2005 Louisiana Health Report Card

As required by R.S. 40:1300.71

Submitted to the Governor and Louisiana Legislature 2006

Kathleen B. Blanco
Governor

Frederick P. Cerise, MD, MPH
Secretary
Department of Health and Hospitals

2005 LOUISIANA HEALTH REPORT CARD

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Kathleen Babineaux Blanco
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Frederick P. Cerise, MD, MPH
Secretary, Department of Health and Hospitals

Submitted to the Governor and the Louisiana Legislature
March, 2006

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This report is the result of contributions from many individuals and programs. The Louisiana State Center for Health Statistics would like to acknowledge their efforts and extend thanks to all who assisted in the publication of this document.

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STATE OF LOUISIANA
DEPARTMENT OF HEALTH AND HOSPITALS

Kathleen Babineaux Blanco
GOVERNOR

Frederick P. Cerise, M.D., M.P.H.
SECRETARY

March 10, 2006

Dear Governor Blanco and Legislators:

It is with great pleasure and in accordance with R.S. 40:1300.71, that I present the *2005 Louisiana Health Report Card*, published by the Department of Health and Hospitals, Office of Public Health (DHH/OPH). This annual publication reports on the overall state of health in Louisiana. Each year the Louisiana State Center for Health Statistics coordinates its efforts with state, regional, and parish-level sources to collect data, link current health assessments with prevention initiatives, present comparisons of morbidity and mortality, and make recommendations to improve individual and community health status. Charts, tables, narrative summaries and statistical descriptions are provided.

Hurricanes Katrina and Rita have had a profound impact on our State's healthcare systems and greatly increased our need for continued evaluation, planning, and the promotion of health policy and services. I hope that this document will serve as a tool to assist with our efforts to rebuild and strengthen the public health and healthcare infrastructure of the state.

The *2005 Louisiana Health Report Card* is available in hard copy from the DHH/OPH Center for Health Statistics (CHS) and may also be accessed in electronic format through the CHS website at http://www.oph.dhh.louisiana.gov. We welcome feedback from you and your respective communities and hope that this report continues to prompt discussion and meet informational needs as we all work together to improve health status in Louisiana.

Sincerely,

Frederick P. Cerise, M.D., M.P.H.
Secretary

FPC:DS

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Executive Summary

Monitoring the health status of a population is an essential step in evaluating the effectiveness of various health programs and in developing programmatic policy for the future. Monitoring the status of a population relative to certain health indicators over a number of years is an especially effective tool for health planning. Act 985 of the 1995 Louisiana Regular Legislative Session, enacting R.S. 40:1300.71, requires that the Louisiana Department of Health and Hospitals annually prepare a report card relative to health and health-related issues.

The following pages comprise the ninth annual Health Report Card. This document reports on the overall state of health in Louisiana, addressing the following issues:

- Health findings of major diseases
- Teenage pregnancy and birth rates
- Rates of low birthweight babies
- Suicide rates
- Sexually transmitted diseases
- Incidence of drug addictions
- Violent deaths
- Morbidity rates
- Health assessment programs and results
- Results of preventive health outreach programs
- Assessment of the state health care delivery system

The report card is divided into six major sections. The first three sections are “Population and Vital Statistics,” “Morbidity,” and “Health Assessment Programs.” These contain data relative to the health status indicators listed above for the state as a whole and for the parishes within the state. There are comparisons with prior years and with other states. In some cases, variations among different segments of the state’s population are reported.

The last three sections address current health care initiatives, the state’s health care delivery system, and future measures for health status improvement. These sections are: “Preventive Health Outreach and Service Programs,” “Louisiana State Health Care System,” and “Recommendations for Improving Health Status.”

This report is the result of efforts by individuals throughout the Department of Health and Hospitals. To contact the individual programs that contributed to this document, please refer to the listing of Program Office telephone numbers and web addresses in the “Contact Information” table in the back of the book. Many of the programs have reports available through their individual program websites.

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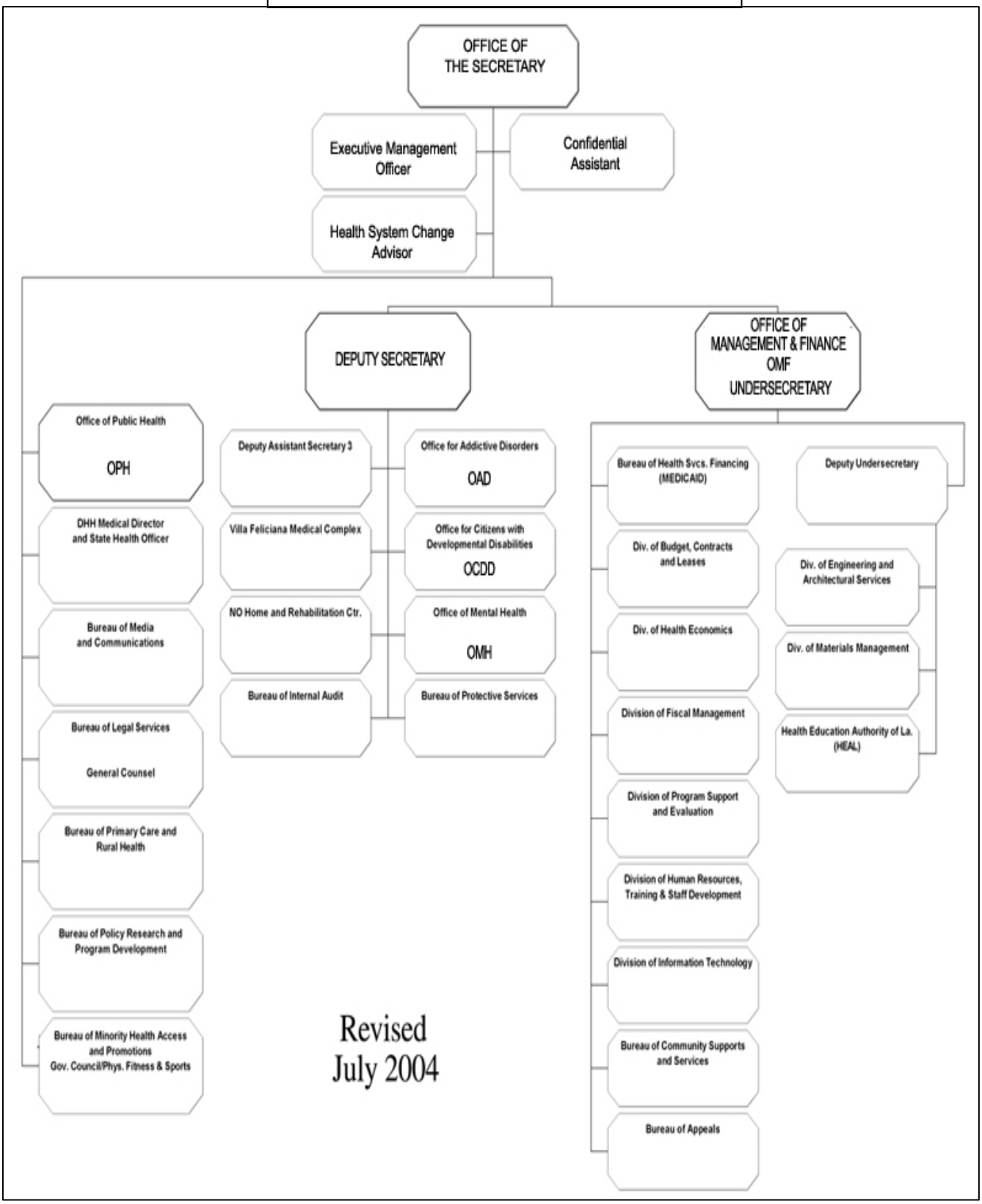


7
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Claiborne
Union
Morehouse
W. Carroll
E. Carroll
Bossier
Webster
Lincoln
Ouachita
Caddo
Richland
Madison
Bienville
Jackson
Red River
DeSoto
Caldwell
Tensas
Winn
Franklin
Natchitoches
LaSalle
Sabine
Grant
Catahoula
Concordia
E. Feliciana
Ascension
Rapides
Vernon
Avoyelles
W. Feliciana
St. Helena
Washington
Tangipahoa
Pointe Coupee
West B.R.
Living-ston
St. Tammany
St. John the Baptist
Beau-regard
Allen
Evan-geline
Landry
East B.R.
Jeffer-son Davis
Acadia
St. Iberville
Calcasieu
Lafay-ette
St. Martin
Orleans
Cameron
Vermilion
Iberia
Assump-tion
St. Charles
St. Bernard
St. Mary
Lafourche
Plaquemines
Terrebone
St. James
Jefferson

I. POPULATION AND VITAL STATISTICS

A. POPULATION

This chapter on Louisiana's population presents information from Bridged-Race Population Estimate 2003 by the U.S. Bureau of the Census and National Center for Health Statistics (NCHS). According to these estimates, Louisiana's resident population was 4,496,334 as of July 1, 2003. The state's subgroup estimate counts for 2003 are given in the following table:

Louisiana Population, 2003 *

Sex	Race	Age Group (Years)						
		<5	5-19	20-44	45-64	65-84	85 & +	All *
Male	White	92,684	292,037	514,730	364,327	151,122	13,614	1,428,514
	Black	69,584	205,370	251,639	132,282	41,688	4,317	704,880
	Other	3,357	11,358	21,572	9,882	2,554	215	48,938
Female	White	88,763	276,747	507,333	372,868	199,472	33,464	1,478,647
	Black	66,851	199,733	285,445	160,460	64,476	10,077	787,042
	Other	3,189	10,654	20,522	10,599	3,015	334	48,313
All*	Total	324,428	995,899	1,601,241	1,050,418	462,327	62,021	4,496,334

Source: * Bridged-Race Population Estimate 2003, U.S. Census Bureau & NCHS (Released in September 2004)

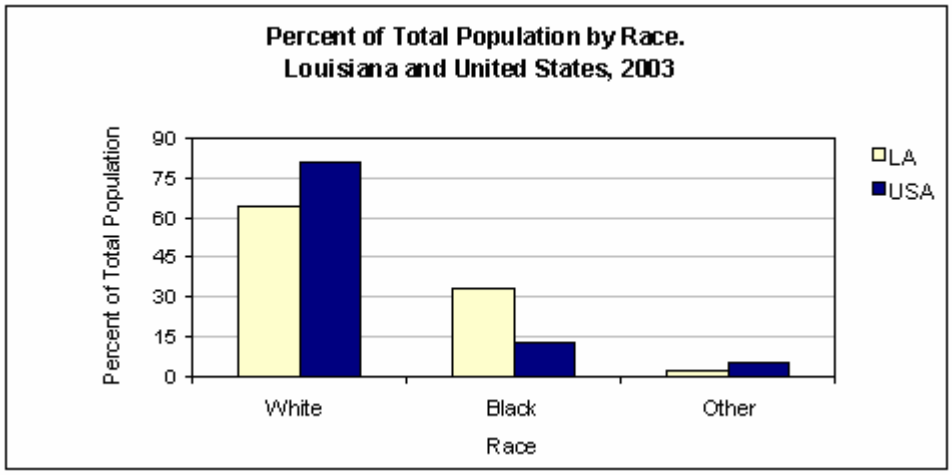
A comparison of the year 2003 national and state population estimates shows that Louisiana and the United States have very similar age distributions.

Percent of Total Population by Age Group
Louisiana and United States, 2003

	Age Group (Years)						
	<5	5-19	20-44	45-64	65-84	85 & +	All Ages
Louisiana	7.2	22.1	35.6	23.4	10.3	1.4	100.0
United States	6.8	21.1	36.1	23.6	10.7	1.6	100.0

Source: Calculation based on Bridged-Race Population Estimate 2003, U.S. Census Bureau & NCHS

Estimates of the population distribution by race, however, show the percentage of blacks in Louisiana is more than twice the national average. Blacks comprise 33.2% of the state's population, versus 13.1% nationally. The proportion of blacks by parishes in Louisiana ranges from 4% to 67%.

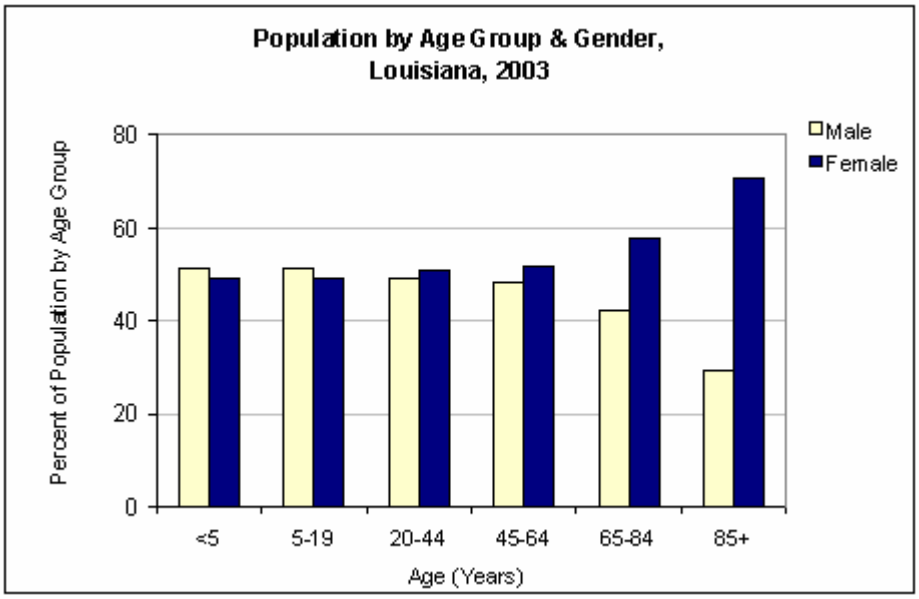


Source: Calculation based on Bridged-Race Population Estimate 2003, U.S. Census Bureau & NCHS

Percent of Total Population by Race Louisiana and United States, 2003				
	Race			
Location	White	Black	Other	Total
Louisiana	64.7	33.2	2.2	100.0
United States	81.3	13.1	5.6	100.0

Source: Calculation based on Bridged-Race Population Estimate 2003, U.S. Census Bureau & NCHS (Released on September 2004)

As in the rest of the nation, an increase in the proportion of women to men is seen in older age categories. Louisiana's year 2003 percentage estimates for the 45-to-64 year age group are 48% male and 52% female. The percentages change to 29% male and 71% female in the 85 &+ age group.



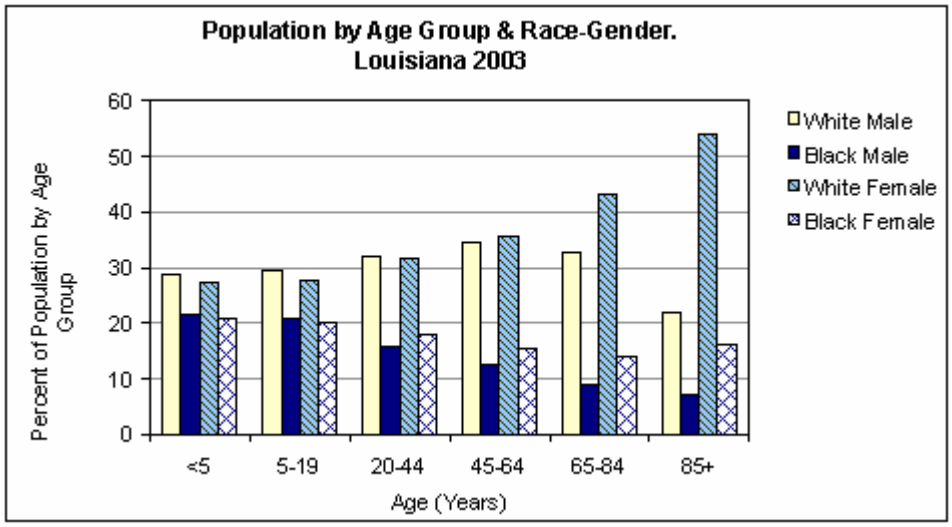
Source: Calculation based on Bridged-Race Population Estimate 2003, U.S. Census Bureau & NCHS

Population by Age Group, Gender and Race. Louisiana, 2003							
		Age Group (Years)					
Sex	Race	<5	5-19	20-44	45-64	65-84	85 & +
Male	White	28.6	29.3	32.1	34.7	32.7	22.0
	Black	21.4	20.6	15.7	12.6	9.0	7.0
	Other	1.0	1.1	1.3	0.9	0.6	0.3
	Total	51.1	51.1	49.2	48.2	42.3	29.3
Female	White	27.4	27.8	31.7	35.5	43.1	54.0
	Black	20.6	20.1	17.8	15.3	13.9	16.2
	Other	1.0	1.1	1.3	1.0	0.7	0.5
	Total	48.9	48.9	50.8	51.8	57.7	70.7

Source: Calculation based on Bridged-Race Population Estimate 2003, U.S. Census Bureau & NCHS
Note: Percentages may not add up to 100% due to rounding.

Within individual age groups, the race/gender proportions in Louisiana change with advancing age. White males and white females each comprise approximately 29% of the population in both the <5 and 5-19 age groups, followed by black males and females at approximately 20% each. By age 85+, 54% of the

population is white women, 22% are white men, 16% are black women, and 7% are black men. Women (70.7%) are more likely to live into their mid-eighties than men (29.3%) in Louisiana.



Source: Calculation based on Bridged-Race Population Estimate 2003, U.S. Census Bureau & NCHS

The U.S. Bureau of the Census has also provided the estimated parish-level population data for 2003. The changes in Louisiana's mid-year parish populations by 2000 census and the 2003 estimates are presented in the table below:

Population by Parish. Louisiana 2003				
	7/1/2000	7/1/2003	% Change	7/1/2003
Parish	Census	Estimates	2000-2003	% as Total of State Pop.
State Total	4,468,976	4,496,334	0.6	100.0
Acadia	58,861	59,165	0.5	1.3
Allen	25,440	25,334	-0.4	0.6
Ascension	76,627	81,388	6.2	1.8
Assumption	23,388	23,291	-0.4	0.5
Avoyelles	41,481	42,287	1.9	0.9
Beauregard	32,986	33,190	0.6	0.7
Bienville	15,752	15,580	-1.1	0.3
Bossier	98,310	102,088	3.8	2.3
Caddo	252,161	254,216	0.8	5.7
Calcasieu	183,577	184,693	0.6	4.1
Caldwell	10,560	10,715	1.5	0.2
Cameron	9,991	9,717	-2.7	0.2
Catahoula	10,920	10,717	-1.9	0.2
Claiborne	16,851	16,428	-2.5	0.4
Concordia	20,247	19,995	-1.2	0.4
DeSoto	25,494	25,490	0.0	0.6
E. Baton Rouge	412,852	416,881	1.0	9.3
E. Carroll	9,421	9,005	-4.4	0.2
E. Feliciana	21,360	20,940	-2.0	0.5
Evangeline	35,434	35,180	-0.7	0.8
Franklin	21,263	20,848	-2.0	0.5
Grant	18,698	18,905	1.1	0.4
Iberia	73,266	73,842	0.8	1.6
Iberville	33,320	32,842	-1.4	0.7

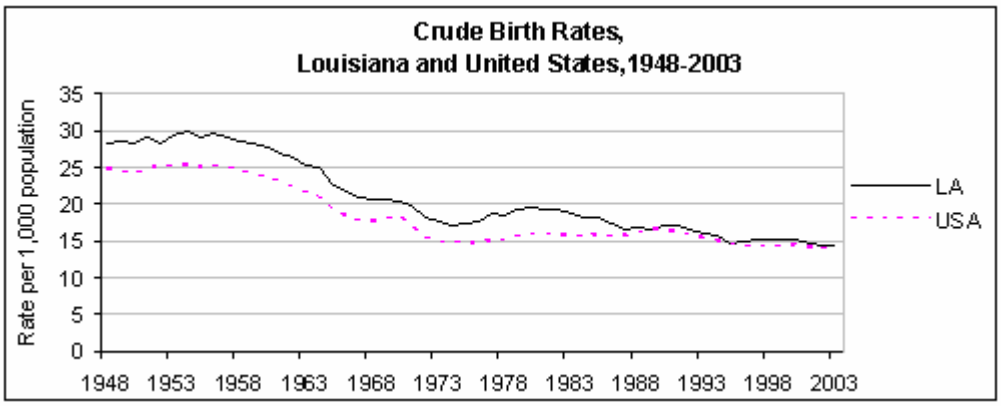
Population by Parish. Louisiana 2003				
	7/1/2000	7/1/2003	% Change	7/1/2003
Parish	Census	Estimates	2000-2003	% as Total of State Pop.
Jackson	15,397	15,591	1.3	0.3
Jefferson	455,466	456,779	0.3	10.2
Jefferson Davis	31,435	30,826	-1.9	0.7
Lafayette	190,503	194,408	2.0	4.3
Lafourche	89,974	91,034	1.2	2.0
LaSalle	14,282	14,349	0.5	0.3
Lincoln	42,509	42,882	0.9	1.0
Livingston	91,814	99,109	7.9	2.2
Madison	13,728	13,091	-4.6	0.3
Morehouse	31,021	30,520	-1.6	0.7
Natchitoches	39,080	39,328	0.6	0.9
Orleans	484,674	469,271	-3.2	10.4
Ouachita	147,250	148,112	0.6	3.3
Plaquemines	26,757	28,049	4.8	0.6
Pointe Coupee	22,763	22,114	-2.9	0.5
Rapides	126,337	127,184	0.7	2.8
Red River	9,622	9,556	-0.7	0.2
Richland	20,981	20,151	-4.0	0.4
Sabine	23,459	23,635	0.8	0.5
St. Bernard	67,229	66,172	-1.6	1.5
St. Charles	48,072	48,351	0.6	1.1
St. Helena	10,525	10,500	-0.2	0.2
St. James	21,216	21,139	-0.4	0.5
St. John	43,044	44,053	2.3	1.0
St. Landry	87,700	89,128	1.6	2.0
St. Martin	48,583	49,294	1.5	1.1
St. Mary	53,500	52,403	-2.1	1.2
St. Tammany	191,268	202,203	5.7	4.5
Tangipahoa	100,588	102,078	1.5	2.3
Tensas	6,618	6,252	-5.5	0.1
Terrebonne	104,503	106,823	2.2	2.4
Union	22,803	22,330	-2.1	0.5
Vermilion	53,807	54,274	0.9	1.2
Vernon	52,531	51,959	-1.1	1.2
Washington	43,926	43,634	-0.7	1.0
Webster	41,831	41,441	-0.9	0.9
W. Baton Rouge	21,601	21,738	0.6	0.5
W. Carroll	12,314	12,208	-0.9	0.3
W. Feliciana	15,111	15,177	0.4	0.3
Winn	16,894	16,453	-2.6	0.4

Source: United States Census Bureau, 2000 Census and Bridged-Race Population Estimate 2003, U.S. Census Bureau & NCHS

B. BIRTHS

Number of Live Births and Birth Rates

In the year 2003, there were 64,689 births to Louisiana residents. This marked a 0.1% decrease from the number of Louisiana births in 2002, and a little more than the 0.1% decrease observed in the United States as a whole, from 2002 to 2003. Louisiana's 2003 crude birth rate was 14.4 live births per 1,000 population. Because the crude birth rate represents the number of live births to the total population in an area, without regard to the age or sex distribution of the population, it is useful as a measure of the contribution of births to the growth of the population of the area.[1] Louisiana's crude birth rate remained steady at 14.4 per 1,000 population as in 2002.



Source: Louisiana State Center for Health Statistics
National Center for Health Statistics, Births: Final Data for 2003

In the table below, Louisiana's crude birth rates are furnished to compare to the rates of its four neighboring states. Louisiana continues to rank relatively high in terms of birth rate as its 2003 ranking of 13th highest in the nation was one rank lower than its 2002 ranking of 12. Among neighboring states, Louisiana's birth rate is the third highest.

Crude Birth Rates
Louisiana, Neighboring States, and United States, 2003

State	*Birth Rate**	*National Ranking*
Alabama	13.2	33
Arkansas	14.0	20
Louisiana	14.5	13
Mississippi	14.7	12
Texas	17.2	2
United States	14.1	-

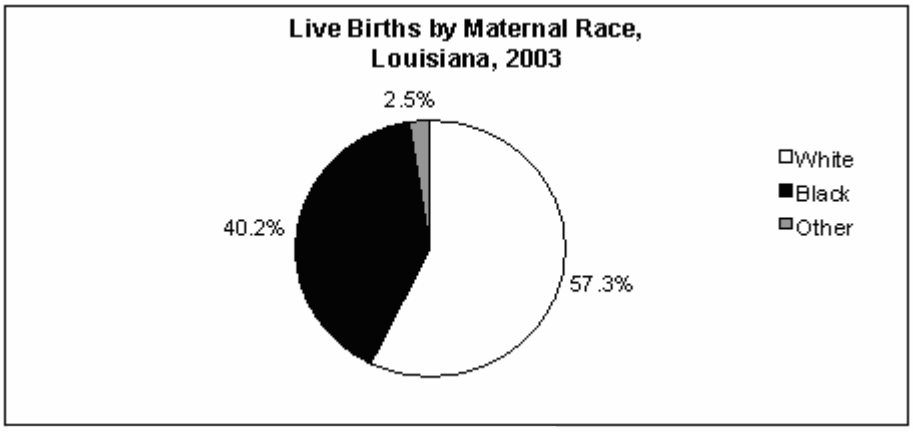
Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005: Health Care in the 50 United States. (13th Ed.): Morgan Quitno Press, Lawrence, KS.

Although black women aged 15-44 years represent 36% of the female population of Louisiana belonging to that same age group, 40.2% of the state's live births in the year 2003 were to black mothers. The birth rate is 12.7 for whites and 17.4 for blacks. In 2003, the race-specific birth rates peaked at 146.8 for black

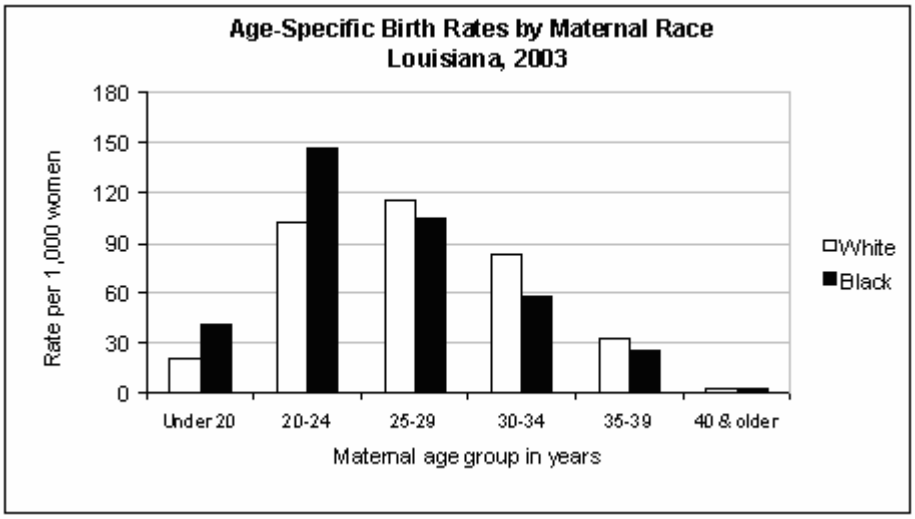
[1] Clarke SC and Ventura SJ. *Birth and Fertility for States: United States*, 1990.National Center for Health Statistics. Vital Health Statistics 21(52), 1994.

mothers age 20-24, and at 115.2 for white mothers age 25-29. The second highest birth rate for black mothers was 104.5 at age 25-29, and, for white mothers, 102.4 at age 20-24. The third highest birth rates were 78.5 for black mothers age 15-19 and 83.4 for white mothers age 30-34.

In 2003, as in the previous year, Vernon Parish had the highest birth rate at 19.4 births per 1,000 population, and West Feliciana had the lowest birth rate at 8.5 births per 1,000 population.



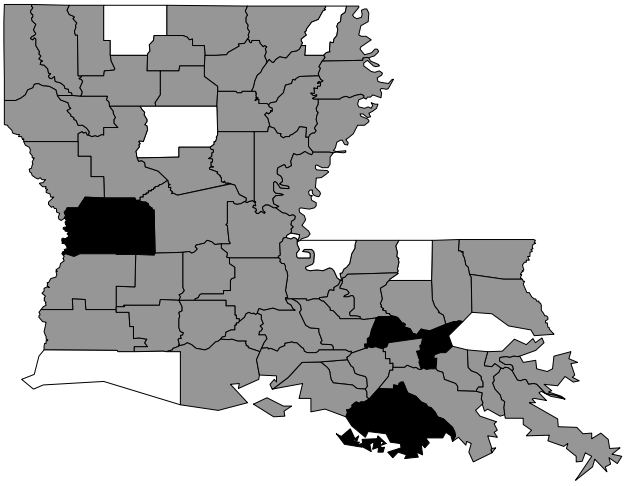
Source: Louisiana State Center for Health Statistics



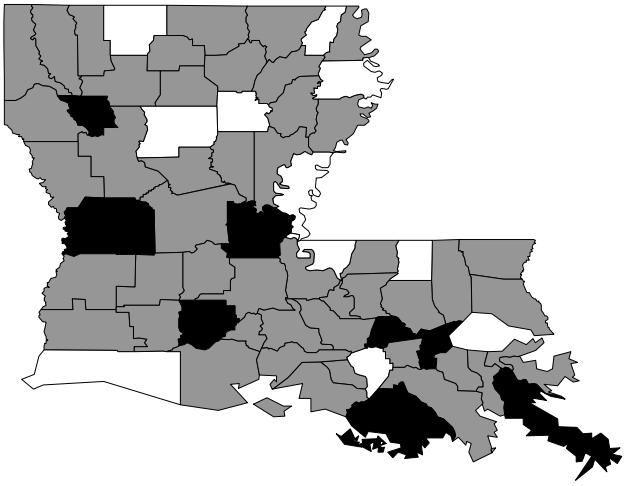
Source: Louisiana State Center for Health Statistics

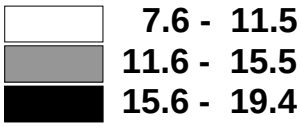
Live Birth Rate Per 1,000 Population
Louisiana, 2002 & 2003

YEAR 2002



YEAR 2003





Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2003

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
STATE	65302	64689	14.4	ALL	183	9452	21240	16716	11281	4851	909	54	****
	37671	37066		WHITE	31	3899	10851	10423	7923	3317	586	34	****
	26014	26024		BLACK	150	5444	10037	5825	2909	1348	291	19	****
	1617	1599		OTHER	****	109	352	468	449	186	32	****	0
ACADIA	626	956	16.2	ALL	****	157	351	247	120	63	15	****	0
	455	732		WHITE	****	104	246	205	108	54	13	****	0
	169	223		BLACK	****	53	104	42	12	9	****	0	0
	****	****		OTHER	0	0	****	0	0	0	0	0	0
ALLEN	****	317	12.5	ALL	****	****	5	11	17	21	56	130	79
	0	239		WHITE	0	****	****	7	12	17	40	102	64
	****	67		BLACK	****	0	****	****	5	****	16	24	13
	0	11		OTHER	0	0	0	0	0	0	0	****	****
ASCENSION	****	1422	17.5	ALL	****	****	12	27	46	62	149	392	419
	****	1071		WHITE	0	0	5	14	27	39	85	261	333
	****	333		BLACK	****	****	7	13	19	23	64	128	81
	0	18		OTHER	0	0	0	0	0	0	0	****	5
ASSUMPTION	0	268	11.5	ALL	0	****	****	9	9	20	40	86	91
	0	163		WHITE	0	0	****	5	****	7	15	52	61
	0	103		BLACK	0	****	0	****	7	13	24	34	29
	0	****		OTHER	0	0	0	****	0	0	****	0	****
AVOYELLES	****	667	15.8	ALL	****	5	12	18	44	50	129	251	174
	****	402		WHITE	0	****	****	7	23	24	59	145	118
	****	248		BLACK	****	****	8	10	20	24	65	101	54
	0	17		OTHER	****	0	****	****	****	****	5	5	****
BEAUREGARD	386	425	12.8	ALL	0	****	6	7	28	21	65	151	103
	322	365		WHITE	0	****	****	****	23	16	48	134	92
	55	52		BLACK	0	0	****	****	****	****	15	16	9
	9	8		OTHER	0	0	0	0	****	****	****	****	****
BIENVILLE	0	192	12.3	ALL	0	0	****	5	16	14	39	86	40
	0	101		WHITE	0	0	****	0	10	8	19	39	32
	0	90		BLACK	0	0	****	5	6	6	20	46	8
	0	****		OTHER	0	0	0	0	0	0	0	****	0
BOSSIER	739	1560	15.3	ALL	****	6	15	34	49	84	188	500	453
	573	1123		WHITE	****	****	6	16	34	43	102	337	354
	155	400		BLACK	****	****	9	18	15	36	81	155	91
	11	37		OTHER	0	0	0	0	0	5	5	8	8
CADDO	5810	3578	14.1	ALL	13	30	62	126	186	210	614	1188	953
	2974	1518		WHITE	****	****	12	30	38	62	145	402	483
	2730	2012		BLACK	12	27	50	96	147	146	466	781	456
	106	48		OTHER	0	0	0	0	****	****	****	5	14
CALCASIEU	3249	2765	15.0	ALL	****	23	25	73	116	171	408	1011	686
	2353	1921		WHITE	****	10	11	39	76	112	248	661	504
	848	807		BLACK	****	13	14	34	39	57	157	340	172
	48	37		OTHER	0	0	0	0	****	****	****	10	10

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 2003

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
CALDWELL	0	106	9.9	ALL	****	17	47	18	19	****	0	0	0
	0	93		WHITE	0	15	39	17	18	****	0	0	0
	0	13		BLACK	****	****	8	****	****	0	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
CAMERON	0	94	9.7	ALL	0	14	42	18	12	5	****	0	0
	0	85		WHITE	0	12	39	16	10	5	****	0	0
	0	8		BLACK	0	****	****	****	****	0	0	0	0
	0	****		OTHER	0	0	****	0	0	0	0	0	0
CATAHOULA	0	127	11.9	ALL	****	29	46	34	7	8	****	0	****
	0	81		WHITE	0	16	30	24	7	****	****	0	****
	0	46		BLACK	****	13	16	10	0	6	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
CLAIBORNE	35	166	10.1	ALL	0	32	69	34	21	7	****	0	0
	16	67		WHITE	0	****	28	20	13	****	****	0	0
	19	98		BLACK	0	30	40	14	8	****	****	0	0
	0	****		OTHER	0	0	****	0	0	0	0	0	0
CONCORDIA	316	187	9.4	ALL	****	35	82	44	18	****	****	0	0
	72	75		WHITE	0	11	35	15	10	****	****	0	0
	238	109		BLACK	****	24	47	29	5	****	****	0	0
	6	****		OTHER	0	0	0	0	****	0	0	0	0
DESOTO	5	340	13.3	ALL	****	66	118	69	53	27	****	0	0
	****	160		WHITE	0	29	53	37	25	13	****	0	0
	****	180		BLACK	****	37	65	32	28	14	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
E BATON ROUGE	9845	5736	13.8	ALL	16	729	1753	1461	1137	535	100	5	0
	5686	2503		WHITE	****	151	576	698	691	328	55	****	0
	3923	3026		BLACK	15	571	1144	702	378	175	40	****	0
	236	207		OTHER	0	7	33	61	68	32	5	****	0
EAST CARROLL	6	130	14.4	ALL	18	57	29	18	****	****	****	0	18
	0	18		WHITE	****	5	5	6	0	0	0	0	****
	6	112		BLACK	17	52	24	12	****	****	****	0	17
	0	0		OTHER	0	0	0	0	0	0	0	0	0
E FELICIANA	****	261	12.5	ALL	43	105	66	31	11	5	0	0	43
	****	132		WHITE	18	46	38	20	8	****	0	0	18
	0	129		BLACK	25	59	28	11	****	****	0	0	25
	0	0		OTHER	0	0	0	0	0	0	0	0	0
EVANGELINE	512	471	13.4	ALL	81	184	118	57	27	****	0	0	81
	304	333		WHITE	43	124	94	49	21	****	0	0	43
	205	137		BLACK	38	60	23	8	6	0	0	0	38
	****	****		OTHER	0	0	****	0	0	0	0	0	0
FRANKLIN	9	279	13.4	ALL	54	96	79	34	10	****	****	0	54
	****	153		WHITE	19	53	50	22	7	****	0	0	19
	6	125		BLACK	35	43	28	12	****	****	****	0	35
	0	****		OTHER	0	0	****	0	0	0	0	0	0
GRANT	0	255	13.5	ALL	****	31	106	67	36	12	****	0	0
	0	224		WHITE	0	26	93	58	35	11	****	0	0
	0	28		BLACK	****	5	13	6	****	****	0	0	0
	0	****		OTHER	0	0	0	****	0	0	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2003

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
IBERIA	989	1122	15.2	ALL	7	201	377	281	167	81	8	0	0
	540	658		WHITE	****	93	209	169	121	60	****	0	0
	427	441		BLACK	****	108	161	102	43	19	****	0	0
	22	23		OTHER	0	0	7	10	****	****	****	0	0
IBERVILLE	368	458	13.9	ALL	****	87	151	118	63	28	10	0	0
	58	178		WHITE	0	14	49	57	38	16	****	0	0
	308	278		BLACK	****	72	101	61	25	12	6	0	0
	****	****		OTHER	0	****	****	0	0	0	0	0	0
JACKSON	****	211	13.5	ALL	****	34	72	52	40	11	****	0	0
	****	147		WHITE	0	23	46	39	31	8	0	0	0
	0	62		BLACK	****	10	25	13	9	****	****	0	0
	0	****		OTHER	0	****	****	0	0	0	0	0	0
JEFFERSON	8056	6287	13.8	ALL	20	767	1740	1722	1327	602	108	****	0
	4870	3721		WHITE	****	355	859	1077	926	426	74	****	0
	2806	2230		BLACK	17	398	823	545	291	132	24	0	0
	380	336		OTHER	0	14	58	100	110	44	10	0	0
JEFF DAVIS	379	477	15.5	ALL	0	73	187	136	47	25	7	****	****
	301	370		WHITE	0	48	141	115	38	19	7	****	****
	75	102		BLACK	0	23	45	20	9	5	0	0	0
	****	5		OTHER	0	****	****	****	0	****	0	0	0
LAFAYETTE	5016	2956	15.2	ALL	8	342	875	775	642	253	58	****	0
	3406	1923		WHITE	0	181	477	529	514	176	43	****	0
	1510	971		BLACK	8	158	385	228	110	70	12	0	0
	100	62		OTHER	0	****	13	18	18	7	****	0	0
LAFOURCHE	895	1229	13.5	ALL	****	159	396	329	228	101	13	****	0
	774	932		WHITE	****	101	284	267	184	85	10	0	0
	99	257		BLACK	****	51	99	52	35	15	****	****	0
	22	40		OTHER	0	7	13	10	9	****	0	0	0
LASALLE	0	175	12.2	ALL	0	26	69	47	24	8	****	0	0
	0	152		WHITE	0	20	60	41	23	7	****	0	0
	0	21		BLACK	0	6	7	6	****	****	0	0	0
	0	****		OTHER	0	0	****	0	0	0	0	0	0
LINCOLN	676	543	12.7	ALL	****	74	208	141	84	28	6	****	0
	331	286		WHITE	0	27	82	96	60	19	****	****	0
	333	244		BLACK	****	46	125	43	15	9	5	0	0
	12	13		OTHER	0	****	****	****	9	0	0	0	0
LIVINGSTON	****	1528	15.4	ALL	0	171	494	466	291	94	11	****	0
	****	1436		WHITE	0	157	463	443	277	84	11	****	0
	0	81		BLACK	0	14	27	22	9	9	0	0	0
	0	11		OTHER	0	0	****	****	5	****	0	0	0
MADISON	****	130	9.9	ALL	0	29	45	31	20	****	****	0	0
	0	32		WHITE	0	5	8	11	7	****	0	0	0
	****	98		BLACK	0	24	37	20	13	****	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
MOREHOUSE	357	410	13.4	ALL	****	73	185	87	42	17	****	****	0
	225	188		WHITE	0	22	81	49	24	10	****	0	0
	131	218		BLACK	****	51	104	35	17	7	****	****	0
	****	****		OTHER	0	0	0	****	****	0	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2003

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
NATCHITOCHES	600	581	14.8	ALL	****	105	236	135	75	22	6	0	0
	247	269		WHITE	0	34	90	80	48	14	****	0	0
	345	306		BLACK	****	70	142	55	26	8	****	0	0
	8	6		OTHER	0	****	****	0	****	0	0	0	0
ORLEANS	8254	6919	14.7	ALL	32	1175	2101	1636	1233	606	129	7	0
	2339	1298		WHITE	0	43	159	298	459	276	61	****	0
	5672	5421		BLACK	32	1126	1915	1279	696	302	66	5	0
	243	200		OTHER	0	6	27	59	78	28	****	0	0
OUACHITA	3483	2251	15.2	ALL	10	372	746	570	381	146	26	0	0
	1974	1206		WHITE	****	134	356	336	268	94	17	0	0
	1470	1017		BLACK	9	238	384	221	108	48	9	0	0
	39	28		OTHER	0	0	6	13	5	****	0	0	0
PLAQUEMINES	5	443	15.8	ALL	0	61	147	123	71	38	****	0	0
	****	284		WHITE	0	35	90	83	50	23	****	0	0
	****	128		BLACK	0	25	49	30	15	9	0	0	0
	0	31		OTHER	0	****	8	10	6	6	0	0	0
POINTE COUPEE	0	289	13.1	ALL	****	57	90	79	41	16	****	0	0
	0	152		WHITE	0	14	45	49	30	12	****	0	0
	0	132		BLACK	****	43	41	29	11	****	****	0	0
	0	5		OTHER	0	0	****	****	0	0	0	0	0
RAPIDES	3153	1898	14.9	ALL	****	284	667	504	307	107	24	****	0
	2063	1145		WHITE	0	136	360	327	230	72	17	****	0
	1042	736		BLACK	****	146	304	172	73	34	5	****	0
	48	17		OTHER	0	****	****	5	****	****	****	0	0
RED RIVER	****	162	17.0	ALL	****	36	53	45	14	12	****	0	0
	0	82		WHITE	0	13	23	28	9	9	0	0	0
	****	79		BLACK	****	23	30	16	5	****	****	0	0
	0	****		OTHER	0	0	0	****	0	0	0	0	0
RICHLAND	0	281	13.9	ALL	****	53	100	76	35	16	0	0	0
	0	129		WHITE	0	20	42	36	22	9	0	0	0
	0	150		BLACK	****	33	58	38	13	7	0	0	0
	0	****		OTHER	0	0	0	****	0	0	0	0	0
SABINE	****	338	14.3	ALL	0	53	129	96	38	21	****	0	0
	0	233		WHITE	0	39	85	67	27	14	****	0	0
	****	74		BLACK	0	13	31	20	6	****	0	0	0
	0	31		OTHER	0	****	13	9	5	****	0	0	0
ST BERNARD	0	898	13.6	ALL	****	130	253	257	162	78	12	****	0
	0	743		WHITE	****	104	204	213	138	67	11	****	0
	0	128		BLACK	0	24	43	36	18	6	****	0	0
	0	27		OTHER	0	****	6	8	6	5	0	0	0
ST CHARLES	****	644	13.3	ALL	0	81	171	179	133	65	15	0	0
	0	423		WHITE	0	38	93	124	109	51	8	0	0
	****	209		BLACK	0	42	78	50	20	12	7	0	0
	0	12		OTHER	0	****	0	5	****	****	0	0	0
ST HELENA	0	101	9.6	ALL	0	14	46	19	12	9	****	0	0
	0	38		WHITE	0	6	15	9	****	****	****	0	0
	0	63		BLACK	0	8	31	10	9	5	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2003

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
ST JAMES	0	287	13.6	ALL	0	48	101	75	47	14	0	****	****
	0	122		WHITE	0	10	42	36	27	6	0	****	0
	0	165		BLACK	0	38	59	39	20	8	0	0	****
	0	0		OTHER	0	0	0	0	0	0	0	0	0
ST JOHN	324	691	15.7	ALL	****	104	197	204	131	42	11	****	0
	160	326		WHITE	0	30	69	113	78	28	8	0	0
	160	354		BLACK	****	72	127	85	51	14	****	****	0
	****	11		OTHER	0	****	****	6	****	0	0	0	0
ST LANDRY	1535	1337	15.0	ALL	6	235	498	314	180	91	13	0	0
	919	705		WHITE	****	86	234	205	126	44	8	0	0
	605	621		BLACK	****	147	263	106	51	45	5	0	0
	11	11		OTHER	0	****	****	****	****	****	0	0	0
ST MARTIN	0	706	14.3	ALL	****	116	246	169	112	52	10	0	0
	0	444		WHITE	0	55	148	115	85	35	6	0	0
	0	248		BLACK	****	61	92	50	24	16	****	0	0
	0	14		OTHER	0	0	6	****	****	****	0	0	0
ST MARY	333	766	14.6	ALL	****	134	310	170	104	37	8	0	0
	157	461		WHITE	****	66	181	117	72	22	****	0	0
	170	285		BLACK	****	65	120	50	28	15	5	0	0
	6	20		OTHER	0	****	9	****	****	0	****	0	0
ST TAMMANY	3781	2916	14.4	ALL	****	269	692	764	748	364	71	7	0
	3014	2464		WHITE	****	186	533	662	682	332	62	6	0
	702	396		BLACK	0	79	145	88	53	23	7	****	0
	65	56		OTHER	0	****	14	14	13	9	****	0	0
TANGIPAHOA	1370	1562	15.3	ALL	****	233	608	383	243	76	15	****	0
	773	946		WHITE	****	97	336	257	179	63	10	****	0
	585	605		BLACK	0	136	270	123	60	12	****	0	0
	12	11		OTHER	0	0	****	****	****	****	****	0	0
TENSAS	0	80	12.8	ALL	****	16	31	20	6	5	****	0	0
	0	15		WHITE	0	****	****	7	0	****	0	0	0
	0	63		BLACK	****	13	27	12	6	****	****	0	0
	0	****		OTHER	0	0	0	****	0	****	0	0	0
TERREBONNE	2484	1697	15.9	ALL	****	262	606	423	264	120	17	****	0
	1685	1216		WHITE	****	174	421	306	209	92	13	0	0
	629	331		BLACK	****	65	132	71	37	20	****	****	0
	170	150		OTHER	****	23	53	46	18	8	****	0	0
UNION	****	305	13.7	ALL	****	46	121	66	55	12	****	0	0
	****	209		WHITE	****	19	80	53	45	9	****	0	0
	****	93		BLACK	0	27	41	12	8	****	****	0	0
	0	****		OTHER	0	0	0	****	****	0	0	0	0
VERMILION	52	750	13.8	ALL	****	100	252	201	109	74	10	****	0
	23	565		WHITE	****	59	183	162	94	57	7	****	0
	27	167		BLACK	0	41	63	34	14	12	****	****	0
	****	18		OTHER	0	0	6	5	****	5	****	0	0
VERNON	874	1010	19.4	ALL	0	123	456	266	118	44	****	0	0
	638	781		WHITE	0	88	363	202	94	33	****	0	0
	193	188		BLACK	0	30	80	50	18	8	****	0	0
	43	41		OTHER	0	5	13	14	6	****	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2003

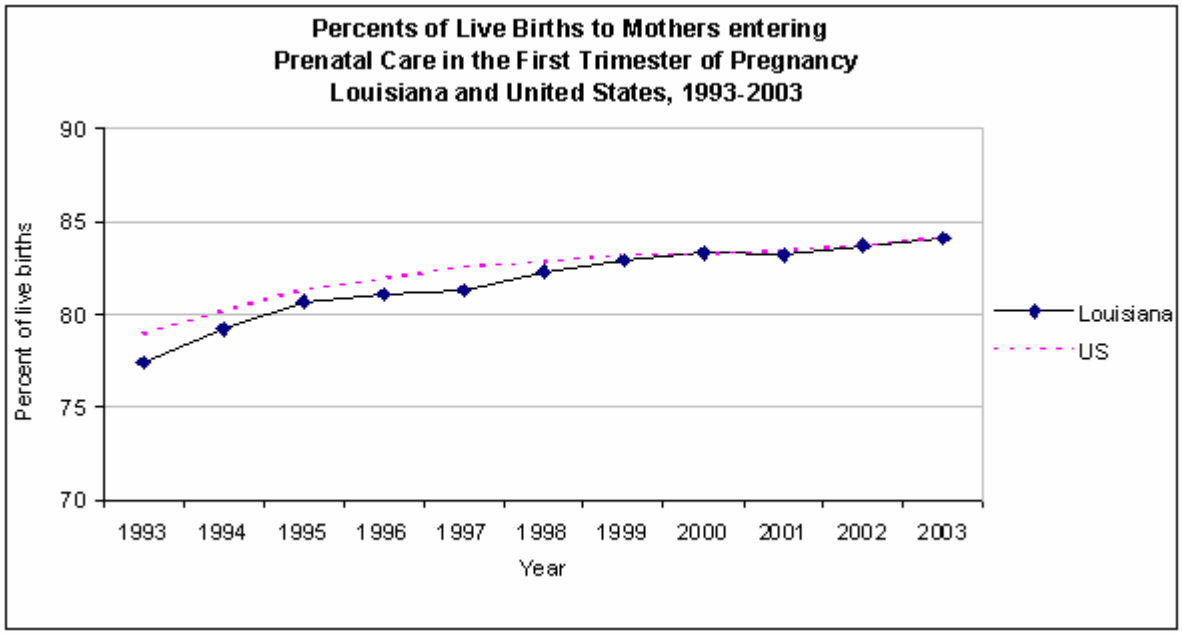
Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
WASHINGTON	6	659	15.1	ALL	6	111	271	153	90	24	****	0	0
	0	407		WHITE	****	56	159	105	67	16	****	0	0
	6	250		BLACK	****	54	111	48	23	8	****	0	0
	0	****		OTHER	0	****	****	0	0	0	0	0	0
WEBSTER	751	532	12.8	ALL	****	93	187	146	74	22	9	0	0
	405	347		WHITE	0	43	122	97	64	18	****	0	0
	343	183		BLACK	****	50	64	49	10	****	6	0	0
	****	****		OTHER	0	0	****	0	0	****	0	0	0
W BATON ROUGE	****	293	13.5	ALL	0	37	99	68	61	26	****	0	0
	0	174		WHITE	0	17	47	49	40	20	****	0	0
	****	118		BLACK	0	20	52	19	20	6	****	0	0
	0	****		OTHER	0	0	0	0	****	0	0	0	0
WEST CARROLL	****	146	12.0	ALL	0	30	57	28	23	6	****	0	0
	0	117		WHITE	0	24	45	21	21	****	****	0	0
	****	29		BLACK	0	6	12	7	****	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
W FELICIANA	0	129	8.5	ALL	0	19	38	30	32	7	****	0	0
	0	63		WHITE	0	****	15	18	23	****	****	0	0
	0	66		BLACK	0	16	23	12	9	5	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
WINN	0	190	11.5	ALL	****	25	81	50	23	6	****	0	0
	0	120		WHITE	0	13	48	37	16	5	****	0	0
	0	70		BLACK	****	12	33	13	7	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
OUT OF STATE**	333	946		ALL	0	79	271	269	207	94	21	5	0
	169	774		WHITE	0	58	215	222	174	83	19	****	0
	161	151		BLACK	0	18	52	39	27	11	****	****	0
	****	21		OTHER	0	****	****	8	6	0	0	0	0

+Rate per 1,000 population.
****Counts less than 5 but greater than 0.
Source: Louisiana State Center for Health Statistics. Denominators for population based rates are derived from the Research Division, College of Administration and Business of Louisiana Technological University (July 1, 2003).

Prenatal Care

Prenatal care is recognized as an important means of providing medical, nutritional, and educational interventions to reduce the risk of adverse pregnancy outcomes and to identify women at high risk for these outcomes. Women in prenatal care routinely receive tests for complete blood count and blood type, diabetes, syphilis, and other conditions. Newborn children are routinely tested for errors of inborn metabolism and other problems. Although these outcomes are rare, a positive test result triggers interventions that benefit both mother and child. Screening and testing undertaken as part of prenatal care has been responsible for substantial improvements in health and wellbeing.[2] Beyond the positive effect on birth outcomes, prenatal care is a vital part of women's health care, as many women (particularly adolescents, minorities, and women of low socio-economic status) start wellbeing checkups only as a consequence of pregnancy.[3]

Prenatal care is most effective when it begins during the early stages of pregnancy. At the national level, the percentage of live births to mothers entering prenatal care in the first trimester of pregnancy has been steadily increasing. While consistently below the national percentage, Louisiana has shown similar improvement.



Source: State Center for Health Statistics

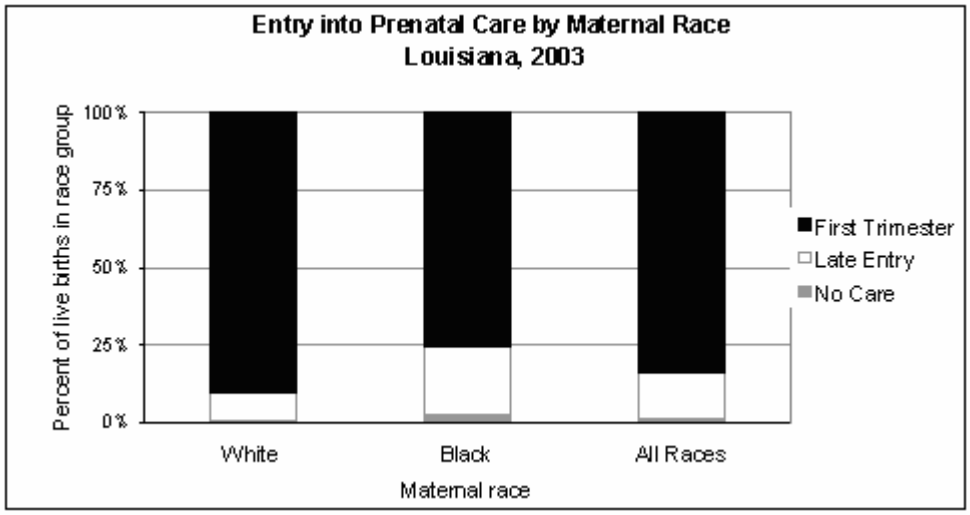
In the following table, percentages of live births to mothers utilizing prenatal care are furnished to allow a comparison of Louisiana to its neighboring states. In the year 2003, 84.1% of Louisiana residents who gave birth entered prenatal care in the first trimester, same as 84.1% of mothers in the United States as a whole. Louisiana moved two places up from its 28th ranking in 2002 to the 26th position nationwide in 2003. Among neighboring states, Louisiana ranked second for the highest percent of mothers receiving prenatal care in the first trimester.

[2] Stoto et al. (1999)" Public Health Screening Programs" in: Reducing the Odds: Preventing Perinatal Transmission of HIV in the United States (pp.21-35) Washington, DC: National Academy Press.
[3] Fiscella, K. (1995). "Does Prenatal Care Improve Birth Outcomes? A Critical Review." Obstetrics & Gynecology 85, 468-79.

Percent of Live Births to Mothers Receiving Prenatal Care in the First Trimester of Pregnancy Louisiana, Neighboring States, and United States, 2003		
State	**Percent of Mothers**	**National Ranking**
Alabama	83.9	28
Arkansas	81.3	36
Louisiana	84.1	26
Mississippi	85.2	21
Texas	80.9	39
United States	84.1	-

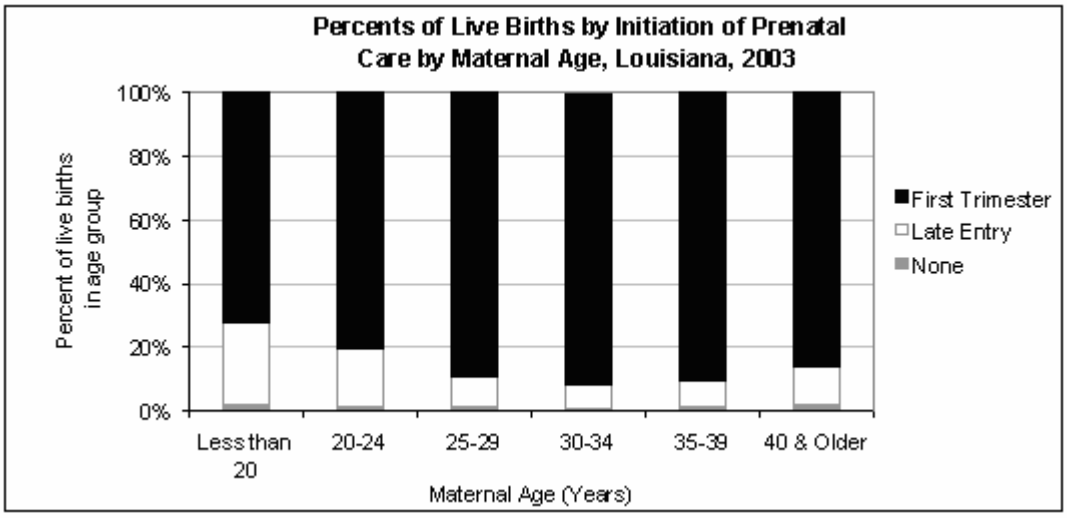
Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005: (13th Ed.): Morgan Quitno Press, Lawrence, KS.

Only 75.5% of black mothers had their first prenatal visit in the first trimester, compared to 90.1% of white mothers. Also, 2.5% of black mothers received no prenatal care, as compared to 0.6% of white mothers.



Source: Louisiana State Center for Health Statistics
Note: Late Entry, refers to women who started prenatal care in the second trimester or later.

A little more than a quarter (28%) of mothers under the age of 20 years started prenatal care after the first trimester of pregnancy, while 1.9% of women in this age group never received any prenatal care. However, entry into care improved with age before leveling off in the mid-thirties age group.



Source: Louisiana State Center for Health Statistics
Note: Late Entry, refers to women who started prenatal care in the second trimester or later.

In Louisiana, adequacy of prenatal care is measured by a modified Kessner index, which defines prenatal care as adequate if the first prenatal visit occurred in the first trimester of pregnancy and if the total number of visits was appropriate to the gestational age of the baby at birth. It should be noted, however, that these measures assess neither the quality nor the content of prenatal care and, therefore, are most likely overestimates of the adequacy of care. Of the 64,689 Louisiana residents who gave birth in 2003, 80.1% received adequate care according to the Kessner index.

Percent of Mothers Receiving Adequate+ Prenatal Care by Parish Louisiana, 1999-2003

Parish	*1999*	*2000*	*2001*	*2002*	*2003*
State Total	77.5	77.96	77.77	78.91	80.06
Acadia	71.6	66.81	61.50	61.20	65.67
Allen	77.3	79.19	81.63	85.50	82.43
Ascension	82.8	81.85	81.82	83.53	83.99
Assumption	83.1	76.33	77.00	70.11	66.92
Avoyelles	71.8	71.27	76.31	76.70	83.13
Beauregard	81.0	80.00	77.69	75.91	74.58
Bienville	61.9	74.07	78.02	80.00	77.89
Bossier	81.4	80.45	79.81	80.09	81.59
Caddo	72.0	71.09	71.64	72.61	73.90
Calcasieu	84.1	85.30	86.54	88.26	85.96
Caldwell	79.7	85.21	86.40	88.31	83.50
Cameron	84.0	84.75	93.14	95.70	89.25
Catahoula	68.1	72.41	56.45	72.66	74.80
Claiborne	61.7	62.13	79.38	84.15	71.95
Concordia	69.7	65.02	54.51	58.45	55.19
DeSoto	70.2	68.72	73.10	69.60	72.89
East Baton Rouge	74.7	76.91	78.29	79.68	80.86
East Carroll	52.4	61.25	66.90	71.01	67.44
East Feliciana	76.7	78.83	73.99	76.32	75.77
Evangeline	69.4	75.72	76.80	80.66	75.64
Franklin	71.9	67.73	60.87	66.67	64.52

Percent of Mothers Receiving Adequate+ Prenatal Care by Parish Louisiana, 1999-2003					
Parish	1999	2000	2001	2002	2003
Grant	83.9	80.31	82.95	84.85	86.45
Iberia	62.6	65.20	57.32	69.90	67.03
Iberville	72.9	65.81	70.26	71.88	75.00
Jackson	65.6	74.60	71.62	75.76	79.33
Jefferson	81.7	78.93	77.60	78.04	82.56
Jefferson Davis	61.5	63.70	68.97	72.35	70.13
Lafayette	87.8	88.71	87.15	91.36	88.93
Lafourche	83.0	84.06	83.89	84.29	73.72
LaSalle	75.8	83.15	83.84	79.49	89.14
Lincoln	54.3	61.63	69.66	68.98	75.84
Livingston	87.5	84.64	88.90	86.17	85.73
Madison	67.5	64.26	71.29	72.86	70.54
Morehouse	53.8	75.05	73.46	75.06	78.50
Natchitoches	69.8	72.20	75.39	79.41	77.02
Orleans	76.6	76.22	76.90	74.69	76.89
Ouachita	78.1	81.69	82.11	82.28	82.52
Plaquemines	82.4	82.80	78.63	81.27	80.82
Pointe Coupee	76.8	74.72	69.61	70.00	81.05
Rapides	75.8	78.21	79.42	82.78	87.71
Red River	66.9	71.94	61.42	71.01	72.50
Richland	76.8	81.25	82.31	80.94	78.91
Sabine	76.3	71.30	81.61	77.22	76.88
St. Bernard	85.0	83.14	82.10	79.88	88.28
St. Charles	76.1	77.58	75.67	76.72	83.44
St. Helena	89.4	85.60	82.54	73.08	82.65
St. James	68.9	66.03	67.33	68.65	62.81
St. John	68.7	62.96	64.63	69.90	74.23
St. Landry	67.6	70.93	68.00	69.91	75.34
St. Martin	79.1	81.35	80.60	85.59	86.23
St. Mary	78.2	79.06	68.96	69.09	73.52
St. Tammany	84.2	85.27	84.80	85.37	87.14
Tangipahoa	91.8	89.66	81.41	77.97	80.49
Tensas	63.5	60.00	49.43	55.68	47.50
Terrebonne	78.5	79.91	78.67	81.82	76.71
Union	65.5	70.64	71.52	76.61	82.12
Vermilion	85.1	87.75	82.98	88.85	88.23
Vernon	81.3	83.68	81.07	82.05	76.52
Washington	77.4	75.50	77.48	78.02	81.82
Webster	72.4	79.47	82.02	84.02	81.42
West Baton Rouge	74.8	76.85	78.99	79.87	79.17
West Carroll	58.6	73.38	79.53	77.70	83.33
West Feliciana	78.6	78.74	78.63	79.65	87.20
Winn	73.7	69.61	73.60	80.21	82.35

+According to modified Kessner index.
Source: Louisiana State Center for Health Statistics.

Low Birthweight

A low birthweight infant is defined as an infant weighing less than 2500 grams (5 pounds, 8 ounces) at birth. Preterm infants who have a lower than normal birth weight are at higher risk of experiencing neurological problems, respiratory and gastrointestinal disorders, developmental problems and slowed growth[4]. Low birthweight infants who survive are more likely than normal weight infants to have brain damage, lung and liver disease, subnormal growth, developmental problems, and other adverse health conditions. The effects of low birthweight follow these infants throughout life, through a greater likelihood of physical, intellectual and behavioral difficulties[5]. In the long run, higher proportions of low birthweight infants are enrolled in special education classes relative to their normal birthweight counterparts.[6]

In the year 2003, 6,918 of the 64,689 infants born to Louisiana residents were low birthweight babies. This represents 10.7% of Louisiana's live births for the year, compared to 7.9% born at low birthweight in the United States as a whole. Both Louisiana and the United States have seen an increase in the percentage of infants with low birthweight in recent years.

According to the National Center for Health Statistics, Louisiana had the second highest percentage of low birthweight babies in the nation in the year 2003, outranked only by Mississippi.

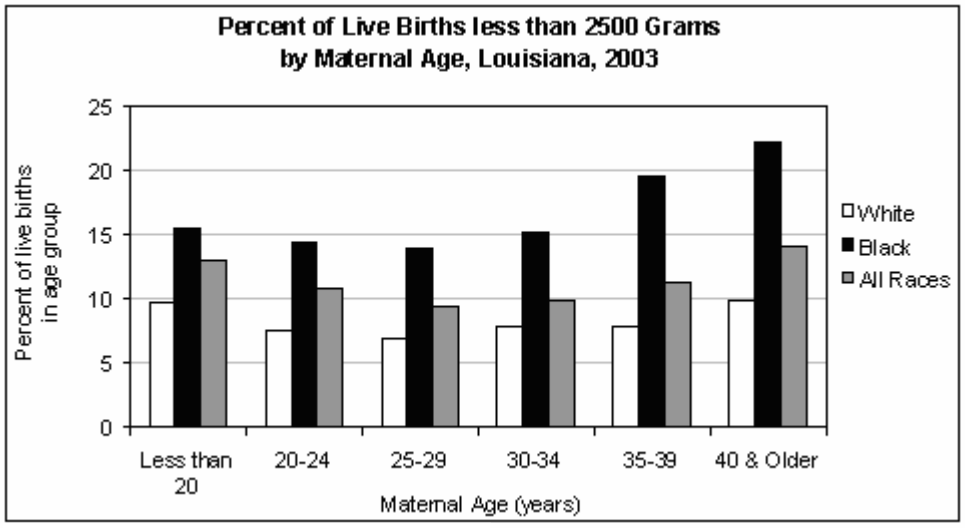
Percent of Live Births Less Than 2500 Grams
Louisiana, Neighboring States, and United States, 2003

State	Percent of Live Births	National Ranking
Alabama	10.0	3
Arkansas	8.9	11
Louisiana	10.7	2
Mississippi	11.4	1
Texas	7.9	26
United States	7.9	-

Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005: (13th Ed.): Morgan Quitno Press, Lawrence, KS.

Black women in the state gave birth to infants of low birthweight about twice as frequently as white women did, at 15.0% compared to 7.7% of live births, respectively. This discrepancy held true for almost all age groups, excluding women under 15 years of age where the racial disparity was almost threefold. Black teenagers under 15 were more likely to have low birthweight babies than white women under 15. Examination of births by age group found that mothers over age 40 years had the highest percentage of low birthweight babies (14.1% of live births), followed by mothers under age 20 (13.0%).

[4] High- Risk Infants. Journal of the American Medical Association. 284 (16) 2142 October 25th 2000.
[5] Waldman HB. Perlman SP., Low Birthweight babies grow older, but there could be many problems. Journal of Dentistry for Children. 68 (5-6): 302, 2001 Sep-Dec.
[6] Hack M, Klein NK & Taylor HG. *Long-term developmental outcomes of low birthweight infants*. The Future of Children, Low Birthweight '95; 5:19-34.



Source: Louisiana State Center for Health Statistics

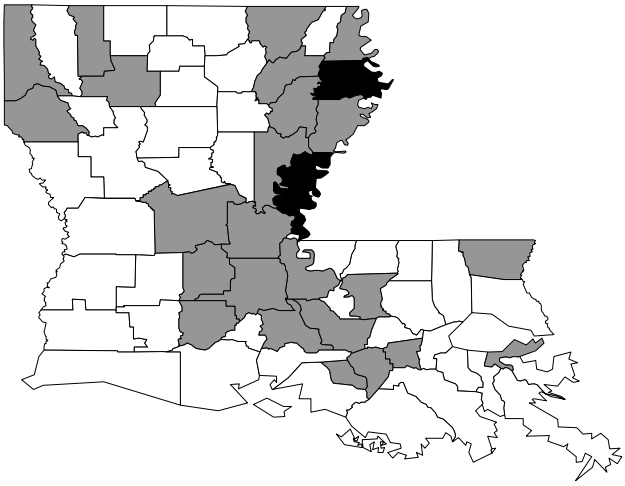
Infants weighing less than 1,500 grams (3 pounds, 5 ounces) at birth are considered to be very low birthweight and are at much greater risk of mortality and long-term disability. The risk of early death for very low birthweight infants is about 65 times that of infants who weigh at least 1,500 grams.[7] In the year 2003, 2.2% of infants born to Louisiana residents weighed less than 1,500 grams, as compared to 1.4% of infants born to United States residents as a whole. As with infants weighing less than 2,500 grams, there were demographic differences in the mothers giving birth to very low birthweight infants. Black mothers gave birth to very low birthweight infants twice as frequently as white mothers did, at 1.4% compared to 0.7% of live births, respectively. Infants born to the youngest and the oldest mothers were more likely to be very low birthweight.

In the year 2003, Madison Parish had the highest percentage of low birthweight babies in Louisiana at 14.6% of live births, while Beauregard Parish had the lowest at 6.4% of live births. The map on the following page shows the percent of live births that were low birthweight babies in each parish.

[7] Ventura SJ, Martin JA, Curtin SC, Mathews TJ. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report*; vol. 45 no 11, suppl. Hyattsville, Maryland: National Center for Health Statistics. 1997.

Percent of Live Births less than 2500 grams
Five-Year Average

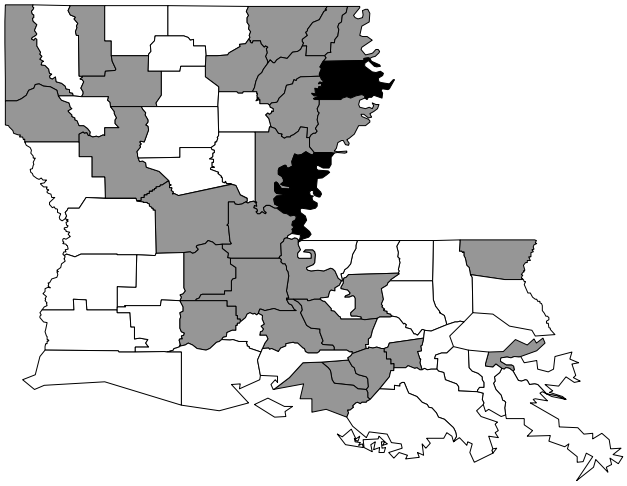
YEARS 1998-2002



Percent

7.1 – 10.5
10.6 – 14.0
14.1 – 17.5

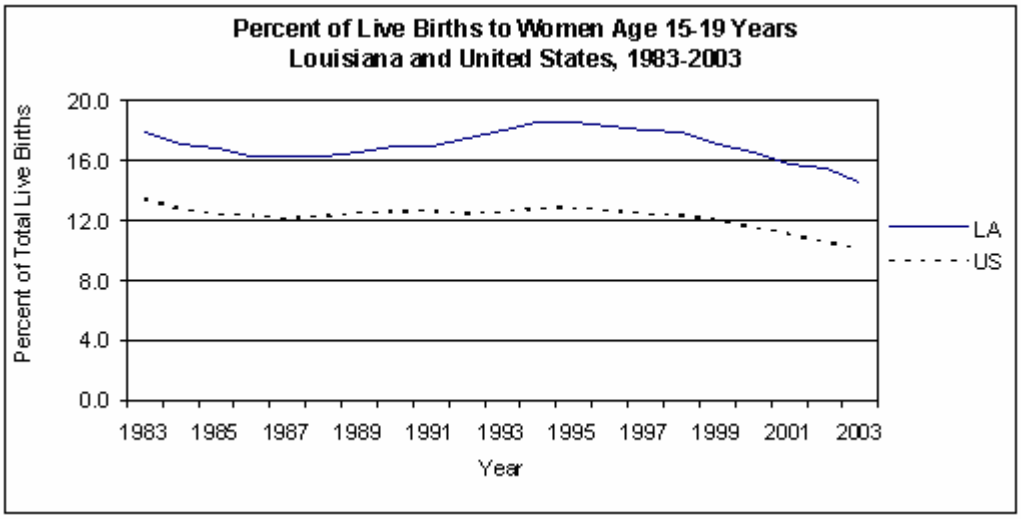
YEARS 1999-2003



Teen Births

Despite an overall decrease in teen birth rates over the last two decades, teenage pregnancy continues to be a problem for the nation. Teen mothers are less likely to receive adequate prenatal care and are more likely to give birth to low birthweight infants.[8] Their infants are more likely to be hospitalized and go on to have childhood health problems. National statistics report that most births to teens (78.9%) occur outside marriage[9] and 25% of teenage mothers go on to have additional children within the next two years.[10] These factors, combined with the fact that teenage mothers are less likely to finish high school, contribute to the high proportion of women living in poverty who first gave birth during adolescence. During the fiscal years of 1997-1998, Louisiana spent over $540 million on programs such as the Family Independent Temporary Assistance Program (FITAP), Food Stamps, Women, Infant and Children (WIC) Program, Foster Care and Medicaid to support adolescent pregnancy in Louisiana.[11] In contrast, the state spent over $10.3 million in fiscal year 1997-1999 on programs designed to prevent teenage pregnancy.[12]

As illustrated in the graph below, the percentage of live births to teen mothers aged 15-19 years has decreased over the last twenty years nationwide, this percentage is higher in Louisiana overall than in United States. While, both nationwide and in Louisiana, an increase in teenage births was observed in the mid-1990's, the proportion of teenage births as a total of all births has been on a downward trend for the last six years.



Source: Louisiana State Center for Health Statistics and National Center for Health Statistics, NVSR Reports

The following table shows teen birth rates for women aged 15-19 years in Louisiana and neighboring states. Louisiana has consistently ranked among the top ten states in terms of rate of live births to teens.

[8] Lewis CT, Mathews TJ, Heuser RL. *Prenatal Care in the United States, 1980-94*. National Center for Health Statistics. Vital Health Statistics 21(54). 1996.

[9] Ventura SJ, Curtin SC, Martin JA, Mathews TJ. "Variations in Teenage Birth Rates, 1991-98." *National Vital Statistics Reports,* vol. 48 no 6. Hyattsville, Maryland: National Center for Health Statistics. 2000.

[10] The Alan Guttmacher Institute. *Sex and America's Teenagers*. 1994.

[11] Louisiana Task Force on Teen Pregnancy. Consequences of Adolescent Pregnancy, p. 27, March 1999

[12] Louisiana Task Force on Teen Pregnancy. Consequences of Adolescent Pregnancy, p. 28, March 1999

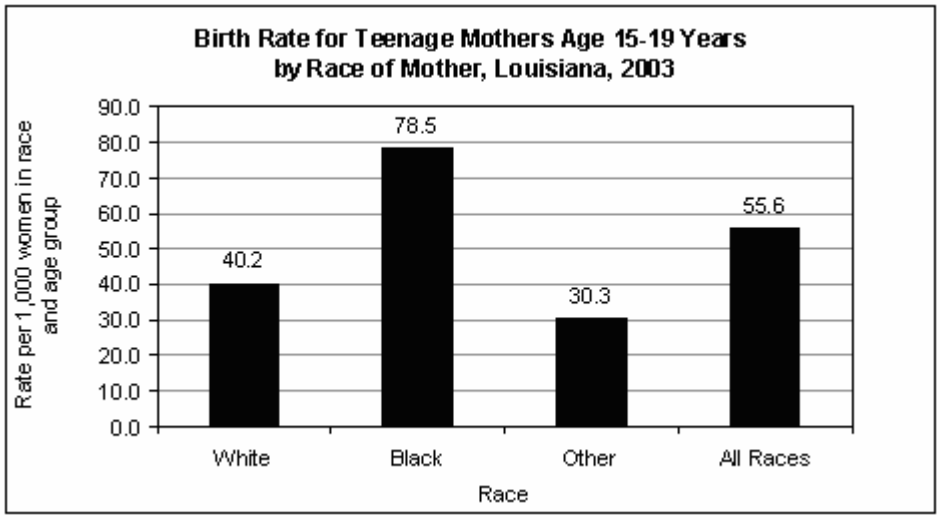
In the year 2003, Louisiana had the 6th highest rate of live births to teens aged 15-19 in the nation, ranking lower than Mississippi, Texas and Arkansas which were all in the top five.

Rate of Live Births to Teenage Mothers aged 15-19 Years
Louisiana, Neighboring States, and United States, 2003

State	Rate per 1,000 Live Births	National Ranking
Alabama	55.8	13
Arkansas	66.3	5
Louisiana	63.9	6
Mississippi	70.5	1
Texas	69.4	3
United States	46.1	-

Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005: (13th Ed.): Morgan Quitno Press, Lawrence, KS.

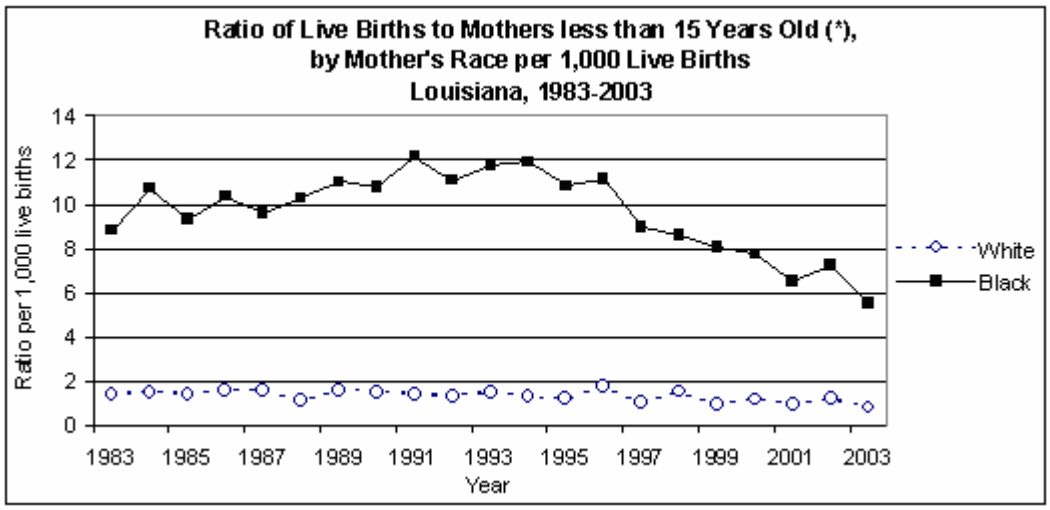
To make meaningful comparisons of births among teens in different race groups, teen birth rates have been calculated by relating the number of teen births in each race group, to the total number of teen women in the same age-race group. In Louisiana, the birth rate for black teenagers aged 15-19 in 2003 (78.5) was nearly twice than that of white teenagers (40.2), of that same age group, as illustrated in the following graph.



Source: Louisiana State Center for Health Statistics

The birth rate in 2003 among women less than 20 years of age was 40.9 for blacks, compared to 20.7 for whites.

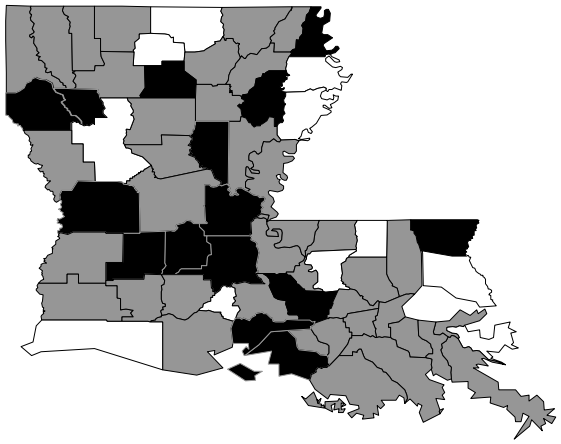
While this chapter has focused on births to teenage mothers aged 15-19 years, it is important to note that live births do occur among women aged less than 15. There is a great racial disparity in the proportion of women giving birth to live infants when younger than 15 years of age. Black women are historically more likely than white women to conceive and deliver an infant before turning 15 years old as illustrated in the following graph.



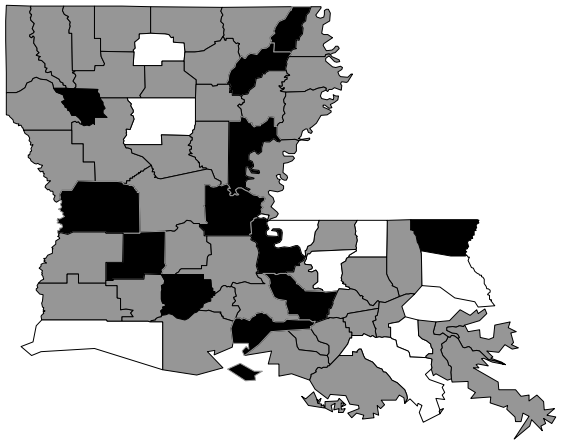
Source: Louisiana State Center for Health Statistics
(*) Mothers aged less than 8 years are not included in the count

Teen birth rate per 1,000 women 15-19
Louisiana, 2002- 2003

YEAR 2002



YEAR 2003



Rate

22.4 - 44.9
45.0 - 7.5
67.6 - 90. 0

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2003					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 1999 - 2003	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Louisiana	64689	80.06	10.46	14.61	14.89
White	37066	86.82	7.50	10.52	10.60
Black	26024	70.27	14.64	20.92	21.50
Other	1599	82.82	8.44	6.82	6.94
Acadia	956	65.67	10.83	16.42	16.63
White	732	69.66	8.75	14.21	14.34
Black	223	52.09	17.72	23.77	24.22
Other	****	100.00	9.09	0.00	0.00
Allen	317	82.43	10.22	17.67	17.98
White	239	86.50	8.01	16.74	16.74
Black	67	68.66	16.95	23.88	25.37
Other	11	77.78	20.93	0.00	0.00
Ascension	1422	83.99	8.57	10.48	10.62
White	1071	89.51	6.89	7.94	7.94
Black	333	66.26	13.97	19.22	19.82
Other	18	83.33	3.39	0.00	0.00
Assumption	268	66.92	11.36	14.93	14.93
White	163	71.70	7.68	9.20	9.20
Black	103	59.80	16.10	23.30	23.30
Other	****	50.00	11.11	50.00	50.00
Avoyelles	667	83.13	10.97	19.34	19.79
White	402	88.69	7.60	14.68	14.68
Black	248	74.07	16.90	26.21	27.02
Other	17	82.35	8.82	29.41	35.29
Beauregard	425	74.58	7.35	15.29	15.29
White	365	77.56	6.67	13.15	13.15
Black	52	51.92	9.94	28.85	28.85
Other	8	87.50	18.18	25.00	25.00
Bienville	192	77.89	11.90	20.31	20.31
White	101	85.00	10.69	18.81	18.81
Black	90	69.66	13.44	22.22	22.22
Other	****	100.00	0.00	0.00	0.00
Bossier	1560	81.59	9.36	12.05	12.24
White	1123	87.73	7.57	9.08	9.26
Black	400	64.56	14.51	20.25	20.50
Other	37	81.08	5.71	13.51	13.51
Caddo	3578	73.90	12.07	17.16	17.52
White	1518	88.13	7.81	9.55	9.62
Black	2012	63.01	15.39	23.16	23.76
Other	48	80.43	8.87	6.25	6.25
Calcasieu	2765	85.96	9.72	14.76	14.83
White	1921	90.01	7.66	12.91	12.96
Black	807	76.32	14.63	19.45	19.58
Other	37	86.49	4.85	8.11	8.11
Caldwell	106	83.50	9.27	16.04	16.98
White	93	85.56	8.29	16.13	16.13
Black	13	69.23	15.15	15.38	23.08
Other	0	0.00	0.00	0.00	0.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2003					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 1999 - 2003	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Cameron	94	89.25	8.36	14.89	14.89
White	85	88.24	8.02	14.12	14.12
Black	8	100.00	17.39	25.00	25.00
Other	****	100.00	0.00	0.00	0.00
Catahoula	127	74.80	11.66	22.83	23.62
White	81	85.19	8.11	19.75	19.75
Black	46	56.52	17.67	28.26	30.43
Other	0	0.00	0.00	0.00	0.00
Claiborne	166	71.95	9.31	19.28	19.28
White	67	85.07	5.66	2.99	2.99
Black	98	62.50	12.16	30.61	30.61
Other	****	100.00	0.00	0.00	0.00
Concordia	187	55.19	17.39	18.72	19.25
White	75	75.68	15.32	14.67	14.67
Black	109	41.12	19.45	22.02	22.94
Other	****	50.00	7.14	0.00	0.00
DeSoto	340	72.89	12.12	19.41	20.29
White	160	81.65	8.80	18.13	18.13
Black	180	64.94	15.42	20.56	22.22
Other	0	0.00	25.00	0.00	0.00
E. Baton Rouge	5736	80.86	11.14	12.71	12.99
White	2503	91.01	7.22	6.03	6.07
Black	3026	71.98	14.53	18.87	19.37
Other	207	88.83	8.31	3.38	3.38
East Carroll	130	67.44	12.10	13.85	14.62
White	18	88.89	7.81	5.56	11.11
Black	112	63.96	13.02	15.18	15.18
Other	0	0.00	0.00	0.00	0.00
E. Feliciana	261	75.77	9.31	16.48	16.48
White	132	85.61	7.79	13.64	13.64
Black	129	65.63	10.90	19.38	19.38
Other	0	0.00	25.00	0.00	0.00
Evangeline	471	75.64	13.26	17.20	17.62
White	333	80.61	10.04	12.91	12.91
Black	137	63.50	19.54	27.74	29.20
Other	****	100.00	7.69	0.00	0.00
Franklin	279	64.52	11.22	19.35	20.43
White	153	85.62	9.10	12.42	13.07
Black	125	38.40	13.90	28.00	29.60
Other	****	100.00	0.00	0.00	0.00
Grant	255	86.45	8.32	12.16	12.94
White	224	89.09	7.87	11.61	11.61
Black	28	64.29	12.26	17.86	25.00
Other	****	100.00	0.00	0.00	0.00
Iberia	1122	67.03	9.80	17.91	18.54
White	658	77.42	6.73	14.13	14.59
Black	441	51.61	14.41	24.49	25.40
Other	23	65.22	7.78	0.00	0.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2003					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 1999 - 2003	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Iberville	458	75.00	11.61	19.00	19.21
White	178	90.34	7.92	7.87	7.87
Black	278	65.33	14.37	25.90	26.26
Other	****	50.00	0.00	50.00	50.00
Jackson	211	79.33	9.28	16.11	16.59
White	147	85.42	6.98	15.65	15.65
Black	62	64.52	14.16	16.13	17.74
Other	****	100.00	0.00	50.00	50.00
Jefferson	6287	82.56	9.22	12.20	12.52
White	3721	88.00	7.05	9.54	9.62
Black	2230	73.46	13.29	17.85	18.61
Other	336	82.93	7.61	4.17	4.17
Jefferson Davis	477	70.13	10.42	15.30	15.30
White	370	77.66	8.83	12.97	12.97
Black	102	42.00	16.57	22.55	22.55
Other	5	80.00	4.76	40.00	40.00
Lafayette	2956	88.93	9.25	11.57	11.84
White	1923	93.43	6.51	9.41	9.41
Black	971	80.27	15.09	16.27	17.10
Other	62	85.25	6.57	4.84	4.84
Lafourche	1229	73.72	9.94	12.94	13.10
White	932	75.55	8.11	10.84	10.94
Black	257	66.54	16.19	19.84	20.23
Other	40	77.50	10.80	17.50	17.50
LaSalle	175	89.14	7.82	14.86	14.86
White	152	90.79	6.05	13.16	13.16
Black	21	76.19	20.69	28.57	28.57
Other	****	100.00	0.00	0.00	0.00
Lincoln	543	75.84	9.39	13.63	13.81
White	286	81.63	5.96	9.44	9.44
Black	244	69.14	13.28	18.85	19.26
Other	13	75.00	4.44	7.69	7.69
Livingston	1528	85.73	7.99	11.19	11.19
White	1436	87.14	7.60	10.93	10.93
Black	81	59.26	15.19	17.28	17.28
Other	11	100.00	5.41	0.00	0.00
Madison	130	70.54	15.37	22.31	22.31
White	32	93.55	13.48	15.63	15.63
Black	98	63.27	16.02	24.49	24.49
Other	0	0.00	0.00	0.00	0.00
Morehouse	410	78.50	11.81	17.80	18.05
White	188	88.11	8.85	11.70	11.70
Black	218	70.14	14.22	23.39	23.85
Other	****	75.00	16.67	0.00	0.00
Natchitoches	581	77.02	10.92	18.07	18.42
White	269	87.50	7.59	12.64	12.64
Black	306	67.44	13.65	22.88	23.53
Other	6	100.00	24.14	16.67	16.67

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2003					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 1999 - 2003	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Orleans	6919	76.89	13.23	16.98	17.44
White	1298	89.86	7.42	3.31	3.31
Black	5421	73.45	14.76	20.77	21.36
Other	200	86.67	7.50	3.00	3.00
Ouachita	2251	82.52	10.68	16.53	16.97
White	1206	88.76	7.16	11.11	11.19
Black	1017	74.85	14.87	23.40	24.29
Other	28	92.59	11.01	0.00	0.00
Plaquemines	443	80.82	8.51	13.77	13.77
White	284	84.45	6.96	12.32	12.32
Black	128	73.60	11.86	19.53	19.53
Other	31	76.67	9.02	3.23	3.23
Pointe Coupee	289	81.05	12.45	19.72	20.76
White	152	88.59	8.13	9.21	9.21
Black	132	71.76	17.15	32.58	34.85
Other	5	100.00	0.00	0.00	0.00
Rapides	1898	87.71	10.65	14.96	15.02
White	1145	92.77	7.63	11.88	11.88
Black	736	80.19	15.34	19.84	19.97
Other	17	75.00	9.15	11.76	11.76
Red River	162	72.50	10.22	22.22	22.84
White	82	81.71	7.92	15.85	15.85
Black	79	62.34	12.43	29.11	30.38
Other	****	100.00	0.00	0.00	0.00
Richland	281	78.91	11.87	18.86	19.22
White	129	86.72	6.78	15.50	15.50
Black	150	71.72	16.91	22.00	22.67
Other	****	100.00	37.50	0.00	0.00
Sabine	338	76.88	9.20	15.68	15.68
White	233	79.91	6.88	16.74	16.74
Black	74	63.51	14.96	17.57	17.57
Other	31	86.67	14.41	3.23	3.23
St. Bernard	898	88.28	9.47	14.48	14.92
White	743	90.50	8.61	14.00	14.54
Black	128	78.57	15.46	18.75	18.75
Other	27	74.07	9.82	7.41	7.41
St. Charles	644	83.44	8.99	12.58	12.58
White	423	92.31	7.03	8.98	8.98
Black	209	65.22	12.81	20.10	20.10
Other	12	90.91	12.50	8.33	8.33
St. Helena	101	82.65	9.44	13.86	13.86
White	38	89.19	6.72	15.79	15.79
Black	63	78.69	11.27	12.70	12.70
Other	0	0.00	0.00	0.00	0.00
St. James	287	62.81	11.80	16.72	16.72
White	122	75.00	7.45	8.20	8.20
Black	165	53.94	14.58	23.03	23.03
Other	0	0.00	20.00	0.00	0.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2003					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 1999 - 2003	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
St. John	691	74.23	10.23	15.05	15.20
White	326	84.57	7.16	9.20	9.20
Black	354	64.53	13.23	20.34	20.62
Other	11	72.73	1.69	18.18	18.18
St. Landry	1337	75.34	11.13	17.58	18.03
White	705	85.76	7.92	12.20	12.48
Black	621	63.74	14.49	23.67	24.32
Other	11	72.73	5.41	18.18	18.18
St. Martin	706	86.23	10.78	16.43	16.57
White	444	91.03	8.46	12.39	12.39
Black	248	77.42	14.44	24.60	25.00
Other	14	92.86	7.55	0.00	0.00
St. Mary	766	73.52	10.55	17.49	17.89
White	461	78.56	8.08	14.32	14.53
Black	285	65.25	14.83	22.81	23.51
Other	20	75.00	6.98	15.00	15.00
St. Tammany	2916	87.14	7.80	9.22	9.26
White	2464	89.04	6.92	7.55	7.59
Black	396	75.64	12.75	19.95	19.95
Other	56	85.19	10.33	7.14	7.14
Tangipahoa	1562	80.49	10.20	14.92	14.98
White	946	87.27	6.84	10.25	10.36
Black	605	69.68	15.14	22.48	22.48
Other	11	90.91	14.52	0.00	0.00
Tensas	80	47.50	11.36	20.00	21.25
White	15	86.67	10.45	20.00	20.00
Black	63	36.51	11.53	20.63	22.22
Other	****	100.00	33.33	0.00	0.00
Terrebonne	1697	76.71	10.31	15.44	15.67
White	1216	77.13	8.37	14.31	14.39
Black	331	77.54	16.61	19.64	20.24
Other	150	71.43	10.82	15.33	16.00
Union	305	82.12	8.97	15.08	15.41
White	209	90.38	7.42	9.09	9.57
Black	93	62.64	11.81	29.03	29.03
Other	****	100.00	15.38	0.00	0.00
Vermilion	750	88.23	9.13	13.33	13.60
White	565	88.85	7.53	10.44	10.80
Black	167	85.45	15.61	24.55	24.55
Other	18	94.44	5.38	0.00	0.00
Vernon	1010	76.52	7.10	12.18	12.18
White	781	77.94	6.24	11.27	11.27
Black	188	70.97	10.35	15.96	15.96
Other	41	75.00	6.25	12.20	12.20
Washington	659	81.82	10.88	16.84	17.75
White	407	88.53	8.81	13.76	14.25
Black	250	70.73	14.12	21.60	23.20
Other	****	100.00	0.00	50.00	50.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2003					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 1999 - 2003	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Webster	532	81.42	12.33	17.48	17.67
White	347	88.60	9.20	12.39	12.39
Black	183	67.98	17.17	27.32	27.87
Other	****	50.00	33.33	0.00	0.00
W. Baton Rouge	293	79.17	10.18	12.63	12.63
White	174	87.72	7.60	9.77	9.77
Black	118	66.38	14.12	16.95	16.95
Other	****	100.00	0.00	0.00	0.00
West Carroll	146	83.33	10.59	20.55	20.55
White	117	86.09	8.88	20.51	20.51
Black	29	72.41	17.31	20.69	20.69
Other	0	0.00	0.00	0.00	0.00
W. Feliciana	129	87.20	8.92	14.73	14.73
White	63	98.36	5.72	4.76	4.76
Black	66	76.56	12.26	24.24	24.24
Other	0	0.00	0.00	0.00	0.00
Winn	190	82.35	9.07	13.16	15.26
White	120	87.39	5.64	10.83	10.83
Black	70	73.53	15.45	17.14	22.86
Other	0	0.00	0.00	0.00	0.00

+According to modified Kessner index.
****Counts less than 5 and greater than 0.
Source: Louisiana State Center for Health Statistics.

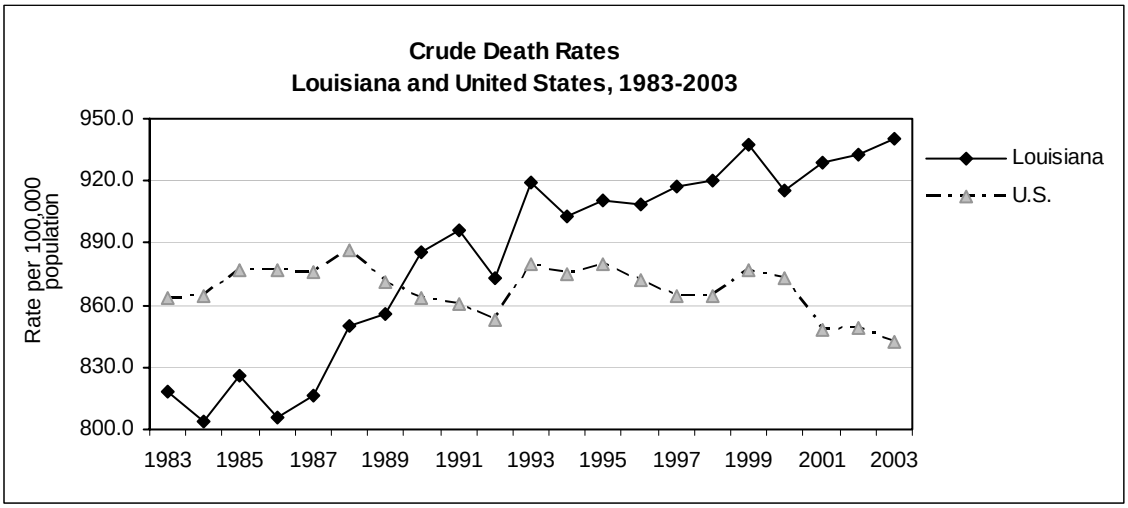
C. DEATHS

Death Counts and Crude Mortality Rates

There were 42,297 deaths among Louisiana residents in 2003, representing an increase from 41,797 deaths in 2002. In 2003, there were 28,947 (68.4%) deaths among whites, 13,075 (30.9%) among blacks, and 275 (0.7%) among other races. Among age groups there were 21% deaths in the age group 45-64 years, 45% in the age group 65-84 years and 23% among those who were 85 years and older.

Crude (unadjusted) death rates are useful for examining the overall mortality in an area or population group, since they utilize total population and do not account for any population attributes. In Louisiana, the crude death rate slightly increased from 932.4 per 100,000 population in 2002 to 940.7 per 100,000 population in 2003.

The United States death rate in 2003 decreased to 841.9 per 1,000 population, from 848.9 per 1,000 population in 2002.



Source: Louisiana State Center for Health Statistics
National Center for Health Statistics Final Data 2003

Crude death rates also give an estimate of the overall mortality for a population, because they measure deaths in the population as a whole. Adjusted rates (also called standardized rates) are derived from statistical procedures that adjust for differences in population composition, such as age, race, or sex, which can increase or decrease the likelihood of death in one or more of the populations being considered. Because age-adjusted death rates control for the variations in age structures of populations, they make comparisons between mortality rates of different populations meaningful. However, the age-adjusted mortality measure is not a true estimation of the death rate as the crude mortality rate is, and it should not be used in comparisons with crude mortality rates. Differences in age-adjusted rates in two different populations may reflect an actual difference in death rates in the two populations, or may be due to other factors, such as race or sex, which were not taken into account when the adjustments for age

were made. In the table below, crude rates for 2003 are preliminary; at this time we have final figures for Louisiana and United States, which are 940.7 and 841.9 per 100,000 population respectively.

Mortality Rates
Louisiana, Neighboring States, and United States, 2003

State	Crude Rate*	Age-Adjusted Rate**
Alabama	1038.2	1001.9
Arkansas	1024.5	937.6
Louisiana	954.0	1007.4
Mississippi	990.4	1015.2
Texas	701.5	857.2
United States	840.4	831.2

*Rate per 100,000 population, preliminary 2003. **Rate per 100,000 U.S. standard population 2000.

Source: National Center for Health Statistics (Revised 2000 rates in NVSR vol. 53:15 : Preliminary Death Data 2003)

Number of Deaths by Age Group and Sex
Louisiana, 2003

Sex	Age Group								
	Under 5	5-14	15-24	25-44	45-64	65-84	85+	Unknown	Total
Male	307	55	213	1034	3479	9451	6674	0	21213
Female	404	80	612	1923	5390	9568	3107	0	21084
Total	711	135	825	2957	8869	19019	9781	0	42297

Source: Louisiana State Center for Health Statistics

Number and Rate of Deaths by Race - Sex, Age Group, and Parish
Louisiana, 2003

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
State Total	42297	940.7	ALL	604	107	61	74	330	495	1016	1941	3636	5233	7635	11384	9781	0
	14231		WM	118	23	17	16	135	212	344	692	1293	1949	2904	4144	2384	0
	14716		WF	119	9	****	****	58	60	143	368	670	1249	2368	4493	5160	0
	6699		BM	209	45	22	24	101	158	352	520	942	1158	1214	1252	702	0
	6376		BF	149	28	12	23	****	57	166	347	698	835	1090	1447	1490	0
	154		OM	****	****	****	0	0	****	****	8	23	25	28	26	21	0
	121		OF	****	****	0	****	****	****	****	6	10	17	31	22	24	0
Acadia	599	10.1	ALL	9	****	0	****	****	13	14	29	51	76	95	153	151	0
	250		WM	****	****	0	****	****	8	9	17	24	36	37	60	50	0
	269		WF	****	0	0	0	****	****	****	9	14	28	44	76	87	0
	35		BM	0	****	0	0	0	****	****	****	7	6	7	7	****	0
	44		BF	0	0	0	0	0	0	****	****	6	6	****	10	****	0
	****		OM	0	0	0	0	0	0	0	0	0	0	****	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Allen	241	9.5	ALL	****	0	****	****	0	5	5	9	18	32	47	70	50	0
	95		WM	0	0	****	0	0	****	****	5	10	14	27	22	13	0
	96		WF	****	0	0	0	0	****	****	****	****	11	16	35	23	0
	20		BM	0	0	0	0	0	****	0	****	****	****	****	5	****	0
	27		BF	0	0	0	****	0	****	0	****	****	****	****	8	8	0
	****		OM	****	0	0	0	0	0	0	0	****	0	0	0	****	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ascension	575	7.1	ALL	7	****	****	****	12	5	8	37	60	75	94	166	105	0
	233		WM	****	****	****	****	7	****	****	20	28	30	45	70	20	0
	225		WF	****	****	0	****	****	****	****	7	14	27	30	69	68	0
	53		BM	****	****	0	0	****	0	****	5	8	11	9	11	****	0
	62		BF	****	0	0	0	0	0	****	5	10	****	****	16	****	0
	****		OM	0	0	0	0	0	0	0	0	0	****	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	****	0	0	0

Number and Rate of Deaths by Race - Sex, Age Group, and Parish
Louisiana, 2003

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Assumption	201	8.6	ALL	7	0	****	0	0	****	****	6	16	30	43	46	47	0
	67		WM	****	0	0	0	0	****	****	****	5	8	20	15	13	0
	58		WF	0	0	0	0	0	0	****	****	****	6	12	15	21	0
	45		BM	****	0	****	0	0	0	****	****	7	11	****	7	5	0
	31		BF	****	0	0	0	0	0	0	****	****	5	****	9	8	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avoyelles	459	10.9	ALL	****	****	0	0	****	****	6	19	42	54	71	132	124	0
	165		WM	****	0	0	0	****	****	****	10	14	23	31	49	30	0
	181		WF	****	0	0	0	****	0	0	0	12	13	21	58	74	0
	51		BM	0	****	0	0	0	0	****	****	8	9	13	8	9	0
	59		BF	0	0	0	0	****	0	****	****	8	9	6	15	10	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	****	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	0	****	****	0
Beauregard	303	9.1	ALL	****	0	0	0	****	****	8	12	26	33	63	83	73	0
	146		WM	****	0	0	0	****	****	6	****	14	24	33	44	18	0
	124		WF	****	0	0	0	0	0	****	5	6	9	21	31	49	0
	14		BM	0	0	0	0	0	0	0	****	****	0	****	****	****	0
	19		BF	0	0	0	0	0	0	****	****	****	0	****	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bienville	223	14.3	ALL	****	0	0	0	****	5	****	9	9	24	38	52	79	0
	55		WM	0	0	0	0	****	****	0	****	****	9	13	14	10	0
	74		WF	****	0	0	0	0	0	0	****	0	****	9	16	43	0
	53		BM	0	0	0	0	0	****	****	****	****	9	11	14	11	0
	41		BF	****	0	0	0	0	0	****	****	****	****	5	8	15	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bossier	813	8	ALL	10	****	****	****	****	11	24	35	58	92	172	225	176	0
	356		WM	****	****	****	****	****	8	7	17	29	46	85	111	43	0
	304		WF	****	****	0	****	0	****	****	14	16	22	65	87	91	0
	65		BM	****	****	0	0	0	****	11	****	7	12	14	8	6	0
	82		BF	****	0	0	0	0	****	****	****	6	****	5	19	36	0
	****		OM	0	0	0	0	0	0	0	0	0	****	****	0	0	0
	****		OF	0	0	0	0	0	0	0	****	0	0	****	0	0	0
Caddo	2683	10.6	ALL	43	5	****	****	13	26	48	117	220	331	463	737	675	0
	765		WM	****	0	****	0	7	9	10	33	56	91	170	237	146	0
	881		WF	****	0	0	0	****	****	11	****	31	70	117	279	350	0
	551		BM	27	****	****	0	****	9	18	35	84	99	98	121	****	0
	480		BF	10	****	0	****	****	****	9	29	49	69	76	100	126	0
	****		OM	0	0	0	0	0	0	0	0	0	****	****	0	0	0
	****		OF	0	0	0	0	0	0	0	****	0	****	****	0	****	0
Calcasieu	1712	9.3	ALL	22	5	6	****	15	18	37	92	140	226	316	460	374	0
	664		WM	5	****	****	****	7	6	20	39	62	93	124	199	102	0
	631		WF	5	0	****	0	****	6	****	16	29	64	102	187	210	0
	207		BM	8	0	****	0	****	****	9	23	28	32	45	38	****	0
	200		BF	****	****	****	0	0	****	****	14	20	34	42	****	44	0
	5		OM	0	0	0	0	0	0	0	0	0	0	****	****	****	0
	5		OF	0	0	0	0	0	0	0	0	****	****	****	0	0	0
Caldwell	138	12.9	ALL	0	0	0	0	0	****	****	9	15	17	30	39	24	0
	60		WM	0	0	0	0	0	****	****	6	6	11	13	14	****	0
	58		WF	0	0	0	0	0	0	****	****	5	****	12	19	15	0
	13		BM	0	0	0	0	0	0	0	0	****	****	****	****	0	0
	6		BF	0	0	0	0	0	0	0	****	****	****	0	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	****	0	0	0
Cameron	66	6.8	ALL	0	0	****	0	****	****	****	****	****	10	14	18	15	0
	33		WM	0	0	0	0	****	0	****	0	****	6	7	10	****	0
	27		WF	0	0	****	0	0	****	0	****	0	****	****	****	8	0
	****		BM	0	0	0	0	0	0	0	0	0	0	****	0	0	0
	5		BF	0	0	0	0	0	0	0	****	0	0	****	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number and Rate of Deaths by Race - Sex, Age Group, and Parish
Louisiana, 2003

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Catahoula	112	10.5	ALL	****	****	****	****	****	****	****	0	7	13	28	25	29	0
	34		WM	0	****	****	0	0	****	****	0	****	****	7	7	9	0
	43		WF	****	0	0	0	0	****	0	0	****	****	12	13	11	0
	13		BM	****	0	0	****	0	0	0	0	****	****	****	****	0	0
	22		BF	0	0	0	0	****	0	0	0	****	****	****	****	9	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Claiborne	199	12.1	ALL	****	0	0	0	****	****	****	5	10	15	29	60	71	0
	46		WM	****	0	0	0	****	0	0	****	****	****	9	17	11	0
	70		WF	0	0	0	0	0	0	0	****	0	****	****	24	36	0
	48		BM	****	0	0	0	****	****	****	****	6	6	12	9	9	0
	35		BF	****	0	0	0	0	0	0	****	****	****	****	10	15	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concordia	183	9.2	ALL	0	****	0	****	****	****	6	8	12	32	30	47	41	0
	57		WM	0	0	0	0	0	****	****	****	****	5	11	14	13	0
	56		WF	0	0	0	0	****	0	0	****	0	9	10	16	16	0
	36		BM	0	0	0	****	0	0	****	****	****	10	5	8	5	0
	33		BF	0	****	0	0	0	0	0	0	5	8	****	9	7	0
	****		OM	0	0	0	0	0	0	0	0	0	0	****	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DeSoto	307	12	ALL	****	0	0	0	****	****	6	12	16	41	45	101	79	0
	95		WM	0	0	0	0	****	0	****	****	6	12	16	31	22	0
	92		WF	****	0	0	0	0	****	0	****	****	7	11	37	30	0
	67		BM	****	0	0	0	0	0	****	6	5	14	13	19	7	0
	****		BF	0	0	0	0	****	0	****	****	****	8	****	14	20	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	****	0	0	0
E. Baton Rouge	3320	8	ALL	53	10	****	6	34	47	97	192	324	412	516	839	787	0
	945		WM	10	****	0	0	12	18	26	43	67	135	159	283	191	0
	1069		WF	5	0	0	0	****	****	****	****	48	84	154	328	414	0
	652		BM	24	6	****	****	12	19	32	75	120	99	104	97	60	0
	637		BF	14	****	****	****	****	****	31	53	83	90	96	129	122	0
	****		OM	0	0	0	0	0	0	****	****	****	****	****	****	0	0
	****		OF	0	0	0	0	0	0	0	0	****	****	****	****	0	0
East Carroll	103	11.4	ALL	0	****	0	0	****	****	****	****	9	19	19	24	26	0
	****		WM	0	0	0	0	0	****	0	0	0	****	****	6	****	0
	22		WF	0	0	0	0	0	0	0	0	****	****	****	10	7	0
	27		BM	0	****	0	0	****	0	****	0	****	7	6	****	****	0
	34		BF	0	0	0	0	0	0	0	****	****	6	6	****	11	0
	****		OM	0	0	0	0	0	0	0	0	0	****	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E. Feliciana	229	10.9	ALL	****	0	0	0	****	****	6	7	27	21	54	61	44	0
	59		WM	0	0	0	0	0	****	****	****	9	5	19	15	6	0
	65		WF	0	0	0	0	****	****	0	0	****	****	16	20	20	0
	62		BM	****	0	0	0	****	****	****	5	****	7	12	14	9	0
	43		BF	****	0	0	0	0	0	0	****	8	****	7	12	9	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evangeline	374	10.6	ALL	****	****	****	****	6	10	7	10	31	32	68	105	98	0
	165		WM	****	0	0	****	****	6	****	5	16	12	32	52	30	0
	124		WF	****	0	****	0	0	0	0	****	7	****	20	34	53	0
	54		BM	0	****	****	0	****	****	****	****	****	11	9	9	8	0
	31		BF	0	0	0	0	0	****	0	****	****	****	7	10	7	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Franklin	280	13.4	ALL	5	****	0	0	****	****	****	5	19	33	58	75	77	0
	90		WM	0	0	0	0	0	****	0	****	5	11	23	26	20	0
	98		WF	****	0	0	0	0	0	****	0	****	6	21	27	38	0
	****		BM	****	****	0	0	****	****	0	****	5	10	8	****	****	0
	56		BF	****	0	0	0	0	0	****	****	****	6	6	17	****	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	****	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number and Rate of Deaths by Race - Sex, Age Group, and Parish
Louisiana, 2003

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Grant	196	10.4	ALL	0	0	0	0	****	0	****	8	16	22	36	61	51	0
	83		WM	0	0	0	0	0	0	****	5	11	15	19	21	11	0
	88		WF	0	0	0	0	0	0	0	****	****	****	13	35	32	0
	13		BM	0	0	0	0	****	0	0	****	0	****	****	5	****	0
	12		BF	0	0	0	0	0	0	0	****	****	****	****	0	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iberia	675	9.1	ALL	12	****	****	****	6	****	8	33	51	99	117	172	167	0
	233		WM	****	****	0	****	****	****	****	12	22	40	47	62	38	0
	247		WF	****	****	****	0	****	0	****	7	8	25	37	75	87	0
	102		BM	6	0	0	****	0	****	0	9	9	22	22	20	12	0
	92		BF	****	0	****	0	0	0	****	5	12	12	11	15	30	0
	****		OM	0	0	0	0	0	****	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iberville	327	10	ALL	****	****	0	0	****	5	9	9	30	48	70	83	68	0
	92		WM	0	0	0	0	****	****	****	****	9	22	****	26	15	0
	89		WF	0	0	0	0	0	****	****	0	****	****	16	32	27	0
	75		BM	0	****	0	0	****	****	****	5	****	16	26	8	8	0
	****		BF	****	****	0	0	0	0	****	****	12	****	14	17	18	0
	****		OM	0	0	0	0	0	****	0	0	0	0	****	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackson	213	13.7	ALL	****	0	0	0	****	0	****	5	8	28	49	59	54	0
	73		WM	0	0	0	0	****	0	0	****	****	****	21	27	17	0
	65		WF	0	0	0	0	****	0	****	****	****	8	12	21	19	0
	47		BM	****	0	0	0	0	0	****	****	****	12	11	6	8	0
	28		BF	****	0	0	0	0	0	****	0	****	****	5	5	10	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jefferson	4136	9.1	ALL	65	5	5	****	19	44	105	179	335	499	776	1215	886	0
	1621		WM	15	****	****	0	****	17	44	73	139	222	349	512	244	0
	1703		WF	8	****	****	****	5	****	23	46	76	144	275	560	557	0
	405		BM	20	****	****	****	7	13	25	34	67	75	75	61	22	0
	342		BF	17	0	0	****	****	7	10	24	47	48	****	73	48	0
	36		OM	****	0	0	0	0	****	****	****	****	****	****	****	9	0
	29		OF	****	****	0	0	0	0	****	****	****	****	10	****	6	0
Jefferson Davis	324	10.5	ALL	****	****	****	0	****	****	8	16	23	43	55	101	70	0
	127		WM	****	0	0	0	0	****	****	8	10	16	22	39	25	0
	132		WF	0	0	0	0	0	0	****	5	6	14	24	45	36	0
	34		BM	0	****	****	0	****	0	****	****	****	5	****	8	****	0
	****		BF	0	0	0	0	0	0	****	0	****	8	****	9	****	0
	****		OM	0	0	0	0	0	0	0	****	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lafayette	1473	7.6	ALL	28	****	****	****	6	19	26	87	141	176	295	355	331	0
	561		WM	****	0	****	****	****	9	9	40	58	67	117	151	101	0
	553		WF	11	****	0	0	****	****	****	20	34	45	109	150	174	0
	186		BM	****	****	0	0	****	5	9	19	28	41	****	30	****	0
	167		BF	10	0	****	****	0	****	****	8	21	23	36	24	38	0
	****		OM	0	0	0	0	0	0	****	0	0	0	****	0	0	0
	****		OF	0	0	0	****	0	0	0	0	0	0	0	0	****	0
Lafourche	763	8.4	ALL	10	5	****	0	6	6	20	25	57	99	119	220	195	0
	351		WM	****	****	****	0	****	****	15	13	25	51	56	104	71	0
	322		WF	5	0	0	0	0	****	5	7	18	35	45	92	114	0
	46		BM	****	****	0	0	****	0	0	****	6	7	10	15	****	0
	35		BF	****	****	0	0	0	0	0	****	5	****	****	9	7	0
	****		OM	0	0	0	0	0	0	0	0	****	****	****	0	****	0
	****		OF	0	0	0	0	0	0	0	0	****	****	0	0	****	0
LaSalle	170	11.8	ALL	****	0	0	****	****	0	0	****	17	18	30	53	46	0
	73		WM	****	0	0	****	****	0	0	****	10	12	****	25	11	0
	85		WF	0	0	0	0	0	0	0	0	****	6	19	25	31	0
	5		BM	0	0	0	0	0	0	0	0	****	0	0	****	****	0
	7		BF	0	0	0	0	0	0	0	0	****	0	****	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number and Rate of Deaths by Race - Sex, Age Group, and Parish
Louisiana, 2003

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Lincoln	343	8	ALL	7	****	0	0	****	8	7	7	25	37	68	68	111	0
	93		WM	****	0	0	0	****	****	****	****	5	9	19	21	28	0
	116		WF	****	****	0	0	0	****	****	0	6	11	15	26	53	0
	58		BM	5	****	0	0	****	****	****	****	9	8	11	6	10	0
	76		BF	0	0	0	0	0	0	****	****	5	9	23	15	20	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Livingston	710	7.2	ALL	16	****	0	****	8	9	26	39	67	98	145	187	112	0
	354		WM	6	****	0	****	****	****	20	26	40	46	78	83	38	0
	311		WF	6	0	0	****	****	****	6	11	23	43	57	94	68	0
	17		BM	0	0	0	0	0	0	0	****	****	6	****	****	****	0
	26		BF	****	0	0	0	0	0	0	****	****	****	****	****	****	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	0	****	0
	****		OF	0	0	0	0	0	0	0	0	0	****	0	0	0	0
Madison	132	10.1	ALL	0	0	0	0	****	0	****	13	7	14	20	31	44	0
	27		WM	0	0	0	0	0	0	0	****	****	5	****	8	7	0
	30		WF	0	0	0	0	0	0	0	****	0	****	****	10	12	0
	35		BM	0	0	0	0	****	0	0	7	****	****	9	6	9	0
	40		BF	0	0	0	0	0	0	****	****	****	****	5	7	16	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morehouse	380	12.5	ALL	6	****	****	0	****	9	15	17	28	35	57	104	104	0
	106		WM	0	0	0	0	0	****	6	****	10	11	18	34	20	0
	135		WF	****	0	0	0	0	****	****	****	****	11	19	40	49	0
	69		BM	****	****	****	0	****	****	5	****	8	8	10	14	****	0
	****		BF	****	****	0	0	0	0	****	5	****	5	10	16	22	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	****	0	0	0	0	****	0
Natchitoches	372	9.5	ALL	5	0	****	****	5	****	7	16	26	35	71	114	88	0
	110		WM	****	0	0	0	****	****	0	****	10	12	32	27	22	0
	128		WF	0	0	0	****	0	****	****	****	****	****	20	51	43	0
	64		BM	****	0	0	0	0	0	****	9	****	14	8	13	7	0
	70		BF	****	0	****	****	****	0	0	****	7	****	11	23	16	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orleans	4956	10.6	ALL	78	8	****	15	52	81	221	256	515	621	812	1215	1078	0
	791		WM	5	0	0	0	****	6	22	28	80	113	112	247	177	0
	947		WF	****	0	0	0	****	****	****	****	40	46	120	278	434	0
	1633		BM	40	****	****	6	35	58	143	131	220	254	285	310	146	0
	1530		BF	28	****	****	9	13	14	47	82	171	201	284	366	309	0
	27		OM	****	****	0	0	0	****	****	0	****	****	5	5	5	0
	28		OF	0	0	0	0	****	0	0	****	****	****	6	9	7	0
Ouachita	1380	9.3	ALL	26	****	5	5	5	7	34	52	97	148	236	423	338	0
	442		WM	****	0	****	****	****	****	11	18	44	49	81	160	65	0
	516		WF	****	0	****	0	****	0	6	8	18	41	79	168	189	0
	****		BM	11	****	****	****	****	****	7	14	13	33	35	36	27	0
	238		BF	9	****	****	0	0	0	10	12	22	****	41	59	57	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	****	0	0	0	0
Plaquemines	227	8.1	ALL	****	****	0	****	****	6	****	15	27	30	41	52	43	0
	77		WM	****	0	0	0	****	****	****	10	11	11	15	13	10	0
	90		WF	****	0	0	0	0	****	0	****	5	9	21	24	26	0
	36		BM	0	****	0	****	0	****	****	****	6	****	****	10	****	0
	21		BF	0	****	0	0	0	0	0	****	5	****	****	5	****	0
	****		OM	****	0	0	0	0	0	****	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	****	0	0	0	0	0	0	0	0
Pointe Coupee	241	10.9	ALL	****	0	0	****	****	****	****	11	15	21	41	78	64	0
	71		WM	0	0	0	0	0	0	****	****	5	8	16	24	13	0
	81		WF	0	0	0	****	0	0	0	****	****	****	8	30	33	0
	50		BM	****	0	0	0	****	****	****	****	5	8	8	11	8	0
	39		BF	****	0	0	0	0	****	0	****	****	****	9	13	10	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number and Rate of Deaths by Race - Sex, Age Group, and Parish
Louisiana, 2003

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Rapides	1417	11.1	ALL	27	****	****	****	7	11	29	48	107	149	269	402	363	0
	495		WM	****	0	****	0	****	****	9	25	39	54	108	158	91	0
	518		WF	9	0	0	0	****	****	****	7	19	34	81	167	189	0
	188		BM	8	****	0	****	****	****	11	11	29	30	****	29	30	0
	212		BF	6	****	****	0	0	****	****	5	****	29	46	48	53	0
	****		OM	0	0	0	0	0	0	0	0	****	****	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	****	****	0	0	0
Red River	104	10.9	ALL	****	0	0	0	****	****	****	****	9	11	14	31	29	0
	38		WM	0	0	0	0	****	****	0	****	****	****	10	12	6	0
	41		WF	0	0	0	0	0	0	0	****	****	5	****	16	14	0
	14		BM	****	0	0	0	0	0	****	****	0	****	****	****	****	0
	11		BF	0	0	0	0	0	0	****	****	****	0	0	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Richland	235	11.7	ALL	6	0	****	0	****	****	****	7	15	25	48	52	77	0
	70		WM	0	0	0	0	0	****	****	****	****	12	16	15	19	0
	73		WF	****	0	0	0	0	0	0	****	****	****	12	22	31	0
	40		BM	****	0	****	0	****	0	0	****	5	6	9	7	7	0
	52		BF	****	0	0	0	0	0	0	****	****	****	11	8	20	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sabine	256	10.8	ALL	****	0	0	0	****	****	5	6	23	31	50	65	69	0
	115		WM	****	0	0	0	****	****	****	****	13	14	28	30	19	0
	106		WF	****	0	0	0	****	0	****	0	****	12	17	25	45	0
	20		BM	0	0	0	0	****	0	0	0	****	****	****	****	****	0
	15		BF	0	0	0	0	0	0	****	****	****	****	****	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Bernard	797	12	ALL	****	0	0	****	6	7	13	33	66	90	159	263	156	0
	373		WM	0	0	0	0	****	****	7	****	42	45	80	128	50	0
	380		WF	****	0	0	****	****	****	****	17	17	38	72	127	98	0
	23		BM	0	0	0	0	0	0	****	****	****	****	****	****	****	0
	21		BF	****	0	0	0	****	0	****	0	****	****	****	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Charles	368	7.6	ALL	****	****	****	****	****	6	6	24	41	45	74	89	72	0
	131		WM	****	0	0	0	0	****	****	7	15	21	30	36	16	0
	120		WF	****	****	0	0	0	****	****	****	9	8	24	33	36	0
	63		BM	****	0	0	****	****	0	****	9	11	9	11	10	6	0
	****		BF	0	0	0	****	****	****	0	****	6	7	9	****	14	0
	****		OM	0	0	****	0	0	0	0	0	0	0	0	****	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Helena	96	9.1	ALL	0	0	0	0	0	****	0	8	9	13	21	24	20	0
	23		WM	0	0	0	0	0	****	0	****	****	****	****	7	0	0
	32		WF	0	0	0	0	0	0	0	****	****	****	9	****	10	0
	16		BM	0	0	0	0	0	0	0	0	****	****	****	****	****	0
	25		BF	0	0	0	0	0	0	0	****	****	****	5	7	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. James	180	8.5	ALL	****	0	0	0	****	****	****	8	15	22	44	35	45	0
	40		WM	0	0	0	0	0	0	****	****	****	****	13	****	10	0
	51		WF	0	0	0	0	0	0	0	****	****	****	9	14	23	0
	51		BM	****	0	0	0	****	****	****	****	6	12	12	****	5	0
	38		BF	0	0	0	0	****	0	****	****	5	****	10	10	7	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. John	343	7.8	ALL	****	****	0	****	****	5	6	17	36	53	55	92	69	0
	87		WM	****	0	0	0	0	****	****	6	7	17	13	24	13	0
	99		WF	****	0	0	0	****	0	0	****	****	6	18	29	36	0
	81		BM	****	0	0	****	****	****	0	6	15	13	13	21	7	0
	72		BF	0	****	0	****	0	****	0	****	7	17	11	****	13	0
	****		OM	0	0	0	0	0	0	****	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	****	0	****	0	0	****	0	0

Number and Rate of Deaths by Race - Sex, Age Group, and Parish
Louisiana, 2003

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
St. Landry	959	10.8	ALL	18	****	****	0	9	10	13	56	82	102	190	246	229	0
	305		WM	****	****	0	0	****	****	6	17	36	33	63	89	50	0
	301		WF	5	0	0	0	****	****	****	****	****	19	55	87	112	0
	****		BM	7	****	****	0	****	****	****	17	22	30	35	30	21	0
	179		BF	****	0	0	0	****	****	****	11	15	20	37	40	46	0
	****		OM	0	0	0	0	0	0	0	****	****	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Martin	439	8.9	ALL	9	****	****	****	7	7	13	20	29	65	79	96	108	0
	153		WM	****	0	****	****	****	****	****	8	13	24	34	28	30	0
	138		WF	****	0	0	0	****	0	5	****	****	9	24	35	53	0
	79		BM	****	****	****	****	****	****	****	6	6	21	12	16	****	0
	67		BF	****	****	0	0	0	****	****	****	****	11	9	****	17	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	****	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	0	0	****	0
St. Mary	530	10.1	ALL	****	****	0	0	5	****	8	31	41	89	109	135	107	0
	185		WM	****	0	0	0	****	0	****	11	12	27	49	55	24	0
	177		WF	0	0	0	0	0	0	****	7	11	28	26	47	57	0
	93		BM	0	****	0	0	****	****	****	6	10	21	20	19	10	0
	68		BF	****	0	0	0	****	0	0	7	****	****	****	****	****	0
	****		OM	0	0	0	0	0	0	0	0	****	****	****	****	****	0
	****		OF	0	0	0	0	0	0	****	0	0	0	0	0	0	0
St. Tammany	1538	7.6	ALL	16	****	****	5	10	15	31	68	133	200	297	422	336	0
	681		WM	9	****	****	****	7	13	19	35	68	110	152	164	100	0
	689		WF	****	****	0	****	****	****	7	22	44	66	117	221	204	0
	86		BM	****	****	0	****	****	****	5	7	10	11	14	22	****	0
	77		BF	****	0	0	0	0	0	0	****	11	13	14	****	23	0
	****		OM	0	0	0	0	0	0	0	****	0	0	0	****	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	0	0	****	0
Tangipahoa	990	9.7	ALL	17	5	0	****	7	11	25	50	102	132	169	252	217	0
	349		WM	****	****	0	****	****	6	10	29	31	55	82	81	46	0
	365		WF	****	****	0	0	****	****	****	13	27	37	43	112	120	0
	132		BM	****	****	0	****	0	****	7	****	27	26	****	27	13	0
	142		BF	7	****	0	0	****	0	****	****	17	14	22	32	38	0
	****		OM	0	0	0	0	0	0	****	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	****	0	0	0
Tensas	63	10.1	ALL	0	0	0	0	0	0	0	****	11	7	10	15	18	0
	15		WM	0	0	0	0	0	0	0	0	****	****	****	****	6	0
	16		WF	0	0	0	0	0	0	0	****	****	****	****	****	7	0
	18		BM	0	0	0	0	0	0	0	****	5	****	****	5	****	0
	14		BF	0	0	0	0	0	0	0	0	****	****	****	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Terrebonne	810	7.6	ALL	12	****	5	0	9	14	18	39	77	110	164	213	147	0
	338		WM	****	****	0	0	****	7	10	17	34	55	72	93	41	0
	296		WF	5	0	****	0	5	****	****	11	15	31	60	78	86	0
	84		BM	****	0	****	0	****	****	****	5	16	15	13	16	****	0
	56		BF	****	0	****	0	0	0	****	****	****	****	10	17	11	0
	20		OM	****	0	0	0	0	****	0	****	6	0	****	****	0	0
	16		OF	0	0	0	0	0	****	0	****	****	****	****	****	****	0
Union	263	11.8	ALL	0	0	0	0	****	****	5	12	21	27	43	73	76	0
	91		WM	0	0	0	0	****	****	****	6	6	10	18	25	21	0
	99		WF	0	0	0	0	0	0	****	****	****	9	15	28	41	0
	36		BM	0	0	0	0	0	0	****	****	8	****	****	9	****	0
	37		BF	0	0	0	0	****	****	****	****	****	****	****	11	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermilion	548	10.1	ALL	7	****	0	0	6	****	12	21	42	61	92	160	142	0
	220		WM	****	0	0	0	****	****	6	6	23	25	38	73	42	0
	237		WF	****	0	0	0	****	****	****	6	7	18	40	71	87	0
	50		BM	****	****	0	0	****	0	****	****	5	11	8	7	****	0
	36		BF	0	0	0	0	0	****	0	****	7	****	6	****	6	0
	****		OM	0	0	0	0	0	0	0	0	0	****	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	0	****	****	0

Number and Rate of Deaths by Race - Sex, Age Group, and Parish
Louisiana, 2003

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Vernon	385	7.4	ALL	****	****	****	0	****	****	9	11	19	63	77	98	97	0
	180		WM	****	****	****	0	****	****	****	7	10	34	41	45	33	0
	162		WF	****	0	0	0	****	0	****	****	****	17	29	44	58	0
	19		BM	0	0	0	0	****	0	****	****	****	8	****	****	****	0
	21		BF	0	0	0	0	0	0	****	0	0	****	****	****	****	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	0	****	0
	****		OF	0	0	0	0	0	0	0	0	0	****	****	0	0	0
Washington	567	13	ALL	7	****	0	****	****	9	7	22	55	83	101	162	116	0
	216		WM	****	0	0	0	****	6	****	9	26	37	42	64	28	0
	198		WF	****	0	0	****	0	0	****	6	11	22	35	64	56	0
	81		BM	0	0	0	****	****	****	****	6	11	11	13	18	16	0
	****		BF	****	****	0	0	0	****	****	****	7	13	****	****	16	0
	****		OM	0	0	0	0	0	0	0	0	0	0	****	****	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Webster	574	13.9	ALL	****	****	0	0	5	7	7	19	40	66	115	170	139	0
	187		WM	0	****	0	0	****	****	5	6	13	22	45	63	28	0
	206		WF	****	0	0	0	0	****	****	7	6	20	41	62	67	0
	81		BM	****	****	0	0	****	****	0	****	10	14	13	22	14	0
	100		BF	****	0	0	0	****	****	****	****	11	10	16	23	30	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W. Baton Rouge	177	8.1	ALL	****	****	****	0	0	****	****	10	18	34	36	38	30	0
	53		WM	0	0	0	0	0	0	****	****	****	11	15	15	****	0
	41		WF	****	0	****	0	0	****	0	****	****	7	10	7	12	0
	38		BM	****	****	0	0	0	0	****	****	9	7	****	7	****	0
	45		BF	****	****	0	0	0	0	0	****	****	9	****	9	10	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Carroll	158	12.9	ALL	****	0	0	****	0	****	0	****	10	16	24	35	61	0
	60		WM	****	0	0	0	0	****	0	****	5	9	15	13	12	0
	72		WF	****	0	0	****	0	0	0	****	****	****	****	18	39	0
	13		BM	****	0	0	0	0	****	0	0	****	****	0	****	5	0
	13		BF	0	0	0	0	0	0	0	0	****	****	****	****	5	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W. Feliciana	107	7.1	ALL	0	****	****	****	****	****	5	****	12	17	21	28	13	0
	33		WM	0	****	****	0	****	****	****	****	5	8	****	8	****	0
	23		WF	0	0	0	0	****	0	0	0	0	****	8	****	8	0
	28		BM	0	0	0	0	****	0	****	****	****	7	6	****	****	0
	23		BF	0	0	0	****	0	0	****	0	****	****	****	11	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Winn	212	12.9	ALL	****	****	0	0	****	****	****	****	14	29	37	70	49	0
	86		WM	****	0	0	0	0	****	****	0	7	19	15	25	16	0
	66		WF	0	0	0	0	****	0	0	****	****	****	11	25	23	0
	25		BM	****	0	0	0	****	0	****	****	****	****	5	5	****	0
	35		BF	0	****	0	0	0	0	0	0	****	****	6	15	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0

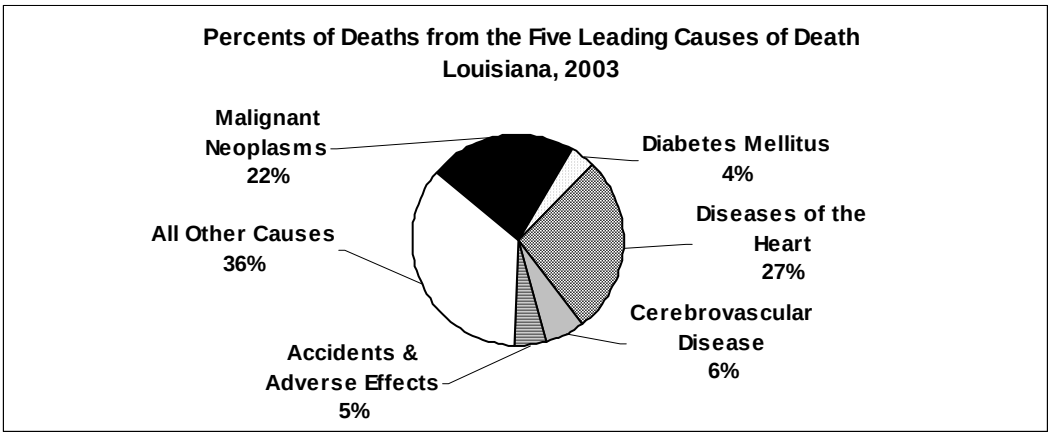
Source: Louisiana State Center for Health Statistics.
*Rate per 1,000 population.
****Cells suppressed to protect confidentiality.

Age-Adjusted Mortality Rate for Total Deaths

The age-adjusted death rate from all causes for Louisiana in 2003 was 994.8 per 100,000 (2000 U.S. standard population).

Leading Causes of Death

Beginning with deaths occurring in 1999, the United States has adopted the World Health Organization's tenth revision of the International Classification of Diseases (ICD-10) guidelines for coding cause of death information recorded on death certificates. Because ICD-10 incorporated changes in the way causes of death are grouped to produce cause-of-death statistics, death statistics generated under ICD-9 (1979-1998) and ICD-10 might not be comparable for some causes of death. It is important to be aware of these potential comparability issues when viewing and evaluating changes in death rates over time.



Source: Louisiana State Center for Health Statistics

Of the total 42,297 deaths to Louisiana residents in 2003, the leading causes were: diseases of the heart; malignant neoplasms (cancer); cerebrovascular disease (stroke); accidents; and diabetes mellitus. 64% of all deaths in Louisiana in 2003 were attributable to these five causes, as shown in the figure.

The top four causes - diseases of the heart, malignant neoplasms, cerebrovascular disease, and accidents - together account for 60.4% of total deaths. There was no variation observed between the years 2003 and 2002 with regard to leading causes of death. In fact, these four causes have consistently been the leading causes of death in Louisiana for the past 20 years, though the specific order has alternated. The fifth-ranked cause has shown more variation, shifting between diabetes, chronic lower respiratory disease, and influenza and pneumonia.

Although the last two decades have seen a considerable downward trend in diseases of the heart, these conditions remain Louisiana's number one cause of death. The 2003 crude death rate of 254.4 per 1,000 population was higher than the 2002 rate of 248.3 deaths per 100,000 population. Rounding out the top ten causes of death in the state in 2003 were: diabetes mellitus; chronic lower respiratory diseases; alzheimer's disease, nephritis, nephrotic syndrome, and nephrosis; influenza and pneumonia; and septicemia.

The leading causes of death in Louisiana were determined by ranking the crude death rates from the highest to lowest, and then adjusting these rates for age. Once adjusted, the top five cause-specific, death rates for the state were found to be the same for both 2003 and 2002. The causes in question were:

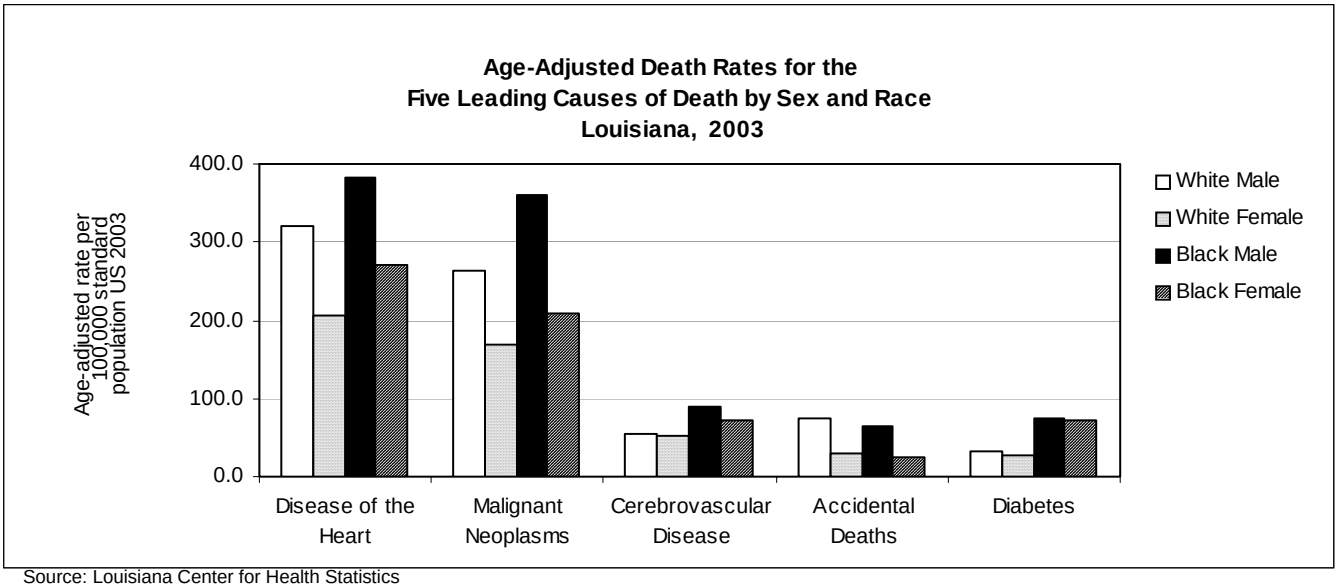
- Diseases of the heart
- Malignant Neoplasms
- Cerebrovascular disease
- Accidents and adverse effects
- Diabetes Mellitus

Age-Adjusted Mortality Rates* for the Top Ten Causes of Death Louisiana and United States, 2003

LA Rank**	Cause of Death	Age-Adjusted Death Rate		U.S. Rank**
		Louisiana	United States	
-	*All Causes*	994.8	846.8	-
1	*Diseases of the Heart*	271.8	232.3	*1*
2	*Malignant Neoplasms*	220.2	190.1	*2*
3	*Cerebrovascular Disease*	59.9	54.2	*3*
4	*Accidents*	48.3	37.3	*5*
5	*Diabetes Mellitus*	40.6	25.6	*6*
6	*Chronic Lower Respiratory Diseases*	40.6	43.3	*4*
7	*Alzheimer's Disease*	28.9	21.4	*8*
8	*Nephritis, Nephrotic Syndrome, and Nephrosis*	25.0	14.4	*9*
9	*Influenza and Pneumonia*	22.0	22.0	*7*
10	*Septicemia*	19.2	11.6	*10*

*Age-Adjusted Rate per 100,000 2000 U.S. standard population
**Causes of death are ranked based on crude death rates
Source: Louisiana State Center for Health Statistics
National Center for Health Statistics, Final Death Data 2003

The following chart displays age-adjusted mortality rates for the five leading causes of death in Louisiana in 2003. The age-adjusted rates show that males, particularly black males, are at higher risk than females of dying of heart disease, cancer, cerebrovascular disease, accidents, and chronic lower respiratory disease. Blacks are at higher risk than whites of dying of heart disease, cancer, and cerebrovascular disease.



Source: Louisiana Center for Health Statistics

The following table lists age-adjusted mortality rates for the four major race-sex groups in 2003.

Age-Adjusted Death Rates* for Selected Causes of Mortality by Race - Sex Louisiana, 2003	
Cause of Death/Race/Sex	**Age-adjusted Rate***
Diseases of the Heart	271.8
White Male	321.3
White Female	207.0
Black Male	382.2
Black Female	271.5
Malignant Neoplasm	220.2
White Male	262.2
White Female	168.6
Black Male	359.5
Black Female	209.8
Cerebrovascular Diseases	59.9
White Male	54.9
White Female	52.6
Black Male	89.5
Black Female	73.1
Accidents	48.3
White Male	75.3
White Female	30.1
Black Male	65.8
Black Female	23.7
Diabetes	40.6
White Male	33.4
White Female	27.0
Black Male	73.7
Black Female	72.8
Chronic Lower Respiratory Disease	40.6
White Male	52.9
White Female	38.7
Black Male	42.3
Black Female	22.6
Alzheimer's Disease	28.9
White Male	28.2
White Female	33.2
Black Male	19.6
Black Female	21.7
Nephritis, Nephrotic Syndrome and Nephrosis	25.0
White Male	24.4
White Female	16.1
Black Male	46.9
Black Female	21.7
Influenza and Pneumonia	22.0
White Male	24.0
White Female	20.7
Black Male	29.0
Black Female	17.8

Age-Adjusted Death Rates* for Selected Causes of Mortality by Race - Sex Louisiana, 2003	
Cause of Death/Race/Sex	**Age-adjusted Rate***
Septicemia	19.2
White Male	16.4
White Female	15.3
Black Male	36.7
Black Female	26.2
Homicide	13.1
White Male	5.5
White Female	2.5
Black Male	55.9
Black Female	8.1
Suicide	10.3
White Male	21.7
White Female	5.6
Black Male	6.3
Black Female	1.5

*Age-adjusted Rate per 100,000 2000 U.S. standard population
Source: Louisiana State Center for Health Statistics
United States Census Bureau, 2000 Census

Infant Deaths

Overview

Infant mortality encompasses all deaths that occur within the first year of life and excludes fetal deaths (miscarriages and abortions). This measure can be a significant predictor of the health status of a particular area, population, or nation, since it is associated with many factors, such as socioeconomic status and access to health care.

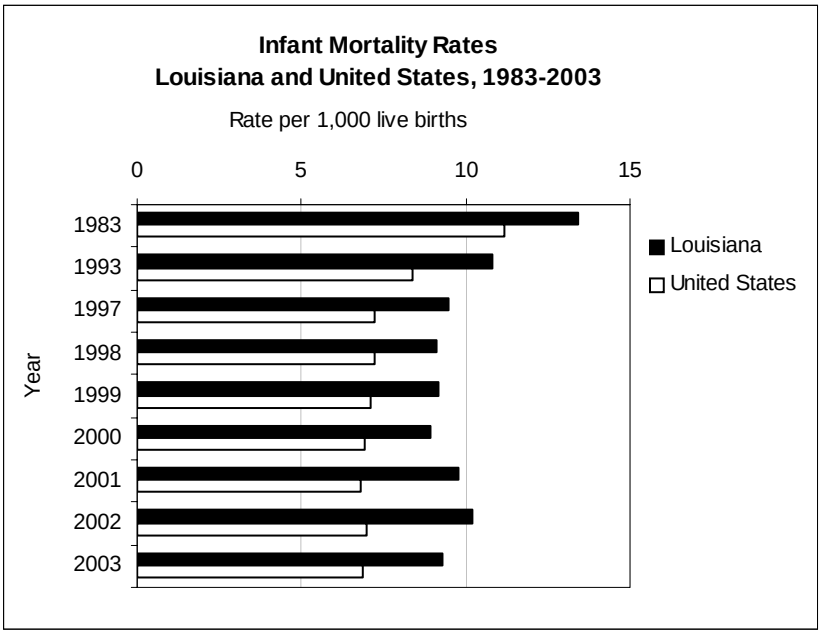
There are several measures used to describe mortality in this age group. While infant mortality measures deaths during the first year, neonatal mortality describes deaths occurring through the first 27 days after birth. Other measures include post-neonatal mortality (deaths occurring from 28 days to one year after birth), hebdomadal mortality (deaths occurring during the first seven days after birth), and perinatal mortality (fetal deaths and infant deaths occurring during the first seven days after birth).

Infant Mortality Rates* by Race of Child Louisiana, 2003						
Race	**Number of Deaths**	**Infant Mortality Rate**	**Neonatal Mortality Rate**	**Post-Neonatal Mortality Rate**	**Hebdomadal Mortality Rate**	**Perinatal Mortality Rate**
Total	604	9.3	5.7	3.6	4.5	12.7
White	237	6.4	3.9	2.5	3.0	9.1
Black	358	13.8	8.4	5.3	6.6	18.0
Other	9	5.6	3.8	1.9	3.1	9.3

*All rates, except perinatal, are per 1,000 live births. Perinatal rates are per 1,000 stillbirths + live births
Source: Louisiana State Center for Health Statistics

Infant Mortality

In the year 2003, there were 604 deaths in Louisiana to children under one year of age, i.e., a rate of 9.3. The infant mortality rate is defined as the number of deaths within the first year of life per 1,000 live births. Since 1983, the infant mortality rate has seen an overall decline from 13.2 deaths per 1000 live births in 1983 to 8.9 in 2000. The national infant mortality rate in 2003 is 6.9 per 1,000 live births.



Source: Louisiana State Center for Health Statistics, 2002
National Center for Health Statistics, Final Data 2003

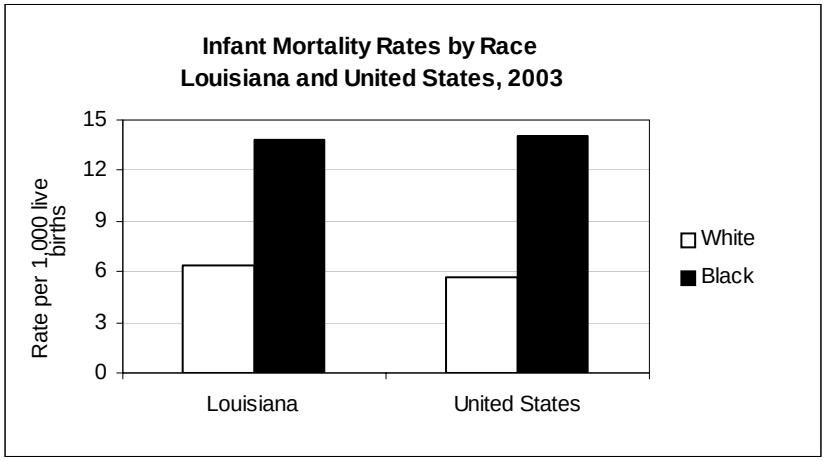
For comparison purposes, the table below shows infant mortality rates for Louisiana and its neighboring states. (Note: Although Louisiana's final 2003 infant mortality rate is available and is reported in this document, the table below uses National Center for Health Statistics final 2002 infant mortality data for all states.) Rates for Louisiana's neighboring states (except Texas) are above the national figure. National ranking refers to highest Louisiana's infant mortality rate lies in the middle of the spectrum of the neighboring states' rates.

Infant Mortality Rates*
Louisiana, Neighboring States, and the United States, 2002

State	*Rate*	*National Ranking***
Alabama	9.1	6
Arkansas	8.3	11
Louisiana	10.3	2
Mississippi	10.3	2
Texas	6.4	33
United States	7.0	-

* Rate per 1,000 live births
** All states are ranked on a high to low basis
Source: National Center for Health Statistics, Vol 53, No. 5, page 99

Infant mortality rates differ substantially by race. Though rates of infant deaths are decreasing across racial groups, children born to black mothers tend to have higher death rates than those born to white mothers. It is important to note that, beginning in the year 1989, the race of the mother is used for analysis rather than the inferred race of the child. Accordingly, race-specific infant mortality rates prior to 1989 are not comparable to the more current rates. In 2003, there were 237 white, 358 black, and 9 other-race infant deaths in Louisiana. The infant mortality rates were 6.4, 13.8, and 5.6 deaths per 1,000 race-specific live births, respectively.



Source: Louisiana State Center for Health Statistics, 2003
National Center for Health Statistics, 2000

There are geographic variations in infant mortality as well. The table below shows parish-level figures for infant deaths in Louisiana.

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother
Louisiana, 1999-2003

Parish	*Mother's Race*	*2003 Number of Infant Deaths*	*2003 Infant Mortality Rate*[+]	*1999-2003 Infant Mortality Rate* [++]
State	*All*	604	9.3	9.5
	White	237	6.4	6.3
	Black	358	13.8	14.1
	Other	9	5.6	6.3
Acadia	*All*	9	9.4	9.5
	White	9	12.3	8.8
	Black	-	-	12.1
	Other	-	-	-
Allen	*All*	****	9.5	7.1
	White	****	8.4	7.8
	Black	-	-	2.8
	Other	****	90.9	23.3
Ascension	*All*	7	4.9	7.1
	White	****	3.7	5.7
	Black	****	9	11.6
	Other	-	-	-
Assumption	*All*	7	26.1	14.1
	White	****	12.3	8.4
	Black	5	48.5	21.7
	Other	-	-	-

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 1999-2003				
Parish	Mother's Race	2003 Number of Infant Deaths	2003 Infant Mortality Rate+	1999-2003 Infant Mortality Rate ++
Avoyelles	All	****	4.5	7.6
	White	****	7.5	3.6
	Black	-	-	15
	Other	-	-	-
Beauregard	All	****	7.1	7.9
	White	****	8.2	7.2
	Black	-	-	12
	Other	-	-	-
Bienville	All	****	10.4	5.2
	White	****	9.9	5.7
	Black	****	11.1	4.6
	Other	-	-	-
Bossier	All	10	6.4	7.7
	White	5	4.5	5.1
	Black	5	12.5	14.9
	Other	-	-	5.7
Caddo	All	43	12	13.3
	White	6	4	6
	Black	37	18.4	19.2
	Other	-	-	-
Calcasieu	All	22	8	9.9
	White	10	5.2	7.2
	Black	12	14.9	16.4
	Other	-	-	-
Caldwell	All	-	-	15.2
	White	-	-	14.4
	Black	-	-	20.2
	Other	-	-	-
Cameron	All	-	-	7.4
	White	-	-	7.8
	Black	-	-	-
	Other	-	-	-
Catahoula	All	****	15.7	8.9
	White	****	12.3	9.5
	Black	****	21.7	8
	Other	-	-	-
Claiborne	All	****	18.1	12.8
	White	****	14.9	13.5
	Black	****	20.4	12.4
	Other	-	-	-
Concordia	All	-	-	9.8
	White	-	-	4.8
	Black	-	-	12.9
	Other	-	-	71.4
Desoto	All	****	5.9	12.6
	White	****	6.3	6.5
	Black	****	5.6	18.7
	Other	-	-	-

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 1999-2003				
Parish	Mother's Race	2003 Number of Infant Deaths	2003 Infant Mortality Rate+	1999-2003 Infant Mortality Rate ++
E Baton Rouge	All	53	9.2	9.7
	White	15	6	5.3
	Black	38	12.6	13.9
	Other	-	-	2.3
East Carroll	All	-	-	11
	White	-	-	7.8
	Black	-	-	11.7
	Other	-	-	-
E Feliciana	All	****	7.7	8.3
	White	-	-	6.6
	Black	****	15.5	10.3
	Other	-	-	-
Evangeline	All	****	4.2	8.9
	White	****	6	5.3
	Black	-	-	16
	Other	-	-	-
Franklin	All	5	17.9	17
	White	****	6.5	13.6
	Black	****	32	21.2
	Other	-	-	-
Grant	All	-	-	8.5
	White	-	-	8
	Black	-	-	12.9
	Other	-	-	-
Iberia	All	12	10.7	10
	White	****	6.1	7.7
	Black	****	18.1	14.1
	Other	-	-	-
Iberville	All	****	2.2	8
	White	-	-	7.1
	Black	****	3.6	8.8
	Other	-	-	-
Jackson	All	****	19	7.8
	White	-	-	-
	Black	****	64.5	24
	Other	-	-	-
Jefferson	All	65	10.3	8
	White	23	6.2	4.6
	Black	37	16.6	13.6
	Other	5	14.9	10.2
Jeff Davis	All	****	2.1	4.9
	White	****	2.7	5.2
	Black	-	-	3.9
	Other	-	-	-
Lafayette	All	28	9.5	9.3
	White	15	7.8	5.7
	Black	13	13.4	16.9
	Other	-	-	3.6

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 1999-2003				
Parish	Mother's Race	2003 Number of Infant Deaths	2003 Infant Mortality Rate+	1999-2003 Infant Mortality Rate ++
Lafourche	All	10	8.1	11
	White	****	8.6	9
	Black	****	7.8	19.2
	Other	-	-	4.7
LaSalle	All	****	5.7	7.5
	White	****	6.6	4.9
	Black	-	-	17.2
	Other	-	-	142.9
Lincoln	All	7	12.9	7.3
	White	****	7	5.7
	Black	****	20.5	9.3
	Other	-	-	-
Livingston	All	16	10.5	7.3
	White	****	8.4	6.3
	Black	****	49.4	20.3
	Other	-	-	54.1
Madison	All	-	-	10.6
	White	-	-	7.5
	Black	-	-	11.6
	Other	-	-	-
Morehouse	All	6	14.6	12.7
	White	****	10.6	10.7
	Black	****	18.3	14.5
	Other	-	-	-
Natchitoches	All	5	8.6	11.5
	White	****	3.7	10.1
	Black	****	13.1	12.9
	Other	-	-	-
Orleans	All	78	11.3	10.2
	White	****	6.9	6
	Black	68	12.5	11.3
	Other	****	5	7.6
Ouachita	All	26	11.6	11.8
	White	6	5	8.6
	Black	20	19.7	16
	Other	-	-	-
Plaquemines	All	****	9	6.4
	White	****	10.6	6.9
	Black	-	-	5.1
	Other	****	32.3	8.2
Pointe Coupee	All	****	10.4	8.5
	White	-	-	6
	Black	****	22.7	11.3
	Other	-	-	-
Rapides	All	27	14.2	11.8
	White	13	11.4	7.3
	Black	14	19	19
	Other	-	-	-

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 1999-2003				
Parish	Mother's Race	2003 Number of Infant Deaths	2003 Infant Mortality Rate+	1999-2003 Infant Mortality Rate ++
Red River	All	****	12.3	15.4
	White	-	-	11.7
	Black	****	25.3	18.9
	Other	-	-	-
Richland	All	6	21.4	18.5
	White	****	7.8	11.3
	Black	****	33.3	24.9
	Other	-	-	125
Sabine	All	****	8.9	10.4
	White	****	12.9	10.3
	Black	-	-	13.9
	Other	-	-	-
St Bernard	All	****	3.3	8.3
	White	****	2.7	8.1
	Black	****	7.8	11.7
	Other	-	-	-
St Charles	All	****	6.2	5
	White	****	4.7	4.5
	Black	****	9.6	5.4
	Other	-	-	25
St Helena	All	-	-	6.7
	White	-	-	-
	Black	-	-	11.3
	Other	-	-	-
St James	All	****	13.9	10.6
	White	-	-	6.3
	Black	****	24.2	13.3
	Other	-	-	-
St John	All	****	5.8	8.3
	White	****	6.1	5
	Black	****	5.6	11.6
	Other	-	-	-
St Landry	All	18	13.5	11.4
	White	8	11.3	8.4
	Black	10	16.1	14.6
	Other	-	-	-
St Martin	All	9	12.7	10.2
	White	****	11.3	5.9
	Black	****	16.1	17.3
	Other	-	-	-
St Mary	All	****	3.9	9.4
	White	****	4.3	7
	Black	****	3.5	14
	Other	-	-	-
St Tammany	All	16	5.5	6.1
	White	****	4.9	5.2
	Black	****	10.1	12.4
	Other	-	-	-

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 1999-2003				
Parish	Mother's Race	2003 Number of Infant Deaths	2003 Infant Mortality Rate+	1999-2003 Infant Mortality Rate ++
Tangipahoa	All	17	10.9	7.5
	White	7	7.4	4.9
	Black	10	16.5	11.7
	Other	-	-	-
Tensas	All	-	-	12.4
	White	-	-	14.9
	Black	-	-	11.5
	Other	-	-	-
Terrebonne	All	12	7.1	10.9
	White	****	7.4	7.6
	Black	****	6	22.1
	Other	****	6.7	10.3
Union	All	-	-	5.6
	White	-	-	3.8
	Black	-	-	9.2
	Other	-	-	-
Vermilion	All	7	9.3	9.9
	White	****	10.6	5.8
	Black	****	6	23.8
	Other	-	-	15.4
Vernon	All	****	4	4.4
	White	****	5.1	2.9
	Black	-	-	9.5
	Other	-	-	4.2
Washington	All	7	10.6	10.4
	White	****	7.4	7.1
	Black	****	16	15.5
	Other	-	-	-
Webster	All	****	7.5	11.1
	White	****	2.9	7.8
	Black	****	16.4	16.5
	Other	-	-	-
W Baton Rouge	All	****	10.2	8.6
	White	****	5.7	5.6
	Black	****	16.9	13.3
	Other	-	-	-
West Carroll	All	****	27.4	9.2
	White	****	17.1	6.6
	Black	****	69	19.2
	Other	-	-	-
W Feliciana	All	-	-	4.6
	White	-	-	-
	Black	-	-	9.4
	Other	-	-	-
Winn	All	****	10.5	9.9
	White	****	8.3	3
	Black	****	14.3	22.5
	Other	-	-	-

**** Cells suppressed to protect confidentiality.
+Rate per 1,000 live births. Very small numbers of deaths, such as those seen for 2003 infant mortality, result in rates that are likely to fluctuate from year to year.
++To create rates that are more stable, 1999-2003 five-year infant mortality rates have been calculated.
Source: Louisiana State Center for Health Statistics

Injury Deaths

The term "injury" includes:

a. unintentional injuries (more commonly referred to as "accidents")
b. intentional injuries (suicides and homicides)
c. injuries in which the intent could not be determined, and
d. other - legal intervention (law enforcement), operations of war

The term excludes adverse effects of either medical care or therapeutic use of drugs.

Background

Injuries are the number one killer of children and young adults aged 1 – 44 years in Louisiana, and the leading cause of potential life lost before age 65. Injuries leave tens of thousands of people suffering from chronic disabilities and dramatically affect the lives of tens of thousands of others, particularly loved ones. Almost all injuries are preventable.

Status

Louisiana exceeds the United States in overall injury death rates considerably.

Injury Mortality Rates*
United States v/s Louisiana, 2000 - 2003

Year	United States		Louisiana	
	Number of Deaths	Death Rate	Number of Deaths	Death Rate
2000	148,209	52.7	3,140	70.3
2001	157,078	55.1	3,109	69.6
2002	161,269	56.0	3,308	73.9
2003	-	-	3,296	73.8

'-' Data not available
' * ' Rate per 100,000 residents
Source: OPH Health Statistics Data

The following tables indicate core findings of the 2003 injury mortality database from the Injury Research and Prevention Program.

Injury Deaths by Public Health Region. Louisiana 2003

Demographics	Number of Injury Deaths	Death Rate per 100,000 Residents
State Total	**3,296**	**73.8**
Region 1	832	81.9
Region 2	395	64.7
Region 3	240	61.8
Region 4	405	72.8
Region 5	199	70.2
Region 6	206	68.7
Region 7	406	77.6
Region 8	247	70.2
Region 9	363	77.6

Injury Deaths by Public Age Group, Gender and Race. Louisiana 2003		
Demographics	**Number of Injury Deaths**	**Death Rate per 100,000 Residents**
State Total	**3,296**	**73.8**
Age Group(Years)		
< 1	38	56.1
1 - 4	45	18.0
5 - 14	65	9.5
15 - 24	655	94.7
25 - 34	585	97.3
35 - 44	599	86.6
45 - 54	456	
55 - 64	291	76.8
65 - 74	183	64.7
75 - 84	212	120.9
85 & +	167	284.6
Gender		
Male	2,380	110.0
Female	916	39.7
Race		
White	2,149	75.2
Black	1,110	76.4
Other	37	23.0

Source: OPH Health Statistics Data
* Public Health Region data not available in 3 deaths

Product

The Louisiana DHH/OPH EMS/INJURY PREVENTION SECTION analyzes injury data from mortality records. Both routine and special reports are available and used for public and community program planning and support. The section's dissemination of this information drives policy and resource distribution decisions and identifies emerging or special population injury events for intervention efforts. These injury mortality data constitute a foundation for program planning, development and evaluation.

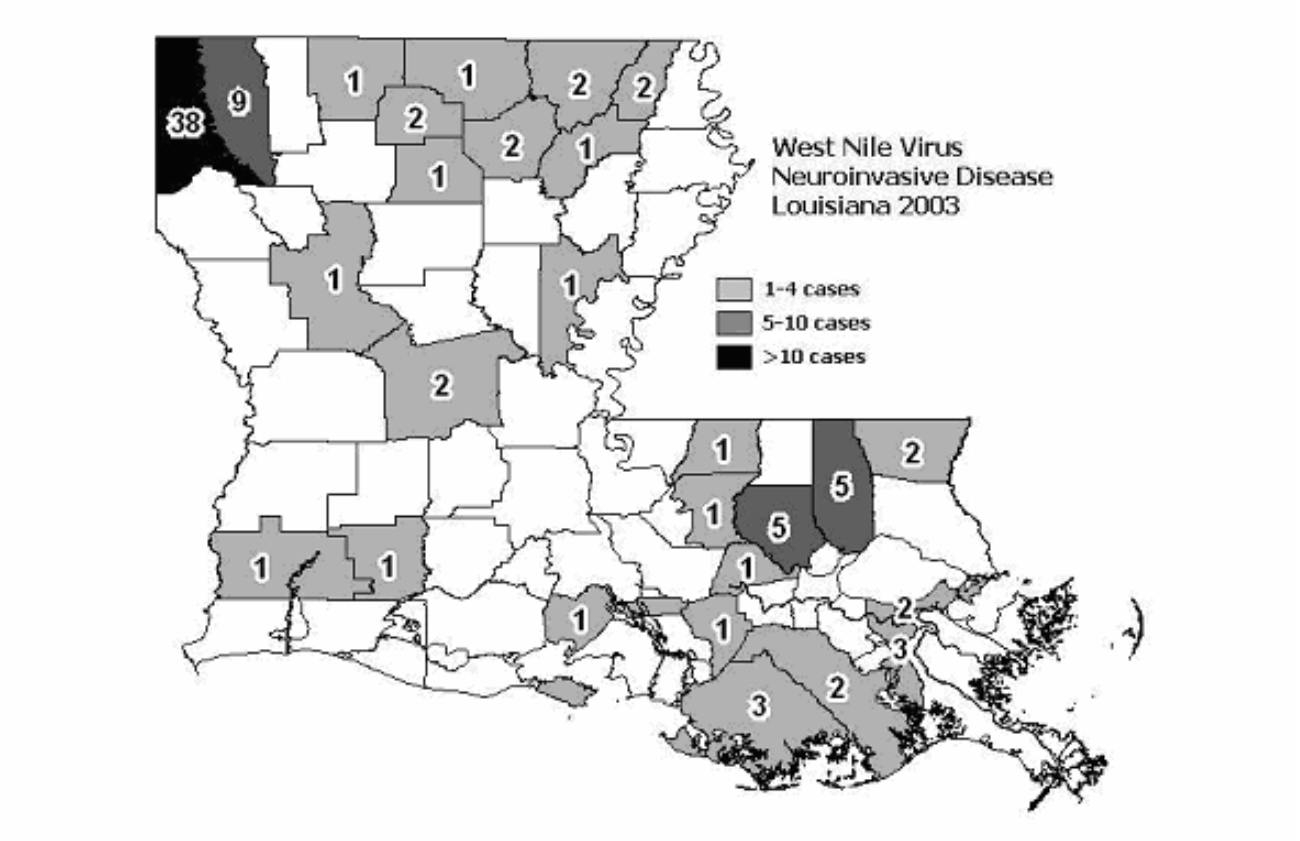
II. MORBIDITY

A. INFECTIOUS DISEASES

West Nile Encephalitis

In 2002, 329 cases of West Nile (WN) illness were reported in Louisiana, including 204 cases of West Nile neuroinvasive diseases and 125 cases of West Nile fever. Clinical presentation of neuroinvasive diseases or of West Nile fever was confirmed serologically.

In 2003 there were 101 cases of WN virus neuroinvasive disease, a sharp decrease from the 204 cases reported in 2002, the first year of the WN epidemic. Fifty-one cases were concentrated in one foci in Northwestern Louisiana (including Bossier and Caddo Parishes), which were relatively spared in 2002. The seasonal distribution was similar to that of 2002 starting in June but with a longer tail up to the third week in December.



Antibiotic Resistance

Hospital laboratories routinely monitor the prevalence of antibiotic-resistant infections in their facilities. The Antibiotic Sensitivity Active Sentinel Surveillance system is Louisiana's compilation of antibiotic-resistance reports generated by individual hospitals. Currently, forty-three hospitals voluntarily participate in submission of monthly lab aggregate reports documenting the percentage of infections in their facilities from the following antibiotic-resistant bacteria:

- Vancomycin Resistant Enterococci (VRE)
- Drug Resistant Streptococcus Pneumoniae (DRSP)
- Methicillin Resistant Staphylococcus Aureus (MRSA)

The current active surveillance system includes only aggregate laboratory-based data from sentinel reporting sites. The Infectious Diseases Epidemiology Program's Disease Surveillance Specialists and Surveillance Epidemiologists identify the primary laboratory contact person in each acute care facility within their assigned regions and actively recruit new hospital lab reporting sites to participate in this surveillance activity. Because surveillance program for antibiotic resistance is interested in tracking all degrees of resistance, bacteria with either intermediate or total resistance have been combined in the Table. The resistance rate for two of the three reported organisms (MRSA and DRSP) increased between 1999 and 2003.

Active Surveillance of Antibiotic Resistance: Percents of Resistant Bacteria. Louisiana, 1999-2003

Year	MRSA	DRSP	VRE
1999	33%	21%	5.0%
2000	38%	42%	5.0%
2001	45%	48%	4.9%
2002	53%	44%	6.5%
2003	57%	42%	6.1%

Hepatitis C

Reportable cases of Hepatitis C virus (HCV) infections consist of newly infected individuals who are symptomatic and have elevated liver enzymes as an indicator of recent infection. According to the Centers for Disease Control and Prevention (CDC), it is estimated that 80,000 residents of Louisiana are infected by HCV. Annually, 120 Louisiana residents are expected to die from hepatitis C. About 4,000 individuals (5% of those infected by hepatitis C) are candidates for a liver transplant, at a cost of $300,000 per transplant.

There are an estimated 500 to 600 new (acute) infections each year in Louisiana. Since the early 1990s, the state has seen a slow but steady increase of reported new hepatitis C cases. The decline in the number of reported cases of hepatitis C that started in 2001 continued in 2002. This decline was due most likely to a CDC-mandated change in the case definition for acute hepatitis C. Beginning in 1990, the designation for elevated liver enzymes was established by the CDC as 2.5 times the upper limit of normal. However, in 2001, the CDC increased the required elevation level to seven times the upper limit of normal, thus excluding a large number of cases that previously would have been considered reportable.

Meningococcal Invasive Diseases

Meningococcal meningitis is an acute bacterial disease caused by *Neisseria meningitidis*. It is characterized by sudden fever onset, intense headache, nausea and often vomiting, stiff neck, and rash.

During the 1990s, the number of meningitis cases in Louisiana steadily increased from a low of 30 in 1990 to a high of 74 in 2001, then again a decrease in the last 3 years. The incidence rate ranges from 0.8 to 1.6 /100,000. This incidence is similar to US incidence which is around 1/100,000 /year. Based on capsular polysaccharide there are 5 groups of meningococci. These groups are important to consider because of their epidemiologic, clinical and preventive importance. The 3 main groups observed in Louisiana are B, C and Y. Group A and W135 are uncommon. This is important because the quadrivalent vaccine available in the USA is effective only against A, C, Y and W135, thus ineffective against B which represents about 1/3 of the cases. The seasonal trend in the number of cases shows a high peak during the first quarter of the year (January to March) with close to 50% of the cases. The lowest quarter is the July to September quarter. Infants 0-1 year old have the highest incidence of new cases (10/100,000 cases/year). The incidence decreases to reach a low plateau around 1.5 from ages 5 to 19, then decrease again to a low of 0.4 in the 40-49 age group and rises slowly in the older age group (1.1 in the older than 70 group).

Shigellosis

Shigellosis or bacterial dysentery is acute infectious enteritis of humans due to *Shigella*. It has a human reservoir and is transmitted via the fecal-oral route. 99% of *Shigella* isolates come from stools. The peaks and troughs observed in trends of *Shigella* infections are mainly driven by the number of cases in children. There is a slight rise in incidence in young adults, then a decline until rates stabilize in middle age.

Vibriosis

Vibrios are gram-negative, curved, rod-shaped bacteria that are natural inhabitants of the marine environment. In the United States, transmission of Vibrio infections is primarily through the consumption of raw or undercooked shellfish or exposure of wounds to warm seawater. The most common clinical presentation of Vibrio infection is self-limited gastroenteritis, but wound infections and primary septicemia also may occur. Patients with liver disease are at a particularly high risk for significant morbidity and mortality associated with these infections. Many cases of Vibrio-associated gastroenteritis are under-recognized because most clinical laboratories do not routinely use the selective medium, thiosulfate-citrate-bile salts-sucrose (TCBS) agar, for processing of stool specimens unless they are specifically requested to do so.

Early detection and initiation of treatment of these infections is very important, particularly for cholera and invasive Vibrio infections, because these infections may rapidly progress to death.

The numbers of cases of reported Vibrio infections have remained fairly stable over the past twenty years, ranging from twenty to fifty cases per year, with a slight increase from year to year. There are several species of Vibrios, some increasing in reported numbers over time and others decreasing in numbers. The most common Vibrio species observed in reported cases in Louisiana is V. para-hemolyticus (24%), followed by V. vulnificus (24%), V. cholerae non O1 (21%) and all other Vibrios. (All other Vibrios include V. algino-lyticus, V. damse-lae, V. fluvialis, V. hollisae and V.mimicus.)

Vibrio parahemolyticus

Consumption of crustacean and molluscan shellfish commonly has been implicated in the transmission of V. parahaemolyticus. Raw oysters are the primary source of ingestion-associated V. parahaemolyticus infection. A review of infections between 1988 and 1997 found that 88% of patients with V. parahaemolyticus gastroenteritis and 91% of patients with V. parahaemolyticus primary septicemia and known food history, reported eating raw oysters. Studies indicate that the infectious dose of V. parahaemolyticus is about 100,000 viable cells ingested. The number of reported cases of V. parahemolyticus has remained stable over the years.

Vibrio Vulnificus

V. vulnificus is the most important pathogenic Vibrio in the U. S. because of its invasiveness and the high fatality rates associated with infection. It was first identified and described by the Centers for Disease Control and Prevention (CDC) in 1976 and has become the leading cause of seafood-associated deaths in the United States.

In a review of V. vulnificus infections in the U.S., 96% of patients with primary septicemia consumed raw oysters within seven days before symptom onset. All follow-ups (trace-backs) with complete information, implicated oysters harvested in the Gulf of Mexico; 89% were harvested in seawater warmer than 22°C (71.6°F). All clinical syndromes of V. vulni-ficus are more common during the warmer months.

Among the 422 culture-confirmed V. vulnificus infections on the Gulf Coast reported to the CDC through the Vibrio Surveillance System between 1988 and 1996:

- 45% were classified as wound infections
- 43% as primary septicemia
- 5% as gastroenteritis
- 7% were from other, or unknown sites of infection

There has been a steady increase in the number of V.vulnificus cases reported every year. This increase is probably due to increased awareness and an increase in the susceptible population (those with liver disease, hemo-chromatosis, diabetes, cancers - particularly those on chemo or radio-therapy, leukemia, lymphoma, Hodgkin's, immune suppression such as HIV, long term steroid use, alcoholism, chronic kidney disease and the elderly population).

66% of Vibrio vulnificus cases had underlying conditions prior to illness onset, with the most frequently reported underlying conditions including liver disease (41%), alcoholism (22%) and heart disease (37%). 12% consumed oysters including 10% consuming raw oysters. 44% were wound infections. These wound infections may be a result of sustaining a wound in salty or brackish water. An infection could also occur in a pre-existing wound being exposed to salty or brackish water or seafood drippings.

Other Non-Cholerae Vibrios

The increase in reported numbers of other non-cholerae Vibrios is attributed to better awareness among medical providers and laboratory testing.

V. alginolyticus is a halophilic Vibrio, first recognized as being pathogenic in humans in 1973. Wound infections account for 71% of V. alginolyticus infections; ear infections are also seen with this organism. Gastroenteritis is thought to be a rare presentation of V. alginolyticus infection. Other clinical syndromes reported in association with V. alginolyticus infection include chronic diarrhea in a patient with AIDS, .conjunctivitis and post-traumatic intracranial infection. Resistance to tetracycline and chloramphenicol has been reported in a few isolates of V. alginolyticus, but all strains appear to be sensitive to ciprofloxacin.

V. mimicus is a non-halophilic Vibrio named according to its similarity to V. cholerae. V. mimicus can cause sporadic episodes of acute gastroenteritis and ear infections.

V. fluvialis is a halophilic Vibrio, first identified in Bahrain in 1975, in a patient with diarrhea. It is biochemically similar to Aero-monas hydrophila but can be differentiated from this organism by its ability to grow well on media containing 6%-7% sodium chloride. The largest series of V. fluvialis infections involved 500 patients in Bangladesh, half of whom were young children. In that series, patients presented with diarrhea (100% with 75% bloody diarrhea), vomiting (97%), abdominal pain (75%), dehydration (67%) and fever (35%). V. fluvialis rarely causes wound infections or primary septicemia.

Photobacterium damsela (formerly Vibrio damsela) is a halophilic gram-negative bacillus similar to V. vulnificus. It strictly causes soft tissue infections following exposure of wounds to brackish water or injury

by saltwater animals. P. damsela infections can be fulminant and frequently are fatal even in immuno-competent hosts. Of the sixteen cases of P. damsela infection reported between 1982 and 1996, four were fatal.

V. hollisae is a halophilic Vibrio, first described in 1982. It most commonly causes gastroenteritis. V. hollisae is difficult to isolate, since it grows poorly on selective TCBS media and it needs to be isolated from colonies on a blood agar plate. V. hollisae septicemia and wound infections have been reported but are rare.

Vibrio Cholerae Non-O1

Vibrio cholerae is classified in groups according to its somatic antigen O.

Non-O1 are found in surface waters (freshwater rivers, ocean) throughout the world. The infection is acquired by ingesting heavily contaminated water or food (raw or poorly cooked seafood, especially oysters, clams, shrimp or crabs). Small outbreaks are some-times reported. These infections usually occur in individuals with increased susceptibility to infections: immunocompromised individuals with gastric disease (low gastric acidity) or liver disease.

V. cholerae non-01 can produce a wide range of symptoms: asymptomatic infections, simple diarrhea, or severe diarrheal disease. Some isolates are capable of producing a toxin indistinguishable from V.cholerae O1. Diarrhea and simple enteritis is the most common clinical picture. Approximately a quarter of infected patients have bloody stools. Illness usually is self-limiting and requires no treatment.

Age, Gender, and Race Distribution

Since the distribution is similar for all Vibrio cases, the following discussion describes all Vibrio species combined.

The age group distribution shows an increase in Vibrio cases in older age groups, an expected finding since adults and older people are the most common consumers of raw seafood and therefore, comprise most of the high risk population group.

B. TUBERCULOSIS

Background

Pulmonary tuberculosis (TB) occurs as a result of infection of the lungs with an organism named *Mycobacterium tuberculosis,* which infected persons may transmit by coughing. If untreated, a pulmonary TB case may infect others who breathe in the organisms expelled by the infected person. Infection is not limited to the lungs as it can also occur in other regions of the body.

Due to the danger of contagion, individuals who have been exposed to TB should be identified and evaluated. A simple skin test is used to determine if the exposed person has been infected. If the skin test and evaluation reveal that the person has been infected, a course of preventive therapy may be prescribed to protect against progression from TB infection to TB disease. Preventive therapy generally consists of six months of therapy with a single anti-TB drug called isoniazid hydrazide (INH).

Treatment of TB disease requires an initial course of four anti-tuberculosis drugs. Length of treatment for TB disease is usually six months, but may vary due to the severity of illness or the presence of other factors, such as the Human Immunodeficiency Virus (HIV). Due to the potentially great public health impact of this infectious disease, and because of the intricacy of the therapy (i.e., length of treatment and number of medications involved), a practice called Directly Observed Therapy (DOT) is employed to assist the patient with his or her therapy and assure completion. With DOT, trained field staff or medical personnel monitor the efficacy of treatment and the patient's compliance with the treatment regimen.

2004 Status

Louisiana reported 249 cases of TB in the year 2004, for a case rate of 5.5 per 100,000 population. This represents only a 4% decrease from the year 2003 figure of 260 cases (5.8 cases per 100,000 population). This is still above the 2002 case rate. The natural decline of tuberculosis is 6% a year.

Tuberculosis Case Counts
Louisiana, 2000-2004

2000	*2001*	*2002*	*2003*	*2004*
332	294	230	260	249

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Tuberculosis Program

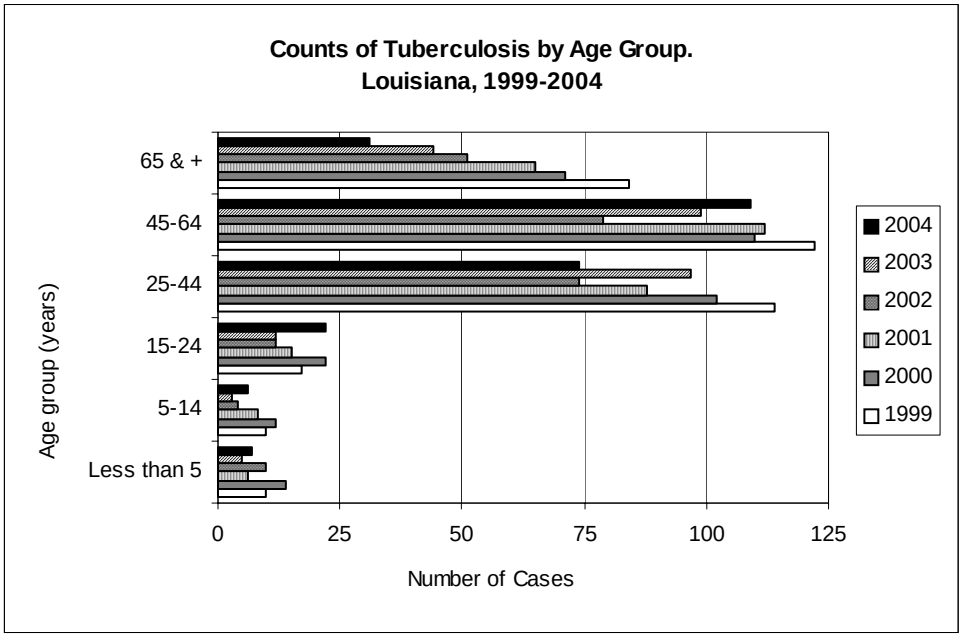
In 2004, Louisiana's state ranking for TB case rates (i.e., cases per 100,000) was the tenth highest in the nation. The state's year 2004 rate was similar to those in neighboring states but was significantly higher than the national rate of 4.9 per 100,000, which declined from 2003 to 2004 by 3.9%.

Tuberculosis Cases and Rates* Louisiana and Neighboring States, 2004		
State	Number of Cases	Case Rate
Alabama	211	4.7
Arkansas	132	4.8
Louisiana	249	5.5
Mississippi	119	4.1
Texas	1,683	7.5
United States	14,511	4.9

*Rate per 100,000 population
Source: Louisiana Department of Health and Hospitals, Office of Public Health, Tuberculosis Program
National Tuberculosis Surveillance System, Division of Tuberculosis Elimination, Centers for Disease Control and Prevention. Provisional 2002 data.

Drug-resistant TB continues to be a problem in Louisiana. In 2004 one case of multi-drug-resistant tuberculosis (MDR-TB) was reported, while the incidence of INH resistant TB rose to 4.6% (the recommended threshold for initiating a four-drug anti-TB regimen for new (or suspected) cases of TB is 4%).

As shown in the following graph, a decrease in the number of reported cases of TB in Louisiana was observed in children (below age 15 years), and over 65. The increase occurred in 24 to 44 and 45 to 64 age groups.



Louisiana Tuberculosis Cases and Rates
By Region and Parish, 2004
State Total = 249
State Case Rate = 5.5 per 100,000

Region/Parish	Cases	Rate/100,000
Region 1	85	8.2
Jefferson	27	5.9
Orleans	55	11.5
Plaquemines	1	3.7
St Bernard	2	3.0
Region 2	15	2.5
Ascension	1	1.4
East Baton Rouge	13	3.2
East Feliciana	1	4.7
Iberville	0	0.0
Pointe Coupee	0	0.0
West Baton Rouge	0	0.0
West Feliciana	0	0.0
Region 3	21	5.3
Assumption	1	4.2
Lafourche	5	5.5
St Charles	2	4.0
St James	0	0.0
St John	3	6.9
St Mary	3	5.1
Terrebonne	7	6.5
Region 4	25	4.6
Acadia	1	1.7
Evangeline	2	5.7
Iberia	4	5.3
Lafayette	9	4.7
St Landry	5	5.8
St Martin	3	6.2
Vermilion	1	1.9
Region 5	13	6.0
Allen	0	0.0
Beauregard	0	0.0
Calcasieu	11	6.0
Cameron	0	0.0
Jefferson Davis	2	6.2
Region 6	5	1.6
Avoyelles	0	0.0
Catahoula	0	0.0
Concordia	0	0.0
Grant	0	0.0
LaSalle	0	0.0
Rapides	5	3.9
Vernon	0	0.0
Winn	0	0.0
Region 7	41	7.9
Bienville	0	0.0
Bossier	6	6.3
Caddo	30	12.1
Claiborne	0	0.0
DeSoto	2	7.8
Natchitoches	1	2.6
Red River	0	0.0
Sabine	0	0.0
Webster	2	4.6

Louisiana Tuberculosis Cases and Rates
By Region and Parish, 2004
State Total = 249
State Case Rate = 5.5 per 100,000

Region/Parish	Cases	Rate/100,000
Region 8	25	6.9
Caldwell	0	0.0
East Carroll	0	0.0
Franklin	1	4.4
Jackson	1	6.3
Lincoln	4	9.4
Madison	2	15.3
Morehouse	4	12.4
Ouachita	9	6.0
Richland	1	4.7
Tensas	1	14.7
Union	2	8.9
West Carroll	0	0.0
Region 9	19	4.4
Livingston	2	2.2
St Helena	0	0.0
St Tammany	11	5.7
Tangipahoa	4	4.0
Washington	2	4.4

Source: Louisiana, Department of Health and Hospitals, Office of Public Health, Tuberculosis Program

C. Sexually Transmitted Diseases

Overview

Sexually transmitted diseases (STDs) are hidden epidemics of enormous health and economic consequence in the United States. They are hidden because many Americans are reluctant to address sexual health issues in an open way and because of the biologic and social characteristics of these diseases. All Americans have an interest in STD prevention because all communities are impacted by STDs and all individuals directly or indirectly pay for the costs of these diseases. STDs are public health problems that lack easy solutions because they are rooted in human behavior and fundamental societal problems. Indeed, there are many obstacles to effective prevention efforts. The first hurdle will be to confront the reluctance of American society to openly confront issues surrounding sexuality and STDs.

STD Rates* and National Rankings**
Louisiana, 2000-2004

Year	Primary and Secondary Syphilis		Gonorrhea		Chlamydia	
	Rate	Rank	Rate	Rank	Rate	Rank
2000	4.8	8	302.9	2	408.2	3
2001	4.0	8	291.0	1	423.0	4
2002	3.4	8	255.0	1	412.9	4
2003	4.1	3	264.4	1	467.8	2
2004	7.4	-	236.9	-	491.3	-

* Rate per 100,000 Population, Census 2000
** States ranked from highest to lowest disease incidence. Nationwide ranks for 2004 currently not available.
Sources: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2004
Centers for Disease Control and Infection, STD Surveillance Report 2003

Syphilis

Syphilis infections are caused by *Treponema pallidum*, a spirochete (bacterium). The primary stage of the disease is characterized by a painless, indurated ulcer that appears at the site(s) of exposure in about 21 days (range of 10-90 days), and lasts from 1 to 5 weeks. The secondary stage, which usually appears 1 to 5 weeks after the primary ulcer has healed, is characterized by skin rash, mucous patches, and *condylomata lata* (fluid-secreting skin eruptions), sometimes accompanied by generalized lymphadenopathy, headache, and fever. The latent stage is defined as any interval following the primary stage during which the infected individual has no clinical signs or symptoms.

Syphilis, a genital ulcerative disease, facilitates the transmission of HIV and may be important in contributing to HIV transmission in those parts of the country where rates of both infections are high. Untreated early syphilis in pregnant women results in perinatal death in up to 40% of cases and, if acquired during the four years preceding pregnancy, may lead to infection of the fetus in over 70% of cases.

Louisiana had the third highest rate of primary and secondary (P&S) syphilis nationwide in the year 2003. Although the rate of P&S syphilis in the United States declined by 89.7% during 1990-2000, the rate of P&S syphilis remained unchanged between 2000 and 2001 and increased in 2002 and 2003. Overall increases in rates during 2001-2003 were observed only among men.

In Louisiana, there were 330 reported cases of P&S syphilis cases for the year 2004. In comparison with the number of reported cases of P&S syphilis cases in the year 2003 (192 cases), the number of reported cases increased by 71.9% in 2004.

Early Syphilis (Primary, Secondary, and Early Latent) Rates* by Sex and Race
Louisiana, 2000-2004

Year	White			Blacks			Other		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
2000	2.0	3.0	2.0	32.0	26.0	28.0	0.0	2.0	1.0
2001	2.0	1.0	2.0	27.0	23.0	25.0	0.0	5.0	2.0
2002	0.9	1.1	1.0	22.2	19.3	20.7	3.7	2.5	3.1
2003	1.9	1.5	1.7	23.6	21.6	22.5	1.2	1.3	1.2
2004	3.3	2.4	2.8	42.3	33.8	37.8	9.4	3.2	6.3

* Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2003

The Louisiana incidence rate for primary and secondary syphilis for 2004 was 7.3 per 100,000 population, while the latest national rate available (year 2003) was 2.5. The 2004 Louisiana P&S syphilis rate is 2.9 times higher than the 2003 national P&S syphilis rate. The *Healthy People 2010* rate objective for primary and secondary syphilis is 0.2.

Primary and Secondary Syphilis Rates
Louisiana, Neighboring States, and United States, 1999-2003

State	1999	2000	2001	2002	2003
Alabama	4.6	2.8	3.2	3.4	2.5
Arkansas	3.4	4.1	1.8	1.3	1.9
Louisiana *	7	4.8	3.9	3.4	4.1
Mississippi	7	4.9	4.9	1.7	1.4
Texas	2.4	2	2.3	2.8	3
United States	2.4	2.2	2.2	2.4	2.5

Gonorrhea

Infections by *Neisseria gonorrhoeae* may be symptomatic or asymptomatic, and may include genital, anorectal, and/or pharyngeal infections.

In the year 2004, 10,587 cases of gonorrhea were reported in Louisiana with a corresponding rate of 235.5 cases per 100,000 population. In comparison with the number of reported cases for the year 2003, in the year 2004 there was a 10.2 % decline in the rates. The rate among males was 231.8 per 100,000

population and the rate among females was 236.3 per 100,000 population in year 2004. The male rate for year 2004 declined by 11.4% when compared to the year 2003, while the female rate declined by 10.0%. The numbers of reported cases were 4,346 among black males, 272 for white males, and 11 for other males. The numbers of reported cases among black females were 4013, white females were 597, and others were 26. Blacks had the highest rate and reported cases, nearly 90% of total reported cases were among blacks.

Gonorrhea Rates* by Sex and Race
Louisiana, 2000-2004

Year	White			Black			Other		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
2000	22.0	39.0	31.0	1019.0	780.0	892.0	22.0	32.0	27.0
2001	23.0	40.0	31.0	929.0	727.0	821.0	17.0	46.0	32.0
2002	21.1	45.7	33.7	702.7	598.6	648.2	8.6	15.1	11.8
2003	23.0	41.0	32.4	697.2	567.7	628.7	29.6	33.8	31.7
2004	19.2	40.5	30.0	633.2	520.1	537.3	18.9	44.5	31.7

* Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2003

The Louisiana incidence rate of gonorrhea for 2004 was 235.5 per 100,000 population, while the most recent national rate available (year 2003) was 116.2. The 2004 Louisiana gonorrhea rate was 2.0 times higher than the 2003 national gonorrhea rate. The *Healthy People 2010* objective for gonorrhea is to reduce the rate to 19.0 per 100,000 population.

Gonorrhea Rates
Louisiana, Neighboring States, and United States, 1999-2003

State	1999	2000	2001	2002	2003
Alabama	249.2	276.0	251.4	227.5	207.4
Arkansas	126.4	142.7	172.2	171.5	156.9
Louisiana *	301.7	302.9	274.2	254.8	264.4
Mississippi	376.0	332.9	272.8	241.7	220.4
Texas	164.2	164.2	144.0	129.4	112.9
United States	132.0	131.6	128.5	125.0	116.2

Chlamydia

Infection caused by *Chlamydia trachomatis* is among the most prevalent STDs in the United States. Therapy is commonly based on the clinical syndrome, and is often administered simultaneously with treatment for gonorrhea.

Chlamydia trachomatis infection is the most commonly reported notifiable disease in Louisiana and the United States. It is among the most prevalent of all STDs and, since 1994, has comprised the largest proportion of all STDs reported to CDC. In 2004, 21,954 Chlamydia cases were reported to the Louisiana STD Control Program from Nine Health Regions. This count corresponds to a rate of 488.3 cases per

100,000 population, an increase of 5.4% compared with the rate of 463.4 in 2003. The numbers of reported cases of Chlamydia infections in females was 17,628 to a corresponding rate of 761.8 per 100,000 female population (Figure 2). The number of reported cases for males was 4,045 with a corresponding rate of 185.4 per 100,000 male population (Figure 2). In 2004 the number of reported cases for females was 4.4 times higher than those for males. The rate of Chlamydia infection among black females was 1509.4 per 100,000 black female population, while that among white females was 166.1 per 100,000 white female population, and 140.7 per 100,000 female Asian/Pacific Islanders and American Indian/Alaskan Natives population. The rate for black females was 9 times higher than the rate for white females and 10.8 times higher than the rate for other females.

Chlamydia Rates* by Sex and Race
Louisiana, 2000-2004

	White			Black			Other		
Year	Males	Females	Total	Males	Females	Total	Males	Females	Total
2000	27.0	140.0	85.0	518.0	1477.0	1031.0	12.0	115.0	63.0
2001	28.0	145.0	88.0	457.0	1539.0	1035.0	22.0	90.0	56.0
2002	30.0	150.1	91.5	403.7	1392.0	927.7	17.2	65.4	41.0
2003	29.8	157.3	94.9	401.3	1397.7	928.7	42.0	207.5	124.8
2004	32.6	166.1	100.7	437.5	1509.4	1004.8	24.1	140.3	82.3

* Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2004

Chlamydia Rates
Louisiana, Neighboring States, and United States, 1999-2003

State	1999	2000	2001	2002	2003
Alabama	283.2	350.7	326.6	351.0	316.7
Arkansas	229.9	243.8	272.3	273.5	289.9
Louisiana *	380.5	408.2	399.2	412.7	467.8
Mississippi	417.0	458.6	414.6	414.8	424.6
Texas	314.1	343.3	334.5	333.4	317.7
United States	251.6	257.5	278.3	296.5	304.3

Sexually Transmitted Disease Rates+ by Parish
Louisiana, 2004

Parish	Early Syphilis (Primary, Secondary, And Early Latent)	Gonorrhea	Chlamydia
State Total	14.4	235.6	488.4
Acadia	3.4	185.2	441.7
Allen	0.0	55.0	157.2
Ascension	8.3	138.3	328.9
Assumption	4.3	162.5	406.2
Avoyelles	14.4	163.9	352.0
Beauregard	3.0	51.5	157.6
Bienville	0.0	222.2	469.8
Bossier	2.0	242.1	579.8
Caddo	6.4	576.6	961.3
Calcasieu	1.1	131.3	345.9
Caldwell	0.0	85.2	303.0
Cameron	0.0	10.0	110.1

Sexually Transmitted Disease Rates+ by Parish Louisiana, 2004			
Parish	**Early Syphilis (Primary, Secondary, And Early Latent)**	**Gonorrhea**	**Chlamydia**
Catahoula	0.0	119.1	311.4
Claiborne	0.0	243.3	445.1
Concordia	5.1	266.7	479.1
DeSoto	0.0	345.2	874.7
East Baton Rouge	58.2	304.5	569.5
East Carroll	0.0	254.8	774.9
East Feliciana	85.3	140.5	402.6
Evangeline	2.9	160.9	420.5
Franklin	0.0	221.0	324.5
Grant	0.0	123.0	299.5
Iberia	8.1	359.0	490.0
Iberville	18.3	249.1	441.2
Jackson	6.6	149.4	292.3
Jefferson	6.4	140.3	351.3
Jefferson Davis	0.0	114.5	210.0
Lafayette	27.8	2702.7	5531.4
Lafourche	0.0	68.8	179.5
LaSalle	0.0	6.7	32.2
Lincoln	0.0	289.4	588.1
Livingston	18.6	61.0	165.6
Madison	0.0	167.5	830.4
Morehouse	6.5	432.0	612.5
Natchitoches	2.6	284.0	783.0
Orleans	29.2	485.9	890.1
Ouachita	4.1	247.9	489.6
Plaquemines	10.7	104.7	250.4
Pointe Coupee	26.6	96.7	386.6
Rapides	3.1	170.2	353.8
Red River	0.0	249.4	789.9
Richland	0.0	185.9	376.5
Sabine	0.0	81.0	238.7
St. Bernard	7.6	75.9	159.2
St. Charles	2.0	160.2	428.5
St. Helena	126.1	57.0	199.5
St. James	4.7	117.8	575.0
St. John	4.5	137.1	425.2
St. Landry	6.7	258.8	474.3
St. Martin	16.0	216.1	374.6
St. Mary	0.0	185.1	469.2
St. Tammany	3.4	51.8	190.8
Tangipahoa	12.6	182.9	507.0
Tensas	0.0	196.4	513.8
Terrebonne	2.8	165.6	490.9
Union	4.4	114.0	197.3
Vermilion	5.5	68.8	204.4
Vernon	0.0	127.5	428.3
Washington	2.3	184.4	368.8
Webster	0.0	217.5	411.2
West Baton Rouge	36.8	115.7	305.5
West Carroll	8.2	32.5	211.1
West Feliciana	13.1	92.7	225.0
Winn	0.0	130.2	207.2

+Rates per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals Office of Public Health, STD Control Program 2004

D. HIV/AIDS

Background

Acquired Immunodeficiency Syndrome (AIDS) is caused by the *human immunodeficiency virus*, or HIV. People infected with HIV can develop many health problems, including extreme weight loss, severe pneumonia, cancer, and damage to the nervous system; these illnesses signal the onset of AIDS. The time at which symptoms first begin to appear varies from person to person. In some people, these illnesses may develop within a year or two, while others may remain asymptomatic for 10 years or more. Although recent advances in treatment have significantly slowed the progression from HIV to AIDS and from AIDS to death, there is still no cure for the disease. This means that the most effective way to curb the HIV/AIDS epidemic is through the prevention of HIV infections, provision of HIV prevention interventions, and improved access to treatment and other services for persons living with HIV/AIDS.

The HIV/AIDS epidemic continues to greatly impact public health in Louisiana and will make growing demands on health and social service systems for many decades. The lifetime medical cost for caring for a person with AIDS is approximately $200,000 - most of which is paid for by the government. Every year, new infections obligate Louisiana to approximately $120 million in future medical costs.

Summary

As of December 31, 2003, there were 15,326 persons reported to be living with HIV/AIDS in Louisiana. In 2003 alone, 915 new AIDS cases and 1,106 new HIV cases were diagnosed.

There are persons living with HIV/AIDS in every parish in Louisiana. New cases of HIV/AIDS were detected in 56 of Louisiana's 64 parishes in 2003. The HIV detection rate among black persons remains disproportionately high. In 2003, 74% of newly diagnosed HIV/AIDS cases and 73% of newly diagnosed AIDS cases were among black persons. The 2003 HIV detection rate for black persons was over six times higher than that of white persons.

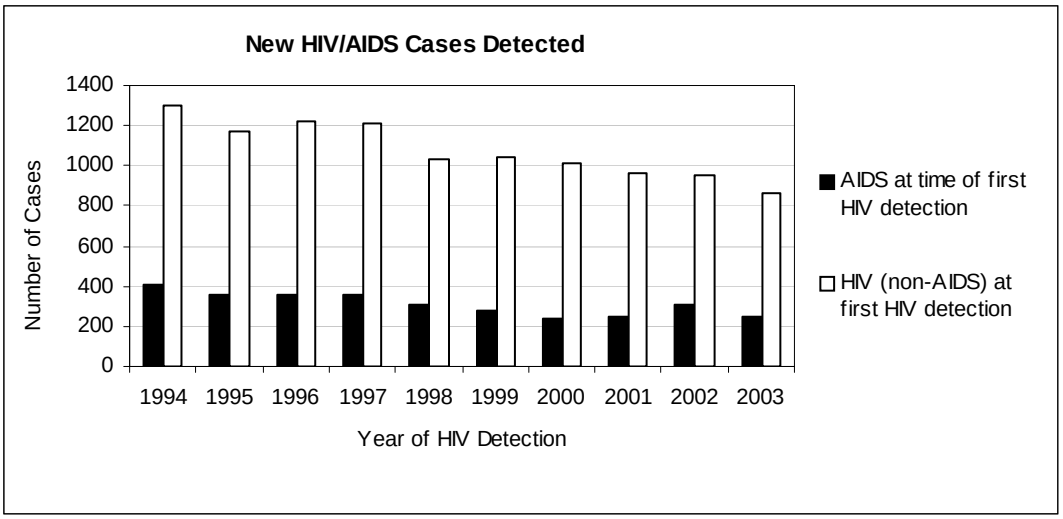
In 2003, the largest proportion of cases detected (42%) was attributed to men who have sex with men (MSM), after adjusting for unreported risk. For black persons, high-risk heterosexual activity has remained the leading exposure category, while, among white persons, the predominant exposure to HIV is among MSM.

Both new AIDS diagnoses and AIDS-related mortality began to decline dramatically in the mid-1990s, coinciding with the emergence of more effective treatments. However, from 1999 to 2003, the estimated number of deaths among persons with AIDS remained relatively stable. The number of new AIDS cases increased in 2000 for the first time since the introduction of new drug therapies.

2003 Status

New highly active antiretroviral therapies (HAART) have been shown to be effective in treating HIV infection. These new therapies have delayed the progression from HIV to AIDS and from AIDS to death among many people infected with the virus. However, due to factors such as late testing, limited access to or use of health care services, and limitations of current therapies for some people, AIDS cases are increasing.

In the year 2003, Louisiana ranked sixth highest in reported AIDS case rates nationwide, a slight decrease from fifth highest in the year 2002. The state ranked eleventh in the number of new AIDS cases reported in the United States for the year 2003, down from tenth in the previous year. Louisiana's AIDS case rate continues to be higher than the rates of neighboring states.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program

AIDS Cases and Rates Louisiana, Neighboring States, and United States, 2000-2003							
	2002		2003		Cumulative Totals		
State	Cases	Rate/100,000	Cases	Rate/100,000	Cases	Children less than 13	Total
Alabama	433	9.7	472	10.5	7,531	76	7,607
Arkansas	239	8.8	188	6.9	3,543	38	3,581
Louisiana	1163	26	1041	23.2	15,519	134	15,653
Mississippi	436	15.2	508	17.6	5,742	57	5,799
Texas	3076	14.2	3,379	15.3	62,592	391	62,983
United States	42336	14.7	43,704	15	863,702	8,927	872,629

Source: CDC HIV/AIDS Surveillance Report (Vol. 15, No. 1)
*The cumulative total includes all cases of AIDS reported to the health departments from 1984 (when AIDS became reportable) through December 31, 2003.

In Louisiana, the New Orleans area had the highest number of HIV/AIDS cases detected in 2003. During the past 5 years, the Baton Rouge region has had the highest HIV/AIDS detection rate (number of new cases per 100,000 population). However, in 2003 the New Orleans and Baton Rouge regions had the same HIV/AIDS detection rate (number of cases per population of the region). Among the large cities in the nation, the metropolitan Baton Rouge area ranked 8th and the metropolitan New Orleans area ranked 11th in AIDS case rates in 2003.

Persons Living with HIV/AIDS

The number of persons living with HIV/AIDS continues to increase in Louisiana each year. In 2003, 15,326 persons in Louisiana were known to be living with HIV/AIDS. These numbers reflect only those persons who were confidentially tested and reported to the state Department of Health and Hospitals, and should be considered a minimum estimate of the total number of persons infected with HIV in Louisiana. As the number of persons living with HIV continues to increase, more resources will need to be directed toward programs and services that address primary and secondary prevention, early detection, and effective treatment.

Currently, there are persons living with HIV/AIDS in every parish in Louisiana. As of the end of 2003, 14 parishes out of 64 (22%) had greater than 300 persons living with HIV per 100,000 members of the population. The HIV/AIDS Program has funded community-based organizations in every region of the

state to deliver HIV prevention programs to persons at high-risk and to provide services for persons living with HIV/AIDS.

Persons Living with HIV/AIDS by Parish
Louisiana, 2003

Parish	Persons Living with HIV/AIDS	Parish	Persons Living with HIV/AIDS
Statewide	15,326	Region VI	687
		Avoyelles	153
Region I	6,744	Catahoula	26
Jefferson	1232	Concordia	28
Orleans	5375	Grant	25
Plaquemines	25	La Salle	9
St. Bernard	112	Rapides	318
		Vernon	55
Region II	3,203	Winn	73
Ascension	103		
East Baton Rouge	2449	Region VII	1,060
East Feliciana	111	Bienville	19
Iberville	259	Bossier	124
Pointe Coupee	41	Caddo	704
West Baton Rouge	83	Claiborne	74
West Feliciana	157	De Soto	31
		Natchitoches	50
Region III	465	Red River	6
Assumption	19	Sabine	18
Lafourche	72	Webster	34
St. Charles	63		
St. James	43	Region VIII	716
St. John the Baptist	64	Caldwell	7
St. Mary	63	East Carroll	31
Terrebonne	141	Franklin	11
		Jackson	12
Region IV	981	Lincoln	43
Acadia	64	Madison	50
Evangeline	41	Morehouse	39
Iberia	75	Ouachita	414
Lafayette	492	Richland	52
St. Landry	177	Tensas	26
St. Martin	67	Union	20
Vermilion	65	West Carroll	11
Region V	786	Region IX	684
Allen	197	Livingston	102
Beauregard	42	St. Helena	9
Calcasieu	492	St. Tammany	244
Cameron	4	Tangipahoa	170
Jefferson Davis	51	Washington	159

Source: Louisiana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program

Shifts in the Epidemic

In keeping with national trends, Louisiana has seen a shift over the last decade in the HIV/AIDS epidemic, with an increasing proportion of cases among women, minorities, and high-risk heterosexuals. The percentage of persons in the state living with HIV/AIDS who likely contracted their infection through heterosexual contact increased from 12% in 1993 to an estimated 21% in 2003.

Black persons continue to be disproportionately impacted by HIV/AIDS. In 2003, 74% of newly detected HIV/AIDS cases in Louisiana were among black persons, who comprise only 32% of the total state population. The 2003 HIV detection rate among black persons was over six times higher than the rate among white persons, and three and a half times higher than the rate among hispanic persons.

The percentage of women in Louisiana living with HIV/AIDS has increased from 11.3% in 1990 to 28% in 2003. Furthermore, the percentage of newly detected HIV/AIDS cases reported among women in the state has been increasing steadily. In 1990, 18% of all newly detected cases were among women; this percentage has steadily increased to 34% in 2003. Black women accounted for 85% of all new HIV/AIDS cases among women in 2003.

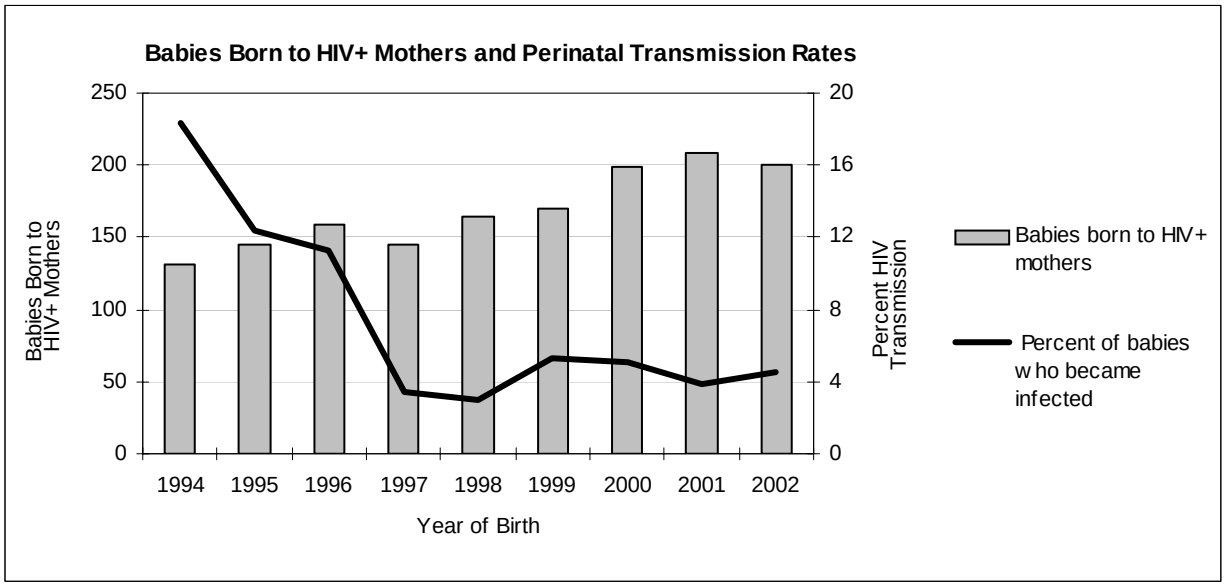
Newly-detected HIV/AIDS Cases, by Demographics and Exposure Group
Louisiana, 1996-2003

Year	1996	1997	1998	1999	2000	2001	2002	2003
Total Cases	1,586	1,575	1,341	1,320	1,250	1,212	1,262	1,106
Sex								
Male	1,132	1,111	925	936	852	787	871	732
Female	454	464	416	384	398	425	391	374
Race								
Black	1,113	1,104	971	965	901	882	932	822
White	430	427	334	319	312	290	301	239
Other	42	40	36	35	36	37	26	45
Unknown	1	4	0	1	1	3	3	0
Exposure Group								
Cases with Specified Risk	1074	989	824	708	647	589	643	523
MSM *	40%	38%	41%	41%	44%	45%	49%	49%
IDU *	28%	27%	26%	25%	21%	20%	19%	18%
MSM & IDU	8%	8%	5%	7%	5%	5%	4%	3%
HRH *	22%	25%	26%	24%	26%	27%	28%	28%
Transf/Hemo *	1%	1%	1%	2%	2%	<1%	1%	0%
Perinatal	2%	2%	2%	1%	2%	2%	2%	1%

* MSM: Men who have Sex with Men; IDU: Injection Drug Users; HRH: High Risk Heterosexual; Transf/Hemo: ransfusion/Transplant/Hemophiliac
Source: Louisiana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program

Perinatal HIV Transmission

Despite the increasing number of women infected with HIV, the percentage of pediatric HIV/AIDS cases (children diagnosed when younger than 13 years of age) has been decreasing in recent years. Perinatal transmission rates dropped dramatically from 18% of all births to HIV infected mothers in 1994 to less than 5% in 2002. However, perinatal transmission rates remain higher in Louisiana than in other southern states that collect these data. This decline is credited to greater screening for HIV as a part of prenatal care, improved treatment protocols for HIV-infected pregnant women, and increased use of antiretroviral therapy during pregnancy, delivery, and for the exposed infants. The OPH HIV/AIDS Program Perinatal Prevention Program continues to work with medical centers and providers around the state to reinforce the importance of offering HIV counseling and testing to all pregnant women, to encourage early diagnosis and treatment for HIV-infected pregnant women, and to promote appropriate testing and treatment of exposed children.



Source: Louisana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program

E. CANCER

1998–2002 Status

According to the American Cancer Society, one in every four deaths in the United States is attributable to cancer. Although more people are surviving cancer now than ever before, this trend is not true for all groups. Survival rates vary according to race, age group, and type of cancer.

Five Most Common Cancers
Louisiana, 1998–2002
(Five-Year Case Counts - Invasive Cases Only)

Type	*Number of Cases*
All Cancers	100,843
Lung	16,973
Prostate	15,695
Breast	14,630
Colon & Rectum	12,388
Non-Hodgkin's Lymphoma	3,768

Source: Louisiana Tumor Registry

Cancer presents in different forms and is associated with a variety of risk factors. Several common forms of cancer can be either prevented or diagnosed early enough to prevent spread to other organs.

The National Cancer Institute estimates that tobacco use accounts for 30% of cancer deaths with dietary factors and sedentary lifestyle accounting for another 35%. Most cases of lung cancer can be prevented by not smoking, while consuming a diet low in fat and high in fiber may help prevent colon, rectal, breast, prostate, and other cancers.

Early detection is important in lowering the rate of deaths due to cancer. Mammography, clinical breast examination, Papanicolaou (Pap) tests, fecal occult blood tests, and proctosigmoidoscopy (colon exam with lighted scope) aid in the early detection and treatment of cancers in their early stages. These procedures have been proven to prevent the spread of existing cancers. Nonetheless, a significant portion of the population at risk for various cancers fails to participate in screening procedures.[1]

[1] *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. United States Department of Health and Human Services. Washington: GPO, 1990.

Five Most Common Cancers In Males, Louisiana 1998–2002					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	595.1	All Cancers	679.3	All Cancers	53,533
Prostate	161.1	Prostate	234.0	Prostate	15,695
Lung	109.5	Lung	135.3	Lung	10,291
Colon & Rectum	72.6	Colon & Rectum	78.3	Colon & Rectum	6,451
Bladder	38.8	Kidney & Renal Pelvis	21.3	Non-Hodgkin's Lymphoma	1,941
Non-Hodgkin's Lymphoma	23.9	Stomach	20.4	Kidney & Renal Pelvis	1,895

* All races combined. In situ cases are excluded. Case counts cover five years.
** Average annual age-adjusted (2000 U.S.) incidence rates per 100,000 population
Source: Louisiana Tumor Registry.

Five Most Common Cancers In Females, Louisiana 1998–2002					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	406.0	All Cancers	395.6	All Cancers	46,310
Breast	124.9	Breast	120.8	Breast	14,469
Lung	59.0	Colon & Rectum	56.7	Lung	6,682
Colon & Rectum	47.1	Lung	48.9	Colon & Rectum	5,937
Corpus Uteri	17.5	Corpus Uteri	16.9	Corpus Uteri	2,002
Non-Hodgkin's Lymphoma	17.2	Cervix Uteri	15.3	Non-Hodgkin's lymphoma	1,827

* All races combined. In situ cases are excluded. Case counts cover five years.
** Average annual age-adjusted (2000 U.S.) incidence rates per 100,000 population.
Source: Louisiana Tumor Registry

Background [2]

Breast cancer is the most frequently occurring invasive cancer among women in the United States and is second only to lung cancer in cancer-related deaths. Nationwide, the death rate from breast cancer decreased significantly during the 1990s, with the largest declines among younger women. Certain factors, such as family history, exposure to hormones, reproductive issues, and excessive alcohol use, can influence the risk for breast cancer. The association between the intake of diets high in fat and increased breast cancer incidence has not been firmly established. It has recently been discovered that alterations in two genes can account for most inherited breast cancer, which constitutes 5% of all breast cancers. Early detection improves the chances of survival, and the National Cancer Institute recommended in 1997 that women in their forties or older undergo screening mammograms on a regular basis every year. Women who are at increased risk for breast cancer should seek medical advice about when to begin having mammograms, and how often to be screened.

[2] From National Cancer Institute (NCI) and American Cancer Society resources and publications. Statistics quoted pertain to the United States.

Cervical (cervix uteri) cancer afflicts 10,500 women each year. Increased use of the Pap test has contributed to an almost 50**%** drop in cervical cancer deaths since 1973. Women who are, or have been sexually active or have reached age 18 should have Pap tests and physical examinations regularly.

Colorectal cancer was the second leading cause of cancer deaths in the years 1998–2002, although both incidence and mortality rates have been declining. Studies have shown that lifestyle factors may cause colon and rectum cancers. A diet high in fruits, vegetables and fiber, and low in fat, appears to reduce the risk of colorectal cancer. Increased physical activity may also lower the risk for this type of cancer. Research suggests that increased screening and polyp removal has contributed to the reduction in the impact of this disease.

Kidney cancer, according to the American Cancer Society, will account for almost 3% of all new cancers detected in 2005 in the United States. Obesity, cigarette smoking, and abuse of analgesics have been linked to increased risk for this disease; on the other hand, beverages such as coffee, tea, and alcoholic drinks have not been found to be important risk factors. About one third of renal cell cancers and more than one half of renal pelvis and ureteric cancers could be avoided by eliminating the use of tobacco.

Leukemias together will account for 2.5% of the 2004 cancer incidence in the United States and almost one third of cancers in children. Five main types (and an increasing number of subtypes) have been identified. Rates for all types of leukemia are higher among males than among females; for most leukemias, rates are higher among whites than blacks.

Lung cancer is the largest single cause of cancer mortality in the United States. It is difficult to detect and hard to treat. In the period between 1998 and 2002, lung cancer caused approximately 30% of all cancer deaths. Smoking is responsible for 85% of lung cancers. The risk of dying as a result of lung cancer is 22 times higher for male smokers and 12 times higher for female smokers than for people who have never smoked. Smoking rates rose significantly among high school students from 1991 to 1997 but have been declining since then.

Melanoma of the skin incidence rates have increased steadily over the last several decades. This form of skin cancer was responsible for about 75% of all skin cancer deaths 1998–2002. Earlier diagnoses of melanoma of the skin have increased survival rates, but the total mortality rate continues to rise gradually with the increase in incidence. Risk factors include excessive exposure to ultraviolet radiation, occupational exposures, family history, and multiple or atypical moles.

Non-Hodgkin's lymphoma cases increased dramatically in the 1970s and 1980s, but the rate stabilized in the 1990s. Part of this increase is due to AIDS-related cases. Among the risk factors are reduced immune function and exposure to certain infectious agents. Occupational exposures to certain chemicals are also suspected.

Cancer of the oral cavity and the pharynx accounted for approximately 2% of all malignancies in 1998 to 2002. In the United States, oral cancer is two to three times more common among males than females. Tobacco use and alcohol consumption account for approximately three fourths of all oral cancers in the United States. Epidemiological evidence indicates that, while smoking and drinking are independent risk factors, their combination increases the risk of cancer. Use of snuff is a primary cause of cancers of the gum and cheek. Although not as prevalent as cigarette smoking, habitual use of pipes, cigars, and smokeless tobacco is associated with relative risks as great as that for cigarette smoking.

Ovarian cancer strikes almost 22,000 women every year. Currently, the five-year survival rate is approximately 50%. Reproductive history, family history, and use of oral contraceptives have been linked to the incidence of ovarian cancer. As is the case for almost all cancers, the risk increases with age.

Pancreatic cancer is called a "silent" disease, as it is asymptomatic until well advanced. Survival is considered poor since only about 4% of patients are alive five years after diagnosis. In the period from 1998 through 2002, it ranked eleventh in incidence among all cancers in the United States, but was fifth in cancer mortality. Little is known about the etiology of pancreatic cancer, and the only established risk factor is cigarette smoking.

Prostate cancer is the most frequently diagnosed invasive cancer in men but is a distant second to lung cancer as a cause of death. Increasingly, evidence points to diet, particularly animal fat, in prostate cancer development. Hormones are also being investigated, as well as occupational and other lifestyle factors. The National Cancer Institute (NCI) is currently conducting a study to determine whether regular screening with a digital rectal exam and a blood test for prostate-specific antigen (PSA) reduces mortality.

Urinary bladder cancer was the fourth most common type of cancer in the five-year period from 1998 to 2002 among men and the tenth most common among women in the United States. It is especially prevalent among older white men. Since the late 1980s, incidence and mortality rates have generally leveled off. The most important known risk factor is cigarette smoking. Smokers demonstrate two to three times the risk for urinary bladder cancer as non-smokers. Several occupational exposures like those involved in rubber, chemical, textile, metal, and leather industries also increase the risk for bladder cancer. Occupational risk factors include recurrent and early exposure to hair dye, and exposure to dye containing aniline, a chemical used in medical and industrial dyes. Despite previous speculation, research shows that neither artificial sweeteners nor coffee drinking appears to increase the risk of cancer.

Uterine (corpus uteri) cancer, the fourth most common cancer in women in the United States, accounted for approximately 6% of all cancer cases in women from 1998 through 2002. However, a limited number of deaths result from this disease, as reflected in a high five-year survival rate of 85%. High cumulative exposure to estrogen is the major risk factor for the most common type of cancer of the uterine corpus; low parity and obesity are also linked to this disease.

To learn more about cancer incidence and mortality statistics, visit the following websites:

Louisiana Tumor Registry: http://publichealth.lsuhsc.edu/tumorregistry

State Cancer Profiles: http://statecancerprofiles.cancer.gov

(developed by the National Cancer Institute and the CDC)

Note on Statistics

In the following tables describing cancer incidence in Louisiana, disease counts encompass a five-year period. This evens out natural fluctuations in cancer incidence and allows a more reliable identification of the cancers that are of most concern in Louisiana. Only invasive cases are included in the following counts (i.e., *in situ* cases are excluded). Data come from the Louisiana Tumor Registry.

If multiple sites are listed in one cell, separated by a slash, the number of cases diagnosed at each site during the five-year period was the same.

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
State Total	All Cancers	100,843	All Cancers	53,533	All Cancers	47,310
	Lung	16,973	Prostate	15,695	Breast	14,469
	Prostate	15,695	Lung	10,291	Lung	6,682
	Breast	14,630	Colon & Rectum	6,451	Colon & Rectum	5,937
	Colon & Rectum	12,388	Non-Hodgkin Lymphoma	1,941	Corpus Uteri	2,002
	Non-Hodgkin Lymphoma	3,768	Kidney	1,895	Non-Hodgkin Lymphoma	1,827
Region 1	All Cancers	24,296	All Cancers	12,549	All Cancers	11,747
	Lung	4,223	Prostate	3,442	Breast	3,637
	Breast	3,688	Lung	2,484	Lung	1,739
	Prostate	3,442	Colon & Rectum	1,505	Colon & Rectum	1,460
	Colon & Rectum	2,965	Non-Hodgkin Lymphoma	475	Corpus Uteri	441
	Non-Hodgkin Lymphoma	899	Bladder	459	Non-Hodgkin Lymphoma	424
Jefferson	All Cancers	10,613	All Cancers	5,399	All Cancers	5,214
	Lung	1,889	Prostate	1,410	Breast	1,618
	Breast	1,635	Lung	1,073	Lung	816
	Prostate	1,410	Colon & Rectum	657	Colon & Rectum	607
	Colon & Rectum	1,264	Non-Hodgkin Lymphoma	223	Non-Hodgkin Lymphoma	210
	Non-Hodgkin Lymphoma	433	Kidney & Renal Plevis	216	Corpus Uteri	194
Orleans	All Cancers	11,294	All Cancers	5,896	All Cancers	5,398
	Lung	1,825	Prostate	1,748	Breast	1,702
	Prostate	1,749	Lung	1,117	Colon & Rectum	726
	Breast	1,731	Colon & Rectum	695	Lung	708
	Colon & Rectum	1,421	Non-Hodgkin lymphoma	211	Corpus Uteri	202
	Non-Hodgkin Lymphoma	382	Bladder	186	Ovary	171

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
Plaquemines	All Cancers	572	All Cancers	309	All Cancers	263
	Lung	107	Prostate	75	Breast	73
	Breast/Prostate	75	Lung	64	Lung	43
	Colon & Rectum	60	Colon & Rectum	30	Colon & Rectum	30
	Bladder	27	Bladder	20	Skin Melanomas	10
	Kidney	22	Kidney and Renal Pelvis	16		
St. Bernard	All Cancers	1,817	All Cancers	945	All Cancers	872
	Lung	402	Lung	230	Breast	244
	Breast	247	Prostate	209	Lung	172
	Colon & Rectum	220	Colon & Rectum	123	Colon & Rectum	97
	Prostate	209	Bladder	55	Corpus Uteri	38
	Bladder	70	Non-Hodgkin Lymphoma	31	Non-Hodgkin Lymphoma	34
Region 2	All Cancers	12,350	All Cancers	6,577	All Cancers	5,773
	Prostate	2,128	Prostate	2,128	Breast	1,845
	Lung	1,858	Lung	1,138	Colon & Rectum	734
	Breast	1,863	Colon & Rectum	744	Lung	725
	Colon & Rectum	1,478	Kidney	263	Corpus Uteri	266
	Non-Hodgkin Lymphoma	468	Non-Hodgkin Lymphoma	239	Non-Hodgkin Lymphoma	229
Ascension	All Cancers	1,379	All Cancers	740	All Cancers	639
	Prostate	233	Prostate	233	Breast	229
	Lung	232	Lung	133	Lung	99
	Breast	229	Colon & Rectum	88	Colon & Rectum	59
	Colon & Rectum	147	Oral Cavity & Pharynx	32	Corpus Uteri	26
	Non-Hodgkin Lymphoma	53	Non-Hodgkin Lymphoma	29	Non-Hodgkin Lymphoma	24
East Baton Rouge	All Cancers	8,377	All Cancers	4,338	All Cancers	4,039
	Prostate	1,467	Prostate	1,467	Breast	1,280
	Breast	1,292	Lung	689	Colon & Rectum	532
	Lung	1,181	Colon & Rectum	496	Lung	492
	Colon & Rectum	1028	Kidney & Renal Pelvis	173	Corpus Uteri	184
	Non-Hodgkin Lymphoma	316	Non-Hodgkin Lymphoma	155	Non-Hodgkin Lymphoma	161
East Feliciana	All Cancers	525	All Cancers	309	All Cancers	216
	Prostate	100	Prostate	100	Breast	59
	Lung	93	Lung	61	Colon & Rectum	33
	Colon & Rectum	66	Colon & Rectum	33	Lung	32
	Breast	59	Bladder / Oral Cavity & Pharynx	15	Corpus Uteri	13
	Kidney & Renal Pelvis	20	Kidney & Renal Pelvis	12	Thyroid / Kidney & Renal Rectum	8

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
Iberville	All Cancers	738	All Cancers	424	All Cancers	314
	Lung	122	Prostate	117	Breast	90
	Prostate	117	Lung	87	Colon & Rectum	40
	Breast	91	Colon & Rectum	41	Lung	35
	Colon & Rectum	81	Kidney & Renal Pelvis	20	Cervix Uteri	16
	Non-Hodgkin Lymphoma	32	Non-Hodgkin Lymphoma /Oral Cavity & Pharynx	19	Corpus Uteri	15
Pointe Coupee	All Cancers	565	All Cancers	323	All Cancers	242
	Prostate	90	Prostate	90	Breast	77
	Lung	88	Lung	63	Colon & Rectum	31
	Breast	77	Colon & Rectum	39	Lung	25
	Colon & Rectum	70	Non-Hodgkin Lymphoma/ Kidney & Renal Pelvis	14	Corpus Uteri	15
	Non-Hodgkin Lymphoma	24	Esophagus	12	Pancreas	11
West Baton Rouge	All Cancers	510	All Cancers	277	All Cancers	233
	Lung	86	Prostate	75	Breast	80
	Breast	80	Lung	60	Colon & Rectum/Lung	26
	Prostate	75	Colon & Rectum	32	Non-Hodgkin Lymphoma/ Corpus Uteri / Lymphoma	11
	Colon & Rectum	58	Kidney & Renal Pelvis	11	Pancreas	10
	Non-Hodgkin Lymphoma	20	Leukemia	10		
West Feliciana	All Cancers	256	All Cancers	166	All Cancers	90
	Lung	61	Prostate	46	Breast	30
	Prostate	46	Lung	45	Lung	16
	Colon & Rectum	30	Colon & Rectum	15	Colon & Rectum/Lung	13
	Larynx	28	Oral Cavity & Pharynx/Leukemia	8		
Region 3	All Cancers	7,657	All Cancers	4,161	All Cancers	3,496
	Lung	1,238	Prostate	1,102	Breast	1,117
	Breast	1,135	Lung	789	Colon & Rectum	453
	Prostate	1,102	Colon & Rectum	525	Lung	449
	Colon & Rectum	978	Kidney & Renal Pelvis	180	Corpus Uteri	173
	Non-Hodgkin Lymphoma	302	Bladder	160	Non-Hodgkin Lymphoma	143
Assumption	All Cancers	481	All Cancers	261	All Cancers	220
	Lung	88	Lung	65	Breast	75
	Breast	77	Prostate	54	Colon & Rectum	31
	Colon & Rectum	64	Colon & Rectum	33	Lung	23
	Prostate	54	Kidney & Renal Pelvis	15	Kidney & Renal Pelvis	10
	Kidney & Renal Pelvis	25	Non-Hodgkin Lymphoma / Multiple Myeloma	9	Non-Hodgkin Lymphoma /Cervix Uteri	8º

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
Lafourche	All Cancers	1,750	All Cancers	953	All Cancers	797
	Breast	267	Prostate	247	Breast	262
	Lung	249	Lung	163	Colon & Rectum	109
	Prostate	247	Colon & Rectum	123	Lung	86
	Colon & Rectum	232	Kidney & Renal Pelvis	37	Corpus Uteri	46
	Kidney & Renal Pelvis	72	Bladder	36	Kidney & Renal Pelvis	35
St. Charles	All Cancers	940	All Cancers	506	All Cancers	434
	Prostate	159	Prostate	159	Breast	145
	Breast	146º	Lung	76	Lung	58
	Lung	134	Colon & Rectum	57	Colon & Rectum	41
	Colon & Rectum	98	Kidney & Renal Pelvis	22	Non-Hodgkin Lymphoma	17
	Non-Hodgkin Lymphoma/ Kidney & Renal	36	Stomach / Non-Hodgkin Lymphoma	19	Thyroid	16
St. James	All Cancers	455	All Cancers	253	All Cancers	202
	Prostate	78	Prostate	78	Breast	57
	Colon & Rectum	71	Lung	45	Colon & Rectum	36
	Lung	66	Colon & Rectum	35	Lung	21
	Breast	58	Kidney & Renal Pelvis / Pancreas	10º	Corpus Uteri	10
	Pancreas	17	Bladder	9		
St. John the Baptist	All Cancers	784	All Cancers	396	All Cancers	388
	Breast	126	Prostate	122	Breast	124
	Prostate	122	Lung	71	Lung	48
	Lung	119	Colon & Rectum	42	Colon & Rectum	47
	Colon & Rectum	89	Bladder	23	Corpus Uteri	24
	Non-Hodgkin Lymphoma	33	Kidney & Renal Pelvis	17	Non-Hodgkin Lymphoma	17
St. Mary	All Cancers	1,181	All Cancers	661	All Cancers	520
	Lung	236	Prostate	160	Breast	159
	Breast	161	Lung	151	Lung	85
	Prostate	160	Colon & Rectum	82	Colon & Rectum	60
	Colon & Rectum	142	Oral Cavity & Pharynx/Bladder	31	Corpus Uteri	23
	Non-Hodgkin Lymphoma	48	Non-Hodgkin Lymphoma	30	Ovary	21
Terrebonne	All Cancers	2,066	All Cancers	1,131	All Cancers	935
	Lung	346	Prostate	282	Breast	295
	Breast	300	Lung	218	Colon & Rectum	129
	Colon & Rectum/Prostate	282	Colon & Rectum	153	Lung	128
	Non-Hodgkin Lymphoma	87	Kidney & Renal Pelvis	56	Corpus Uteri	50
	Kidney & Renal Pelvis	85	Oral Cavity & Pharynx	49	Non-Hodgkin Lymphoma	42

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
Region 4	All Cancers	12,389	All Cancers	6,655	All Cancers	5,734
	Lung	2,082	Prostate	2,001	Breast	1,706
	Prostate	2,001	Lung	1,247	Lung	835
	Breast	1,729	Colon & Rectum	806	Colon & Rectum	656
	Colon & Rectum	1,462	Kidney & Renal Pelvis	238	Non-Hodgkin Lymphoma	251
	Non-Hodgkin Lymphoma	475	Non-Hodgkin Lymphoma	224	Corpus Uteri	241
Acadia	All Cancers	1,437	All Cancers	725	All Cancers	712
	Lung	271	Prostate	188	Breast	188
	Colon & Rectum	203	Lung	149	Lung	122
	Breast	191	Colon & Rectum	108	Colon & Rectum	95
	Prostate	188	Oral Cavity & Pharynx	29	Non-Hodgkin Lymphoma	44
	Non-Hodgkin Lymphoma	71	Non-Hodgkin Lymphoma	27	Corpus Uteri	33
Evangeline	All Cancers	814	All Cancers	424	All Cancers	390
	Lung	162	Prostate	107	Breast	91
	Colon & Rectum	113	Lung	95	Lung	67
	Prostate	107	Colon & Rectum	57	Colon & Rectum	56
	Breast	92	Non-Hodgkin Lymphoma	17	Non-Hodgkin Lymphoma	21
	Non-Hodgkin Lymphoma	38	Kidney & Renal Pelvis	16	Pancreas	15
Iberia	All Cancers	1,700	All Cancers	926	All Cancers	774
	Lung	273	Prostate	266	Breast	247
	Prostate	266	Lung	172	Lung	101
	Breast	255	Colon & Rectum	108	Colon & Rectum	79
	Colon & Rectum	187	Kidney & Renal Pelvis	36	Corpus Uteri	41
	Kidney & Renal Pelvis	64	Oral Cavity & Pharynx	35	Kidney & Renal Pelvis	28
Lafayette	All Cancers	3,921	All Cancers	2,039	All Cancers	1,882
	Prostate	624	Prostate	624	Breast	612
	Lung	617	Lung	357	Lung	260
	Breast	616	Colon & Rectum	237	Colon & Rectum	196
	Colon & Rectum	433	Kidney & Renal Pelvis	79	Corpus Uteri	78
	Non-Hodgkin Lymphoma	140	Skin Melanomas	69	Non-Hodgkin Lymphoma	75
St. Landry	All Cancers	2,118	All Cancers	1,181	All Cancers	937
	Lung	378	Prostate	341	Breast	278
	Prostate	341	Lung	236	Lung	142
	Breast	282	Colon & Rectum	145	Colon & Rectum	110
	Colon & Rectum	255	Non-Hodgkin Lymphoma	44	Pancreas	46
	Pancreas	87	Pancreas	41	Non-Hodgkin Lymphoma	36
St. Martin	All Cancers	1011	All Cancers	586	All Cancers	425
	Prostate	196	Prostate	196	Breast	129
	Lung	176	Lung	118	Lung	58
	Breast	129	Colon & Rectum	64	Colon & Rectum	55
	Colon & Rectum	119	Kidney & Renal Pelvis	24	Corpus Uteri	24
	Kidney & Renal Pelvis	38	Oral Cavity & Pharynx	19	Non-Hodgkin Lymphoma	18

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
Vermilion	All Cancers	1,388	All Cancers	774	All Cancers	614
	Prostate	279	Prostate	279	Breast	161
	Lung	205	Lung	120	Lung	85
	Breast	164	Colon & Rectum	87	Colon & Rectum	65
	Colon & Rectum	152	Non-Hodgkin Lymphoma/Pancreas	26	Non-Hodgkin Lymphoma	30
	Non-Hodgkin Lymphoma	56	Bladder	25	Skin Melanomas	27
Region 5	All Cancers	6,416	All Cancers	3,472	All Cancers	2,944
	Lung	1,094	Prostate	1,084	Breast	897
	Prostate	1,084	Lung	681	Lung	413
	Breast	903	Colon & Rectum	375	Colon & Rectum	393
	Colon & Rectum	768	Non-Hodgkin Lymphoma	149	Non-Hodgkin Lymphoma	143
	Non-Hodgkin Lymphoma	292	Bladder	122	Corpus Uteri	125
Allen	All Cancers	511	All Cancers	275	All Cancers	236
	Lung	88	Prostate	77	Breast	65
	Prostate	77	Lung	61	Colon & Rectum	37
	Colon & Rectum	68	Colon & Rectum	31	Lung	27
	Breast	65	Non-Hodgkin Lymphoma	12	Non-Hodgkin Lymphoma	15
	Non-Hodgkin Lymphoma	27	Leukemia	9	Corpus Uteri	8
Beauregard	All Cancers	721	All Cancers	420	All Cancers	301
	Lung	132	Prostate	131	Breast	82
	Prostate	131	Lung	89	Lung	43
	Breast	82	Colon & Rectum	47	Colon & Rectum	32
	Colon & Rectum	79	Bladder	21	Corpus Uteri	18
	Non-Hodgkin Lymphoma	29	Non-Hodgkin Lymphoma	20	Cervix Uteri	13
Calcasieu	All Cancers	4,356	All Cancers	2,315	All Cancers	2,041
	Prostate	736	Prostate	730	Breast	638
	Lung	729	Lung	430	Lung	299
	Breast	642	Colon & Rectum	250	Colon & Rectum	288
	Colon & Rectum	538	Non-Hodgkin Lymphoma	101	Non-Hodgkin Lymphoma	99
	Non-Hodgkin Lymphoma	200	Skin Melanomas	82	Corpus Uteri	79
Cameron	All Cancers	157	All Cancers	80	All Cancers	77
	Lung	31	Lung	21	Breast	20
	Colon & Rectum	23	Prostate	13	Colon & Rectum	12
	Breast	21	Colon & Rectum	11	Lung	10
	Prostate	13	Kidney & Renal Pelvis/Non-Hodgkin Lymphoma	4	Cervix Uteri	5
	Non-Hodgkin Lymphoma	7			Oral Cavity & Pharynx	4

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
Jefferson Davis	All Cancers	671	All Cancers	382	All Cancers	289
	Prostate	127	Prostate	127	Breast	92
	Lung	114	Lung	80	Lung	34
	Breast	93	Colon & Rectum	36	Colon & Rectum	24
	Colon & Rectum	60	Bladder	13	Cervix Uteri	18
	Non-Hodgkin Lymphoma	29	Kidney & Renal Pelvis/ Leukemia/ Non-Hodgkin Lymphoma	12	Non-Hodgkin Lymphoma	17
Region 6	All Cancers	6,659	All Cancers	3,649	All Cancers	3,010
	Lung	1,236	Prostate	998	Breast	814
	Prostate	998	Lung	790	Lung	446
	Colon & Rectum	902	Colon & Rectum	493	Colon & Rectum	409
	Breast	821	Non-Hodgkin Lymphoma	130	Non-Hodgkin Lymphoma	116
	Non-Hodgkin Lymphoma	246	Oral Cavity & Pharynx	125	Corpus Uteri	104
Avoyelles	All Cancers	1009	All Cancers	540	All Cancers	469
	Lung	184	Prostate	129	Breast	121
	Colon & Rectum	161	Lung	114	Lung	70
	Prostate	129	Colon & Rectum	94	Colon & Rectum	67
	Breast	121	Kidney & Renal Pelvis	22	Non-Hodgkin Lymphoma	21
	Non-Hodgkin Lymphoma	42	Non-Hodgkin Lymphoma	21	Leukemia	18
Catahoula	All Cancers	264	All Cancers	137	All Cancers	127
	Lung	46	Prostate	39	Breast	36
	Prostate	39	Lung	30	Colon & Rectum	19
	Colon & Rectum	38	Colon & Rectum	19	Lung	16
	Breast	36	Non-Hodgkin Lymphoma	6	Corpus Uteri	7
	Pancreas	11	Pancreas	5	Pancreas	6
Concordia	All Cancers	372	All Cancers	195	All Cancers	177
	Lung	88	Lung	55	Breast	42
	Prostate	52	Prostate	52	Lung	33
	Breast/ Colon & Rectum	43	Colon & Rectum	26	Colon & Rectum	17
	Pancreas	15	Skin Melanomas	7	Ovary	14
	Ovary	14	Pancreas/Esophagus	6	Pancreas	9
Grant	All Cancers	408	All Cancers	229	All Cancers	179
	Lung	81	Prostate	63	Breast	52
	Prostate	63	Lung	50	Lung	31
	Breast	52	Colon & Rectum	19	Colon & Rectum	26
	Colon & Rectum	45	Oral Cavity & Pharynx	13	Pancreas	8
	Oral Cavity & Pharynx	20	Non-Hodgkin Lymphoma	12	Oral Cavity & Pharynx	7

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
La Salle	All Cancers	403	All Cancers	211	All Cancers	192
	Prostate	68	Prostate	68	Breast	50
	Lung/Colon & Rectum	62	Lung	40	Colon & Rectum	34
	Breast	50	Colon & Rectum	28	Lung	22
	Non-Hodgkin Lymphoma	16	Bladder / Non-Hodgkin Lymphoma	9	Skin Melanomas	9
			Larynx	8	Non-Hodgkin Lymphoma/ Cervix Uteri	7
Rapides	All Cancers	2,993	All Cancers	1,649	All Cancers	1,344
	Lung	529	Prostate	480	Breast	375
	Prostate	480	Lung	330	Lung	199
	Colon & Rectum	406	Colon & Rectum	230	Colon & Rectum	176
	Breast	381	Pancreas	62	Non-Hodgkin Lymphoma	58
	Kidney & Renal Pelvis	109	Kidney & Renal Pelvis	61	Kidney & Renal Pelvis	48
Vernon	All Cancers	778	All Cancers	445	All Cancers	333
	Lung	170	Lung	117	Breast	94
	Prostate	97	Prostate	97	Lung	53
	Breast	94	Colon & Rectum	47	Colon & Rectum	37
	Colon & Rectum	84	Non-Hodgkin Lymphoma	25	Oval Cavity & Pharynx	16
	Oral Cavity & Pharynx	36	Bladder/Oral Cavity & Pharynx	20	Ovary/ Kidney & Renal Pelvis	14
Winn	All Cancers	431	All Cancers	243	All Cancers	188
	Lung	75	Prostate	70	Breast	44
	Prostate	70	Lung	54	Colon & Rectum	33
	Colon & Rectum	63	Colon & Rectum	30	Lung	21
	Breast	44	Oral Cavity & Pharynx	11	Corpus Uteri/ Non-Hodgkin Lymphoma/ Skin Melanomas	10
	Skin Melanoma	20	Skin Melanomas	10		
Region 7	All Cancers	12,849	All Cancers	6,874	All Cancers	5,975
	Lung	2,136	Prostate	2,135	Breast	1,837
	Prostate	2,135	Lung	1,300	Lung	836
	Breast	1,860	Colon & Rectum	867	Colon & Rectum	813
	Colon & Rectum	1,680	Kidney & Renal Pelvis	241	Corpus Uteri	275
	Non-Hodgkin Lymphoma	430	Oral Cavity & Pharynx	239	Non-Hodgkin Lymphoma	208
Bienville	All Cancers	506	All Cancers	270	All Cancers	236
	Prostate	103	Prostate	103	Breast	65
	Lung	85	Lung	55	Colon & Rectum	34
	Breast	65	Colon & Rectum	29	Lung	30
	Colon & Rectum	63	Non-Hodgkin Lymphoma	11	Ovary	12
	Non-Hodgkin	20	Kidney & Renal Pelvis	9	Non-Hodgkin Lymphoma	9

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
Bossier	All Cancers	2,106	All Cancers	1,135	All Cancers	971
	Lung	366	Prostate	302	Breast	290
	Prostate	302	Lung	208	Lung	158
	Breast	296	Colon & Rectum	157	Colon & Rectum	119
	Colon & Rectum	276	Skin Melanomas/Oral Cavity& Pharynx	41	Ovary	43
	Non-Hodgkin Lymphoma	71	Non-Hodgkin Lymphoma	39	Corpus Uteri	35
Caddo	All Cancers	6,117	All Cancers	3,174	All Cancers	2,943
	Prostate	1,014	Prostate	1,014	Breast	930
	Lung	967	Lung	598	Colon & Rectum	393
	Breast	939	Colon & Rectum	399	Lung	369
	Colon & Rectum	792	Oral Cavity & Pharynx	113	Corpus Uteri	144
	Non-Hodgkin Lymphoma	204	Kidney & Renal Pelvis	112	Non-Hodgkin Lymphoma	103
Claiborne	All Cancers	494	All Cancers	293	All Cancers	201
	Prostate	97	Prostate	97	Breast	75
	Breast	79	Lung	55	Colon & Rectum	34
	Lung	76	Colon & Rectum	26	Lung	21
	Colon & Rectum	60	Oral Cavity & Pharynx	11	Corpus Uteri	10
	Non-Hodgkin Lymphoma/ Oral Cavity & Pharynx	16	Bladder	9	Non-Hodgkin Lymphoma / Ovary	9
De Soto	All Cancers	677	All Cancers	369	All Cancers	308
	Prostate	130	Prostate	130	Breast	99
	Lung	113	Lung	71	Colon & Rectum	43
	Breast	100	Colon & Rectum	47	Lung	42
	Colon & Rectum	90	Oral Cavity & Pharynx	14	Corpus Uteri	14
	Oral Cavity & Pharynx	20	Non-Hodgkin Lymphoma/ Kidney & Renal Pelvis	11	Pancreas/Ovary	10
Natchitoches	All Cancers	830	All Cancers	435	All Cancers	395
	Lung	141	Prostate	130	Breast	108
	Prostate	130	Lung	86	Colon & Rectum	63
	Colon & Rectum	114	Colon & Rectum	51	Lung	55
	Breast	109	Oral Cavity & Pharynx	21	Corpus Uteri	24
	Non-Hodgkin Lymphoma	33	Bladder	19	Leukemia	16
Red River	All Cancers	222	All Cancers	122	All Cancers	100
	Colon & Rectum	37	Prostate	29	Breast	24
	Lung	31	Lung	22	Colon & Rectum	19
	Prostate	29	Colon & Rectum	18	Lung	9
	Breast	24	Kidney & Renal Pelvis	8	Corpus Uteri	8
	Kidney & Renal Pelvis	11	Bladder	6	Ovary	5

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
Sabine	All Cancers	614	All Cancers	353	All Cancers	261
	Lung	119	Prostate	100	Breast	81
	Prostate	100	Lung	69	Lung	50
	Breast	81	Colon & Rectum	49	Colon & Rectum	25
	Colon & Rectum	74	Bladder	19	Non-Hodgkin Lymphoma	14
	Non-Hodgkin	28	Kidney & Renal Pelvis	16	Cervix Uteri	11
Webster	All Cancers	1,283	All Cancers	723	All Cancers	560
	Lung	238	Prostate	230	Breast	165
	Prostate	230	Lung	136	Lung	102
	Colon & Rectum	174	Colon & Rectum	91	Colon & Rectum	83
	Breast	167	Kidney & Renal Pelvis	26	Corpus Uteri	24
	Kidney & Renal Pelvis	39	Leukemia	22	Cervix Uteri	20
Region 8	All Cancers	8,251	All Cancers	4,319	All Cancers	3,932
	Lung	1,461	Prostate	1,228	Breast	1,153
	Prostate	1,228	Lung	909	Lung	552
	Breast	1,161	Colon & Rectum	493	Colon & Rectum	475
	Colon & Rectum	968	Oral Cavity & Pharynx	194	Corpus Uteri	190
	Non-Hodgkin Lymphoma	285	Melanoma of the skin	163	Non-Hodgkin Lymphoma	152
Caldwell	All Cancers	310	All Cancers	171	All Cancers	139
	Lung	55	Prostate	53	Breast	36
	Prostate	53	Lung	37	Colon & Rectum	21
	Colon & Rectum	38	Colon & Rectum	17	Lung	18
	Breast	36	Oral Cavity & Pharynx	10	Myeloma	8
	Oral Cavity & Pharynx /Kidney & Renal Pelvis	11	Skin Melanomas	7	Corpus Uteri/Non-Hodgkin Lymphoma	7
East Carroll	All Cancers	214	All Cancers	116	All Cancers	98
	Prostate	41	Prostate	41	Breast	27
	Lung	37	Lung	20	Lung	17
	Colon & Rectum	32	Colon & Rectum	19	Colon & Rectum	13
	Breast	27	Oral Cavity & Pharynx	8	Corpus Uteri	6
	Oral Cavity & Pharynx	8	Leukemia/Bladder	4	Ovary	5
Franklin	All Cancers	535	All Cancers	296	All Cancers	239
	Prostate	98	Prostate	98	Breast	62
	Lung	88	Lung	59	Colon & Rectum	37
	Colon & Rectum	73	Colon & Rectum	36	Lung	29
	Breast	62	Bladder	14	Corpus Uteri	12
	Non-Hodgkin Lymphoma	20	Oral Cavity & Pharynx / Non-Hodgkin Lymphoma	13	Leukemia	9
Jackson	All Cancers	441	All Cancers	232	All Cancers	209
	Lung	89	Prostate	56	Breast	56
	Colon & Rectum	58	Lung	54	Lung	35
	Breast/Prostate	56	Colon & Rectum	31	Colon & Rectum	27
	Skin Melanomas	18	Oral Cavity & Pharynx	10	Skin Melanomas	9
	Oral Cavity& Pharynx / Pancreas	14	Skin Melanomas/ Myeloma/ Bladder	9	Ovary /Cervix Uteri	8

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
Lincoln	All Cancers	823	All Cancers	422	All Cancers	401
	Lung	129	Prostate	127	Breast	124
	Prostate	127	Lung	80	Colon & Rectum	57
	Breast	124	Colon & Rectum	52	Lung	49
	Colon & Rectum	109	Skin Melanomas/Oral Cavity & Pharynx	20	Corpus Uteri	27
	Skin Melanomas	30	Non-Hodgkin Lymphoma	14	Ovary	20
Madison	All Cancers	177	All Cancers	106	All Cancers	71
	Lung	38	Lung	28	Breast	17
	Colon & Rectum	25	Prostate	22	Colon & Rectum	12
	Prostate	22	Colon & Rectum	13	Lung	10
	Breast	17	Esophagus/Oral Cavity & Pharynx/Pancreas	5	Corpus Uteri/ Leukemia/Bladder	4
	Esophagus	7				
Morehouse	All Cancers	851	All Cancers	465	All Cancers	386
	Prostate	154	Prostate	154	Breast	107
	Lung	140	Lung	97	Colon & Rectum	55
	Breast	109	Colon & Rectum	47	Lung	43
	Colon & Rectum	102	Non-Hodgkin Lymphoma	19	Corpus Uteri	21
	Non-Hodgkin Lymphoma	32	Pancreas	15	Non-Hodgkin Lymphoma / Ovary	13
Ouachita	All Cancers	3,278	All Cancers	1,644	All Cancers	1,634
	Lung	564	Prostate	446	Breast	509
	Breast	513	Lung	323	Lung	241
	Prostate	446	Colon & Rectum	198	Colon & Rectum	176
	Colon & Rectum	374	Skin Melanomas	82	Corpus Uteri	77
	Skin Melanomas	130	Oral Cavity & Pharynx	72	Non-Hodgkin Lymphoma	67
Richland	All Cancers	561	All Cancers	309	All Cancers	252
	Lung	120	Prostate / Lung	79	Breast	60
	Prostate	79	Colon & Rectum	31	Lung	41
	Breast	61	Bladder	16	Colon & Rectum	25
	Colon & Rectum	56	Oral Cavity & Pharynx	14	Corpus Uteri	13
	Pancreas	23	Pancreas	12	Non-Hodgkin Lymphoma / Ovary / Pancreas	11
Tensas	All Cancers	123	All Cancers	59	All Cancers	64
	Lung	29	Lung	20	Breast	17
	Breast	17	Prostate	14	Colon & Rectum	10
	Colon & Rectum	15	Colon & Rectum	5	Lung	9
	Prostate	14	Larynx / Brain & Central Nervous System	3	Non-Hodgkin Lymphoma	6
	Kidney & Renal Pelvis	7			Kidney & Renal Pelvis	4

Top Five Cancers and Number of Cases Diagnosed by Region and Parish
Louisiana, 1998–2002
Five-Year Case Counts - Invasive Cases Only

Region / Parish	Total		Males		Females	
Union	All Cancers	601	All Cancers	319	All Cancers	282
	Lung	125	Lung/Prostate	79	Breast	95
	Breast	96	Colon & Rectum	32	Lung	46
	Prostate	79	Oral Cavity & Pharynx	20	Colon & Rectum	25
	Colon & Rectum	57	Skin Melanomas	17	Non-Hodgkin Lymphoma	14
	Skin Melanomas	27	Kidney & Renal Pelvis	10	Corpus Uteri	13
West Carroll	All Cancers	337	All Cancers	180	All Cancers	157
	Prostate	59	Prostate	59	Breast	43
	Lung	47	Lung	33	Colon & Rectum	17
	Breast	43	Colon & Rectum	12	Lung	14
	Colon & Rectum	29	Oral Cavity & Pharynx	11	Non-Hodgkin Lymphoma /Pancreas	10
	Oral Cavity & Pharynx	18	Bladder / Skin Melanomas	10		
Region 9	All Cancers	9,976	All Cancers	5,277	All Cancers	4,699
	Lung	1,640	Prostate	1,577	Breast	1,463
	Prostate	1,577	Lung	953	Lung	687
	Breast	1,475	Colon & Rectum	643	Colon & Rectum	544
	Colon & Rectum	1,187	Non-Hodgkin Lymphoma	210	Corpus Uteri	187
	Non-Hodgkin Lymphoma	371	Kidney & Renal Pelvis	184	Ovary	170
Livingston	All Cancers	1,734	All Cancers	922	All Cancers	812
	Lung	292	Prostate	240	Breast	242
	Breast	245	Lung	179	Lung	113
	Prostate	240	Colon & Rectum	104	Colon & Rectum	95
	Colon & Rectum	199	Oral Cavity & Pharynx	40	Corpus Uteri	37
	Skin Melanomas	69	Kidney & Renal Pelvis/Non-Hodgkin Lymphoma	35	Skin Melanomas	35
St. Helena	All Cancers	159	All Cancers	77	All Cancers	82
	Lung	28	Prostate	25	Breast	25
	Prostate	25	Lung	13	Lung	15
	Colon Rectum	20	Colon & Rectum	9	Colon & Rectum	11
	Pancreas/Non-Hodgkin Lymphoma	7	Myeloma/ Pancreas	4	Thyroid / Skin Melanomas / Non-Hodgkin Lymphoma	4
St. Tammany	All Cancers	4,488	All Cancers	2,310	All Cancers	2,178
	Breast	735	Prostate	722	Breast	730
	Prostate	722	Lung	359	Lung	324
	Lung	683	Colon & Rectum	296	Colon & Rectum	225
	Colon & Rectum	521	Non-Hodgkin Lymphoma	93	Corpus uteri	83
	Non-Hodgkin Lymphoma	169	Kidney & Renal Pelvis	88	Ovary	78
Tangipahoa	All Cancers	2,281	All Cancers	1,263	All Cancers	1,018
	Prostate	377	Prostate	377	Breast	309
	Lung	376	Lung	240	Lung	136
	Breast	311	Colon & Rectum	157	Colon & Rectum	136
	Colon & Rectum	293	Oral Cavity Pharynx	47	Corpus Uteri	41
	Non-Hodgkin Lymphoma	79	Kidney Renal Pelvis	44	Non-Hodgkin Lymphoma	38

Top Five Cancers and Number of Cases Diagnosed by Region and Parish Louisiana, 1998–2002 Five-Year Case Counts - Invasive Cases Only						
Region / Parish	**Total**		**Males**		**Females**	
Washington	All Cancers	1,314	All Cancers	705	All Cancers	609
	Lung	261	Prostate	213	Breast	157
	Prostate	213	Lung	162	Lung	99
	Breast	159	Colon & Rectum	77	Colon & Rectum	77
	Colon & Rectum	154	Non-Hodgkin Lymphoma	38	Corpus Uteri/ Ovary	23
	Non-Hodgkin Lymphoma	54	Skin Melanomas	23	Kidney & Renal Pelvis	22

F. Chronic Diseases: Associated Risk Factors

1. Heart Disease And Stroke: Risk Factors

Cardiovascular diseases (CVDs) are a group of diseases of the heart and blood vessels, including coronary heart disease (CHD), the disease that leads to heart attack, and diseases of the blood vessels that lead to stroke or hemorrhage. CVDs are the leading cause of death for both men and women in all racial and ethnic groups in Louisiana and the United States. Almost 1 million people in the United States die of CVDs each year, accounting for approximately 40% of all deaths.[3] In Louisiana, CVDs caused 14,697 deaths in 2002, which accounted for 35% of all deaths that year.[4]

In addition to the approximately 15,000 Louisiana residents that die from CVDs each year, many more state residents experience a heart attack, stroke, or other non-fatal cardiovascular event. For most of these CVD survivors, their lives have changed forever: the majority will need medications for the rest of their lives, and some are left with permanent, severe disabilities such as the loss of speech or the inability to move an arm or leg.

Some CVD risk factors cannot be changed, such as age (CVD mortality increases with age), sex (males have higher CVD mortality rates than women, especially before menopause), race (blacks generally have higher rates than whites), and a family history of heart attacks at a young age.

However, most CVD risk factors are modifiable, meaning that individuals can change their behavior to slow, or even reverse the process of arterial blockage and decrease their risk of having a heart attack or stroke. The modifiable risk factors include tobacco use, high blood pressure, high blood cholesterol, lack of regular physical activity, overweight/obesity, poor nutrition, and diabetes.

1.1 Tobacco

1.1.1 Cigarette Smoking

Cigarette smoking was the leading risk factor for disease, responsible for an estimated 6,427 deaths and 96,085 years of potential years of life lost in 1999[5]. Furthermore, cigarette smoking is responsible for one in four deaths due to CVDs and contributes to illness and death due to cancers, respiratory diseases, premature and low birth weight infants, sudden infant death syndrome, and burns. More than 770,000

3 American Heart Association, 2004 Heart and Stroke Statistical Update. Dallas: AHA, 2000.

4 Louisiana Office of Public Health, State Center for Health Statistics

5 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC) Report – Louisiana 1999.

adults,[6] 79,000 high school,[7] and 28,000 middle school[8] aged children in Louisiana currently smoke cigarettes. Smokers not only put their own lives at risk, but also affect the lives of people around them. The human and economic costs of cigarette smoking are substantial. Recent estimates show that the total direct and indirect costs for 1999 in Louisiana attributable to cigarette smoking stood at $2.81 billion or $645 per capita. [9]

1.1.1.1 Cigarette Smoking Among Adults

1.1.1.1.1 Prevalence of Cigarette Smoking among Adults

Nearly one in four (23.5%) adults in Louisiana currently smokes cigarettes.[10] Rates of adult smoking in Louisiana have not changed significantly over the past decade and have consistently been above the national mean (20.8%).

Rates of current smoking are higher among males, Hispanics, individuals in the 18 - 49 year age group, individuals with annual household income between 15,000 and $25,000 and in individuals with less than a high school level of education. [11]

Demographic Profile of Current Smokers

Age	% Who Currently Smoke	Sex	% Who Currently Smoke	Race	% Who Currently Smoke	Income	% Who Currently Smoke	Education	% Who Currently Smoke
18-24	27.32	**Male**	26.9	**White**	24.4	**Less than $15,000**	28.07	**Less than H.S.**	33.2
25-49	27.3	**Female**	20.5	**Black**	21.3	**$15,000-$24,999**	31.4	**H.S. or G.E.D.**	25.9
50-64	22.3			**Hispanic**	26.7	**$25,000-$49,999**	23.3	**Some post-H.S.**	24.7
65+	9.8					**$50,000+**	19.3	**College Graduate**	13.7

Source: Louisiana Department of Health and Hospitals Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

1.1.1.1.2 Smoking Cessation among Adults

The best way to avoid the undue consequences of smoking is to never start smoking. However, reduction in disease rates among current smokers is best achieved only through cessation. Smoking

6 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Behavioral Risk Factor Surveillance System (BRFSS) – 2004.

7 Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System (YRBS) – Louisiana, 1997.

8 Tobacco Control Program, Office of Public Health, Louisiana Department of Health and Hospitals. Louisiana Youth Tobacco Survey – 2000.

9 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC) Report – Louisiana 1999.

10 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Behavioral Risk Factor Surveillance System (BRFSS) – 2004.

11 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2004.

cessation has major and immediate health benefits for individuals of all ages. Smoking cessation is known to reduce the risk of lung cancer, other cancers, cardiovascular disease and chronic lung disease. Research shows that:[12]

- Individuals who quit before 50 years of age have a 50% reduction in the risk of dying in the next 15 years compared with continuing smokers.
- The risk of lung cancer declines steadily in people who quit smoking, with a 30 to 50% reduction in the risk after 10 years, compared to the risk for those who continue smoking.
- There is a 50% reduction in the risk of cardiovascular disease after 1 year in those who quit smoking and after 15 years, their risk equals that of non-smokers.

In the readiness-to-change model, smoking cessation is viewed as a process of change with five stages: pre-contemplation, contemplation, preparation, action and maintenance. Results from the 2004 Louisiana BRFSS show that approximately 661,000 adult Louisianans have quit smoking. Furthermore, an additional 465,000 have tried to quit smoking for at least one day in the past year. Trend data over the past seven years (1997 – 2004) show a gradual increase in the proportion of adults who are trying to give up the deadly habit, from 49.0 to 60.0%.

1.1.1.2 Cigarette Smoking among Youth

Nine out of ten current smokers started before they were 18 years of age. The younger one begins to smoke, the more likely one is to remain a smoker as an adult. Health problems associated with smoking are a function of the duration (years) and the intensity (amount) of use.[13] Earlier onset of tobacco use also provides more life-years to use tobacco and thereby increases the potential duration of use and the risk of a range of more serious health consequences. Tobacco use is considered a part of the continuum of high-risk behaviors, which include the use of illegal drugs and anti-social behavior. These problem behaviors can be considered a syndrome, since involvement in one behavior increases the risk for involvement in others. Delaying or preventing the use of tobacco may have implications for delaying or preventing these other behaviors as well. [14]

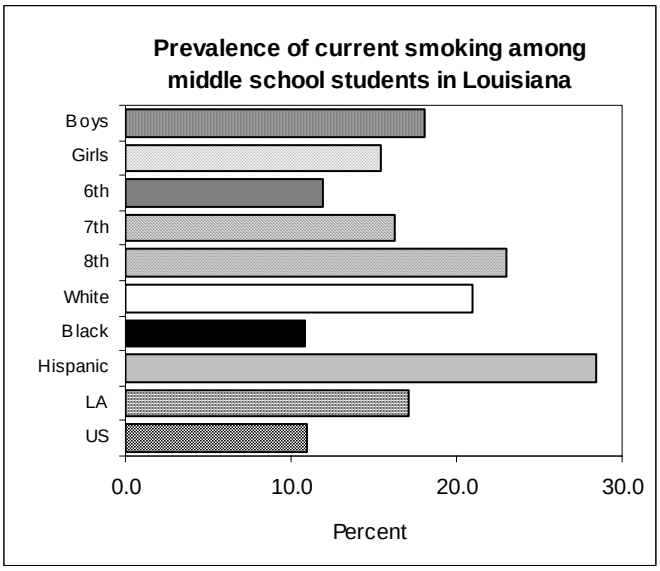
12 U.S. Department of Health and Human Services. The health benefits of smoking cessation: a report of the Surgeon General, Atlanta: U.S. Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1990.

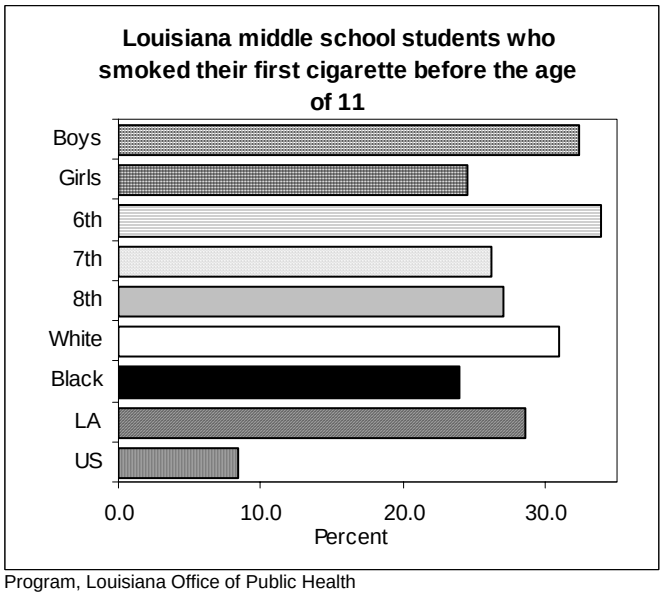
13 U.S. Department of Health and Human Services. Preventing Tobacco Use Among Young People – A Report of the Surgeon General: U.S. Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.

14 EPA. Respiratory health effects of passive smoking: Lung Cancer and other disorders. EPA/600/6-90/006F; December 1992

1.1.1.2.1 Prevalence of Cigarette Smoking among Youth

Results from the 2000 Louisiana Youth Tobacco Survey (YTS) show that more than 70,000 (50.0%) public middle school students in Louisiana reported having ever smoked a cigarette, and 17.1% currently smoke cigarettes. Moreover, more than a fourth (28.6%) of the students had smoked their first cigarette





Source: 2000 Louisiana Youth Tobacco Survey, Louisiana Tobacco Control Program, Louisiana Office of Public Health

before the age of 11. Apart from cigarette smoking, other forms of tobacco use reported by middle school students include cigars (12.5%), pipes (6.3%), bidis (small brown cigarettes from India consisting of tobacco wrapped in a leaf and tied with a thread) (7.1%), and smokeless or chewing tobacco (9.9%). The rates of cigarette smoking and use of other tobacco products increase with each increasing school grade. Furthermore, white and Hispanic students have higher rates of cigarette smoking compared to black students. Rates of current smoking among middle school students in Louisiana are 50% higher than those of their peers nationally.

Sales of tobacco products to children under the age of 18 years are illegal and punishable by law in all 50 states and the District of Columbia. However, underage tobacco sales continue to be a major source of tobacco for minors. Nearly one in two (46.8%) middle school students (under the age of 18) who reported currently smoking cigarettes bought their last pack of cigarettes from a gas station, convenience, grocery, or drug store. Results from the same survey also show that 70.5% of the middle school aged current smokers who bought cigarettes in a store were not asked to show proof of age when buying cigarettes during the 30 days preceding this survey. In addition, a greater proportion of white students (76.0%) reported not being asked for proof of age as compared to black students (55.5%).

1.1.1.2.2 Smoking Cessation among Youth

The continuum of smoking behavior among children and adolescents can be described in five stages: preparation, initial trying, experimentation, regular smoking, and nicotine dependence or addiction. Persons who have smoked can discontinue at any stage, but quitting becomes more difficult as smokers progress through the continuum and become increasingly dependent on nicotine. Desire to quit smoking was shown to decrease with each additional school grade. Current smokers in the sixth grade were more likely to state that they wanted to quit smoking, as compared to eighth graders (61.0% and 47.3%, respectively).

1.1.2. Smokeless Tobacco

Smokeless tobacco (chewing or spit tobacco) can also lead to nicotine addiction, oral cancer, gum disease, and an increased risk of cardiovascular disease, including heart attacks.

1.1.2.1 Use of Smokeless Tobacco among Adults

According to 2004 BRFSS data, 15.3% of the adult population in Louisiana has ever used smokeless tobacco products such as chewing tobacco, dip or snuff. Overall, 4% of the adult population currently uses smokeless tobacco products.

Demographic Profile of Current Smokeless Tobacco Users

Age	% Who Use Smokeless Tobacco	Sex	% Who Use Smokeless Tobacco	Race	% Who Use Smokeless Tobacco	Income	% Who Use Smokeless Tobacco	Education	% Who Use Smokeless Tobacco
18-24	4.8	**Male**	7.6	**White**	5.1	**Less than $15,000**	3.5	**Less than H.S.**	5.4
25-49	5.0	**Female**	0.6	**Black**	1.7	**$15,000-$24,999**	3.9	**H.S. or G.E.D.**	3.9
50-64	2.2					**$25,000-$49,999**	3.7	**Some post-H.S.**	4.1
65+	2.7					**$50,000+**	5.2	**College Graduate**	2.9

Source: Louisiana, Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

1.1.2.2 Use of Smokeless Tobacco among Youth

Use of smokeless tobacco products among youth in Louisiana appears to be widely prevalent. Results from the 2000 YTS show that more than one in two (56.1%) middle school students have used smokeless tobacco products before the age of 11 years. One in ten (9.9%) middle school students currently use smokeless tobacco products. Significantly higher rates of use were observed among boys compared to girls (15.8% vs. 3.2%) and white students compared to blacks (12.8% vs. 5.4%).

1.1.3 Environmental Tobacco Smoke

There is a growing body of evidence to support the harmful effect of exposure to Environmental Tobacco Smoke (ETS) or second-hand smoke. ETS is classified as a Group A carcinogen under the United States Environmental Protection Agency's (EPA) carcinogen assessment guidelines. Exposure to ETS causes lung cancer and has been linked to an increased risk for heart disease in nonsmokers. ETS is also known to cause irritation of the conjunctiva of the eyes and the mucous membranes of the nose, throat, and lower respiratory tract.[15] Provision of completely smoke-free environments is the most effective method for reducing ETS exposure.

1.1.3.1 ETS Exposure at home

Results from the 2004 Louisiana BRFSS survey show that nearly one in four adults (24.7%) in Louisiana allow smoking indoors or did not have any rules about smoking inside the house.

Demographic Profile of Adults who Allow Smoking Indoors

Age	% Who Allow Smoking	Sex	% Who Allow Smoking	Race	% Who Allow Smoking	Income	% Who Allow Smoking	Education	% Who Allow Smoking
18-24	24.8	**Male**	25.9	**White**	22.5	**Less than $15,000**	34.5	**Less than H.S.**	36.8
25-49	24.2	**Female**	23.6	**Black**	30.2	**$15,000-$24,999**	33.9	**H.S. or G.E.D.**	27.7
50-64	26.4					**$25,000-$49,999**	23.6	**Some post-H.S.**	24.0
65+	23.6					**$50,000+**	15.9	**College Graduate**	14.4

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

1.1.3.2 ETS Exposure at work

Exposure to ETS in the workplace represents a substantial contribution to lifetime ETS exposure.

Results from the 2004 Louisiana BRFSS survey show that one in five (19.0%) adults (who work indoors most of the time) report that smoking is allowed in some or all work areas or that there were no rules about smoking in their place of work. Blacks, individuals in the 18 - 24 year age group, individuals with an annual household income between $25,000 and $49,000, and individuals with less than a high school education were more likely to report that their place of work did not prevent indoor smoking. These statistics highlight the increased level of health risk among a large proportion of individuals who are exposed to ETS on a daily basis at their places of work.

15 EPA. Respiratory health effects of passive smoking: Lung cancer and other disorders. EPA/600/6-90/006F; December 1992.

Demographic Profile of Adults whose Place of Work Does Not Prevent Smoking Indoors									
Age	**% Whose Work Allows**	**Sex**	**% Whose Work Allows**	**Race**	**% Whose Work Allows**	**Income**	**% Whose Work Allows**	**Education**	**% Whose Work Allows**
18-24	29.7	**Male**	24.3	**White**	16.5	**Less than $15,000**	21.7	**Less than H.S.**	32.9
25-49	18.5	**Female**	15.1	**Black**	23.1	**$15,000-$24,999**	22.6	**H.S. or G.E.D.**	25.4
50-64	15.0					**$25,000-$49,999**	23.9	**Some post-H.S.**	18.9
65+	14.8					**$50,000+**	14.2	**College Graduate**	11.1

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

1.1.3.3 Youth Exposure to Environmental Tobacco Smoke

Research has shown that children exposed to ETS are at an increased risk for SIDS, acute lower respiratory tract infections, asthma induction and exacerbation, and middle-ear effusions.[16]

Results from the most recent YTS show that, more than three out of four middle school students (84.5%) believe that exposure to ETS is harmful. Middle school students who are current smokers were less likely to believe that ETS exposure can be harmful, as compared to those who have never smoked (77.1% and 87%, respectively).

Nearly one in two middle school students (48.9%) currently lives with someone who smokes cigarettes. Middle school students who were smokers were significantly more likely to be living with someone who smoked, as compared to non-smokers, (66.7% and 33.7% respectively). One of out two middle school students (50.8%) in Louisiana rode in the car with someone smoking on at least one out of the seven days preceding the survey.

1.1.4 Impact of Tobacco Use

1.1.4.1 Morbidity and mortality

Results from the recent Smoking Attributable Morbidity, Mortality and Economic Costs (SAMMEC) study show that in 1999, cigarette smoking contributed to an estimated 6,427 deaths in Louisiana, accounting for 16.0% of all deaths in that year. Also, an estimated 96,085 Years of Potential Life were Lost (YPLL) as a result of the premature mortality resulting from cigarette smoking. Cancer was the leading cause of smoking-attributable YPLL in Louisiana in 1999, it was specifically responsible for 41,890 years of potential life lost (27,088 male and 14,802 female). Cardiovascular disease (CVD) caused a loss of 38,249 years (22,731 male and 15,518 female) of potential life, while respiratory diseases caused 15,948 years to be lost (8,118 male and 7,830 female).

16 EPA. Respiratory health effects of passive smoking: Lung cancer and other disorders. EPA/600/6-90/006F; December 1992.

1.1.4.2 Economic costs

Results from SAMMEC also estimate the total direct and indirect costs for 1999 in Louisiana attributable to cigarette smoking at $2.81 billion. Smoking attributable direct medical costs totaled $1.15 billion:

- $392 million for ambulatory care
- $308 million for hospitalizations
- $101 million for prescription drugs
- $268 million for nursing home services
- $82 million for other professional services

Indirect costs due to loss of productivity resulting from the premature deaths for 1999 in Louisiana due to cigarette smoking were estimated at $1.66 billion. This included $731 million due to malignant neoplasms, $755 million due to CVD and $178 million due to respiratory diseases.

1.2 Overweight and Obesity

New Definitions:
Overweight - an adult with a BMI between 25.0-29.9 kg/m^2
Obesity - an adult with a BMI of 30 kg/m^2 or greater
Note: Because of these changes, readers may find earlier obesity/overweight figures that do not agree with those found in this report.

The three main factors that affect weight are: metabolism, food intake, and activity level. While some individuals may have underlying physical disorders that cause them to gain or lose too much weight, most people can control their weight by matching their food intake to their activity level. Even though an individual's Body Mass Index (BMI) is, for the most part, within his or her control, the percentage of people in the United States who are overweight or obese has been steadily and dramatically on the rise. Adult obesity in Louisiana rose from 16% in 1991 to 27% in 2004, with the largest jump seen in the 18 to 24 year old age group. Being overweight and or obese substantially increases the risk of hypertension, high cholesterol, type II diabetes (adult onset), heart disease, stroke, gallbladder disease, osteoarthritis, and various cancers.[17]

The body mass index (BMI) is an index of weight relative to height, which is used to estimate the amount of fat a person has on his or her body. Prior to 1995, the World Health Organization (WHO) defined overweight as a BMI equal to or greater than 27.8 for males, and a BMI equal to or greater than 27.3 for females. However, as evidence mounted that indicated an increased risk of morbidity and mortality for individuals with a BMI of 25.0 or greater, WHO responded by redefining overweight and obesity. According to current definitions, a person is defined as overweight if his or her BMI is between 25.0 and 29.9 and obese if their BMI is greater than 30.0. Because of this change, readers may find earlier

17 Stunkard AJ, Wadden TA. (Editors) Obesity: Theory and therapy, Second Edition. New York: Raven Press, 1993.

obesity/overweight figures that do not agree with those found in this report and are therefore cautioned against comparing previously reported statistics with the numbers found here.

Overweight and obese adults are at increased risk for CVDs. Over the last decade (1991 - 2004), the% of overweight and/or obese Louisiana residents increased from 49% to 63%.

1.3 High Blood Pressure

High blood pressure, or hypertension, is a major risk factor for both heart disease and stroke. According to results from the 2004 BRFSS survey, nearly one in three adult residents (30.5%) of Louisiana suffers from high blood pressure. The proportion of Louisiana residents with undiagnosed hypertension is unknown. Nationally, only two thirds of people with high blood pressure know they have it, one half are receiving treatment, and one fourth are under control. High blood pressure is a major risk factor for both coronary heart disease (CHD) and stroke.[18] It is important to ensure adequate control of high blood pressure through exercise, weight management, and medication.

1.4 High Cholesterol

Elevated cholesterol is one of the strongest risk factors associated with CHD.[19] Cholesterol plays a direct role in the atherosclerotic process, the disease process that underlies heart disease and stroke, where cholesterol accumulates on the arterial walls, building plaque and restricting blood flow. Low-density lipoprotein (LDL), the “bad cholesterol,” clogs the arteries to the heart and increases the risk for heart disease. High-density lipoprotein (HDL), the “good cholesterol,” decreases the risk for heart disease. A high total cholesterol level increases the risk for heart disease. Lowering high total blood cholesterol levels can decrease the likelihood of death from heart disease.

The percentage of Louisiana adults 35 years of age and older who have not had their blood cholesterol checked within the previous five years was 28.5% in 2004. Of persons who had ever been checked, 32.8% reported having high cholesterol levels.

1.5 Physical Inactivity

Regular physical activity is associated with significant health benefits and has been shown to decrease mortality and morbidity due to several diseases. The benefits of regular physical activity include, but are not limited to; reduction in the rates of heart disease, blood pressure, stroke, diabetes, osteoporosis, colon cancer, and mood disorders such as anxiety and depression. Regular physical activity also helps maintain body weight, aids in the management of osteoarthritis, and reduces the risk of falls and

18 American Heart Association, Heart and Stroke Statistical Update, 2004. Dallas, TX: AHA, 2001.

19 American Heart Association, Heart and Stroke Statistical Update, 2004. Dallas, TX: AHA, 2001.

fractures.[20] Moderately intense physical activity such as a brisk walk or raking a lawn can provide the desired results.

Regular moderate or vigorous physical activity can reduce the risk for CVD. Healthy people 2010 recommends that adults should engage in vigorous-intensity physical activity 3 or more days per week for 20 or more minutes per occasion, or engage in moderate-intensity physical activities for at least 30 minutes on 5 or more days of the week. Only 35% of Louisianans met the recommendations in 2001. The proportion of those who met the recommendations increased to 40% in 2003, but it is still below national level (47%).

1.6 Diet

Eating five or more servings of fruits or vegetables per day can help prevent heart disease, cancer, and other chronic conditions. In 2003, 84% of Louisianans reported that they did not consume at least five servings of fruits and vegetables per day.

2. DIABETES: MANAGEMENT

Diabetes mellitus (diabetes) is a serious chronic disease caused by either a shortage of, or a decreased ability to use, insulin, the hormone that allows glucose (sugar) to enter cells and be converted to energy. Uncontrolled, this deficiency leads to the damaging of vital organs, caused by the prolonged presence of glucose and fats in the blood. Persons who are obese, physically inactive, members of ethnic minorities (blacks, Hispanic/Latino Americans, and American Indians), and those with a family history of diabetes or prior gestational diabetes, are at higher risk of acquiring diabetes.

Diabetes is a common and serious disease in Louisiana. It is costly not only in terms of the economic burden it imposes on the state, but also in terms of the human suffering it inflicts, including complications. Of all states, Louisiana has the highest age adjusted rate of death due to diabetes as the underlying cause (42.1/100,000) and has maintained this position since 1996 (BRFSS, 2004). Diabetes is also the leading cause of blindness in adults aged 20 to 74 and the most common cause of non-traumatic amputations and end-stage renal disease, accounting for approximately 40% of new cases of end stage renal disease nationwide (CDC, 2003).

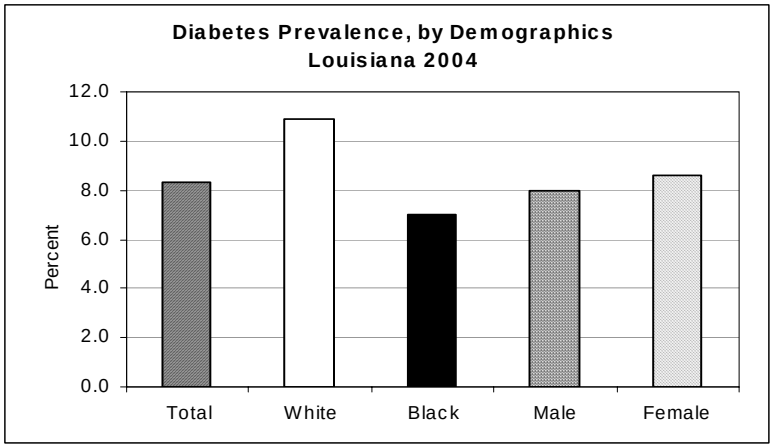
In 2001, approximately 16% (93,000) of Louisiana hospital discharges and 18% ($1.5 billion) of the costs associated with these discharges were attributable to people of all ages with diabetes as the principal or secondary diagnosis. This cost, which reflects estimates derived from known cases of diabetes, is likely an underestimate, given that about one third of all diabetics are undiagnosed.

20 U.S. Department of Health and Human Services. Physical Activity and Health: Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.

2.1 Prevalence

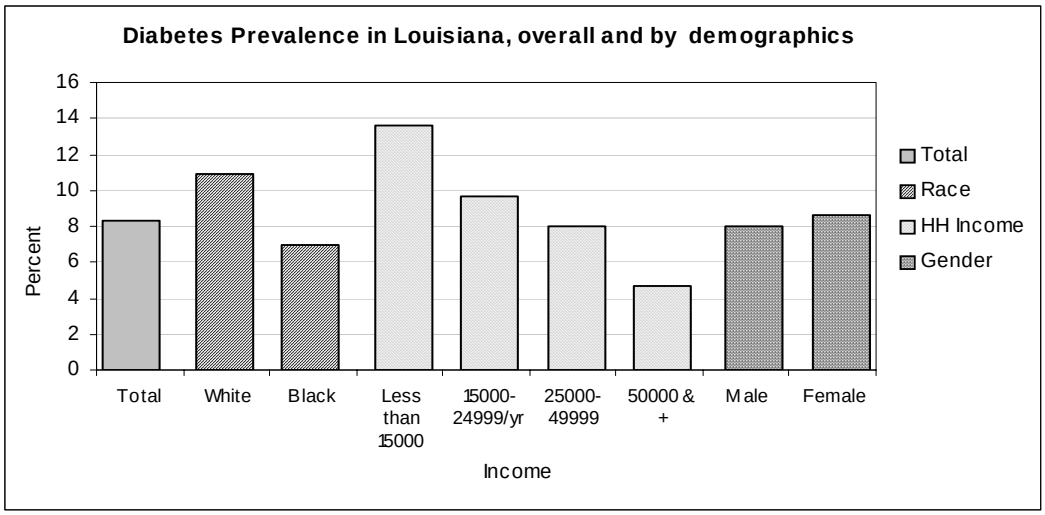
The overall prevalence of diabetes in Louisiana is 8.3% (BRFSS, 2004). There are, however, many demographic variables to account for when studying prevalence. Using BRFSS, these differences were identified for race, sex, age, and household income.

Data analysis showed that, in 2004, blacks had a higher prevalence of diabetes than whites (10.9% vs. 7.0%), and that adult women had a higher prevalence than men (8.6% vs. 8.0%). The likelihood of having diabetes increases with age among Louisiana residents, with the highest prevalence found among those 65 years or older (19.6%), and the lowest prevalence found in those under 45 years of age (2.4%). In terms of household (HH) income, the prevalence of diabetes is higher for adults in Louisiana from



Source: Louisiana Department of Health and Hospitals, Office of Public health, Chronic Disease Epidemiology Unit, BRFSS 2004

households with lower total incomes, and for those with lower educational attainment. For persons living in households with a yearly income less than $15,000, the prevalence of diabetes is approximately 13.6%. This prevalence steadily decreases as the yearly income rises with the lowest prevalence for those with annual income of more than $50,000 (4.7%) (BRFSS, 2004).



Source: Louisiana Department of Health and Hospitals, Office of Public health, Chronic Disease Epidemiology Unit, BRFSS 2004

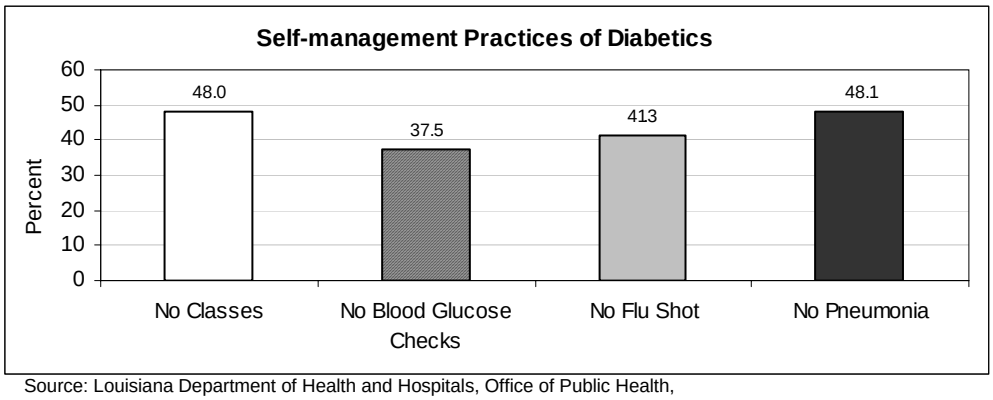
2.2 Preventive Practices

Reducing the burden of disease due to diabetes requires active and effective management of the disease, by both diabetics and those who treat them. For those affected by diabetes, following recommended preventive and curative practices is the best way to ensure a good quality of life. These practices include self-management classes, monitoring blood glucose levels, and vaccinations for both influenza and pneumonia.

2.2.1 Self-Management Courses

A thorough understanding of diabetes is critical to knowing how to properly manage the disease. It is important for diabetics to be consistent with care and up to date on the best practices for management. For this reason, it is recommended that diabetics and their families take classes that teach self-management. An estimated 48% of Louisiana diabetics, however, have not yet taken such a course (BRFSS, 2004).

Louisiana diabetics 65 years of age and older, who are most vulnerable to morbidity, are the least likely to have taken a self-management course. In addition, more white diabetics (51.9%) than black diabetics (43.8%) reported that they have never taken a class on how to manage their diabetes.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

2.2.2 Blood Glucose Monitoring

The most fundamental aspect of self-managing diabetes is keeping blood sugar levels within the normal range. Although diabetics are advised to monitor their blood glucose levels several times a day, it is crucial that they check the level, at least, once a day. When asked how often they checked their blood glucose levels in a day, 37.5% of Louisiana's diabetics responded that they failed to check, at least, once daily (BRFSS, 2004).

2.2.3 Influenza

Because diabetics are more likely than non-diabetics to suffer from complications of influenza (flu), it is recommended that they get an annual flu shot as a necessary precaution. In 2004, over half of Louisiana diabetics (58.7%) had received a flu shot within the last year. In terms of race, 48.9% of black diabetics and 35.5% of white diabetics reported that they had not received an annual flu shot. Approximately 65.8% of diabetics under the age of 45 and 46.5% of diabetics ages 45 to 64 had not received a flu shot.

2.2.4 Pneumonia

Like the flu vaccine, pneumonia vaccinations are important to the health of diabetics. Nationally, however, only about one in three adults with diabetes are vaccinated for pneumonia. A pneumonia shot every 10 years is recommended for anyone aged two years or older who might be at higher risk of getting pneumonia due to an existing chronic condition, such as diabetes. Unfortunately, 48.1% of diabetics in Louisiana reported never having received a pneumonia vaccination (BRFSS, 2004). Black diabetics were less likely to have ever received a pneumonia vaccination than white diabetics (45.2% vs. 42%). Those with annual household incomes less than $15,000 were more likely to have had a pneumonia vaccination than those with annual household incomes over $50,000.

2.3 Medical Office Visits

It is essential that persons with diabetes see a physician or other health professional specifically for their condition. Diabetes has the distinction of being one of the few chronic diseases that must be actively managed on a daily basis in order to be effectively controlled. The affected persons should perform the tasks addressed earlier, such as daily monitoring of blood glucose, and ensure that they receive the recommended standard of care from their healthcare professionals in terms of consultations, foot examinations, and eye examinations.

2.3.1 Hemoglobin A1c (HgA1c)

The HgA1c test is the most reliable method for determining average blood sugar levels over the three months prior to the test. Diabetics are advised to have this test once every three months. Since the test provides the best indication of blood sugar over the previous three months, health professionals can make the necessary determination on how to proceed with care, including insulin adjustment. BRFSS analysis shows that, of diabetics surveyed in 2004, only an estimated 61.1% reported that they had received even at least two HgA1c tests in the previous year. About 45.2% of blacks and 35.3% of whites responded that they had not had the test at least twice in the previous year. Diabetics in the highest income bracket ($50,000 and over) comprise the lowest proportion not having received an HgA1c annually (33.7%). Those with a yearly income of $15,000 to $24,000 have the highest proportion at 41.8% not receiving an HgA1C test at least twice annually.

2.3.2 Foot Examinations

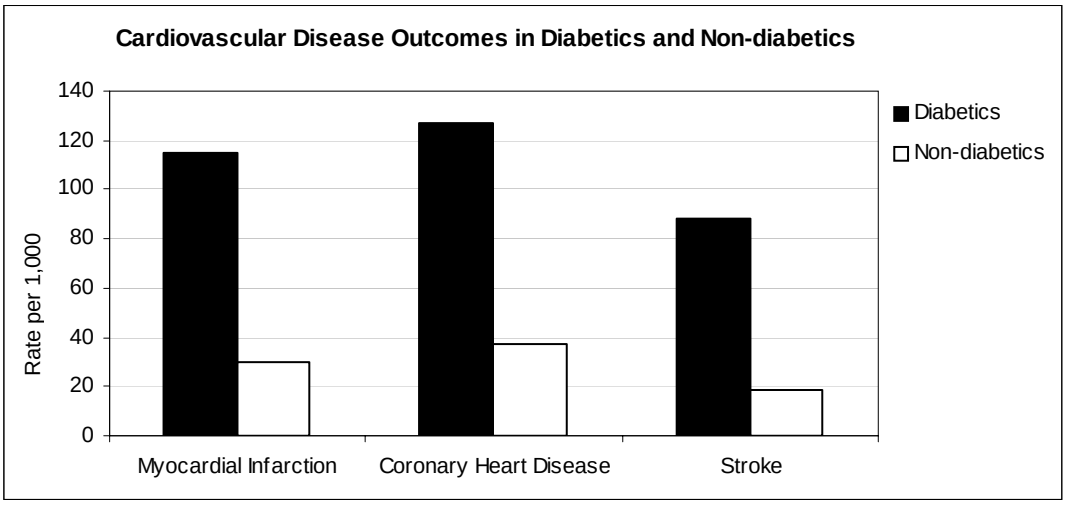
Diabetics are asked to check their own feet regularly and to have them checked by a health professional at least once a year. While self-examinations of the feet allow the patient to catch any sores or cuts that might progress if undetected, medical professionals have the proficiency to, among other aspects of complications, detect signs of nerve damage and prescribe appropriate measures. Overall, 29% of adult Louisiana diabetics did not receive a foot examination in the 12 months prior to the survey. The state's white diabetics are more likely than black diabetics to report not receiving a foot examination (31% and 26%, respectively).

2.3.3 Eye Examinations

Diabetes has been proven to be the leading cause of new cases of blindness in adults aged 20 to 74 years. Therefore, annual eye examinations by healthcare professionals provide the possibility of early detection for signs of retinopathy and allow appropriate measures to be taken. Overall, an estimated 28.8% of Louisiana diabetics did not have an eye examination in the previous year.

2.4 Co-Risk Factors

Because diabetes causes damage to many vital organs over time, diabetics are at higher risk than non-diabetics for morbidity and mortality. To assess the extent to which diabetes does increase the risk of morbidity, three outcomes were selected for analysis, comparing the rates (per 1,000) between diabetics and non-diabetics. Louisiana diabetics were found to have about four times the risk for myocardial infarction that non-diabetics have, five times the risk for coronary heart disease, and three times the risk for stroke.



Source: Louisiana Department of Health and Hospitals.
Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

Reducing the burden of disease due to diabetes requires monitoring diabetics on risk factors associated with other morbidity outcomes. Risk factors that may potentially speed the progression of disease in diabetics and impose excess morbidity include obesity, physical inactivity, hypertension, high cholesterol,

and tobacco use. The following section examines the distribution of some important risk factors among Louisiana diabetics.

2.4.1 Overweight/Obesity

Overweight and obesity continue to be an area of particular relevance in the state. 30% of Louisiana diabetics are overweight, and another 57% are obese. Hence, approximately 87% of all adult diabetics in Louisiana are overweight/obese. Because the maintenance of an ideal body weight depends on lifestyle choices over which every individual has some measure of control, this is an area with considerable opportunity for worthwhile impact. The consumption of proper foods in moderation is essential to weight control.

2.4.2 Physical Activity

Combined with a nutritionally balanced diet, moderate physical activity is critical for physiological balance and well-being. The 2003 BRFSS defines "any exercise" as participation, over the previous month, in any physical activities such as running, calisthenics, golf, gardening, or walking, outside of the duties of one's regular work. Nearly half (41%) of Louisiana diabetics reported that they had not exercised at all over the month prior to the survey.

The benefits of physical activity are greater when activity is regular and sustained. The BRFSS defines moderate physical activity as engaging in 30 minutes of moderate activities, five or more times per week, or 20 minutes of vigorous activity 3 or more times per week. In Louisiana, about 71.7% of diabetics do not engage in moderate physical activity as defined above.

2.4.3 Hypertension

In the absence of physical activity and a nutritious diet, many diabetics are in jeopardy of developing high blood pressure. The CDC reports that an estimated 60 to 65% of persons with diabetes have high blood pressure, placing them at increased risk for several morbidity outcomes, including heart attack and stroke. The overall rate of high blood pressure among Louisiana diabetics in 2004 was 69.3%. Of black diabetics in the state, 74.6% appear to be particularly affected by high blood pressure, relative to white diabetics (67.2%). Moreover, diabetics from households with the lowest total income have the highest rates of high blood pressure (79.4%).

2.4.4 Cholesterol

As with blood pressure, elevated blood cholesterol levels are associated with adverse cardiovascular outcomes for diabetics. Approximately 54% of all adult diabetics in Louisiana have high blood cholesterol. Broken into demographic groups, cholesterol prevalences are directly proportional to levels of education, those with less than a high school education having the largest prevalence of high cholesterol (61%) (BRFSS, 2004).

2.4.5 Tobacco Use

Tobacco use, even without the complication of other chronic diseases, is one of the most important risk factors for morbidity. Combined with the complications of other chronic diseases such as diabetes, it greatly increases the risk of stroke and cardiovascular health problems. The prevalence for smoking among diabetics is estimated to be 18.4% (BRFSS, 2004).

Some of the greatest disparities in current smoking among diabetics occur between gender and age. At 16.9%, female diabetics are less likely to smoke than males (20.2%) (BRFSS, 2004). In addition, younger diabetics are proportionately more likely than older diabetics to be current smokers. The relationship between age and current smoking among Louisiana adult diabetics shows a gradient decrease with age. The youngest group of Louisiana adult diabetics (less than 45 years of age) smokes at a rate (24.6%) that is more than the rate (21.8%) of the next age group (45-64 years), and more than two times the rate (10%) of the oldest age group (65 years and above). While diabetics are strongly advised not to smoke, smoking represents a risk factor that diabetics and non-diabetics alike should be encouraged to avoid.

While it has been shown that diabetes is a very serious and costly disease, it is often preventable and even manageable. Because diabetes management involves behavior modifications, self-management is very important to control. Surveillance systems such as the BRFSS and the Diabetes Prevention and Control Program are instrumental to identifying areas of need for increased emphasis on diabetes education in an effort to reduce the morbidity and mortality of those affected by the disease.

3. CANCER SCREENING

Cancer is a potentially fatal disease that affects millions of people in the United States every year. It is the second leading cause of death after cardiovascular disease.[21] Nevertheless, early detection of cancer will increase a person's chances of survival. The following discussion provides screening information for five of the most common forms affecting residents of the United States: breast, cervical, prostate, colorectal, and skin cancers.

3.1 Breast Cancer Screening

Except for skin cancer, breast cancer is the most commonly diagnosed cancer among women in the United States. It is second to lung cancer as the leading cause of cancer-related death. The American Cancer Society estimated that 39,600 women would die of breast cancer in 2002. Routine breast examinations by a health professional, or mammography and clinical breast examination (CBE) are the most effective ways of detecting breast cancer early and improving the chances of survival. All women

aged 50 and older should undergo mammography, with or without a CBE, every one to two years. Nevertheless, the United States Preventive Services Task Force (USPSTF) indicates that women may begin breast cancer screening at age 40 with some added benefit. Women should discuss these options with their health care provider.

In the 2004 BRFSS, among Louisiana women aged 40 and older, 25.7% reported they had not had a mammogram within the two years before the survey. Black women (26.0%) and white women (25.4%) had similar rates of reporting that they had not had a mammogram within the last two years. It is important to note that while white women are more likely to develop breast cancer, black women have a higher mortality rate from the disease. Clearly, it is vital that all women aged 40 and older, regardless of race, be screened regularly for breast cancer.

The percentage of women 40 years and older not receiving the recommended breast cancer screening has drastically decreased from 1991 to 2004. Currently in Louisiana, over 74% of women in this age group receive a mammogram, which meets and exceeds the Healthy Louisiana 2010 goal of having 70% of the women aged 40 and over screened within the preceding two years. Women in the lowest socioeconomic tier (i.e., with an income of less than $15,000 per year) are over twice as likely to be inadequately screened as women in the highest socioeconomic tier (annual income greater than $50,000).

3.2 Cervical Cancer Screening

The CDC recommends that, from the onset of sexual activity, but no later than their 18th birthday, women should receive a Papanicolaou (Pap) test annually to detect cervical cancer and precancerous lesions. After receiving normal results for three consecutive annual tests, physicians may decide to test less frequently. In the year 2002, the American Cancer Society projected that 13,000 new cases of cervical cancer would be detected. Early detection of cervical cancer through screening has decreased the number of deaths nationally from cervical cancer over the past 40 years. According to results from the 2004 BRFSS, approximately 15% of adult women in Louisiana did not receive a Pap test within the last three years. Black women in the state are more likely not to receive adequate screening for cervical cancer (15.3%) than White women (14.0%).

A high proportion of women who are 65 years of age and older (25%) were not screened within the last three years. Many older women do not realize that they are at risk for the disease. According to the American Cancer Society, the average age for a woman newly diagnosed with cervical cancer is 50 to 55 years old. Risk of cervical cancer does not decrease after age 40, so it is important for older women to be screened regularly.

[21] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health statistics. Deaths: Leading Causes for 2000. NVSR Vol.50; No.6.

3.3 Prostate Cancer Screening

Prostate cancer is the second leading cause of death due to cancers among men over the age of 45 years, and overall it is the fifth leading cause of death among men in that age group.[22] In 2001, 3,216 new cases of prostate cancer were diagnosed among men in Louisiana (SEER, Nov 2003). Furthermore, there were over 562 deaths due to prostate cancer in the state in 2001 (CDC Wonder).

There are no clear risk factors for developing prostate cancer. However, men with a family history of prostate cancer and black men appear to be at an increased risk of developing the disease. Also, although there are screening tests such as the Prostate Specific Antigen (PSA) and Digital Rectal Exam (DRE) to detect the presence of prostate cancer, there appears to be no clear consensus among the medical community about the reliability of these tests in detecting prostate cancer. Furthermore, the medical community is also divided on the issue of what constitutes recommended, adequate, and frequent male screening for the disease.[23]

According to results from the 2004 Louisiana BRFSS, an estimated 35,000 Louisiana men 40 years of age or older (4.0%) reported being told by a healthcare professional that they have prostate cancer. Data from the 2004 BRFSS also show that approximately 379,000 men over the age of 40 years in the state (46.9%) have not been screened for prostate cancer with a PSA test in the last two years. Fifty two% of black men over the age of 40 years reported not having had a PSA test in the last two years, compared to 45.6 % of white men.

There are no known methods to prevent prostate cancer. Therefore, individuals in the high-risk groups should have periodic evaluations by a medical professional to detect early tumors and prevent the growth and spread of such tumors.

3.4 Colon Cancer Screening

Colorectal cancer, or cancer of the colon or rectum, is the second leading cause of cancer-related deaths in the United States and in Louisiana.[24] In 2001, there were 950 deaths due to colon cancer in Louisiana, with an estimated 2,600 new cases of colon and rectum cancer expected to be detected in the year 2002. Colorectal cancer occurs most often in people aged 50 and older and can affect both men and women. The risk of colorectal cancer may be higher than average for individuals with the following risk factors: a close relative who has colorectal polyps or cancer, a personal history of inflammatory bowel disease, and/

[22] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

[23] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Diseases. Prostate Cancer: Can we reduce deaths and preserve quality of life? AT-A-GLANCE-2000

[24] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

or a personal history of intestinal and colon polyps. A diet primarily from animal sources, physical inactivity, obesity, and smoking are also known risk factors for colorectal cancer.[25]

As with several other cancers, routine screening is known to help in early detection and treatment to prevent the progression of colorectal cancer. The USPSTF recommends initiating screening at age 50 for men and women at average risk for colorectal cancer, based on the higher incidence of cancer in this and older age groups, relative to the general population. In persons at higher risk (e.g., those with a first-degree relative who receives a diagnosis with colorectal cancer before 60 years of age), initiating screening at an earlier age is reasonable. Annual home blood stool tests for individuals over the age of 50, combined with a flexible sigmoidoscope examination every 5 years, are known to be effective in diagnosing early tumors. Results from the 2004 BRFSS show that nearly half of the adults over the age of 50 (43.0%) have not had either a home blood stool test or a flexible sigmoidoscope examination in accordance with the USPSTF guidelines. Of those who have not had the tests, an increased proportion was black relative to white (46.5% vs. 41.3%).

4. ASTHMA PROGRAM

4.1 Asthma in the Nation

Asthma is a chronic respiratory disease characterized by wheezing and shortness of breath. In the last few years, the disease has become an emergent public-health concern in the United States. Asthma is the most common chronic disease facing children, accounting for 10.1 million missed days of school, and is the third-ranking cause of hospitalization among those younger than 15 years of age. Nationwide, approximately 4.8 million children under the age of 18 (7%) currently have. According to the Centers for Disease Control and Prevention, approximately 10.3% of adults in the United States in 2002 had ever been told that they had asthma, and 7.7% were current asthmatics.

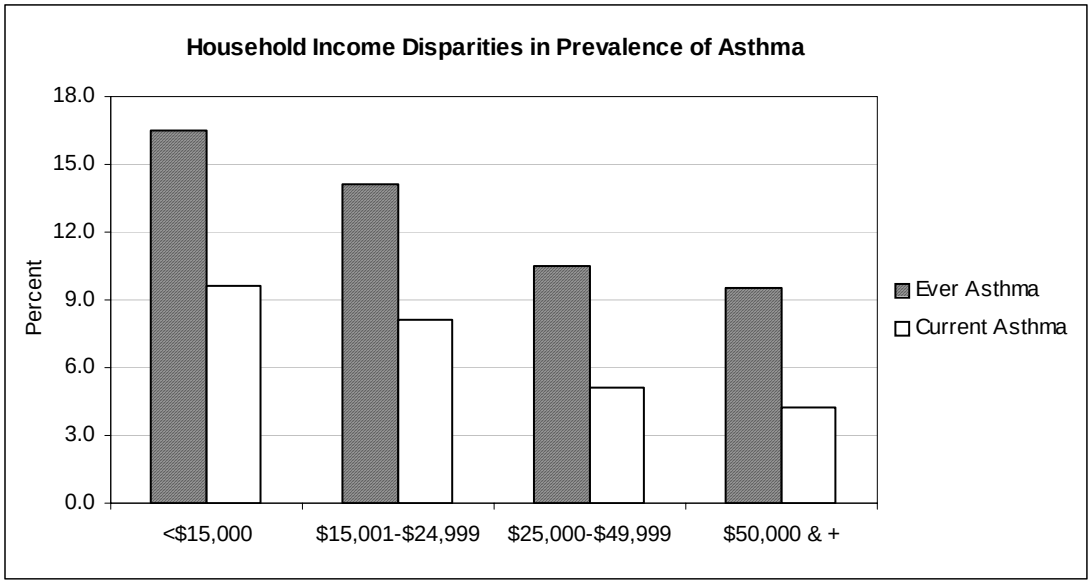
4.2 Adult Asthma in Louisiana

In 2004, the BRFSS Optional Asthma Module was used to determine the prevalence of asthma in adults in Louisiana. This module included two questions about asthma that had been asked in previous years: 1) Did a doctor ever tell you that you had asthma? and 2) Do you still have asthma? Analysis showed that approximately 11.8% of adults in the state have had asthma at some time, and approximately 6.0% currently have asthma. This is an increase from 2000 when only 8% of respondents had ever had asthma and 5% currently had asthma.

[25] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Diseases. Colorectal Cancer: The Importance of Prevention and Early Detection. AT-A-GLANCE-2001

Demographically, blacks were more likely than whites to report that they had asthma at some time in the present or past (13.5% vs.10.6%). When asked if they still had asthma, 7.5% of blacks and 5.4% of whites reported that they did at the time of the interview. BRFSS analysis also showed that there is a direct correlation between age and ever having asthma as well as current asthma. Survey respondents in the 18-24-year age group had the highest prevalence of ever having asthma while the lowest prevalence occurred in those who are 65 years of age or older (13.4% vs. 10.7%). Similarly, 7.4% of those aged 18-24 currently had asthma in comparison to 4.8% of those 65 and older.

Of all demographic categories analyzed, the greatest disparity in asthma prevalence existed in income levels. As shown in the figure on the next page, adults in Louisiana who have a yearly household income of less than $15,000 are twice more likely to have suffered with asthma at some time in their lives than those in the highest income bracket of over $50,000 (16.4% vs. 9.5%). These results were consistent with the current asthma analysis where 9.6% of those in households with earnings of less than $15,000 yearly had asthma at the time and only 4.2% of those in households with yearly incomes above $50,000 had asthma at the time of the interview.



Source: Louisiana, Department of Health and Hospitals.
Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

4.3 Childhood Asthma in Louisiana

In an effort to measure the prevalence of asthma among children under the age of 18 years, a new Module was added to the BRFSS in 2002. The Optional Childhood Asthma Module asks if there are children with asthma in the home of the respondent. Survey participants who indicated that there were, in fact, children living in their homes were subsequently asked if one or more of the children had ever had asthma and if the child/children had asthma currently. Analysis revealed that approximately 43.1% of homes in Louisiana have children living in them and, of these, 10.7% have children with current asthma.

Houses in which the survey respondent was white have the lowest prevalence of children with asthma. At 8.4%, white households are in stark contrast to all other racial groups surveyed. The prevalence of childhood asthma was 13.5% among black households, 16.2% in Hispanic households, and 17.5% for households in which the respondent chose "Other" as their racial group. Those households with an annual income of less than $15,000 per year had the highest prevalence of childhood asthma (21.3%). In comparison, houses with an income of $50,000 per year or more have a prevalence of 8.1% for children in the house with asthma. Houses in which the survey participant is unemployed also have a high prevalence of childhood asthma, at 21.8%. In homes where the respondent was retired, the prevalence was 18.4%, while, in homes where the respondent was employed, it stood at 6.4%.

4.4 Effect of Smoking on Childhood Asthma

Because the BRFSS is an adult survey and children are not questioned directly, the State of Louisiana Chronic Disease Epidemiology Unit added the International Study of Asthma and Allergies in Childhood (ISAAC) wheezing module to the 2001 Youth Tobacco Survey, a survey of public middle-school students age 12-16 years. An estimated 17.4% of students questioned were classified as current asthmatics, while 25.7% of the students reported having ever had asthma in their lives. The prevalence of asthma was found to be higher in female students than males (19.6% vs. 15.6%) and slightly lower for whites than blacks (16.8% vs. 18.0%). The most significant source of disparity in asthma prevalence was between students aged 12-14 and those aged 15-16. Further analysis showed that 17.8% of 12-14 year old students were current asthmatics, while only 12.8% of those 15-16 also had asthma. Of students who are current asthmatics, 30.7% are themselves smokers, 68.7% were likely to spend at least one day a week in the room with someone who smoked, 57.8% live with someone who smokes, 54.7% ride in the car with a smoker, and 39.3% has, at least, one close friend who smokes.

Association between Smoking and Current Asthma

Characteristic	Current Asthma	
	Yes	No
1. Current Tobacco Use (excluding smokeless)	30.7	22.8
2. In the same room with someone who was smoking (at least 1 day in the last week)	68.7	59.3
3. In the car with someone who was smoking (at least 1 day in the last week)	54.7	40.9
4. Live with someone who smokes	57.8	47.0
5. At least one of close friend smokes	39.3	33.7

Source: Louisiana, Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2002

4.5 Asthma Mortality

The national mortality rate for asthma in 2002 was 2.0/100,000. Although Louisiana has one of the lowest state prevalences for asthma, a three year aggregate of mortality rates found that the state ranked 13th in death rates due to asthma. In the years 1996-1998, mortality rates for asthma in Louisiana were 2.4/100,000 for all citizens and 10.1/100,000 for those over the age of 65. In the City of New Orleans, the overall mortality rate attributable to asthma was 6.9/100,000. For Orleans Parish residents over the age of 65, the asthma mortality rate is 2.5 times the rate for the same age group in the state as a whole (27.5/100,000 vs. 10.1/100,000). Furthermore, it is more than three times the 1998 rate for the United States in the 65 and older age group (27.5/100,000 vs. 8.7/100,000).

Because there is no asthma-specific emergency room surveillance in the State of Louisiana, surveillance systems such as the BRFSS, YTS, and ISAAC make it possible to generate information and to develop interventions that will help control asthma in the state. Further studies on the prevalence of asthma in school aged children, as well as the association between smoking and asthma, are important in reducing the asthma mortality rates in Louisiana.

G. TRAUMATIC BRAIN INJURY

Traumatic Brain Injury (TBI) is one of the leading causes of death and disability to children and young adults in the United States and Louisiana. An estimated 5.3 million individuals, approximately 2% of the United States' population, are living with a disability resulting from a TBI.

An analysis of two years of data indicates that, annually in Louisiana, 3,400 individuals experience TBIs that require hospitalization. Several thousand more individuals will not recognize that they have sustained a preventable injury (as in closed head trauma from sports or falls) capable of causing long-term deficits. TBIs can have a deep impact on families and communities and they are resource-intensive, both financially and emotionally.

TBIs can be markers of inadequate prevention policies, correctable environmental hazards (e.g., uneven sidewalks), and other injury-prevention opportunities. Alcohol-impaired driving, unsafe boating, unsafe bicycling, and violence can be assessed separately. Pedestrian injuries may be linked to poor signage, alcohol use, poor outdoor lighting, and unsafe pedestrian paths. Falls may be linked to home safety, cycle helmet use, work safety, playground safety, and other environmental obstacles. Violence injuries may be linked to gun use, aggression, alcohol use, and child abuse. These examples show how programs not particularly aimed at reducing brain injuries may use the same data to plan and evaluate prevention intervention strategies.

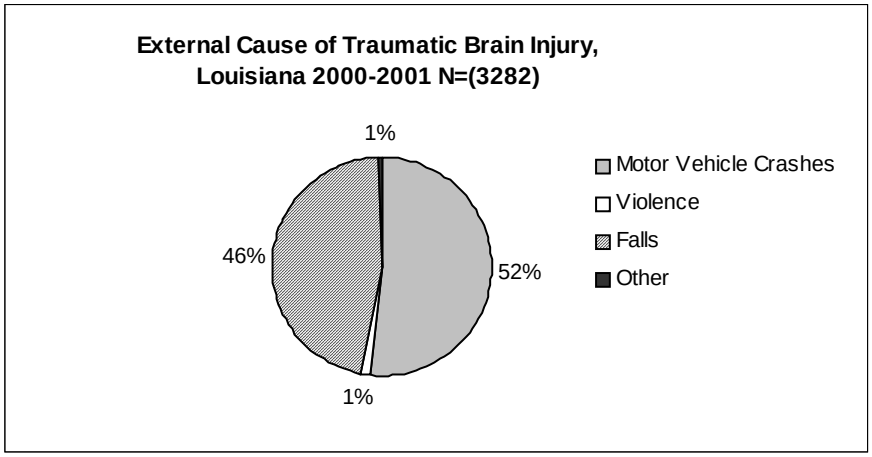
The majority of TBIs are preventable. That fact, coupled with the seriousness and prevalence of their occurrence, makes TBIs a public health concern. The Louisiana State Legislature has established the Traumatic Brain and Spinal Cord Injury Registry, and has mandated the reporting of these events.

DHH-OPH's EMS/Injury Research and Prevention Program partners with hospitals statewide to obtain surveillance data on TBIs that require hospitalization lasting more than one day. A report on TBIs is prepared annually and is available to the public upon request. It is also published on the Injury Research and Prevention Program web page.

Traumatic Brain Injury Facts

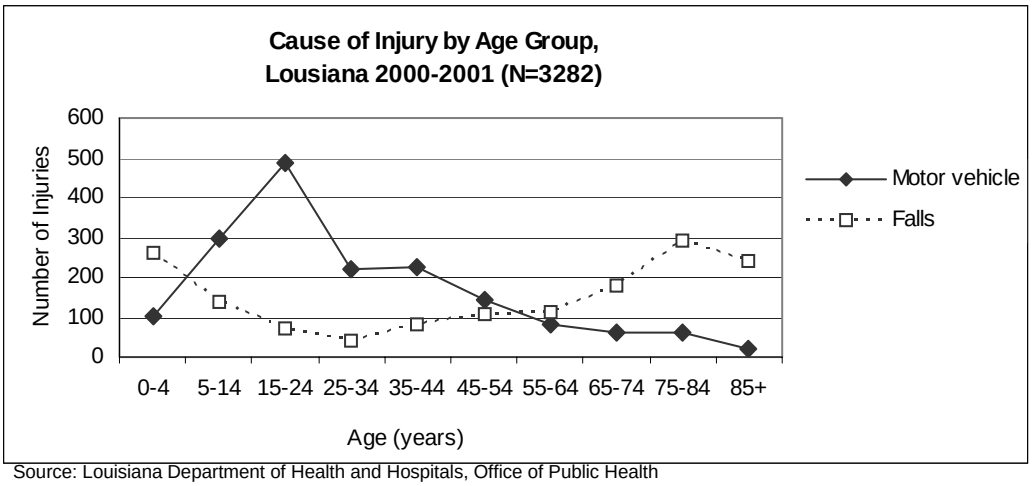
Males are twice as likely to experience a TBI as females. Consistent with national figures, the highest rates of TBI in Louisiana occur among persons aged 15 to 24 years and among the elderly. Motor vehicle crashes are the leading cause of TBI, followed by falls and violence. DHH-OPH's Region 7 (Shreveport area) had the highest 2-year cumulative TBI incidence rate; DHH-OPH Region 2 (Baton Rouge area) had the lowest. Additional studies of data from these regions to uncover any "protective factors" may lead to improved intervention strategies statewide.

52% of TBI cases are transportation or motor vehicle crash-related. This group includes car or truck passengers; pedestrians; bicyclists; passengers of All Terrain Vehicles (ATVs); motorcyclists, and other or unspecified persons. Falls were the second leading cause of overall TBIs (46.3%).



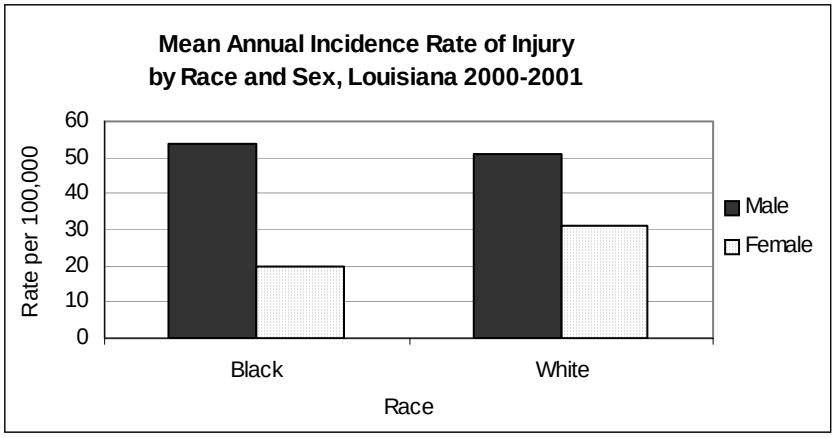
Source: Louisiana Department of Health and Hospitals, Office of Public Health
EMS/Injury Research and Prevention Program

Analyzing TBI cases by age group allows for the development of targeted interventions in sub-populations. Motor vehicle crashes were the leading cause of injury among youth from birth to 24 years of age. Fall-related TBIs, in turn, were the leading cause of injury among persons aged 75 and older.



Source: Louisiana Department of Health and Hospitals, Office of Public Health
EMS/Injury Research and Prevention Program

The following chart shows that males consistently had higher TBI incidence rates than females for the two-year period from 2000 to 2001. The rate for black males was higher (53.6 per 100,000) than the rate for white males (50.7 per 100,000). White females had a higher TBI rate (31.2 per 100,000) than black females (20 per 100,000).



Source: Louisiana Department of Health and Hospitals, Office of Public Health
EMS/Injury Research and Prevention Program

III. HEALTH ASSESSMENT PROGRAMS

A. IMMUNIZATION COVERAGE

Background

Vaccines are among the most effective and reliable methods to prevent and control disease. Every year, they prevent countless serious illnesses and thousands of possible deaths. About 100 million vaccine doses are given annually in the United States, most of them to infants and children as part of their routine immunization schedule. A single dose of some vaccines gives nearly complete protection. With others, a series of doses spread over months or years is needed for the best results.

Children in particular are beneficiaries of the protection from infectious illnesses that vaccines offer. Currently, there are twelve diseases from which children are routinely protected through the use of standard childhood immunizations: diphtheria, tetanus, pertussis (whooping cough), polio, measles, mumps, rubella (German measles), hepatitis B, varicella (chickenpox) and pneumococcal (pneumococcal pneumonia).

Two vaccines which protect from bacterial meningitis are *Haemophilus influenzae B* and *Meningococcal.* Drastic reductions in the occurrence of these serious diseases have taken place since the introduction of vaccines. For example, there were 894,134 cases of measles reported in the United States in 1941, but only 86 cases in 2000 and Louisiana has had no reported cases of measles since 1996.

Although the public is most familiar with the vaccines used for childhood immunization, there are many others that afford protection to individuals at risk of infection from other types of exposures. Examples are the hepatitis A vaccine, which is available to select populations such as travelers to areas where the disease is endemic, and the meningococcal vaccine, which is available to select populations, such as college students living in dormitories.

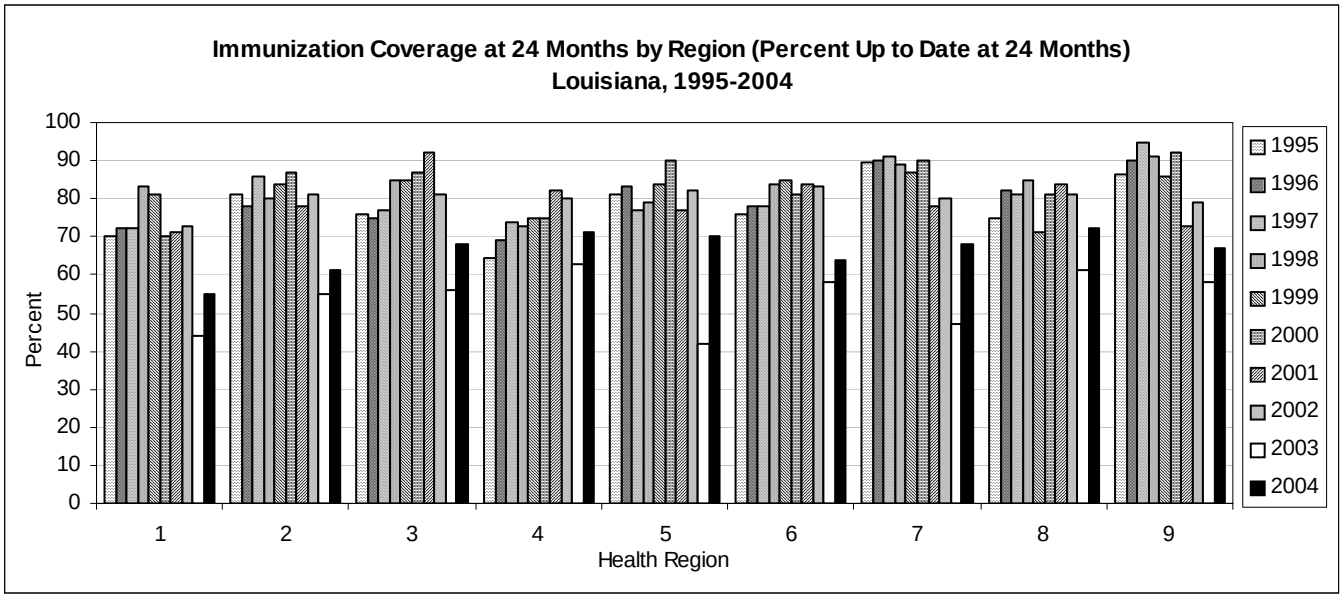
In addition to being reliable and effective, vaccines are also some of the most cost-effective medical procedures available. The ten vaccine-preventable diseases addressed in standard childhood immunizations are very serious illnesses and very expensive to treat. Vaccines are relatively inexpensive and very effective. Cost estimates show that each dollar spent on immunization saves $12 in direct medical and hospitalization costs. These estimates do not include attendant costs, such as workdays lost by family members, costs for outbreak control, or the burden of lives lost to these severe diseases. A prime example is measles, which leads to the hospitalization of approximately 10% of those who become

ill. Even with excellent medical care, approximately one to two out of every 1,000 cases dies, usually from measles infection complications.

However, diseases that are prevented by routine childhood immunizations have not disappeared. Pertussis is spread by direct contact such as coughing on others who are not immune. In countries where childhood immunizations against this disease have been stopped, large outbreaks of whooping cough have occurred.

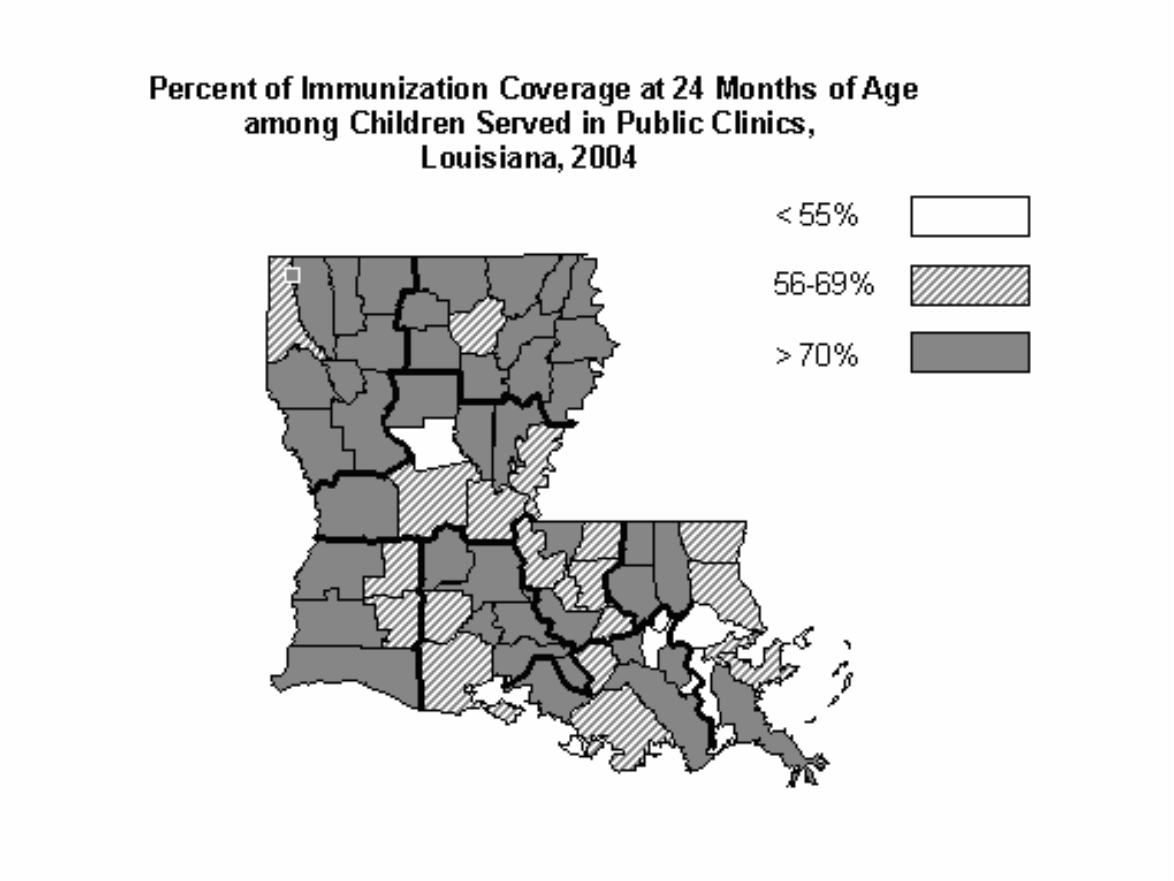
The number of pertussis cases reported in Louisiana has ranged from 10 to 21 cases since 2000. Diphtheria, another dangerous infectious disease which has been controlled through childhood immunization, has not been observed in Louisiana since 1972. However, in recent years, epidemics of diphtheria have occurred in Eastern Europe and Asia. Without immunization, diphtheria and other vaccine-preventable diseases may be re-introduced to Louisiana and contribute to an increasing number of cases.

The Immunization Program of the Office of Public Health (OPH) conducts periodic assessments to determine the immunization coverage rates throughout the state. As the graph below indicates, rates of coverage have generally been increasing steadily between 1996 and 2004, though there have been variations between the nine OPH administrative regions over the years and a significant decrease reflected statewide in 2004.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Immunization Program

The map below and table on the following pages display the% of immunization coverage at age 24 months among those served by parish health units. Calcasieu Parish had the lowest immunization coverage rate at 23%, while Morehouse Parish had the highest rate at 82%.



Immunizations: Percent Up-To-Date at Age 24 Months* Louisiana 2003	
Clinic	**%UTD 2003 Results**
Region I	
Orleans-Edna Pilsbury	N/A
Orleans-Mandeville Detiege	61.0
Orleans-Mary Buck	55.0
Orleans-Katherine Benson	45.0
Orleans-Helen Levy	60.0
Orleans-St. Bernard Gentilly	N/A
Orleans-Ida Hymel	54.0
St. Bernard	65.0
Jefferson-Marrero	37.0
Plaquemines	70.0
Jefferson-Metairie	49.0
Region II	
Ascension	23.0
West Baton Rouge	61.0
West Feliciana	60.0
Iberville	55.0
East Feliciana-Clinton	60.0
Pointe Coupee	48.0
E. Baton Rouge	48.0
Region III	
St. James	71.0
Lafourche-Galliano	73.0
Lafourche-Thibodaux	67.0
Terrebonne	48.0
St. Mary	49.0
St. John	32.0
Assumption	59.0
St. Charles	59.0
Region IV	
Evangeline	58.0
St. Landry	64.0
St. Martin	70.0
Acadia	58.0
Vermilion	61.0
Lafayette	48.0
Iberia	54.0
Region V	
Allen	62.0
Calcasieu-Sulphur	60.0
Calcasieu-Lake Charles	54.0
Jefferson Davis	58.0
Beauregard	75.0
Cameron	58.0
Region VI	
Catahoula	57.0
LaSalle	78.0
Rapides	42.0
Grant	68.0
Winn	68.0
Vernon	81.0
Concordia	42.0
Avoyelles	60.0

Immunizations: Percent Up-To-Date at Age 24 Months* Louisiana 2003	
Clinic	**%UTD 2003 Results**
Region VII	
Red River	68.0
Claiborne	73.0
Webster-Springhill	79.0
DeSoto	71.0
Natchitoches	63.0
Bienville	73.0
Sabine	71.0
Webster-Minden	68.0
Bossier-Bossier City	52.0
Caddo	56.0
Region VIII	
Morehouse-Bastrop	63.0
Franklin-Winnsboro	73.0
West Carroll-Oak Grove	78.0
Ouachita-Monroe	41.0
Caldwell	88.0
Tensas-St. Joseph	72.0
Lincoln	61.0
Jackson-Jonesboro	59.0
East Carroll	77.0
Union	680
Richland-Rayville	71.0
Ouachita-West Monroe	62.0
Madison	63.0
Region IX	
St. Helena	79.0
Washington-Franklinton	73.0
Washington-Bogalusa	64.0
Tangipahoa	69.0
St. Tammany	56.0
Livingston	53.0

*Up-to-date includes 4 DTAP, 3 OPV or IPV, and 1 MMR

N/A: Not Applicable - no longer an OPH Parish Health Unit

Source: Louisiana Department of Health and Hospitals Office of Public Health, Immunization Program

B. INFECTIOUS DISEASE SURVEILLANCE

Disease Surveillance

Surveillance of infectious diseases, chronic diseases, and injuries is essential to understanding the health status of the population and planning effective prevention programs. The history of reporting and tracking of diseases that pose a risk to public health in the United States dates back to more than a century ago. Fifty years ago, morbidity statistics published each week were accompanied by a statement: "No health department, state or local, can effectively prevent or control diseases without the knowledge of when, where, and under what condition cases are occurring." Today, disease surveillance remains the primary tool for the gathering of information essential to controlling disease spread in the population.

Achievement of the CENTERS FOR DISEASE CONTROL AND PREVENTION, Healthy People 2010 Objectives depends in part on the ability to monitor and compare progress toward the objectives at the federal, state, and local levels. Infectious disease surveillance activities are a primary function of the programs within the DEPARTMENT OF HEALTH AND HOSPITALS (DHH), OFFICE OF PUBLIC HEALTH (OPH). Many OPH programs exist to conduct disease surveillance for the State of Louisiana. A sampling of these programs includes the INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM, the SEXUALLY TRANSMITTED DISEASES CONTROL PROGRAM, the TUBERCULOSIS CONTROL PROGRAM, the HIV/AIDS PROGRAM, and the IMMUNIZATIONS PROGRAM.

Disease surveillance involves the collection of pertinent data, the tabulation and evaluation of the data, and the dissemination of the information to all who need to know. This process is a very important aspect of public health because its purpose is the reduction of morbidity (i.e., disease occurrence). The immediate use of surveillance is for disease control; the long-term use is to assess trends and patterns in morbidity.

Surveillance also facilitates epidemiologic and laboratory research, both by providing cases for more detailed investigation or case-control studies, and by directing which research avenues are most important. Reports of unusual clusters of diseases are often followed by an epidemiological investigation to identify and remove any common source exposure or to reduce other associated risks of transmission.

Notifiable Diseases

Reporting of notifiable diseases to public health agencies is the backbone of disease surveillance in Louisiana and nationwide. The Sanitary Code, State of Louisiana, Chapter II, entitled "The Control of Diseases," charges the BOARD OF HEALTH (i.e., DHH/OPH) to promulgate a list of diseases that are required to be reported, who is responsible for reporting those diseases, what information is required for each case of disease reported, what manner of reporting is needed, and to whom the information is

reported. Reporting of cases of communicable diseases is important in the planning and evaluation of disease prevention and control programs, in the assurance of appropriate medical therapy, and in the detection of common-source outbreaks. Surveillance data gathered through the reporting of notifiable diseases are used to document disease transmission, quantify morbidity, estimate trends, and identify risk factors for disease acquisition.

DHH routinely follows up on selected disease cases, either directly or through the individual's physician or other health care provider. Tracking and follow-up are done to ensure initiation of appropriate prophylactic therapy for contacts of persons with the infectious condition and appropriate preventive measures for the community. All disease tracking/follow-up reports are confidential and constitute an essential element in monitoring and maintaining the health of the public in Louisiana. Through participation in disease-reporting, physicians and other health care providers are integral parts in ensuring that public health resources are used most effectively. Reporting for a number of infectious diseases is mandatory as listed in the Sanitary Code.

Bioterrorism Surveillance

The INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM has developed several systems to identify disease syndromes associated with bioterrorism agents prior to their confirmation, which may take several days.

Early detection of a bioterrorism event is considered essential. Most diseases caused by a bioterrorism agent are rapidly fatal, but may be treatable in the early stages or even preventable with timely administration of antibiotics or vaccination. If the disease is transmissible from person to person, early intervention is the best measure to prevent the spread of disease. People affected by a bioterrorism agent may present themselves at emergency rooms, be transported by emergency medical service (EMS), consult a dermatologist, or be examined by a coroner. An animal may even be the first to be affected since many of the bioterrorism agents are, in fact, primarily affecting animals.

The bioterrorism-surveillance systems in place are:

(1) An emergency room syndromic surveillance, a web-based reporting system for emergency departments;
(2) An emergency medical services syndromic surveillance, a web-based reporting system for emergency medical services;
(3) An intensive care syndromic surveillance system, also web based;
(4) a veterinary disease reporting system, another web-based system;
(5) a call-in notification system with dermatologists;
(6) a call-in notification with the coroners; and

(7) a web based syndromic surveillance mining automatically data entered by emergency room physicians and conditions at the emergency rooms. This project in piloted in the Medical Center of Louisiana at New Orleans.

Infectious Disease Outbreak Investigations

Infectious diseases are transmitted by a variety of methods: human to human via oral/fecal route (ingestion of the organism), exposure to blood, airborne and droplet routes and direct person-to-person contact; vectors such as mosquitoes and ticks; and animal to human (zoonotic). In Louisiana, outbreaks of a wide variety of infectious diseases have occurred including Norovirus, gastroenteritis, rotavirus, hepatitis A, salmonellosis, shigellosis, perfringens food poisoning, pertussis, and West Nile encephalitis, among others. The most compelling reason to investigate a recognized or suspected outbreak of disease is that exposure to the source(s) of infection may be continuing; by identifying and eliminating the source of infection, OPH can prevent additional cases. Another reason for investigating outbreaks is that the results of the investigation may lead to recommendations or strategies for preventing similar outbreaks in the future. Other reasons for investigating outbreaks are the opportunity to describe new diseases and learn more about known diseases; evaluate existing prevention strategies, e.g., vaccines; teach and improve research on epidemiology; and address public health concern about the outbreak.

The effectiveness of the investigation is in large part determined by how quickly and thoroughly investigative activities are initiated. Historically, all infectious disease outbreak investigations were initiated and managed through the OPH'S INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM. This program, however, is now relying on a statewide regional network of epidemiologists (Regional Disease Surveillance Specialists and Regional Epidemiologists) assisted, if need be, by additional staff such as a nurse, sanitarian, and/or disease intervention specialist, among others. Each OPH administrative region thus has an Infectious Disease Rapid Response Team (ID-RRT), which the Infectious Disease Epidemiology Program provides training to. The training comprises basic epidemiologic principles, outbreak investigation methodology, computer analysis and interpretation of data, presentation of results, and selection of the appropriate disease control methods. Each team member brings a unique set of skills/knowledge that is very important in conducting outbreak investigations. Activities are coordinated and supervised by the INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM, and guidance and assistance are provided as needed. The ID-RRT members conduct most of the field activities, and both the INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM and the regional teams analyze the data. Recommendations are provided and guidance given for instituting appropriate disease control measures.

Outbreak investigations, an important and challenging component of epidemiology and public health, can help identify the source of ongoing outbreaks and prevent additional cases. Even when an outbreak is over, a thorough epidemiologic and environmental investigation often can increase the public health

community's knowledge of a given disease and prevent future outbreaks. Outbreak investigations also provide epidemiologic training and foster cooperation between the clinical and public health communities. Most outbreaks are handled in a timely manner with effective outcomes. Additionally, since these staff members are located in the communities, they are in a better position to identify potential outbreak situations than are staff members housed in the OPH central office. The concept of using public health staff from different disciplines and cross training them for a common, collaborative purpose sets a precedent for similar efforts dealing with other public health issues, and reflects the agency's goal of developing a streamlined, cost effective, integrated workforce. One unexpected benefit has been the increased local visibility creating positive impressions with the public and the media.

Diseases reported in the OPH surveillance program include: arthropod-borne encephalitis (including West Nile neuro-invasive disease), aseptic meningitis, campylobacteriosis, *E. coli 0157:H7* and hemolytic-uremic syndrome, giardiasis, *Haemophilus influenzae* (invasive disease), hepatitis A, B, and C; legionellosis, Lyme disease, malaria, *Neisseria* meningitidis (invasive disease), pertussis, rabies (animal and human), salmonellosis, shigellosis, *Streptococcus pneumoniae* (invasive infection in children less than 5 years of age), varicella (chickenpox); and *Vibrio* infections. There are many more reportable diseases in Louisiana but their numbers are extremely small.

Surveillance also focuses on three antibiotic-resistant microorganisms: vancomycin resistant enterococcus (VRE), methicillin-resistant *Staphylococcus aureus* (MRSA), and drug-resistant *Streptococcus pneumoniae* (DRSP).

The following are two examples describing surveillance and epidemiologic response to these diseases:

Surveillance for West Nile and other encephalitides

All health care providers are required to immediately report suspected cases of arboviral encephalitis to OPH. When a suspect case is reported, an epidemiologist evaluates the case and attempts to obtain confirmation. Once confirmed, information about the distribution of new cases is compiled without any identifiers. This information is then widely disseminated to parishes, regional public health staff, hospitals and private practitioners, local health government, and mosquito control programs. This information is the most useful guide for preventive measures against arboviral encephalitis.

Surveillance for meningococcal meningitis and invasive disease

Once a suspect case of meningococcal meningitis is reported, an epidemiologist calls the physician, laboratory specialist or hospital infection control practitioner to obtain confirmatory evidence and to establish a rapid control effort in order to prevent the spread of the illness. All close contacts are identified, interviewed by telephone or in person, and given prophylaxis. These preventive activities are carried in close collaboration with the medical providers of the case. All cases are fingerprinted with

pulse field electrophoresis techniques (PFGE) to identify strains that may be potentially more virulent and alert the medical community and the public about their presence.

Selected 2003 Results of Infectious Disease Surveillance in Louisiana

- West Nile neuro-invasive diseases totaled 104 cases in Louisiana in 2003. It is estimated that about 60,000 Louisiana residents had been infected since the importation of West Nile virus to the state in 2001. There were sporadic cases throughout the state and intense foci in the areas around Shreveport and Bossier City.
- For the past 5 years, reported cases of salmonellosis ranged from 700 to 800 per year. The incidence rate is 20 cases per 100,000, reaching up to 60 cases per 100,000 in infants up to one year of age.
- The number of shigellosis cases peaked in 2002, and started to decrease in 2003, following a pattern of cyclical changes. Children under the age of 10 years accounted for 45% of the cases.
- The number of *Vibrio* cases reported in 2003 was 38 cases, well within the range of 30 to 40 per year reported for the past 10 years. The main *Vibrio* species reporting around 10 cases each are *Vibrio parahemolyticus*, *Vibrio vulnificus,* and *Vibrio cholerae* non-O1; all other *Vibrio* species combined provided about 10 cases. Of the reported *Vibrio* cases with known exposures, contact with saltwater or raw seafood drippings and seafood consumption are the reported exposures.
- The state hepatitis A rate of 2.0 per 100,000 is only about half that of the national rate. A survey estimated that 25% of young adults have been infected with this virus.
- The number of acute cases of hepatitis C reported in 2003 was 50. It is estimated that 80,000 people in Louisiana are infected with the virus.

Reports

The bimonthly *Louisiana Morbidity Report* and the *Epidemiology Annual Report* are published by the OPH INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM. Both publications present information and statistics describing the status of reportable diseases in the state.

C. SEXUALLY TRANSMITTED DISEASE (STD) AND HIV/AIDS SURVEILLANCE

Contracting a sexually transmitted disease (STD) can have serious consequences. For example, advanced (tertiary) syphilis can produce neurological, cardiovascular, and other terminal disorders, pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer, fetal and infant death, birth defects, and mental retardation in children born to infected mothers.

The DHH-OPH'S STD CONTROL PROGRAM and HIV/AIDS PROGRAM work to: 1) conduct surveillance to determine the incidence and prevalence of STDs and HIV/AIDS; 2) monitor STD and HIV/AIDS trends; 3) collect data on the location and referral of persons with or suspected of having an STD, in order to

facilitate medical examination and provide early treatment; and 4) conduct partner notification to limit the spread of disease.

2003 National Rankings

- Nationally, Louisiana has a high ranking among the 50 states with regard to rates of STDs and HIV/AIDS.
- Primary and secondary syphilis rates in Louisiana ranked third highest in the nation in 2003.
- Gonorrhea rate ranked 1st highest in the nation in 2003.
- Chlamydia rate ranked 2nd highest in the nation in 2003.
- Louisiana ranked fifth highest in AIDS case rates among the states and twelfth highest in the number of AIDS cases reported in 2002.

2002 and 2003 Disease Statistics

Please refer to the STDs and HIV/AIDS sections in "II: Morbidity."

Reports

The STD CONTROL PROGRAM and the HIV/AIDS PROGRAM maintain program databases, and generate specific analyses and reports by cause, location, and demographic factors for individuals, communities, and agencies. The HIV/AIDS PROGRAM also publishes the *HIV/AIDS Annual Report*, monthly reports and nine annual regional reports all of which are available to the public.

D. TUBERCULOSIS (TB) SURVEILLANCE

The DHH-OPH TB CONTROL PROGRAM conducts active surveillance for tuberculosis in the state. Regional staff interact with area physicians, hospitals, and laboratories in the course of their duties. All known or suspected cases of tuberculosis are investigated to assure that transmission of the disease is contained. Currently, the TB Control Program in Louisiana is working with CDC to enhance surveillance activities. An improved methodology is being implemented to facilitate reporting and tracking.

2003 and 2004 Disease Statistics

Please refer to the Tuberculosis section in "Chapter II: Morbidity."

E. ALCOHOL & DRUG ABUSE PROGRAM: INTRAVENOUS DRUG USE TREATMENT, STD, TB, AND HIV/AIDS SCREENING

National statistics show that more than 70 conditions requiring hospitalization (most notably cancer, heart diseases, and HIV/AIDS) have risk factors associated with substance abuse. One out of every five dollars Medicaid spends on hospital care is attributable to substance abuse (U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 1997 Fact Sheet). The same report shows that injecting-drug use is the primary

mode of transmission of HIV among women and is responsible for 71% of AIDS cases among women. The lifetime cost of taking care of one AIDS patient is approximately $85,000. The U.S. SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION estimates that over five million persons in the United States were in need of treatment for severe drug abuse problems in 1998. Almost 60%, or an estimated 2.9 million, have not received treatment for their addiction. The size of this treatment gap has remained relatively unchanged over the past eight years, ranging from 54% to 68%[1].

As part of the Louisiana's State Demand Need Assessment Studies, the DHH OFFICE FOR ADDICTIVE DISORDERS (OAD) collaborated with the Research Triangle Institute in North Carolina and Louisiana State University (LSU) Medical Center in New Orleans to publish an Integrated Population Estimates of Substance Abuse Treatment Needs Study in August 1999. This work was supported by the CENTER FOR SUBSTANCE ABUSE TREATMENT (CSAT). The study showed that 10.2% of Louisiana adults, or 318,857 persons, were found to be in need of substance abuse treatment. The DHH/OPH region with the highest number of persons needing services was Region 1 (Orleans, Jefferson, Plaquemines, and St. Bernard parishes), while the region with the fewest number of individuals needing treatment was Region 6 (Avoyelles, Catahoula, Concordia, Grant, LaSalle, Rapides, Winn, and Vernon parishes).

Epidemiology

The Community Epidemiology Work Group (CEWG) is a national network of epidemiologists and researchers who meet twice a year to discuss current and emerging substance abuse problems. A State Epidemiology Work Group (SEWG) on drug abuse held a meeting in Baton Rouge, Louisiana on September 24, 2002. The meeting included representatives from all ten Office for Addictive Disorders administrative regions. A summary of findings outlined the following trends:

Alcohol, cocaine/crack, and marijuana abuse continue to be the most serious substance abuse problems in Louisiana. There are, however, indicators of other drug problems emerging and spreading in areas throughout the state.

The abuse of heroin has been increasing in some parishes and there is concern that this problem could easily spread to other areas. Increased use of "other opiates" include prescription drugs such as Dilaudid, Vicodin, Percodan, Darvon, and OxyContin.

There is growing evidence that methamphetamine production and abuse are increasing in Louisiana. An increase in methamphetamine production and distribution was reported in different areas of the state, including East Baton Rouge and Rapides parishes and areas in Region V.

[1] CSAT by Fax, August 30, 2000, Vol.5, Issue 13

Alcohol abuse indicators continue to dominate in Louisiana, with the drug accounting for more treatment admissions in 2002–2003 than any other substance. In Region III, alcohol treatment admissions continue to increase, from 35% of all treatment admissions in 2000, to 39% in 2001, to 42% in 2002. While alcohol continues to be the most frequently used drug within Region IV, treatment programs in the region report a decrease in adolescent alcohol use in the past year. Driving while intoxicated (DWI) arrests remain high throughout the state. In 2002, for example, there were 1,154 DWI arrests in Region V. East Baton Rouge (Region II), has the highest rate of DWI arrests/citations in the entire state.

Cocaine/crack indicators continue at very high levels throughout Louisiana. In Region I, cocaine/crack remains the most frequently reported illicit drug among emergency department visits and treatment admissions, but cocaine indicators appear to have stabilized. Cocaine dominates as the drug of choice for adults seeking inpatient treatment in Region II; cocaine treatment admissions increased by 11% there in 2001. In Region VII, cocaine represents 26.5% of treatment admissions, and the drug accounts for the majority of drug-related arrests. Cocaine treatment admissions are down in Region X.

Marijuana remains a top illicit drug of abuse in Louisiana. It continues as a major problem among youth, particularly in Region IX, where it accounts for 81.1% of all youth treatment admissions. Additionally, students in Region IV report increased marijuana use during the last year.

Indicators of the abuse of **amphetamines and methamphetamine** in Louisiana continue to increase. In Region VII, there were 47 admissions for amphetamine/methamphetamine abuse in fiscal year (FY) 2002–2003, compared to no such admissions the previous year. Similarly, in Region II, treatment admissions for amphetamine abuse increased by 45.5% between FYs 2000 and 2001, while in Region VI, methamphetamine indicators increased among both adult and juvenile users.

Prescription opiates (e.g., oxycodone, hydrocodone, and street methadone) remain a problem in many parishes, and their use is spreading to others. In Region II during the most recent reporting periods, treatment admissions of persons indicating use of “other opiates” increased by 76%, and narcotics-related arrests increased by 12%. Other opiate treatment admissions also increased in Region IX, where they accounted for 10.1% of admissions in 2002–2003. Other opiates, including synthetic opioids, were mentioned by 15.7% of youth treatment admissions in Region IX as a secondary/tertiary substance. In Region X, it was reported that there has been an increase in the abuse of OxyContin and other prescription opiates, as well as “street” methadone.

The State of Louisiana Communities that Care youth survey: Student Use of Alcohol and Cigarettes

This report summarizes findings from the Louisiana Caring Communities Youth Survey (CCYS), a survey of 6th, 8th, 10th and 12th grade school students, conducted in the fall of 2004. The survey was designed

to assess adolescent substance use, antisocial behavior, and the risk and protective factors that predict these behaviors. In this report, the results are presented for each grade along with comparisons to the results from the 2001 and 2002 surveys.

According to the CCYS, the substances that are most commonly used (lifetime) by Louisiana's students are alcohol and tobacco products (6th through 12th graders); marijuana (10th and 12th grade students), and inhalants (6th and 8th graders). Preliminary results indicate that there is an upward trend in the use of sedatives and ecstasy for 2004. Detailed information on the youth survey of 6th, 8th, 10th, and 12th grade students completed in 2004 can be found at http://www.dhh.state.la.us/offices/publications

Intravenous Drug Users Treatment

DHH-OAD policy gives intravenous drug users (IDUs) statewide priority admission status to programs (contract and state) and treatment modalities. Block grant requirements mandate that IDUs be admitted to treatment programs within 14 days after request for admission. Interim services are provided within 48 hours if comprehensive care cannot be made available upon initial contact, with a waiting period of no longer than 120 days. OAD offers outreach services statewide using the Indigenous or Behavioral Model, or other models. Activities include education, prevention, condom distribution, clean needle demonstrations, medical evaluations, and referrals.

STD, TB, and HIV/AIDS Screening

In addition to the treatment of problems of addiction, OAD makes testing available for STDs, TB, and HIV to each individual receiving treatment. Testing is offered, either directly or through arrangements with other public or nonprofit private entities, through a Qualified Service Organization Agreement (QSOA) and a Memorandum of Understanding (MOU) between OPH and OAD. This system includes the provision of the necessary supplies by OPH's STD CONTROL, TB CONTROL, and HIV/AIDS PROGRAMS for onsite STD, TB, and HIV testing of OAD clients. Early intervention services include screening, testing and pre- and post-test counseling.

Individuals testing positive for HIV are referred to the DHH-OPH clinics for further evaluation and appropriate testing. Once a client is identified as an HIV patient in the DHH-OPH system, he or she is referred to the local consortium and/or directly to a charity hospital outpatient clinic, under the auspices of DHH-OPH. Besides referrals to public agencies, clients can be referred to other HIV supportive services that are available in the community. OAD utilizes this referral network to access additional services for substance abuse clients diagnosed with HIV/AIDS. The Office has established a working relationship with the referral entities and is able to monitor the needs of clients who have been referred. OAD also provides ongoing counseling to its clients regarding HIV prevention and treatment, self-help groups, and information and referral services.

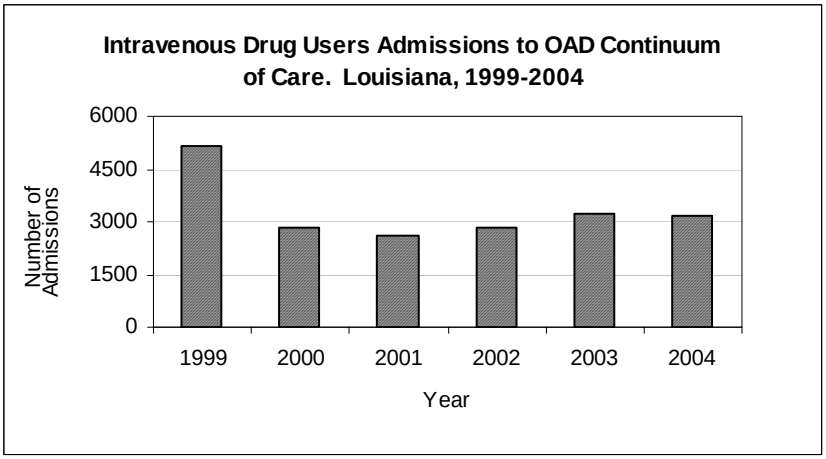
OAD participates in the Statewide HIV Community Planning Group (SCPG) and two subcommittees, Nominations and Special Needs, at the regional level. The goal of the statewide group is to identify interventions that will assist in preventing future infections with HIV and STDs among Louisiana's residents. Groups targeted for intervention are racial and ethnic minority groups, sexually active females, men who have sex with men (MSMs), youth, and substance abusers. Currently, interventions utilized are street outreach, counseling and testing, and condom availability. There is pending legislation regulating condom distribution.

The SCPG composition is representative of each region and individuals with expertise in education, substance abuse, health, and public health; special at-risk populations (e.g., youth, persons who are HIV infected, AIDS patients, Latinos, blacks, Native Americans, women, individuals with a varied sexual lifestyle); and representatives from the DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS, the DEPARTMENT OF EDUCATION, and DHH'S OAD. The regional CPG meets monthly and the statewide committee meets quarterly. Accomplishments for last year included the establishment of a 3-year state plan that was submitted and approved by the CDC, the hosting of two well-attended STD/HIV Annual Conferences, and the achievement of parity in the composition of the committee.

1999-2004 Program Statistics

Intravenous Drug Users (IDUs)

OAD'S Management Information System (MIS) program reports that there were 3,148 IDU admissions to the OAD continuum of care for state fiscal year (SFY) 2004 (9% of total admissions); 3,211 admissions for SFY 2003 (11% of total admissions); 2,826 for SFY 2002 (9% of total admissions); 2,666 admissions for SFY 2001 (9% of the total admissions), 2,830 admissions for SFY 2000 (9% of the total admissions) and 5,147 admissions for SFY 1999 (17% of the total admissions).



Source: Louisiana Department of Health and Hospitals, Office for Addictive Disorders

HIV/AIDS

An Executive Summary from the Louisiana HIV/AIDS 2002 Annual Report[2] indicates that, at the end of 2002, 14,647 persons in Louisiana were known to be living with HIV/AIDS, of which 6,945 (47%) have been diagnosed with AIDS. The report highlights that there are persons living with HIV in every parish in Louisiana, and this number continues to increase each year. According to the report, the higher life expectancy rate is due to more effective drug therapies.

According to the Office of Public Health (OPH) information published in the most recent CDC HIV/AIDS Surveillance Report (Vol. 14), Louisiana ranked 5th highest in state AIDS case rates and 10th in the number of AIDS cases reported in 2002. Also in 2002, new cases of HIV/AIDS were detected in 62 of Louisiana's 64 parishes. The highest rates of newly-detected HIV/AIDS cases were in Iberville, Orleans, Catahoula, and East Baton Rouge parishes. Additionally, the New Orleans region had the highest number of HIV/AIDS cases detected in 2002, and 44% of all persons living with HIV in Louisiana live in this area. However, in 2002, as in past years, the Baton Rouge region surpassed the New Orleans region in the rate of new HIV/AIDS cases. The metropolitan Baton Rouge area ranked 7th and the metropolitan New Orleans area ranked 19th in AIDS case rates in 2001 among the large cities in the nation (CDC HIV/AIDS Surveillance Report, Vol. 13, No. 2).

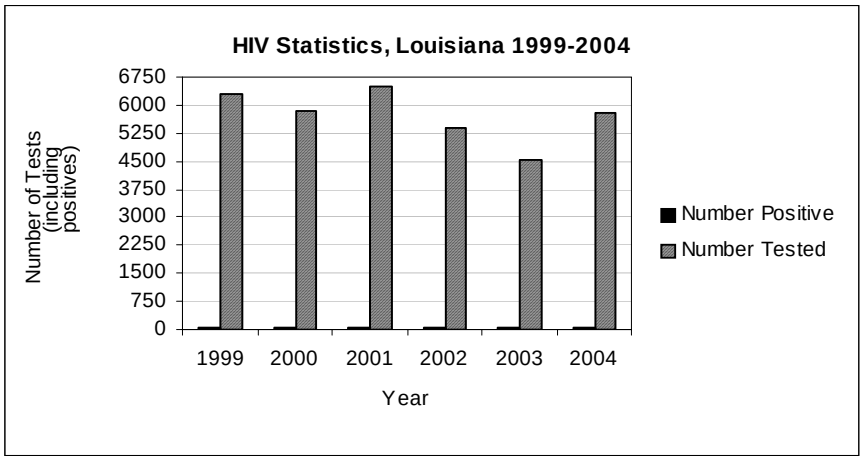
The following statistics represent the regions currently under OAD jurisdiction (Regions 3 through 9). In SFY 1999, Louisiana had an incidence rate of 18 HIV cases per 100,000 population. The most recent incidence rate figure available from OPH is for the year 2002 *Louisiana HIV/AIDS Cases and Case Rates by Parish*, which shows an increase in the detected rate of cases per 100,000 from 18 in 1999 to 27 in SFY 2002[3]. As a result, the state continues to be eligible for block grant expenditures for HIV services (minimum of 5% of the total award). The most recent data prior to October 1, 2005 by the Centers for Disease Control & Prevention's (CDC's) HIV/AIDS Surveillance Report 2003 shows Louisiana with a rate of 23.2 cases per 100,000 and keeps it ranked 10th in the nation. DHH-OPH's summary of statistics for calendar year (CY) 2003 showed that 4,533 tests were conducted at OAD sites; of these, 42 yielded a positive result (less than 1%). During CY 2003, OAD conducted 6,127 Pretest counseling sessions, 2,886 Post Test counseling sessions, and 4,795 services.

In CY 2004, according to OAD set-aside report 5789 clients were tested for HIV and 73 (less than 1%) tested positive; during CY 2003, OPH statistics showed that 4,533 HIV tests were conducted at OAD sites; of these, 42 (less than 1%) tested positive. Historically, In CY 2002 5,371 HIV tests were conducted, with 65 (less than 1%) testing positive. CY 2001 showed 6,474 HIV tests with 40 (less than 1%) positive results. CY 2000 reports showed that 5,820 HIV tests were conducted at OAD sites; of this

[2] Louisiana HIV/AIDS Annual Report – 2002, Geographic Distribution of HIV/AIDS, pg. 14

tested population, 26 (less than 1%) tested positive. Also in CY 2000, OAD sites performed approximately 9.8% of the total HIV testing done in the state. During CY 1999, 6,313 tests were performed, with 37 (less than 1%) of those tests having a positive result.

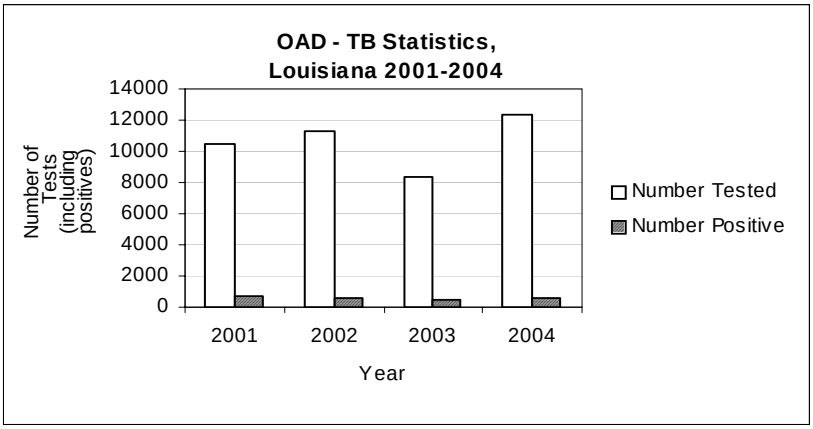
During SFY 2004, OAD provided 4,529 services to the HIV infected population; 4,745 services for SFY 2003; 4,765 services for SFY 2002; 5,045 services for SFY 2001; and 5,191 services during SFY 2000.



Source: Louisiana Department of Health and Hospitals, Office of Addictive Disorders

Tuberculosis

During SFY 2004 OAD tested 12,327 clients for TB which yielded 546 (4%) positive results. OAD provided 7,914 services according to the Louisiana Addictive Disorders Data System (LADDS); for SFY 2003, OAD tested 8,406 clients for TB which yielded 461 (5%) positive results according to OAD Set-Aside quarterly reports. OPH did not have the information for CY 2003 available at the time of this report. OAD provided 19,842 services for this population during 2003.



Source: Louisiana Department of Health and Hospitals, Office of Addictive Disorders

F. Statewide Child Death Review Panel

The State Child Death Review Panel conducts oversight meetings with investigative agencies on unexpected deaths involving children under 15 years old. Additionally, cases of Sudden Infant Death Syndrome (SIDS) are also reviewed. The State Child Death Review Panel, a multi-disciplinary group of professionals, identified a total of 251 unexpected, largely injury-related child deaths in 2002. The State Panel is presently supporting the development of local Panels within a parish or a group of parishes. The development of these "local" Panels will allow agencies directly involved in death investigations to collaborate on strategies for preventing child deaths under similar circumstances in the future.

Reports

Each year, the Panel submits a mandated Report to the Legislature when the latter is in session. Beginning in 2000, the Panel added a new section to the Report, which focuses on All-Terrain and Off-Road Vehicle Deaths. Although the number of deaths related to these types of vehicles was less than 10 in both 2001 and 2002, the Panel did identify an increase in the total number since 2000. The Panel will continue to educate the public on the circumstances surrounding these deaths in an effort to decrease the number of all child deaths in the future.

On a positive note, the panel reports, that there was a slight decline in all of the three leading causes of child injury deaths. The leading causes of child injury death in 2002 were: Motor Vehicle Crashes (60 cases, a decrease of three cases from 2001), Airway Obstruction/Suffocation Deaths (29 cases, a decrease of only one case from 2001), and Fire and Burn deaths (26 cases, a decrease of ten cases from 2001).

G. Dog Bite Injuries

Each year about 2% of the Louisiana population experiences a dog bite injury. While a fatal attack is rare, there have been fatalities as well as serious disfigurement cases from dog attacks. Children experience most of the bites from dogs that they know rather than unknown dogs. Dog bites can be very serious and are common, preventable injuries.

The EMS/Injury Research and Prevention Program performed a special study of the incidence and characteristics of dog bites in an urban setting in cooperation with local veterinarians and others. Abstracts from hospital emergency rooms provided information on dog-bite-related visits over a specified time period. The local Society for the Prevention of Cruelty to Animals (SPCA) contributed information from their data on reports of dog bites.

Reports

A report on the outcome of this surveillance project, accompanied by information on avoiding dog bites, is available from the EMS/Injury Research and Prevention Program (http://www.oph.dhh.louisiana.gov/injuryprevention/index.html).

H. PERSONAL FLOTATION DEVICES

The combination of natural bodies of water, swimming pools, and very large drainage canals in Louisiana contributes to higher-than-average numbers of injuries and deaths from drowning. Staff from the Injury Research and Prevention Program performed an observational survey of boaters in conjunction with the Department of Wildlife and Fisheries.[4] The results of the survey showed that only a small percentage of boaters used personal flotation devices such as life jackets, which are known to save lives. As an adjunct to featuring the outdoor opportunities for visitors to the state, advertising visuals should include safety equipment in use. Other opportunities for preventive education exist in visual materials used at point-of-sale in sporting goods stores and swimming pool related businesses, and in responsible communication and enforcement of safety equipment laws.

Reports

A report on this survey, accompanied by recommendations, is available from the EMS/Injury Research and Prevention Program (http://www.oph.louisiana.gov/injuryprevention).

I. INJURY MORTALITY DATABASE

In 2003, the most recent year in which injury mortality data are available, 901 residents of Louisiana died as a result of a motor vehicle crash (rate 20.2 deaths per 100,000). As is the case nationally, males died at a higher rate then females (28.8 per 100,000 (622 deaths) male vs. 12.1 per 100,000 (279 deaths) female). Fire and burn fatalities, the second leading cause of injury-related fatalities, resulted in 91 deaths (2.0 per 100,000). Drowning fatalities resulted in a total of 86 deaths (1.9 per 100,000) in 2003. The crude drowning rate in Louisiana continues to exceed the national average (1.4 per 100,000).

The Injury Mortality Database, maintained by the Injury Research and Prevention Program, organizes death certificate information on all injury-related deaths in the state. The database is extracted from the DHH-OPH Vital Records electronic death files dating back to 1986. The information is used to examine trends in the occurrence of specific injuries or groups of injuries and to identify and track the injury experiences of different at-risk groups. It provides important data for the planning and evaluation of interventions, public policy development, resource planning, and identification of emerging problems.

[4] MMWR. May 25, 2001 / 50(20); 413-4.

Reports

The Injury Research and Prevention Program can generate specific tables, reports, and analyses by cause of death, residency, and a variety of demographic factors for individuals, communities, or agencies upon request. Injury mortality information is also available on the Internet through the CDC's Web-based Injury Statistics Query and Reporting System (WISQARS).

J. Injury Morbidity Information from Hospital Discharge Data

Newly available hospital discharge data allows the injury epidemiologists to perform analyses of general injury morbidity. These data can anchor the development of injury prevention initiatives, resource planning, and identification of higher risk groups. Special training for community injury prevention specialists and advocates, EMS and emergency room staff, and other injury control personnel can be based on these findings.

K. Louisiana Adolescent Health Initiative

In September 1995, the Louisiana Adolescent Health Initiative (AHI) was launched. AHI facilitates a coordinated, multi-disciplinary approach to adolescent health care, disease prevention, and health promotion in the state. The goal of the initiative is to provide Louisiana adolescents with the opportunity to grow and prosper in a healthy, nurturing, and safe environment. AHI is reaching this goal by increasing coordination and collaboration among internal programs and external agencies, infusing adolescent voices in planning and policy-making efforts of the state, and providing an infrastructure that enables local communities to more effectively and efficiently address adolescent health needs.

The collection of data and dissemination of information is an essential part of AHI. Providing information on adolescent health statistics and on current adolescent health activities is a priority. DHH-OPH serves as a central repository for such information. The use of statewide teen health questionnaires and statewide adolescent focus groups, coupled with the collection of adolescent health statistics, provides parents, communities, politicians, and policy-makers with a clear picture of adolescent health in Louisiana.

Currently, there are many state and local projects that emphasize different aspects of adolescent health. Some focus on teenage pregnancy or teen parenting, while others may focus on HIV/AIDS, tobacco control, conflict resolution, cardiovascular health, or the maintenance of school-based health clinics. AHI allows for the planning, development, implementation, and evaluation of these activities in a coordinated, collaborative manner. In addition, it broadens the scope of cooperation to include the DHH-Office of Mental Health (OMH) and OAD and the Office of Youth Services, among others. Such team-building

efforts are necessary to merge the work of all agencies working toward the common goal of ensuring health and well-being of Louisiana's youth.

AHI : Activities to Date:

- Directed the Teen Talk 2000 Focus Group Project to nearly 300 Louisiana youth in all 9 OPH Regions;
- Planned and coordinated the 2000, 2001 and 2002 Safe Summer Violence Prevention Youth Rallies;
- Produced the AHI Website that is updated annually;
- Administered quarterly statewide Adolescent Health Initiative Steering Committee Meetings, bimonthly Body-Wise Nutrition & Obesity Prevention Program Meetings, monthly Louisiana Youth Suicide Prevention Meetings, and monthly Louisiana Young Women's Health Summit Meetings;
- Increased coordination with over 150 internal DHH-OPH programs and external agencies involved in public health, public policy and social welfare;
- Provided technical assistance to local, statewide and national adolescent health coalitions that are performing comprehensive adolescent activities (Let's Talk Month Activities, National Day to Prevent Teen Pregnancy, National Month to Prevent Teen Pregnancy, National Week to Prevent Suicide, Yellow Ribbon Youth Suicide Prevention Week, and National Women's Health Week Activities) featured in multiple Louisiana newspapers, TV stations, and national newsletters;
- Formed and chairs the Louisiana Youth Suicide Prevention Task Force, trained 400 multi-disciplinary professionals in all 9 OPH regions, and hosted the 1st Multi-parish Planning Summit to Prevent Suicide;
- Provided technical assistance and expertise to the CDC/SPRC/CSN-Federal Region VI & IV's Suicide Prevention Conference by participating in monthly conference calls, facilitating sessions, organizing Tulane student volunteers and presenting the Louisiana Strategic Plan to Prevent Youth Suicide;
- Planned and Coordinated the 2nd Louisiana Young Women's Health Summit (YWHS) held on May 6, 2005 at the New Orleans Superdome, with 450 young women, adults and various speakers from other states in attendance, 40 youth vendors exhibiting at the event, 5 media outlets highlighting the event, and the Office on Women's Health highlighting the event as the 1st local YWHS in the nation (three outcomes of the Louisiana Summit were the Dallas Teen Fashion Show, the Houston Young Women's Health Summit and the 1st Louisiana Young Women's Leadership Luncheon with Louisiana Legislators);
- Planned and coordinated the 1st Louisiana Young Women's Leadership Luncheon with Louisiana Legislators held at the ASHE Cultural Arts Center with over 50 people in attendance including 6 legislators, a 10-member young women's leadership group, parents, mentors, AHI community partners and AHI staff (the keynote speaker was Ms. Oletta Garrett Fitzgerald, the Executive Director and a renowned speaker of the Children's Defense Fund Southern Regional Office);
- Planned and organized the AHI 10 Year Anniversary Celebration which was held on August 8-12,2005 and included an AHI Teen Pregnancy Prevention Presentation at the Juvenile Educational Training Center, the 1st College and University State Suicide Prevention Training for college

personnel, the AHI 10 year Celebration Community Appreciation/Educational Summit, the 1st Louisiana Young Women's Leadership Luncheon with Louisiana Legislators, the AHI Appreciation for Office of Public Health professionals, (the total attendance for the AHI Anniversary Week Activities was 225 participants who consisted of adolescents, parents, college professionals, community partners, and OPH professionals).

AHI : Continuing Activities:

- Produces, distributes, and annually updates the Louisiana Adolescent Data Book, which includes a statistical compilation of adolescent health indicators;
- Produces, distributes, and annually updates the Louisiana Teen Pregnancy Prevention Directory, which includes a listing of statewide programs that provide counseling and medical services to help teens prevent pregnancy;
- Produces and distributes annually the Louisiana Adolescent Health Fact Sheet, which gives an accurate account of the health status of Louisiana adolescents;
- Collaborates with other state and national adolescent projects (National Campaign to Prevent Teen Pregnancy, Advocates for Youth, Louisiana Teen Pregnancy Prevention Task Force, and New Orleans Mayor's Children Service's Collaborative);
- Serves as an Adolescent Specialist on many statewide Adolescent Task Forces;
- Gives AHI Presentations at national (e.g., *Healthy People 2010*), statewide, and local conferences;
- Plans and coordinates the Body-Wise Nutrition and Obesity Prevention School Program and the Louisiana Young Women's Health Summit;
- Plans and administers Gatekeeper trainings in the coming year (these will focus on school professionals, such as teachers, nurses, coaches, counselors, social workers, and resource officers; one Gatekeeper training of 50 school professionals will be conducted in each of the 9 regions of the state, ultimately reaching 450 school professionals);
- Plans and administers Multi-Parish Planning Summits that will be conducted in 5 areas of the state in order to bring together 50 participants per meeting, representing various disciplines from within the schools and the community (previously trained Gatekeepers will be reconvened and updated on the Louisiana Suicide Prevention Plan);
- Plans and coordinates various teen pregnancy prevention summits at schools, churches and after-school programs.

L. Environmental Epidemiology and Toxicology

The DHH-OPH Section of Environmental Epidemiology and Toxicology (SEET) promotes reductions in disease morbidity and mortality related to human exposure to chemical contamination. SEET oversees and responds to public health needs across the state with regard to environmental health issues.

In recent years, there has been an increase in public awareness of the acute and chronic health effects of chemicals in the environment and a greater demand for SEET to investigate these effects. SEET attempts to address residents' concerns by:

- Identifying toxic chemicals in the environment that are likely to cause health effects;
- Evaluating the extent of human exposure to these chemicals and the adverse health effects caused by these exposures;
- Making recommendations for the prevention/reduction of exposure to toxic chemicals and the adverse health effects caused by these exposures; and
- Promoting a better public understanding of the health effects of chemicals in the environment and of the ways to prevent exposure.

Activities conducted by SEET include:

Epidemiological and Toxicological Investigations

- Public Health Assessment/Health Studies Program
- Pesticide Surveillance Program
- Disease Cluster Investigations Program
- Louisiana Environmental and Health Effects Tracking Program
- Health/Fish Consumption Advisories Program
- Chemical Event Exposure Assessment

Environmental Health Advisories (See "Chapter IV: Preventive Health Outreach")

- Mercury in Fish

Environmental Health Education (See "Chapter IV: Preventive Health Outreach")

- Health Effects Related to Pesticide Exposure
- Mercury in Fish
- Health Professional Education Sub-Program
- Private Water Well Brochure
- Indoor Air Quality Education

Environmental Health Emergency Response Programs (See "Chapter IV: Preventive Health Outreach")

- Environmental Public Health Emergency Preparedness and Response
- Chemical Terrorism
- Poison Control Center Notifications Sub-Program
- Geographical Information System (GIS) Program
- Hazardous Substances Emergency Events Surveillance Project

Other projects as described below are representative of those coordinated by SEET.

Public Health Assessment/Health Studies Program

www.oph.dhh.louisiana.gov/environmentalepidemiology/pubhlthassess

Health assessors complete extensive Public Health Assessments or shorter Health Consultations for hazardous waste sites in Louisiana. A Public Health Assessment is an evaluation of all relevant environmental information, health outcome data, and community concerns about hazardous waste sites. It identifies populations potentially at risk and offers recommendations to mitigate exposures. A Health Consultation is a response to a request for information and addresses specific public health issues that could arise as a result of human exposure to hazardous materials. Based on the above documents, health studies, environmental remediation, health education, exposure investigation, or further research may be recommended. SEET also (1) develops fact sheets and other handouts to help inform local communities about health issues around hazardous waste sites, (2) responds to individual requests for toxicological and medical information, and (3) makes presentations in public meetings and availability sessions.

As of June 7, 2005, there were 164 confirmed inactive and abandoned hazardous waste sites in Louisiana, and 450 similar potential sites, according to the Louisiana Department of Environmental Quality (LDEQ). SEET is evaluating the public health impact of twelve of these sites, and the potential for further involvement and/or work with additional sites is very likely.

Calcasieu Estuary

The U.S. Environmental Protection Agency's (EPA's) remedial investigation (RI) of the Calcasieu Estuary in Calcasieu Parish, Louisiana examines the effects of uncontrolled releases from industrial plants located along the estuary. At the request of local residents, SEET reviewed the RI's sediment and water data. SEET determined that recreational exposure to these media pose no health hazard to residents, whose residential water supply originates from a municipal source.

Devil's Swamp Lake

The Devil's Swamp Lake site, which is located in Baton Rouge, East Baton Rouge Parish, Louisiana, was proposed to the EPA National Priorities List on March 8, 2004. SEET has examined historical data related to this site and found several contaminants detected in animal tissue and/or sediment including polychlorinated biphenyls (PCBs), hexachlorobenzene (HCB), hexachlorobutadiene (HCBD), tetrachlorobenze, and pentachlorobenzene. The Devil's Swamp Lake site is included in the Louisiana Department of Health and Hospitals' Health/Fish Consumption Advisory Program. No more than two fish meals per month should be consumed from fish caught in the lake, and recreational visitors should refrain from swimming in the area. SEET has conducted two separate site visits of the area, one by motor boat and another on foot, which evidenced some recreational, hunting, fishing and leisure activities.

In cooperation with the Agency for Toxic Substances and Disease Registry (ATSDR), SEET has completed an Initial Release of the Public Health Assessment for Devil's Swamp Lake, and a Public Comment Version is in review. A Final Version of the Pubic Health Assessment will be completed in 2005. Health Education will be conducted at this site throughout the year to inform community members of the risk associated with site related contaminants, warning signs posted in the area, and fishing advisories for the site.

Marion Pressure Treating Company

From 1964 to 1989, the now-defunct Pressure Treating site used a creosote injection process to treat wood products such as railroad ties, fence posts and utility poles. Wood treatment facilities such as this one are the largest source of creosote in the environment. Creosote is a synthetic chemical which contains many compounds, particularly polycyclic aromatic hydrocarbons (PAHs). SEET has reviewed groundwater and biota data sampled from the Marion site. Investigations have determined that groundwater and biota pathways pose no human health hazard to residents. SEET is currently assessing sediment and soil data and will present the findings to the public in 2005.

South Scotlandville Air Monitor

LDEQ requested that SEET review annual 1,3-butadiene concentrations from the South Scotlandville air monitoring station in Baton Rouge from 1999 to 2004 to determine how exposure to 1,3-butadiene exceedances may have impacted human health. SEET found no human health hazard involved with these exposures.

Vermiculite

Vermiculite is a porous mineral used as insulation and to hold water in potting soil. The vermiculite ore examined in a SEET study was mined in Libby, Montana from the early 1900s until the mine closed in 1990. The ore, distributed mostly for commercial purposes around the United States and abroad, was known to be contaminated with tremolite asbestos. Exposure to asbestos in vermiculite ore may increase the risk of asbestosis (a chronic lung disease that can produce shortness of breath and permanent lung damage), as well as increase the risk of dangerous lung infections, lung cancer, mesothelioma (a rare cancer of the thin membranes that line the chest and abdomen), and other cancers such as those of the larynx and of the gastrointestinal tract.

EPA and ATSDR have identified six facilities in Louisiana which may have received contaminated Libby ore. Three of these facilities are located in Orleans Parish, one in Jefferson Parish, one in Saint John the Baptist Parish, and one in Caddo Parish. SEET examined cancer statistics for four zip codes which contained the sites: Southern Mineralite Company, Orleans Parish (70117); W.R. Grace Company/ Zonolite, Jefferson Parish (70121); Filter Media Company, Saint John the Baptist Parish (70084); and

Best Wall Gypsum on Almonaster Boulevard in Orleans Parish (70126). The zip codes 70117, 70121, 70084 all contained exfoliation plants. The findings of the Cancer Statistics Review will be released to the public in 2005.

Health education outreach activities included an initial fact sheet that SEET compiled and mailed to the residents of the four zip codes in August and September 2002. SEET will provide a follow-up fact sheet containing the results of the study from the Cancer Statistics Review to be released this year.

Pesticide Surveillance Program

http://www.oph.dhh.louisiana.gov/environmentalepidemiology/healthrelatepest/index.html

Health-Related Pesticide Incident Report Program

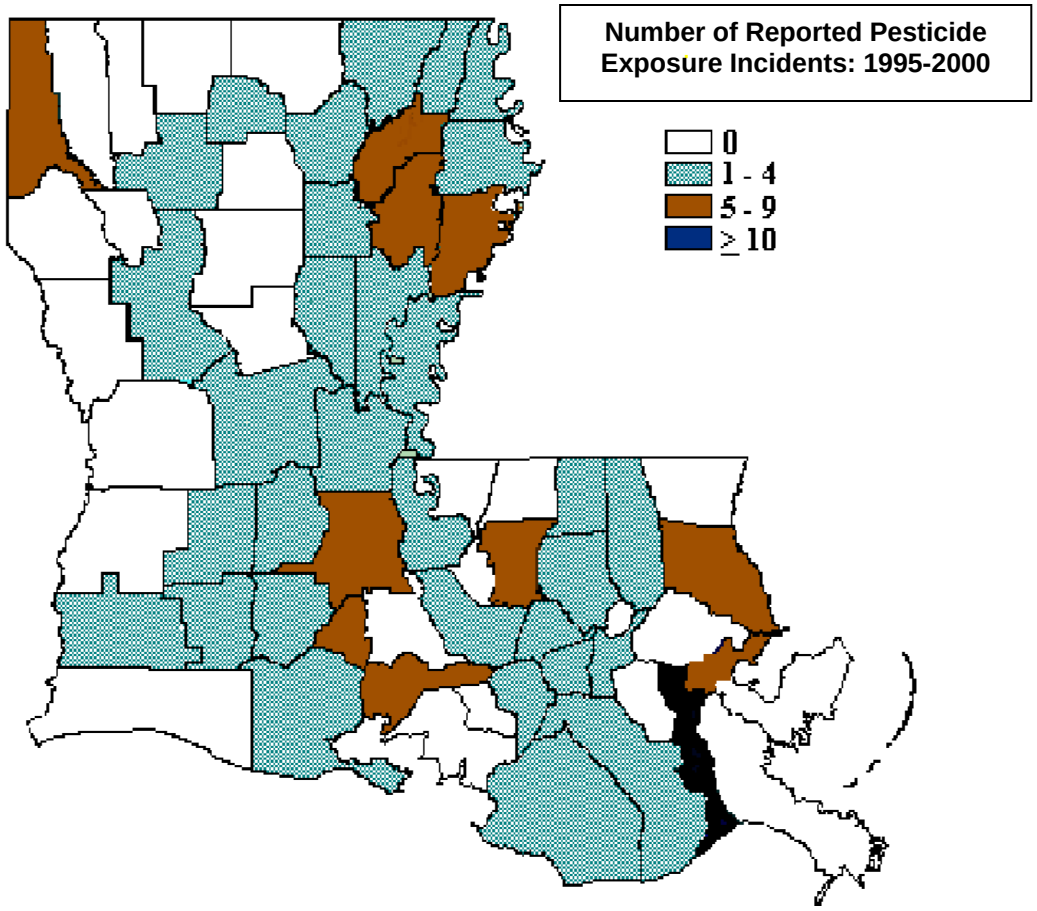
The Health-Related Pesticide Incident Report (HRPIR) Program is a statewide surveillance program designed to investigate and evaluate adverse health effects related to acute pesticide exposure. In addition to investigating pesticide exposure complaints, SEET maintains a statewide database. Pesticide exposure complaints are obtained from two sources: the Louisiana Department of Agriculture and Forestry (LDAF) and the Louisiana Poison Control Center (LAPCC). Complaints obtained from LDAF are jointly investigated by LDAF and SEET. Investigations involve the collection and review of environmental and health data relevant to the pesticide exposure incident. A written summary of the findings is provided to the complainant.

Poison Control Center Notifications Sub-Program

Since October 2002, SEET has been receiving all pesticide-related calls from the LAPCC. Case reports obtained from the LAPCC are reviewed and entered into the pesticide surveillance database. Only cases reporting pesticide exposure and health effects are included in the database; cases with unclear exposure histories or no reported symptoms are not included. Most LAPCC cases are investigated solely by SEET. Those incidents that occur on the job or in a public place are referred to LDAF for follow-up.

Cases obtained from LDAF and LAPCC are evaluated to determine short-term and long-term health effects related to pesticide exposure. Cases are classified using standardized pesticide exposure criteria developed by the Centers for Disease Control and Prevention (CDC). Classification categories consider the level of certainty of exposure, documentation of health effects, and the plausibility of reported health effects based on the known toxicology of the pesticides.

Figure: Health-Related Pesticide Incidents (HRPIs) by Parish: October 1995 - September 2000



Summary Of HRPIs Reported In Louisiana From October 1995 Through September 2000. Louisiana Department of Health and Hospitals, Office of Public Health, Section of Environmental Epidemiology and Toxicology. February 2002.

Louisiana's Registry of Pesticide Hypersensitive Individuals Sub-Program

www.oph.dhh.louisiana.gov/environmentalepidemiology/regispesthyper

LDAF and SEET established a statewide Registry of Pesticide Hypersensitive Individuals. The registry's purpose is to enable hypersensitive individuals to receive prior notification of pesticide applications in the vicinity of their homes. With prior notification, individuals can take necessary precautions to protect themselves from inadvertent pesticide exposure. There is no charge for inclusion in the registry, although a physician licensed to practice medicine in Louisiana must certify that the registrant is hypersensitive to pesticides.

The registry is updated annually and provided to all licensed applicators and pest control operators (PCOs). Applicators and PCOs are requested to notify registrants prior to making a pesticide application

to a property within 100 feet of, or adjacent to, the registrant's property. Notification by applicators and PCOs is voluntary, and there is no penalty for non-compliance.

In 1999, SEET conducted a telephone survey of all registrants to evaluate their satisfaction with the registry. Of the 62 households on the registry, 37 (60%) participated in the survey. Results indicate that 62% of the surveyed registrants live in a rural area, of which 49% live on a farm. Forty-one% of the households were notified every time there was a pesticide application within 100 feet of their property, 32% were sometimes notified, and 27% were never notified.

Overall, 62% of the surveyed registrants were satisfied with the registry, although 76% of the registrants believed that 100 feet was not a protective enough distance. All surveyed registrants stated that they would be willing to pay a small fee in exchange for mandatory notification by applicators.

Disease Cluster Investigations

www.oph.dhh.louisiana.gov/environmentalepidemiology/diseaseclust

SEET provides Louisiana residents with information on chemicals or other factors (environmental or naturally occurring) that could potentially be associated with a reported disease cluster. In some cases, comparative rates of the disease are tabulated. SEET also works closely with the Louisiana Tumor Registry (LTR) at the Louisiana State University Health Sciences Center in New Orleans to address public concerns about cancer rates throughout the state. During the 2004 CY, SEET was notified about or responded to approximately 12 reports of disease clusters throughout the state. In an effort to increase the effectiveness of the program, SEET has drafted Cancer Cluster Investigation Guidelines along with the LTR to address Louisiana residents' concerns.

Public Outreach Sub-Program

SEET provides public outreach services concerning disease clusters throughout the state, such as environmental public health education on cancer.

Louisiana Environmental & Health Effects Tracking (LEHET) Program

The Louisiana Environmental & Health Effects Tracking (LEHET) Program is a collaborative effort of SEET and LDEQ to develop environmental public health tracking in Louisiana. The LEHET is funded through a three-year cooperative agreement with the CDC's Environmental Public Health Tracking Program. This program fulfills the mandate of Louisiana Act 666 to investigate ways to develop an Environmental Health Surveillance System.

The purpose of this program is to demonstrate and evaluate methods for linking data from ongoing, existing public health surveillance systems with data from existing surveillance systems for human exposure and environmental hazards. The national effort to develop an environmental public health

tracking program will ultimately lead to the standardization of how both public health and environmental data are collected and potentially used. With the full support of the CDC and other cooperative agreement states, Louisiana will be one of the nation's leaders in developing and maintaining environmental public health surveillance systems.

LEHET consists of several components: 1) the LEHET Working Group; 2) the LEHET Community Consortium and, 3) the LEHET Wood Preservation and Treatment Site Pilot Project. The LEHET Working Group is comprised of public health professionals, researchers from universities and technical experts from state agencies. This group provides technical input for the pilot project and for data collection and analysis. The LEHET Community Consortium is drawn from community and environmental organizations, professional associations, industry groups, universities, and state and federal public health and environmental agencies. This group provides suggestions for projects and assists in the development, communication and dissemination of environmental public health information for citizens and other interested parties. The LEHET pilot project focuses on linking environmental, exposure, and health data from wood preservation and treatment sites. Working in partnership with LDEQ and the OPH Safe Drinking Water Program, groundwater and drinking water data are being compiled from areas near abandoned or inactive wood preservation and treatment facilities throughout the state. Groundwater and drinking water data will be tracked along with bladder, lung, and all cancer sites data provided by the Louisiana Tumor Registry. Ultimately, the results will demonstrate methods and benefits of linking environmental and health data, and help to reduce the risk of preventable exposures to environmental contaminants.

Health/Fish Consumption Advisories Program

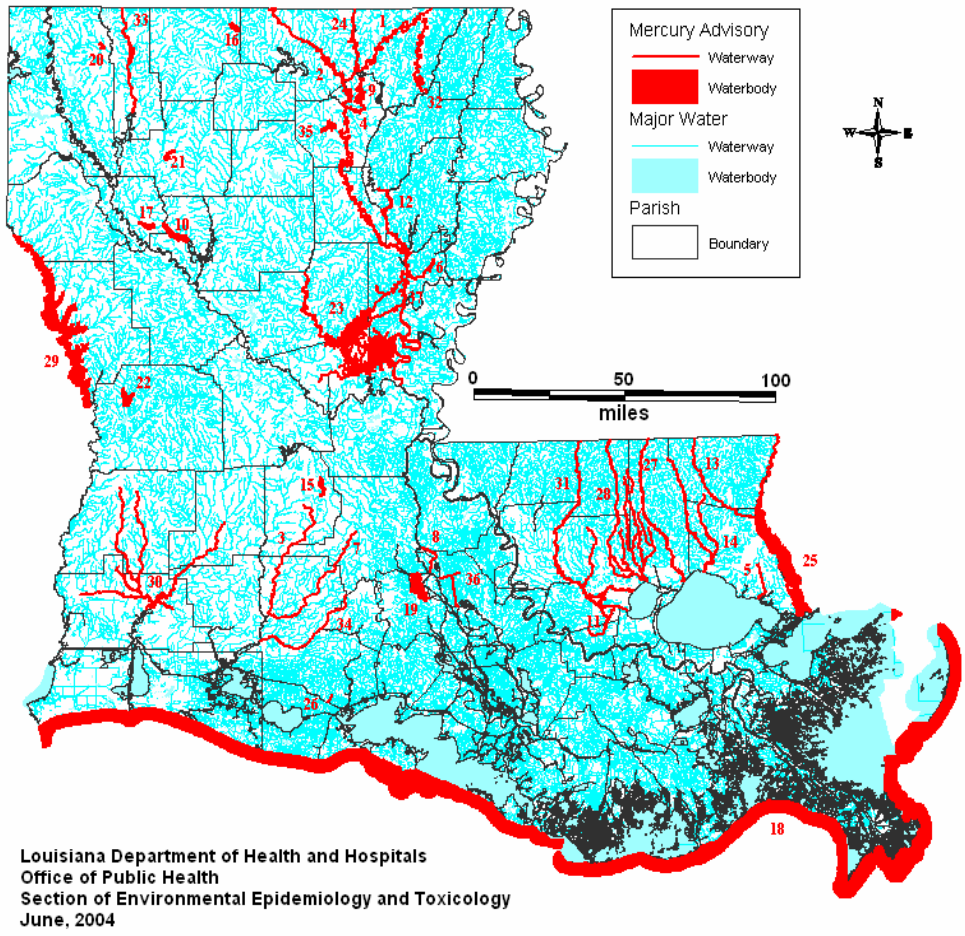
http://www.oph.dhh.louisiana.gov/environmentalepidemiology/healthfish/index

SEET issues fish consumption advisories in consultation with state environmental agencies when chemicals or heavy metals in sport fish reach levels that could potentially harm the public.

Mercury in Fish

SEET works with the LDEQ and the Louisiana Department of Wildlife and Fisheries (LDWF) to assess the extent of mercury contamination in fish. Methylmercury, a metal compound sometimes found in fish, can cause birth defects and neurological problems when present at high levels. LDEQ collects and samples fish from water bodies that are selected based on their pH, usage, and SEET recommendations. SEET then conducts a public health risk assessment, and, if warranted, the State Health Officer issues a fish consumption advisory for specific species of fish. Of nearly 400 water bodies tested to date, 37 health advisories for fish containing mercury have been issued. These advisories cover at least 61 freshwater bodies in or traversing 42 parishes, and include an advisory on king mackerel for parishes along the Gulf of Mexico.

Louisiana Mercury Fish Consumption Advisories



LOCATION	NUM
Amite River Drainage Basin	31
Bayou Bartholomew	1
Bayou Bonne Idee	32
Bayou De Loutre and Associated Lakes	2
Bayou des Cannes	3
Bayou DeSiard	4
Bayou Dorcheat	33
Bayou Liberty	5
Bayou Louis and Lake Louis	6
Bayou Plaquemine Brule	7
Bayou Queue De Tortue	34
Big Alabama Bayou	8
Black Bayou Lake	9
Black Lake	10
Blind River	11
Boeuf River	12
Bogue Chitto River	13
Bogue Falaya and Tchefuncte Rivers	14
Calcasieu River Drainage Basin	30
Cheniere Lake	35
Chicot Lake	15
Corney Lake	16
Grand Bayou Reservoir	17
Gulf of Mexico	18
Henderson Lake Area	19
I-10 Canal and Work Canal	36
Ivan Lake	20
Kepler Creek Lake	21
Lake Vernon	22
Little River/Catahoula Lake Area	23
Ouachita River	24
Pearl River	25
Seventh Ward Canal	26
Tangipahoa River	27
Tew Lake	37
Tickfaw River Drainage Basin	28
Toledo Bend Reservoir	29

Population-based Blood Mercury Services Sub-program

In 1998, 313 individuals from selected parishes in Louisiana participated in a blood mercury screening. Ninety-eight% of the study participants were within an expected range of mercury blood levels. The remaining 2% exhibited slightly elevated mercury levels and were advised to decrease fish consumption.

The 1998 blood mercury services screening revealed that a small percentage of the participants had a slightly elevated blood mercury level. These individuals were from Ouachita and Morehouse parishes. In 2003, SEET returned to northeast Louisiana to offer additional blood mercury screening for commercial fishers and their families, as well as others who eat fish caught in local water bodies. Seventy-seven

individuals from Morehouse, Union, and Ouachita parishes participated in the screenings. Sixty-eight% of those participants had a blood mercury level within the expected range, while 25% exhibited slightly elevated mercury levels and were advised to decrease fish consumption. The remaining 7% were advised to seek a medical evaluation because their blood mercury level was elevated.

Chemical Event Exposure Assessment

http://www.oph.dhh.louisiana.gov/environmentalepidemiology/toxsubexp

SEET responds to requests for information and investigations from the public and government agencies regarding health effects of known and suspected toxic substances in the environment. Some of these inquiries develop into comprehensive health investigations involving interagency workgroups.

M. VITAL STATISTICS

Vital statistics data provide a body of information that serves as the foundation for monitoring the health and well-being of Louisiana residents. These data are collected via birth, death, fetal death, abortion, marriage, and divorce certificates. Collection and processing of vital statistics information is the responsibility of DHH-OPH's VITAL RECORDS REGISTRY.

A large number of health status indicators rely on vital statistics data. These indicators include infant death rates, numbers of low birthweight infants, percentage of mothers lacking adequate prenatal care, teen birth rates, homicide and suicide rates, rates of death from AIDS, and motor-vehicle injury death rates, among many others. Vital statistics data are used in both the public and the private sectors to identify health needs in the population and to target effective health interventions. Vital statistics health status indicators are also used to measure achievement of the CDC'S Healthy People 2010 objectives.

The role of the STATE CENTER FOR HEALTH STATISTICS (CHS) is to analyze vital statistics data and distribute findings to government programs, community organizations, universities, and interested members of the general public. The Center accomplishes this through publication of the annual *Louisiana Vital Statistics Report*, the *Louisiana-Health at a Glance* poster and through response to ad hoc requests for data and information. CHS is also responsible for compiling information from the different DHH programs to create the legislatively mandated annual *Louisiana Health Report Card*.

2003 Statistics

Please refer to "Chapter I: Population and Vital Statistics."

Reports

Reports and data tables published by CHS, including the annual *Louisiana Health Report Card:*

Louisiana Vital Statistics Report, and the *Louisiana-Health at a Glance* poster, may be viewed and downloaded by the public at the Center's internet website:
http://www.oph.dhh.state.la.us/recordsstatistics/statistics/page0cda.html?page=117
CHS also maintains databases of births, deaths, fetal deaths, abortions, marriages, and divorces, which it uses to respond to data requests from communities, agencies, and the general public through generation of ad hoc reports and analyses.

N. STATE HEALTH CARE DATA CLEARINGHOUSE

Act 622 of the 1997 Regular Legislative Session (Louisiana Revised Statutes 40:1300.111-1300.113) defined the STATE HEALTH CARE DATA CLEARINGHOUSE as the entity responsible for the collection of health care and health industry-related data. The Act charges the CLEARINGHOUSE with responsibility for creating population-based health care data registries that will offer Louisiana and its health care providers their first opportunity to plan and operate systematic intervention strategies that address morbidity.

In prioritizing the mandates of the HEALTH CARE DATA CLEARINGHOUSE (which is housed within CHS), the OFFICE OF PUBLIC HEALTH considered the various health information data streams already in existence and the data collection experiences of some 36 other states, and determined that Louisiana would benefit most by focusing initial data collection efforts on hospital inpatient discharge data. In addition to the inpatient discharge database, the CLEARINGHOUSE also plans to work with hospitals and other facilities to develop a statewide hospital outpatient emergency room database and other data sets which will provide a more complete picture of the health of Louisiana residents and help address the urgent concerns regarding the increasing threat of bioterrorism.

Louisiana Hospital Inpatient Discharge Database (LAHIDD)

BACKGROUND

Act 622 of the 1997 Regular Session of the Louisiana Legislature enacting R.S. 40:1300.111 through 40:1300.113 designated the STATE HEALTH CARE DATA CLEARINGHOUSE as the agency responsible for the collection of data related to the healthcare industry. This law charges the CLEARINGHOUSE with the responsibility for creating population-based healthcare data registries. These registries are expected to offer Louisiana and its healthcare providers their first opportunity to plan and operate systematic intervention strategies that address the antecedents of death.

In prioritizing the mandates of the CLEARINGHOUSE, the DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF PUBLIC HEALTH (DHH/OPH) considered the various health-information data streams already in existence and the data-collection experiences of 36 other states. It was determined that Louisiana would benefit the most by focusing its initial data-collection efforts on hospital inpatient discharge data. As a

result, the Louisiana Hospital Inpatient Discharge Database (LAHIDD) was designated as the registry containing inpatient discharge data submitted to DHH/OPH by hospitals within Louisiana.

History of LAHIDD

The rulemaking process enabling the development of LAHIDD which involved the participation of public and private stakeholders, was completed in the fall of 1998. The following three milestones depict the legislative and regulatory history of the project:

- House Bill 1462 passed in May 1997; signed by the Governor in July as Act 622.
- Rules committee formed in DHH/OPH in November 1997
- Rules governing LAHIDD published in July 1998

An extensive survey of all hospitals in the state regarding their database systems and their discharge data submission capacities was conducted from late 1997 to early 1998. As a result of this survey, a comprehensive submittal guide was created and mailed out to hospitals in October 1998. In December 1998, hospitals began submitting data on discharges occurring between January and June 1998. To date, the State Center for Health Statistics has received fifteen quarterly data submissions from hospitals. These were submitted semi-annually during 1998, and quarterly thereafter, from January 1999 through March 2003.

Purpose of LAHIDD

LAHIDD underlies the commitment of DHH/OPH to the practice of sound public health by expanding the state's ability to carry out its three Core Public Health Functions:

- Assessment of community health status and resources;
- Assurance of availability and provision of necessary, high-quality, effective services; and
- Development of health policy that accurately addresses community needs.

The LAHIDD data will help DHH/OPH to accomplish its functions by:

- ***Enhancing Disease Surveillance and Reporting:*** LAHIDD provides a unique resource for the investigation of the progression of morbidity in the population and helps to identify at-risk populations within the community. LAHIDD data can be enriched through linkage to other DHH/OPH databases and can be further enhanced by information gathered by the state's other surveillance programs (e.g., Injury Research and Prevention, Behavioral Risk Factor Surveillance). Linking LAHIDD data to these other population-based databases will enable the development of effective prevention policies targeted to at-risk populations. For DHH/OPH programs such as Tuberculosis and HIV, these data can be used to track patient treatment and to evaluate the completeness of programmatic surveillance.

- ***Assessing Healthcare Utilization:*** Many areas in Louisiana are experiencing rising healthcare costs and shortages of health professionals. These costs and shortages make it essential that

patients, healthcare professionals, hospitals, and third-party payers have the necessary information to:

- ❖ evaluate health care needs and
- ❖ identify the appropriate and efficient utilization of health services.
- ❖ Ultimately, evaluation of needs and identification of appropriate and efficient utilization of health services requires an understanding of:
- ❖ the patterns and trends in the availability, utilization, and costs of health care services
- ❖ the underlying patterns of disease that necessitate these services.

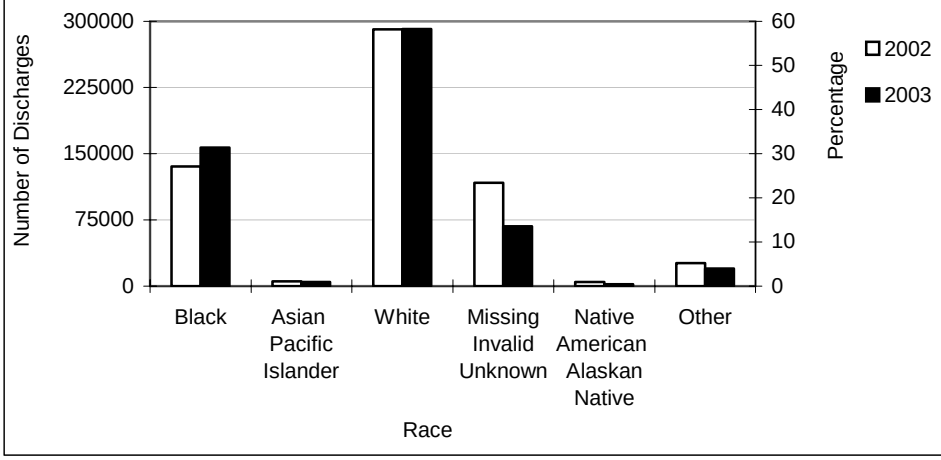
Through LAHIDD, the STATE HEALTH CARE DATA CLEARINGHOUSE provides information needed to make these determinations. It is different from other sources of data in that LAHIDD is Louisiana's only comprehensive, population-based repository for hospital inpatient data while the DHH/OPH has been the state's repository for mortality data. LAHIDD contains information needed to measure and evaluate morbidity and hospital charges associated with inpatient stays in the state. It also contains information on the diagnoses of those treated, the procedures performed, and the hospital charges for those procedures.

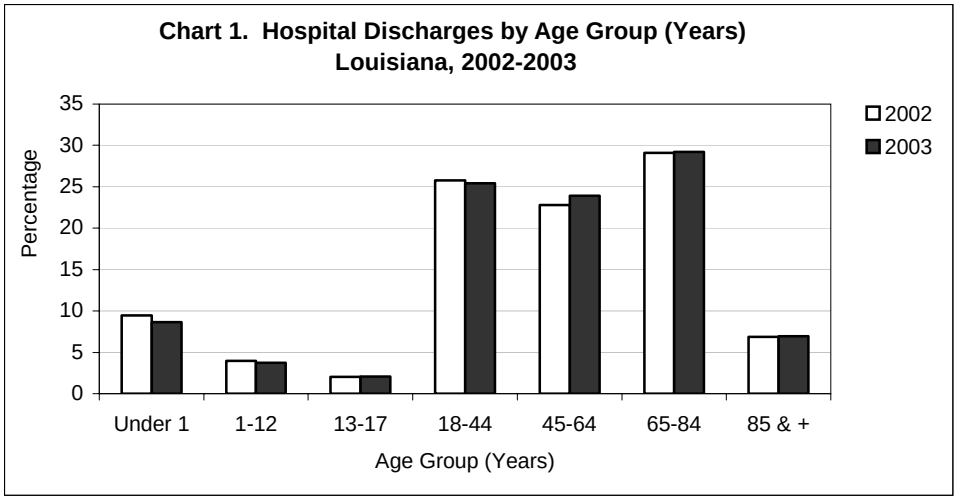
The detailed information available in LAHIDD enables the state to identify specific geographic areas and populations in need of improved access to healthcare and health education. While maintaining LAHIDD confidentiality restrictions, identification of healthcare needs can be accomplished by tracking:

- utilization of hospital care for specific diagnoses and procedures in targeted populations and geographic areas and
- hospital charges for services provided to targeted populations and in geographic areas.

Demographics

Chart 2. Number and Percentage Discharges by Race
Louisiana, 2002-2003





Top 15 Principal Diagnoses by Discharges, LA 2003				
Principal Diagnosis	**Discharges**	**Rates**	**LOS**	**Charges**
Liveborn	36,594	81.4	4.1	7,815
Pneumonia (except by TB or STDs)	22,461	50	6	19,193
Cong. heart failure, non-hypertensive	21,627	48.1	5.5	20,543
Cor. Atherosclerosis, other heart diseases	20,164	44.9	3.5	31,877
Rehab. Care, prosthesis & devices	12,038	26.8	13	26,230
Nonspecific chest pain	11,821	26.3	2	9,545
Fluid and electrolyte disorders	11,761	26.2	3.6	9,008
Affective disorders	11,425	25.4	8.6	10,670
Skin and subcutaneous tissue infect.	10,689	23.8	4.9	11,403
COPD * & bronchiectasis	10,020	22.3	5.3	17,005
Cardiac dysrhythmias	9,878	22	3.6	19,694
Urinary tract infections	9,528	21.2	5.2	13,813
Acute myocardial infarction	9,153	20.4	5.6	39,988
Complicats. of device, implant or graft	9,125	20.3	6.1	36,121
Acute cerebrovascular disease	8,860	19.7	6.5	23,908

Discharges = No. of Discharges; Rate = Per 10,000 LA pop.,2003; LOS = Average Length of Stay (days); $ Charge = Average $ Charges; * COPD = Chronic Obstructive Pulmonary Disease. Total Discharges = 543,219.

Top 15 Principal Procedures by Discharges, LA 2003				
Principal Procedure	**Discharges**	**Rate**	**LOS**	**Charges**
Low Cervical Cesarean Section	14,162	31.5	3.6	12,036
Other Manually Assisted Deliver	11,886	26.5	2.3	6,708
Circumcision	11,126	24.8	2.8	3,743
Left Heart Cardiac Catheterization	9,594	21.4	3.6	21,920
PTCA*	8,472	18.9	3.1	37,485
Transfusion of Packed Cells	7,314	16.3	6.0	20,062
Esophagogastroduodenoscopy	6,956	15.5	5.9	19,972
Venous Catheterization	6,603	14.7	10.5	34,968
Hemodialysis	6,187	13.8	5.8	19,618
Prophylactic Vaccine Administration	6,005	13.4	2.7	2,431
Total Abdominal Hysterectomy	5,294	11.8	3.0	16,962
Repair of Obstetric Laceration	5,027	11.2	2.3	6,704
Laparoscopic Cholecystectomy	4,268	9.5	4.5	24,397
Endoscopy of Small Intestine	4,137	9.2	5.9	19,219
Total Knee Replacement	4,042	9.0	4.4	35,439

Discharges= No. of Discharges; Rate= Per 10,000 LA population, U.S. Census Bureau estimate 2003 (4493665); LOS= Average Length of Stay in days; Charges= Average Charges in dollars; PTCA* = Percutaneous Transluminal Coronary Angioplasty

Hospital Discharges by Primary Payers, LA 2003					
Primary Payer	**Discharge**	**Rate**	**Females**	**Males**	**Charges**
CHAMPUS	4,639	10.3	2,960	1,679	6,644
Medicaid	122,365	272.3	82,407	39,954	156,419
Medicare	219,653	488.8	125,500	94,152	489,669
Private	158,279	352.2	92,912	65,363	316,729
Self Insured	1,620	3.6	871	749	3,190
Self Pay	14,849	33	7,037	7,812	23,826
Workers Comp.	2,562	5.7	569	1,993	6,061
Unknown	19,031	42.4	8,477	10,554	33,077
Total	**543,219**	**1,208.90**	**321,242**	**221,968**	**1,024,139**

Discharges= Total No. of Discharges; Rate= Per 10,000 LA population, U.S. Census Bureau estimate 2003; Charges= Total Charges in 10,000 dollars; Missing values: Medicaid= 4, Medicare= 1, Private= 4, No Charge have only 1 discharge.

Additional information on the LAHIDD program may be found on the internet at:

http://www.oph.dhh.louisiana.gov/recordsstatistics/statistics/statehealth/index.html

IV. PREVENTIVE HEALTH OUTREACH, SERVICE, AND EDUCATION PROGRAMS

The Department of Health and Hospitals (DHH), Office of Public Health (OPH) provides Louisiana residents with a variety of Preventive Health Outreach Programs targeted to assure the health of its most vulnerable citizens: infants and children; adolescents; women; families; and persons suffering from infectious and chronic diseases, violence and injury, substance addictions, and mental impairment. The programs detailed in this chapter provide services to thousands of Louisiana residents and are essential to the health of the state as a whole.

Programs Targeting: Infants, Children, Adolescents, Women, and Families

A. Maternal and Child Health Program

The Maternal and Child Health (MCH) Program is dedicated to identifying health problems and developing solutions to improve the health of women of childbearing age, pregnant women, infants, children, and adolescents. This goal is accomplished through the provision of needed preventive health care services for the population in general as well as those who have limited access to preventive services due to financial or geographic barriers, or lack of service providers.

Through parish health units and contract agency sites statewide, the Maternity Program offers pregnancy testing, prenatal care, and nutrition education/counseling. In some locations, comprehensive prenatal care is provided to women who are unable to access such services elsewhere in their communities. The prenatal care includes regular physical assessments, laboratory tests, counseling and education on physical and behavioral issues, and home visiting when indicated. HIV education for all patients and HIV screening and counseling are provided for those who choose to participate.

In state fiscal year 2004, 3,624 pregnant women initiated or received comprehensive prenatal care, while 18,854 pregnant women received prenatal and nutrition counseling and education in conjunction with the Women, Infants, and Children (WIC) Program services. Over 13,607 women came to the health units for pregnancy tests only. The total number of maternity related visits was 79,326. The Maternity Program also provides prenatal care in areas of the state with access problems through contracts with Louisiana State University Health Sciences Center and Community Health Centers. Through these contracts, 803 women received prenatal and postpartum care in 6608 visits. The MCH Program also supports the Partners for Healthy Babies Campaign, which is a public awareness and education media effort to promote healthy prenatal behaviors, early prenatal care, and a toll-free telephone hotline for information and referral for health and related services.

Preventive health services to infants and children offered by the Child Health Program include periodic health screening through parish health units statewide. These services may involve a medical history and physical examination; immunizations; assessment of growth; assessment of developmental status; laboratory screening for phenylketonuria (PKU), congenital hypothyroidism, sickle cell disease, anemia, urinary tract problems, and lead poisoning; screening for vision, hearing, or speech problems; and parental counseling and education. Nutritionist and social services are available in addition to medical and nursing services. In state fiscal year 2004, 86,664 infants, children, and adolescents were seen in a total of 158,733 visits. Over 2,542 children received 2,979 comprehensive screenings, and 34,001 children received 45,426 health counseling and follow up services.

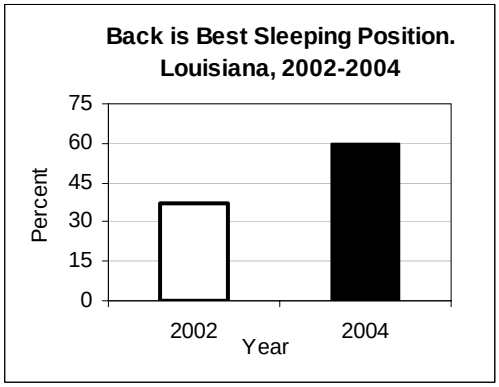
Infant Mortality Reduction Initiatives have been established in each region to examine the causes of fetal and infant death through a formal review process, and recommendations to address the need for prenatal and infant health interventions will be made by these community coalitions. Injury prevention coordinators have been hired to address prevention of unintentional injuries, which are the leading cause of death among children. Car, pedestrian, bicycle, playground, and water safety are addressed through education and public awareness events. Prevention of injury from fires and suffocation are also targeted.

SUDDEN INFANT DEATH SYNDROME (SIDS)

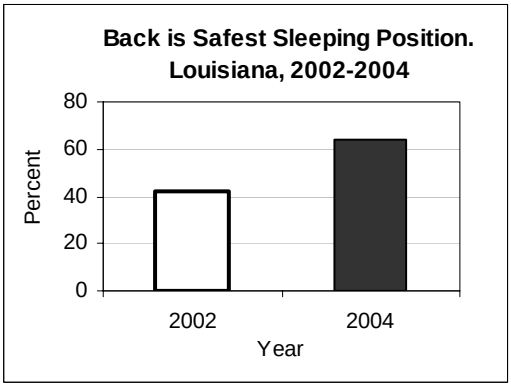
The DHH-OPH Sudden Infant Death Syndrome (SIDS) Counseling and Risk Reduction Program is designed to increase public awareness on the topic of SIDS and to provide education to reduce the risk of SIDS deaths. The SIDS Program developed a 30 second media message aimed at encouraging parents of infants to place healthy babies on their backs for sleeping and promoting a safe sleep environment. Educational materials on SIDS risk-reduction have been developed for distribution to populations at risk. These materials include: two fact sheets that provide basic SIDS information and describe state specific statistics on SIDS risk factors and practices in Louisiana; an educational counseling card to provide risk-reduction information for parents and grandparents; and posters that promote back sleeping. Grief counseling is made available to all families who have experienced the death of an infant due to SIDS. The SIDS risk-reduction community outreach and education initiative has continued; activities included the following:

- Conducted multimedia public relations and community outreach event for SIDS Awareness Month.
- Conducted education awareness sessions to community groups and organizations.
- Provided professional education in-service training to childcare providers, nurses, and other health providers, including a video conference.
- Distributed a SIDS informational kit for faith-based organizations to utilize in education of the community about SIDS.
- Distributed educational materials on SIDS risk-reduction to hospitals, childcare providers, and community groups statewide.

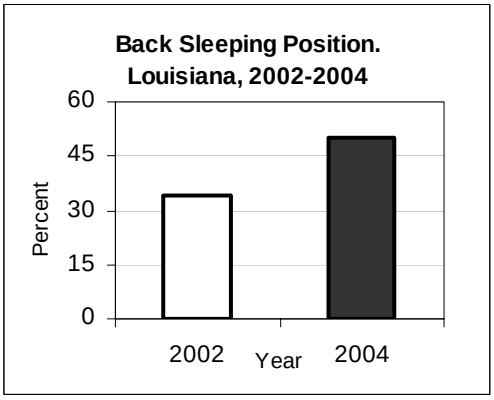
Since the initiation of SIDS risk-reduction efforts, a baseline quantitative 10-minute telephone survey was conducted in 2002, with a follow-up survey in 2004, to measure awareness of SIDS and its risk factors. Data were gathered from a representative sample of Louisiana women (n=400) who were 18-29 years of age, had an annual household income of $29,000 or less, and resided in either urban and rural areas in the state. Data from this sample show that, from 2002 to 2004, there was an increase in the number of Louisiana women who believe back sleeping is safest, and is best for infants, and who place infants to sleep on their backs. There was a decrease in the number of women who place soft bedding (i.e., pillows or comforters) in a baby's sleeping area. The following are selected findings from the 2004 SIDS follow-up telephone survey:



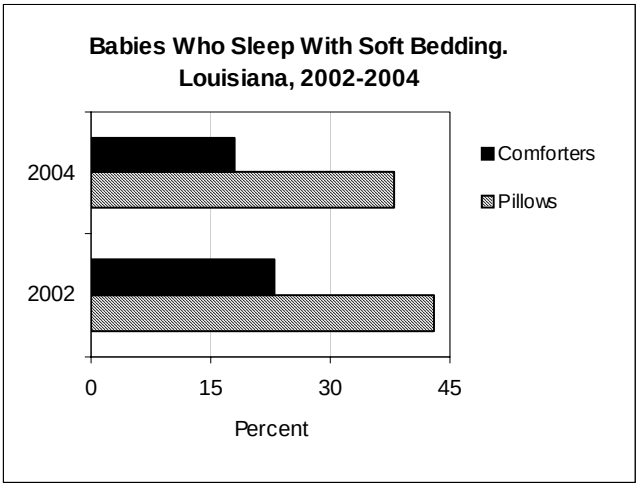
Source: DHH OPH, SIDS Program



Source: DHH OPH, SIDS Program



Source: DHH OPH, SIDS Program

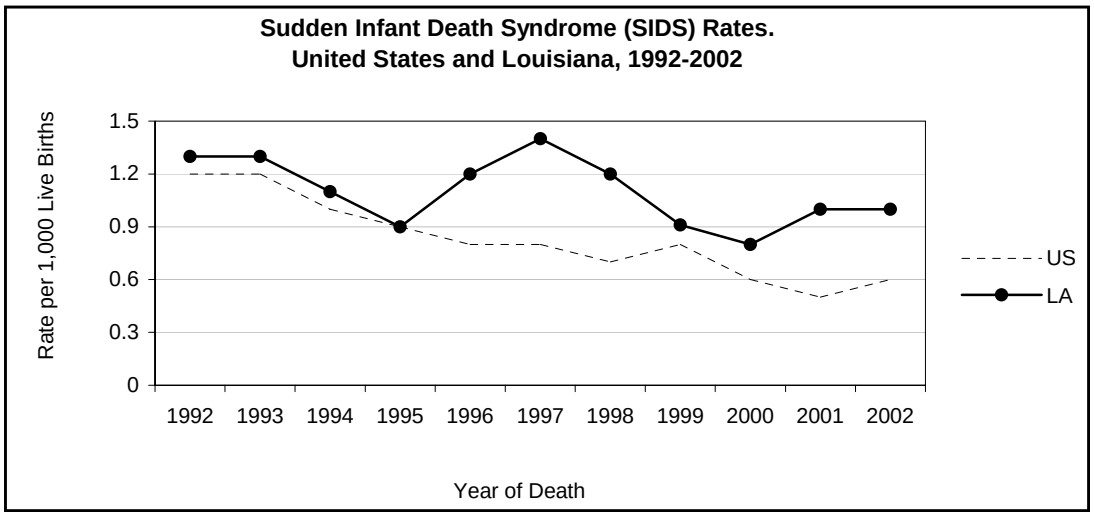


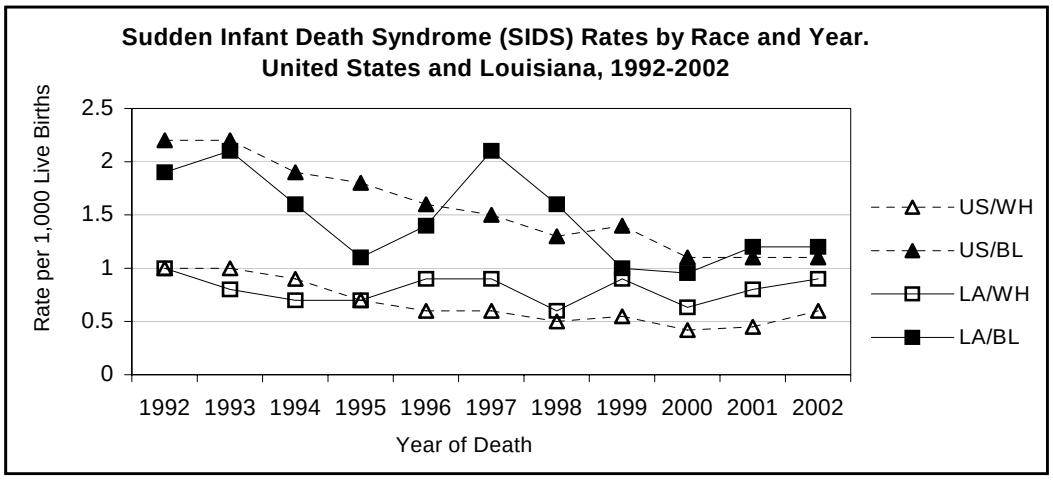
Source: DHH OPH, SIDS Program

In addition to public and professional education and grief counseling, standard data are collected on each case with the hope of identifying preventable circumstances that are associated with unexpected deaths in infancy. Cases are assessed for SIDS risk factors, ethnic-racial trends, and geography-specific trends. A program to improve the investigation of unexpected infant deaths through the training and certification of death-scene investigators was begun in 1996. Over 275 investigators from coroner offices and law enforcement have been trained in conducting death-scene investigations in cases of unexpected deaths in infants.

SIDS was the second leading cause of unexpected child death in Louisiana in 2002. That year, there were 66 deaths from SIDS in the state, equivalent to a death rate of 1.0 per 1,000 live births. Between 1990 and 1995, rates in Louisiana were roughly comparable to the national rates. From 1996 through 2002, the SIDS rate in Louisiana was higher than the national rate. However, over the past decade, the SIDS rate has decreased from 1.3 deaths per 1,000 births to 0.8 deaths per 1,000 births.

Blacks were more likely to die from SIDS than whites in 2002 (31 deaths among blacks for a rate of 1.2 deaths per 1,000 live black births vs. 34 deaths among whites for a rate of 0.9 deaths per 1,000 live white births). For many years, there has been a large disparity between SIDS rates by race, both at the national level and in Louisiana. However, the disparity between ethnic groups in Louisiana has decreased over the years from 2.5 in 1998 to 1.3 in 2002.





LOUISIANA PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (LAPRAMS)

Overview

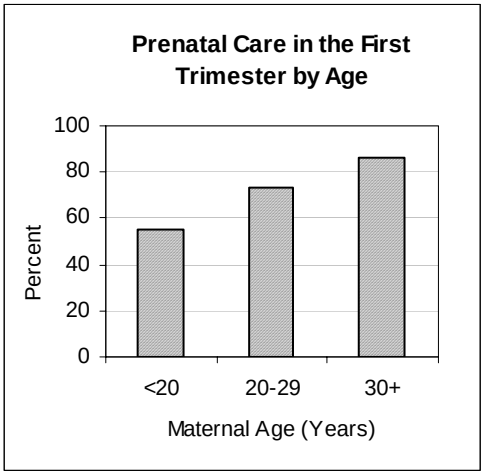
The Louisiana Pregnancy Risk Assessment Monitoring System (LaPRAMS) is an ongoing, population-based surveillance system designed to identify and monitor selected maternal behaviors that occur before and during pregnancy and during a child's early infancy. It is a joint effort between the OFFICE OF PUBLIC HEALTH (OPH) and the CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC). CDC, the OPH VITAL RECORDS REGISTRY, the STATE CENTER FOR HEALTH STATISTICS, and the TULANE UNIVERSITY SCHOOL OF PUBLIC HEALTH AND TROPICAL MEDICINE provide technical assistance to LaPRAMS. CDC, along with the OPH FAMILY PLANNING and MATERNAL AND CHILD HEALTH programs, provide funding for the project.

LaPRAMS data are collected from a representative random sample of new mothers by means of mail surveys and telephone interviews. Louisiana women who have had a recent live birth are randomly selected to participate in the system. Since data collection was initiated in October 1997, 17,992 women have received the LaPRAMS questionnaire. In 2002 alone, 2,357 women were selected to receive the questionnaire, with the response rate at 72%. Since LaPRAMS is based on a representative sample, the data collected by this survey represent information that can be generalized to the whole State of Louisiana. Information provided by LaPRAMS includes: medical and physical factors; socioeconomic status; prenatal maternal experiences and behaviors (e.g., cigarette smoking, alcohol use, and physical abuse); prenatal care counseling; use and barriers to prenatal care; content and quality of care; complications during pregnancy; birth control use before and after pregnancy; sources of prenatal care and payment of delivery; and postpartum maternal experiences and behaviors.

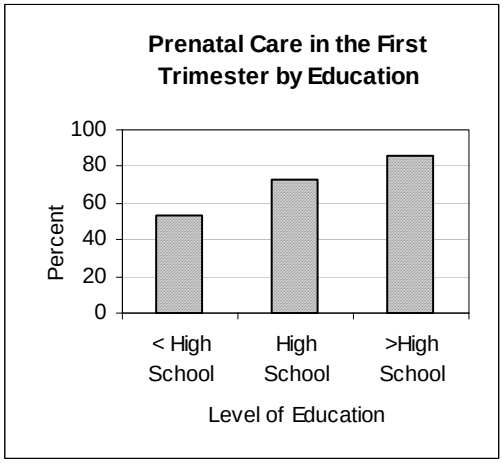
Results

The following are selected findings based on LaPRAMS 2002 data.

- ***Early initiation of prenatal care*:** Seventy-four percent of women reported initiating prenatal care during the first trimester of their pregnancy. The *Healthy Louisiana 2010* target for initiation of prenatal care in the first trimester is 90%. The socio-demographic characteristics of women entering prenatal care during the first trimester are shown below.

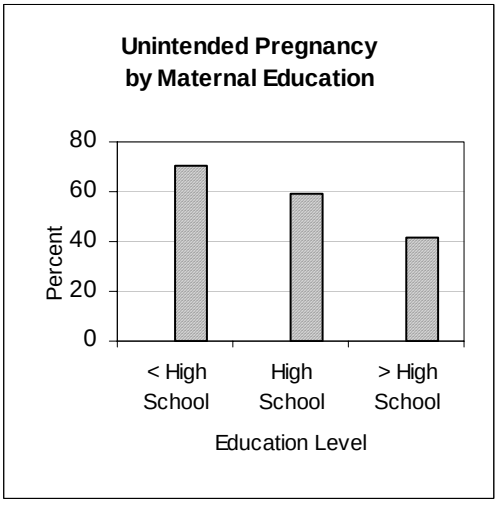


Source: DHH-OPH, LaPRAMS 2002

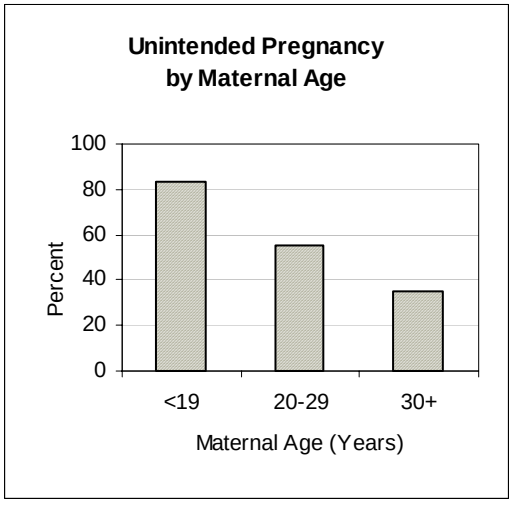


Source: DHH-OPH, LaPRAMS 2002

- ***Unintended pregnancies*:** Fifty-five percent of women reported that their pregnancies were unintended. Unintended refers to the timing of the pregnancy, i.e., whether the woman desired the pregnancy to be at some time in the future or not at all. The *Healthy Louisiana 2010* target for unintended pregnancies is 30%. The socio-demographic characteristics of women reporting an unintended pregnancy are shown below.

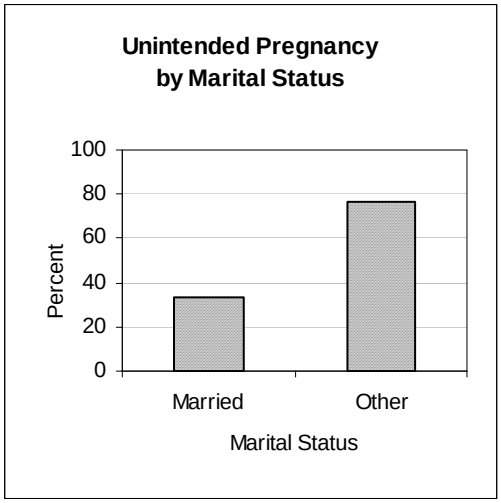


Source: DHH-OPH, LaPRAMS 2002



Source: DHH-OPH, LaPRAMS 2002

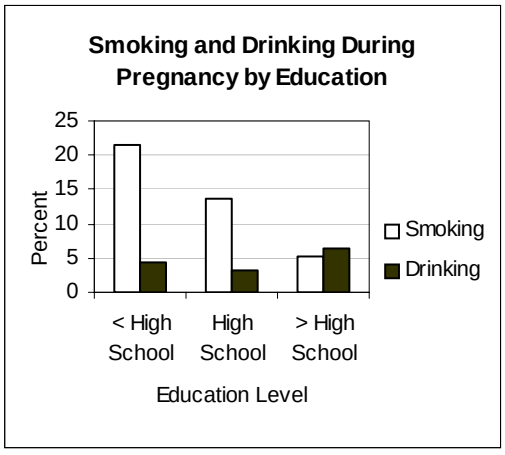
- ***Birth control use:*** Forty-five percent of women surveyed were using birth control when they became pregnant; the remaining 55% were not. Reasons for not using birth control include not minding pregnancy, thinking that they were infertile, and/or husband or partner not wanting to use birth control.



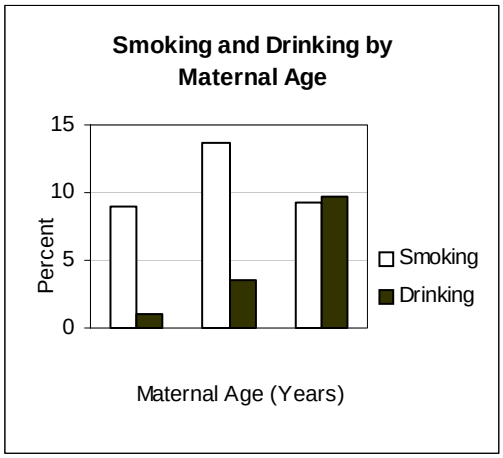
Source: DHH-OPH, LaPRAMS 2002

- ***Cigarette smoking before, during, and after pregnancy*:** Twenty-three percent of women reported that they had smoked during the three months before pregnancy. The percentage decreased during pregnancy to 12% but increased to 19% at 3-6 months after delivery. The *Healthy Louisiana 2010* target for women, in general, is 15%, and 1% for pregnant women specifically.

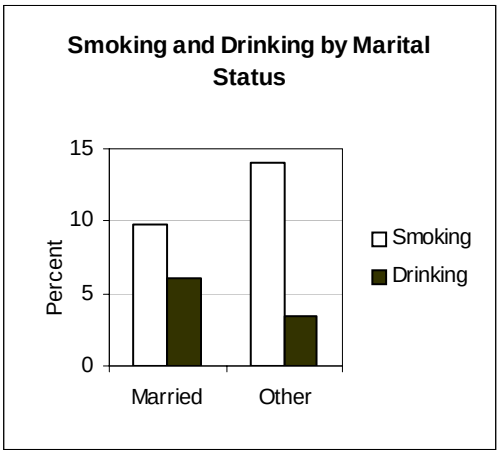
- ***Alcohol consumption before and during pregnancy*:** Forty-two percent of women reported that they drank alcohol during the three months before pregnancy, and 5% reported that they drank alcohol during the last trimester of their pregnancy. The *Healthy Louisiana 2010* target for pregnant women is 6%.



Source: DHH-OPH, LaPRAMS 2002

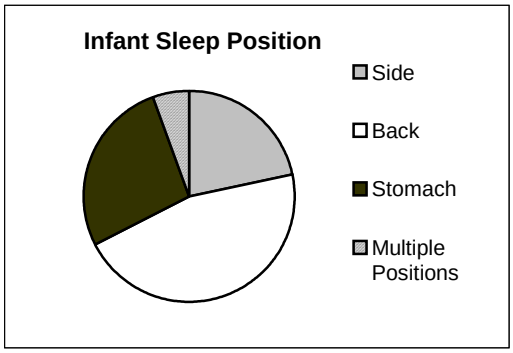


Source: DHH-OPH, LaPRAMS 2002



Source: DHH-OPH, LaPRAMS 2002

***Infant sleep position*:** Among women surveyed, 46% placed the baby on its back, 22% placed the baby on its side, 27% placed the baby on its stomach, and 6% report placing their infants in multiple sleeping positions. Research shows that placing a baby on the back to sleep reduces the risk of Sudden Infant Death Syndrome (SIDS).



Source: DHH-OPH, LaPRAMS 2002

- ***WIC participation*:** Fifty-six percent of women reported being on the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) during their pregnancy.

- ***Breastfeeding*:** Forty-six percent of women breastfed their infants beyond one week. The *Healthy Louisiana 2010* target for breastfeeding during the early postpartum period is 75%. Women with the highest prevalence of breastfeeding in Louisiana were white, 30 years of age or higher, had 13 years or more of education, and were married. Among mothers less than 20 years of age, 29% breastfed their infants. Twenty-three% of mothers with less than a high school education breastfed beyond the first week. Thirty-one% of unmarried mothers breastfed their infants.

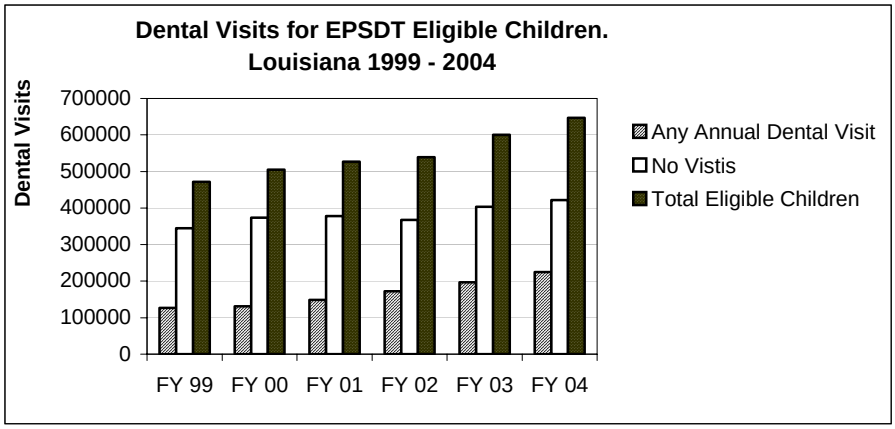
Data from LaPRAMS will be used to supplement information from vital records and to generate information for planning and assessing perinatal health programs around the state. Findings from the data will also be used to develop programs designed to identify high-risk pregnancies. In addition, LaPRAMS data will enhance the understanding of maternal behaviors and the relationship between these behaviors and adverse pregnancy outcomes, such as low birth weight and infant mortality.

Oral Health Assessment

The Oral Health Program aims to improve the oral health status of the residents of Louisiana. Poor oral health in children can have far-reaching consequences, including pain and suffering from infections, absence from school, malnutrition, and diminished sense of self-esteem. Dental decay is the most common disease affecting children. In addition, poor periodontal health has been linked to diabetes, cardiovascular disease, stroke, and adverse pregnancy outcomes. The Oral Health Program of the Office of Public Health, Maternal and Child Health Program, addresses the oral health status of Louisiana's children and pregnant women.

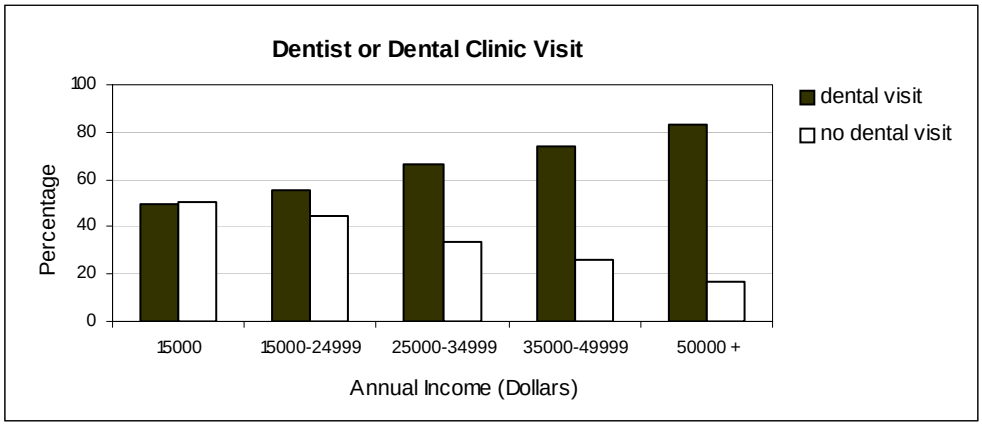
The Oral Health Program collected data by school nurses on 871 3rd-grade students from 7 parishes in the state. Thirty-nine schools participated in the dental screenings. Of the screened children, 37.3% had untreated dental caries; 63.5% had previous dental caries experience; only 18% had dental sealants; and 38.5% had to be referred to dentists for treatment. Data collected by school nurses in 1998 for 3rd graders showed that 38% of the children had untreated dental caries and the prevalence of dental sealants among the children was 22%. This trend indicates a decline in sealant utilization since 1998. The *Healthy Louisiana 2010* objective for dental sealants states that 50% of children should have sealants on their permanent molars.

Medicaid claims data show that, as the enrolled total number of Medicaid/LACHIP eligible children in Louisiana has increased, more children are receiving at least one dental visit per year. Statistics show that the percentage of children receiving an annual dental visit has remained constant at approximately 26% from 1998 through 2002. In 2003, the proportion of Medicaid eligible children who received at least one dental visit increased to 32% and, in 2004, the percentage rose to 34.8.

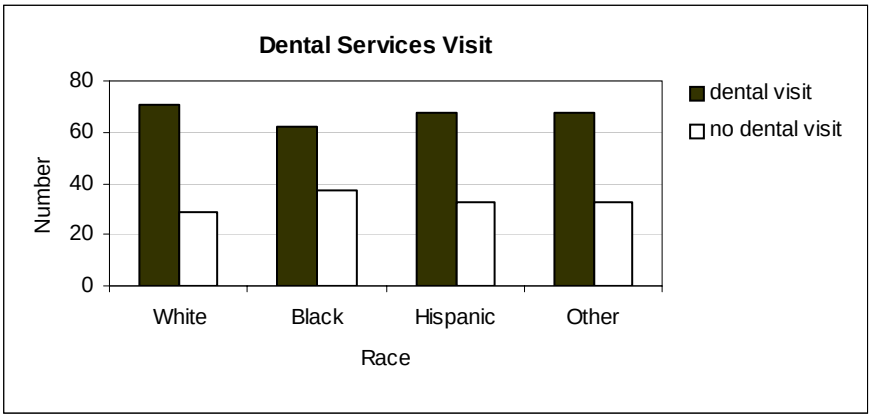


Behavior Risk Factor Surveillance System: 2004 Dental Data

- 68.2% of the population surveyed reported visiting a dentist
- 50.4% of Louisiana residents with an annual income of less than $15,000 per year did not visit a dentist or dental clinic
- 17.2% of Louisiana residents with an annual income of more than $50,000 per year did not visit a dentist or dental clinic
- Hispanics were more likely to visit a dentist than Blacks
- 31.4% of the population aged 65 years and above have lost 6 or more teeth



Source: Behavior Risk Factor Surveillance System 2004



Source: Behavior Risk Factor Surveillance System 2004

The Oral Health Program is committed to preventing dental disease through increased community water fluoridation efforts. Approximately 46% of Louisiana residents have access to community- fluoridated water, which is well below the *Healthy People 2010* objective of 75% of the population receiving optimally fluoridated water. The Oral Health Program has implemented contracts with the cities of Lutcher and Oakdale to provide technical support and assistance with equipment purchases for implementation of community fluoride programs in those cities. As of October 2005, community water fluoridation will be available to an estimated 46.5% of the population with the funding of equipment in Crowley. The Fluoride Program is working with St. Bernard, a water system which serves a population of 67,900, to provide community fluoridated water in 2005.

A study of Louisiana Medicaid data by the CDC[1] showed that the average dental treatment costs for Medicaid eligible children living in non-fluoridated areas were twice as high as the average treatment costs for Medicaid-eligible children living in fluoridated areas. The study also showed that Medicaid-eligible children living in non-fluoridated areas were three times as likely as Medicaid-eligible children living in fluoridated areas to receive dental treatment in a hospital operating room.

The Oral Health Program, in collaboration with the Louisiana Medicaid Program, has implemented a new dental program for pregnant women that provides dental services to this vulnerable population. Current research has linked untreated periodontal disease in pregnant women to as much as a seven-times greater risk of delivering a preterm low birth weight infant than pregnant women without periodontal disease.

The Oral Health Program, in cooperation with the Louisiana State University Health Sciences Center (LSUHSC) School of Dentistry, continues to provide tobacco cessation training to LSUHSC dental students and dental hygiene students. This training provides necessary information and practical experience with pharmacological agents used to alleviate tobacco cravings. These future dental health care providers will then be able to counsel patients on the benefits of not smoking and the risks associated with tobacco usage, as well as offer the necessary tools to help these patients become tobacco free.

Child Care Health Consultant Program

The MATERNAL AND CHILD HEALTH PROGRAM of the OFFICE OF PUBLIC HEALTH coordinates the activities of the Child Care Health Consultant Program. By combining professional health experience with knowledge and training in childcare, consultants work to support, assist, and solve problems with childcare providers in order to improve the safety and quality of childcare. Consultants serve as a source of education, guidance, and support to childcare facilities; provide technical assistance; act as a health resource and referral point; and provide access to health care information. This program also has the advantage of bringing together a multi-disciplinary network of both public and private health professionals from a variety of settings to address local community needs. There are 176 health professionals who have been trained and are approved by the DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF PUBLIC HEALTH.

[1] Centers for Disease Control and Prevention. "Water Fluoridation and Costs of Medicaid Treatment for Dental Decay -- Louisiana, 1995-1996" Morbidity and Mortality Weekly Report. 48; 34 (Sept. 1999): 753.

HOME VISITATION PROGRAMS

Nurse-Family Partnership: Helping First-Time Parents Succeed

The Nurse Family Partnership program (NFP) targets first-time mothers of low socio-economic status. Home-visiting nurses follow well-developed guidelines that require regular (weekly or biweekly) visits to the family from prior to twenty-eight weeks of pregnancy until the infant is two years of age. This model, developed by Dr. David Olds and colleagues, was chosen by MCH because of its proven effectiveness as a preventive intervention. Clinical trials and longitudinal studies have shown that this model of prevention reduced by 79% the verified reports of child abuse and neglect, reduced by 31% the number of subsequent births, and increased by 83% the rates of labor force participation, resulting in improvements in adolescent and parent behavior 15 years later. Furthermore, the latest follow-up study revealed improved school readiness in the children, including improvements in language, cognition, and attention.

Since 1999, the NFP has been available in Region IV (Iberia, St. Martin, and Vermilion parishes) and Region VIII (Franklin, Jackson, Morehouse, and Richland parishes). Services were expanded to Region III (Terrebonne and Lafourche parishes) and Region V (Calcasieu, Beauregard, Jefferson Davis, and Allen parishes) in the spring of 2000. In the spring of 2002, in an effort to further address infant mortality, the NFP (via partnerships with local, state, and community organizations) expanded to Region II (East Baton Rouge Parish), Region VI (Rapides Parish), and Region VII (Caddo Parish). During calendar year 2003 the MCH PROGRAM expanded the NFP program to include all nine regions of the state, for a total of 19 out of 64 parishes. Half or partial teams were developed in Region I (Jefferson Parish), Region IX (St. Tammany Parish), and Region VIII (Ouachita Parish); additional nurses were added to make full teams in Regions III, V, and VI. Additional sites in Regions IV and V have arisen through grants and private case management organizations. Currently, the Nurse Family Partnership is available in 28 parishes, with the eventual goal to have NFP available in all parishes of the state. Since the inception of the program, the Office of Public Health NFP sites have provided nearly 62,761 visits to 5,201 families.

A randomized-controlled study of the program in one region of Louisiana was conducted by the Tulane School of Public Health and Tropical Medicine, supported by funds from OPH, the Office of Mental Health, and the Children's Trust Fund. Results from this study (completed in summer 2002) indicated that women who participated in the NFP program, compared to those who received usual community care, had 52% fewer premature births, 22% fewer low birth weight babies, a 43% reduction in depression symptoms during pregnancy, and a 33% reduction in subsequent pregnancies by the time the child was 14 months of age. Infants experienced 35% fewer hospitalizations, and 50% fewer emergency room visits. Currently, the Louisiana program is working to link NFP statewide data to birth certificate data in a matched case-control study to further explore the impact of the program on birth outcomes.

Provider Training for Parenting Education & Child Abuse Prevention Intervention

MCH has trained nursing and social work staff in Infant Mental Health in all nine OPH regions of the state, as well as staff from the New Orleans Health Department. This 30-hour training, completed in five separate sessions, is designed to improve the staff's knowledge and skills in the early recognition of factors and conditions which place the infant and caregiver at risk for immediate, as well as long-term, problems in social, emotional, and cognitive growth and development. Continuing education credit for nurses is provided. To date, more than 450 public health and other providers have received this training; the goal is to train all nurses, social workers, and other staff involved in maternal and child health clinical programs around the state, as well as all nurses involved in the Nurse Family Partnership program. The training continues to be offered on a semi-annual basis for new MCH staff, as well as for nurses and staff who work in the Nurse Family Partnership Program.

The MCH Program also provides training in Keys to Caregiving, a parenting education program developed at the University of Washington through the Nursing Child Assessment Satellite Training (NCAST) program. Keys to Caregiving originally was developed for hospital nurses to provide information to new parents about newborn behavior, communication, the infant's capacity for relationships from birth, and strengthening the parent-infant relationship, but its usefulness extends well beyond the newborn period. This material is extremely well received by staffs who work directly with infants and their caregivers. Keys to Caregiving is part of the required Nurse Family Partnership staff training; it is also offered to MCH nurses in maternal and child clinical settings who have completed the Infant Mental Health training. Continuing education credit for nurses and social workers is offered for both Infant Mental Health and Keys to Caregiving.

Best Start, a new Maternal-Infant Mental Health intervention which is targeted towards high risk, low income mothers who do not meet NFP program criteria, has been funded in four parishes in the state. The mental health clinicians involved, social workers and marriage and family therapists, received 40 hours of intensive training at inception of the program, and receive 2 hours of training and clinical supervision weekly through an interactive statewide videoconference format. Nurses involved in Best Start receive training designed to improve their knowledge and skills in the early recognition of factors and conditions which place the infant and caregiver at risk for immediate, as well as long-term, problems in social, emotional, and cognitive growth and development. Best Start targets problems in the attachment relationship between mothers and infants that place infants at highest risk for maltreatment. Within the Best Start groups, risk factors for child abuse and neglect are addressed therapeutically, in both the individual/dyadic (two fold) and small therapeutic group formats.

Finally, the MCH program is preparing to begin distribution of the new parenting newsletter*, Happy and Healthy Kids.* The newsletter has an emphasis on social and emotional development and strengthening the parent-child relationship. The easy-to-read format highlights practical information and suggestions parents can understand and use.

PARTNERS FOR HEALTHY BABIES

For state fiscal year 2004, the statewide Partners for Healthy Babies Project continued its outreach through multi-media channels, including a website, to encourage pregnant women to seek out early prenatal care and practice healthy behaviors during pregnancy, such as appropriate weight gain during pregnancy, good oral health, and no smoking. During the same fiscal year, the Partners for Healthy Babies toll-free helpline received approximately 4,358 calls and made referrals to medical and social services statewide. The project also conducted extensive research with Louisiana women statewide to assist with program planning and future campaign direction.

B. IMMUNIZATION PROGRAM

The Shots for Tots Program was developed by the Immunization Program of the Office of Public Health to improve immunization levels among infants and toddlers. The program has four major methods, as detailed below, to improve immunization levels: (1) service and delivery; (2) parent/provider information and education; (3) assessment; and (4) coordination and oversight.

- Service and delivery are enhanced by increasing the number of locations where immunizations can be received, reducing the barriers for families, encouraging evening and weekend immunization clinics, and improving communication among providers.
- Information and education are provided to health care providers and to parents. Health care providers are kept informed of immunization updates and the correct use of vaccines. Parents are educated about the importance of having their children immunized on time.
- Assessment is used to provide feedback to providers regarding their immunization practices, both from the program's perspective and the client's perspective.
- Coordination and oversight establish a central point of responsibility to help improve all of the methods listed above.

Shots for Tots has improved access to immunizations, decreased cost to families, improved public awareness of the need for immunizations, and educated health care providers about proper immunization practices. The following chart illustrates the effectiveness of the Shots for Tots Program. Since its inception in 1992, the program has increased by 25% the immunization levels among two-year-old children receiving care at parish health units (PHUs) in Louisiana through 2002. The impact of PHU closures, lack of immunization on demand/appointment only system, lack of flexible immunization clinic hours, inability to immunize managed care children without a referral, absorbency issues within the private sector, and not providing simultaneous immunizations have synergistically impacted the immunization levels among two-year-old children in 2003, resulting in the lowest immunization level since the inception of the Shots for Tots Program. A slight improvement in 2004 has been noticed, but the rates are still reflecting the impact of the aforementioned issues. More education, information and quality assurance visits will be conducted to ensure immunization best practices and simultaneous administration

of vaccines. The Immunization Program will continue to work with our coalitions comprised of physicians, nurses, voluntary agencies, political leaders, churches, and community organizations. These diverse groups have come together specifically to improve immunization coverage in Louisiana, and the coalition will continue to work and oversee the Shots for Tots plan as progress is made toward achieving improvements.

Immunization Levels Among Two-Year-Old Children Receiving Care at Parish Health Units Louisiana, 1992-2004	
1992	55%
1993	59%
1994	64%
1995	75%
1996	79%
1997	81%
1998	82%
1999	80%
2000	83%
2001	80%
2002	78%
2003	47%
2004	54%

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Immunization Program

C. HEARING, SPEECH, AND VISION PROGRAM: INCLUDING SOUND START PROGRAM FOR THE EARLY IDENTIFICATION OF HEARING IMPAIRMENTS IN INFANTS

The goal of the HEARING, SPEECH AND VISION PROGRAM (HSVP) is early identification of communication disorders. A child's vision, hearing, and language development are the most important skills they will need to be able to learn. Early intervention has profound lifelong benefits for infants and toddlers with any of these disorders while containing costs of special education and other services provided by the state.

During the year 2003, HSVP continued to work toward consolidation of services by collaboration with public agencies and private providers to avoid duplication of services. Many services offered previously by OPH staff will be provided by community agencies. The DEPARTMENT OF EDUCATION and private providers will provide vision screening. HSVP provides training and loan of equipment to schools.

The audiologists under the HSVP will work to ensure audiological services are available in all areas of the state through the private sector and other public agencies. In order to increase the provision of hearing aid services by private providers, the department has worked closely with Medicaid and successfully

raised the reimbursement rates for hearing aids. This will make services available closer to the child's community.

The SOUND START PROGRAM (SSP) under HSVP made great strides during 2003. In 1999, the Legislature mandated UNIVERSAL NEWBORN HEARING SCREENING (UNHS). Since that time, the SSP has worked to insure that hospitals comply with the law. Currently, more than 93% of newborns are screened prior to discharge. Due to the success of this screening initiative, the SSP is now emphasizing follow-up and tracking components of the program to ensure that each child is not only screened, but receives appropriate referrals for follow-up and intervention as well. Two federal grants have been received to expand universal newborn hearing screening and intervention in Louisiana, including funding for an epidemiologist and tracking specialist to insure access to needed services for all children and families. The program encourages community and private sector involvement, which allows unique regional emphasis, while maintaining statewide compliance and coordination.

D. CHILDREN'S SPECIAL HEALTH SERVICES

CHILDREN'S SPECIAL HEALTH SERVICES (CSHS) is a program that provides services for eligible children and families with serious disabilities that significantly limit major life activities. These children have complex medical conditions that may be rare, severe, or disabling and require pediatric subspecialty services on an on-going basis. Some of the products and services provided by CSHS are medications, durable medical equipment, home health care, physical therapy, hospital care, parent training, and case management to coordinate primary and specialty services. There are nine regional CSHS clinics throughout the State of Louisiana.

A 2002 national maternal and child health survey ranked Louisiana 4th in the nation for population of children with special health care needs (CSHCN), with 16% of its children having a special health care needs versus 12% at the national level. Twenty-three percent of households in Louisiana have, at least, one child with a special health care need. The proportion of CSHCN in Louisiana without a primary care provider in Louisiana is 12%. Thirty-two percent of this population has not been insured in the past 12 months versus 11% at the national level.

CSHS provides services to CSHCN, many with complex, severe, medically disabling conditions such as congenital heart defects, cystic fibrosis, cleft lip and palate, cerebral palsy, and neurological disorders. These conditions often require complex medical care including numerous surgeries, hospitalization, and costly drug therapy. Because of the cost-efficient manner in which CSHS provides these services, the cost of treating these children and providing support to their families is very low. Although this program provides medical services for disabilities and chronic medical conditions that children already have, it also prevents these problems from becoming worse and more costly to treat and allows the children to

achieve their full potential in life to become contributing citizens of Louisiana. In 2003, CSHS provided 18,341 clinic visits to 5,111 children.

Since 2001, CSHS has been involved in the Medical Home Project in association with the Louisiana Chapter of the American Academy of Pediatrics, Louisiana State University Health Sciences Center, Tulane University School of Medicine, Children's Hospital, other community agencies, and groups concerned with children with special needs. This project has gained widespread support for training primary care physicians to provide a "medical home" for CSHCN.

Louisiana Birth Defects Monitoring Network

Birth defects are the leading cause of infant death in the United States, accounting for roughly 1 out of every 5 infant deaths each year. The Louisiana Birth Defects Monitoring Network (LBDMN) is a new CSHS program designed to keep track of the type and number of birth defects occurring in Louisiana children.

The LBDMN staff and advisory board have made significant progress in 2004. Act No. 194 of 2001, which established the birth defects surveillance system, required that rules and regulations outlining operational procedures for the system be formally drawn up and made subject to public review and comment. This process has been completed, with the final rule to be published in the June 2004 issue of the *Louisiana Register*. As of July 1, 2004, the new procedures will go into effect and collection of data is projected to begin by the end of 2004.

EarlySteps

Part C of the Individuals with Disability Education Act (IDEA) requires states to develop a coordinated system of interagency services and supports for infants and toddlers with medical conditions likely to cause a disability or developmental delay. EarlySteps is Louisiana's Part C System for infants and toddlers from birth to 3 years of age and their families. Previously, the Louisiana Department of Education was the lead agency for the statewide Early Intervention System (formerly known as Childnet). On July 1, 2003, the Louisiana Department of Health and Hospitals (DHH) became the lead agency. The national goal is for states to serve 2% of children from birth to 3 years of age in the Part C System. On December 1, 2002, Louisiana reported 2,483 children served. This number increased to 3,498 by December 1, 2003 and 3,925 as of March 2004. It is estimated that approximately 5,850 children in Louisiana may be eligible for Part C services due to a disability or developmental delay. EarlySteps is continuing to conduct ongoing outreach to identify children who may be eligible.

EarlySteps services are provided at no cost to families and include the following services: Audiology, Speech-Language Therapy, Occupational Therapy, Physical Therapy, Special Instruction, Assistive

Technology, Service Coordination, Medical Evaluation, Health Services, Nursing Services, Vision Services, Social Work Services, Psychological Services, Family Training, Nutrition Services, and Transportation. Services are provided in the child's everyday environment such as the home, childcare center, or other community settings. EarlySteps has successfully enrolled 1,976 service providers as of May 2004 and is currently conducting comprehensive, mandatory, statewide trainings to ensure quality services are provided to families.

E. NEWBORN HEEL STICK SCREENING AND FOLLOW-UP

DHH-OPH's Genetic Diseases Program, in collaboration with the State Central Public Health Laboratory, operates a statewide Newborn Heel Stick Screening and Follow-up Program in accordance with pertinent legislation and rules (R.S. 40:1299.1.,2.,3 and LAC 48: V. 6300). Screening for Phenylketonuria (PKU) initiated the newborn screening program in 1964, with screening for other diseases being added through the following years. The current official panel includes the following diseases: PKU, congenital hypothyroidism, hemoglobinopathies (sickle cell disease), biotinidase deficiency and galactosemia. Also, through a pilot using tandem mass spectrometry started in November of 2004, universal testing is performed for five additional metabolic diseases: argininosuccinic aciduria, citrullinemia, homocystinuria, maple syrup urine disease (MSUD) and medium chain acyl coA dehydrogenase deficiency (MCADD). These diseases will become an official part of the newborn screening panel in February of 2006. The program's mission of early detection coupled with immediate referral for specialized medical care of an infant with any of these disorders will prevent many, and in some disorders, all of the serious clinical sequelae or after effects. Benefits to Louisiana residents and savings to the state have been substantial over the years as described below:

- Every year, on average, 3 infants with PKU and 16 infants with congenital hypothyroidism are detected and treated early. Given the early initiation of specialized care, these children can live normal lives instead of suffering mental retardation and requiring expensive supports.
- There are approximately 80 infants with sickle cell disease detected and referred into specialized care each year. Before the standard of care included newborn screening, penicillin, and other aspects of specialized care, 30% of the children with sickle cell disease would not reach their third birthday. Recently, the case fatality rate has been within the range for that of the general population for this age group.

The following table provides statistics from the Newborn Screening Program for detection of all diseases included in the panel before the expansion, and shows the number of infants detected with a genetic disorder by disease and by race for each calendar year from 2000 through 2004.

NEWBORN SCREENING DETECTION STATEWIDE FROM 2000 TO 2004										
DISEASES	2000		2001		2002		2003		2004	
	White	Non-white	White	Non-white	White	Non-white	White	Non-white	White	Non-white
CONGENITAL HYPOTHYROIDISM*	6	3	12	5	11	18	25	16	22	25
PHENYLKETONURIA (Classical PKU)	2	0	3	1	4	0	2	1	1	0
SICKLE CELL DISEASE (SS,SC,S-THAL)	0	87	0	73	0	76	0	79	1	96
BIOTINIDASE DEFICIENCY	0	0	0	0	2	0	3	0	1	0
GALACTOSEMIA (Classical)	0	0	0	0	2	0	0	0	1	1
TOTAL BIRTH	**38,467**	**29,806**	**37,284**	**28,337**	**36,605**	**28,150**	**37,066**	**27,623**	**37,066****	**27,623****

* Definition for congenital hypothyroidism: patient requiring thyroid replacement medication for adequate thyroid functioning.
** Provisional data from Vital Records

F. LOUISIANA CHILDHOOD LEAD POISONING PREVENTION PROGRAM (LACLPPP)

The DHH-OPH Louisiana Childhood Lead Poisoning Prevention Program (LACLPPP) is designed to identify and prevent lead poisoning in children between 6 months and 6 years of age through screening, case management, surveillance, health education, and primary prevention initiatives.

Childhood lead poisoning is a reportable disease. The Louisiana Childhood Lead Poisoning Prevention Program Rule (LAC 48:V.7001-7007) requires health providers to report a case of lead poisoning (that is, a case in which the blood-lead level is 15 micrograms per deciliter (µg/dl) or higher) within 48 hours to ensure that the child receives the necessary medical and environmental services. In addition, the rule requires laboratories to report all blood lead levels, regardless of whether or not they are elevated. The information received is used for case management and surveillance. The rule also allows DHH to designate areas as high-risk for lead poisoning and to mandate screening in those areas. Designation of those areas is reviewed and updated on an annual basis.

Statewide lead poisoning prevention services at parish health units began in 1981. In 1998, funding was received from the Centers for Disease Control and Prevention, which enabled the program to establish the Louisiana Childhood Blood Lead Surveillance System (CBLSS) and to become a fully comprehensive, population-based program. The grant also enhanced patient case management and allowed the program to expand its target population from children screened at parish health units to all children, including children screened at private providers. The City of New Orleans Lead Poisoning Prevention Program has also played an important role in addressing lead poisoning. Orleans Parish has taken part in lead

poisoning prevention initiatives since the early 1970s and continues to do so with support from the Office of Public Health.

Program Activities

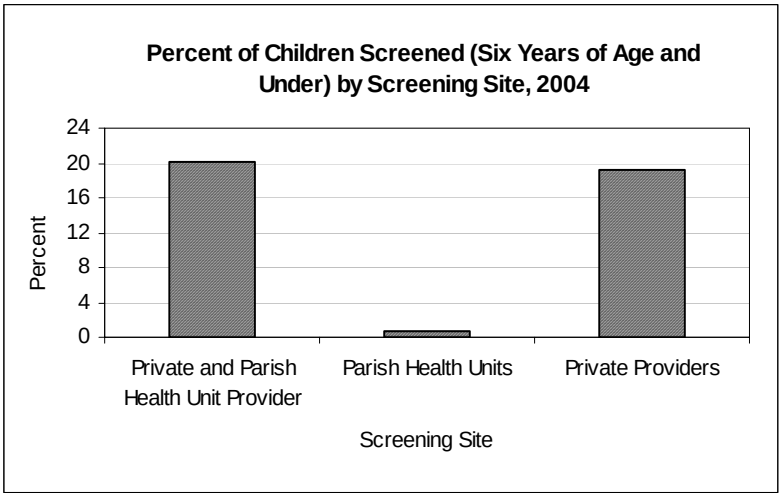
LACLPPP has collaborated with its advisory committee to compose a strategic plan to eliminate childhood lead poisoning by the year 2010. The essential components of the plan are: surveillance, primary prevention (including education/outreach and environmental/housing), and initiatives for reaching high-risk populations.

LACLPPP works with local and statewide organizations to curb childhood lead poisoning by increasing screening in high-risk populations and areas, improving knowledge of lead poisoning, and facilitating comprehensive medical and environmental case management for lead-poisoned children. The program also has a statewide case management system designed to ensure that children with elevated blood lead levels receive adequate care. The driving force behind LACLPPP's activities is its surveillance system, which enables the program to target resources to high-risk areas and populations.

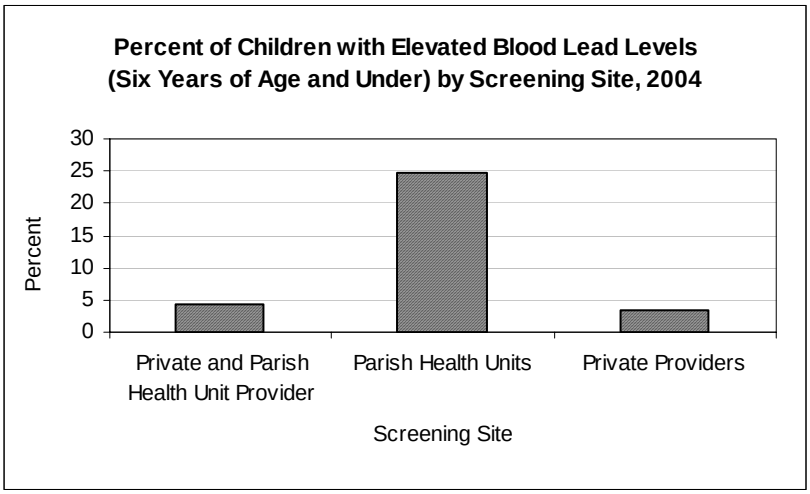
Over the last year, efforts were focused on maintaining and enhancing the childhood blood lead surveillance system by merging public and private laboratory data, developing statewide screening recommendations, and strengthening case management and primary prevention by placing a greater emphasis on environmental activities.

Screening and Prevalence

Lead poisoning is a preventable disease that affects 4.4% of US children between 6 months and 6 years of age. Data from 2004 show that 70,172 children in Louisiana (20.1%) were screened at parish health units and by private providers. Of the children screened, 4.3% had blood-lead levels that were 10µg/dl or greater. A majority of children aged 6 months to 6 years of age have not been reached through screening.

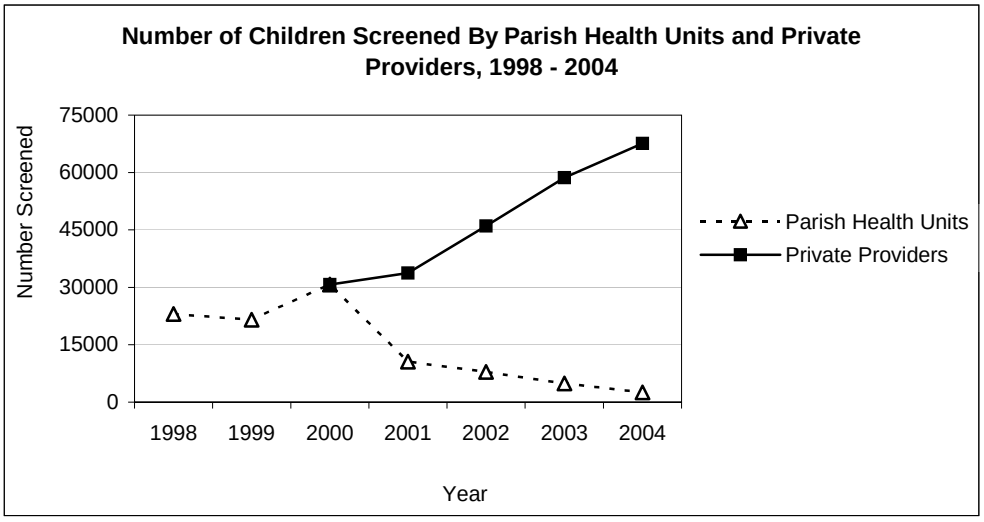


Source: LACLPPP's Childhood Blood Lead Surveillance System (CBLSS)
Denominator data from Census 2000pop.
For children <=6, US Census Bureau



Source: LACLPPP's Childhood Blood Lead Surveillance System (CBLSSS)
NB: Percentage is based on number of Children Screened, not on population of children <=6

In previous years, most children were screened at the parish health units; however, with the shift to DHH's Community Care Initiative, more children are now being screened by private providers. The increase in the number of children being screened by private providers underscores the importance of working with private providers and ensuring that they are aware of program recommendations and guidelines. In the figure shown below, private provider data are not available for 1996 through 1999 as the Louisiana Childhood Lead Poisoning Prevention Program Rule (LAC 48:V.7001-7007), requiring private providers and laboratories to report to LACLPPP, had not yet been implemented.



Screening is an important aspect of lead-poisoning prevention and elimination as it is only through screening that lead-poisoned children are identified. Once identified, the program can ensure that lead-poisoned children receive the necessary services. Thus, over the next year, LACLPPP will focus on

increasing screening rates by ensuring that private providers and parish health units are aware of and comply with the screening recommendations and the mandated screening legislation. Furthermore, the program will assume a three-pronged approach to expand the scope of screening and improve the percentage of at-risk children screened. The program will work with the state Medicaid program to ensure screening and follow-up of this at-risk population, assure screening of children receiving services through WIC at the parish health units, and work with private providers who serve affected children to assure appropriate case management and follow-up.

Future Plans

In addition to increasing screening rates, LACLPPP intends to spend the next year focusing on primary prevention and strengthening its environmental activities by:

- Ensuring the screening plan is implemented on a statewide level;
- Implementing mandated screening in areas specified by legislation;
- Conducting primary prevention activities for families at high risk for lead poisoning, particularly those who live in housing built prior to 1978;
- Working with program partners to promote protective measures and to collaborate on increasing abatement and remediation activities in the state; and
- Implementing the childhood lead poisoning strategic plan to meet the *Healthy People 2010* objective of eliminating childhood lead poisoning by 2010.

G. SAFE KIDS COALITION

The DHH, Office of Public Health, EMS/Injury Research and Prevention Program includes Louisiana SAFE KIDS, Inc. This non-profit coalition is dedicated to the reduction of unintentional injuries in children from birth to age 14 years.

At the state level, Louisiana SAFE KIDS promotes media coverage of preventable childhood injuries, sponsors injury prevention events, and provides ongoing messages that unintentional injuries are the leading cause of death for children under age 14. Louisiana SAFE KIDS also works thoroughly to promote policies and programs to prevent childhood injury. Eight community chapters and three community coalitions sponsor injury prevention education activities in their respective areas.

Examples of these injury prevention education activities include: hands-on child safety seat clinics where trained, certified specialists check for proper child safety seat installation and educate parents how to use car seats correctly; promotion of the use of bicycle helmets through grant programs supporting community projects and reminder tags that are hung on bicycle handlebars; and bicycle rodeos. For information on the broad list of prevention materials available or information on how to start a chapter, Louisiana SAFE KIDS may be contacted at (504) 568-2508.

H. ADOLESCENT SCHOOL HEALTH INITIATIVE

Pursuant to a legislative request, the DHH OFFICE OF PUBLIC HEALTH (OPH) conducted a study in 1990 that concluded that the causes of adolescent deaths and illnesses could be reduced or prevented through greater adolescent health education and improved teen access to primary/preventive health care and professional counseling. Therefore, in 1991, the Louisiana State Legislature created the Adolescent School Health Initiative to facilitate the development of comprehensive health centers in public middle and senior high schools.

The School-Based Health Center Program, officially known as the Adolescent School Health Initiative, is directed by the DHH-OPH, ADOLESCENT SCHOOL HEALTH PROGRAM. School Based Health Centers (SBHCs) are an integral part of the state's Coordinated School Health Program, which also encompasses education, school environment, nutrition, physical fitness, and parent and community involvement.

Sources of funding for the SBHCs include the State General Fund (Tobacco Settlement monies), Maternal and Child Health Block Grant, Preventive Health and Health Services Block Grant, local in-kind contributions, and Medicaid reimbursement.

SBHCs are established by a sponsoring agency (the grantee), which is responsible for management of the health center. Hospitals, medical schools, health departments, youth-serving agencies, community organizations, or school systems may be sponsoring agencies. Each SBHC's staff includes a licensed physician, a nurse practitioner, a registered nurse, a mental health counselor, a clinic administrator, and support staff, who work in collaboration with the counselors, social workers, psychologists, and speech, physical, and occupational therapists on school campuses. Services provided include preventive health care, medical screenings, sports and employment physical examinations, treatment for common simple illnesses, referral and follow-up for serious illnesses, and emergencies. Other services include mental health counseling, immunizations, and preventive services for high-risk conditions such as pregnancy, sexually transmitted diseases, drug and alcohol abuse, violence, and injuries.

In the academic year 2003-2004, 53 SBHCs were operational in 23 parishes, serving 85 public schools and providing access to 50,000 students. Many sites have expanded services to primary and elementary feeder schools. In the 2003-2004 school year, 26,294 students received services, comprising a total of 128,165 individual visits to the centers. This number does not include students who participated in group counseling sessions with mental health professionals.

I. LOUISIANA'S SERVICE SYSTEM FOR PERSONS WITH DEVELOPMENTAL DISABILITIES

The DHH OFFICE FOR CITIZENS WITH DEVELOPMENTAL DISABILITIES (OCDD) administers the Mental Retardation/Developmental Disabilities (MR/DD) Services System. OCDD provides an evaluation of developmental disabilities for persons and/or their families who request such. This evaluation determines the individual's eligibility for services through Louisiana's MR/DD Services System. Eligibility is based on the definition of developmental disability contained in LA R.S. 28:380 et seq.: developmental disability is a severe, chronic disability that is attributable to mental retardation, cerebral palsy, epilepsy, autism, or to any other condition (except mental illness) found to be closely related to mental retardation. Related conditions are included when they result in impairment of general intellectual functioning or adaptive behavior similar to that of persons who have mental retardation or require similar treatment and services. The disability must have occurred prior to age 22; be likely to continue indefinitely; and result in substantial limitations in three or more areas of major life activities, such as self-care, language, learning, mobility, self-direction, and capacity for independent living.

The MR/DD Services System includes public and private residential services and other supports and services to persons with mental retardation and/or developmental disabilities; it is administered through eight community services regional offices and nine developmental centers. These offices and centers are located statewide in or near major cities and provide a range of supports and services that equip the individual or family to plan for, prevent, or lessen the impact of adverse outcomes from the individual's disability. The community services regional offices serve as the points of entry for individuals to receive services from both the regional offices and the developmental centers.

The nine developmental centers provide a variety of residential supports and services, including care and treatment in the residential facility, community-based services such as community homes, extended family living services, Supported Independent Living Program, and day vocational services to their local communities. In concert with the community services regional offices, the developmental centers provide planning and follow-up services for those individuals who have chosen to move from the facilities to live in the community. Family involvement in this process is critical to success.

OCDD community regional offices offer a broad range of services including individual and family supports, such as personal care assistance, cash subsidy, respite, crisis intervention, and supported living services. OCDD regional offices also offer vocational services for adults. These services are provided by private provider agencies through contractual agreements or through individualized agreements with individuals and families who obtain their own service providers. The services are described below.

- The Individual and Family Support Program provides resources to people with developmental disabilities to allow them to live in their own homes or with their families in their own community. Regional offices administer the program through state general fund monies to provide support that is not available from any other source. Individual and Family Support services include, but are not limited to: respite care, personal assistance services, specialized clothing (e.g., adult briefs), dental and medical services not covered by other sources, equipments and supplies, communication services, crisis intervention, specialized nutrition, and family education. Requests for Family Support funding are reviewed each year or when a person's needs change.

- The Cash Subsidy Program provides a monthly stipend to families of eligible children with severe disabilities, until the age of 18. Funds are intended to help families meet the extraordinary cost associated with maintaining their child in the home. Stipends are awarded to eligible children on a first come, first serve basis.

- The Resource Centers are new initiatives implemented in state fiscal year 2003 that provide leadership, enhance communication and collaboration, and increase the availability and capacity of support and services to people with developmental disabilities. Services provided include training opportunities, training curriculum development, provision of resource materials, resource guides, peer reviews, and program reviews. There are five Resource Centers in the state, each offering specialized information and expertise: **Resource Center on Aging with Developmental Disabilities** – Columbia, **Resource Center on Community Inclusion** – Lake Charles, **Resource Center on Dental & Medical Supports** – Belle Chasse, **Resource Center on Nutritional, Physical & Nursing Supports** – Pineville, and **Resource Center on Psychiatric & Behavioral Supports** – Hammond.

There are six Community Support Teams located in various regions throughout the state; they are managed through local developmental centers and accessed through OCDD Regional Offices. Community Support Teams provide support and services to people with developmental disabilities who need intensive treatment intervention, thus allowing them to remain in their community living setting. The support and services include: initial and ongoing assessment, psychiatric services, family support and education, support coordination, and other services critical to an individual's ability to live successfully in the community. Community Support Teams, which consist of psychologists, social workers, nurses, and psychiatrists, provide support and services on an as-needed basis, 24 hours a day, seven days a week. Additionally, Community Support Team services are provided in the community rather than in an office-based practice and combine skills development with clinical management.

J. NUTRITION SERVICES PROGRAM

Nutrition Services in the Office of Public Health are comprised of several programs, including the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); the Commodity Supplemental Food Program (CSFP); the 5-A-Day Program; operation of the Center for Disease Control and Prevention's (CDC's) Pediatric Enhanced Nutrition Surveillance System (PEDNSS); and nutrition consultative services currently provided for the Maternal and Child Health Program, the Children's Special Health Services Program, the Genetics Program, and the Family Planning Program. The overriding goal of Nutrition Services is to promote health through nutrition education and, when necessary, through medical nutrition therapy.

The **Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)** is the largest program operated by OPH Nutrition Services. The Program serves pregnant, breastfeeding and postpartum women, infants, and children up to the age of five who meet eligibility criteria, including an income of less than 185% of the poverty level. WIC is available through a statewide system of 123 clinics located in parish health units and contract local agencies. During state fiscal year 2005, the state served approximately 144,637 women, infants, and children, which represented a 4% increase over the state fiscal year 2004.

The WIC Program in Louisiana is 100% federally funded by a grant from the United States Department of Agriculture (USDA) totaling $99.2 million during federal fiscal year 2005. Of that total $74.4 million were allocated directly to the purchase of specific supplemental foods rich in vitamins A and C, iron, calcium, and protein. Foods are provided through the issuance of vouchers, which are redeemed at approximately 830 approved WIC vendors across the state, thus impacting the state's economy.

In addition to the provision of supplemental foods, the WIC Program provides services including assessment of nutrition risk; development of a nutrition plan of care; and nutrition counseling based on nutrition risk, educational activities, reassessment, and continued nutrition guidance. Prenatal nutrition counseling is extremely important to ensure healthy pregnancy outcomes. Breastfeeding is promoted to prenatal women as a means of providing optimal nutrition and health for their babies.

The **Commodity Supplemental Food Program (CSFP)** is also 100% federally funded by a grant from the USDA. This program provides monthly food boxes primarily to senior citizens, but also serves pregnant women, breastfeeding and postpartum women, infants, and children until six years of age. Participation in the program is approximately 84,816 individuals per month, of whom 80,049 (93%) are senior citizens. The CSFP grant for federal fiscal year 2004 was approximately $4.9 million. Foods provided for the program are purchased by the USDA and distributed to the participating states around

the country. In Louisiana, the CSFP program is administered through a subcontract with the Catholic Archdiocese of New Orleans, which operates at 330 sites around the state with expansion into the northern parishes.

The DHH-OPH Nutrition Services Office has been designated as the licensee for the national **5-A-Day Program**. While no funding exists for this program, the state does benefit from the national public partnership with the National Cancer Institute within the National Institutes of Health of the U.S. Department of Health and Human Services, and a national private partnership with the Produce for Better Health Foundation. The state is able to access free materials on the benefits of consuming at least five servings of fruits and vegetables per day, which are then distributed to the public through the system of parish health units around the state. In addition to the general benefits of good health that fruit and vegetable consumption provide, consuming five servings of fruits and vegetables per day has been associated with a decrease in cancer occurrence in 13 anatomical sites. Considering the high cancer rate in Louisiana, it is important to promote fruit and vegetable consumption; with only 19% of the population consuming at least five servings of fruits and vegetables per day, the state currently falls below the national average of 25% of residents achieving recommended consumption levels.

The **Pediatric Enhanced Nutrition Surveillance System (PEDNSS)** is a collaborative effort with the CDC whereby anthropometric and laboratory data obtained on participants in the WIC program are analyzed in order to identify the participants at highest nutrition risk in the state. These data enable nutritionists in the public health system to provide intervention techniques to improve the health status of the children in Louisiana.

Consultative services are provided statewide to Louisiana's population participating in the Maternal and Child Health Program, the Genetics Program, the Children's Special Health Services Program, and the Family Planning Program. These services are provided both at the state level (directly to program managers) and at the local level (by public health nutritionists in the communities around the state). Consultation relative to these programs usually involves medical nutrition therapy providing intervention in cases of underweight, overweight, oral motor dysfunction, and metabolic disorders such as PKU and galactosemia. Nutrition intervention is essential in managing these conditions.

Programs Targeting Infectious Diseases

K. Tuberculosis (TB) Prevention and Outreach

Through the work of Disease Intervention Specialists (DIS), the DHH-OPH TB Control Section monitors the treatment of reported cases of TB statewide. The DIS staff accomplishes this monitoring through Directly Observed Therapy (DOT), which is a service provided to ensure compliance with and completion of TB treatment for all Louisiana patients in either public or private health care settings. The DIS staff also investigates each case of TB to assure timely identification and evaluation of contacts to TB. Of those patients whose TB cases have been designated "closed," 93% completed therapy in 2000 and 95% completed therapy in 1999, as compared with the 96% completing therapy among the "closed" cases in 1998. The high therapy completion was due to both the intense DOT efforts of DIS staff and to the utilization of incentives and enablers.

L. Sexually Transmitted Diseases (STDs) and HIV/AIDS Prevention Programs

DHH/OPH aims to prevent the spread of STDs and HIV/AIDS through a variety of methods, including: prevention education; HIV counseling, testing, and referral; and partner notification. Other methods include STD treatment and control (including syphilis partner notification) and encouraging patients with other STDs to have their partners seek medical treatment as STD contacts. Additional activities implemented statewide by DHH/OPH involve peer programs, street and community outreach in selected zip code areas, and condom distribution via businesses in communities with high rates of STDs and HIV/AIDS.

STDs

STD control is a labor-intensive task which relies on the rapid location of a person's sexual partners in the community to halt further spread of the disease. The OPH STD CONTROL PROGRAM conducts the following four basic activities in order to prevent the spread of disease:

- Prevention activities which provide education and information to patients and the general public about STDs and the use of condoms;
- Clinical services that include the testing, diagnosis, and treatment of patients seen in public health clinics;
- Epidemiology in conjunction with surveillance, location, and referral of persons suspected of having an STD for examination and early treatment; and

- Targeted screening, which is a mechanism to discover infections in certain populations and determine disease prevalence.

To reach people who have the highest risk of infection, the STD CONTROL PROGRAM works with a number of other health-related programs, including MATERNAL and CHILD HEALTH, FAMILY PLANNING, correctional institutions, substance abuse centers, and other facilities where STDs may be prevalent. Through collaboration with these programs and efforts of STD field personnel, 250,000 STD screening tests are administered annually.

HIV/AIDS

The HIV/AIDS Prevention component of the program is driven by the CDC's required community planning process. This process operated under the structure of 10 local and regional advisory groups and one statewide planning group that ultimately had the responsibility for developing and producing a comprehensive HIV/STD statewide prevention plan. DHH/OPH co-chaired all of these bodies and supported, facilitated, and coordinated this statewide activity. These regional and local groups met monthly, while the statewide group met twice during the year. A three-year HIV/STD Prevention Comprehensive Statewide Plan was developed and submitted with the OPH HIV/AIDS PROGRAM (HAP) Cooperative Agreement to the CDC. This plan identified and prioritized target populations, intervention strategies, and geographic locations throughout the state where HIV/STD prevention activities should be conducted with individuals at high risk for these diseases.

During 2003, OPH/HAP provided support, contract monitoring, technical assistance, capacity building, and training to 28 funded community-based organizations. These organizations conducted the following interventions: prevention resource distribution, street outreach, venue based outreach, small group peer programs, popular opinion leader programs, and prevention counseling and testing. Additionally, statewide public health, STD, substance abuse, and mental health clinics participate in partner counseling and referral services, as well as HIV prevention counseling and testing interventions.

The following accomplishments were reported in 2003: A total of 55,144 prevention counseling sessions were conducted by 178 organizations; 579 new HIV infections were detected through the prevention counseling, 373 individuals were trained in prevention counseling and outreach; 429,892 street outreach contacts were conducted; 715 educational sessions, which trained 86 peer leaders and 1,985 peer participants, were conducted; 3,122 telephone calls were received by the Statewide Hotline; and 187,489 brochures were distributed to the residents of Louisiana.

The Perinatal HIV Prevention Program, now in its fifth year, was funded by a grant from CDC. This grant has now become part of the annual base award for the HIV/AIDS Prevention Program. The focus of the

perinatal program is to maximally prevent mother-to-child transmission of HIV through promotion of the nationally recommended testing and treatment protocols and by strengthening linkages to care.

As part of these efforts, the HIV/AIDS Program has distributed education materials statewide, and is continuing to reach out to clinicians and medical centers statewide to promote the U.S. Public Health Service recommendations for screening and treatment of HIV for pregnant women and their newborns. In collaboration with the Family Advocacy Care and Educational Services Program, the HIV/AIDS Program has distributed folders with patient and clinician education materials to over 2,500 obstetricians/ gynecologists and family practice physicians and pediatricians, residency programs, medical centers, parish health units, clinics, and social service agencies throughout Louisiana. In addition, over 50,000 pocket cards have been distributed to females at high risk during street outreach. These materials are available and can be ordered through the HIV/AIDS Program Clearinghouse Resource Center.

Programs Targeting Chronic Diseases

M. Heart Disease and Stroke Prevention Program

Louisiana has the 9th highest mortality rate for cardiovascular disease in the nation. In 2002, the death rate from cardiovascular disease in the state was 12% higher than that for the rest of the nation, Likewise, the state ranks 12th in the nation for stroke mortality. Louisiana is located in an area of the country known as the Stroke Belt, where the highest rates of stroke mortality in the nation are found. Louisiana is represented in the Delta States Stroke Consortium (DSSC), which also includes Mississippi, Alabama, Tennessee, and Arkansas. Through the consortium, the state will implement a pilot project designed specifically to address the burden of stroke in this region.

The legislatively mandated Louisiana Stroke Task Force submitted recommendations to the Legislature on how to reduce the burden of stoke in the state. The recommendations include:

- reducing stroke risk through healthy lifestyle practices
- recognizing stroke warning signs
- adopting and disseminating stroke protocols and guidelines

This year, the task force promoted the recognition of Stroke Warning Signs by raising billboards across the state in areas where stroke mortality is the highest. Along with the Bureau of EMS, the Heart Disease and Stroke Prevention (HDSP) program distributed fact sheets on Stroke and High Blood Pressure to nine major industrial sites, Counsels on Aging, and schools housing Automatic External Defibrillators (AED) throughout the state. The HDSP program also partnered with the American Stroke Association to distribute Stroke Patient Education Toolkits and Heart Truth for Women Toolkits to 100 Community Care clinics around the state.

In 2005/06, HDSP Program will lead the HDSP Coalition in completing assessments in the Community and School settings. These assessments, combined with the Worksite and Health Care Assessments conducted last year, provide a "state of the state" picture of programs, policies and environments in Louisiana. The HDSP program and key partners in the coalition will implement strategies set forth in the State Plan for Cardiovascular Health based on gaps identified by the Environmental Assessments.

The HDSP program continues to support the Behavioral Risk Factor Surveillance Survey conducted by **University of Louisiana at Monroe**. Plans for this year include 9 regional reports using BRFSS signs and symptoms and CVD optional modules identifying demographic, geographic, and other disparities using the expanded 2004 BRFSS and disseminate 2005 State of the Heart Report.

Activities planned for 2004 include: collaboration with the American Heart Association to conduct a statewide training conference on the adherence to nationally recognized guidelines for treatment of heart disease and stroke; and collaboration with community health centers for appropriate treatment and follow up for patients with identified risk factors for heart disease and stroke and reoccurrence of heart attack and stroke.

N. DIABETES CONTROL PROGRAM

The Louisiana DIABETES PREVENTION AND CONTROL PROGRAM (DPCP) began receiving funding from CDC on October 1, 1996. The overall goal of the program is to reduce the burden of diabetes in Louisiana using the following methods: *monitoring* the prevalence and incidence of diabetes and available care and education opportunities; *informing* the population on how to use existing resources as efficiently and effectively as possible; and *strengthening* weak points in the diabetes care system. Through these methods, DPCP hopes to reduce morbidity and mortality related to diabetes in the state. It is hoped that future efforts will focus on primary prevention of type-2 diabetes through obesity prevention for high-risk groups.

Activities supported by the Louisiana DPCP include the following:

- **Coordinate diabetes efforts with other prevention activities.** Because of the overlap in intervention strategies and risk factors for diabetes, cardiovascular health, and tobacco use, the Health Promotion and Chronic Disease Control Section of OPH, which administers the Louisiana DPCP, will integrate reducing the burden of diabetes with existing programs. This program includes collaborating to develop and implement standards and quality assurance for preventive services in clinical settings and community-based interventions that target risk and preventive healthcare-seeking behaviors, as well as community-based and statewide marketing of health messages aimed at the 10 leading causes of death.

- **Create a comprehensive surveillance and evaluation system** using existing vital statistics, surveillance data, client encounter-based systems, and data from the Behavioral Risk Factor Surveillance System, a diabetes module of which has been in place since 1997. A partnership has been established with the Louisiana State University Health Sciences Center. Collaborations have also been developed or strengthened with the Louisiana Diabetes Association, Medicaid, and the Louisiana Healthcare Review, as well as with managed care organizations, insurers, and employers.
- **National Health Disparities Collaborative.** This effort is being addressed through a contract with the Louisiana Primary Care Association and partnering with seven community health centers. The goal is to reduce the burden of diabetes in disparate populations by increasing the capacity to provide diabetes patient education and improve the data management system that tracks the health care of the homeless patients on the diabetes registry.
- **A statewide Diabetes Initiatives Council.** The Council will adopt diabetes standards of care guidelines, develop a state plan for Louisiana, and establish a "Diabetes Center of Excellence", and make recommendations to the Secretary of the Department of Health and Hospitals. The Council also serves as a catalyst for collaboration among public, private, and community-based organizations around diabetes issues.

O. TOBACCO CONTROL PROGRAM

The OPH TOBACCO CONTROL PROGRAM (TCP) is committed to promoting partnerships and using research-based strategies for tobacco prevention, control, and awareness in order to empower citizens to make healthy lifestyle choices and strive to create a tobacco-free Louisiana.

Program Impact Statement

The Louisiana TCP has been working diligently to decrease the burden of tobacco use on the residents of the state through evidence-based strategies and activities. The program's community outreach efforts to prevent tobacco use and decrease current smoking through cessation services have benefited a diverse group of Louisiana residents. Furthermore, the program's success can be measured by the fact that, in spite of the millions of dollars that are spent each year by the tobacco industry to lure people into the smoking addiction, the number of adult Louisiana smokers has remained constant over the past 10 years.

Goals

The TCP's goals are to: 1) prevent non-smokers from starting; 2) help current smokers to quit; 3) prevent exposure to second-hand smoke; and 4) eliminate health disparities among special populations to reduce the burden of tobacco-related diseases.

Tobacco Facts

- Tobacco use is the single most preventable cause of death and disability in our society, causing more deaths every year than AIDS, alcohol, car crashes, murders, suicides, and illegal drugs combined.[2]
- Approximately 100,000 youth in Louisiana are projected to die prematurely due to smoking.[2]
- An increasing number of adolescents in Louisiana become addicted to tobacco products at an early age and go on to become chronic users each day.[3]
- One in four adults in Louisiana (752,000) is a current smoker.[4]
- One in four Louisiana children has tried cigarettes by the 6th grade.[3]
- Tobacco causes one in five deaths in Louisiana.[5]
- The economic cost to the state associated with tobacco use is approximately $1.46 billion a year.[5]
- Children exposed to environmental tobacco smoke (ETS), or second-hand smoke, are at an increased risk for sudden infant death syndrome, acute respiratory tract infections, asthma induction and exacerbation, and middle ear infections.[6]
- Approximately 744,000 Louisiana children under the age of 18 years were exposed to ETS inside their homes.[4]
- One in five mothers of newborns reported smoking cigarettes during the first 3 to 6 months after delivery.[7]

The Program

Implemented in 1993, OPH/TCP focuses on: increasing community awareness of the harmful effects of ETS; assisting communities in policy development which makes tobacco use less socially acceptable; empowering youth and adults to recognize tobacco industry advertising tactics used to promote smoking; and developing strategies to counter these messages.

The program plan and components are based on the *Best Practices For Comprehensive Tobacco Control Programs* recommended by Office on Smoking and Health of CDC. These specific components are:

[2] Centers for Disease Control and Prevention. Projected smoking-related deaths among youth – United States, 1996. Morbidity and Mortality Weekly Report 1996;45(44):971-4

[3] Tobacco Control Program, Office of Public Health, Louisiana Department of Health and Hospitals. Louisiana Youth Tobacco Survey (LYTS) – 2000.

[4] Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Behavioral Risk Factor Surveillance System (BRFSS), 2000.

[5] Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC) Report – Louisiana 1999

[6] EPA. Respiratory health effects of passive smoking: Lung cancer and other disorders. EPA/600/6-90/006F; December 1992.

[7] Louisiana Office of Public Health. Louisiana Pregnancy Risk Assessment System (LAPRAMS), 2000.

Community Interventions for Tobacco Control

Community mobilization and empowerment make up a significant component of the OPH/TCP initiatives. The program provides grants to community-oriented organizations to coordinate community planning and capacity building for tobacco prevention and control.

Tobacco Control Program Policy Priorities

OPH/TCP promotes policy development and change by encouraging an increase in tobacco excise taxes (which is directly related to a decrease in consumption by youth) and promoting clean indoor air in public places, worksites, schools, and all other places where children learn and play.

Strategic Use of Media

The Louisiana TCP is executing two marketing and public relations outreach campaigns. The Educational and Promotional Multimedia Smoking Cessation Campaign is aimed at those who want to quit smoking. It will also promote the use of the toll-free 1-800-LUNG-USA smoking cessation helpline. The Educational and Promotional Multimedia Second Hand Smoke Campaign informs the public of the risks associated with tobacco use and promotes changes in behavior to reduce exposure to second-hand smoke through radio and print ads and the cutting-edge Louisiana-specific website www.BreatheEasyBayou.com. The website provides information for various audiences including pregnant women, restaurant/bar workers, and businesses owners, among others. The website also encourages web visitors to "Tell Their Story" about ETS by posting their stories directly to the site, which the program utilizes in media outreach activities. The ultimate goal of the campaign is to decrease the number of tobacco smokers and to reduce the number of people exposed to ETS. The second hand smoke media campaign also aspires to eliminate and prevent first time smoking among the youth population and to encourage worksites and major public facilities to establish and implement smoke-free policies. Louisiana residents will be exposed to television and radio commercials, billboards, and other print materials that will convey both the cessation and second-hand smoke messages.

Cessation Services

TCP receives funding from CDC and the State of Louisiana. In 2002, the Legislature awarded OPH $500,000 for tobacco cessation efforts. OPH-TCP has used the funding to implement the 1-800-LUNG-USA helpline and establish Freedom From Smoking (FFS) clinics both in person and online, at www.ffsonline.org, throughout the state. The FFS clinics target Medicaid patients, the uninsured, and state workers. OPH-TCP sponsors the cessation helpline as a free service to all Louisiana residents. Both the cessation helpline and the FFS clinics are provided through a partnership with the American Lung Association of Louisiana.

OPH-TCP also provides a Perinatal Cessation Program. Through this program, medical professionals in the state are trained to counsel pregnant and post partum women on quitting smoking and the negative

health effects of smoking while pregnant and/or while in the presence of their children. This program also provides outreach to the pregnant and post partum women by working with workplaces, churches and community organizations that involve women of childbearing age. These services are provided through partnerships with the American Cancer Society and the American Lung Association of Louisiana. This program is evaluated by the Louisiana State University Health Science Center School of Nursing.

Interfaith Program

The purpose of this program is to develop a statewide interfaith organization, identify and train congregational health advocates, identify and train regional health ministers, and to serve as a forum for pastors and lay leaders in Louisiana's faith communities statewide. Through the Interfaith Program, Congregational Health Advocates are trained to provide tobacco prevention education in churches statewide. The Congregational Health Advocates serve as a conduit to help churches to go smoke-free both collectively as a congregation through smoke-free church policies and as individual members. The purpose is to involve faith-based organizations (FBOs) such as churches as an integral part of the community in the area of advocating for smoke-free policies, environments, homes, and families. The program is headed by two FBOs/community-based organizations: the LeBrane Legacy Foundation and Holy Temple International, Inc. Over 100 congregational health advocates have been trained. Relationships have been established with the Church of God in Christ, the National Baptist Convention, Southern Baptist Convention, non-denominational churches, Apostolic churches, low socioeconomic-status populations through the Catholic Archdiocese of New Orleans, the Baha'i faith, and Muslim masjids (mosques). Capacity building is achieved through presentations, training, and congregational meetings. The program promotes quitting by helping pastors set up health ministries. Collaborating programs include the Coalition For A Tobacco-Free Louisiana, Communities of Color, American Heart Association, American Lung Association, Rapides Foundation, McFarland Center, and the Office of the Social Apostolate of the Archdiocese. Religious leaders and laity have shown great interest in the tobacco control efforts and are particularly interested in smoking-cessation strategies. Currently, the program is producing a faith-based resource guide on health-related information with the goal of building healthier churches throughout Louisiana.

Diversity Program

The purpose of this program is to identify and eliminate disparities among specific population groups. Currently, the diversity program works to serve four disparate groups: 18-24 year olds, blacks, Vietnamese, and Hispanics. OPH-TCP is currently developing projects that address each of these groups directly.

To address the disparity among 18-24-year-olds, OPH-TCP is currently implementing the Bacchus Gamma "Step by Step Program" which is CDC-approved and recommended. Step by Step is a detailed

guide to developing student advocacy groups on college campuses to address tobacco control. This project involves developing campus advocacy groups on 13 of the state's major colleges and universities. The program will be expanded to include more universities in the coming years due to an exceptional interest among the campuses and the specific requests received from university presidents.

In order to address the plight of tobacco-related illness in the black community, TCP is currently mobilizing this community statewide around the topic of tobacco prevention, cessation and control by making links and contacts with community leaders that will result in 9 regional advocacy groups that will serve as the Louisiana African American Tobacco Control Network. The first year of this initiative is culminating in an unprecedented African American Summit on Tobacco and Health in Louisiana.

The Vietnamese community is a unique community that is growing and in need of specific messaging and programming. In 2002, OPH-TCP conducted a needs assessment in the Vietnamese community throughout the Greater New Orleans area. The information is now being used to provide effective programming such as education and awareness in the Vietnamese community. Currently, the program is working to identify translators and community leaders to become partners in tobacco control activities specifically geared toward these citizens.

The Hispanic community is the fastest growing minority community in the nation, which also requires specific messaging and programming as a form of outreach. Currently, OPH-TCP is working toward offering perinatal cessation brochures and other materials in Spanish to effectively include these citizens and serve them. In July 2003, OPH-TCP contracted with an organization in New Orleans to conduct a needs assessment of the Hispanic community in the Greater New Orleans Area. This assessment will be used to provide specific programming geared directly toward eliminating tobacco related health disparities in the Hispanic community statewide.

OPH-TCP is also currently working with the Governor's Council on Physical Fitness and Sports to eliminate disparities in the American Indian community statewide by conducting programs in the Cherokee/Chahta/Creek tribe in Slidell.

CDC has requested that each state address all of the aforementioned groups. There are a number of other groups that will be reached in the near future including the Gay Lesbian Bisexual Transgender group and institutionalized smokers.

Youth Tobacco Prevention and Youth Advocacy

OPH-TCP also funds a Youth Tobacco Prevention Program which focuses mostly on sports as an alternative to tobacco use and involves collaboration between the Governor's Council on Physical Fitness

and Sports and the New Orleans Saints Organization. This program encourages activism and leadership among elementary, middle, and high-school students.

Through TCP's Youth Advocacy Program, youth ranging from middle-school age to college age are trained to advocate for policy and environmental change. The current focus is on increasing the state excise tax on tobacco products, advocating clean indoor air, and increasing the number of smoke-free environments statewide. OPH-TCP also educates the youth in media literacy, which, enables them to understand the tactics used by the tobacco industry to target them for tobacco use (media literacy is the ability to "read" television and mass media). It also provides the tools necessary to access, analyze, and evaluate the persuasion methods used in commercial media. By examining who pays for an advertisement, how the advertisement is made, and the messages in an advertisement, youth learn to identify the marketing methods used to communicate primary and secondary messages. Media-literacy training identifies the commercial influences on tobacco use. These young people conduct their own activities at the State Capitol and host programs during national observances such as KICK BUTTS DAY and WORLD NO TOBACCO DAY.

Tobacco Surveillance and Evaluation

Current Surveillance Efforts

OPH/TCP collects data on tobacco-use patterns through the Behavioral Risk Factor Surveillance System (BRFSS) and the Youth Tobacco Survey (YTS). The information obtained from BRFSS assists in: identifying the need for interventions; monitoring the effectiveness of existing interventions and prevention programs; developing health policy and legislation; and measuring progress toward attaining state and national health objectives. The YTS gathers information about tobacco use patterns among middle and high-school students and provides valuable information for program planning, implementation, and evaluation.

Current Evaluation Efforts

The Louisiana TCP has contracted with the University of North Carolina (UNC) at Chapel Hill to perform a comprehensive evaluation of the program. This evaluation will include the measurement of program outcomes and the impact the Louisiana TCP is having statewide. UNC-Chapel Hill has a verifiable track record in the field of tobacco control evaluation and will equip the Louisiana TCP staff with the expertise to maintain evaluation efforts once their contract has ended.

Riester-Robb, one of the country's leading public relations firms, is the media contractor for the Louisiana TCP. Through a request for proposals (RFP) process, Riester-Robb was awarded the contract with the Louisiana TCP to develop and implement a statewide secondhand smoke education campaign and tobacco cessation effort. The secondhand smoke campaign is currently being evaluated and the

campaign's awareness, message recall, attitudinal changes, perceptional changes, and, most importantly, behavior changes are being monitored on an ongoing basis. All data generated are compared to the originally established baseline data. This methodology will allow the Louisiana TCP to fully document campaign progress.

The Louisiana State University Health Sciences Center (LSUHSC) School of Nursing is currently evaluating the Perinatal Smoking Cessation Program, with Dr. Demetrius Porche as the principal investigator. The final results of this evaluation will provide recommendations for further program development and health policy that impacts tobacco usage among pregnant women in Louisiana.

Accomplishments of the TCP:

- The Louisiana Department of Education and OPH/TCP have teamed together to begin the formulation of a comprehensive tobacco-free school policy for the entire state. Preliminary meetings have taken place and a written policy is being formulated. The goal is to present the policy to the Louisiana Board of Elementary and Secondary Education by the fall of 2004.
- OPH/TCP, in conjunction with the Coalition for a Tobacco Free Louisiana (CTFLA), hosted a Communities of Color Meeting in which participants were educated about the problems of tobacco use.
- OPH/TCP and CTFLA jointly conducted Advocacy Training.
- OPH/TCP and CTFLA completed two memoranda of understanding (MOUs) for the Legislative Session in 2004 and 2005. These MOUs clearly state that CTFLA will take the lead role in advocating and educating for TCP's goals of restoring local control in 2004 and increasing the state excise tax on tobacco products in 2005.
- Conducted a radio and print advertisement campaign on ETS, added a website component to the program's ETS media campaign (www.BreatheEasyBayou.com), and conducted media with public relations events around the State of Louisiana.
- TCP's five-year strategic plan was completed in April 2003. The program is on target with the plans and recommendations.
- TCP has collaborated with the newly organized Louisiana Comprehensive Cancer Control Plan, which will develop and execute a statewide comprehensive cancer control plan with a specific tobacco use work group, by submitting the program's strategic plan to use a model for the tobacco use section.
- With partial support from TCP, the BRFSS expanded its sample size from 5,000 to 9,000 for the 2004 survey year. In addition to the core Tobacco questions, 3 optional modules (Other Tobacco Products, Smoking Cessation, Secondhand Smoke Policy), and 3 state added questions were included. For the first time, Louisiana is now positioned to collect critical data on tobacco indicators and evaluation measurements for each of the state's 9 OPH Regions. This enhanced geographical capability will

allow for Louisiana to identify disparities related to geography. Furthermore, this vastly larger sample size will also allow for detailed analysis of indicators by race, sex, and age.

- TCP successfully partnered with the Heart Disease and Stroke Program on two statewide data collection ventures: Workplace Wellness Survey and Healthcare Site Survey.
- Together with the Heart Disease and Stroke Program and the Tulane University Prevention Research Center (PRC), TCP has embarked on a collaborative project to assess the status of worksite health promotion policies in business and industry across Louisiana. The PRC is in the process of administering a telephone survey to obtain workplace wellness information on businesses across the state.

Partners include:

- **American Lung Association of Louisiana—"**To Quit Smoking for Good" Call 1-800-LUNG-USA.
- **Louisiana Public Health Institute (LPHI)—**LPHI is also the site of the Coalition for a Tobacco-Free Louisiana and the Campaign for Tobacco Free-Living. OPH/TCP is a participating member of this statewide coalition of public and private agencies, institutions, and individuals dedicated to the cause of tobacco prevention and control in the state.
- **University of New Orleans Conference Services -** serves as a logistics contractor for all trainings, conferences and meetings.
- **New Orleans Saints—Youth Tobacco Prevention Physical Activity Program -** incorporates tobacco control policies and clean indoor air messages in the Healthy Living portion of the Junior Training Camp and the Sunday Morning Football Program.
- **American Cancer Society—"Make Yours A Fresh Start Family" -** Provides training to public and private medical providers in the area of counseling pregnant and post-partum smokers.
- **LeBrane Legacy Foundation / Congregational Health Advocates in Tobacco (C.H.A.N.T.) and Holy Temple International, Inc. -** This grassroots coalition seeks to eliminate exposure to second hand smoke and advocates local involvement, particularly by faith-based organizations, in community tobacco policy.
- **Governor's Council on Physical Fitness and Sports -** The Council identifies elementary and middle-school students who participated in the statewide, 30-parish fitness assessment study and who are at risk of becoming habitual smokers. These students will be informed about the dangers of tobacco and tobacco-related products along with other tobacco control and prevention initiatives. This program reaches 90,000 school-age children statewide.
- **Mothers Against Drugs of Louisiana, Inc.** - Conducts tobacco control policy presentations covering topics such as the passage of local smoke-free air ordinances and other tobacco related topics in order to promote policy change locally throughout Caddo, Bossier, Red River, and De Soto parishes.
- **Gibsland Youth Community Resource Center -** Promotes clean indoor air policies throughout Claiborne, Webster, Lincoln, Bienville, Jackson, and Union parishes by conducting tobacco control

policy presentations to parish and municipal governments, school boards, business/trade/civic organizations, and worksites/public places to develop formal smoking policies that prohibit smoking indoors.

- **Southwest Louisiana Area Health Education Center (SWLAHEC) -** Serves a 13-parish area of southwestern Louisiana. SWLAHEC has played a significant role in the establishment of a tobacco-control coalition in its service area and advocating tobacco control policies for the state.
- **No Smoking Environment Coalition (NoSE)-**Promotes the passage of local smoke-free ordinances and educates decision-makers and community leaders/members on the dangers of second-hand smoke through presentations and community forums.
- **Empowering Communities of America-** Provides tobacco-control prevention and education to nine parishes of northern Louisiana. This organization is taking the lead in their area in bringing together local businesses, school systems, and city governments in taking a stand against tobacco use.

P. ASTHMA PROGRAM

Asthma is a chronic lung disease characterized by acute episodes or attacks of breathing problems such as coughing, wheezing, chest tightness, and shortness of breath. These symptoms are caused by airway swelling, blocked airways, and increased responsiveness of the airways to a variety of stimuli or "triggers." The triggers that cause an asthma episode vary with individuals; the most common include:

- allergens such as pollen, animal dander, dust mites, and molds;
- irritants such as cold air, strong odors, weather changes, and cigarette smoke;
- upper respiratory infections such as a cold or flu; and
- physical exercise, especially in cold weather.

The Community Health Promotion and Chronic Disease Section has recently established a statewide Asthma Program. This program's objectives are to:

- Develop relationships with other organizations and stakeholders within the community and throughout the state to create an Asthma Coalition.
- Prepare grant applications for submitting to the U.S. Environmental Protection Agency (EPA), CDC, and other federal agencies to secure funding.
- Create a State Asthma Plan to include:
    - Collection of new (and review of already-collected) asthma data.
    - Identification of persons with the condition, providing education on the importance of environmental modifications and correctly adhering to management regimens, and providing quality medical care to those in need.

Through these objectives, the Asthma Program will achieve the ultimate goals of increasing knowledge and awareness about asthma, decreasing asthma mortality and morbidity, reducing the burden of cost of asthma, creating behavior modification regarding asthma and its triggers, and reducing the number of hospitalizations and emergency room visits statewide due to asthma.

Important Asthma Facts

- An estimated 200,000 adults in Louisiana currently suffer from asthma.
- One in ten Louisiana households with children has, at least, one child with asthma.
- Asthma disproportionately affects the poor, minorities, and women.
- Asthma costs Louisiana approximately $184 million every year.

Programs Targeting Substance Abuse

Q. ALCOHOL, DRUG, TOBACCO, AND PREVENTION ADDICTION SERVICES

The Impact of Substance Abuse: OFFICE FOR ADDICTIVE DISORDERS (OAD) Services

Substance abuse has been called the nation's number one health problem.[8] Research indicates that it is associated with poor health, disruptive social relations, decreased work productivity, violence, crime, and child abuse. A report on chronic diseases and causes of death explains that chronic diseases are often complicated by lifestyle and environment.[9] The actual leading causes of death in the United States are tobacco use, poor diet, physical inactivity, and alcohol use.[10] Since 1989, more individuals have been incarcerated for drug offenses than for all violent crimes, and drug and alcohol abusers commit most violent crimes. Alcohol and drug abuse is implicated in three-quarters of all spouse abuse, rapes, child molestation, suicides, and homicides.[11] On a daily basis throughout the United States, hospital emergency rooms treat victims of gunshot wounds and other violence caused by alcohol abuse and drug addiction. Exchanging sex for drugs, practicing unsafe sex, and sharing dirty needles are high-risk behaviors that substance abusers often engage in, and which contribute to the spread of HIV/AIDS and sexually transmitted diseases (STDs).

The CENTER FOR SUBSTANCE ABUSE RESEARCH (CESAR) highlights significant findings in the field of addictive disorders and gives scientific validation to the information presented above in a weekly report distributed by fax. The death rate for drug-induced causes has increased every year since 1990, reaching 5.6 deaths per 100,000 population in 1997. While drug-induced deaths for both males and

[8] Using Social Indicators to Estimate Substance Abuse Treatment Needs in Louisiana. July 1998.
[9] Chronic Diseases and Their Risk Factors: The Nation's Leading Causes of Death 1999. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.
[10] McGinnis & Forge, 1993
[11] The National Center on Addiction and Substance Abuse, Columbia University. 1996

females are rising, the death rate for males is 2.4 times greater than for females, and rising more steeply. Among males, this figure was 8.4 per 100,000 in 1997, up from 4.9 in 1990. Among females, the drug-induced death rate was 3.6 in 1997, up from 2.8 in 1990. The category "drug-induced causes" includes death from dependent and non-dependent use of both legal and illegal drugs, as well as poisoning from medically prescribed and other drugs.[12] Between 50% and 77% of male adult arrestees tested positive for at least one illicit drug in 1999, according to data from 34 cities participating in a National Arrestee Drug Abuse Monitoring (ADAM) program. Marijuana was the drug most frequently detected in 24 sites, followed by cocaine in the remaining 10 sites. Treatment of cocaine-dependent persons in long-term residential and outpatient drug-free programs generated reductions in crime that more than offset the cost of the treatment, according to data from the national Drug Abuse Treatment Outcomes Study (DATOS). The average cost of crime among these cocaine-addicted clients decreased 78% from the year before to the year after long-term residential treatment, resulting in a $21,360 average benefit per client. This is nearly twice the average treatment cost per episode of $11,016. Outpatient drug-free clinics experienced slightly less savings. The average cost of crime decreased 28% from the year before to the year after treatment, resulting in a $2,217 average benefit per client—1.5 times the cost of treatment. It was noted that these figures may understate the economic benefits of treatment because other areas commonly improved by treatment, such as employment and health, were not included in the study.[13]

A 2003 study by Loren Scott and Associates, Inc. estimated that, for each dollar the state puts into an alcohol-and drug-abuse treatment program, society enjoys a reduction in future crime and medical-care cost savings, between $3.69 to $5.19. Because Louisiana has one of the highest HIV infection rates in the United States as well as the highest incarceration rate, it is reasonable to assume that the medical care and crime cost savings from alcohol-and drug-abuse treatment programs will be greater than the national average figures cited above. Finally, it should be noted that the estimated cost savings would be greater if the effects of alcohol and drug abuse treatment programs on education, public assistance, and lost productivity were included in the analysis.[14]

Louisiana's substance-abuse healthcare picture resembles that of the nation. Tobacco use was cited as a leading actual cause of death (i.e., played a significant role in cancer, heart disease, stroke, vascular and respiratory diseases) in 1994 in Louisiana.[15] One of every five deaths was attributable to tobacco use. The LOUISIANA OFFICE OF COMMUNITY SERVICES, which provides child welfare services, estimates that, currently, up to 75% of the families receiving Child Protective Services interventions have some substance abuse involvement. Less than one-fifth (18%) of child passengers who died while being

[12] CESAR, July 17, 2000, vol.9, Issue 28

[13] CSAT by Fax, July 19, 2000, Vol. 5, Issue 10

[14] Issue Brief on Addictive Disorders, September 2003

[15] Chronic Disease Control Program, 1998

transported by a drunken driver were restrained at the time of the fatal crash, according to an analysis of data from the National Highway Traffic Safety Administration.[16] In all age groups, child passenger restraint use decreased as the blood alcohol concentration of the child's driver increased. Older children were least likely to have been restrained.

A cumulative report from the DEPARTMENT OF SOCIAL SERVICES (DSS) indicates that, as of state fiscal year (SFY) 2003, 5,748 assessments have been completed under the Family Independence Temporary Assistance Program (FITAP) Drug Testing Program. OAD referral tracking records from SFY 2003 show 514 recipients (9%) have been referred by DSS, with 220 (43%) admitted to treatment. The DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS reports that approximately 75% of incarcerated adults have substance abuse problems. Smokers who begin smoking at a younger age are more likely than those who begin smoking at a later age to report lifetime drug use and dependency. According to the 1999 National Household Survey on Drug Abuse, the mean age of first cigarette use is currently 15.4 years.[17] Because of the high prevalence and significant social, health, and economic impact/cost of substance abuse, both the state and the federal government give high priority to prevention and treatment efforts. OAD, the sole state authority for substance abuse, operates through a regionalized Community Service District (CSD)/Regions substructure. There are ten administrative regions (or CSDs) of approximately 450,000 to 500,000 inhabitants each, two of which are currently independent districts. Effective July 1, 2004, two additional independent districts, Region 1 and Region 9, will be operationalized.

Programs within OAD are categorized as either Prevention or Treatment. Prevention programs address the individual, interpersonal, social, and environmental influences that cause an individual to abuse alcohol and other drugs. Prevention program activities must include, at least, three of the following six strategies: Information Dissemination; Education; Alternatives; Problem Identification and Referral; Community-Based Process; and Environmental Processes/Social Policy/Advocacy. Prevention services have the additional responsibility of the Synar Initiative, a community development and educational program designed to comply with the federal and state laws regarding tobacco sales to individuals under the age of 18 years. The December 1996 baseline found 75% of retailers to be non-compliant. OAD implemented programs to educate tobacco vendors regarding tobacco sales to minors. Enforcement efforts are conducted via compliance checks by the OFFICE FOR ALCOHOL AND TOBACCO CONTROL through a contractual agreement with OAD. The federal mandate was to reduce the illegal sales of tobacco to minors from 75% to 20% over a five-year period. Louisiana met the federal goal in 18 months. The most current non-compliance rate available stands at 5.6%, which is among the best in the nation.

[16] CESAR, August 21, 2000 vol. 9 issue 33
[17] CESAR September 25, 2000 vol. 9 issue 38

OAD continues to operate a statewide Tobacco Cessation Program for its clients in both outpatient and inpatient substance-abuse facilities. The program is based on the "Your Next Step" Tobacco Cessation Program developed by the Minnesota-based Hazelden organization, which incorporates the 12-step model for treating chemical dependency. Nicotine patches are provided as a component of this program. In May 2002, 24 OAD facilities offered tobacco-cessation services, and 450 clients were screened during the month. Seven facilities accounted for 56.4% of all screenings. Among tobacco users screened, 18.2% wanted to participate in the program. Sixteen clients (3.6%) were admitted to the program. The majority of clients were male (74.4%) and 82.9% of the clients used tobacco products. During the past year, 62.5% of the clients smoked, at least, one pack of cigarettes a day. With regard to discharge, 75% of the clients completed more than half of the modules. During the program, 100% did not smoke. During follow-up, 100% of the clients reported that they had not used as much tobacco in the previous month as they did before participation in the program.

Prevention specialists coordinate prevention services in each of the Regions and implement community-based primary-prevention strategies. Research indicates that alcohol, tobacco, and other drug (ATOD) use, delinquency, school achievement, and other important outcomes in adolescence are associated with specific characteristics (i.e., risk or protective factors) in the students' communities, schools, and family environments. Evidence indicates that exposure of adolescents to a greater number of risk factors, irrespective of what the specific risk factors are, is associated with more substance use and delinquency, while exposure to more protective factors is associated with lower prevalence of these behaviors.

The analysis of risk and protective factors is the most powerful paradigm available for understanding the origin of both positive and negative adolescent behavioral outcomes and how the most successful adolescent prevention programs can be designed.[18] Under the sponsorship of the CENTER OF SUBSTANCE ABUSE PREVENTION (CSAP), DHH/OAD contracted with DEVELOPMENTAL RESEARCH AND PROGRAMS, INC., of Seattle, Washington, to conduct a survey of sixth, eighth, tenth, and twelfth-grade students, using the Communities that Care ® (CTC) Youth Survey. The CTC survey was developed to provide scientifically sound information to communities on the prevalence of risk and protective factors among youth. The survey data were collected in October 1998, March 2001, and October 2002 in Louisiana public and private schools. A risk and protective factor profile was developed for the students.

Results showed Louisiana students to be above the national average for all but two of the protective factors. There was only one protective factor, Opportunities for Positive Involvement in the Community, for which Louisiana students scored significantly lower than both the National Comparison average and the CTC matched comparison. The next lowest protective factor was School Rewards for Prosocial

[18] *Communities that Care® Youth Survey.* May 1999.

Involvement. The most elevated risk factor was in the school domain, Academic Failure, which measures students' self-reports of their academic performance. Other risk factors that were significantly higher than the national average were Friends, Delinquent Behavior and Impulsiveness, and Poor Family Discipline. Results of the survey are posted on OAD's web page. It is important to note, the survey points out, that both risk and protective factors must be addressed for a program to be successful. OAD conducted a follow-up Louisiana Youth Survey in collaboration with the Southwest Center for Application of Prevention Technologies, University of Oklahoma. The survey began in the school system in March 2001 and was completed the following month. Analysis of these data is complete and will be used to determine the areas most in need, as well as the type and intensity of programs to be implemented. It will also enable the state to transition into a model conducive to research-based programming. Beginning with the implementation of the State Incentive Grant (SIG), OAD has funded 18 research-based projects around the state addressing Risk and Protective Factors.

OAD HAS been designated by the Office of the Governor to administer and implement the Center for Substance Prevention's SIG. The grant award is in the amount of $8.4 million for a 3-to-5 year period. SIG is a cornerstone of the National Youth Substance Abuse Prevention Incentive (NYSAPI), which was established to assist state governors with enhanced capabilities to coordinate, leverage, and implement effective prevention strategies as well as a statewide prevention plan for its citizens.

OAD provides a continuum of treatment services: detoxification, inpatient, halfway houses, residential, and outpatient. These treatment services provide assessment, diagnosis, and treatment of alcohol abuse, alcoholism, drug abuse, and drug addiction. In addition, OAD provides services in three programs: Drug Courts (services are provided upon referral by the Courts to any OAD 24-hour care facility), Compulsive Gambling (Inpatient and Outpatient), and Driving While Intoxicated (DWI) treatment. Federal funding mandates require that OAD provide specialized services to pregnant women, women with dependent children, intravenous drug users, and those infected with HIV.

OAD continues to participate in a collaborative project between OPH and THE OFFICE OF MENTAL HEALTH (OMH) to provide services to the school-based health centers in the state. An interdepartmental agreement for School Based Health Centers (SBHCs) was approved by the Assistant Secretaries of OAD, OMH, and OPH. This agreement will afford each Office an opportunity to provide prevention and early intervention services to children and adolescents served by SBHCs.

Programs Targeting Intentional and Unintentional Injury

R. Intentional Injury Prevention - Violence Prevention

The EMS/Injury Research and Prevention Program provides statewide data, educational resources, funding, technical support, and leadership in public health methods to groups working for the prevention of violence. This category includes interpersonal violence, school violence, child abuse, date rape, violence against women, and workplace violence, among others. To facilitate violence prevention initiatives within communities, staff assist to organize training events and presentations, provide access to key agencies, offer inter-agency mentoring, and promote the creation of local groups.

Prevention of sexual violence through support of local and statewide volunteer agencies is an ongoing project. In addition to direct services for victims, the agencies also work to achieve coordination within the medical and legal systems to minimize victim trauma. The agencies challenge communities to examine attitudes and actions which implicitly support violence against women, and to replace that implicit support with explicit support of non-violence. The EMS/Injury Research and Prevention Program provides information on outreach to media, faith-based communities, athletic organizations, businesses, universities, and other groups which can use their authority to change community norms concerning violence toward women and children.

S. Unintentional Injury Prevention - Community Injury Prevention

Unintentional injuries are the leading cause of death for Louisiana residents 1 to 44 years of age, and the fourth leading cause of all deaths. The EMS/Injury Research and Prevention Program supports nine Regional Coordinators and a State Injury Prevention Coordinator who facilitate and provide education and resources for community programs to address injuries and/or deaths from unintentional injuries among children. Examples of preventive areas include: Use of All Terrain Vehicles (ATVs); Choking & Suffocation; Drowning; Falls; Use of Firearms; Fire & Burns; Poisoning; Use of Motor Vehicles; and Sleep-related Infant Deaths.

The Community Injury Prevention Program reviews the existing injury prevention curriculum and tailors information to fit the specific needs of agencies that serve school-aged children in the state. The curriculum addresses the importance of wearing seat belts and bicycle helmets, pedestrian and traffic safety, home safety, drowning prevention, fall prevention, and playground safety. In addition the curriculum includes fact sheets regarding data specific to injuries, prevention tips, and laws in Louisiana.

Several local, state, and federal agencies have missions related to injury prevention. Examples are the U.S. Coast Guard, law enforcement, the state Department of Wildlife and Fisheries, North and South Louisiana Area Health Education Center (AHEC), Christus St. Francis Cabrini Hospital, Family Voices, Maternal and Child Health Coalition, and Options For Independence. The Program joins with these groups to maximize messages and provide public health perspectives to safety programs.

For more information about the Community Injury Prevention Program, the EMS/Injury Research and Prevention Program may be contacted at (504) 568-2509.

Programs Targeting Pre-hospital Emergency Medical Services

T. EMERGENCY MEDICAL SERVICES (EMS)

Certified emergency medical-services (EMS) personnel may be found in a variety of public safety and first response settings which vary from large multi-parish ambulance services to town volunteer fire departments. EMS personnel are the first line of critical medical assistance for many individuals. They respond to incidents of drowning, heart attacks, industrial injuries, automobile crashes, and childbirth, among other incidents. Their pre-hospital actions often mean the difference between additional disability or death.

Assuring that these pre-hospital healthcare professionals receive appropriate training, examination and certification are the responsibility of the OPH EMS section.

The approximate 20,000 EMS students and personnel in Louisiana are dependent on testing and national certification handled by and through the section. In any one year, approximately 3,000 to 5,000 of these individuals are processed by the section for initial certification or for bi-annual recertification, as required by national standards. For real-time clinical testing, the section supervises an additional temporary corps of about 400 trained contract personnel as examiners and victims. While written test scoring and registration are handled by the national organization, this section offers credentials for practice to those eligible. The section is the repository of all certification data, and frequently must respond to pre-employment queries. EMS instructors must also be trained and certified through the section.

The OPH/EMS section provides leadership in domestic disaster preparedness in the pre-hospital setting. Working for seamless utilization of personnel, resources, and communications, the section collaborates closely with entities such as the Office of Emergency Preparedness; the Louisiana State Police; the Office of the State Fire Marshal; the Commission on Highway Safety; state pediatric, trauma, and emergency

room physicians and nursing organizations; and the military. The section also participates in traffic safety planning; creation of a State Trauma Plan; management of a unified EMS data reporting system; and training citizens, industrial employees, and others as First Responders.

The Section staffs the EMS Certification Commission, which reviews charges of practice irregularities by individuals and maintains records of the review outcomes.

Emergency Medical Services for Children: EMS-C

To serve children better, the EMS Section directs additional training toward childhood emergencies, including children with special needs. As a leader of the Governor's Council on EMS and Children, the section has published and distributed recommendations for child-sized or child-specific ambulance and emergency room equipment and standards for daycare first-aid and cardiopulmonary resuscitation (CPR). The section has trained emergency personnel in communicating with and understanding the needs of the child patient and his/her family, and in managing equipment used by children with special needs.

Safety training in fire and burn prevention and use of 911 has been provided to thousands of children in Head Start programs and grammar schools through EMS-C. This programming includes education and family safety information for parents and daycare personnel.

Programs Targeting Mental Health

U. SUICIDE ASSESSMENT

The DHH OFFICE OF MENTAL HEALTH (OMH) provides a comprehensive crisis intervention program throughout the state for all citizens who may experience thoughts of suicide, as well as other signs and symptoms of a mental-health crisis. This system includes crisis telephone lines with toll-free numbers, a Single Point of Entry system for those who need face-to-face evaluation, hospital diversionary programs (such as respite), or acute hospitalization.

Mental Health professionals conduct a suicide assessment of any client who presents to the system with emotional or behavioral problems, or with symptoms of severe mental illness. Additionally, all paraprofessionals who work with mentally ill clients are trained in the mental health assessment of potential suicide. These assessments include current ideations of self-harm, plans for self-harm, and whether the individual has the means to harm him/herself. Immediate steps are taken to protect that individual when suicide potential is indicated by the mental health assessment. Additionally, the assessment includes past history of suicidal ideation, an assessment of the severity of previous attempts, and the emotional and environmental factors surrounding previous suicidal issues for the consumer.

V. OFFICE OF MENTAL HEALTH (OMH) PROGRAMS

Acute Unit

The acute-care psychiatric inpatient units provide psychiatric, psychosocial, and medical services in compliance with all licensing and accreditation standards in order to meet the individualized patient needs of adult and adolescent patients in the State of Louisiana who require a level of care which must be rendered in an inpatient setting. These units address the need for inpatient treatment in a less restrictive, shorter term, and more cost effective manner than in the state's longer term care psychiatric facilities.

Specialized Inpatient Services

OMH operates four state psychiatric facilities which provide mental health evaluation, treatment, and rehabilitation services to adults with severe and persistent mental disorders and to child/adolescent clients with serious emotional/behavioral disorders.

Clinic-based Services

OMH currently has an annual caseload of over 43,000 individuals with serious and persistent mental illness. This caseload includes children and youth with serious emotional disturbances receiving outpatient mental health services through the operation of licensed Community Mental Health Centers (CMHCs) and their satellite outreach clinics located throughout the six OMH geographic regions and the four service district regions. The CMHC facilities provide an array of services: screening and assessment; emergency crisis care; individual evaluation and treatment; medication administration and management; clinical casework services; specialized services for children and adolescents, the criminal justice system, and the elderly; and pharmacy services. Inability to pay does not have an impact on the receipt of services.

Crisis Management Services

Crisis services are provided on a 24-hour basis. These services are designed to provide a quick and appropriate response to individuals who are experiencing acute distress. Crisis services include telephone counseling and referrals, face-to-face screening and assessment, community housing for stabilization, and crisis respite.

Day Programs and Psychosocial Rehabilitation Programs

Psychosocial programs and day-treatment programs provide opportunities for teaching new rehabilitative skills related to community living and work activities; build networks of peer support; teach self-help community activities; and provide a place where individuals can learn how to relate to persons and communicate their needs and desires successfully. In addition, day programs provide secure, structured

environments where individuals experiencing disruption in routine behaviors brought on by their illness can receive treatment and support. Day programs also provide structured activities which allow children and adolescents with severe emotional disturbances to continue along their educational path.

Support Services

Supported living services, either through specialized residential programs or through case management and other services which support persons living in their own homes, are available throughout Louisiana. Individuals with serious psychiatric disabilities are provided with services necessary to address their housing, employment, and mental-health rehabilitative needs.

Programs Targeting Environmental Health

W. Community Water Fluoridation

Currently, 54.9% of the United States population served by public water systems is serviced by optimally fluoridated water systems. Renewed effort has been undertaken to reach the Centers for Disease Control and Prevention's Healthy People 2000 goal of optimally fluoridating 75% of the population's water supply. Community water fluoridation efforts have been re-established with recent legislation, ensuring a stable Office of Public Health (OPH) Fluoridation Program. The program will oversee monitoring and evaluation of current systems, provide training, and assist in promotional activities in collaboration with the Oral Health Program, the Center for Environmental Health Services of OPH, and the newly established Fluoridation Advisory Board. This board will function to secure additional resources needed to implement fluoridation systems created as a result of promotional activities. The Parish of Plaquemines and the City of Amite, Louisiana have recently passed ordinances to implement community water fluoridation with the potential to reach an additional 31,000 state residents.

X. Environmental Health Advisories

The OPH Section of Environmental Epidemiology and Toxicology (SEET) issues fish consumption advisories in consultation with state environmental agencies when chemicals or heavy metals in sport fish reach levels that could potentially harm the public.

Mercury in Fish

http://www.oph.dhh.louisiana.gov/environmentalepidemiology/healthfish

SEET works with the Louisiana Department of Environmental Quality (LDEQ) and the Louisiana Department of Wildlife and Fisheries (LDWF) to assess the extent of mercury contamination in fish. Methylmercury, a metal compound sometimes found in fish, can cause birth defects and neurological

problems when present at high levels. LDEQ collects and samples fish from water bodies that are selected based on their pH, usage, and SEET recommendations. SEET then conducts a public health risk assessment, and, if warranted, the State Health Officer issues a fish consumption advisory for specific species of fish. Of nearly 400 water bodies tested to date, 37 health advisories for fish containing mercury have been issued. These advisories cover at least 61 freshwater bodies in or traversing 42 parishes, and include an advisory on king mackerel for parishes along the Gulf of Mexico.

Y. Environmental Health Education

Health Effects Related to Pesticide Exposure

http://www.oph.dhh.louisiana.gov/environmentalepidemiology/healthrelatepest

In an effort to educate Louisiana residents about pesticides, a multi-agency workgroup developed a pamphlet for statewide distribution. The pamphlet, "What You Need to Know About Pesticides and Your Health in Louisiana", was jointly developed by SEET, the Louisiana Department of Agriculture and Forestry (LDAF), and the Louisiana Environmental Action Network (LEAN). The U.S. Environmental Protection Agency funded printing and distribution costs.

The pamphlet discusses health effects related to commonly used pesticides, how pesticide exposure occurs, what a person should do if exposed to a pesticide, laws regulating the use and application of pesticides, and how to file a Health-Related Pesticide Incident Report with LDAF. Distribution of the pamphlet will occur through parish health units, state libraries, the Louisiana Cooperative Extension Service, colleges and universities, and organizations and agencies working in the area of environmental health.

Mercury in Fish

http://www.oph.dhh.louisiana.gov/environmentalepidemiology/healthfish

The Louisiana Departments of Health and Hospitals (LDHH), Environmental Quality (LDEQ), Wildlife and Fisheries (LDWF), and Agriculture and Forestry entered into an interagency agreement in 1997 to determine jointly which water bodies in Louisiana needed health advisories based on levels of environmental contamination, particularly from mercury. That same year, the Louisiana Legislature provided funding to assess mercury levels in recreationally caught fish and to offer free blood-screening services in parishes where high levels of mercury had been identified. In 2003, SEET returned to one of these areas to offer blood mercury screening to commercial fishers and their families and others who eat fish from local water bodies.

SEET, working jointly with representatives of LDEQ, LDWF, the Sierra Club, and the Louisiana Audubon Council, produced two informational brochures, one for the general public and the other directed

specifically toward pregnant or breastfeeding women and mothers of small children. The publications were widely distributed throughout Louisiana by obstetrician/gynecologists' and pediatricians' offices as well as parish health units. The environmental organizations continue to work closely with the Legislature and the state departments to inform the public about the potentially harmful effects of mercury and other contaminants on people's health.

Health Professional Education Sub-Program

www.oph.dhh.louisiana.gov/environmentalepidemiology/envirhlth

SEET conducts Health Professional Education as part of its educational activities. Training is targeted toward physicians and other health professionals located near Superfund and proposed Superfund sites who would potentially receive case studies from the federal Agency for Toxic Substances and Disease Registry (ATSDR). Information provided focuses on site contaminants, health effects from exposure, and clinical descriptions of the diagnosis and management of cases of chemical exposure. SEET's Health Education Program also offers environmental health education to the public and to the medical profession concerning health effects of contaminants from hazardous waste sites and other sources. It develops, publishes, and distributes environmental health education materials; prepares and presents environmental health information to schools, physicians and communities; and coordinates with other state educational programs regarding current environmental health projects and issues.

Since 1996, SEET has disseminated ATSDR case studies to over 4,000 Louisiana physicians in 20 parishes.

Private Well Brochure

www.oph.dhh.louisiana.gov/engineerservice/ssafewater/docs/water_brochure.pdf

In 2002, a brochure titled "Private Water Well Testing in Louisiana" was written and printed. In this printing, 10,000 copies were produced by OPH. This brochure provides the owner/user of the private well with answers to the following questions: how to protect your well water supply, when to test the water, how to test the water, and what contaminants should be tested for. It also provides instructions for sanitarian services, registering your well, various contact numbers and related Internet links.

Indoor Air Quality Education

www.oph.dhh.louisiana.gov/environmentalepidemiology/indoorair/index.html

SEET provides consultations for indoor air quality (IAQ) complaints and inquiries. Telephone consultations generally consist of a discussion of the complaint/inquiry followed by an appropriate referral, if any is indicated. Complainants may also be directed to the OPH/SEET "Indoor Air Quality and Mold Information" webpage for IAQ information; if they lack Internet access, information will be mailed to them. With the approval of the Executive Director of the OPH Center for Environmental Health Services and the Assistant Secretary of OPH, SEET staff may conduct limited IAQ investigations. LDEQ and LDAF may

provide environmental sampling assistance when requested by SEET.

In 2004, 824 IAQ consultations were provided to the residents of Louisiana. Complaints and requests for information originate from the following, among others: private residences (homeowners, renters, landlords); state-owned buildings in Louisiana; schools (teachers, parents, principals, school boards); universities (students, parents); businesses and government agencies (employees, managers, building managers, health and safety professionals); health care facilities, nursing homes and other residential care facilities (physicians, nurses); the media; attorneys; and legislators;

Other 2004 educational accomplishments include presenting mold lectures for the Police Jury Association of Louisiana and the Louisiana chapter of American Academy of Pediatrics, as well as an introductory IAQ lecture for a graduate class at the Tulane School of Public Health and Tropical Medicine; mailing a mold advisory letter to public school superintendents and to the Louisiana School Facility Manager Association; and developing a mold brochure.

Z. Environmental Health Emergency Response Programs

Environmental Public Health Emergency Preparedness & Response (EEPR)

www.oph.dhh.louisiana.gov/environmentalepidemiology/emergencyresponse

Accidental releases, explosions, and other chemical releases occur each year in Louisiana. SEET evaluates the public-health threat of selected events and provides information and recommendations to affected communities, hospitals, and physicians treating exposed individuals. During an event, EEPR staff also generate maps of the incident location and surrounding locations of interest for use by regional and central office personnel.

SEET maintains a surveillance system of emergency chemical releases in the state by screening event notifications from the Louisiana State Police, Louisiana Department of Environmental Quality (LDEQ) and the National Response Center of the U.S. Coast Guard. During a hazardous-materials release, which affects or threatens the public's health, incident briefs, chemical information, and treatment guidelines are provided to hospital emergency departments in the impacted area. The program also generates maps of incident locations pinpointing critical facilities and susceptible populations that may potentially be affected. In 2004, SEET screened over 13,000 event notifications and responded to nine major emergency chemical events.

Chemical Terrorism (CT)

In 2002, SEET established a Chemical Augmentation Team (CAT), which is a specialized, interdisciplinary response unit that can be rapidly mobilized and deployed at the regional or state level to

assess and evaluate the potential for adverse health outcomes to the public during large-scale catastrophic events involving chemical and radiological weapons of mass destruction (WMDs) or accidental releases of hazardous substances. The CAT provides emergency response expertise to the Public Health Incident Response Teams (IRTs), the OPH Assistant Secretary and the State Health Officer in the areas of toxicology, epidemiology, human health risk assessment, exposure assessment, environmental health, Geographical Information Systems (GIS) mapping of public health data, information systems management, health surveillance and medical monitoring. The CT program also tracks all Poison Control Center data for terrorist activities.

The team helps prevent or minimize harmful public health consequences both during and after a chemical event by providing technical support to the IRT and others as assigned; planning and conducting environmental sampling for public health purposes; reviewing sampling results and assessing exposure; providing input into event management, response and follow-up; and providing community health education and risk communication.

Poison Control Center Notifications Sub-Program

SEET receives daily notifications of Poison Control Center cases that involve exposure to chemicals and maintains a database with the details of each exposure. Those incidents that occurred on the job or in a public place are referred for follow-up. This is a sub-program of both the CT Program and the Pesticide Surveillance (PS) Program.

Geographical Information System (GIS) Support Services

The GIS Support Services maintains public-health related locational databases used in the generation of maps and for special SEET projects. Maps generated by the program can be used by public-health assessors and by emergency responders when dealing with accidental chemical releases and/or terrorism as well as by agency personnel during local and statewide drills.

Hazardous Substances Emergency Events Surveillance Project

http://www.oph.dhh.louisiana.gov/environmentalepidemiology/hseess

In the fall of 2000, funds were awarded to SEET by the Agency for Toxic Substances and Disease Registry (ATSDR) for Louisiana to participate in the Hazardous Substances Emergency Events Surveillance (HSEES) system, 14 other states also participate. SEET collects information on acute hazardous-substance events and enters it into a comprehensive database, which includes releases to the air, water, and land; threatened releases that lead to public health actions; and associated public-health consequences including evacuations, injuries, and deaths. The database includes data collected from the National Response Center, LDEQ, and the Louisiana State Police among other sources. SEET collects public health information, which focuses on the impact of releases on the population, e.g.,

injuries, medical care, evacuations, and in-place sheltering. In 2002, SEET screened over 8,000 events; of those, 1,877 were entered initially into the HSEES database system. Out of the 1,877 events, 752 (40.1%) met the criteria for inclusion in the Louisiana HSEES database. Over 9,000 events were screened in 2003, with 1,885 being entered into the HSEES database. Of those 1,885 events, 674 (35.8%) met the criteria for inclusion in the Louisiana HSEES database.

The purpose of HSEES is to collect data that can be used to reduce the injuries and fatalities to employees, first responders, and the public resulting from acute hazardous-substance releases. In collecting data about chemical releases, SEET plans to target its efforts to prevent further adverse public-health consequences from acute hazardous releases in Louisiana. By describing injuries and deaths which result from the releases of hazardous substances, strategies can be developed to reduce such consequences.

V. LOUISIANA STATE HEALTH CARE SYSTEM

A. Analysis of Health Care in Louisiana

In *America's Health: United Health Foundation State Health Rankings 2003*[1], Louisiana ranked 49th—as the second least healthy state in the nation. According to this report, Louisiana is 49th for the combined measures of risk factors and 49th for the combined measure of outcomes, possibly indicating that the relative health of the population will remain at current levels in the future. The state's greatest deficiencies were in the areas of: Premature Death, ranking 49th (10,202 years lost per 100,000 population); Cancer Deaths, ranking 48th (224.8 deaths per 100,000 population); Risk for Heart Disease, ranking 47th (19 percent above national average); Infant Mortality, ranking 47th (9.4 deaths per 1,000 live births); and Lack of Health Insurance, ranking 46th (18.4 percent without any health insurance). Racial disparity with regard to health access and outcomes was also listed as one of the state's problems. Examples of this include the differences between proportions of race groups receiving adequate prenatal care, at 67.6 percent and 86.2 percent of black and white women, respectively.

Despite the negative findings, there were also some positive points. Louisiana ranked 20th in the Adequacy of Prenatal Care measure, with 78.4 percent of all pregnant women in the state receiving adequate prenatal care, as defined by the Kessner Index. The state also ranked 32nd in the Prevalence of Smoking measurement. Additionally, the uninsured population decreased from 19.3 percent to 18.4 percent of the population and infectious disease cases decreased from 37.2 to 32.8 per 100,000 population.

Shortages affecting the accessibility and availability of primary-care physicians (family practice, general practice, internal medicine, pediatrics, and obstetrics/gynecology) pose a significant problem in the delivery of healthcare in Louisiana. As of May 2004, National Center for Health Workforce Analysis (NCHWA) within the Bureau of Health Professions of the Health Resources and Services Administration (HRSA/BHPR) recognized 108 primary care shortage areas in 57 parishes within the state: 27 whole parish and 15 partial parish geographic areas, 12 whole parish and 10 partial parish population groups, and 44 healthcare facilities.

In addition to the shortages among primary-care physicians, other healthcare occupations identified by the NCHWA as posing a general supply problem in the state are physician assistants, nurse practitioners, certified nurse midwives, registered nurses, dentists, dental hygienists, dental assistants, psychologists, and social workers.

[1] America's Health: United Health Foundation State Health Rankings 2002, 2002 © United Health Foundation

Louisiana has attempted to address the problems associated with health professional shortages over the years in many ways. State schools of medicine, nursing schools, and schools of allied health professions have been mandated to cooperate, in collaboration with the Louisiana Area Health Education Centers (AHECs), to improve and expand programs for health-professional shortage areas. Currently, hundreds of thousands of dollars in state funds have been allocated to secure federal monies for professional development initiatives, including loan repayment programs for medical professionals to practice in shortage areas in exchange for payment of professional education loans and medical placement services to assist medical professionals in finding a practice site.

- The Louisiana State Loan Repayment Program is designed to encourage primary-care physicians to serve in health-professional shortage areas. This program is funded with federal monies that match the state investment in recruitment and retention of healthcare providers to practice in health professional shortage areas.
- Med Job Louisiana is a non-profit recruitment and retention program designed to assist rural and underserved communities located in health-professional shortage areas in attracting qualified health professionals to improve residents' access to primary-care services. The project is a collaboration between the Louisiana Department of Health and Hospitals' Bureau of Primary Care and Rural Health, the Louisiana AHECs, the Louisiana Rural Health Access Program, and local communities.
- The National Health Service Corps is a federally funded scholar and loan repayment program managed by HRSA/ BHPR that is designed to bring quality primary-healthcare professionals to communities in need, as well as support communities in their efforts to build better systems of care.

Louisiana must continue to meet the healthcare needs of its residents by working to reduce the health professional shortages in the state. Ensuring appropriate and adequate primary-care services for Louisiana can only take place when there is a concerted effort among the residents of the state to secure state financing to support these services.

B. Louisiana Health Care Statistics

Percent of Population Enrolled in Medicaid in 2003 [2]	
Alabama	16.9%
Arkansas	20.4%
Louisiana	19.2%
Mississippi	25.0%
Texas	11.6%
United States	14.0%
Percent of Population Not Covered by Health Insurance in 2003 [2]	
Alabama	13.3%
Arkansas	16.6%
Louisiana	19.4%
Mississippi	17.0%
Texas	24.6%
United States	15.1%
Emergency Outpatient Visits to Community Hospitals in 2003 [2]	
Alabama	2,145,885
Arkansas	1,251,391
Louisiana	2,498,935
Mississippi	1,597,509
Texas	8,315,483
United States	111,069,871
Emergency Outpatient Visits to Community Hospitals in 2003 [2]	
Alabama	16.0%
Arkansas	16.6%
Louisiana	13.8%
Mississippi	15.1%
Texas	10.8%
United States	13.8%
Number of Health Maintenance Organizations (HMOs), Louisiana, 2004 [2]	7
Percent of Population Enrolled in HMOs, Louisiana, 2004 [2]	11.6%
Number of Nurses, Louisiana, February, 2005 [3]	41,211
Number of Physician Assistants, Louisiana, February, 2004 [4]	315

[2] Morgan, K.O. Morgan, S. and Uhlig, M. (Eds.).2003. *Health Care State Rankings 2004: Health Care in the 50 United States* (13th Ed.)
[3] Louisiana State Board of Nursing
[4] Louisiana State Board of Medical Examiners

C. Louisiana Health Care Access

Number of Hospitals and Beds Louisiana, 2003		
Type of Hospital	**Hospitals**	**Beds**
Acute	112	19,573
Children's	2	246
Critical Access	9	251
Long Term	33	1,681
Psychiatric	19	2,240
Rehabilitation	28	662

Source: Health Standards Section, DHH

Health Facilities Louisiana, 2003	
Type of Facility	**Number**
Alcohol/Drug Abuse Facilities	166
Community Health Centers	35
State Developmental Centers	9
Hospitals	201
Mental Health Clinics	35
Rural Health Clinics	51
Parish Health Units	72

Source: Health Standards Section, DHH

Licensed Nursing Home Statistics Louisiana, 2003	
Number of Nursing Homes	300
Number of Beds	
Licensed Beds	39,036
Medicaid	35,629
*Average Annual Occupancy (Medicaid)**	77.5%

*From October, 2001 thru September, 2002
Source: Health Standards Section, DHH

Lack of Access to Primary Care* Louisiana, Neighboring States, and United States, 2002		
State	**Percent**	**Rank****
Alabama	26.1	3
Arkansas	9.8	31
Louisiana	18.1	7
Mississippi	27.0	1
Texas	15.1	17
United States	11.3	-

* Lack of Access to Primary Care measures the percent of population areas where the population is underserved by primary care practitioners residing in designated Health Manpower Shortage Areas.
** Rank reflects worst (lowest) to best (highest).
Source: Morgan, K.O. and Morgan, S (Eds.). 2005. *Health Care State Rankings 2005*

D. MEDICAID

Medicaid, or Title XIX of the Social Security Act, became law in 1965 as a jointly funded cooperative venture between the federal and state governments. Its purpose was to assist states in the provision of adequate medical care to eligible individuals and families with low incomes and resources. Within broad, federally provided national guidelines, Louisiana has autonomy in establishing its own eligibility standards; determining the type, amount, duration, and scope of services; setting the rate of payment for services; and administering its own program.

As the largest provider of medical and health-related services to America's poorest people, Medicaid includes funding for these basic healthcare programs: inpatient and outpatient hospital services; laboratory and X-ray services; skilled nursing and home health services; physician's services; family planning; and periodic health checkups, diagnoses, and treatments for children.

LOUISIANA MEDICAID PROGRAM
SFY 2002/03 (July 1 2002 to June 30 2003)

	Unduplicated Recipients			
Race/Ethnicity	**Male**	**Female**	**Unknown**	**Grand Total**
White	142,007	199,234	17	341,258
Black or African American	225,185	314,254	27	539,466
American Indian or Alaskan Native	827	1,149	-	1,976
Asian	1,594	2,121	1	3,716
Hispanic or Latino (no other race info)	2,417	3,409	-	5,826
Native Hawaiian or Other Pacific Islander	70	92	-	162
Hispanic or Latino and one or more other races	141	166	1	308
More than one race indicated (and not Hispanic or Latino)	121	139	3	263
Unknown	22,111	33,466	3,134	58,711
Grand Total	394,473	554,030	3,183	951,686

LOUISIANA MEDICAID PROGRAM
SFY 2002-2003 (July 1 2002 to June 30 2003)

	Payments *			
Race/Ethnicity	**Male**	**Female**	**Unknown**	**Grand Total**
White	$650,018,662	$967,032,761	$40,800	$1,617,092,222
Black or African American	$637,527,361	$922,590,038	$43,580	$1,560,160,979
American Indian or Alaskan Native	$1,831,031	$2,984,115	$638	$4,815,785
Asian	$3,657,927	$4,622,327	$1,925	$8,282,179
Hispanic or Latino (no other race info)	$5,319,629	$7,607,537	$0	$12,927,166
Native Hawaiian or Other Pacific Islander	$228,069	$189,065	-	$417,134
Hispanic or Latino and one or more other races	$159,578	$369,374	$847	$529,799
More than one race indicated (and not Hispanic or Latino)	$226,984	$189,756	$1,682	$418,422
Unknown	$108,818,454	$178,249,956	-$22,636,760	$264,431,650
Grand Total	$1,407,787,693	$2,083,834,931	-$22,547,289	$3,469,075,335

* Figures have been rounded to the nearest dollar.
Source: DHH / Division of Health Economics (Medicaid)

Louisiana Medicaid Program, SFY 2002-2003 (July 2002-June 2003)		
Age Group (Years)	**Total Number of Recipients**	**Total Payments**
Under 1	57,679	$237,026,459
1- 5	188,106	$256,827,756
6 - 14	269,143	$321,390,076
15 - 20	124,803	$263,173,731
21 - 44	146,967	$825,322,158
45 - 64	74,917	$755,525,161
65 - 74	35,570	$241,425,052
75 - 84	32,217	$300,014,515
85+	22,284	$268,370,427
Total	951,686	$3,469,075,335

Source: Division of Health Economics (Medicaid), for SFY (July 2002-June, 2003)

The following tables compare Louisiana's Medicaid statistics to those of its neighboring states and the United States.

Medicaid Statistics Louisiana, Neighboring States, and United States, Fiscal Year 2003			
State	**Medicaid enrollment**	**Medicaid Expenditures ***	**Medicaid expenditures per enrollee ***
Alabama	760,527	$3,093,271,000	$4,204
Arkansas	557,074	$2,237,818,000	$4,247
Louisiana	861,846	$4,885,972,000	$5,859
Mississippi	720,304	$2,877,014,000	$4,421
Texas	2,559,248	$13,523,486,000	$5,605
United States	42,740,719	$246,283,943,000	$5,985

* Figures correspond to year 2002; figures for year 2003 not yet available

Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005: (13th Ed.): Morgan Quitno Press, Lawrence, KS.

Medicaid Statistics Louisiana, Neighboring States, and United States, Fiscal Year 1998-2002		
	Percent change in Medicaid expenditures	**Percent change in expenditures per Medicaid enrollee**
Alabama	33.1%	- 7.5%
Arkansas	59.1%	5.6%
Louisiana	53.9%	7.3%
Mississippi	73.8%	5.8%
Texas	38.3%	5.8%
United States	45.8%	10.2%

Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005 (13th Ed.): Morgan Quitno Press, Lawrence, KS.

E. MEDICARE

Medicare provides health insurance to people who are at least 65 years old, the disabled, and those with permanent kidney failure. People who receive Social Security or Railroad Retirement benefits are automatically enrolled when they become eligible for Medicare. Others must apply at their local Social Security offices.

Medicare has two parts: Hospital Insurance (Part A) and Medical Insurance (Part B). Medicare Part A helps pay for inpatient hospital services, skilled nursing facility services, home health services, and hospice care. Medicare Part B helps pay for physician services, outpatient hospital services, medical equipment and supplies, and other health services and supplies. Many Medicare beneficiaries choose to enroll in managed care plans like health maintenance organizations. These beneficiaries are eligible for both Part A and Part B benefits in most managed care plans. A total of 620,196 Louisiana residents were enrolled in the Medicare program in 2003.[2]

Medicare Statistics
Louisiana, Neighboring States, and United States, Fiscal Year 2003

State	Medicare enrollment 2003	Percent of population enrolled 2003	Percent of Medicare enrollees in Managed Care Programs 2005
Alabama	719,246	16.0%	8%
Arkansas	452,676	16.6%	0%
Louisiana	620,196	13.8%	11%
Mississippi	436,677	15.1%	0%
Texas	2,390,053	10.8%	8%
United States	41,086,981	13.8%	14%

Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005 (13th Ed.): Morgan Quitno Press, Lawrence, KS.

Medicare Statistics
Louisiana, Neighboring States, and United States, Fiscal Year 2001

State	Medicare benefits payments	Medicare benefit payments per capita	Medicare payments per enrollee
Alabama	$4,270,957,000	$956	$6,144
Arkansas	$2,420,406,000	$898	$5,478
Louisiana	$4,902,926,000	$1,097	$8,099
Mississippi	$2,140,391,000	$748	$5,055
Texas	$16,336,061,000	$764	$7,104
United States	$236,492,552,000	$823	$6,003

Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005 (13th Ed.): Morgan Quitno Press, Lawrence, KS.

[2] Source: Morgan, K.O. and Morgan, S (Editors.) 2004. Health Care State Rankings 2004: Health Care in the 50 United States. (12th Ed.) Lawrence, KS: Morgan Quitno Press.

F. PROVIDER SITES

The following pages describe the various healthcare facilities available to the public throughout the State of Louisiana. These facilities include the state charity hospital system, small rural and community hospitals, parish health units, rural health clinics, Federally Qualified Health Centers (FQHCs), developmental centers, mental health clinics, mental health and rehabilitation hospitals, and substance abuse prevention clinics. Other programs such as school-based health centers, community care, and health maintenance organizations (HMOs) also are discussed.

State Charity Hospitals

The Louisiana charity hospital system is currently being operated by the LOUISIANA STATE UNIVERSITY HEALTH SCIENCES CENTER (LSUHSC). The first Charity Hospital in New Orleans was built in 1736. The system was expanded across the state during the administration of Governor Huey Long. Two new medical centers were added in 1978 and 1993, and two were rebuilt in the late 1970s.

Most of the charity hospitals are teaching hospitals used to train medical school, graduate, and postgraduate students from LSUHSC's Schools of Medicine and Nursing, as well as other professional educational institutions.

Small Rural and Community Hospitals

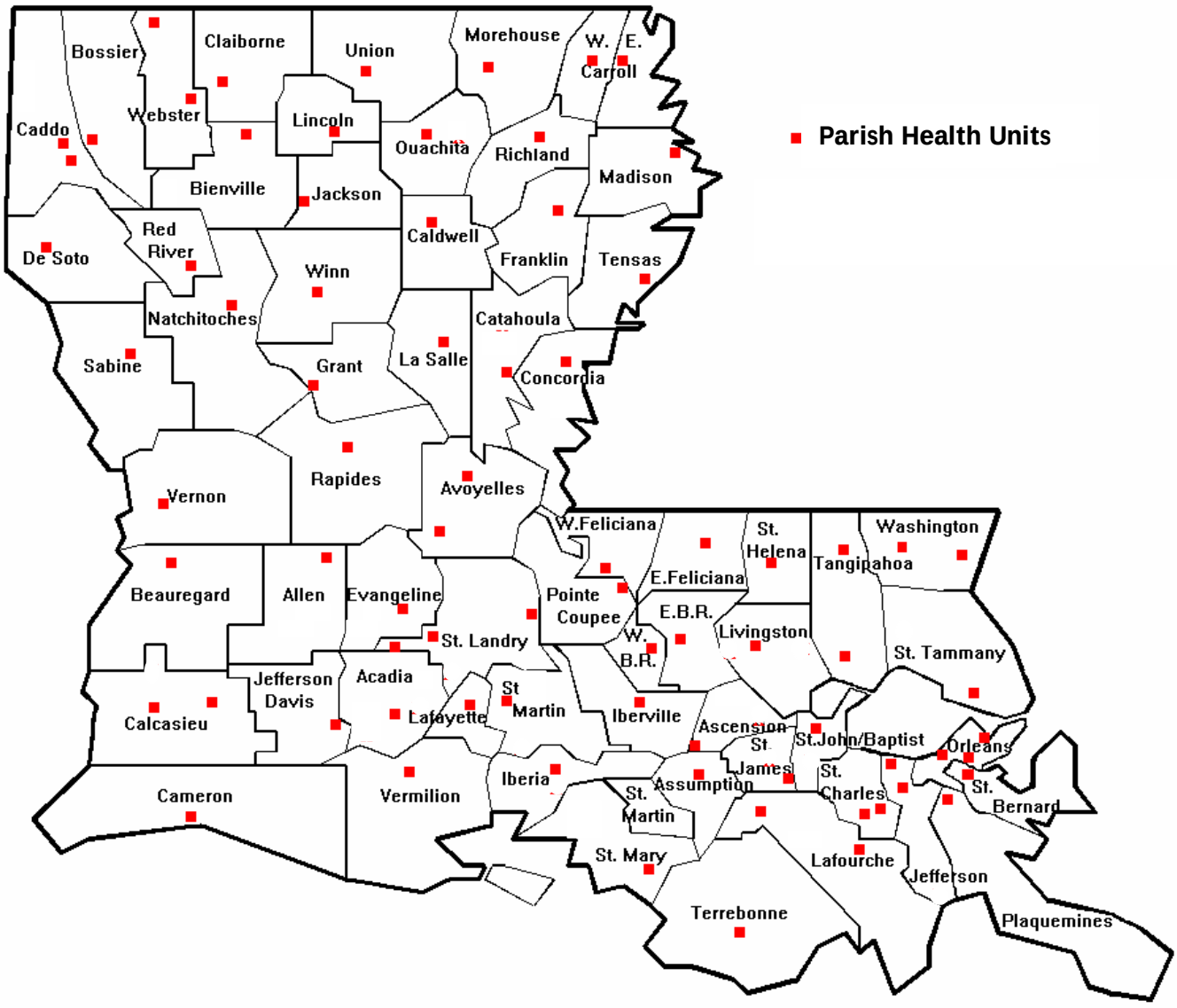
Louisiana has a number of very small rural and community hospitals, some publicly and some privately owned. Eight of the state's 64 parishes (8 percent) do not have a hospital. As part of the move toward managed care, some of the small rural hospitals and the charity hospitals have begun to formalize their long-standing links with the primary care clinics in their regions.

In its Rural Health Care Initiative, the state has appropriated money to support small rural hospitals suffering financial distress. This support has taken the form of grants provided to 34 small rural hospitals (less than 60 beds) for a variety of projects. For example, last year, the state awarded grants to a number of these hospitals for the purchase of updated emergency room equipment and physician coverage for the emergency room. Without such support, some of these hospitals would have had to close their emergency rooms.


Louisiana's
Charity Hospitals (10)
Bossier
Claiborne
Union
Morehouse
W. Carroll
E.
LSU Med Ctr
Caddo
Webster
Lincoln
E.A. Conway
Ouachita
Richland
Madison
Bienville
Jackson
Red River
Caldwell
Franklin
Tensas
De Soto
Winn
Natchitoches
Catahoula
Sabine
Grant
La Salle
Concordia
H.P.Long
Rapides
Vernon
Avoyelles
W.Feliciana
St. Helena
Washington
Tangipahoa
Wash/St Tammany Med Ctr
E.Feliciana
Beauregard
Allen
Evangeline
Pointe Coupee
E.B.R.
Lallie Kemp
W. B.R.
E.K.Long
Livingston
St. Landry
St. Tammany
Jefferson Davis
Acadia
W.O.Moss
St. Martin
Calcasieu
Lafayette
Iberville
Ascension
St. John/Baptist
Med Ctr of LA
Orleans
University Med Ctr
St. James
St. Charles
Iberia
Assumption
St. Bernard
Cameron
Vermilion
St. Martin
St. Mary
L.J.Chabert
Lafourche
Jefferson
Terrebonne
Plaquemines
DHH/ Office of Primary Care & Rural Health, December 2002

Parish Health Units

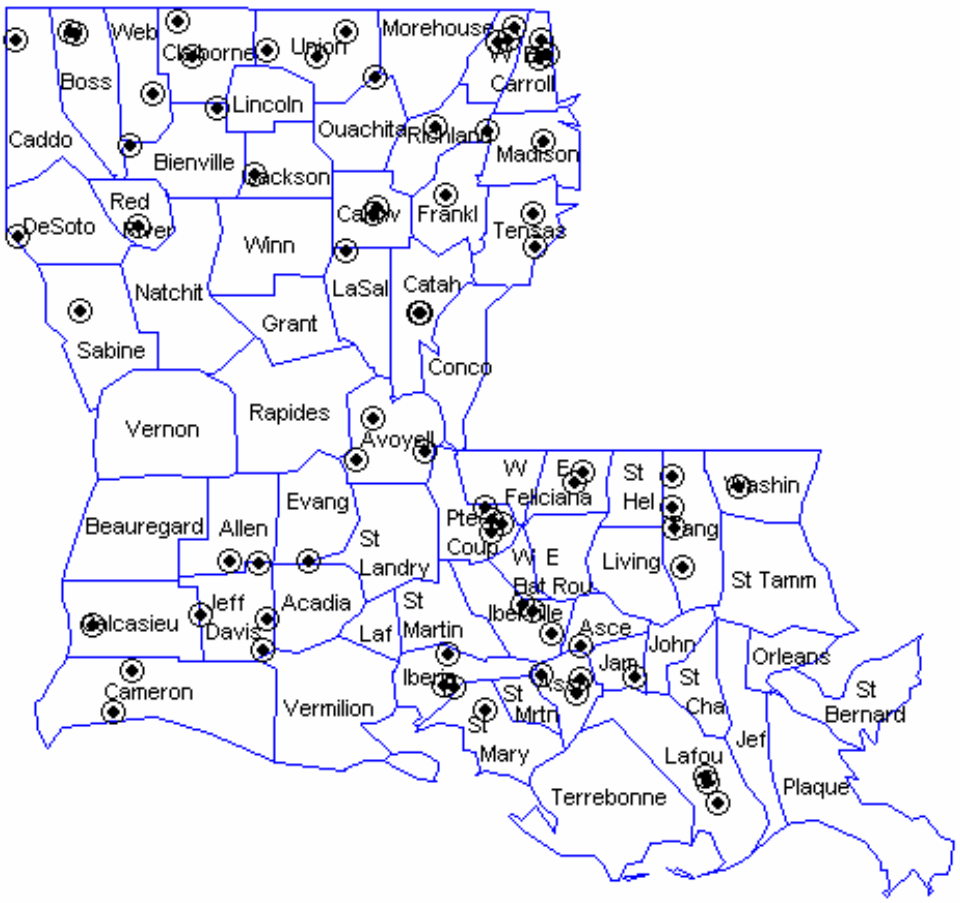
Louisiana has 77 parish health units (PHUs). DHH-OPH currently operates parish health units (see map below) that provide services in the following areas: immunization, family planning, prenatal care, newborn screening for genetic disorders, well-baby care, nutrition therapy, individual nutrition education and counseling, genetic evaluation and counseling, early intervention services for individuals infected with HIV, health education, testing and monitoring of infectious diseases (e.g., tuberculosis, sexually transmitted diseases/HIV/AIDS), environmental health services, and vital records services.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Center for Community Health

Rural Health Clinics

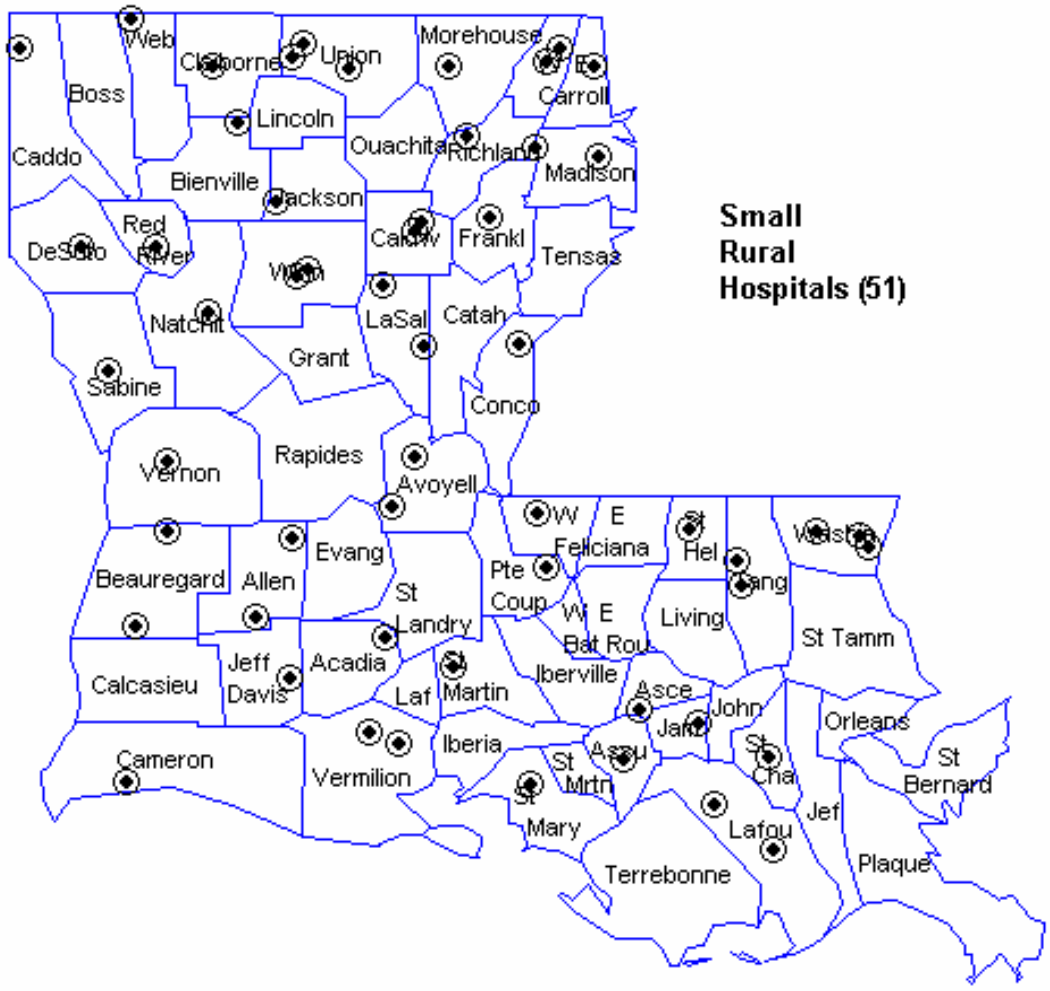
Louisiana has 72 Rural Health Clinics (RHCS). These facilities are located in non-urbanized areas, as defined by the 2000 Census, and in Health Professional Shortage Areas (HPSAs) or Medically Underserved Areas (MUAs). The facility must be staffed by, at least, one physician and, at least, one mid-level practitioner, such as a physician assistant, a nurse practitioner, or a certified nurse midwife at least 50% of the time the clinic is open. RHCs provide routine diagnostic services, maintain medical supplies, dispense drugs, and have arrangements with local hospitals and other providers for services not available at the clinic.



Small Rural Hospitals

Louisiana has 51 Small Rural Hospitals. A Small Rural Hospital is defined as a hospital, other than a long-term care hospital, rehabilitation hospital, or free-standing psychiatric hospital, but including distinct-part psychiatric units, meeting the following criteria:

- Has no more than 60 beds as of July 1, 1994; and 1) is located in a parish with a population of less than 50,000; or 2) is located in a municipality with a population of less than 20,000; **OR**
- Meets the qualifications of a sole community hospital under 42 CFR §412.92(a); **OR**
- Effective October 1, 1999, has no more than 60 hospital beds as of July 1, 1999, and is located in a parish with a population of less than 17,000 as measured by the 1990 census; **OR**
- Effective October 1, 1999, has no more than 60 hospital beds as of July 1, 1997 and is a publicly owned and operated hospital; and 1) is located in a parish with a population of less than 50,000; or 2) is located in a municipality with a population of less than 20,000; **OR**
- Effective August 8, 2001, has no more than 60 hospital beds as of June 30, 2000 and is located in a municipality with a population of less than 20,000 as measured by the 1990 census; **OR**
- Effective August 8, 2001, has no more than 60 hospital beds as of July 1, 1997 and is located in a parish with a population of less than 50,000 as measured by the 1990 and 2000 censuses; **OR**
- Effective August 8, 2001, was a facility licensed by DHH that had no more than 60 hospital beds as of July 1, 1994, which hospital facility has been in continuous operation since July 1, 1994, is currently operating under a license issued by DHH, and is located in a parish with a population of less than 50,000 as measured by the 1990 census; **OR**
- Has no more than 60 hospital beds or has notified DHH as of March 7, 2002 of its intent to reduce its number of hospital beds to no more than 60, and is located in a municipality with a population of less than 13,000 and in a parish with a population of less than 32,000 as measured by the 2000 census.


Web
Claiborne
Union
Morehouse
Boss
Carroll
Lincoln
Ouachita
Richland
Madison
Caddo
Bienville
Jackson
Red River
DeSoto
Franklin
Tensas
Natchit
LaSal
Catah
Grant
Sabine
Conco
Vernon
Rapides
Avoyell
Evang
Beauregard
Allen
St Landry
Jeff Davis
Acadia
Calcasieu
Laf
St Martin
Iberville
Asce
John
Orleans
St Bernard
Cameron
Vermilion
Iberia
St Mrtn
St Mary
Lafou
Terrebonne
Plaque
Jef
St Tamm
Living
Pte Coup
Feliciana
Small
Rural
Hospitals (51)

Federally Qualified Health Centers (FQHCs)

Louisiana has 18 grantees for community health centers delivering services to 36 sites supported through a federal grant program funded under Section 330 of the United States Public Health Service Act. FQHCs (also known as Community Health Centers) are health clinics that provide primary and preventive healthcare services in medically underserved areas throughout the United States and its territories. FQHC staff may include primary care physicians (pediatricians, general practitioners, family practitioners, obstetricians, gynecologists, and general internists), advanced nurse practitioners, physician assistants, dentists, social workers, counselors, psychologists, other mental-health and substance abuse professionals, and support staff. Services most commonly provided include primary and preventive healthcare, outreach, dental care, mental health services, laboratory tests, pharmacy services, health education, transportation, translation, and prenatal services.

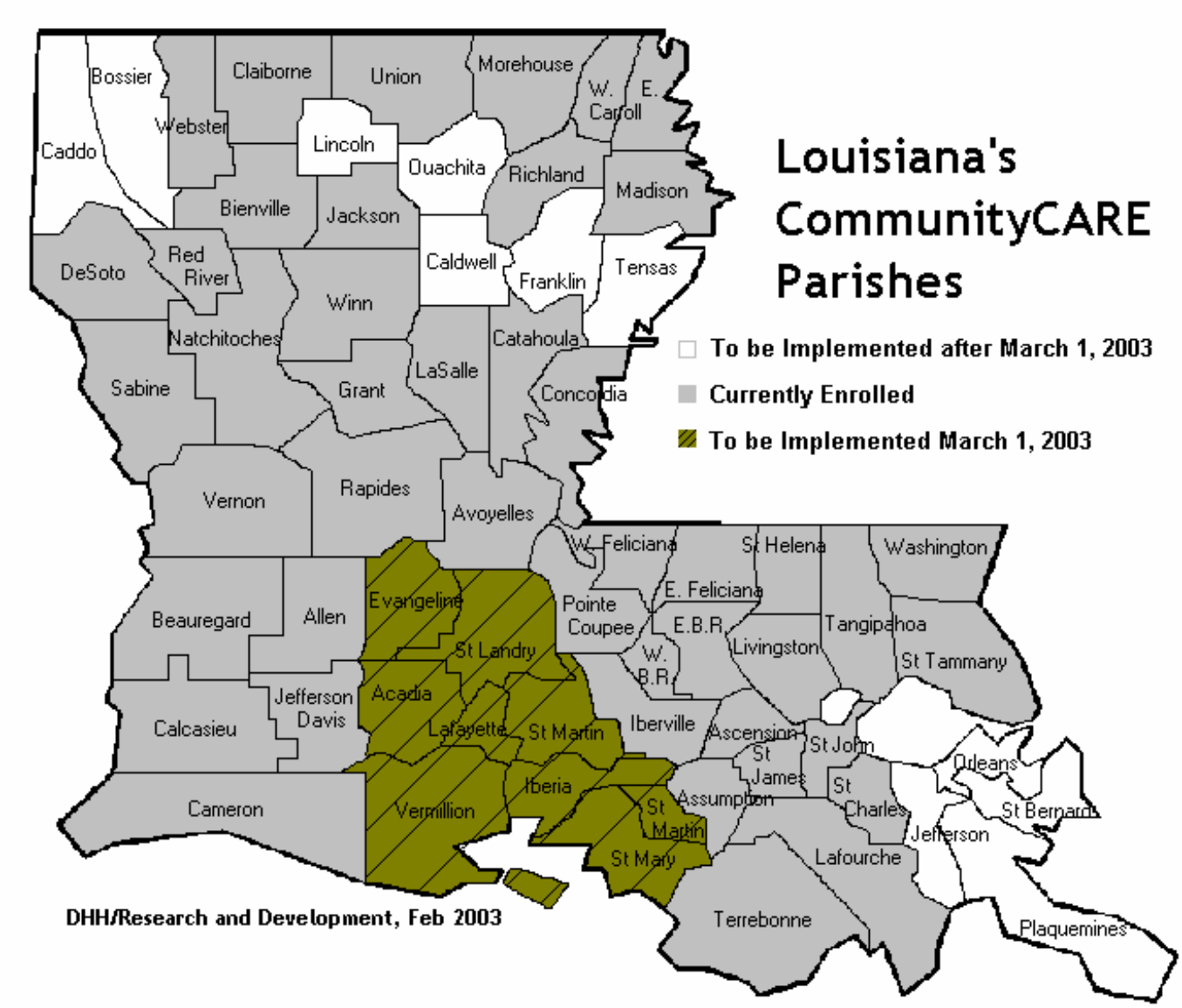
CommunityCARE

CommunityCARE is a system of comprehensive healthcare based on primary care case management (PCCM). DHH embarked on a statewide expansion of CommunityCARE in August 2001, which was to be fully implemented by December 2003. CommunityCARE is now available in 46 rural parishes throughout the state (see map on following page) under a Medicaid 1915 (b) waiver from the federal government. The program is designed to assure Medicaid recipients a “medical home” where they can obtain primary care, preventive care and all other healthcare coordinated in a comprehensive manner. It is also a freedom-of-choice waiver program that must demonstrate cost effectiveness. CommunityCARE links Medicaid recipients in designated parishes with a physician, clinic, FQHC, or RHC that serves as the primary care provider (PCP).

The PCP may be a family practice physician, internist, pediatrician, general practitioner, Obstetrician/Gynecologist, RHC, or FQHC. The PCP has total responsibility for managing all facets of the recipient’s health care, including education, prevention, maintenance, and acute care. Referral for specialty services is an integral component of CommunityCARE.

As of February 2002, the program was operational in 46 parishes in Louisiana, with a total of 315,215 Medicaid recipients enrolled. There are 632 enrolled providers employing a total of 1,117 physicians. PCPs are paid a primary-care management fee of $3.00 each month for each CommunityCARE enrollee for whom they manage care. Reimbursement is fee-for-service but is at an enhanced rate from that paid to other physicians. As a result of advisory groups with physicians and hospitals, numerous changes have been made in the program to reduce unnecessary paperwork, streamline processes, and ease the administrative burden on PCPs and other providers. The improved coordination of care is expected to

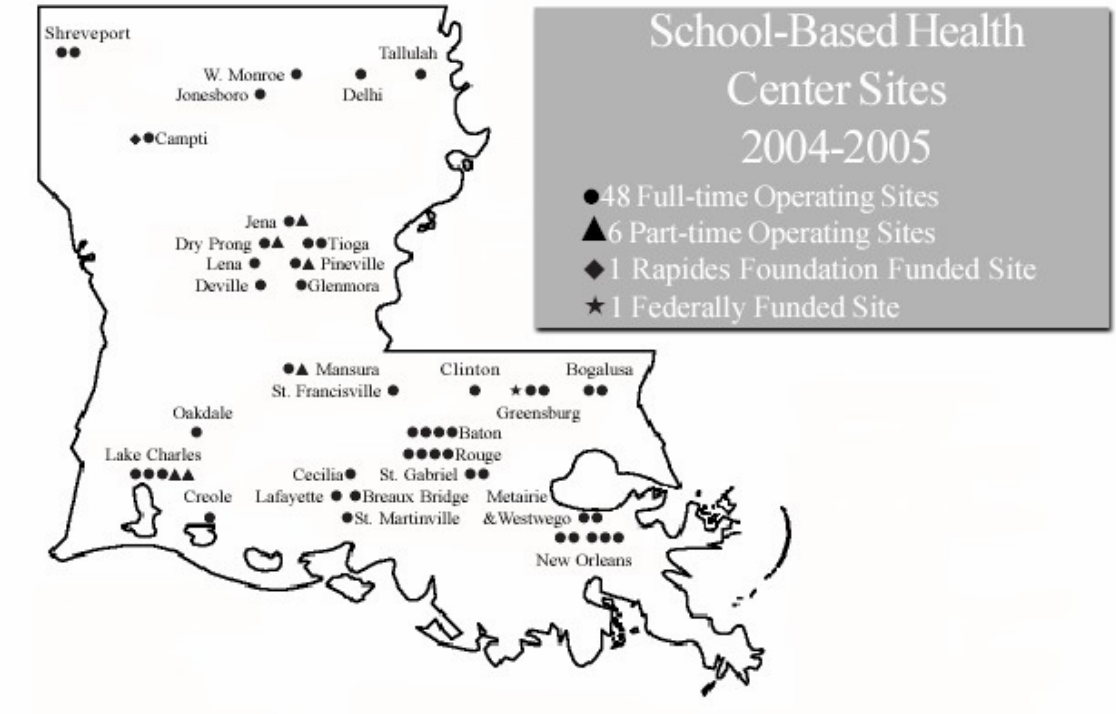
reduce inappropriate utilization of services, especially emergency room services, as well as improve health outcomes.



School-Based Health Centers

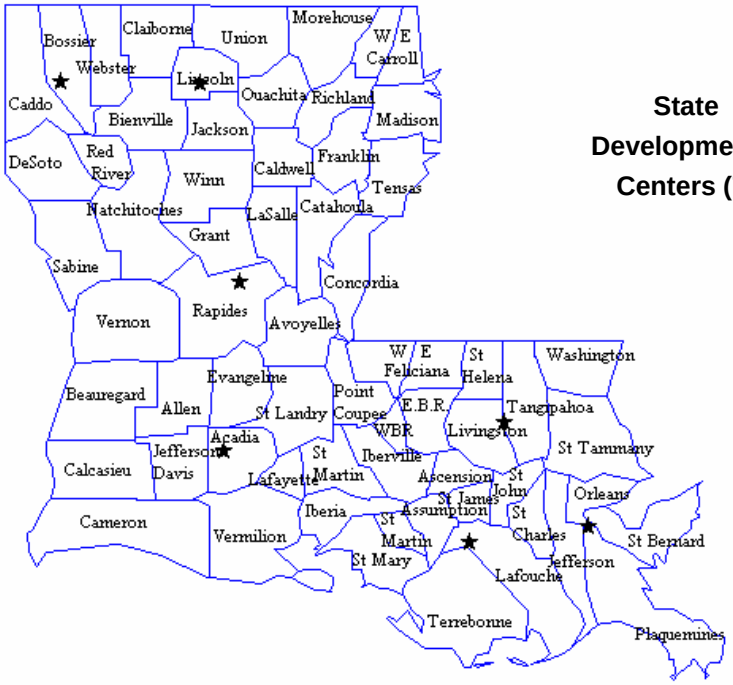
In response to the Adolescent School Health Initiative Act passed by the Louisiana State Legislature in 1991, DHH-OPH funds and provides technical assistance to localities for the establishment and operation of full service health centers in elementary, middle, and secondary schools (see map below). Currently, there are 53 state-funded sites and one federally funded site. These school-based health centers are sponsored and operated at the local level by a health or education agency under contract with the OPH. The state reimburses to each of these centers a portion of their costs.

The centers primarily serve low-income adolescents in rural and medically underserved urban areas. They offer primary and preventive physical and mental healthcare, including health education, and counseling services. They are staffed by physicians, nurse practitioners, registered nurses, and master-level mental-health counselors and have been immensely popular with the high-risk adolescent population.



Developmental Centers

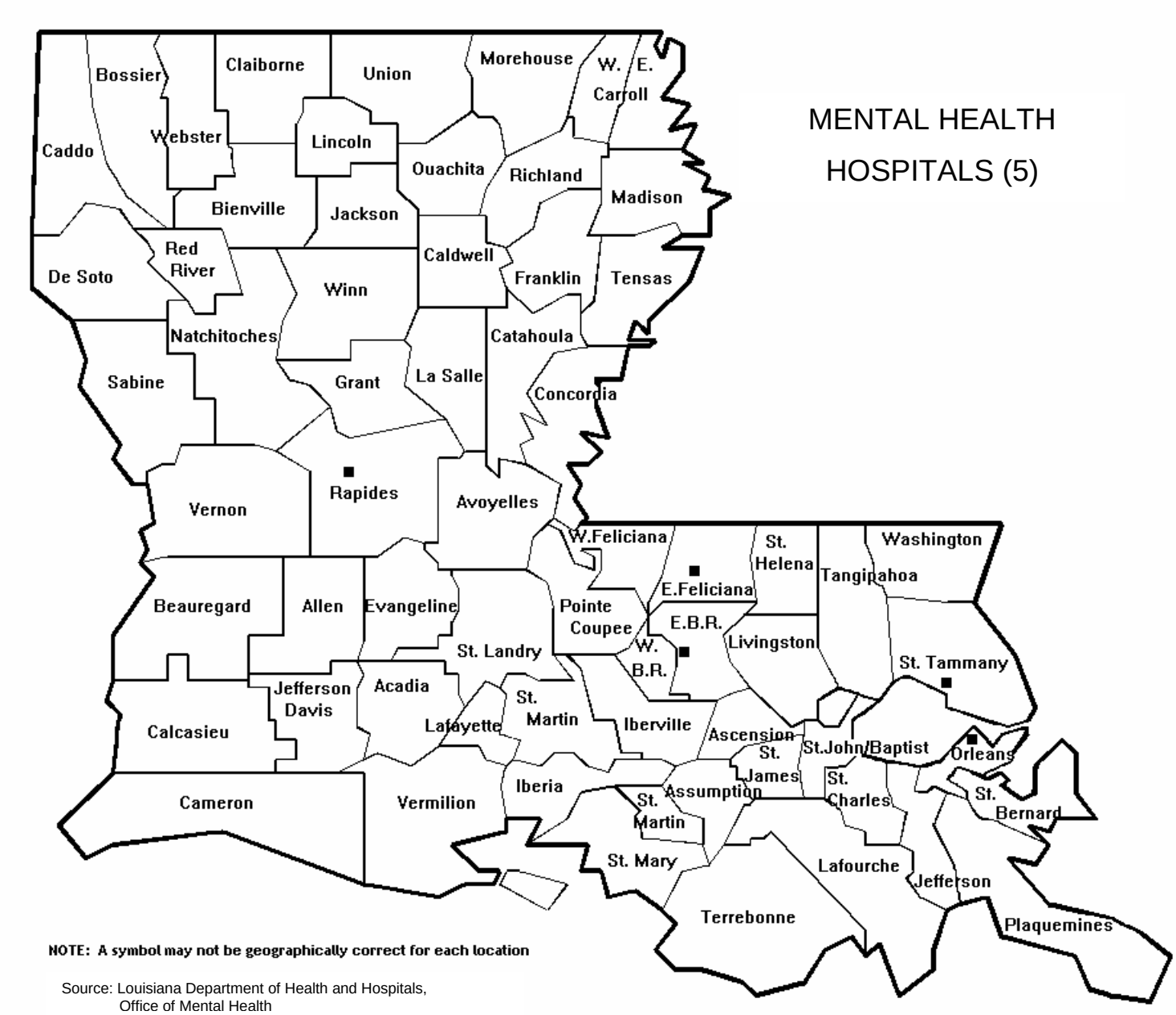
There are seven state-operated developmental centers licensed as ICFs/MR (Intermediate Care Facilities for persons with Mental Retardation) which provide active treatment services and a range of residential services including 24-hour care in large and small settings such as institutions and community or group homes. In addition, these centers provide a variety of services such as extended family living, supported living in one's own home, supported employment and day habilitation. These include the Hammond, Metropolitan (at Belle Chasse), Northwest (at Bossier City), Peltier-Lawless (at Thibodaux), Pinecrest (at Pineville), Ruston and Southwest (at Iota) Developmental Centers.



Note: A symbol may not be geographically correct for each location
Source: Office for Citizens with Developmental Disorders

Mental Health Clinics

THE DHH Office of Mental Health (OMH), either directly or through partnerships with private and university resources, provides an array of community-based and hospital-based services, the range of which is consistent with national models for public mental-health care for individuals with serious mental illnesses. Statewide, there are currently 43 community mental-health centers, 33 outreach sites, seven acute treatment units, four intermediate/long-term care hospitals, and one forensic hospital (see map below). Major service components include crisis response programs, assertive community treatment, family or consumer respite care, traditional clinic-based services, community forensic interventions, hospital-based inpatient intensive and intermediate units, case management, and rehabilitative services.

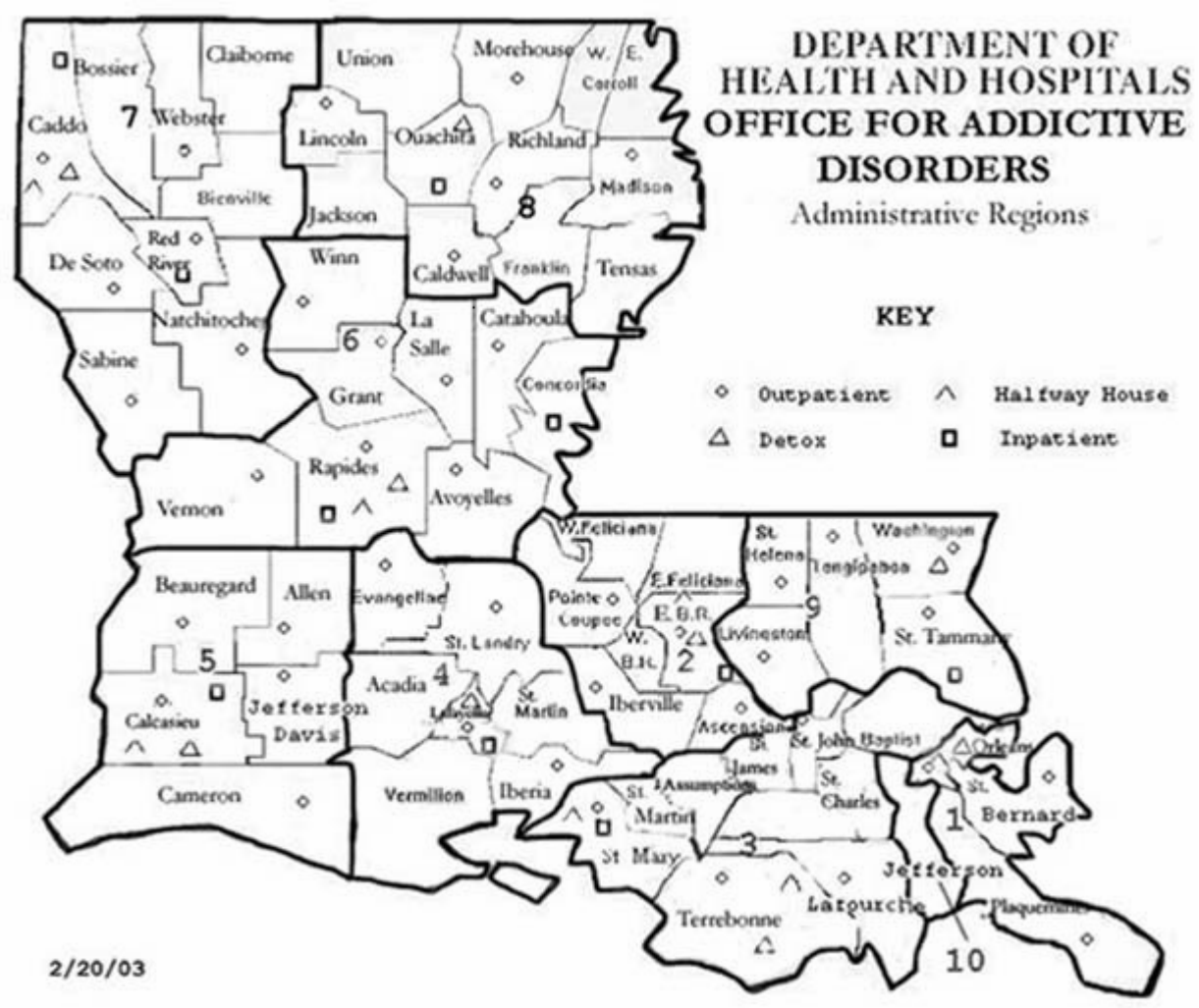


NOTE: A symbol may not be geographically correct for each location

Source: Louisiana Department of Health and Hospitals, Office of Mental Health

Substance Abuse Prevention Clinics

The DHH Office for Addictive Disorders (OAD) offers a continuum of care for prevention, diagnosis, treatment, rehabilitation, and follow-up care for alcohol and drug abuse, through contracts and state-operated facilities. This system is composed of nine treatment delivery regions, with DHH-OAD Region 2 as an independent district. OAD has 12 inpatient clinics (10 adult and two adolescent), 11 detoxification clinics, 16 halfway houses, and three residential facilities. The Prevention Delivery System offers 48 prevention programs.



Source: Louisiana Department of Health and Hospitals, Office for Addictive Disorders

Existing Health Maintenance Organizations

Louisiana currently has 10 licensed health maintenance organizations (HMOs) operating in the state. Under state insurance law, an HMO is defined as any plan delivering basic health benefits for a prepaid fee. Most of the state's HMOs are composed of independent physicians practicing alone or in small medical groups. As of the year 2002, approximately 626,780 Louisiana residents (14.0 percent of the population) were enrolled in HMOs.[6] In addition to HMOs, the LOUISIANA MANAGED HEALTH CARE ASSOCIATION lists as members preferred provider organizations (PPOs) and several physician hospital networks (PHOs) operating in the state.

G. INVENTORY OF PRIMARY CARE/ MENTAL HEALTH PROVIDERS

Number of Selected Health Professionals by Parish
Louisiana, 2003

Location	Primary Care Physicians (PCPs)							Mental Health Provider	
Parish	Family Practice	General Practice	Infectious Disease	Internal Medicine	Obstetrics & Gynecology	Pediatrics	Total PCP	Psychiatrists	Social Workers
Acadia	15	3		5	3	5	31	1	8
Allen	5	1		1		3	10		4
Ascension	9	7		11		4	31	1	22
Assumption	4	1					5		2
Avoyelles	9	5		3			17		10
Beauregard	7			3	3	2	15		6
Bienville							0		3
Bossier	17	2		29	10	9	67	2	31
Caddo	68	7	2	217	54	77	423	40	164
Calcasieu	56	8		57	27	23	171	14	92
Caldwell	4			2		1	7		2
Cameron	1			2			3		0
Catahoula	3	1					4		1
Claiborne	5			1		1	7		3
Concordia	4	1		1	2		8		5
DeSoto	1	3		1	2	1	8	1	4
East Baton Rouge	102	35	1	204	78	101	520	42	577
East Carroll	2			1			3		0
East Feliciana	6	5		1	1		13	2	14
Evangeline	7	5		10	4	2	28		1
Franklin	3			1			4		3
Grant	3				1		4		4
Iberia	17	10		13	8	12	60	2	18
Iberville	7	2		6	2	3	20		14
Jackson	1			3		1	5		3
Jefferson	60	29	4	317	90	125	621	61	376

Continued

[6] Morgan, K.O. and Morgan, S. (Eds.) 2003. *Health Care State Rankings 2003: Health Care in the 50 United States*. (11th Ed.) Lawrence, KS: Morgan Quitno Press.

Number of Selected Health Professionals by Parish
Louisiana, 2003

Location	Primary Care Physicians (PCPs)							Mental Health Provider	
Parish	Family Practice	General Practice	Infectious Disease	Internal Medicine	Obstetrics & Gynecology	Pediatrics	Total PCP	Psychiatrists	Social Workers
Jefferson Davis	3	5		7	2	2	19	1	7
Lafayette	48	15		103	42	42	250	20	181
Lafourche	21	6		21	11	8	67	2	23
LaSalle	2	2		3			7		1
Lincoln	6	2		13	3	3	27	1	15
Livingston	7	1		2		1	11		25
Madison		2		1		1	4		2
Morehouse	7	3		5	3	2	20		3
Natchitoches	5	4		7	3	8	27	2	15
Orleans	64	27	3	428	109	201	829	158	798
Ouachita	44	12		74	19	32	181	17	96
Plaquemines	3	2		2			7	2	4
Pointe Coupee	9	3		1	1		14		8
Rapides	36	5		66	19	27	153	20	111
Red River	2	1		1			4		3
Richland	7	1		2	2		12		5
Sabine	2	2		5		1	10		3
St. Bernard	1	1		16	1	3	22	1	15
St. Charles	4	1		4		5	14	2	14
St. Helena	2	1					3		1
St. James	5	1		3	1	2	12	1	6
St. John	7	1		7	4	2	21		12
St. Landry	25	8		18	11	13	75	2	26
St. Martin	5	1		1			7		4
St. Mary	12	2		7	6	3	30		7
St. Tammany	38	9	1	122	38	51	258	34	214
Tangipahoa	19	6		26	8	11	70	3	59
Tensas		2					2		0
Terrebonne	10	7		31	17	16	81	6	39
Union	2	2		4			8		11
Vermilion	4	3		5	1	4	17	2	14
Vernon	3	2		7	2	3	17	1	5
Washington	7	6		9	2	1	25	1	11
Webster	12	4		5	4	2	27		9
West Baton Rouge	5						5		4
West Carroll	1	1		2		1	5		2
West Feliciana	3			2		1	6		11
Winn	2	2		2		1	7		2
Total	849	278	11	1901	594	817	4439	442	3133

Source: Louisiana Board of Medical Examiners, January 2003
Louisiana Board of Certified Social Work Examiners, 2000

H. HEALTH PROFESSIONAL SHORTAGE AREAS (HPSAS)

Health Professional Shortage Area (HPSA) designations identify geographic areas, population groups, or facilities where a lack of primary-care providers poses serious barriers to adequate healthcare. The equitable geographic distribution of healthcare resources has long been recognized as a problem in the United States, particularly Louisiana. Adequate access to healthcare services for all residents is an important objective of current state and federal policy. Availability of an adequate supply and distribution of health professionals is essential to the ability to access basic healthcare services, regardless of ability to pay. The redistribution of the supply of health professionals, particularly primary-care providers, through the designation of HPSAs, is one method used to attain this goal.

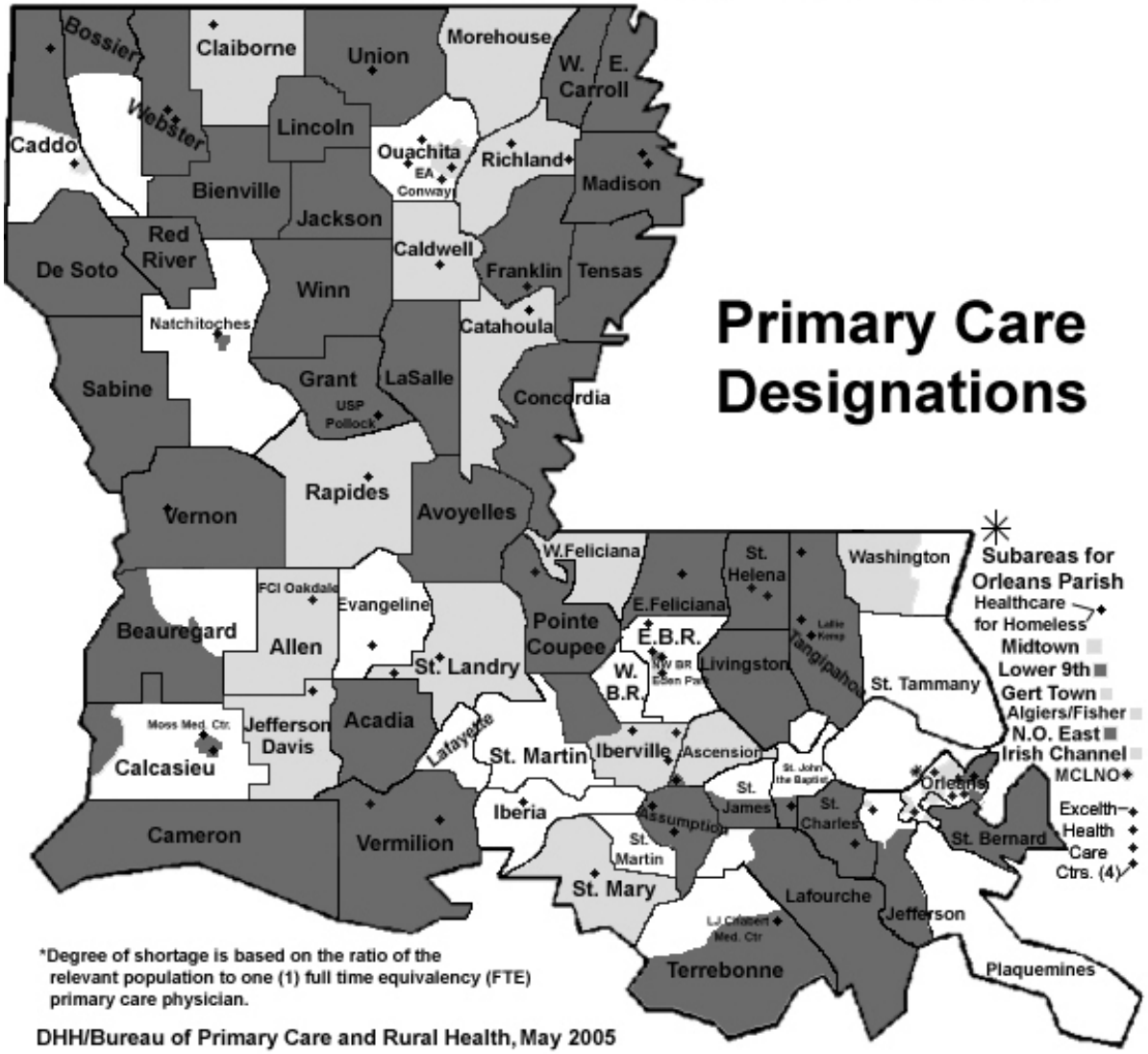
HPSA designations are used to create incentives to improve the distribution and the number of primary care providers in the most critical shortage areas. The designation methodology was developed to determine exactly where shortages exist in order to define those areas eligible for participation in the incentive programs.

Designation requests and reviews are the responsibility of the DHH BUREAU OF PRIMARY CARE AND RURAL HEALTH. After analysis and review, the designation requests and recommendations are forwarded to the Shortage Designation Branch in HRSA/ BHPR/ NCHWA, which is a part of the U.S. Department of Health and Human Services. The entire designation process can take up to six to eight months for completion.

There are approximately 34 federal programs utilizing HPSA designations. The following are examples:

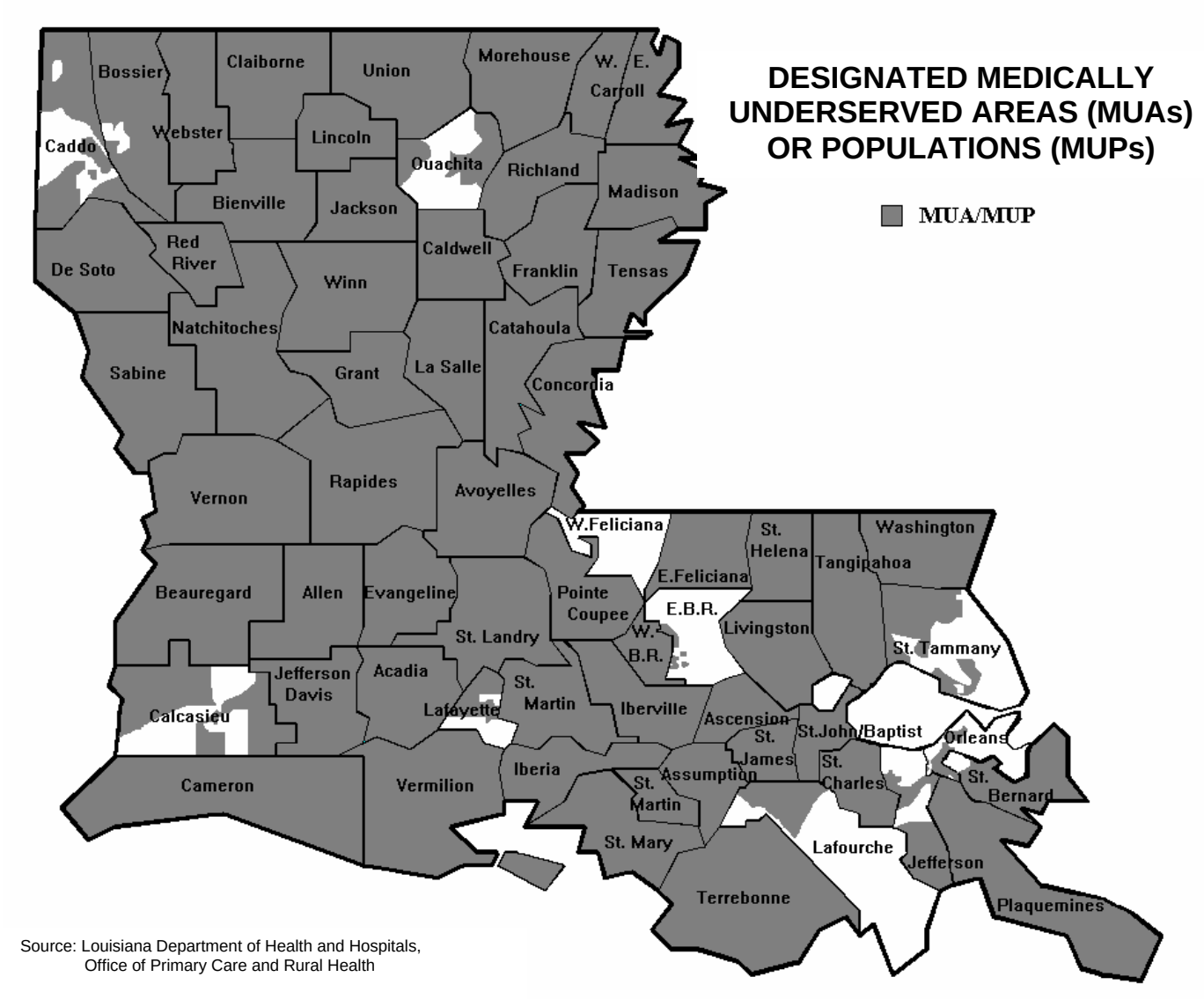
- National Health Service Corps
- Medicare Incentive Payments
- J-1 Visa Waiver Program
- Rural Health Programs

Health Professional Shortage Area (HPSA) Map



HPSA DESIGNATIONS LEGEND:

- Geographic Designation
- Population Group Designation
- Facility Designation
- Pending (submitted to the federal government for approval)



Source: Louisiana Department of Health and Hospitals,
Office of Primary Care and Rural Health

VI. RECOMMENDATIONS FOR IMPROVING HEALTH STATUS

A. MATERNAL, INFANT, AND CHILD HEALTH

Maternal Mortality

- Conduct an ongoing, formal Pregnancy Associated Mortality Review (PAMR) process under the direction of the State Perinatal Commission, to evaluate deaths and identify opportunities for their prevention.

Infant Mortality

- Implement the recommendations to reduce low birthweight rates (see Low Birthweight section below), since this is a leading cause of infant mortality.
- Expand a systematic review of all fetal and infant deaths (Fetal Infant Mortality Review) to gather information for the development of preventive programs.
- Carry out public and professional education on risk factors for Sudden Infant Death Syndrome (SIDS).
- Encourage the cessation of smoking and avoidance of second-hand smoke during and after pregnancy.
- Extend home-visiting and case-management services to mothers who are at high risk for an adverse outcome and evaluate program effectiveness
- Formalize a community-based approach through development of Regional MCH Forums designed to increase awareness, promote collaboration, and implement effective intervention strategies to address infant mortality at the local level.
- Monitor the status of pregnancy risk factors with the LOUISIANA PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (LaPRAMS) and employ this information for policy development and implementation of appropriate, effective interventions.
- Enhance communication, collaboration, and coordination with public and private agencies who impact infant mortality and MCH outcomes (i.e., Louisiana STD, HIV, Family Planning, Tobacco Control Programs; Office of Addictive Disorders; Office of Mental Health; Louisiana Public Health Institute; Louisiana MCH Coalition; Louisiana Chapter of American College of Obstetricians and Gynecologists)
- Increased direct communication with public providers, private providers, and birthing hospitals on state / regional outcome data, current intervention programs, and opportunities to enhance more effective interventions.

Low Birthweight

- Ensure access to prenatal care for all pregnant women, especially minorities, those with low incomes, teenagers, and those living in medically underserved areas.
- Improve access to and utilization of prenatal care by identifying and removing barriers, elimination of factors contributing to racial disparity, and promoting the use of non-traditional obstetrical practitioners in Louisiana (e.g., nurse midwives, nurse practitioners).

- Expand a system of prenatal screening for multiple risk factors (e.g., substance use/abuse, domestic violence, and depression) associated with poor pregnancy outcomes, so that identified women can be referred early for appropriate management.
- Promote healthy oral hygiene during pregnancy, particularly coverage of treatment of periodontal disease currently included as Medicaid covered services.
- Promote appropriate weight gain during pregnancy, as Louisiana data reveal increased risk of low birthweight in women with too little weight gain.
- Promote preconceptional and interconceptional care with increased availability of Family Planning services, identification of maternal risk factors, and referral for treatment as appropriate.
- Reduce substance abuse (including use of drugs, alcohol, and tobacco) among pregnant women through public education.
- Increase screening, counseling and treatment services for substance-abusing pregnant women in conjunction with the Office of Addictive Disorders.
- Target women with prior very low birth weight (VLBW) infants with education / prevention messages as part of an overall interconception care service.
- Increase WOMEN, INFANTS, AND CHILDREN (WIC) PROGRAM services for pregnant women.
- Improve surveillance systems to gather information on risk factors in low birthweight pregnancies.
- Increase support for Partners for Healthy Babies, which promotes healthy prenatal behaviors and early prenatal care through media messages and a toll-free hotline that links pregnant women with healthcare providers.
- Initiate a CME- based educational programs for healthcare providers , focusing on factors influencing low birth weight births and their prevention.
- Analyze data collected in the LAPRAMS database to assess preventable risk factors associated with low birthweight and to help identify effective and ineffective elements of existing efforts.

Child Health

- Provide access to preventive health services (e.g., health screening, immunizations, parental education) to infants and children in low-income families or to others who do not have access to such services due to geographic or financial barriers, or a lack of providers.
- Support outreach efforts through the Covering Kids and Families Initiative for the Louisiana Children's Health Insurance Program (LaCHIP) in order to increase access to health services.
- Expand health-system development efforts to all areas of the state to insure that all children have access to comprehensive health (primary and specialty), mental health, social, and education services.
- Develop and implement statewide and community-based initiatives for the prevention of unintentional injuries, which are the leading cause of death in children over the age of one year.
- Support local Child Death Review Panels for the review of all unexpected deaths in children under 15 years of age in order to develop interventions for the prevention of such deaths.

- Conduct public awareness media campaigns on issues related to improving the health and safety of infants and children such as Safe Sleep Environments, Safe Havens, and prevention of injuries due to motor vehicles, drowning, fire, and suffocation.
- Establish comprehensive systems of services for young children and their families through which their needs are addressed,

Child Abuse and Neglect

- Increase public awareness of child abuse prevention and positive parenting and promote parenting education.
- Expand home visiting services to families at high risk for child abuse and neglect, utilizing the Nurse Family Partnership Visiting Model.
- Educate healthcare providers in the assessment of the parent-child relationship for early detection of families that are at risk for child abuse and neglect.
- Implement, in several regions of the state, a new program for at-risk pregnant women and women with babies using a health/infant mental health intervention focus to strengthen overall child outcomes, including reducing the risk of abuse and neglect.

Child Care

- Promote health and safety in out-of-home childcare by utilizing childcare health consultants.
- Provide expertise and leadership in the development and enhancement of childcare standards.
- Sustain the coalition of state and local health professionals, government and community agencies, child care providers, and concerned citizens to address health and safety childcare issues.
- Utilize a multi-disciplinary community approach to improve quality of childcare facilities.
- Utilize childcare health consultants to assist childcare centers to integrate children with special health care needs into their facilities.

Teenage Birth Rates

- Facilitate the community's capacity to address teenage pregnancy through provision of information and resources.
- Provide educational enrichment and economic opportunities to strengthen the family and the community.
- Involve both the public and the private sectors in developing community-centered, sustainable, collaborative, innovative and adolescent-focused programs.
- Encourage age-appropriate sex and family life education at home by parents.
- Provide age-appropriate family life education in schools, focusing on abstinence and the delay of sexual activity.
- Ensure access to information on safe sex practices and contraceptives.
- Provide culturally appropriate, intensive, long-term programs that recognize family and community values.

- Provide resources to adult mentors, peers, and community members with similar backgrounds and experiences to facilitate a variety of approaches.
- Mobilize multi-disciplinary teams involving teachers, health professionals, social workers, and community leaders.
- Develop multi-message programs addressing school drop-out; real life options; job exploration, training, and placement; and individual and family counseling when necessary.
- Provide comprehensive adolescent health clinics that are community-based, school-based, and/or school-linked.
- Ensure youth involvement and leadership in program design, implementation, and evaluation.
- Infuse adolescent voices into planning and policy-making efforts.
- Assist local communities to 1) identify needs and potential resources; 2) prioritize problems; 3) develop solutions 4) evaluate impact.
- Provide technical assistance and give presentations on adolescent health to community based organizations, institutions and other agencies.
- Coordinate community based awareness summits, conferences, and church activities.
- Annually spearhead statewide teen pregnancy prevention observances.

B. INFECTIOUS DISEASES

Surveillance and Epidemiologic Response

- Conduct surveillance activities to identify disease trends and risk factors for acquiring infections.
- Coordinate or implement preventive measures required after reporting communicable diseases.
- Investigate outbreaks and recommend or implement preventive measures.
- Develop appropriate statewide guidelines for the prevention, surveillance, and management of communicable diseases of public health importance.
- Assist healthcare facilities in planning and implementing infection control programs.
- Provide education and information to the public and health professionals regarding infections of public health importance.

Bioterrorism

- Provide for early detection of exposure to bioterrorism agents and early identification of diseases due to bioterrorism agents.
- Prepare for early and efficient response to bioterrorism events.
- Plan preventive measures to minimize adverse consequences of bioterrorism events.
- Disseminate information on identification and response to bioterrorism events to health professionals.

Other Infectious Disease Objectives

- Conduct surveillance of antibiotic resistance through passive reporting of invasive diseases through active laboratory surveillance of select agents and compilation of hospital antibiograms in a statewide summary.
- Implement a broad-based program to promote appropriate antibiotic use for outpatient upper respiratory infections directed to the health professionals and the public.
- Implement an educational program for judicious use of antibiotics in health-care facilities.
- Coordinate and foster in sexually transmitted disease clinics and HIV/AIDS program sites screening and educational activities to prevent hepatitis C.
- Provide education and information to the public concerning hepatitis C.
- Continue active surveillance for influenza cases each year in order to inform health-care providers and the public about the proper time to be immunized each fall.

Tuberculosis (TB)

- Continue the practice of directly observed therapy (DOT) to ensure completion of therapy.
- Expand surveillance for TB through liaisons with hospital infection control practitioners and private medical groups in high-incidence areas.
- Enhance the capacity to provide field-based outreach and ensure thorough case and contact follow-up.
- Ensure that the in-patient treatment facility at Villa Feliciana remains a treatment option for drug-resistant, recalcitrant, or other TB patients who require close supervision of therapy.
- Assure prompt medical assessment of foreign-born persons entering the state with evidence of TB.

Sexually Transmitted Diseases (STDs) and HIV/AIDS

- Encourage condom use among persons who may have high-risk sexual behavior and increase distribution of and accessibility to condoms.
- Provide STD and HIV testing and counseling, group educational sessions, and outreach to persons at high risk for STDs and HIV/AIDS.
- Increase access to clinical services for people with STDs to ensure rapid treatment and thereby reduce spread of STDs and vulnerability to HIV.
- Increase awareness of asymptomatic STD infection, especially gonorrhea and chlamydia in the young adult population, and the need to screen both men and women for those infections.
- Enhance partner notification activities for syphilis, all other STDs, and HIV/AIDS.
- Enhance statewide efforts to promote syphilis elimination.
- Continue support for public awareness and professional education regarding HIV/AIDS in pregnant women, the effective use of anti-retroviral drugs in preventing perinatal transmission, and education for all people regarding the public health threat of STDs and HIV/AIDS.

C. ORAL HEALTH

- Continue to strengthen the fluoridation program infrastructure within OPH.
- Continue to promote expansion of community water systems that adjust water fluoridation levels to optimal range for the reduction of dental cavities.
- Ensure continuous monitoring of all public water systems that fluoridate and provide technical assistance for all public water systems operators.
- Provide education to the public, policymakers, and dentists regarding the optimal water fluoridation status in Louisiana.
- Increase access to pit and fissure dental sealants among school children in Louisiana.
- Provide education to the public, policymakers, and dentists, regarding current pit and fissure sealant utilization rates among populations at risk for dental caries.
- Work with the DHH Bureau of Health Services Financing to increase Medicaid dental coverage for at-risk special-needs populations.
- Provide education to the public, policy makers, dentists, and obstetricians regarding the relationship between periodontal disease in pregnant women and premature births.
- Continue to work with Medicaid/LaMOMS outreach programs to inform pregnant women about the dental program available to them.
- Provide tobacco cessation training to future dental healthcare professionals.

D. CHRONIC DISEASES

Tobacco

Evidence Based Strategies that Work

- Increase the excise tax on tobacco products. This would directly correlate with a decrease in tobacco consumption by youth and provide funds for increased tobacco control efforts to be accomplished and thus help in long-term improvement of health for Louisiana's residents.
- Conduct an effective mass-media campaign as an intervention which is useful in reducing the consumption of tobacco products and increasing cessation among current tobacco users.
- Incorporate a policy requiring a comprehensive provider-education program and insuring a provider-reminder system for smoking cessation by health-insurance providers which include cessation services. This would allow for increased smoking cessation efforts by those individuals who use tobacco.
- Eliminate exposure to secondhand smoke by working at the local level to enact local smoke-free air ordinances which encompass smoke-free workplaces, public places, schools, and restaurants, among other facilities.

Diabetes

- Advocate maintenance of optimal weight levels and physical activity.
- Increase intake of fruit, vegetables, and grains while reducing fat in diet.
- Promote working continuously with a physician to control blood sugar levels and monitor hemoglobin A1c through regular testing.
- Encourage adoption of healthy lifestyles.
- Advocate maintenance of normal blood pressure and cholesterol levels.
- Encourage annual retinal exams.
- Promote daily inspection of feet.
- Urge patients to have their feet checked annually.
- Encourage annual influenza shots.
- Encourage pneumococcal shots.
- Promote daily self blood-glucose checks.

Heart Disease/Stroke

- Advocate for programs that promote community awareness of signs and symptoms of stroke and the need to call 911.
- Advocate for reimbursement of rehabilitation and follow up care for heart disease and stroke victims.
- Advocate for systems change that encourages adherence to national guidelines for appropriate stroke treatment.
- Advocate for systems change that encourages adherence to national guidelines for appropriate treatment and follow up of heart disease.
- Advocate for policy development that ensures increased adherence to national guidelines for the prevention and control of high blood pressure and high cholesterol through screening and follow-up.
- Advocate for programs that assist worksites in providing and promoting detection and follow up services for employees for control of blood pressure and cholesterol.
- Advocate for programs that inform the public that high blood pressure and high cholesterol is a major modifiable risk factor for heart disease and stroke.
- Advocate for programs that inform the public that having blood pressure and cholesterol checks is an important first step in reducing the risk of heart disease and stroke.

Asthma

- Support existing programs and foster statewide implementation of regional pilot projects.
- Promote annual Flu and Pneumonia immunizations.
- Promote disease management activities especially for people with moderate to severe persistent asthma.

- Advocate for the development of primary guidelines to ensure that all primary care providers and/or clinic staff are equipped to counsel people with asthma and their care givers in asthma-management and episode prevention.
- Advocate for screening of all Louisiana children for asthma.
- Eliminate exposure to second hand smoke.
- Advocate for asthma education for all people with asthma as well as their teachers, parents, and caregivers.
- Adjust the literacy level of Asthma publications in Louisiana.

E. ALCOHOL, DRUG, AND OTHER ADDICTIONS

Prevention

- Implement research-based/evidence-based prevention programs statewide.
- Maintain the sale of tobacco products to minors at a 10 percent or lower non-compliance rate through the Synar Program.
- Continue the CENTER FOR SUBSTANCE ABUSE PREVENTION'S State Incentive Grant activities empowering the Governor with enhanced capability to coordinate, enforce, and integrate effective prevention strategies into the state's Prevention Plan for its residents.
- Develop and implement a compulsive gambling prevention curriculum in the school system and for elderly citizens statewide.
- Continue to offer Tobacco Cessation Services for all Office for Addictive Disorders clients.
- Partner with the Office of Alcohol and Tobacco Control of the Louisiana Department of Revenue regarding the access of alcohol to minors.

Treatment and Prevention

- Close existing treatment and prevention gaps and provide a seamless system care through a comprehensive array of community-based treatment and prevention services for individuals with addictive disorders and those at risk for developing addictions.
- Improve the quality and effectiveness of treatment and prevention initiatives through the implementation of best practices and on-going development of the workforce.
- Provide a comprehensive array of prevention and treatment services to meet the needs of problem and compulsive gamblers.
- Continue the development of recovery homes and therapeutic community models as part of the community-based treatment continuum.
- Implement recommendations from the Governor's Health Care Summit.
- Explore a Medicaid waiver or pre-authorization as a means of providing substance-abuse treatment services to the Medicaid-eligible population.

- Office of Mental Health in building an infrastructure to support assessing and treating co-occurring disorders, both in outpatient and inpatient settings.
- Outreach with Faith-Based communities to assist in expanding capacity for clinical and recovery support services.

F. UNINTENTIONAL INJURIES

- Promote policies and resources for the proper use of child safety seats, smoke and carbon monoxide detectors, personal flotation devices, helmet use, and other proven injury-reducing techniques.
- Enforce policies regarding alcohol use and vehicles. Provide resources to prevent recidivism.
- Establish social norms about the impropriety of letting others drive or pilot a vessel while intoxicated.
- Establish social norms of lowest possible acceptable risk within housing, transportation, school, and playground environments (e.g., lighting, surface materials, bicycle-friendly roads, and signaling).
- Promote policies and resources for supervision of children by responsible caretakers, including daycare centers, schools, sports teams, and playgrounds.
- Provide resources for tested injury-prevention actions.
- Promote resources for a coordinated trauma system, including an ambulance run report system.
- Provide resources to initiate an emergency room discharge reporting system to track non-hospitalized injuries.
- Work to reduce the number of children and adults living in poverty.

G. INTENTIONAL INJURIES

- Support policies to reduce firearm injuries and deaths.
- Support policies and promote social norms about safer firearm storage.
- Support policies and resources to reduce domestic and sexual violence.
- Support social norms that repudiate violence against women.
- Support policy and resources to protect and rehabilitate children who witness or experience violence.

Child Death

- Support polices recommended by Child Death Review Panels.
- Promote policies and resources for supervision of children by responsible caretakers.
- Work to promote resources for, and to identify and prevent child abuse.
- Promote policies to provide services for adolescents and adults abused as children.

H. MENTAL HEALTH

- Assure the provision of a system of mental health services based on best practices, which are responsive to the assessed and self-identified needs of consumers, families, and the communities in which they live.
- Provide the greatest impact on the quality of life for individuals within the state mental health system.
- Provide quality services that are cost-effective.
- Provide person-centered care to meet the individual's and family's needs.
- Provide a continuum of services in collaboration with multiple stakeholders.
- Decrease the stigma associated with mental illness by increasing public education efforts.
- Enhance consumer and family participation in the planning, delivery, and monitoring of services and settings, especially concerning suicide issues.
- Focus on prevention and early intervention efforts to minimize the impact of mental illness.
- Treat each person served by the mental health system in a holistic manner with services tailored to meet their individual needs.
- Educate and train all physicians to recognize the signs and symptoms of persons with mental illness and/or at risk for suicide, so that appropriate referrals can be made and/or intervention measures taken.

Contact Information

For more information, please contact
the Louisiana Department of Health & Hospitals
or visit our site on the World Wide Web

Home page address:
http://www.dhh.louisiana.gov/

LOUISIANA DEPARTMENT OF HEALTH & HOSPITALS	http://www.dhh.louisiana.gov/
Office for Addictive Disorders	http://www.oad.dhh.louisiana.gov/
Office for Citizens with Developmental Disabilities	http://www.ocdd.dhh.louisiana.gov/
Office for Community Services	http://www.dss.state.la.us/departments/ocs/index.html
Office of Mental Health	http://www.dhh.louisiana.gov/offices/?ID=62
Office of Public Health	http://www.oph.dhh.louisiana.gov/
Children's Special Health Services	http://www.dhh.louisiana.gov/offices/?ID=256
Chronic Disease Control	http://www.dhh.louisiana.gov/offices/?ID=243
Environmental Epidemiology & Toxicology	http://www.dhh.louisiana.gov/offices/?ID=205
Family Planning	http://www.dhh.louisiana.gov/offices/?ID=262
Administration & Technical Support	http://www.dhh.louisiana.gov/offices/?ID=195
HIV/AIDS	http://www.dhh.louisiana.gov/offices/?ID=264
Immunizations	http://www.dhh.louisiana.gov/offices/?ID=265
Infectious Epidemiology	http://www.dhh.louisiana.gov/offices/?ID=249
Injury Research & Prevention	http://www.dhh.louisiana.gov/offices/?ID=221
Maternal & Child Health	http://www.dhh.louisiana.gov/offices/?ID=267
Oral Health	http://www.dhh.louisiana.gov/offices/page.asp?id=267&detail=6347
Sexually Transmitted Diseases	http://www.dhh.louisiana.gov/offices/?ID=272
State Center for Health Statistics	http://www.dhh.louisiana.gov/offices/?ID=275
Tuberculosis	http://www.dhh.louisiana.gov/offices/?ID=273
Vital Records Registry	http://www.dhh.louisiana.gov/offices/page.asp?ID=252&Detail=6489
Women, Infants, & Children (WIC) Nutrition Program	http://www.dhh.louisiana.gov/offices/page.asp?id=269&detail=6356

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