2009 Louisiana Health Report Card

Submitted to the Governor and Louisiana Legislature 2010

As required by R.S. 40:1300.71

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Governor

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Secretary
Department of Health and Hospitals

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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 tenth 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

The report card is divided into five 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 two 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” and “Louisiana State Health Care System”.

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 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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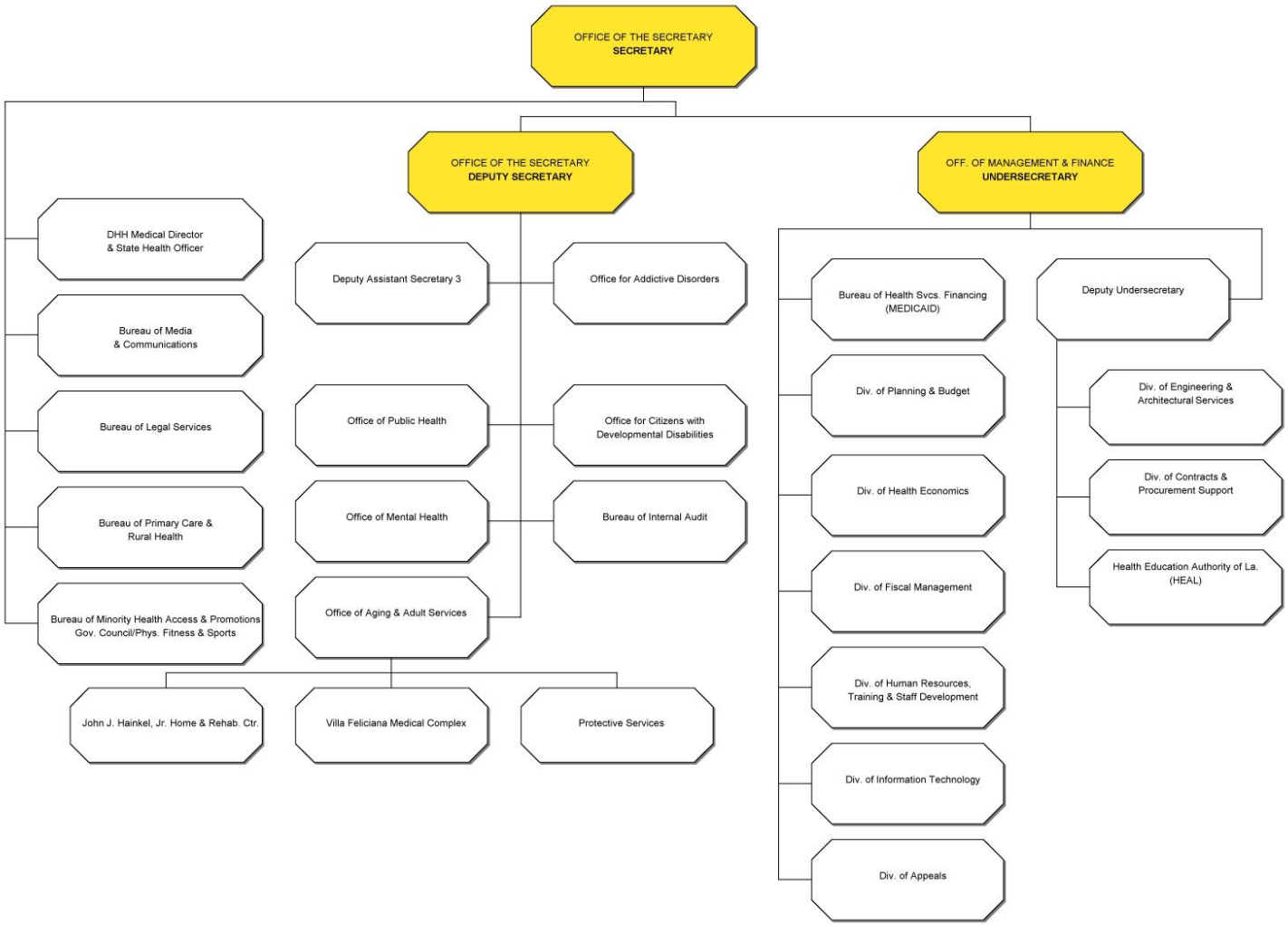
LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS

May 2007

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St. John the Baptist
Beau-regard
Allen
Evan-geline
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East B.R.
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I. POPULATION AND VITAL STATISTICS

A. POPULATION

This chapter on Louisiana's population presents information from Bridged-Race Population Estimate 2007 by the U.S. Census Bureau and National Center for Health Statistics (NCHS). According to these estimates, Louisiana's resident population was 4,293,204 as of August 2008. The state's subgroup estimate counts for 2007 are given in the following table:

Louisiana Population, 2007 *

Gender	Race	Age Group (Years) <5	5-19	20-44	45-64	65-84	85 & +	All*
Male	White	88,826	272,747	479,993	373,657	151,788	16,383	1,383,394
	Black	59,972	180,366	229,887	138,577	40,137	4,727	653,666
	Other	3,657	10,799	19,982	10,643	3,021	283	48,385
Female	White	84,801	261,465	469,522	384,719	193,819	36,428	1,430,754
	Black	57,603	177,830	254,962	167,070	61,500	10,377	729,342
	Other	3,298	10,296	18,633	11,565	3,456	415	47,663
All*	Total	298,157	913,503	1,472,979	1,086,231	453,721	68,613	4,293,204

Source: * Bridged-Race Population Estimate 2007, U.S. Census Bureau & NCHS (Released in August, 2008)

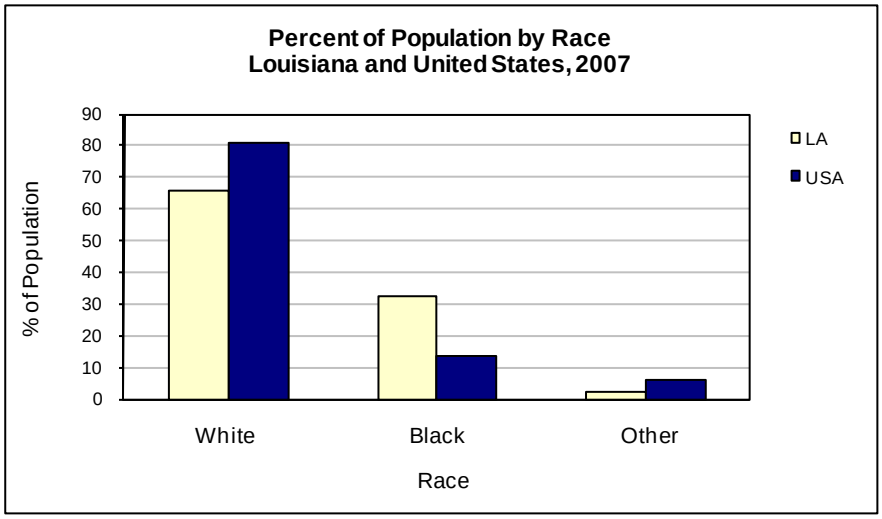
A comparison of the year 2007 population estimates shows that Louisiana and the United States have very similar age distributions.

Percent of Total Population by Age Group
Louisiana and United States, 2007

	Age Group (Years) <5	5-19	20-44	45-64	65-84	85 & +	All Ages
Louisiana	6.9	21.3	34.3	25.3	10.6	1.6	100.0
United States	6.9	20.4	34.7	25.4	10.7	1.8	100.0

Source: Calculation based on Bridged-Race Population Estimate 2007, 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 32.2% of the state's population, versus 13.3% nationally.

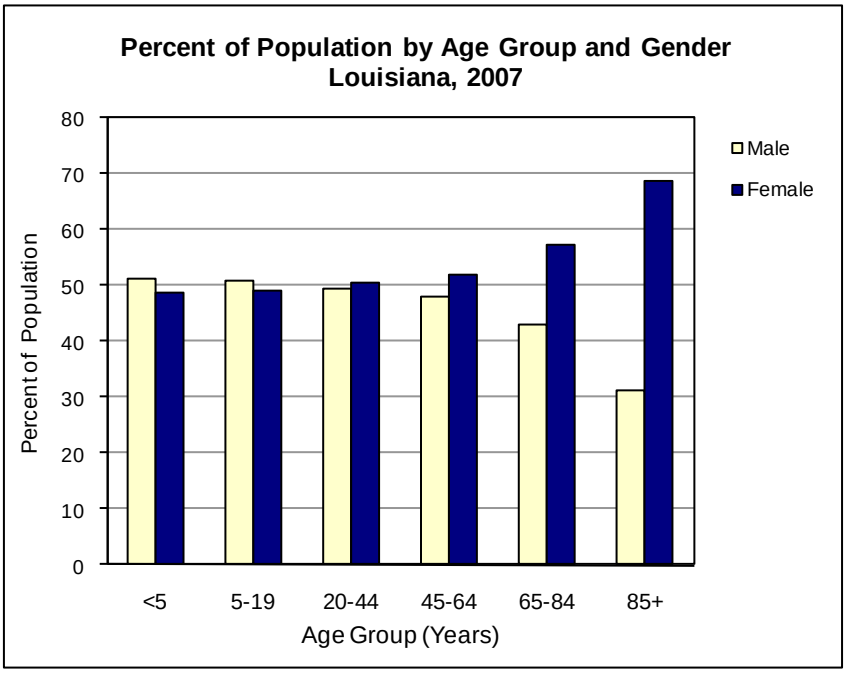


Source: Calculation based on Bridged-Race Population Estimate 2007, U.S. Census Bureau & NCHS

Percent of Total Population by Race Louisiana and United States, 2007				
	Race			
Location	White	Black	Other	Total
Louisiana	65.5	32.2	2.2	100.0
United States	80.8	13.3	6.0	100.0

Source: Calculation based on Bridged-Race Population Estimate 2007, U.S. Census Bureau & NCHS (Released on August 2007)

As in the rest of the nation, an increase in the proportion of women to men is seen in older age categories.

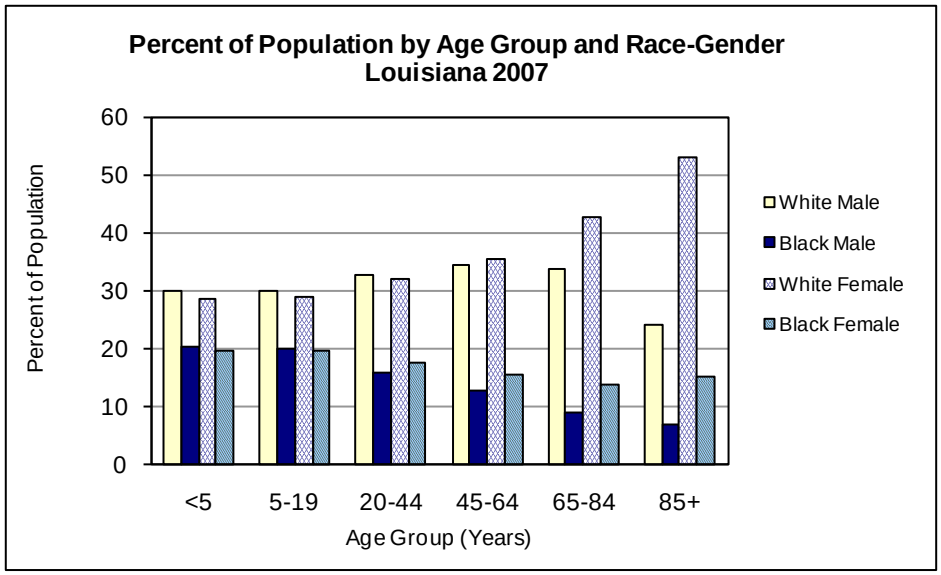


Source: Calculation based on Bridged-Race Population Estimate 2007, U.S. Census Bureau & NCHS

Percent of Population by Sex, Race and Age Group Louisiana, 2007							
		Age Group (Years)					
Sex	Race	<5	5-19	20-44	45-64	65-84	85 & +
Male	White	29.8	29.9	32.6	34.4	33.5	23.9
	Black	20.1	19.7	15.6	12.8	8.8	6.9
	Other	1.2	1.2	1.4	1.0	0.7	0.4
	Total	51.1	50.8	49.6	48.1	43.0	31.2
Female	White	28.4	28.6	31.9	35.4	42.7	53.1
	Black	19.3	19.5	17.3	15.4	13.6	15.1
	Other	1.1	1.1	1.3	1.1	0.8	0.6
	Total	48.9	49.2	50.4	51.9	57.3	68.8

Source: Calculation based on Bridged-Race Population Estimate 2007, U.S. Census Bureau & NCHS
Note: Percentages may not add up to 100% due to rounding.

Within individual age groups, the race/sex proportions in Louisiana change with advancing age.



Source: Calculation based on Bridged-Race Population Estimate 2007, U.S. Census Bureau & NCHS

The U.S. Census Bureau has also provided the estimated parish-level population data for 2007. The changes in Louisiana's mid-year parish populations by 2000 census and the 2007 estimates are presented in the table below:

Louisiana 2007 Population by Parish				
	7/1/2000	*7/1/2007*	*% Change*	*7/1/2007*
Parish	*Census*	*Estimates*	*2000-2007*	*% as Total of State Pop.*
State Total	4,468,976	4,293,204	-3.9	94.9
Acadia	58,861	59,958	1.9	1.3
Allen	25,440	25,524	0.3	0.6
Ascension	76,627	99,056	29.3	2.2
Assumption	23,388	22,991	-1.7	0.5
Avoyelles	41,481	42,169	1.7	0.9
Beauregard	32,986	34,776	5.4	0.8
Bienville	15,752	14,907	-5.4	0.3
Bossier	98,310	108,705	10.6	2.4
Caddo	252,161	252,609	0.2	5.6
Calcasieu	183,577	184,512	0.5	4.1
Caldwell	10,560	10,307	-2.4	0.2
Cameron	9,991	7,414	-25.8	0.2
Catahoula	10,920	10,452	-4.3	0.2
Claiborne	16,851	16,283	-3.4	0.4
Concordia	20,247	19,058	-5.9	0.4
DeSoto	25,494	26,269	3.0	0.6
E. Baton Rouge	412,852	430,317	4.2	9.5
E. Carroll	9,421	8,302	-11.9	0.2
E. Feliciana	21,360	20,833	-2.5	0.5
Evangeline	35,434	35,905	1.3	0.8
Franklin	21,263	20,060	-5.7	0.4
Grant	18,698	19,758	5.7	0.4
Iberia	73,266	74,965	2.3	1.7

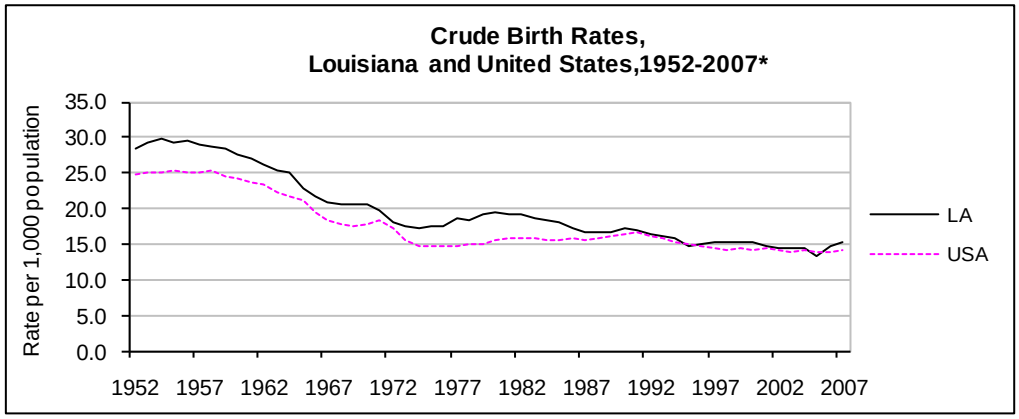
Louisiana 2007 Population by Parish				
	7/1/2000	7/1/2007	% Change	7/1/2007
Parish	Census	Estimates	2000-2007	% as Total of State Pop.
Iberville	33,320	32,501	-2.5	0.7
Jackson	15,397	15,139	-1.7	0.3
Jefferson	455,466	423,520	-7.0	9.4
Jefferson Davis	31,435	31,177	-0.8	0.7
Lafayette	190,503	204,843	7.5	4.5
Lafourche	89,974	92,713	3.0	2.0
LaSalle	14,282	14,041	-1.7	0.3
Lincoln	42,509	42,562	0.1	0.9
Livingston	91,814	116,580	27.0	2.6
Madison	13,728	11,858	-13.6	0.3
Morehouse	31,021	28,783	-7.2	0.6
Natchitoches	39,080	39,485	1.0	0.9
Orleans	484,674	239,124	-50.7	5.3
Ouachita	147,250	149,502	1.5	3.3
Plaquemines	26,757	21,540	-19.5	0.5
Pointe Coupee	22,763	22,392	-1.6	0.5
Rapides	126,337	130,079	3.0	2.9
Red River	9,622	9,195	-4.4	0.2
Richland	20,981	20,469	-2.4	0.5
Sabine	23,459	23,683	1.0	0.5
St. Bernard	67,229	19,826	-70.5	0.4
St. Charles	48,072	52,044	8.3	1.1
St. Helena	10,525	10,620	0.9	0.2
St. James	21,216	21,578	1.7	0.5
St. John	43,044	47,684	10.8	1.1
St. Landry	87,700	91,362	4.2	2.0
St. Martin	48,583	51,651	6.3	1.1
St. Mary	53,500	51,311	-4.1	1.1
St. Tammany	191,268	226,625	18.5	5.0
Tangipahoa	100,588	115,398	14.7	2.5
Tensas	6,618	5,865	-11.4	0.1
Terrebonne	104,503	108,424	3.8	2.4
Union	22,803	22,773	-0.1	0.5
Vermilion	53,807	55,691	3.5	1.2
Vernon	52,531	47,380	-9.8	1.0
Washington	43,926	44,920	2.3	1.0
Webster	41,831	40,924	-2.2	0.9
W. Baton Rouge	21,601	22,625	4.7	0.5
W. Carroll	12,314	11,553	-6.2	0.3
W. Feliciana	15,111	15,113	0.0	0.3
Winn	16,894	15,521	-8.1	0.3

Source: Population Division, U.S. Census Bureau, 2000 Census and Estimate 2007
Release Date: March 20, 2008

B. BIRTHS

Number of Live Births and Birth Rates

In the year 2007, there were 66,063 births to Louisiana residents, an increase from 63,186 births in 2006. Louisiana's 2007 crude birth rate was 15.4 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]



* *Preliminary data for 2007*. National Vital Statistics Report, Vol.57, No.12, March 18, 2009.

In the table below, Louisiana's crude birth rate is furnished to compare to the rates of its four neighboring states. Louisiana continues to rank relatively high in terms of birth rate as its 2007 ranking is the 11th highest in the nation. Among neighboring states, Louisiana's birth rate is the third highest.

Crude Birth Rates
Louisiana, Neighboring States, and United States, 2007*

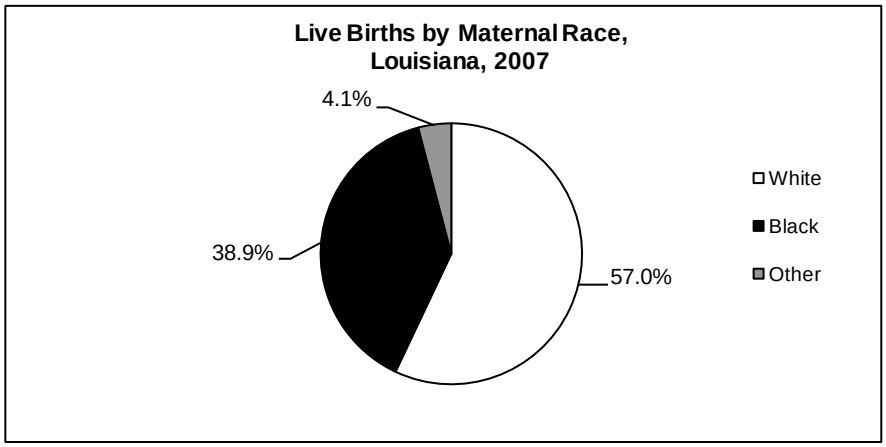
State	*Birth Rate*	*National Ranking*
Alabama	14.0	28
Arkansas	14.6	18
Louisiana	15.4	11
Mississippi	15.9	7
Florida	13.1	38
Texas	17.1	2
United States	14.3	N/A

Source: Morgan, K.O. and Morgan, S (Editors) 2010. Health Care State Rankings 2010 Health Care Across America. CQ Press, Washington, DC. * *Preliminary data for 2007*.

[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.

Black women aged 15-44 years represent 35.2% of the total female population of Louisiana belonging to that same age group and 38.9% of the state's live births in the year 2007 were to black mothers. The birth rate is 13.4 for whites and 18.6 for blacks. In 2007, the race-specific birth rate was 81.7 for black mothers age 20-24 and at 57.4 for white mothers at age 25-29.

Vernon Parish had the highest birth rate in Louisiana in 2007 at 19.3 births per 1,000 population and West Feliciana Parish had the lowest birth rate at 7.5 births per 1,000 population.



Source: Center for Records and Statistics

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2007

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
STATE	66345	66063	15.4	ALL	169	8934	21644	18621	10817	4847	971	54	6
	38129	37672		WHITE	38	3808	11026	11517	7281	3337	627	36	****
	25494	25698		BLACK	130	4908	9941	6289	2899	1222	288	17	****
	2722	2693		OTHER	****	218	677	815	637	288	56	****	0
ACADIA	553	971	16.3	ALL	****	157	354	262	138	50	6	0	****
	416	761		WHITE	****	98	284	205	124	43	6	0	0
	137	206		BLACK	****	59	69	56	13	6	0	0	****
	0	****		OTHER	0	0	****	****	****	****	0	0	0
ALLEN	0	392	15.6	ALL	****	70	151	90	55	19	5	0	0
	0	303		WHITE	****	47	115	74	47	15	****	0	0
	0	75		BLACK	****	22	34	11	****	****	****	0	0
	0	14		OTHER	0	****	****	5	****	****	0	0	0
ASCENSION	8	1660	16.6	ALL	****	143	424	514	378	163	31	****	0
	5	1212		WHITE	****	80	274	404	302	128	19	****	0
	****	406		BLACK	****	60	142	101	61	30	10	0	0
	0	42		OTHER	0	****	8	9	15	5	****	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 2007

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
ASSUMPTION	0	302	13.1	ALL	****	45	101	87	51	14	****	0	0
	0	157		WHITE	****	22	40	49	33	10	****	0	0
	0	142		BLACK	****	23	60	38	16	****	0	0	0
	0	****		OTHER	0	0	****	0	****	0	0	0	0
AVOYELLES	****	655	15.5	ALL	****	113	237	178	83	38	****	0	0
	0	415		WHITE	****	51	145	122	63	29	****	0	0
	****	230		BLACK	****	59	88	55	20	7	0	0	0
	0	10		OTHER	0	****	****	****	0	****	0	0	0
BEAUREGARD	330	484	14.3	ALL	****	76	176	142	59	26	****	0	0
	275	412		WHITE	****	56	151	125	54	21	****	0	0
	49	63		BLACK	0	17	23	17	****	****	0	0	0
	6	9		OTHER	0	****	****	0	****	****	0	0	0
BIENVILLE	****	201	13.4	ALL	0	41	94	39	18	7	****	0	0
	****	102		WHITE	0	17	45	23	11	5	****	0	0
	0	96		BLACK	0	24	49	14	6	****	****	0	0
	0	****		OTHER	0	0	0	****	****	0	0	0	0
BOSSIER	988	1689	15.6	ALL	****	211	571	464	316	103	22	0	0
	709	1223		WHITE	****	125	396	362	240	81	18	0	0
	253	412		BLACK	****	86	157	91	56	17	****	0	0
	26	54		OTHER	0	0	18	11	20	5	0	0	0
CADDO	6050	3950	15.6	ALL	24	664	1336	1050	560	270	46	0	0
	2970	1580		WHITE	0	143	461	509	300	146	21	0	0
	2940	2309		BLACK	24	520	864	526	237	113	25	0	0
	140	61		OTHER	0	****	11	15	23	11	0	0	0
CALCASIEU	3327	2830	15.3	ALL	****	370	974	827	431	178	41	5	0
	2348	1904		WHITE	0	208	604	585	343	130	31	****	0
	903	867		BLACK	****	159	349	227	75	41	10	****	0
	76	59		OTHER	0	****	21	15	13	7	0	0	0
CALDWELL	****	121	11.7	ALL	****	19	45	39	14	****	0	0	0
	0	97		WHITE	****	15	34	32	12	****	0	0	0
	****	23		BLACK	0	****	11	6	****	0	0	0	0
	0	****		OTHER	0	0	0	****	0	0	0	0	0
CAMERON	0	80	10.8	ALL	0	6	27	26	18	****	0	0	0
	0	77		WHITE	0	6	27	25	16	****	0	0	0
	0	****		BLACK	0	0	0	****	0	0	0	0	0
	0	****		OTHER	0	0	0	0	****	0	0	0	0
CATAHOULA	0	146	14	ALL	****	35	46	44	13	7	0	0	0
	0	94		WHITE	0	19	29	30	10	6	0	0	0
	0	52		BLACK	****	16	17	14	****	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
CLAIBORNE	23	190	11.6	ALL	****	34	75	51	25	****	****	0	0
	7	74		WHITE	0	8	29	21	14	0	****	0	0
	16	115		BLACK	****	26	45	30	11	****	0	0	0
	0	****		OTHER	0	0	****	0	0	0	0	0	0
CONCORDIA	0	258	13.5	ALL	****	43	93	67	34	14	****	0	0
	0	125		WHITE	****	16	39	33	25	9	****	0	0
	0	128		BLACK	****	27	53	34	6	****	****	0	0
	0	5		OTHER	0	0	****	0	****	****	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2007

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
DESOTO	****	438	17.1	ALL	0	77	167	115	55	17	7	0	0
	****	234		WHITE	0	36	85	64	36	7	6	0	0
	****	199		BLACK	0	41	81	49	18	9	****	0	0
	0	5		OTHER	0	0	****	****	****	****	0	0	0
E BATON ROUGE	11205	6272	14.6	ALL	19	755	1931	1847	1106	497	108	7	****
	6020	2361		WHITE	0	135	503	806	580	271	63	****	0
	4799	3626		BLACK	19	604	1375	952	444	192	34	****	****
	386	285		OTHER	0	16	53	89	82	34	11	0	0
EAST CARROLL	6	127	15.4	ALL	****	34	45	23	18	5	****	0	0
	0	26		WHITE	0	8	8	****	5	****	0	0	0
	6	101		BLACK	****	26	37	19	13	****	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
E FELICIANA	0	244	11.7	ALL	0	32	100	59	32	17	****	****	0
	0	107		WHITE	0	12	42	27	14	10	****	0	0
	0	135		BLACK	0	20	58	31	17	7	****	****	0
	0	****		OTHER	0	0	0	****	****	0	0	0	0
EVANGELINE	341	547	15.4	ALL	****	106	211	143	58	22	****	****	0
	160	361		WHITE	****	53	133	112	40	17	****	****	0
	174	185		BLACK	0	53	77	31	18	5	****	0	0
	7	****		OTHER	0	0	****	0	0	0	0	0	0
FRANKLIN	****	314	15.5	ALL	****	55	132	70	35	17	****	0	0
	****	180		WHITE	0	24	80	38	24	12	****	0	0
	****	134		BLACK	****	31	52	32	11	5	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
GRANT	****	276	14.6	ALL	0	47	106	77	32	10	****	****	0
	****	242		WHITE	0	42	90	70	28	9	****	****	0
	0	30		BLACK	0	5	14	5	****	****	****	0	0
	0	****		OTHER	0	0	****	****	0	0	0	0	0
IBERIA	1067	1226	16.6	ALL	****	211	448	314	164	63	22	0	0
	511	646		WHITE	****	100	213	187	84	46	14	0	0
	519	538		BLACK	****	106	221	116	73	14	6	0	0
	37	42		OTHER	0	5	14	11	7	****	****	0	0
IBERVILLE	208	428	12.9	ALL	****	66	162	121	52	24	****	0	0
	26	176		WHITE	0	21	54	60	28	12	****	0	0
	180	246		BLACK	****	45	107	60	20	12	****	0	0
	****	6		OTHER	0	0	****	****	****	0	0	0	0
JACKSON	****	208	13.8	ALL	0	32	77	57	28	10	****	0	0
	0	146		WHITE	0	19	56	40	20	7	****	0	0
	****	62		BLACK	0	13	21	17	8	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
JEFFERSON	9695	6238	14.5	ALL	9	701	1748	1829	1200	621	123	6	****
	4926	3242		WHITE	****	260	760	1004	728	402	80	****	****
	3710	2158		BLACK	5	371	796	560	271	126	27	****	0
	1059	838		OTHER	****	70	192	265	201	93	16	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 2007

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
JEFF DAVIS	458	510	16.6	ALL	****	71	202	147	62	22	****	0	0
	376	413		WHITE	****	50	161	128	52	17	****	0	0
	77	91		BLACK	****	19	40	18	8	5	0	0	0
	5	6		OTHER	0	****	****	****	****	0	0	0	0
LAFAYETTE	5571	3159	15.5	ALL	****	332	914	977	588	290	54	0	0
	3734	2019		WHITE	0	137	514	663	443	224	38	0	0
	1699	1058		BLACK	****	190	383	286	123	57	15	0	0
	138	82		OTHER	0	5	17	28	22	9	****	0	0
LAFOURCHE	927	1366	14.9	ALL	13	185	475	375	204	100	14	0	0
	803	1022		WHITE	9	120	330	305	164	80	14	0	0
	103	281		BLACK	****	54	115	58	34	16	0	0	0
	21	63		OTHER	0	11	30	12	6	****	0	0	0
LASALLE	****	206	14.6	ALL	****	28	85	67	19	5	****	0	0
	0	181		WHITE	0	26	71	60	18	5	****	0	0
	****	21		BLACK	****	****	11	7	****	0	0	0	0
	0	****		OTHER	0	****	****	0	0	0	0	0	0
LINCOLN	775	562	13.2	ALL	0	73	205	161	83	34	6	0	0
	407	273		WHITE	0	20	81	90	61	19	****	0	0
	355	268		BLACK	0	51	121	66	16	12	****	0	0
	13	21		OTHER	0	****	****	5	6	****	****	0	0
LIVINGSTON	6	1983	17.1	ALL	****	236	620	602	371	133	19	****	0
	5	1824		WHITE	0	211	564	556	352	124	16	****	0
	****	125		BLACK	****	23	45	36	14	5	****	0	0
	0	34		OTHER	0	****	11	10	5	****	****	0	0
MADISON	0	164	14	ALL	****	36	60	43	18	****	****	0	0
	0	46		WHITE	****	****	15	15	11	****	0	0	0
	0	118		BLACK	****	33	45	28	7	****	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
MOREHOUSE	301	445	15.5	ALL	****	68	157	135	58	19	****	0	0
	143	206		WHITE	0	25	67	67	35	11	****	0	0
	158	239		BLACK	****	43	90	68	23	8	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
NATCHITOCHES	643	600	15.2	ALL	5	112	229	140	72	38	****	0	0
	255	259		WHITE	****	34	78	81	40	25	0	0	0
	376	335		BLACK	****	78	148	57	31	13	****	0	0
	12	6		OTHER	0	0	****	****	****	0	0	0	0
ORLEANS	3068	4076	17	ALL	14	589	1230	964	758	421	96	****	0
	817	970		WHITE	****	36	114	218	319	234	45	****	0
	2053	2819		BLACK	13	539	1038	658	373	154	43	****	0
	198	287		OTHER	0	14	78	88	66	33	8	0	0
OUACHITA	3930	2443	16.3	ALL	****	342	833	702	374	163	24	****	0
	2172	1217		WHITE	****	127	355	382	228	110	13	0	0
	1704	1188		BLACK	****	213	475	304	136	46	11	****	0
	54	38		OTHER	0	****	****	16	10	7	0	0	0
PLAQUEMINES	****	347	16.1	ALL	0	30	127	88	66	27	9	0	0
	****	246		WHITE	0	23	81	64	48	21	9	0	0
	****	83		BLACK	0	6	43	17	13	****	0	0	0
	0	18		OTHER	0	****	****	7	5	****	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2007

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
POINTE COUPEE	****	339	14.8	ALL	****	48	118	98	45	20	9	0	0
	0	165		WHITE	0	11	52	58	28	13	****	0	0
	****	171		BLACK	****	35	66	40	17	6	6	0	0
	0	****		OTHER	0	****	0	0	0	****	0	0	0
RAPIDES	3403	2045	15.6	ALL	****	276	723	578	314	127	23	****	0
	2235	1201		WHITE	0	111	389	381	214	94	10	****	0
	1093	792		BLACK	****	157	321	180	89	30	13	****	0
	75	52		OTHER	0	8	13	17	11	****	0	0	0
RED RIVER	****	165	17.9	ALL	****	24	70	41	17	10	****	0	0
	****	77		WHITE	0	9	32	22	9	****	****	0	0
	****	88		BLACK	****	15	38	19	8	6	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
RICHLAND	****	321	16.5	ALL	****	55	121	74	50	15	****	0	0
	0	163		WHITE	****	23	61	36	31	9	****	0	0
	****	154		BLACK	****	32	60	37	18	5	****	0	0
	0	****		OTHER	0	0	0	****	****	****	****	0	0
SABINE	0	297	12.7	ALL	****	46	111	75	41	22	****	0	0
	0	190		WHITE	0	28	68	44	31	18	****	0	0
	0	61		BLACK	****	10	27	13	7	****	0	0	0
	0	46		OTHER	0	8	16	18	****	****	0	0	0
ST BERNARD	0	416	16.6	ALL	****	54	147	123	56	27	6	****	0
	0	333		WHITE	****	39	124	94	44	25	****	****	0
	0	61		BLACK	0	11	18	23	7	****	****	0	0
	0	22		OTHER	0	****	5	6	5	****	****	0	0
ST CHARLES	0	746	14.8	ALL	0	80	189	221	174	59	20	****	0
	0	454		WHITE	0	36	89	144	127	44	12	****	0
	0	255		BLACK	0	41	93	63	39	11	7	****	0
	0	37		OTHER	0	****	7	14	8	****	****	0	0
ST HELENA	0	129	12.5	ALL	0	22	41	50	9	7	0	0	0
	0	46		WHITE	0	8	13	20	****	****	0	0	0
	0	82		BLACK	0	14	28	29	6	5	0	0	0
	0	****		OTHER	0	0	0	****	0	0	0	0	0
ST JAMES	0	294	13.6	ALL	****	30	97	110	36	16	****	0	0
	0	119		WHITE	0	****	32	62	14	6	****	0	0
	0	175		BLACK	****	26	65	48	22	10	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
ST JOHN	493	782	16.8	ALL	****	108	253	227	137	46	9	0	****
	190	265		WHITE	0	36	69	84	57	16	****	0	0
	294	482		BLACK	****	70	172	132	72	29	5	0	****
	9	35		OTHER	0	****	12	11	8	****	****	0	0
ST LANDRY	1819	1518	16.9	ALL	****	241	584	391	192	89	17	****	0
	1074	781		WHITE	0	96	279	218	128	52	7	****	0
	735	724		BLACK	****	145	302	170	63	31	10	****	0
	10	13		OTHER	0	0	****	****	****	6	0	0	0
ST MARTIN	****	844	16.6	ALL	****	115	297	243	119	56	13	0	0
	****	495		WHITE	0	46	156	159	88	36	10	0	0
	0	337		BLACK	****	68	137	82	29	17	****	0	0
	0	12		OTHER	0	****	****	****	****	****	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 2007

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
ST MARY	576	882	17.2	ALL	****	157	322	240	120	36	****	****	0
	308	504		WHITE	0	80	166	146	81	28	****	0	0
	256	346		BLACK	****	72	146	84	35	6	0	****	0
	12	32		OTHER	0	5	10	10	****	****	****	0	0
ST TAMMANY	4217	3202	13.9	ALL	****	284	708	981	730	412	78	7	0
	3347	2619		WHITE	****	196	537	825	622	358	74	6	0
	737	449		BLACK	****	82	147	117	67	32	****	****	0
	133	134		OTHER	0	6	24	39	41	22	****	0	0
TANGIPAHOA	1754	1906	16.9	ALL	5	258	680	535	286	123	15	****	****
	970	1136		WHITE	****	127	354	347	210	85	10	****	****
	767	746		BLACK	****	130	323	178	71	35	****	****	0
	17	24		OTHER	0	****	****	10	5	****	****	****	0
TENSAS	0	64	10.9	ALL	0	15	20	15	11	****	****	0	0
	0	26		WHITE	0	5	6	8	6	0	****	0	0
	0	38		BLACK	0	10	14	7	5	****	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
TERREBONNE	2697	1803	16.6	ALL	****	269	636	518	250	104	23	****	0
	1753	1232		WHITE	****	157	420	381	178	78	16	****	0
	716	392		BLACK	****	87	150	84	46	20	****	0	0
	228	179		OTHER	0	25	66	53	26	6	****	0	0
UNION	****	332	15.2	ALL	****	46	113	96	46	25	****	****	0
	****	235		WHITE	0	23	76	70	40	21	****	****	0
	****	95		BLACK	****	22	37	25	6	****	0	0	0
	0	****		OTHER	0	****	0	****	0	0	0	0	0
VERMILION	161	874	15.8	ALL	****	123	290	244	144	57	15	0	0
	75	684		WHITE	0	84	213	200	126	48	13	0	0
	81	170		BLACK	****	37	72	37	16	6	****	0	0
	5	20		OTHER	0	****	5	7	****	****	****	0	0
VERNON	920	917	19.3	ALL	****	108	362	280	125	36	5	0	0
	686	710		WHITE	0	78	291	206	101	30	****	0	0
	187	163		BLACK	****	26	53	60	18	****	****	0	0
	47	44		OTHER	0	****	18	14	6	****	0	0	0
WASHINGTON	5	647	14.6	ALL	****	124	231	166	82	30	13	0	0
	****	397		WHITE	0	69	132	112	57	21	6	0	0
	****	239		BLACK	****	54	96	51	21	9	7	0	0
	0	11		OTHER	0	****	****	****	****	0	0	0	0
WEBSTER	787	597	14.6	ALL	****	95	244	146	79	25	7	0	0
	391	356		WHITE	0	45	151	90	53	15	****	0	0
	390	237		BLACK	****	50	93	55	24	9	5	0	0
	6	****		OTHER	0	0	0	****	****	****	0	0	0
W BATON ROUGE	****	350	15.4	ALL	0	38	136	99	48	21	8	0	0
	0	203		WHITE	0	22	66	63	31	17	****	0	0
	****	142		BLACK	0	16	69	33	16	****	****	0	0
	0	5		OTHER	0	0	****	****	****	0	0	0	0
WEST CARROLL	****	169	14.9	ALL	0	18	68	53	17	10	****	0	0
	0	135		WHITE	0	15	51	45	14	8	****	0	0
	****	33		BLACK	0	****	16	8	****	****	****	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, 2007													
Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
W FELICIANA	****	113	7.5	ALL	0	19	38	29	15	11	****	0	0
	****	67		WHITE	0	5	18	21	13	9	****	0	0
	****	44		BLACK	0	14	20	7	****	****	0	0	0
	0	****		OTHER	0	0	0	****	****	0	0	0	0
WINN	0	203	13.1	ALL	****	36	77	52	28	7	****	0	0
	0	146		WHITE	****	22	53	41	23	6	0	0	0
	0	57		BLACK	****	14	24	11	5	****	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
OUT OF STATE**	783	1065		ALL	****	87	307	323	198	106	29	12	****
	380	837		WHITE	****	64	223	252	168	90	27	10	****
	396	192		BLACK	0	20	71	62	20	15	****	****	0
	7	36		OTHER	0	****	13	9	10	****	0	0	0

+Rate per 1,000 population. ** Not included in state totals.
**** Suppressed to protect confidentiality.
Source: Center for Records and Statistics. Denominators for population based rates are derived from the Research Division, College of Administration and Business of Louisiana Technological University.

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. Since 2003, Louisiana has also shown marked improvement.

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. According to the most recent data (as of April 2010), in the year 2006, 87.0% of Louisiana mothers who gave birth entered prenatal care in the first trimester, compared to 83.2% of mothers in the reporting states and areas. Among neighboring states, Louisiana ranked first for the highest percentage 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.

Percentage of Live Births to Mothers Receiving Prenatal Care in the First Trimester of Pregnancy, Louisiana, Neighboring States and Reporting States and Areas*, 2006+		
State	**Percentage of Mothers**	**National Ranking**
Alabama	81.7	20
Arkansas	79.5	26
Louisiana	87.0	4
Mississippi	83.2	16
*Total Reporting States and Areas**	83.2	N/A

Source: Morgan, K.O. and Morgan, S (Editors) 2010. Health Care State Rankings 2010 Health Care Across America. CQ Press, Washington, DC. + *Available as of April 2010*

** Total Reporting States and Areas that Include 32 states, New York City, District of Columbia, New York City and territories, 2006.*

Excludes data for Florida, Idaho, Kansas, Kentucky, Nebraska, New Hampshire, New York (excluding New York City), Pennsylvania, South Carolina, Tennessee, Texas, Vermont, and Washington, which implemented the 2003 Revision of the U.S. Certificate of Live Birth; Prenatal care based on the 2003 Revision of the U.S. Certificate of Live Birth are not compatible with those based on the 1989 Revision of the U.S. Certificate of Live Birth.

"Technical Notes" on "Prenatal care" at the National Vital Statistics Report, Vol. 57, No.7, page 93, January 7, 2009 states that "Substantive changes in both question wording and the sources for this information have resulted in the data that are not comparable among revisions. The wording of the prenatal care item was modified to "Date of first prenatal visit" from "Month prenatal care began". In addition, the 2003 revision process resulted in recommendations that the prenatal care information be gathered from the prenatal care or medical records, whereas the 1989 revision did not recommend a source for these data". + *Available as of April 2010*

Only 73.3% of black mothers had their first prenatal visit in the first trimester, compared to 87.7% of white mothers.

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 66,063 Louisiana residents who gave birth in 2007, 82.3% received adequate care according to the Kessner index.

Percent of Mothers Receiving Adequate+ Prenatal Care by Parish. Louisiana, 2003-2007					
Parish	**2003**	**2004**	**2005**	**2006**	**2007**
State Total	80.06	80.98	81.64	81.84	82.34
Acadia	65.67	65.52	64.99	64.62	63.43
Allen	82.43	85.88	90.13	85.90	82.05
Ascension	83.99	84.65	87.74	86.58	89.00
Assumption	66.92	74.43	68.86	72.04	78.60
Avoyelles	83.13	82.50	84.83	88.49	88.13
Beauregard	74.58	70.04	73.80	76.64	74.84
Bienville	77.89	83.87	81.62	83.33	85.35
Bossier	81.59	80.71	81.79	83.51	81.58
Caddo	73.90	76.16	76.29	75.97	75.12
Calcasieu	85.96	90.89	89.82	89.34	87.73
Caldwell	83.50	86.96	80.00	83.09	87.50
Cameron	89.25	91.40	97.26	90.54	90.79
Catahoula	74.80	72.48	78.57	83.94	85.52
Claiborne	71.95	78.92	75.15	76.21	83.87
Concordia	55.19	63.28	64.79	72.93	70.70

Percent of Mothers Receiving Adequate+ Prenatal Care by Parish. Louisiana, 2003-2007					
Parish	**2003**	**2004**	**2005**	**2006**	**2007**
DeSoto	72.89	75.41	70.49	76.21	74.06
East Baton Rouge	80.86	80.05	84.23	83.05	80.29
East Carroll	67.44	61.70	71.88	60.90	66.67
East Feliciana	75.77	86.85	87.60	79.78	76.05
Evangeline	75.64	83.99	83.17	81.14	81.11
Franklin	64.52	68.73	67.97	78.62	80.65
Grant	86.45	88.70	87.55	86.88	92.51
Iberia	67.03	66.42	69.24	73.56	75.66
Iberville	75.00	72.31	75.85	79.39	83.01
Jackson	79.33	81.62	84.43	78.53	77.23
Jefferson	82.56	84.78	83.71	83.11	82.70
Jefferson Davis	70.13	73.39	77.78	71.55	74.50
Lafayette	88.93	85.76	88.74	89.49	87.53
Lafourche	73.72	80.62	78.15	72.57	82.61
LaSalle	89.14	90.68	89.95	93.22	89.66
Lincoln	75.84	78.37	81.47	79.25	79.71
Livingston	85.73	87.40	91.90	89.71	89.56
Madison	70.54	70.27	74.39	65.71	75.78
Morehouse	78.50	78.54	79.40	78.03	78.05
Natchitoches	77.02	74.91	72.29	70.98	73.23
Orleans	76.89	78.19	76.42	76.11	77.32
Ouachita	82.52	80.38	82.00	85.10	83.17
Plaquemines	80.82	83.52	84.41	81.34	84.26
Pointe Coupee	81.05	77.13	85.28	83.82	85.84
Rapides	87.71	88.48	87.23	90.04	90.55
Red River	72.50	73.72	72.99	75.32	68.29
Richland	78.91	81.47	84.69	84.21	82.75
Sabine	76.88	76.52	74.83	79.30	80.20
St. Bernard	88.28	88.77	86.19	88.08	84.35
St. Charles	83.44	82.53	84.54	83.03	88.54
St. Helena	82.65	72.45	73.08	77.68	82.17
St. James	62.81	73.93	78.10	80.07	82.70
St. John	74.23	78.92	81.26	81.64	86.83
St. Landry	75.34	71.63	75.76	73.49	72.01
St. Martin	86.23	78.58	85.25	85.66	85.63
St. Mary	73.52	78.43	77.01	77.34	78.85
St. Tammany	87.14	87.29	87.65	87.05	87.73
Tangipahoa	80.49	79.97	80.71	83.00	84.90
Tensas	47.50	60.00	50.00	69.01	66.67
Terrebonne	76.71	84.54	77.09	73.95	87.11
Union	82.12	78.78	81.11	80.30	80.50
Vermilion	88.23	86.58	88.33	87.04	86.76
Vernon	76.52	69.21	66.17	73.35	83.26
Washington	81.82	83.33	79.70	84.86	84.82
Webster	81.42	81.51	84.26	82.63	84.59
West Baton Rouge	79.17	81.85	83.44	82.70	86.73
West Carroll	83.33	89.06	82.27	84.31	88.10
West Feliciana	87.20	87.27	91.00	87.39	84.07
Winn	82.35	80.20	80.86	77.49	81.41

+According to modified Kessner index.
Source: Center for Records and Statistics.

Low Birthweight

A low birthweight infant is defined as an infant weighing less than 2,500 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, with 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 2007, 7,445 of the 66,063 infants born to Louisiana residents were low birthweight babies. This represents 11.3% of Louisiana's live births for the year. Both Louisiana and the United States have seen an increase in the percentage of infants with low birthweight in recent years.

According to preliminary data published by the National Center for Health Statistics, Louisiana had the second highest percentage of low birthweight babies in the nation in the year 2007, outranked only by Mississippi.

Percent of Live Births Less Than 2500 Grams
Louisiana, Neighboring States, and United States, 2007*

State	*Percent of Live Births*	*National Ranking*
Alabama	10.4	3
Arkansas	9.1	10
Louisiana	11.0	2
Mississippi	12.3	1
Florida	8.7	16
Texas	8.4	22
United States	8.2	N/A

Source: Morgan, K.O. and Morgan, S (Editors) 2008. Health Care State Rankings 2010 Health Care Across America. CQ Press, Washington, DC.* *Preliminary data for 2007*.

Black women in the state gave birth to infants of low birthweight about twice as frequently as white women did, at 15.8% compared to 8.4% of live births, respectively.

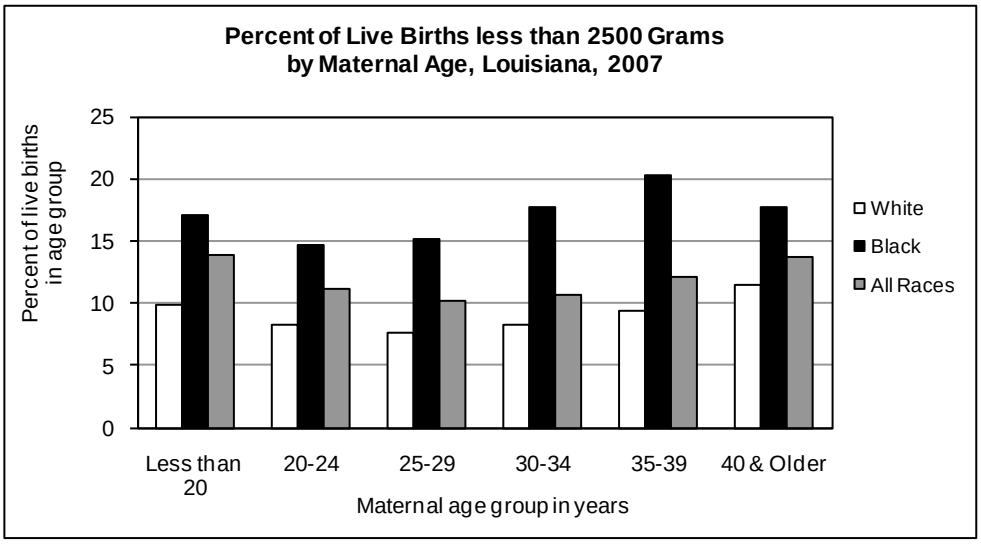
Infants weighing less than 1,500 grams (3 pounds, 4 ounces) at birth are considered to be very low birthweight and are at much greater risk of mortality and long-term disability. The risk of early death for very low birthweight infants is about 65 times that of infants who weigh at least 1,500 grams.[7]

In the year 2007, 2.2% of infants born to Louisiana residents weighed less than 1,500 grams, as compared to 1.5% 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

[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.

[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.

infants. Black mothers in 2007 gave birth to very low birthweight infants at 3.7% compared to 1.3% of total live births in whites. Infants born to the youngest and the oldest mothers were more likely to be very low birthweight.



Source: Center for Records and Statistics

In the year 2007, Concordia Parish had the highest percentage of low birthweight babies in Louisiana at 17.4% of live births, while Plaquemines Parish had the lowest at 6.9% of live births.

Teen (15 to 19 years) Births

The teen (15 to 19 years) birth rate for Louisiana in 2007 is shown in the table below:

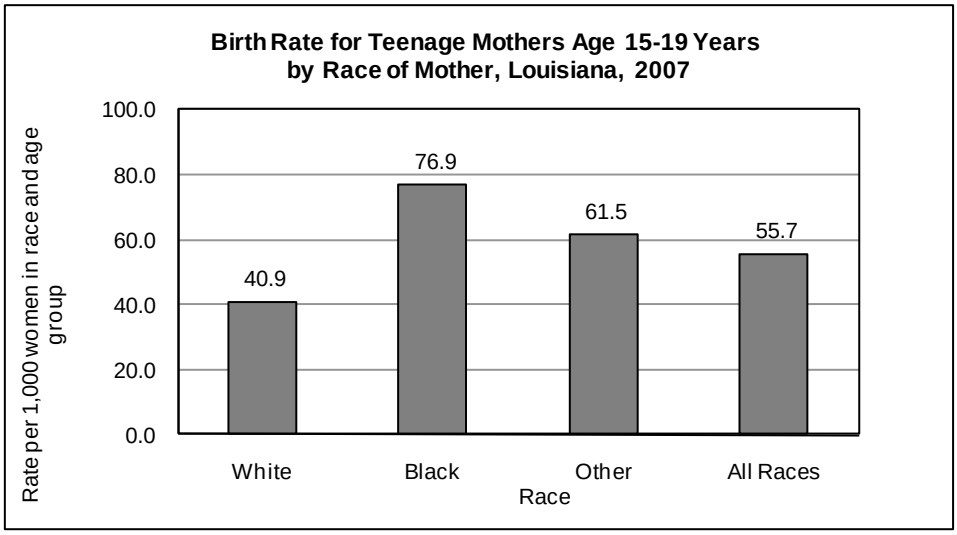
Teen Birth Rate per 1,000 Women (15-19 years) by Parish, Louisiana 2007		
	15-19 years	
Parish	*Births*	*Rate*
State Total	8,934	55.7
Acadia	157	69.0
Allen	70	90.1
Ascension	143	41.6
Assumption	45	52.9
Avoyelles	113	81.6
Beauregard	76	65.4
Bienville	41	78.2
Bossier	211	54.2
Caddo	664	70.1
Calcasieu	370	58.8
Caldwell	19	61.3
Cameron	6	19.7
Catahoula	35	100.0
Claiborne	34	65.5
Concordia	43	68.6
DeSoto	77	79.7

Teen Birth Rate per 1,000 Women (15-19 years) by Parish, Louisiana 2007		
	15-19 years	
Parish	Births	Rate
E. Baton Rouge	755	40.9
E. Carroll	34	113.3
E. Feliciana	32	50.0
Evangeline	106	79.9
Franklin	55	77.6
Grant	47	67.4
Iberia	211	77.6
Iberville	66	59.8
Jackson	32	63.2
Jefferson	701	48.4
Jefferson Davis	71	64.0
Lafayette	332	43.1
Lafourche	185	51.6
LaSalle	28	67.1
Lincoln	73	28.7
Livingston	236	59.7
Madison	36	78.9
Morehouse	68	69.7
Natchitoches	112	57.7
Orleans	589	54.6
Ouachita	342	55.9
Plaquemines	30	33.7
Pointe Coupee	48	62.8
Rapides	276	62.2
Red River	24	69.6
Richland	55	77.1
Sabine	46	53.9
St. Bernard	54	57.0
St. Charles	80	40.3
St. Helena	22	54.2
St. James	30	34.5
St. John	108	55.0
St. Landry	241	71.0
St. Martin	115	63.9
St. Mary	157	85.0
St. Tammany	284	37.3
Tangipahoa	258	53.6
Tensas	15	82.4
Terrebonne	269	68.9
Union	46	60.7
Vermilion	123	64.3
Vernon	108	67.4
Washington	124	82.4
Webster	95	72.3
W. Baton Rouge	38	46.5
W. Carroll	18	48.9
W. Feliciana	19	53.7
Winn	36	71.0

Source: Center for Records and Statistics
Bridged-Race Population Estimates (2007).

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.

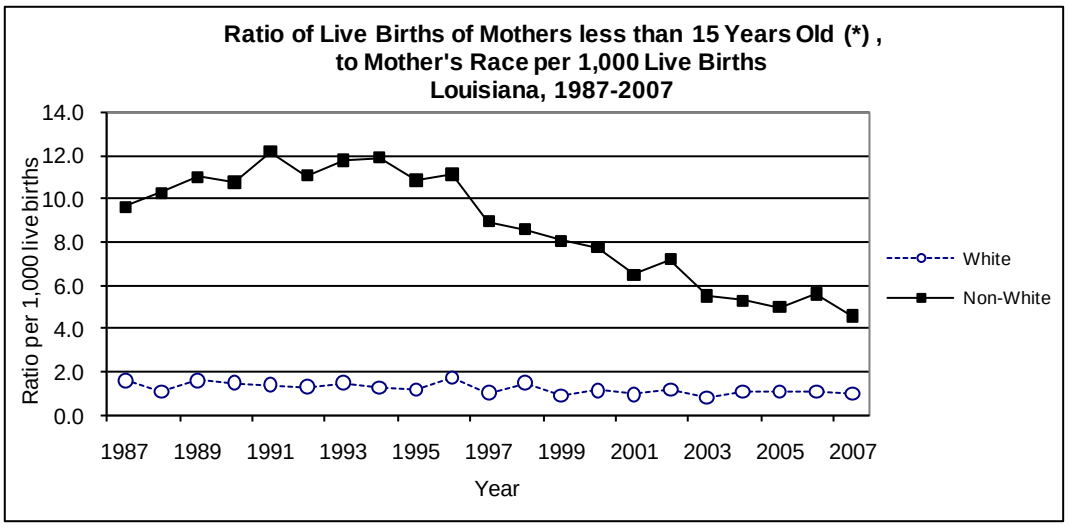
To make meaningful comparisons of births among teens in different race groups, teen birth rates have been calculated by relating the number of teen births in each race group to the total number of teen women in the same age-race group. In Louisiana, the birth rate for black teenagers aged 15-19 in 2007 (76.9) was nearly twice than that of white teenagers (40.9) and teenagers of other races (61.5), of that same age group, as illustrated in the following graph.



Source: Center for Records and Statistics

There is a great racial disparity in the proportion of women giving birth to live infants when younger than 15 years of age. Non-white women are historically more likely than white women to conceive and deliver a child before turning 15 years old as illustrated in the following graph.

[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.



Source: Center for Records and Statistics (*) Mothers aged less than 8 years are not included in the count.

**Births by Parish of Residence, Race of Mother, and Selected Characteristics
Louisiana, 2007**

Parish	Total Births	Total Live Births to Unmarried Mothers	% Births to Mothers 15-19 Years Old	Percent with Adequate Prenatal Care+
Louisiana	66063	33858	13.52	82.34
White	37672	12574	10.11	88.22
Black	25698	20112	19.10	74.28
Other	2693	1172	8.10	77.13
Acadia	971	497	16.17	63.43
White	761	316	12.88	66.76
Black	206	181	28.64	50.25
Other	****	0	N/S	100.00
Allen	392	190	17.86	82.05
White	303	126	15.51	83.72
Black	75	58	29.33	76.00
Other	14	6	N/S	78.57
Ascension	1660	624	8.61	89.00
White	1212	316	6.60	91.65
Black	406	291	14.78	80.95
Other	42	17	N/S	90.48
Assumption	302	170	14.90	78.60
White	157	54	14.01	84.52
Black	142	114	16.20	71.63
Other	****	****	N/S	100.00
Avoyelles	655	359	17.25	88.13
White	415	154	12.29	91.29
Black	230	200	25.65	82.46
Other	10	5	N/S	90.00
Beauregard	484	190	15.70	74.84
White	412	140	13.59	78.52
Black	63	47	26.98	52.38
Other	9	****	N/S	66.67
Bienville	201	111	20.40	85.35
White	102	36	16.67	93.07
Black	96	75	25.00	76.84
Other	****	0	N/S	100.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2007				
Parish	Total Births	Total Live Births to Unmarried Mothers	% Births to Mothers 15-19 Years Old	Percent with Adequate Prenatal Care+
Bossier	1689	661	12.49	81.58
White	1223	357	10.22	86.28
Black	412	290	20.87	67.17
Other	54	14	0.00	83.33
Caddo	3950	2346	16.81	75.12
White	1580	487	9.05	88.02
Black	2309	1846	22.52	66.26
Other	61	13	N/S	78.33
Calcasieu	2830	1313	13.07	87.73
White	1904	649	10.92	90.61
Black	867	637	18.34	81.85
Other	59	27	N/S	81.03
Caldwell	121	57	15.70	87.50
White	97	36	15.46	89.58
Black	23	21	N/S	78.26
Other	****	0	N/S	100.00
Cameron	80	24	7.50	90.79
White	77	22	7.79	91.78
Black	****	****	N/S	100.00
Other	****	****	N/S	50.00
Catahoula	146	75	23.97	85.52
White	94	29	20.21	92.55
Black	52	46	30.77	72.55
Other	0	0	N/S	0.00
Claiborne	190	113	17.89	83.87
White	74	21	10.81	84.93
Black	115	92	22.61	83.04
Other	****	0	N/S	100.00
Concordia	258	160	16.67	70.70
White	125	49	12.80	82.93
Black	128	111	21.09	60.16
Other	5	0	0.00	40.00
DeSoto	438	234	17.58	74.06
White	234	75	15.38	82.74
Black	199	157	20.60	63.73
Other	5	****	0.00	80.00
E. Baton Rouge	6272	3406	12.04	80.29
White	2361	596	5.72	89.80
Black	3626	2720	16.66	74.75
Other	285	90	5.61	72.24
East Carroll	127	108	26.77	66.67
White	26	9	30.77	84.62
Black	101	99	25.74	62.00
Other	0	0	N/S	0.00
E. Feliciana	244	139	13.11	76.05
White	107	39	11.21	83.81
Black	135	100	14.81	70.23
Other	****	0	N/S	50.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2007				
Parish	Total Births	Total Live Births to Unmarried Mothers	% Births to Mothers 15-19 Years Old	Percent with Adequate Prenatal Care+
Evangeline	547	273	19.38	81.11
White	361	126	14.68	84.83
Black	185	147	28.65	74.32
Other	****	0	N/S	0.00
Franklin	314	171	17.52	80.65
White	180	56	13.33	89.77
Black	134	115	23.13	68.66
Other	0	0	N/S	0.00
Grant	276	128	17.03	92.51
White	242	104	17.36	93.99
Black	30	23	16.67	80.00
Other	****	****	N/S	100.00
Iberia	1226	773	17.21	75.66
White	646	315	15.48	85.16
Black	538	438	19.70	64.71
Other	42	20	11.90	68.29
Iberville	428	281	15.42	83.01
White	176	70	11.93	91.72
Black	246	208	18.29	77.78
Other	6	****	0.00	50.00
Jackson	208	98	15.38	77.23
White	146	48	13.01	84.51
Black	62	50	20.97	60.00
Other	0	0	N/S	0.00
Jefferson	6238	3188	11.24	82.70
White	3242	1139	8.02	89.18
Black	2158	1637	17.19	75.98
Other	838	412	8.35	75.09
Jefferson Davis	510	248	13.92	74.50
White	413	177	12.11	79.31
Black	91	69	20.88	52.75
Other	6	****	N/S	80.00
Lafayette	3159	1462	10.51	87.53
White	2019	636	6.79	91.99
Black	1058	798	17.96	79.41
Other	82	28	6.10	82.93
Lafourche	1366	652	13.54	82.61
White	1022	385	11.74	84.78
Black	281	237	19.22	74.01
Other	63	30	17.46	85.48
LaSalle	206	69	13.59	89.66
White	181	48	14.36	89.89
Black	21	19	N/S	85.71
Other	****	****	N/S	100.00
Lincoln	562	272	12.99	79.71
White	273	59	7.33	86.25
Black	268	208	19.03	74.43
Other	21	5	N/S	61.90

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2007				
Parish	Total Births	Total Live Births to Unmarried Mothers	% Births to Mothers 15-19 Years Old	Percent with Adequate Prenatal Care+
Livingston	1983	680	11.90	89.56
White	1824	588	11.57	90.69
Black	125	78	18.40	76.00
Other	34	14	N/S	79.41
Madison	164	120	21.95	75.78
White	46	19	N/S	84.09
Black	118	101	27.97	72.65
Other	0	0	N/S	0.00
Morehouse	445	285	15.28	78.05
White	206	72	12.14	86.34
Black	239	213	17.99	70.89
Other	0	0	N/S	0.00
Natchitoches	600	367	18.67	73.23
White	259	93	13.13	81.01
Black	335	273	23.28	66.67
Other	6	****	0.00	100.00
Orleans	4076	2693	14.45	77.32
White	970	221	3.71	89.82
Black	2819	2311	19.12	73.92
Other	287	161	4.88	69.01
Ouachita	2443	1339	14.00	83.17
White	1217	358	10.44	88.31
Black	1188	975	17.93	77.68
Other	38	6	N/S	89.19
Plaquemines	347	159	8.65	84.26
White	246	93	9.35	89.34
Black	83	58	7.23	74.07
Other	18	8	N/S	61.11
Pointe Coupee	339	207	14.16	85.84
White	165	63	6.67	92.64
Black	171	142	20.47	79.52
Other	****	****	N/S	66.67
Rapides	2045	1039	13.50	90.55
White	1201	392	9.24	94.76
Black	792	628	19.82	84.54
Other	52	19	15.38	84.62
Red River	165	103	14.55	68.29
White	77	29	11.69	80.52
Black	88	74	17.05	57.47
Other	0	0	N/S	0.00
Richland	321	193	17.13	82.75
White	163	59	14.11	92.50
Black	154	133	20.78	71.81
Other	****	****	N/S	100.00
Sabine	297	150	15.49	80.20
White	190	76	14.74	84.41
Black	61	47	16.39	63.93
Other	46	27	17.39	84.78

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2007				
Parish	Total Births	Total Live Births to Unmarried Mothers	% Births to Mothers 15-19 Years Old	Percent with Adequate Prenatal Care+
St. Bernard	416	232	12.98	84.35
White	333	171	11.71	87.84
Black	61	47	18.03	68.97
Other	22	14	N/S	72.73
St. Charles	746	341	10.72	88.54
White	454	132	7.93	93.03
Black	255	188	16.08	81.67
Other	37	21	N/S	81.08
St. Helena	129	80	17.05	82.17
White	46	17	17.39	91.30
Black	82	63	17.07	76.83
Other	****	0	N/S	100.00
St. James	294	150	10.20	82.70
White	119	24	N/S	88.89
Black	175	126	14.86	78.49
Other	0	0	N/S	0.00
St. John	782	451	13.81	86.83
White	265	103	13.58	90.73
Black	482	337	14.52	84.78
Other	35	11	N/S	85.71
St. Landry	1518	842	15.88	72.01
White	781	302	12.29	80.00
Black	724	535	20.03	63.34
Other	13	5	0.00	76.92
St. Martin	844	480	13.63	85.63
White	495	201	9.29	90.37
Black	337	274	20.18	78.21
Other	12	5	N/S	100.00
St. Mary	882	550	17.80	78.85
White	504	244	15.87	82.13
Black	346	290	20.81	73.82
Other	32	16	15.63	81.25
St. Tammany	3202	1088	8.87	87.73
White	2619	735	7.48	89.54
Black	449	308	18.26	80.04
Other	134	45	4.48	78.79
Tangipahoa	1906	1032	13.54	84.90
White	1136	424	11.18	90.37
Black	746	600	17.43	77.05
Other	24	8	N/S	70.83
Tensas	64	45	23.44	66.67
White	26	11	19.23	84.00
Black	38	34	26.32	55.26
Other	0	0	N/S	0.00
Terrebonne	1803	934	14.92	87.11
White	1232	517	12.74	89.50
Black	392	324	22.19	79.79
Other	179	93	13.97	86.44

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2007				
Parish	Total Births	Total Live Births to Unmarried Mothers	% Births to Mothers 15-19 Years Old	Percent with Adequate Prenatal Care+
Union	332	153	13.86	80.50
White	235	68	9.79	87.28
Black	95	84	23.16	63.44
Other	****	****	N/S	100.00
Vermilion	874	415	14.07	86.76
White	684	266	12.28	87.46
Black	170	138	21.76	82.32
Other	20	11	N/S	100.00
Vernon	917	254	11.78	83.26
White	710	162	10.99	83.38
Black	163	80	15.95	85.63
Other	44	12	N/S	72.73
Washington	647	349	19.17	84.82
White	397	144	17.38	88.80
Black	239	200	22.59	79.15
Other	11	5	N/S	63.64
Webster	597	326	15.91	84.59
White	356	132	12.64	88.18
Black	237	193	21.10	79.40
Other	****	****	N/S	75.00
W. Baton Rouge	350	188	10.86	86.73
White	203	71	10.84	92.46
Black	142	116	11.27	77.78
Other	5	****	0.00	100.00
West Carroll	169	69	10.65	88.10
White	135	44	11.11	89.63
Black	33	24	N/S	84.38
Other	****	****	N/S	0.00
W. Feliciana	113	56	16.81	84.07
White	67	21	7.46	92.54
Black	44	35	31.82	70.45
Other	****	0	N/S	100.00
Winn	203	96	17.73	81.41
White	146	48	15.07	87.32
Black	57	48	24.56	66.67
Other	0	0	N/S	0.00

Source: Center for Records and Statistics. ** Not included in state totals.
N/A: Not Applicable. N/S: Not Stable due to small numbers in nominator or denominator.

C. DEATHS

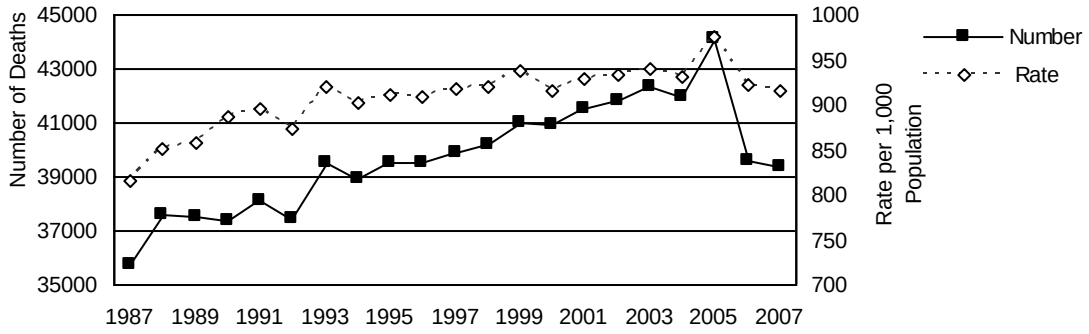
Death Counts and Crude Mortality Rates

There were 39,349 deaths among Louisiana residents in 2007, representing a decrease from 39,581 deaths in 2006. Of the deaths in 2007, 27,544 (69.8%) were among whites, 11,537 (29.3%) among blacks, and 268 (0.7%) among other races. By age group, 22.4% were in the age group 45-64 years, 42.7% in the age group 65-84 years, and 23.6% 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 decreased from 920 per 100,000 population in 2006 to 916.5 per 100,000 population in 2007.

The United States crude death rate in 2007 was 803.7 per 1,000 population and 810.4 in 2006.

Figure 5.1 Death Counts and Crude Death Rates, Louisiana, 1987-2007



Source: Louisiana State Center for Health Statistics, Final Data 2007
National Center for Health Statistics Preliminary Data 2007

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.

Mortality Rates
Louisiana, Neighboring States, and United States, 2007

State	Crude Rate*	Age-Adjusted Rate**
Alabama	1008.5	930.3
Arkansas	993.5	881.8
*Louisiana****	916.5	912.3
Mississippi	968.6	943.5
Texas	*****	*****
United States	803.7	760.3

*Rate per 100,000 population, preliminary data 2007.
**Rate per 100,000 U.S. Standard population 2000. Source: National Center for Health Statistics, National Vital Statistics Report, Vol 58, No.1, Preliminary Death Data 2007
***Louisiana Final Death Data 2007.
*****Data not available

Number of Deaths by Age Group and Sex. Louisiana - 2007

Sex	Age Group								
	Under 5	5-14	15-24	25-44	45-64	65-84	85+	Unknown	Total
Male	395	89	616	1891	5361	8523	3008	1	19884
Female	295	44	181	916	3471	8275	6283	0	19465
Total	690	133	797	2807	8832	16798	9291	1	39349

Source: Louisiana State Center for Health Statistics

Number And Rate of Deaths by Race-Sex, Age Groups, and Parish
Louisiana - 2007

Parish	Total	Rate	Race/ Sex	Age group 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	39349	9.2	ALL	594	96	53	80	299	498	1124	1683	3537	5295	6807	9991	9291	****
	13698		WM	136	23	21	35	125	227	452	627	1303	2010	2625	3725	2388	****
	13846		WF	98	15	11	14	38	58	176	315	775	1312	2074	3987	4973	0
	6034		BM	202	28	15	17	96	160	334	449	838	1165	1126	1003	601	0
	5503		BF	153	24	5	13	33	48	143	271	591	768	936	1223	1295	0
	152		OM	****	5	****	0	5	****	15	14	21	24	22	22	19	0
	116		OF	****	****	0	****	****	****	****	7	9	16	24	31	15	0
Acadia	657	11	ALL	5	0	****	0	****	****	16	31	55	99	106	183	155	0
	288		WM	****	0	****	0	****	****	10	16	27	42	58	83	43	0
	261		WF	0	0	0	0	****	****	****	6	14	35	31	81	90	0
	48		BM	0	0	0	0	0	0	****	5	8	14	8	9	****	0
	60		BF	****	0	0	0	0	0	****	****	6	8	9	10	19	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
Allen	27	1.1	ALL	****	0	0	****	0	0	****	****	****	****	5	****	****	0
	13		WM	****	0	0	0	0	0	****	****	****	****	****	0	****	0
	6		WF	0	0	0	0	0	0	0	0	****	0	0	****	****	0
	6		BM	0	0	0	0	0	0	0	****	****	****	****	0	0	0
	****		BF	0	0	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
Ascension	650	6.5	ALL	14	****	****	****	6	13	22	23	67	108	114	142	138	0
	246		WM	8	****	0	0	6	6	9	11	26	41	41	57	40	0
	246		WF	****	0	0	****	0	****	6	7	13	39	38	57	80	0
	84		BM	****	0	****	0	0	****	****	****	15	17	24	8	5	0
	73		BF	****	0	0	0	0	****	****	****	13	11	11	19	13	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

Number And Rate of Deaths by Race-Sex, Age Groups, and Parish
Louisiana - 2007

Parish	Total	Rate	Race/ Sex	Age group 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	8.7	ALL	5	****	0	****	****	0	****	7	18	27	40	47	51	0
	62		WM	****	0	0	0	****	0	0	****	8	10	15	10	14	0
	68		WF	0	0	0	****	0	0	****	0	****	5	9	23	28	0
	41		BM	****	****	0	0	0	0	****	****	6	8	7	8	****	0
	30		BF	****	0	0	0	0	0	0	0	****	****	9	6	6	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	458	10.9	ALL	6	****	****	****	****	6	9	24	31	63	73	113	127	0
	169		WM	****	0	****	0	****	****	6	6	10	21	39	45	32	0
	164		WF	****	0	0	0	0	0	****	8	7	15	19	48	64	0
	64		BM	0	****	0	0	0	****	****	6	8	18	10	8	10	0
	59		BF	****	0	0	****	****	0	****	****	6	8	5	11	21	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
Beauregard	334	9.9	ALL	****	0	****	0	****	7	13	10	26	42	71	81	78	0
	157		WM	****	0	****	0	****	5	8	6	15	26	30	33	28	0
	140		WF	0	0	0	0	0	****	5	****	7	12	30	39	43	0
	16		BM	0	0	0	0	0	0	0	****	****	****	5	5	****	0
	20		BF	0	0	0	0	0	****	0	0	****	****	5	****	5	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
Bienville	209	14	ALL	****	****	****	****	****	****	****	****	14	21	36	49	73	0
	50		WM	0	****	0	0	0	0	****	0	****	6	12	11	16	0
	80		WF	****	0	0	****	0	0	****	0	****	****	9	20	41	0
	42		BM	0	0	0	0	****	****	****	0	8	7	12	7	****	0
	37		BF	****	0	****	0	****	0	0	****	0	****	****	11	12	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	7.5	ALL	20	****	0	****	5	5	16	34	61	108	155	214	191	0
	345		WM	****	0	0	****	0	****	9	16	29	50	73	91	68	0
	323		WF	5	****	0	****	****	****	****	13	15	37	48	99	98	0
	66		BM	****	0	0	0	****	****	****	****	9	11	19	12	****	0
	75		BF	7	0	0	0	****	0	****	****	8	9	13	11	21	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
Caddo	2654	10.5	ALL	52	8	5	5	13	28	57	108	205	357	424	700	692	0
	752		WM	5	0	****	****	5	13	20	33	65	103	135	215	156	0
	836		WF	****	****	****	0	****	****	9	8	33	66	113	246	350	0
	531		BM	29	****	****	****	5	10	23	38	68	110	87	96	55	0
	526		BF	15	****	0	0	****	****	5	28	39	77	87	138	131	0
	****		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
Calcasieu	1797	9.7	ALL	29	6	****	6	12	21	50	76	185	229	295	480	407	0
	711		WM	9	0	0	****	9	15	25	34	77	106	134	185	114	0
	680		WF	6	****	0	****	****	****	10	18	54	56	90	203	235	0
	212		BM	9	****	****	0	****	****	11	14	33	35	32	48	21	0
	191		BF	5	0	0	****	0	****	****	10	21	32	37	44	36	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

Number And Rate of Deaths by Race-Sex, Age Groups, and Parish
Louisiana - 2007

Parish	Total	Rate	Race/ Sex	Age group 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.
Caldwell	124	12	ALL	0	0	0	0	****	0	****	****	13	13	26	33	33	0
	56		WM	0	0	0	0	****	0	****	****	6	6	12	20	8	0
	45		WF	0	0	0	0	0	0	0	0	****	5	10	10	16	0
	10		BM	0	0	0	0	0	0	****	****	****	****	****	****	0	0
	13		BF	0	0	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
Cameron	50	6.7	ALL	0	0	0	0	****	****	****	****	6	****	10	17	8	0
	30		WM	0	0	0	0	0	****	****	****	****	****	7	12	****	0
	19		WF	0	0	0	0	****	0	0	****	****	****	****	5	7	0
	0		BM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		BF	0	0	0	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
Catahoula	119	11.4	ALL	****	0	0	0	0	****	5	****	13	14	29	24	26	0
	43		WM	0	0	0	0	0	****	****	0	5	****	13	13	****	0
	45		WF	****	0	0	0	0	****	0	****	****	7	8	9	14	0
	12		BM	****	0	0	0	0	0	0	****	****	****	****	0	****	0
	19		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
Claiborne	206	12.6	ALL	****	0	0	0	****	0	****	10	12	17	31	62	67	0
	60		WM	0	0	0	0	****	0	0	****	****	****	12	21	17	0
	70		WF	0	0	0	0	****	0	****	****	****	5	5	22	33	0
	41		BM	****	0	0	0	0	0	0	5	****	6	8	10	7	0
	35		BF	****	0	0	0	0	0	****	****	****	****	6	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
Concordia	213	11.2	ALL	5	0	0	0	****	****	****	7	23	27	52	42	48	0
	83		WM	****	0	0	0	****	****	0	****	7	11	26	18	15	0
	58		WF	****	0	0	0	0	0	****	****	****	7	14	13	16	0
	43		BM	****	0	0	0	0	0	****	****	9	6	11	5	5	0
	29		BF	****	0	0	0	****	0	0	****	****	****	****	6	12	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
Desoto	266	10.4	ALL	****	0	0	0	****	****	****	11	27	34	48	62	72	0
	89		WM	0	0	0	0	0	****	****	5	7	12	20	26	17	0
	70		WF	0	0	0	0	****	0	****	****	5	****	15	11	31	0
	52		BM	****	0	0	0	0	****	****	****	10	11	****	15	7	0
	55		BF	****	0	0	0	0	****	0	****	5	7	10	10	17	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
E Baton Rouge	3442	8	ALL	67	11	8	7	22	61	129	174	344	446	513	814	846	0
	899		WM	****	0	****	****	6	14	39	32	82	109	140	276	194	0
	1036		WF	****	****	0	0	****	****	9	13	59	83	129	316	417	0
	778		BM	33	****	****	****	12	34	46	72	119	155	123	101	73	0
	704		BF	25	****	****	****	****	9	31	54	82	99	119	119	155	0
	17		OM	0	****	0	0	****	0	****	****	****	0	****	****	5	0
	8		OF	****	0	0	0	0	****	0	****	0	0	****	****	****	0

Number And Rate of Deaths by Race-Sex, Age Groups, and Parish
Louisiana - 2007

Parish	Total	Rate	Race/ Sex	Age group 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.
E Carroll	95	11.5	ALL	****	0	0	0	0	****	****	****	8	15	21	18	20	0
	11		WM	0	0	0	0	0	0	0	0	****	****	0	6	****	0
	25		WF	****	0	0	0	0	0	0	****	****	****	7	7	****	0
	25		BM	****	0	0	0	0	****	0	****	****	****	8	****	****	0
	34		BF	****	0	0	0	0	****	****	0	****	6	6	****	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
E Feliciana	219	10.5	ALL	5	****	****	0	****	****	8	14	19	26	45	50	47	0
	68		WM	****	0	0	0	0	****	****	****	7	9	14	20	11	0
	47		WF	0	****	0	0	0	0	****	****	****	****	7	9	22	0
	64		BM	****	0	****	0	****	****	6	6	****	8	17	10	7	0
	40		BF	****	0	0	0	0	0	0	****	7	5	7	11	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
Evangeline	366	10.3	ALL	5	****	0	****	****	6	11	14	31	47	70	90	87	0
	146		WM	****	0	0	****	0	****	****	6	15	21	32	39	25	0
	131		WF	0	0	0	0	0	0	****	****	10	12	23	35	48	0
	51		BM	****	0	0	0	****	0	****	****	****	11	8	11	7	0
	38		BF	****	****	0	0	****	****	****	****	****	****	7	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
Franklin	242	12	ALL	****	****	****	****	0	****	7	7	19	29	39	66	67	0
	82		WM	0	****	0	0	0	****	****	****	7	9	18	28	14	0
	90		WF	0	0	****	0	0	0	****	****	****	5	15	24	36	0
	39		BM	****	0	0	****	0	0	****	0	6	10	****	7	7	0
	31		BF	****	0	0	0	0	****	****	****	****	5	****	7	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
Grant	237	12.6	ALL	6	****	0	0	****	****	7	11	13	36	55	55	51	0
	118		WM	****	0	0	0	****	0	5	5	7	18	29	27	22	0
	82		WF	****	****	0	0	0	0	****	****	****	9	18	22	24	0
	24		BM	****	0	0	0	0	****	****	****	****	5	6	****	****	0
	13		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	699	9.5	ALL	10	****	****	****	5	7	17	30	47	90	133	182	173	0
	252		WM	****	****	****	0	****	5	6	16	24	25	54	65	49	0
	231		WF	****	0	0	0	0	0	****	5	9	28	33	70	83	0
	97		BM	****	0	0	0	0	0	7	8	9	18	16	20	16	0
	113		BF	****	0	0	****	****	****	****	****	5	19	28	26	24	0
	5		OM	0	0	****	0	****	0	0	0	0	0	****	0	****	0
	****		OF	0	0	0	0	0	0	0	0	0	0	0	****	0	0
Iberville	290	8.8	ALL	****	****	0	0	****	6	5	10	34	46	57	68	60	0
	93		WM	****	0	0	0	****	****	****	****	14	19	20	22	10	0
	72		WF	0	****	0	0	0	****	****	****	****	****	13	22	28	0
	59		BM	****	0	0	0	0	****	****	****	13	10	13	7	9	0
	66		BF	0	0	0	0	0	0	****	****	5	14	11	17	13	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

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Parish	Total	Rate	Race/ Sex	Age group 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.
Jackson	176	11.7	ALL	****	0	0	0	****	0	****	5	14	14	47	43	48	0
	52		WM	0	0	0	0	0	0	****	0	5	****	14	17	10	0
	74		WF	0	0	0	0	0	0	0	****	****	7	21	13	29	0
	25		BM	****	0	0	0	****	0	****	****	****	****	6	5	****	0
	24		BF	0	0	0	0	0	0	0	****	****	****	6	8	5	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
Jefferson	3946	9.2	ALL	54	9	****	8	35	50	109	170	352	601	634	1062	861	0
	1558		WM	12	****	0	5	19	26	35	74	151	274	267	449	243	0
	1527		WF	12	0	****	0	5	8	27	41	87	155	224	452	515	0
	457		BM	19	****	0	****	9	10	33	39	67	101	81	63	30	0
	345		BF	10	****	0	****	****	5	9	14	38	65	53	81	66	0
	33		OM	0	****	0	0	****	****	****	****	7	****	****	6	****	0
	26		OF	****	0	0	0	0	0	****	****	****	****	5	11	****	0
Jefferson Davis	332	10.8	ALL	5	****	0	0	****	****	6	15	26	41	71	75	85	0
	142		WM	****	0	0	0	****	****	****	7	14	18	27	43	24	0
	135		WF	****	0	0	0	****	****	****	5	5	16	27	24	52	0
	31		BM	****	****	0	0	0	0	0	****	****	5	10	6	****	0
	24		BF	0	****	0	0	0	0	0	****	****	****	7	****	6	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
Lafayette	1614	7.9	ALL	27	****	****	****	11	26	50	68	153	220	254	437	357	0
	610		WM	8	****	****	****	7	18	25	24	58	94	83	178	109	0
	603		WF	5	0	****	****	0	****	7	14	37	44	94	183	215	0
	217		BM	6	0	0	0	****	****	14	19	35	51	35	37	15	0
	176		BF	8	****	0	****	****	****	****	11	20	28	41	38	18	0
	7		OM	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
Lafourche	781	8.5	ALL	10	****	****	0	9	13	17	33	69	110	123	189	203	0
	331		WM	****	0	****	0	****	10	10	17	32	47	56	86	64	0
	336		WF	****	0	****	0	****	****	****	6	21	40	51	85	122	0
	51		BM	0	****	****	0	****	0	****	8	5	15	5	7	****	0
	55		BF	****	****	0	0	0	****	0	****	9	6	11	9	14	0
	****		OM	0	0	0	0	0	0	0	****	0	****	0	****	0	0
	5		OF	0	0	0	0	0	0	****	0	****	****	0	****	0	0
Lasalle	158	11.2	ALL	****	****	0	0	****	****	6	****	12	20	32	42	38	0
	65		WM	0	****	0	0	0	****	****	****	5	12	13	20	9	0
	81		WF	****	0	0	0	****	0	****	****	5	7	18	20	27	0
	7		BM	****	0	0	0	0	0	****	****	****	****	0	0	****	0
	****		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		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	357	8.4	ALL	6	0	0	0	0	5	16	9	24	34	49	110	104	0
	90		WM	****	0	0	0	0	****	****	****	****	10	11	31	22	0
	133		WF	****	0	0	0	0	0	****	****	****	11	18	44	51	0
	66		BM	****	0	0	0	0	****	****	****	13	8	11	15	10	0
	66		BF	0	0	0	0	0	****	5	****	****	5	9	19	21	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

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Parish	Total	Rate	Race/ Sex	Age group 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.
Livingston	846	7.3	ALL	9	****	0	****	12	11	27	54	81	120	176	200	152	0
	420		WM	****	****	0	****	8	8	17	32	45	63	98	93	53	0
	385		WF	7	0	0	****	****	****	9	18	30	52	67	101	94	0
	20		BM	****	0	0	0	****	0	0	****	****	****	7	****	****	0
	18		BF	0	****	0	0	0	0	0	0	****	****	****	****	****	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
Madison	140	11.9	ALL	0	****	0	0	****	****	****	8	19	22	22	30	33	0
	26		WM	0	0	0	0	0	0	0	****	****	****	6	7	****	0
	42		WF	0	0	0	0	0	0	0	****	****	5	5	13	14	0
	40		BM	0	0	0	0	****	****	****	0	7	11	7	5	6	0
	32		BF	0	****	0	0	****	0	0	****	7	****	****	5	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
Morehouse	404	14.1	ALL	****	****	0	****	****	****	7	15	28	37	65	108	130	0
	114		WM	0	0	0	****	****	****	****	****	10	16	15	30	34	0
	148		WF	****	0	0	0	0	****	****	0	8	7	23	40	67	0
	69		BM	****	****	0	0	****	0	****	7	5	5	13	19	13	0
	73		BF	****	****	0	0	****	0	****	****	5	9	14	19	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
Natchitoches	357	9	ALL	****	0	****	0	****	****	5	9	34	53	59	88	96	0
	105		WM	0	0	****	0	****	****	****	****	8	16	22	31	17	0
	136		WF	0	0	****	0	****	0	0	****	5	21	24	30	52	0
	60		BM	****	0	0	0	****	****	0	****	15	9	7	14	7	0
	55		BF	****	0	0	0	0	0	****	0	6	6	6	13	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
Orleans	2489	10.4	ALL	31	5	****	****	43	61	123	140	250	363	395	547	528	****
	451		WM	****	****	0	0	****	5	22	27	43	71	71	113	92	****
	418		WF	****	0	0	0	0	0	****	9	22	28	42	114	200	0
	890		BM	15	****	0	****	36	50	82	65	107	171	160	131	70	0
	690		BF	10	****	****	0	5	6	13	31	73	90	115	184	161	0
	27		OM	0	****	0	0	0	0	****	7	****	****	5	****	****	0
	13		OF	****	0	0	0	0	0	****	****	****	****	****	****	****	0
Ouachita	1404	9.4	ALL	35	****	****	****	9	10	37	55	101	174	237	382	357	0
	472		WM	7	****	0	0	5	5	14	14	37	62	95	141	91	0
	497		WF	****	****	****	0	****	****	****	9	15	38	77	148	198	0
	208		BM	15	0	****	****	****	****	11	18	22	44	30	42	20	0
	224		BF	9	0	0	****	****	****	9	13	27	29	35	50	48	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
Plaquemines	176	8.2	ALL	****	0	****	0	0	****	5	8	15	24	37	43	37	0
	67		WM	0	0	0	0	0	****	****	****	5	11	11	17	13	0
	58		WF	****	0	0	0	0	****	****	****	****	6	14	16	15	0
	32		BM	0	0	****	0	0	0	0	****	****	7	11	5	****	0
	18		BF	****	0	0	0	0	0	0	****	5	0	****	****	6	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

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Parish	Total	Rate	Race/ Sex	Age group 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.
Point Coupee	239	10.4	ALL	6	0	0	0	****	****	6	15	18	28	41	54	64	0
	72		WM	****	0	0	0	****	0	****	6	5	13	15	15	13	0
	81		WF	0	0	0	0	0	****	0	****	5	****	7	26	36	0
	42		BM	****	0	0	0	****	****	****	****	7	5	8	5	5	0
	43		BF	****	0	0	0	****	****	****	****	****	6	11	8	10	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
Rapides	1140	8.7	ALL	17	****	****	****	****	16	33	36	87	160	206	286	287	0
	365		WM	****	****	****	****	****	9	11	11	37	53	73	98	63	0
	423		WF	****	0	****	****	****	****	****	8	13	44	60	129	154	0
	155		BM	6	0	****	0	0	****	7	7	18	36	40	18	20	0
	189		BF	5	0	0	0	0	****	11	8	19	26	31	39	49	0
	****		OM	0	0	0	0	0	0	0	****	0	****	0	****	0	0
	****		OF	0	0	0	0	0	0	0	****	0	0	****	0	****	0
Red River	114	12.4	ALL	0	0	0	0	****	****	0	****	12	14	20	32	30	0
	35		WM	0	0	0	0	****	****	0	****	****	6	7	10	7	0
	43		WF	0	0	0	0	****	0	0	****	****	5	6	15	13	0
	21		BM	0	0	0	0	****	0	0	0	****	****	6	****	6	0
	15		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
Richland	246	12.7	ALL	****	0	0	****	****	****	0	12	21	32	46	55	74	0
	81		WM	****	0	0	0	****	****	0	****	11	16	16	16	14	0
	90		WF	0	0	0	0	0	0	0	****	****	****	20	26	38	0
	38		BM	0	0	0	****	0	0	0	5	****	10	5	****	9	0
	37		BF	****	0	0	0	0	0	0	****	5	****	5	9	13	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	271	11.6	ALL	****	0	****	****	0	****	****	5	18	32	52	75	77	0
	133		WM	0	0	****	0	0	****	****	****	9	19	33	36	28	0
	103		WF	0	0	0	0	0	****	****	****	5	8	12	31	43	0
	16		BM	0	0	0	****	0	****	****	0	****	****	****	****	****	0
	18		BF	****	0	0	0	0	0	0	0	****	****	****	5	****	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
St. Bernard	223	8.9	ALL	****	****	0	****	****	****	8	12	25	34	52	55	29	0
	104		WM	****	****	0	****	****	****	****	8	14	19	20	20	12	0
	100		WF	****	0	0	0	0	0	****	****	9	10	28	32	16	0
	9		BM	0	0	0	0	0	0	****	0	****	****	****	****	0	0
	9		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
	****		OF	0	0	0	0	0	0	0	0	0	0	****	0	0	0
St. Charles	361	7.2	ALL	6	0	0	****	****	5	12	18	37	47	63	91	79	0
	133		WM	****	0	0	0	0	****	6	8	18	16	23	30	25	0
	134		WF	0	0	0	0	****	****	0	****	9	14	17	49	42	0
	47		BM	0	0	0	****	****	0	6	5	5	9	10	8	****	0
	46		BF	****	0	0	0	0	0	0	****	5	8	13	****	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

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Parish	Total	Rate	Race/ Sex	Age group 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. Helena	95	9.2	ALL	****	0	0	0	****	****	****	7	5	15	15	19	28	0
	21		WM	0	0	0	0	****	****	****	****	0	****	7	****	5	0
	31		WF	0	0	0	0	0	0	0	****	****	6	****	9	7	0
	21		BM	****	0	0	0	0	****	0	****	****	****	****	****	5	0
	22		BF	0	0	0	0	0	0	0	0	0	****	****	5	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
St. James	188	8.7	ALL	****	****	0	0	****	5	5	12	16	21	39	42	44	0
	42		WM	****	0	0	0	0	****	****	****	6	****	10	13	5	0
	44		WF	0	0	0	0	0	0	0	****	****	****	8	11	18	0
	53		BM	****	****	0	0	****	****	****	5	****	8	14	10	6	0
	49		BF	0	0	0	0	0	0	****	****	5	8	7	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
St. John	333	7.2	ALL	8	0	0	****	6	5	15	15	33	42	53	85	69	0
	82		WM	****	0	0	0	0	****	6	****	7	14	15	21	11	0
	90		WF	****	0	0	****	****	0	****	****	****	****	16	26	33	0
	89		BM	****	0	0	****	****	****	5	7	17	7	15	23	5	0
	72		BF	****	0	0	0	****	0	****	****	5	17	7	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
St. Landry	917	10.2	ALL	8	****	****	****	6	8	23	34	95	120	171	229	219	0
	293		WM	****	0	****	****	****	****	11	11	33	41	58	82	46	0
	294		WF	****	0	0	0	0	****	****	6	19	26	46	81	110	0
	160		BM	****	****	0	0	****	0	6	7	23	32	45	26	17	0
	169		BF	****	****	0	0	****	****	****	10	20	21	22	40	45	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
St. Martin	407	8	ALL	10	****	****	****	****	****	13	24	38	49	63	113	86	0
	144		WM	****	0	****	****	****	****	5	11	16	21	24	35	26	0
	138		WF	****	0	0	0	****	0	****	9	5	16	15	45	42	0
	70		BM	****	****	****	0	****	****	5	****	10	8	13	21	5	0
	53		BF	****	****	0	****	0	0	****	****	7	****	11	12	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	0	0
St. Mary	494	9.6	ALL	5	****	0	****	****	****	12	16	46	73	92	127	115	0
	190		WM	****	****	0	****	****	****	8	9	18	30	40	46	32	0
	167		WF	****	0	0	0	0	0	****	****	8	19	27	57	52	0
	64		BM	****	0	0	0	0	0	****	****	11	12	14	10	11	0
	63		BF	****	0	0	0	0	****	****	****	8	10	11	13	17	0
	5		OM	0	0	0	0	0	****	****	****	****	0	0	0	****	0
	5		OF	0	0	0	0	0	0	0	0	0	****	0	****	****	0
St. Tammany	1871	8.1	ALL	18	****	****	****	10	16	49	56	158	237	304	569	445	0
	841		WM	7	0	****	****	****	14	33	37	81	123	147	247	142	0
	836		WF	5	****	0	****	****	****	12	14	53	80	120	270	275	0
	96		BM	****	****	0	0	****	****	****	****	18	15	23	20	6	0
	84		BF	****	0	0	0	0	0	****	****	6	15	10	29	19	0
	5		OM	0	0	0	0	0	0	0	0	0	****	****	****	****	0
	9		OF	0	0	0	0	0	0	0	0	0	****	****	****	****	0

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Louisiana - 2007

Parish	Total	Rate	Race/ Sex	Age group 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.
Tangipahoa	1104	9.8	ALL	14	****	****	****	9	13	46	63	124	138	201	277	212	0
	381		WM	****	0	0	0	6	7	19	29	40	60	82	85	49	0
	423		WF	****	0	****	****	****	****	16	12	31	31	67	127	128	0
	150		BM	****	****	****	0	0	****	7	14	27	31	24	27	12	0
	148		BF	****	****	0	0	****	****	****	8	26	16	28	37	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
Tensas	56	9.5	ALL	****	0	0	0	0	0	0	****	****	14	11	14	10	0
	10		WM	0	0	0	0	0	0	0	0	0	****	0	****	****	0
	12		WF	0	0	0	0	0	0	0	0	****	****	****	****	****	0
	17		BM	****	0	0	0	0	0	0	0	****	6	****	5	****	0
	17		BF	****	0	0	0	0	0	0	****	****	0	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
Terrebonne	922	8.5	ALL	7	8	0	5	7	14	24	41	89	126	192	222	187	0
	375		WM	****	****	0	****	****	****	10	19	34	50	89	103	57	0
	341		WF	****	****	0	0	0	****	5	12	21	40	64	91	103	0
	91		BM	****	0	0	****	****	6	****	5	20	13	14	12	11	0
	78		BF	****	****	0	0	0	****	****	****	8	16	18	14	12	0
	21		OM	0	****	0	0	****	****	****	****	****	5	****	****	****	0
	16		OF	0	****	0	****	****	****	0	****	****	****	****	****	****	0
Union	261	11.9	ALL	****	****	****	****	****	****	6	9	21	35	42	77	61	0
	93		WM	****	0	****	****	0	****	****	5	9	13	17	30	12	0
	96		WF	0	0	0	0	****	0	****	****	****	10	13	30	34	0
	30		BM	0	0	0	0	0	****	****	0	****	8	8	5	5	0
	42		BF	****	****	0	0	0	0	****	****	7	****	****	12	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
Vermilion	546	9.9	ALL	8	0	0	****	6	5	16	23	44	60	111	118	154	0
	218		WM	0	0	0	****	****	****	10	5	24	27	48	60	37	0
	250		WF	****	0	0	0	****	****	****	9	11	25	43	48	106	0
	41		BM	****	0	0	0	****	0	****	6	5	****	12	7	****	0
	32		BF	****	0	0	0	0	****	****	****	****	****	5	****	9	0
	****		OM	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
Vernon	308	6.5	ALL	****	0	0	****	****	0	8	8	28	48	76	81	54	0
	136		WM	****	0	0	****	****	0	5	5	10	23	41	37	11	0
	132		WF	****	0	0	0	0	0	****	****	11	15	30	35	38	0
	18		BM	0	0	0	0	0	0	****	****	****	6	****	****	****	0
	18		BF	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	577	13	ALL	****	****	****	****	0	6	16	21	67	79	112	144	123	0
	231		WM	****	****	****	0	0	****	10	11	27	38	54	59	25	0
	209		WF	****	0	0	****	0	****	****	****	23	17	28	58	74	0
	72		BM	0	0	0	0	0	****	****	****	7	16	16	15	11	0
	64		BF	****	0	0	****	0	****	****	****	10	8	14	12	13	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 Groups, and Parish
Louisiana - 2007

Parish	Total	Rate	Race/ Sex	Age group 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.
Webster	528	12.9	ALL	9	****	0	****	****	****	****	15	43	68	90	143	147	0
	182		WM	5	0	0	****	****	****	0	5	15	22	40	52	39	0
	195		WF	****	0	0	0	****	****	****	****	12	23	20	63	69	0
	67		BM	****	****	0	0	****	****	****	****	9	13	15	13	7	0
	83		BF	****	0	0	0	0	0	0	****	7	9	15	15	32	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
W Baton	176	7.7	ALL	7	****	0	0	****	****	6	13	16	24	37	38	30	0
Rouge	49		WM	****	0	0	0	****	****	****	5	****	11	9	11	****	0
	49		WF	****	****	0	0	0	****	****	0	5	****	9	12	17	0
	38		BM	0	0	0	0	0	****	****	6	5	6	9	6	****	0
	40		BF	****	0	0	0	0	0	****	****	****	5	10	9	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
West Carroll	136	12	ALL	****	0	0	0	0	****	****	****	10	17	19	33	45	0
	55		WM	0	0	0	0	0	****	****	****	****	7	9	14	16	0
	66		WF	****	0	0	0	0	0	0	****	6	9	9	14	26	0
	6		BM	0	0	0	0	0	0	0	0	0	0	****	****	****	0
	9		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
W Feliciana	86	5.7	ALL	****	****	0	****	0	****	****	****	14	16	16	10	18	0
	30		WM	****	0	0	****	0	****	****	0	6	5	6	****	6	0
	22		WF	0	****	0	0	0	****	0	****	5	****	****	****	6	0
	22		BM	****	0	0	0	0	****	****	****	****	7	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
Winn	202	13.1	ALL	****	0	0	0	****	****	5	6	15	31	34	50	55	0
	76		WM	****	0	0	0	****	0	****	****	5	15	17	18	14	0
	79		WF	****	0	0	0	****	****	****	****	5	8	10	20	29	0
	23		BM	****	0	0	0	0	0	****	****	****	****	5	5	5	0
	23		BF	0	0	0	0	0	0	0	0	****	5	****	6	7	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
Unknown	****		OF	0	0	0	0	0	0	0	0	0	0	0	****	0	0

Source: Lousiana State Center for Health Statistics
*Rate per 1,000 population
****Cells suppressed to maintain confidentiality

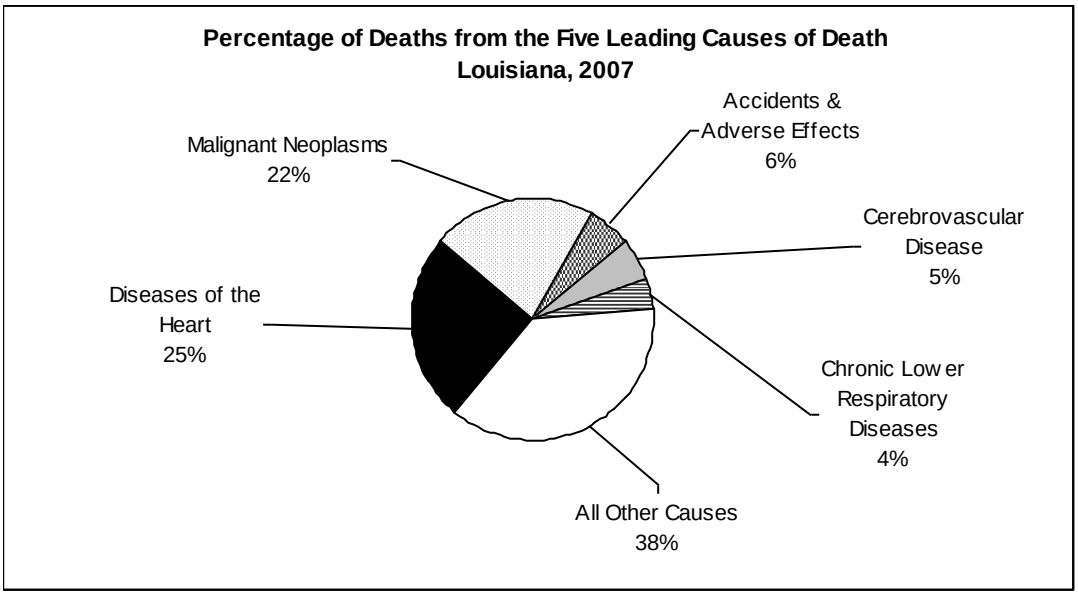
Age-Adjusted Mortality Rate for Total Deaths

The age-adjusted death rate from all causes for Louisiana in 2007 was 912.29 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

There were 39,349 deaths to Louisiana residents in 2007. As shown in the figure above, of all deaths in 2007, 62% were attributable to five causes. Moreover, the top four causes have consistently been the leading causes in Louisiana for the past 20 years, though its specific order has alternated. 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 ranking of the ten leading causes of death in Louisiana after adjusting crude death rates by age is shown in the next table:

Age-Adjusted Mortality Rates* for the Top Ten Causes of Death Louisiana and United States, 2007***

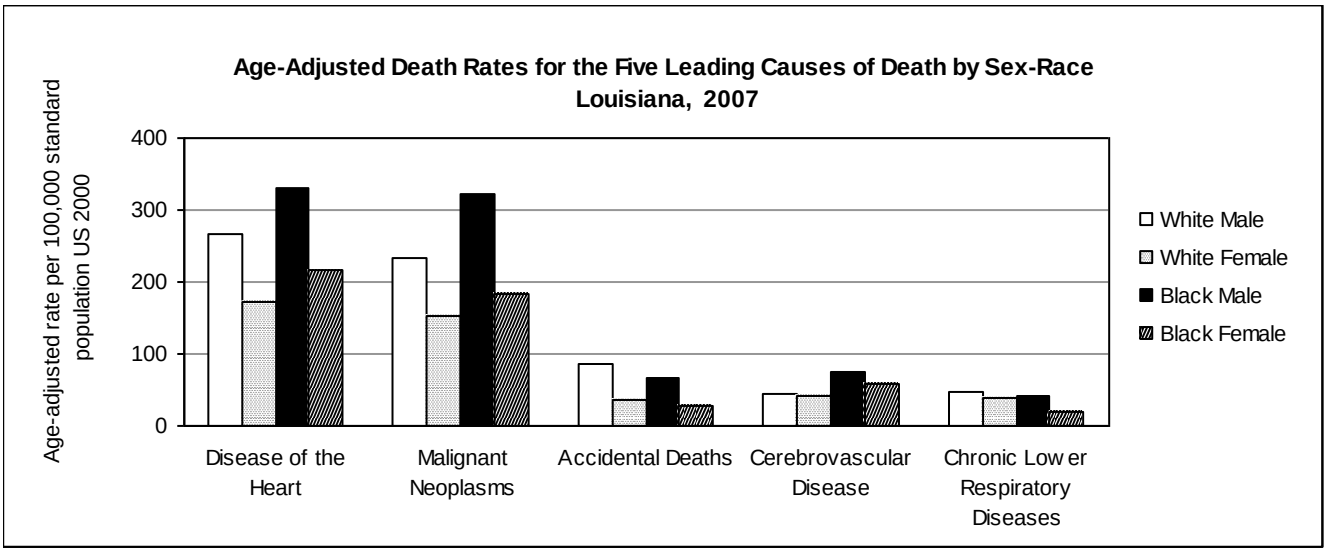
*LA Rank***	*Cause of Death*	*Age-Adjusted Mortality Rate*		*U.S. Rank***
		*Louisiana**	*United States****	
-	*All Causes*	912.29	760.3	-
1	*Diseases of the Heart*	226.63	190.7	*1*
2	*Malignant Neoplasms*	197.80	177.5	*2*
3	*Accidents*	55.40	38.8	*5*
4	*Cerebrovascular Disease*	49.21	44.4	*3*
5	*Chronic Lower Respiratory Diseases*	39.16	42.9	*4*
6	*Diabetes Mellitus*	33.14	23.5	*7*
7	*Alzheimer's Disease*	31.11	24.8	*6*
8	*Nephritis, Nephrotic Syndrome, and Nephrosis*	26.57	15.3	*9*
9	*Influenza and Pneumonia*	20.20	17.5	*8*
10	*Septicemia*	19.41	11.6	*10*

* LA OPH/ State Center for Health Statistics calculated age-adjusted rates (per 100,000 U.S. standard population 2000) 2006, U.S. Census Bureau population estimates used in computing crude rates

** Rank based on crude death rates / Number of Deaths

***Source: National Center for Health Statistics, National Vital Statistics Report, Vol 56, No.16, Preliminary Death Data 2006

The following chart displays age-adjusted mortality rates for the five leading causes of death in Louisiana in 2006. 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 2007.

Age-Adjusted Death Rates* for Leading Causes of Mortality by Race-Sex Louisiana - 2007	
Cause of Death/Race/Sex	***Age-adjusted Rate****
Diseases of the Heart	226.6
White Male	266.1
White Female	173.5
Black Male	331.7
Black Female	216.8
Malignant Neoplasm	197.8
White Male	233.9
White Female	153.4
Black Male	321.1
Black Female	183.0
Accidents	55.4
White Male	85.8
White Female	37.1
Black Male	66.4
Black Female	26.8
Cerebrovascular Diseases	49.2
White Male	44.0
White Female	43.0

Age-Adjusted Death Rates* for Leading Causes of Mortality by Race-Sex Louisiana - 2007	
Cause of Death/Race/Sex	**Age-adjusted Rate***
Black Male	74.4
Black Female	58.6
Chronic Lower Respiratory Disease	39.1
White Male	47.0
White Female	40.1
Black Male	40.9
Black Female	19.3
Diabetes Mellitus	33.1
White Male	47.0
White Female	40.1
Black Male	40.9
Black Female	19.3
Alzheimer's Disease	31.1
White Male	27.8
White Female	36.7
Black Male	19.2
Black Female	24.6
Nephritis, Nephrotic Syndrome and Nephrosis	26.6
White Male	26.3
White Female	17.8
Black Male	50.4
Black Female	41.0
Influenza and Pneumonia	20.2
White Male	24.0
White Female	18.3
Black Male	24.1
Black Female	15.4
Septicemia	19.4
White Male	17.5
White Female	15.3
Black Male	30.9
Black Female	28.9
Homicide	14.1
White Male	8.1
White Female	2.6
Black Male	54.2
Black Female	9.7
Suicide	12.1
White Male	25.7
White Female	5.5
Black Male	9.1
Black Female	1.9

*Age-adjusted Rate per 100,000 U.S. standard population 2000
Source: Louisiana State Center for Health Statistics
United States Census Bureau, 2007 Census Estimates for Crude Rates

Infant Deaths

Overview

Infant mortality encompasses all deaths that occur within the first year of life and excludes fetal deaths (stillbirths) 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 healthcare.

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).

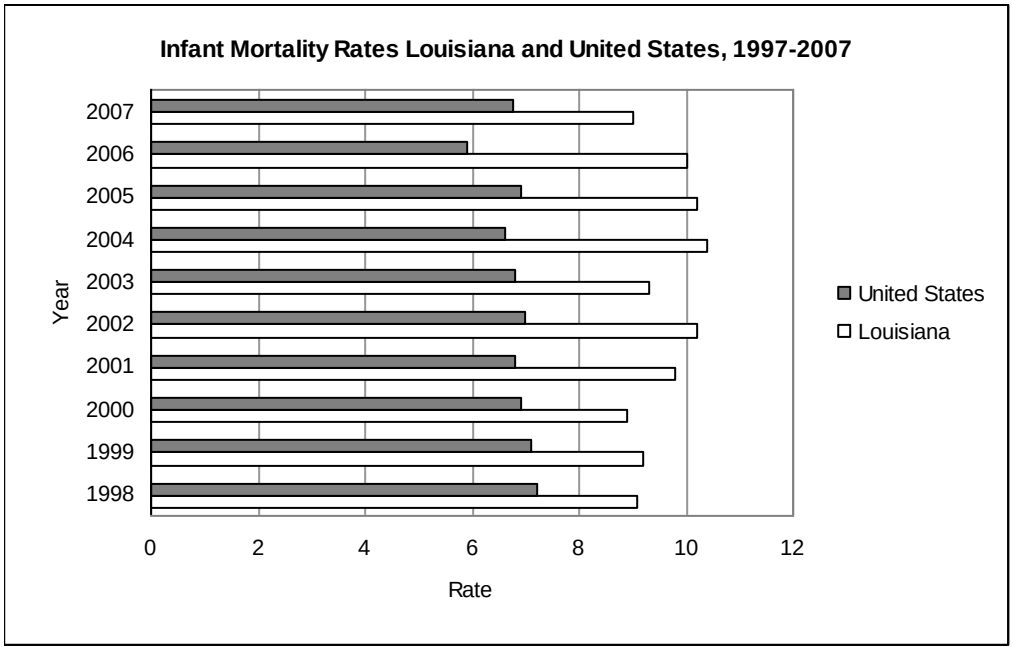
Infant Mortality Rates by Race of Child. Louisiana, 2007*

Race	Number of Deaths	Infant Mortality Rate	Neonatal Mortality Rate	Post- Neonatal Mortality Rate	Hebdomadal Mortality Rate	Perinatal Mortality Rate
Total	594	9.0	5.2	3.8	4	9.8
White	234	6.2	3.5	2.7	2.6	7.3
Black	355	13.8	8.1	5.7	6.3	13.8
Other	5	1.9	1.1	0.7	1.1	5.5

*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

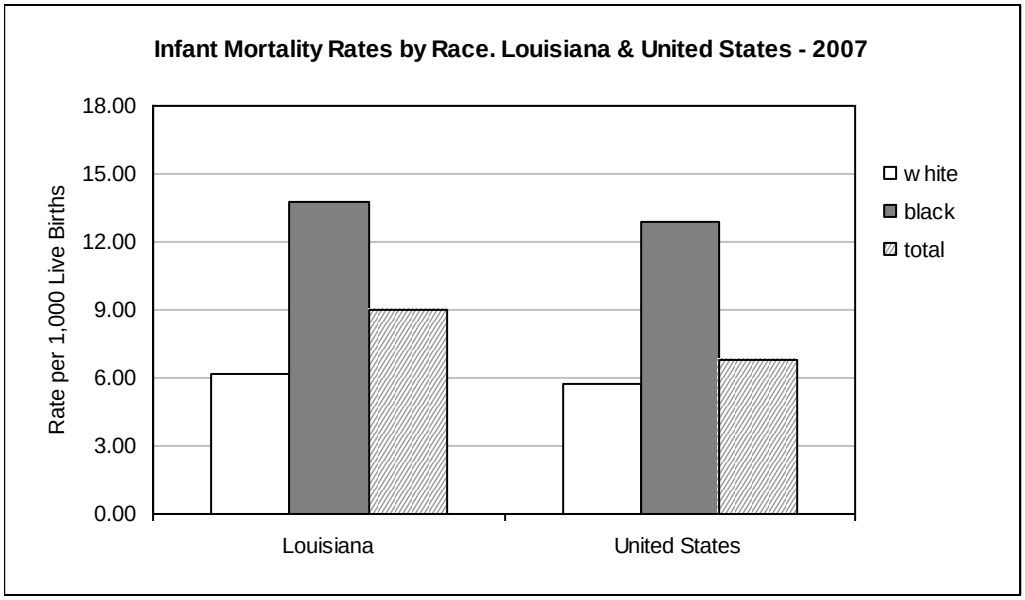
Infant Mortality

In the year 2007, there were 594 deaths in Louisiana to children under one year of age, i.e., a rate of 9.0. The infant mortality rate is defined as the number of deaths within the first year of life per 1,000 live births. The national infant mortality rate in 2007 was 6.8 per 1,000 live births[2].



Source: Louisiana State Center for Health Statistics, Data 2007
National Center for Health Statistics, Preliminary Data 2007

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 2007, there were 234 white, 355 black, and 5 other-race infant deaths in Louisiana. The infant mortality rates were 6.2, 13.8, and 1.9 deaths per 1,000 race-specific live births, respectively.



Source: Louisiana State Center for Health Statistics, Data 2007
NCHS, NVSR, Preliminary Data for 2007

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 - 2007

Parish	*Mother's Race*	*2007 Number of Infant Deaths*	*2007 Infant Mortality Rate*[+]
State Total	All	594	9.0
	White	234	6.2
	Black	355	13.8
	Other	5	1.9
Acadia	All	5	5.1
	White	****	5.3
	Black	****	4.9
	Other	0	0
Allen	All	****	2.6
	White	****	3.3
	Black	0	0
	Other	0	0
Ascension	All	14	8.4
	White	11	9.1
	Black	****	7.4
	Other	0	0

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana - 2007			
Parish	**Mother's Race**	**2007 Number of Infant Deaths**	**2007 Infant Mortality Rate+**
Assumption	All	5	16.6
	White	****	6.4
	Black	****	28.2
	Other	0	0
Avoyelles	All	6	9.2
	White	5	12
	Black	****	4.3
	Other	0	0
Beauregard	All	****	6.2
	White	****	7.3
	Black	0	0
	Other	0	0
Bienville	All	****	10
	White	****	9.8
	Black	****	10.4
	Other	0	0
Bossier	All	20	11.8
	White	9	7.4
	Black	11	26.7
	Other	0	0
Caddo	All	52	13.2
	White	8	5.1
	Black	44	19.1
	Other	0	0
Calcasieu	All	29	10.2
	White	15	7.9
	Black	14	16.1
	Other	0	0
Caldwell	All	0	0
	White	0	0
	Black	0	0
	Other	0	0
Cameron	All	0	0
	White	0	0
	Black	0	0
	Other	0	0
Catahoula	All	****	13.7
	White	****	10.6
	Black	****	19.2
	Other	0	0
Claiborne	All	****	15.8
	White	0	0
	Black	****	26.1
	Other	0	0
Concordia	All	5	19.4
	White	****	16
	Black	****	23.4
	Other	0	0

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana - 2007			
Parish	**Mother's Race**	**2007 Number of Infant Deaths**	**2007 Infant Mortality Rate+**
Desoto	All	****	9.1
	White	0	0
	Black	****	20.1
	Other	0	0
E Baton Rouge	All	67	10.7
	White	8	3.4
	Black	58	16
	Other	****	3.5
East Carroll	All	****	31.5
	White	****	38.5
	Black	****	29.7
	Other	0	0
E Feliciana	All	5	20.5
	White	****	9.3
	Black	****	29.6
	Other	0	0
Evangeline	All	5	9.1
	White	****	5.5
	Black	****	16.2
	Other	0	0
Franklin	All	****	6.4
	White	0	0
	Black	****	14.9
	Other	0	0
Grant	All	6	21.7
	White	5	20.7
	Black	****	33.3
	Other	0	0
Iberia	All	10	8.2
	White	5	7.7
	Black	5	9.3
	Other	0	0
Iberville	All	****	4.7
	White	****	5.7
	Black	****	4.1
	Other	0	0
Jackson	All	****	4.8
	White	0	0
	Black	****	16.1
	Other	0	0
Jefferson	All	54	8.7
	White	24	7.4
	Black	29	13.4
	Other	****	1.2

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana - 2007			
Parish	**Mother's Race**	**2007 Number of Infant Deaths**	**2007 Infant Mortality Rate+**
Jeff Davis	All	5	9.8
	White	****	7.3
	Black	****	22
	Other	0	0
Lafayette	All	27	8.5
	White	13	6.4
	Black	14	13.2
	Other	0	0
Lafourche	All	10	7.3
	White	7	6.8
	Black	****	10.7
	Other	0	0
LaSalle	All	****	9.7
	White	****	5.5
	Black	****	47.6
	Other	0	0
Lincoln	All	6	10.7
	White	****	14.7
	Black	****	7.5
	Other	0	0
Livingston	All	9	4.5
	White	8	4.4
	Black	****	8
	Other	0	0
Madison	All	0	0
	White	0	0
	Black	0	0
	Other	0	0
Morehouse	All	****	9
	White	****	4.9
	Black	****	12.6
	Other	0	0
Natchitoches	All	****	6.7
	White	0	0
	Black	****	11.9
	Other	0	0
Orleans	All	31	7.6
	White	****	4.1
	Black	25	8.9
	Other	****	7
Ouachita	All	35	14.3
	White	11	9
	Black	24	20.2
	Other	0	0

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana - 2007			
Parish	**Mother's Race**	**2007 Number of Infant Deaths**	**2007 Infant Mortality Rate+**
Plaquemines	All	****	5.8
	White	****	4.1
	Black	****	12
	Other	0	0
Pointe Coupee	All	6	17.7
	White	****	6.1
	Black	5	29.2
	Other	0	0
Rapides	All	17	8.3
	White	6	5
	Black	11	13.9
	Other	0	0
Red River	All	0	0
	White	0	0
	Black	0	0
	Other	0	0
Richland	All	****	9.3
	White	****	12.3
	Black	****	6.5
	Other	0	0
Sabine	All	****	6.7
	White	0	0
	Black	****	32.8
	Other	0	0
St Bernard	All	****	4.8
	White	****	6
	Black	0	0
	Other	0	0
St Charles	All	6	8
	White	****	6.6
	Black	****	7.8
	Other	****	27
St Helena	All	****	7.8
	White	0	0
	Black	****	12.2
	Other	0	0
St James	All	****	6.8
	White	****	8.4
	Black	****	5.7
	Other	0	0
St John	All	8	10.2
	White	****	11.3
	Black	5	10.4
	Other	0	0

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana - 2007			
Parish	**Mother's Race**	**2007 Number of Infant Deaths**	**2007 Infant Mortality Rate+**
St Landry	All	8	5.3
	White	****	2.6
	Black	6	8.3
	Other	0	0
St Martin	All	10	11.8
	White	5	10.1
	Black	5	14.8
	Other	0	0
St Mary	All	5	5.7
	White	****	4
	Black	****	8.7
	Other	0	0
St Tammany	All	18	5.6
	White	12	4.6
	Black	6	13.4
	Other	0	0
Tangipahoa	All	14	7.3
	White	8	7
	Black	6	8
	Other	0	0
Tensas	All	****	31.3
	White	0	0
	Black	****	52.6
	Other	0	0
Terrebonne	All	7	3.9
	White	****	2.4
	Black	****	10.2
	Other	0	0
Union	All	****	9
	White	****	8.5
	Black	****	10.5
	Other	0	0
Vermilion	All	8	9.2
	White	****	4.4
	Black	5	29.4
	Other	0	0
Vernon	All	****	2.2
	White	****	2.8
	Black	0	0
	Other	0	0
Washington	All	****	6.2
	White	****	7.6
	Black	****	4.2
	Other	0	0

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana - 2007			
Parish	**Mother's Race**	**2007 Number of Infant Deaths**	**2007 Infant Mortality Rate[+]**
Webster	All	9	15.1
	White	6	16.9
	Black	****	12.7
	Other	0	0
W Baton Rouge	All	7	20
	White	****	14.8
	Black	****	28.2
	Other	0	0
West Carroll	All	****	17.8
	White	****	7.4
	Black	****	60.6
	Other	0	0
W Feliciana	All	****	17.7
	White	****	14.9
	Black	****	22.7
	Other	0	0
Winn	All	****	14.8
	White	****	13.7
	Black	****	17.5
	Other	0	0

**** 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.
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.

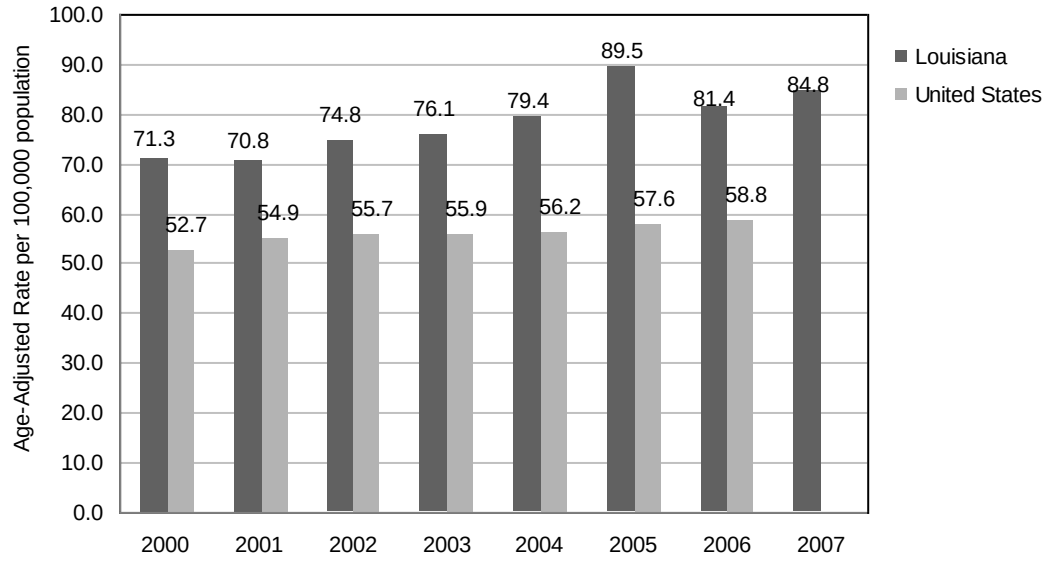
Background

Injuries are the number one killer of children and young adults ages 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.

Figure 1: Comparing Age-Adjusted Rate of Injury Fatalities by Year Louisiana vs. United States (2000-2007)



The following tables indicate core findings of the 2007 injury mortality database from the Injury Research and Prevention Program. In 2007, of the 39,349 fatalities among Louisiana residents, 3,654 were due to injuries.

	Top 5 leading causes of injury related deaths for Age Groups and Intent, Louisiana - 2007				
Rank	**Age Group (0-34 Years)**				
	0-4	5-9	10-14	15-24	25-34
1	Unintentional Suffocation 21	Unintentional MVT 12	Unintentional MVT 13	Unintentional MVT 14	Unintentional MVT 235
2	--	Unintentional Drowning 9	--	Homicide Firearm 6	Homicide Firearm 166
3	--	Homicide Not Specified 8	--	Suicide Firearm 5	Unintentional Poisonings 81
4	--	Unintentional Fire/Flame 7	--	--	Suicide Firearm 45
5	--	--	--	--	Suicide Suffocation 20

Source: LA OPH Health Statistics Program - Death Certificates, 2007
--: Number small to report due to confidentiality issues

	Top 5 leading causes of injury related deaths for Age Groups and Intent, Louisiana - 2007				
Rank	**Age Group (35+ Years)**				
	35-44	45-54	55-64	65+	All Ages
1	Unintentional MVT 158	Unintentional Poisonings 167	Unintentional MVT 87	Unintentional Falls 114	Unintentional MVT 947
2	Unintentional Poisonings 157	Unintentional MVT 145	Unintentional Poisonings 47	Unintentional Not Specified 106	Unintentional Poisonings 647
3	Homicide Firearm 82	Suicide Firearm 64	Suicide Firearm 46	Unintentional MVT 95	Homicide Firearm 469
4	**Suicide Firearm 59**	Homicide Firearm 37	Unintentional Falls 25	**Suicide Firearm 53**	**Suicide Firearm 333**
5	Unintentional MVT 158	Unintentional Poisonings 167	Unintentional MVT 87	Unintentional Falls 114	Unintentional MVT 947

Source: LA OPH Health Statistics Program - Death Certificates, 2007
--: Number small to report due to confidentiality issues

Injury Deaths by Public Health Region. Louisiana 2007		
Demographics	**Number of Injury Deaths**	**Death Rate per 100,000 Residents**
State Total	**3654**	**85.1**
Region 1	694	98.6
Region 2	417	64.9
Region 3	249	62.8
Region 4	363	63.2
Region 5	240	84.7
Region 6	154	51.6
Region 7	323	60.7
Region 8	197	56.7
Region 9	396	77.0
Missing	621	

Injury Deaths by Public Age Group, Sex and Race. Louisiana - 2007		
Demographics	**Number of Injury Deaths**	**Death Rate* per 100,000 Residents**
State Total	**3654**	**85.1**
Age Group (years)		
1 - 4	91	30.5
5 - 14	71	12.0
15 - 24	642	97.7
25 - 34	753	132.2
35 - 44	634	111.4
45 - 54	586	94.2
55 - 64	331	71.3
65 - 74	207	74.8
75 - 84	184	103.9
85 & +	154	224.4
Sex		
Male	2615	125.4
Female	1039	47.1
Race		
White	2496	89.4
Black	1109	81.0
Other	48	36.7
Missing	1	

Source: LA OPH Health Statistics Program - Death Certificates, 2007
*Rate per 100,000 calculated using 2007 US Census Population Estimates

Product

The Louisiana Department of Health & Hospitals (DHH), Office of Public Health (OPH), Bureau of Emergency Medical Services (BEMS), Injury Research & Prevention Program (IRP) analyzes injury data from mortality records. This IRP Program produces a comprehensive mortality report and special reports for use with public health and community planning, program development and evaluation. Currently, the IRP Program is embarking upon an Injury Community Planning process to develop a statewide injury plan. This plan will identify strategies, drive public policy and resource allocations and enhance prevention efforts.

II. MORBIDITY

A. INFECTIOUS DISEASES

West Nile Encephalitis

In 2001, the first case of West Nile encephalitis in humans was diagnosed in Louisiana. West Nile infection may present as 1- a completely asymptomatic infection (about 90% of all infections), 2- a mild fever (about 10% of cases), or 3- a neuro-invasive disease (NID; less than 1% of all infections). NID presents as meningitis or encephalitis that can be life-threatening, with 10% mortality and 10% long-term sequelae impairing normal life. NID tracking is the best measure used to track the progress of West Nile infections. A large outbreak occurred in 2002 with 204 cases of NID reported. From then on, the number of NID cases decreased. Clinical presentation of neuro-invasive diseases or of West Nile fever is always confirmed serologically. The year 2007 was the lowest ever for the total number of cases. The decrease seems to be mostly due to the weather conditions.

West Nile Infections in Louisiana, 2001-2007

Disease	Year						
	2001	2002	2003	2004	2005	2006	2007
Neuro-Invasive Disease	1	204	101	84	118	91	27
Fever	0	124	23	24	54	89	13
Asymptomatic	0	0	4	7	16	22	10
Total	1	328	128	115	188	202	50

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, 45 hospitals voluntarily participate in submission of monthly laboratory 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)
- Extended Spectrum Beta Lactamase E.coli (ESBL/Ecoli)
- Extended Spectrum Beta Lactamase Klebsiella (ESBL/Klebsiella)

The current active surveillance system includes aggregate laboratory-based data from:

1- 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-laboratory reporting sites to participate in this surveillance activity.

2- Hospital antibiograms reported voluntarily to the Office of Public Health.

Because the 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 2004.

A trend analysis was conducted to determine if the rates of resistance were increasing over the past years (2000 to 2005). The results can be seen in the following Table.

Antibiotic Resistance in Louisiana Hospitals in Percent Resistant, 2000-2007

Bacteriae	2000	2001	2002	2003	2004	2005	2006	2007
S. PNEUMONIAE	42.9	47.1	44.0	41.7	43.3	40.7	47.0	49.3
S. AUREUS	38.2	44.5	53.8	56.7	60.6	64.6	62.2	63.5
ENTEROCOCCUS	5.0	4.7	6.5	6.1	7.2	9.2	9.2	9.5
ESBL E.COLI	--	--	0.6	1.2	2.4	2.5	2.9	3.2
ESBL KLIEBSELLA	--	--	6.2	7.3	5.8	6.4	6.5	6.6

Hepatitis A

Reporting of HAV started in 1970. Since then, the number of reported cases per year has decreased. This decrease began a long time before a vaccine became available and seems to be due to improvements in sanitation. Since most hepatitis A infections are asymptomatic, the reported cases represent only a small fraction of the real number of new infections.

The overall number of cases and rates of acute hepatitis A in the United States have declined to historic lows since the last peak in 1995. In that year, the case report rate was 12 per 100,000 population, compared with 0.7 per 100,000 in 2007, which was the lowest annual rate ever recorded.

The proportion of young adults ever infected with hepatitis A was estimated to be 25% in 2004 by a survey done by OPH Laboratory Services among young adults whose blood was tested for other purposes.

The number of reported cases of hepatitis A varied from 38 to 264 cases a year over the last decade. The trend line shows a slight decrease in reported cases over time. This decrease is probably due to a true decrease in new cases rather than an artifact of reporting.

Hepatitis B

Using statistics from the Centers of Disease Control and Prevention (CDC), it is estimated that there were about 1,300 new hepatitis B virus (HBV) infections per year in 2000, down from 5,000 per year in 1980. The introduction of the vaccine in 1982 and the generalization of immunizations has resulted in a steady

decline in the number of reported cases of hepatitis B over the past 25 years. The number of new, acute cases reported in Louisiana was 158 in 2000 and 69 in 2006. It increased slightly in 2007 to 123. This is an incidence of 0.48 new cases of HBV per population of 100,000.

Approximately 0.5% of the Louisiana population (21,000 people) is estimated to be chronically infected by the virus. These people are easily diagnosed by the presence of the hepatitis B surface antigen in the blood (HBsAg+). Some 5% to 10% of people with chronic HBV infections (1,000 to 2,000 people) will develop chronic liver disease during their lifetimes.

Of the 200 to 500 infants born to female carriers of HBV annually, approximately 15 become infected with the virus due to prevention failure. The great majority of infants infected at birth will become chronic carriers.

Hepatitis C

Acute Hepatitis C

An estimated 500 people are infected with hepatitis C each year in Louisiana. Most of these infections are asymptomatic. In the past, the number of new cases reported ranged from 100 to 400. During the 1990s there was a steady increase of reported “acute” hepatitis C cases. This increase was probably due to increased awareness of hepatitis C and screening by medical care providers.

To be classified as an acute hepatitis C case, a person must have clinical symptoms, laboratory evidence of infection with the hepatitis C virus, and “elevated” liver enzymes. In 1990, the Centers for Disease Control and Prevention (CDC) defined liver enzymes as “elevated” if they were two and a half times the upper limit of normal. 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. Also, in 2003, a new reporting category was established: “Hepatitis C past or present infection” (HCV-PPI). Some cases that were reported as “acute hepatitis” in the 1990s are now reported as “HCV-PPI” due to changes in case definitions. Since 2000, reports of acute infections have declined; the number of cases reported in 2006 was 31.

Hepatitis C Past or Present Infection

The CDC estimates that 80,000 people in Louisiana (1.8% of the population) are infected with hepatitis C. Of these people, 68,000 will go on to develop chronic hepatitis and 13,000 of these people will progress to cirrhosis which has a 25% fatality rate. Annually, 120 Louisiana residents are expected to die from hepatitis C. About 4,000 (5% of those infected by hepatitis C) are candidates for a liver transplant which costs at least $300,000 for a non-eventful, uncomplicated procedure.

Prior to 2003, cases of hepatitis C that corresponded to the 2003 classification of C, past or HCV-PPI were entered into a hepatitis register. After 2003, all cases meeting the HCV-PPI case definition became reportable. Overall, the number of cases reported each year is increasing. There is also a pool of undiagnosed HCV-PPI cases in Louisiana. As these people enter into medical care, they are diagnosed

and reported. The hepatitis register currently contains 44,000 reported HCV cases, representing close to half of the estimated 80,000 cases in Louisiana.

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, and then decreased since then. The incidence rate ranges from 0.8 to 1.6 cases/100,000 population. 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; groups A and W135 are uncommon. Knowledge of meningococcal groups in a certain area is important because the quadrivalent vaccine available in the U.S. is effective only against A, C, Y, and W135; therefore, the vaccine is 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 decreases 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).

In 2007, the number of reported invasive meningococcal meningitis was 34.

Salmonellosis

Among the general population in the U.S. and Louisiana, the prevalence rate of Salmonella infection is between 0.15% to 0.2% at any time.

Incidence rates of reported cases are as follows:

- Reported case rate among infants (less than 1 year old): 160 per 100,000 (0.2% of infants), with a high of 300 per 100,000 at age 3 months
- Reported case rate among children 1 to 4: 40 per 100,000; children 5 to 9: 10 per 100,000
- Reported case rate among older age groups: less than 10 per 100,000

The number of reported cases varied from 200 to over 1,000 per year. In 2007, there were 998 cases reported.

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. Ninety-nine percent of *Shigella* isolates come from stools. The number of cases reported vary from 100 to 500 per year. Most of the cases occur in young children (age 1 to 9). In 2007, there were 501 cases. Most cases are sporadic cases, but every year

small outbreaks are reported in daycare centers or schools. Sometimes, there are community wide outbreaks involving several schools and daycare centers.

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 20 years, ranging from 20-50 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. parahaemolyticus (24%), followed by V. vulnificus (24%), V. cholerae non O1 (21%) and all other Vibrios (including V. algino-lyticus, V. damse-lae, V. fluvialis, V. hollisae, and V. mimicus).

Vibrio parahaemolyticus

Consumption of crustacean and molluscan shellfish has been commonly implicated in the transmission of V. parahaemolyticus. Raw oysters are the primary source of ingestion-associated V. parahaemolyticus infection. A review of infections between 1996 and 2005 found that 85% of patients with V. parahaemolyticus gastroenteritis and 90% 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. vulnificus are more common during the warmer months.

Among the culture-confirmed V. vulnificus infections on the Gulf Coast reported to the CDC through the Vibrio Surveillance System between 1996 and 2007:

- 32% were classified as wound infections
- 9% as primary septicemia
- 19% as gastroenteritis
- 40% 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 disease, immune suppression such as HIV, long term steroid use, alcoholism, chronic kidney disease and the elderly population).

Sixty-six percent 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%). Twelve percent consumed oysters including 10% consuming raw oysters. Forty-four percent were wound infections which 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 ("salt-loving") Vibrio, first recognized in 1973 as being pathogenic in humans. 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 1975 in a patient with diarrhea in Bahrain. It is biochemically similar to Aeromonas 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 16 cases of P. damsela infection reported between 1982 and 1996, 4 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 is found in surface waters (freshwater rivers, oceans) throughout the world. The infection is acquired by ingesting heavily contaminated water or food (e.g., raw or poorly cooked seafood, especially oysters, clams, shrimp, or crabs). Small outbreaks are sometimes reported. These infections usually occur in individuals with increased susceptibility to infections such as immunocompromised individuals with gastric disease (low gastric acidity) or liver disease.

V. cholerae non-O1 infections can be asymptomatic or produce a variety of symptoms ranging from simple diarrhea to 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 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 persons with pulmonary disease may transmit by coughing. If untreated, a pulmonary TB case may infect others who breathe in the organisms expelled by the infectious person with disease. 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, or 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 staff monitor the patient's compliance with the treatment regimen and report side effects to medical personnel.

2008 Status

Louisiana reported 227 cases of TB in the year 2008, for a case rate of 5.4 per 100,000 population. This represents a 3.8% increase from the year 2007 figure of 218 cases (5.2 cases per 100,000 population), which is directly related to resettlement of populations evacuated post Katrina. The natural decline of tuberculosis is 6% a year.

Tuberculosis Case Counts Louisiana, 2004-2008

2004	*2005*	*2006*	*2007*	*2008*
249	257	207	218	227

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

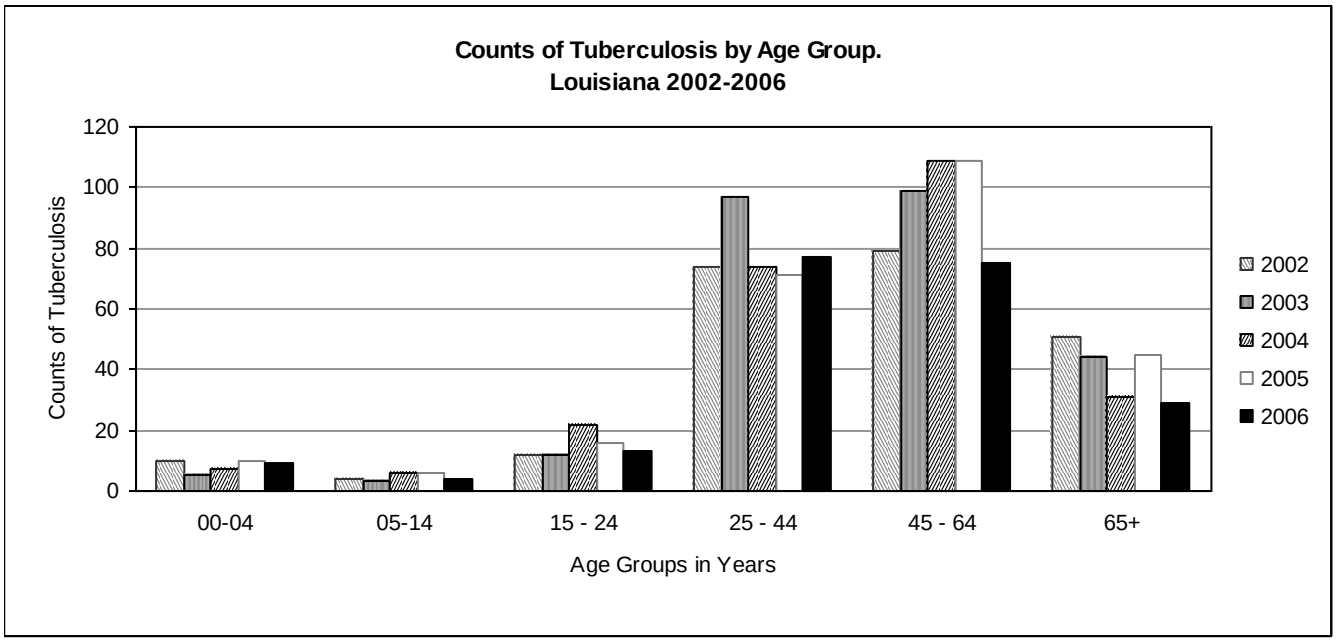
In 2008, Louisiana's state ranking for TB case rates (i.e., cases per 100,000) was the eighth highest in the nation. The state's year 2008 rate was similar to those in neighboring states but was significantly higher than the national rate of 4.1 per 100,000, which declined from 2007 to 2008 by 2.3%.

Tuberculosis Cases and Rates* Louisiana and Neighboring States, 2008		
State	Number of Cases	Case Rate
Alabama	175	3.8
Arkansas	83	2.9
Louisiana	227	5.4
Mississippi	118	4.0
Texas	1,501	6.2
United States	12,904	4.2

*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 2008 data.

Drug-resistant TB is still a concern in Louisiana. Although, in 2008, no cases of multi-drug-resistant tuberculosis (MDR-TB) were reported, the incidence of INH-resistant TB increased to 6.1% (the recommended threshold for initiating a four-drug anti-TB regimen for new (suspected) cases of TB is 4%). Three of the nine drug-resistant cases were foreign-born.

As shown in the following graph, an increase in the number of reported cases of TB in Louisiana was observed in age groups 25 to 44 and 65 and over. The increase in age group 25 to 44 is an indication of continued recent transmission.



Louisiana Tuberculosis Cases and Rates By Region and Parish, 2008 State Total = 227 State Case Rate = 5.4 per 100,000		
Region/Parish	Cases	Rate/100,000
Region 1	55	7.7
Jefferson	25	5.6
Orleans	28	12.2
Plaquemines	0	0.00
St Bernard	2	15.4
Region 2	27	4.1
Ascension	2	2.0
East Baton Rouge	20	4.5
East Feliciana	0	0.0
Iberville	2	5.9
Pointe Coupee	1	4.3
West Baton Rouge	1	4.3
West Feliciana	1	6.3
Region 3	20	4.8
Assumption	0	0.0
Lafourche	6	6.2
St Charles	1	1.8
St James	0	0.0
St John	7	3.7
St Mary	2	3.7
Terrebonne	4	3.6
Region 4	32	5.4
Acadia	3	4.8
Evangeline	1	2.7
Iberia	11	14.2
Lafayette	6	2.9
St Landry	7	7.4
St Martin	3	5.7
Vermilion	1	1.7
Region 5	5	1.7
Allen	0	0.0
Beauregard	0	0.0
Calcasieu	4	2.1
Cameron	0	0.0
Jefferson Davis	1	3.1
Region 6	5	1.6
Avoyelles	1	2.3
Catahoula	0	0.0
Concordia	0	0.0
Grant	0	0.0
LaSalle	0	0.0
Rapides	3	2.2
Vernon	0	0.0
Winn	1	6.1
Region 7	43	6.2

Louisiana Tuberculosis Cases and Rates
By Region and Parish, 2008
State Total = 227
State Case Rate = 5.4 per 100,000

Region/Parish	Cases	Rate/100,000
Bienville	1	6.4
Bossier	5	4.5
Caddo	24	9.4
Claiborne	3	18.0
DeSoto	2	7.4
Natchitoches	3	7.5
Red River	1	10.3
Sabine	1	4.1
Webster	3	7.1
Region 8	22	6.2
Caldwell	0	0.0
East Carroll	0	0.0
Franklin	4	4.7
Jackson	0	0.0
Lincoln	3	7.0
Madison	1	7.9
Morehouse	0	0.0
Ouachita	11	7.2
Richland	1	4.7
Tensas	0	0.0
Union	1	4.2
West Carroll	1	8.3
Region 9	18	5.7
Livingston	3	2.5
St Helena	0	0.0
St Tammany	9	5.9
Tangipahoa	4	3.4
Washington	2	4.3

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

C. SEXUALLY TRANSMITTED DISEASES

Overview

Sexually transmitted diseases (STDs) are the most commonly reported infectious diseases in the United States each year. Louisiana experiences some of the highest rates in the nation

Syphilis, chlamydia and gonorrhea are three most commonly reported STDs that can have serious health consequences. Chlamydia and gonorrhea, in particular, can make it much more difficult for women to get pregnant. In addition, people with a sexually transmitted disease can more easily contract HIV, the virus that causes AIDS. HIV-infected people with a sexually transmitted disease are more likely to transmit HIV to someone else.

Syphilis

Syphilis is an STD caused by the bacterium *Treponema pallidum*. It has often been called "the great imitator" because so many of the signs and symptoms are indistinguishable from those of other diseases. Syphilis also can facilitate 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.

Louisiana ranked 1st nationwide for primary and secondary (P&S) syphilis rates in the year 2006, 2007, and 2008. In 2008, 721 primary and secondary syphilis cases were reported compared to 533 cases in 2007, showing an increase of 35.3% in number of reported P & S syphilis cases.

Primary and Secondary Syphilis Rates*
Louisiana, Neighboring States, and United States, 2003-2008

State	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
Alabama	2.5	3.6	3.7	6.9	8.3	9.7
Arkansas	1.9	1.7	1.9	2.7	4.3	7.3
Louisiana	4.1	7.4	6.1	8.0	12.4	16.4
Mississippi	1.4	2.0	1.7	3.0	4.6	6.3
Texas	3.0	3.7	3.8	4.5	4.9	5.9
United States	2.5	2.7	2.9	3.3	3.8	4.5

*Rates are per 100,000 population

The Louisiana incidence rate for primary and secondary Ssphilis was 12.4 per 100,000 population in 2007 and it increased to 16.4 per 100,000 population in 2008. The *Healthy People 2010* rate objective for primary and secondary syphilis is 0.2.

The following map shows the geographic distribution of P&S syphilis cases across the state during 2008.

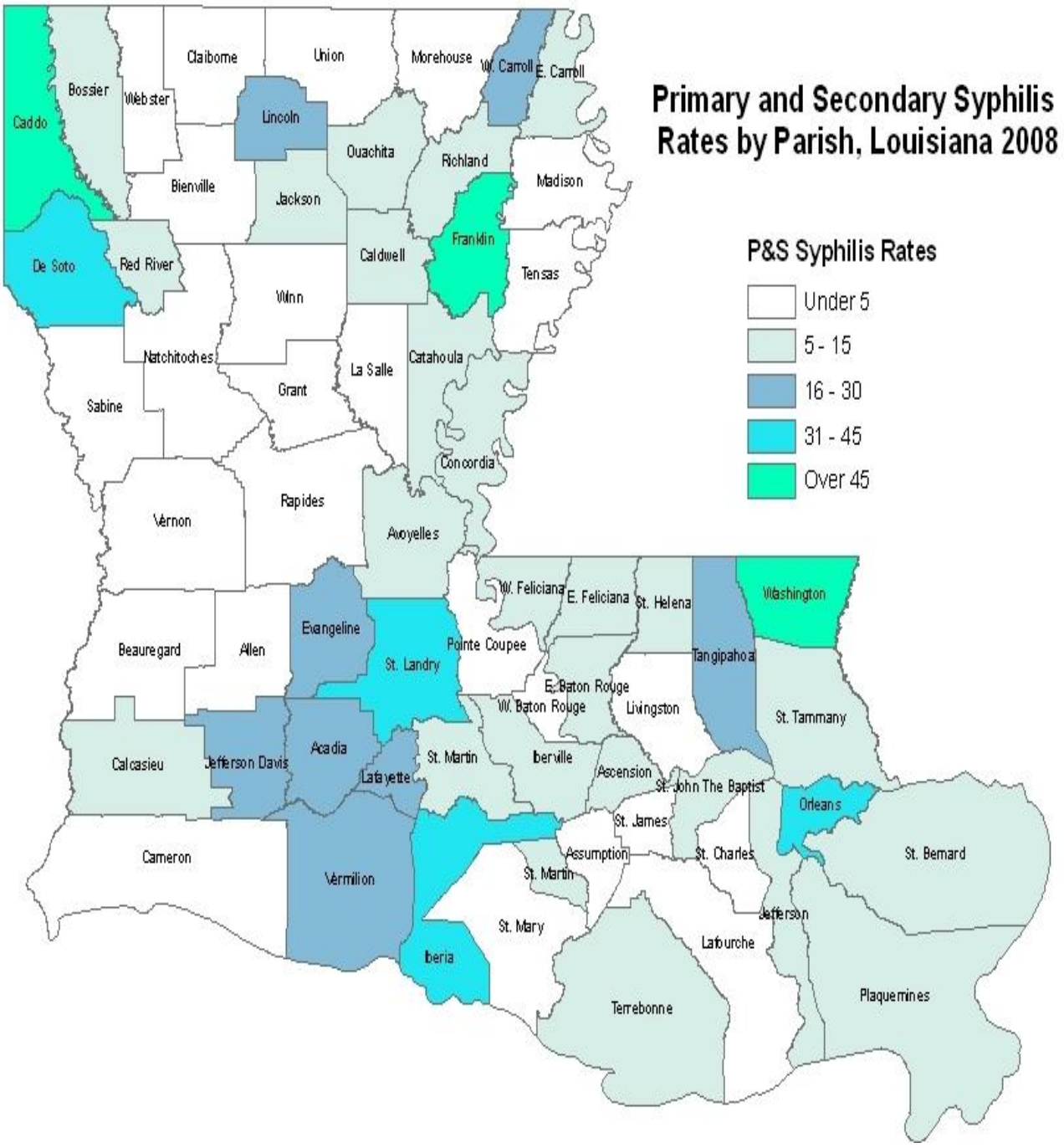

Primary and Secondary Syphilis Rates by Parish, Louisiana 2008
P&S Syphilis Rates
Under 5
5 - 15
16 - 30
31 - 45
Over 45
Caddo
Bossier
Webster
Claiborne
Union
Morehouse
W. Carroll
E. Carroll
Lincoln
Ouachita
Richland
Madison
Bienville
Jackson
Franklin
De Soto
Red River
Caldwell
Tensas
Winn
Natchitoches
La Salle
Catahoula
Grant
Sabine
Concordia
Vernon
Rapides
Avoyelles
W. Feliciana
E. Feliciana
St. Helena
Washington
Tangipahoa
Beauregard
Allen
Evangeline
St. Landry
Pointe Coupee
E. Baton Rouge
W. Baton Rouge
Livingston
St. Tammany
Calcasieu
Jefferson Davis
Acadia
Lafayette
St. Martin
Iberville
Ascension
St. John The Baptist
Orleans
St. James
Cameron
Vermilion
Assumption
St. Charles
St. Bernard
St. Martin
Jefferson
St. Mary
Lafourche
Iberia
Plaquemines
Terrebonne

Table: Sex, race and age distribution of syphilis in Louisiana, 2008					
SEX	PRIMARY & SECONDARY SYPHILIS	SYPHILIS (CONGENTIAL)	SYPHILIS, EARLY LATENT	SYPHILIS, LATE LATENT	SYPHILIS, UNKNOWN LATENT
MALE	411	13	409	217	2
FEMALE	310	8	477	240	2
UNKNOWN	0	3	0	0	0
RACE		(Mother's Race)			
AI/AN	1	0	1	4	0
BLACK	619	21	727	326	3
WHITE	95	3	134	88	1
OTHER / UNKNOWN	6	0	24	0	0
AGE GROUP					
0 – 4	0	24	0	0	0
5 – 9	1	0	0	0	0
10 – 14	3	0	1	0	0
15 – 19	87	0	91	12	0
20 – 24	172	0	206	55	0
25 – 34	204	0	278	109	0
35 – 44	129	0	165	97	1
45 – 54	93	0	107	103	1
55 – 64	26	0	33	44	0
65 – 74	5	0	5	16	0
75 & +	1	0	0	21	0
UNKNOWN	0	0	0	0	2

Fifty-seven percent of primary and secondary syphilis cases were detected in men compared to 43% in women. Racial disparity has been widely noted among syphilis cases in Louisiana. The black population is most affected with 85% of primary and secondary, 83% early latent, and 78% late latent syphilis cases occurring among them.

Age distribution of the syphilis cases shows that the highest number of cases involves the age group 25 to 34 years.

Gonorrhea

Gonorrhea is an STD caused by *Neisseria gonorrhoeae*, a bacterium that can grow and multiply easily in the warm, moist areas of the reproductive tract, including the cervix (opening to the womb), uterus (womb), and fallopian tubes (egg canals) in women, and in the urethra (urine canal) in women and men. The bacterium can also grow in the mouth, throat, eyes, and anus.

Gonorrhea is a very common infectious disease. The CDC estimates that more than 700,000 persons in the U.S. get new gonorrheal infections each year. Only about half of these infections are reported to the CDC.

Louisiana ranked 2nd nationwide for gonorrhea rates in 2008. A total of 9,766 cases of gonorrhea were reported in Louisiana with a case rate of 220.2 per 100,000 population in 2008. There was a 12.3% reduction in the cases reported in 2008 compared to 2007 (11, 137 cases with a rate of 259.7 per 100,000 population in 2007) .

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, 2003-2008

State	2003	2004	2005	2006	2007	2008
Alabama	206.7	181.1	206.4	231.9	236.7	210.5
Arkansas	156.0	150.3	161.1	153.2	148.3	159.2
Louisiana	263.5	233.4	211.6	253.8	259.7	220.2
Mississippi	219.6	246.7	245.5	258.1	285.7	256.8
Texas	111.2	108.4	114.2	129.5	136.4	134.7
United States	115.2	112.4	114.6	119.7	118.9	111.6

The following map shows the geographic distribution of gonorrhea cases across the state during 2008 (rates are by 100,000 population)

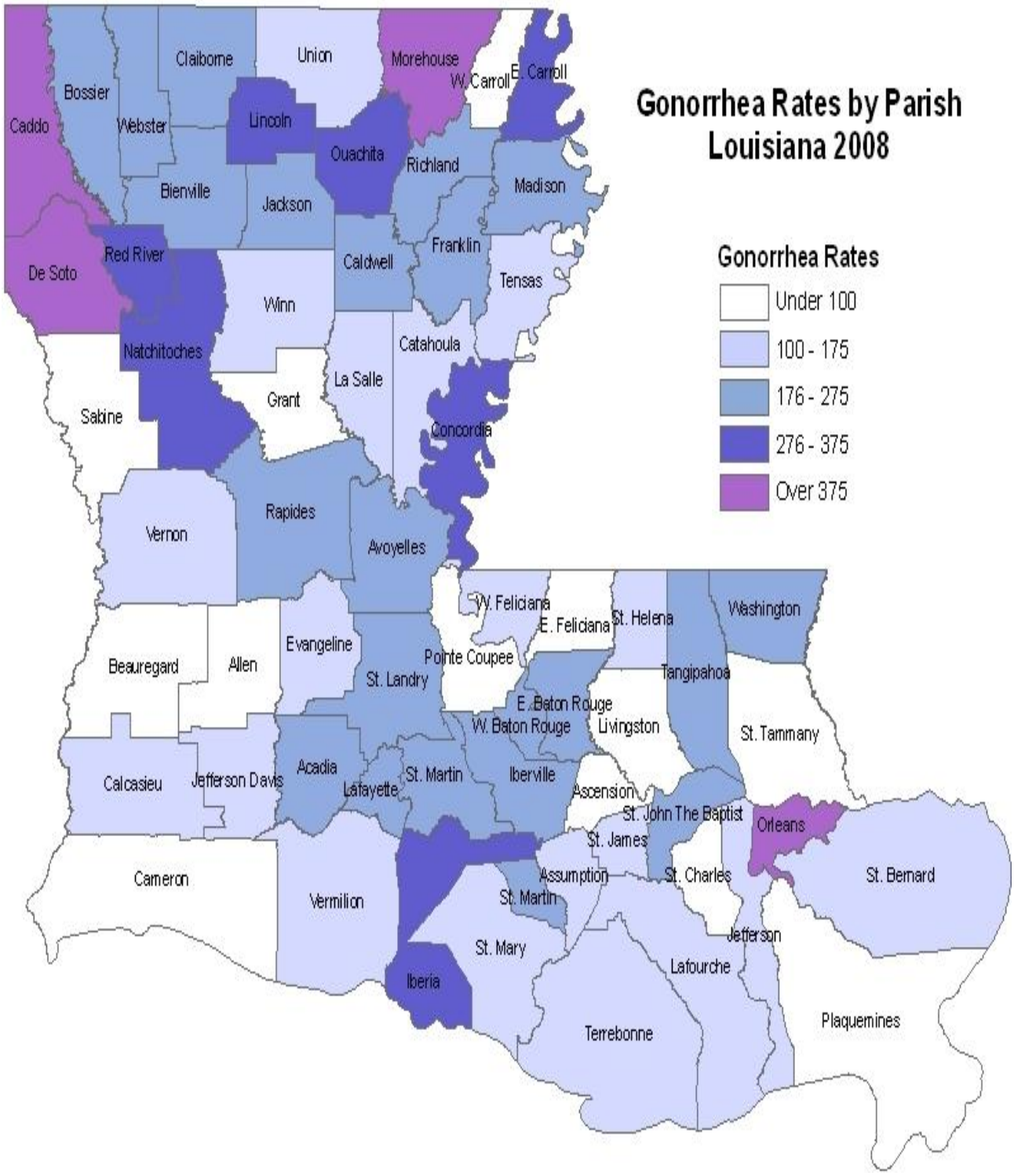

Gonorrhea Rates by Parish
Louisiana 2008
Gonorrhea Rates
Under 100
100 - 175
176 - 275
276 - 375
Over 375
Claiborne
Union
Morehouse
W. Carroll
E. Carroll
Bossier
Caddo
Webster
Lincoln
Ouachita
Richland
Madison
Bienville
Jackson
Franklin
Red River
De Soto
Caldwell
Tensas
Winn
Catahoula
Natchitoches
La Salle
Grant
Sabine
Concordia
Rapides
Vernon
Avoyelles
W. Feliciana
E. Feliciana
St. Helena
Washington
Evangeline
Beauregard
Allen
Pointe Coupee
St. Landry
Tangipahoa
E. Baton Rouge
W. Baton Rouge
Livingston
St. Tammany
Calcasieu
Jefferson Davis
Acadia
Lafayette
St. Martin
Iberville
Ascension
St. John The Baptist
Orleans
St. James
Cameron
Vermilion
Assumption
St. Charles
St. Bernard
St. Martin
Jefferson
St. Mary
Lafourche
Iberia
Plaquemines
Terrebonne

Table: Sex, race, and age distribution of gonorrhea in Louisiana, 2008

SEX	Reported Cases
MALE	4361
FEMALE	5358
UNKNOWN	47

RACE	Reported Cases
AI/AN	28
BLACK	7410
WHITE	962
UNKNOWN	1366

AGE GROUP	Reported Cases
0 - 4	43
5 - 9	8
10 - 14	132
15 - 19	2953
20 - 24	3350
25 - 34	2346
35 - 44	564
45 - 54	275
55 - 64	50
65 - 74	10
75 & +	4
UNKNOWN	31

In 2008, 55% of gonorrhea cases occurred among women compared to 45% among men. Racial disparity was also noted in gonorrhea incidence with about 76% cases occurring among the black population.

Age distribution shows that the highest number of cases occurred in the age group 20 to 24 years old population.

Chlamydia

Chlamydia, the most commonly reported STD, is caused by the bacterium *Chlamydia trachomatis*, which can damage a woman's reproductive organs. In women, chlamydial infections, which are usually asymptomatic, may result in pelvic inflammatory disease (PID), which is a major cause of infertility, ectopic pregnancy, and chronic pelvic pain. Chlamydial infection can facilitate the transmission of HIV infection. In addition, pregnant women infected with chlamydia can pass the infection to their infants during delivery, potentially resulting in neonatal ophthalmia and pneumonia. A total of 23,536 chlamydia cases were reported in Louisiana in 2008, which shows an increase of 21.5% from the number of reported cases in 2007 (19,363 cases with a rate of 433.3 per 100, 000 population).

Chlamydia Rates
Louisiana, Neighboring States, and United States, 2003-2008

State	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
Alabama	315.7	293.9	375.4	498.3	546.9	535.0
Arkansas	288.2	285.7	306.1	293.8	354.1	498.7
Louisiana	466.4	483.6	380.8	417.1	451.6	527.8
Mississippi	423.2	649.8	728.1	652.9	745.1	728.1
Texas	312.9	312.3	314.3	321.4	364.9	422.0
United States	301.7	316.5	329.4	344.3	370.2	401.3

Louisiana was ranked 5th nationwide for chlamydia case rates in 2008. The case rate is on the rise since 2003 and shows gradual increase through 2008.

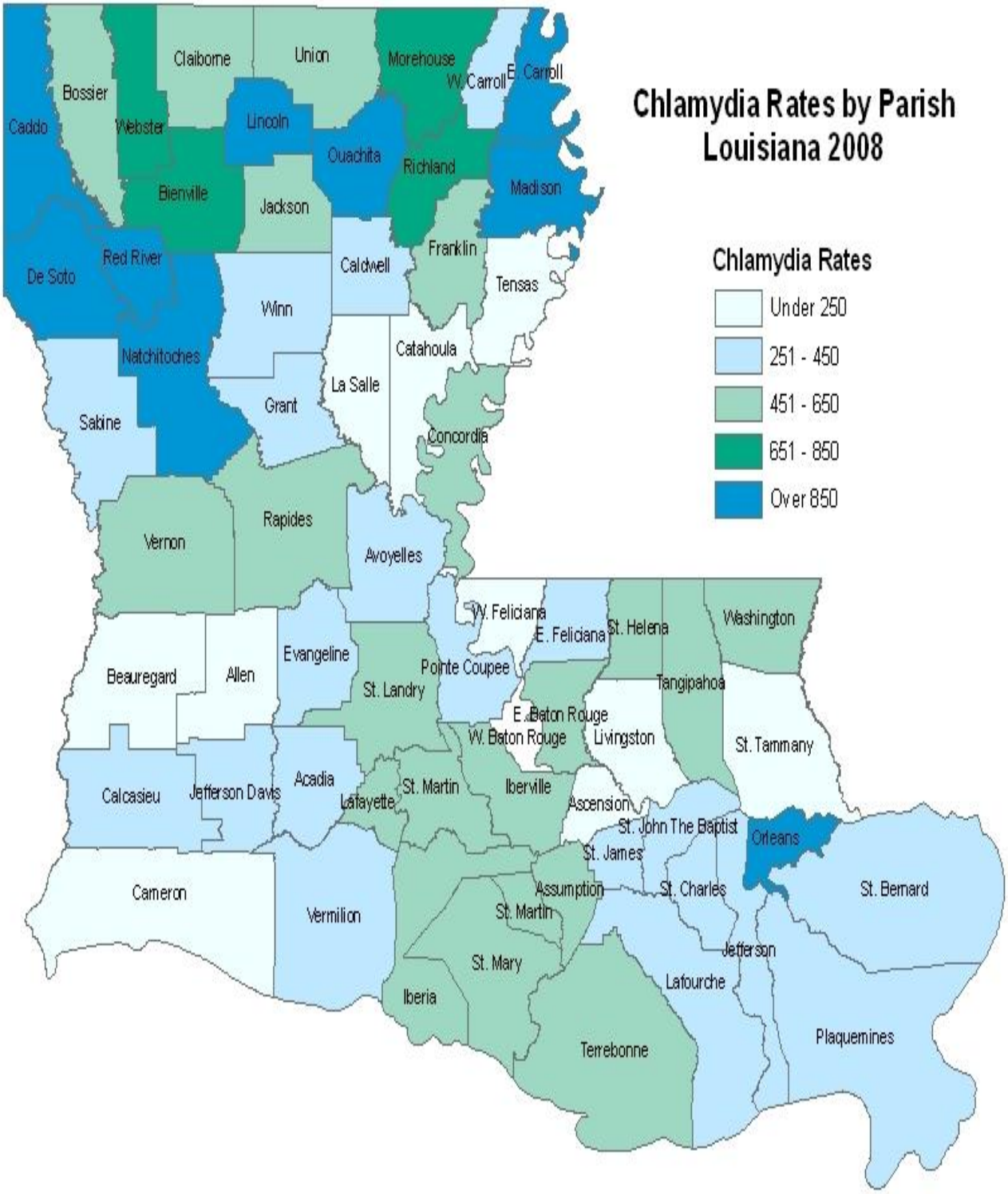

Chlamydia Rates by Parish
Louisiana 2008
Chlamydia Rates
Under 250
251 - 450
451 - 650
651 - 850
Over 850
Claiborne
Union
Morehouse
W. Carroll
E. Carroll
Bossier
Caddo
Webster
Lincoln
Ouachita
Richland
Madison
Bienville
Jackson
Franklin
Red River
De Soto
Caldwell
Tensas
Winn
Catahoula
Natchitoches
La Salle
Grant
Sabine
Concordia
Rapides
Vernon
Avoyelles
W. Feliciana
E. Feliciana
St. Helena
Washington
Beauregard
Allen
Evangeline
Pointe Coupee
St. Landry
Tangipahoa
E. Baton Rouge
W. Baton Rouge
Livingston
St. Tammany
Calcasieu
Jefferson Davis
Acadia
Lafayette
St. Martin
Iberville
Ascension
St. John The Baptist
Orleans
St. James
Cameron
Vermilion
Assumption
St. Charles
St. Bernard
St. Martin
Jefferson
St. Mary
Lafourche
Iberia
Plaquemines
Terrebonne

Table: Sex, race and age distribution of chlamydia in Louisiana, 2008

SEX	Reported Cases
MALE	5397
FEMALE	17951
UNKNOWN	188

RACE	Reported Cases
AI/AN	115
BLACK	15675
WHITE	3226
OTHER / UNKNOWN	4520

AGE GROUP	Reported Cases
0 - 4	116
5 - 9	11
10 - 14	409
15 - 19	8528
20 - 24	8832
25 - 34	4702
35 - 44	627
45 - 54	161
55 - 64	31
65 - 74	5
75 & +	5
UNKNOWN	109

The female population is most affected by chlamydia with 76% cases occurring among them. Racial disparity is widely noted among blacks with about 67% cases occurring in the black population. Age distribution shows that the highest number of cases occurred among the 20 to 24 year-old population.

Sexually Transmitted Disease Rates+ by Parish Louisiana, 2008			
Parish	***Primary & Secondary Syphilis***	***Gonorrhea***	***Chlamydia***
State Total	16.4	220.2	527.8
Acadia	28.3	201.4	329.6
Allen	0.0	89.7	218.5
Ascension	5.9	85.5	248.6
Assumption	0.0	131.1	511.3
Avoyelles	11.8	236.1	424.9
Beauregard	2.9	82.9	240.2
Bienville	0.0	196.9	740.1
Bossier	7.3	215.0	505.2
Caddo	51.4	521.6	977.1
Calcasieu	11.3	142.8	421.3
Caldwell	9.7	212.5	415.3
Cameron	0.0	27.6	55.3
Catahoula	9.5	133.1	247.1
Claiborne	0.0	204.4	545.2
Concordia	5.2	278.0	592.7
DeSoto	41.7	375.2	958.8
East Baton Rouge	13.5	233.4	538.6
East Carroll	12.2	367.4	1102.1
East Feliciana	9.6	76.7	416.8
Evangeline	19.6	157.2	348.1
Franklin	80.0	274.9	604.8
Grant	0.0	65.1	305.4
Iberia	30.6	371.5	563.3
Iberville	9.2	187.4	568.4

Sexually Transmitted Disease Rates+ by Parish Louisiana, 2008			
Parish	**Primary & Secondary Syphilis**	**Gonorrhea**	**Chlamydia**
Jackson	13.2	223.8	493.7
Jefferson	12.2	125.2	383.3
Jefferson Davis	22.4	118.4	307.1
Lafayette	27.5	245.4	488.5
Lafourche	4.3	105.9	368.4
LaSalle	0.0	128.0	220.5
Lincoln	25.8	293.7	984.5
Livingston	2.5	38.3	158.8
Madison	0.0	203.6	1348.6
Morehouse	3.5	496.5	828.6
Natchitoches	0.0	308.3	886.9
Orleans	31.7	415.9	850.7
Ouachita	13.3	373.9	856.4
Plaquemines	9.4	56.4	291.4
Pointe Coupee	0.0	84.8	392.8
Rapides	3.0	213.3	507.8
Red River	11.0	351.0	943.2
Richland	9.8	200.0	692.6
Sabine	0.0	76.0	316.6
St. Bernard	8.0	100.7	352.6
St. Charles	1.9	71.8	252.2
St. Helena	9.5	104.3	455.1
St. James	4.7	136.6	390.9
St. John	10.6	191.5	423.5
St. Landry	32.5	219.2	473.0
St. Martin	7.7	270.6	510.6
St. Mary	3.9	172.3	618.6
St. Tammany	6.1	39.8	176.4
Tangipahoa	21.4	246.2	638.5
Tensas	0.0	140.5	210.7
Terrebonne	12.9	143.7	462.3
Union	0.0	154.2	542.0
Vermilion	16.0	149.7	319.1
Vernon	0.0	124.9	499.6
Washington	57.2	180.5	477.7
Webster	4.9	228.2	696.9
West Baton Rouge	0.0	204.0	407.9
West Carroll	17.4	78.3	339.3
West Feliciana	6.7	153.3	186.6
Winn	0.0	103.8	350.5

+Rates per 100,000 Population, (2008 population estimate used in rate calculation)
Source: Louisiana Department of Health and Hospitals Office of Public Health, STD Control Program 2008

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 assuring that individuals understand how the virus is transmitted and that they adopt behaviors that reduce possible exposure to HIV. In addition, individuals are encouraged to access testing so they are aware of their HIV status and, if positive, are urged to access treatment which may improve the length and quality of life.

The HIV/AIDS epidemic continues to greatly impact public health in Louisiana and will make increasing demands on health and social service systems for many decades. The lifetime medical cost for caring for a person with AIDS is approximately $618,900 - most of which is paid for by the government.

Summary

As of December 31, 2007, there were 15,686 persons reported to be living with HIV/AIDS in Louisiana. In 2007 alone, 808 new AIDS cases and 1,163 new HIV cases were diagnosed.

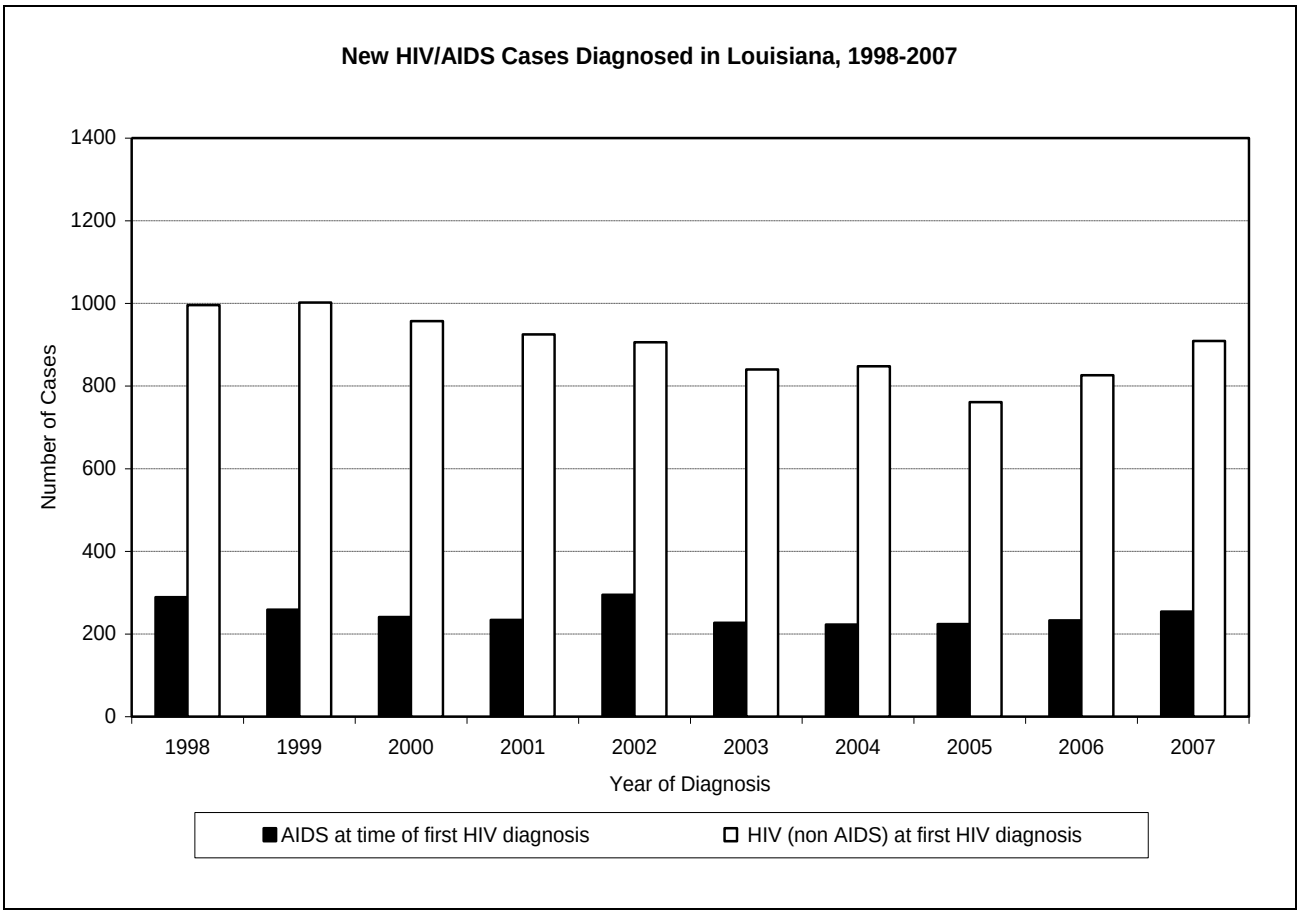
There are persons living with HIV/AIDS in every parish in Louisiana. New cases of HIV/AIDS were diagnosed in 62 of Louisiana's 64 parishes in 2007. The HIV diagnosis rate among black persons remains disproportionately high. Although black persons make up only 32% of the Louisiana population, 72% of persons newly diagnosed with HIV and 75% of those newly diagnosed with AIDS in 2007 were black.

In 2007, the largest proportion of new cases 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 2006, the number of deaths among persons with AIDS remained relatively stable, and from 2005 to 2006, new AIDS diagnoses in the state increased.

2007 Status

Highly active antiretroviral therapies (HAART) have been shown to be effective in treating HIV infection. These 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 available therapies for some people, a significant number of people continue to be newly diagnosed with AIDS each year. In addition, 22% of new HIV cases also had an AIDS diagnosis at the same time they were first diagnosed with HIV, as shown in the graph below. This indicates that many people are not diagnosed until late in the course of their disease. HIV-infected persons who are unaware of their infection cannot receive appropriate medical treatment and may unknowingly spread HIV to other people in their communities.



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

In the year 2006 (for which the most recent statistics are available), Louisiana ranked fifth highest in reported AIDS case rates and twelfth in the number of new AIDS cases reported in the United States. Louisiana's AIDS case rate continues to be higher than the rates of neighboring states.

AIDS Cases and Rates Louisiana, Neighboring States, and United States, 2005 and 2006							
	2005		2006		Cumulative Totals		
State	Cases	Rate/100,000	Cases	Rate/100,000	Cases	Children less than 13	Total
Alabama	510	11.2	462	10.0	8,626	76	8,702
Arkansas	237	8.5	252	9.0	3,891	36	3,927
Louisiana	**936**	**20.8**	**824**	**19.2**	**17,612**	**128**	**17,740**
Mississippi	368	12.7	365	12.5	6,642	56	6,698
Texas	3,045	13.3	2,998	12.8	69,735	392	70,127
United States	40,123	13.5	37,911	12.7	952,221	9,094	961,315

Source: CDC HIV/AIDS Surveillance Report (Vol. 18)
*The cumulative total includes all cases of AIDS reported to the health departments from 1984 (when AIDS became reportable) through December 31, 2006.

In Louisiana, the New Orleans area had the highest number of HIV/AIDS cases diagnosed in 2007. Since 1996, however, the New Orleans and Baton Rouge areas have had similar HIV/AIDS diagnosis rates. Among the large metropolitan areas in the nation, the Baton Rouge metropolitan area ranked 4th and the New Orleans metropolitan area ranked 8th in AIDS case rates in 2006.

Persons Living with HIV/AIDS

The number of persons living with HIV/AIDS continues to increase in Louisiana each year. As of December 31, 2007, 15,686 persons in Louisiana were reported to be living with HIV/AIDS in the state. These numbers reflect only those persons who were confidentially tested and reported to the state Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program 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 diagnosis, and effective treatment.

Currently, there are persons living with HIV/AIDS in every parish in Louisiana. As of the end of 2007, 18 parishes out of 64 (25%) had greater than 300 persons living with HIV per 100,000 persons in the population. The HIV/AIDS Program has funded community-based organizations, medical facilities, and home health providers 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, 2007			
Parish	**Persons Living with HIV/AIDS**	**Parish**	**Persons Living with HIV/AIDS**
Statewide	15,686	**Region VI**	772
		Avoyelles	197
Region I	5,637	Catahoula	26
Jefferson	1,399	Concordia	33
Orleans	4,114	Grant	28
Plaquemines	26	La Salle	10
St. Bernard	98	Rapides	351
		Vernon	43
Region II	3,767	Winn	84
Ascension	145		
East Baton Rouge	2,959	**Region VII**	1,280
East Feliciana	111	Bienville	24
Iberville	258	Bossier	159
Pointe Coupee	45	Caddo	820
West Baton Rouge	102	Claiborne	80
West Feliciana	147	De Soto	51
		Natchitoches	79
Region III	579	Red River	8
Assumption	31	Sabine	21
Lafourche	99	Webster	38
St. Charles	74		
St. James	52		
St. John the Baptist	100	**Region VIII**	843
St. Mary	65	Caldwell	48
Terrebonne	158	East Carroll	39
		Franklin	15
		Jackson	28
Region IV	1,158	Lincoln	44
Acadia	85	Madison	54
Evangeline	55	Morehouse	51
Iberia	98	Ouachita	446
Lafayette	554	Richland	39
St. Landry	204	Tensas	33
St. Martin	90	Union	38
Vermilion	72	West Carroll	8
Region V	836	**Region IX**	817
Allen	223	Livingston	142
Beauregard	36	St. Helena	15
Calcasieu	526	St. Tammany	304
Cameron	****	Tangipahoa	212
Jefferson Davis	47	Washington	144

Source: Louisiana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program
**** Count less than 5

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 minorities, women, 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 18% in 1993 to 24% in 2007.

Black persons continue to be disproportionately impacted by HIV/AIDS. In 2007, 72% of newly diagnosed HIV/AIDS cases in Louisiana were among black persons, who comprise only 32% of the total state population. The 2007 HIV diagnosis rate among black persons was five times higher than the rate among white persons, and nearly twice as high as the rate among Hispanic persons.

The percentage of women in Louisiana living with HIV/AIDS has increased from 11% in 1990 to 34% in 2007. Furthermore, the percentage of newly diagnosed HIV/AIDS cases reported among women in the state has been increasing steadily. In 1990, 18% of all newly diagnosed HIV cases were among women; this percentage has increased to 30% in 2007. Black women accounted for 81% of all new HIV/AIDS cases among women in 2007.

Newly-diagnosed HIV/AIDS Cases, by Demographics and Exposure Group
Louisiana, 2000-2007

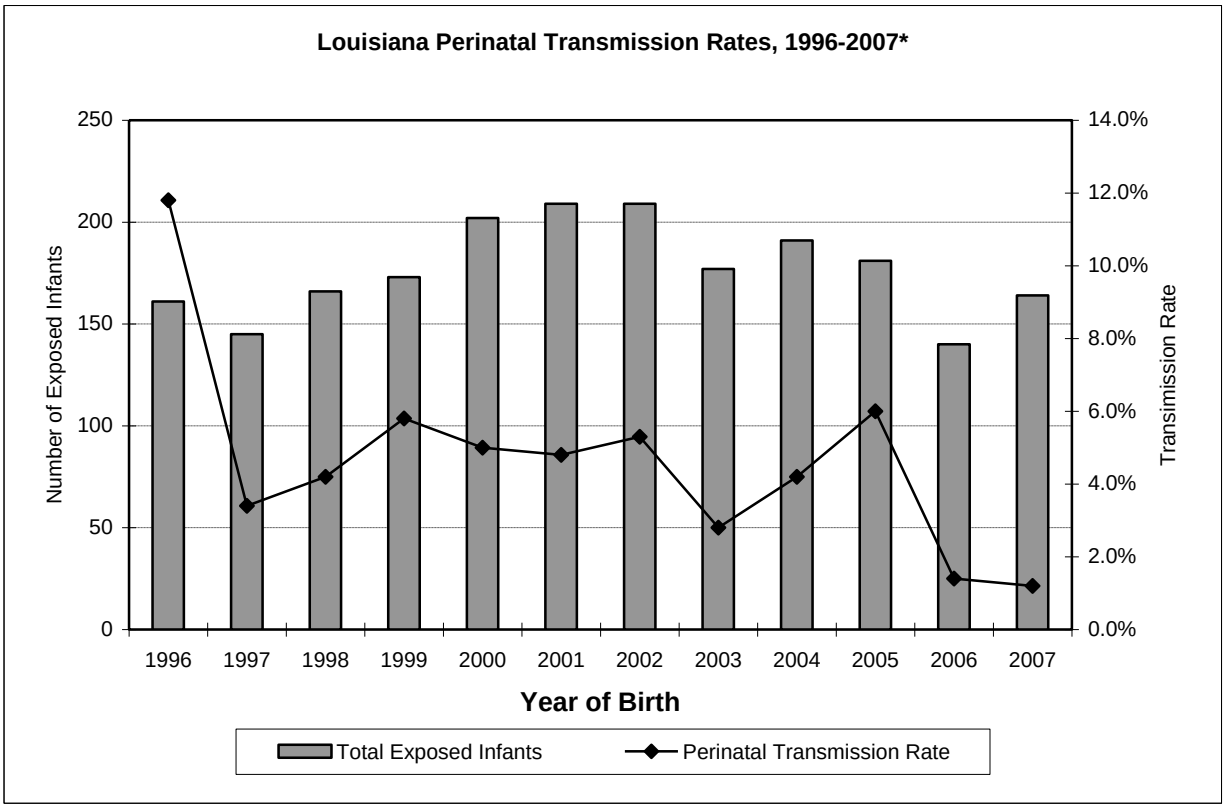
Year	2000	2001	2002	2003	2004	2005	2006	2007
Total Cases	**1,196**	**1,157**	**1,201**	**1,063**	**1,070**	**980**	**1,053**	**1,163**
Gender								
Male	800	740	816	692	729	634	714	809
Female	396	417	385	371	341	346	339	354
Race								
Black	886	870	897	809	828	718	716	836
White	273	251	273	220	214	217	278	254
Other	36	34	30	34	26	40	46	63
Unknown	****	****	****	0	****	5	13	10
Exposure Group								
Cases with Specified Risk	643	596	669	563	507	540	545	532
MSM *	43.4%	42.4%	45.6%	44.2%	50.3%	52.4%	53.2%	59.2%
IDU *	20.2%	20.5%	18.4%	18.5%	13.0%	11.5%	12.1%	9.6%
MSM & IDU	5.3%	5.2%	4.5%	4.1%	4.9%	4.3%	5.1%	3.4%
HRH *	27.5%	29.2%	28.8%	31.8%	29.0%	29.3%	28.6%	27.1%
Transf/Hemo *	1.4%	<1%	<1%	0%	0%	0%	0%	0%
Perinatal	2.2%	2.2%	2.1%	1.4%	2.8%	2.6%	<1%	<1%

Source: Louisiana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program
MSM: Men who have Sex with Men; IDU: Injection Drug Users; HRH: High Risk Heterosexuals;
Transf/Hemo:Transfusion/Transplant/Hemophiliac
**** Count less than 5

Perinatal Transmission

Between early 1985 and the end of 2007, an estimated 2,846 infants were born in Louisiana to women living with HIV; 10.8% of HIV-exposed infants born during this period were infected with HIV at or around the time of birth. The introduction and widespread use of prophylactic antiretroviral drug protocols for pregnant HIV-positive women and their newborns in the mid 1990s led to a decline in annual perinatal transmission rates from nearly 19% in 1994 to less than 2% in 2006 and 2007. Increases in the 2004 and 2005 perinatal HIV transmission rates appear to be multifactorial but include insufficient or no prenatal care and failure of mothers to receive appropriate antiretroviral therapy during pregnancy. The Office of Public Health's current HIV prevention efforts are aimed at increasing the number of pregnant women screened for HIV, providing statewide training to healthcare providers on current CDC and United States Public Health Service (USPHS) guidelines for testing and treatment of HIV-positive pregnant women and their newborns, promoting rapid HIV antibody testing in labor and delivery, and linking HIV-positive women and children with HIV or HIV exposure to the appropriate medical care and Ryan White funded case management services.

In June 2007, the Louisiana Legislature passed Act 153 which requires HIV testing be a component of routine prenatal care, unless a woman declines. Consent for testing may be incorporated into general consent for medical care and the requirement for separate written consent for HIV testing is no longer required. In addition, physicians may test infants born to women whose HIV status is unknown at the time of delivery.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program
*2006 and 2007 data are incomplete

E. CANCER

2002−2006 Status

In Louisiana, incidence rates for all cancers combined for all race/sex groups have been roughly stable for the past decade, but the incidence of all cancers combined declined for three of the four major race-sex groups from 2001-2005 to 2002-2006. Mortality rates have been declining for most race-sex groups since the early 1990s. Mortality trends in Louisiana are similar to those nationwide but remain significantly higher than the U.S. rates. More people are surviving cancer now than ever before (nationally, 5-year relative survival for cases diagnosed in 1999-2005 was 68%, versus 50% for those diagnosed 20 years earlier). Survival rates vary, however, according to race, agegroup, and type of cancer.

Five Most Common Cancers
Louisiana, January 1, 2002−July 1, 2006
Average Annual Case Counts: Invasive Cases Only

Type	*Number of Cases*
All Cancers	21,059
Lung	3,425
Prostate	3,273
Breast	2,845
Colon & Rectum	2,425
Non-Hodgkin's Lymphoma	849

Source: Louisiana Tumor Registry

Cancer includes many different diseases, and current evidence indicates that different types of cancer are associated with specific risk factors, although many of these are still unknown. Lung, breast, prostate, and colorectal cancers account for about half the new cases diagnosed each year, and most of these four diseases can either be prevented or be 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 third. Tobacco is associated with cancers of the oral cavity and pharynx, lung, larynx, esophagus, stomach, pancreas, kidney, bladder, liver, and cervix, as well as with some leukemias. 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 number of deaths due to cancer and can even prevent cancers of the cervix, colon, and rectum. Mammography, clinical breast examination, Papanicolaou (Pap) tests, fecal occult blood tests, and proctosigmoidoscopy (colon examination with lighted scope) aid in the

early detection and treatment of cancers to reduce the impact of the diseases. Nonetheless, a significant portion of the population at risk for various cancers fails to participate in screening procedures.[1]

Five Most Common Cancers In Males, Louisiana 2002−2006 Invasive cases only					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Average Annual Count
All Cancers	591.3	All Cancers	684.5	All Cancers	11,411
Prostate	158.5	Prostate	237.9	Prostate	3,273
Lung	104.5	Lung	128.5	Lung	2,022
Colon & Rectum	66.5	Colon & Rectum	76.4	Colon & Rectum	1,267
Bladder	40.2	Kidney & Renal Pelvis	22.4	Non-Hodgkin Lymphoma	447
Non-Hodgkin Lymphoma	25.1	Stomach	20.9	Kidney & Renal Pelvis	454

* All races combined
** Average annual age-adjusted (U.S. 2000) incidence rates per 100,000 population
Source: Louisiana Tumor Registry.

Five Most Common Cancers In Females, Louisiana 2002−2006 Invasive cases only					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Average annual count
All Cancers	407.6	All Cancers	402.5	All Cancers	9,648
Breast	119.1	Breast	122.5	Breast	2,816
Lung	60.8	Colon & Rectum	56.4	Lung	1,403
Colon & Rectum	44.3	Lung	50.9	Colon & Rectum	1,158
Non-Hodgkin's Lymphoma	18.6	Uterus	18.5	Uterus	418
Uterus	17.7	Pancreas	15.1	Non-Hodgkin's lymphoma	402

* All races combined
** Average annual age-adjusted (U.S. 2000) incidence rates per 100,000 population
Source: Louisiana Tumor Registry

Background [2]

Among women, *breast cancer* is the most frequently occurring invasive cancer in the United States and is second only to lung cancer in cancer-related deaths. Nationwide, the death rate from breast cancer has decreased steadily since the early 1990s, and this decline is attributed to both early detection and improved treatment. Family history, exposure to hormones, reproductive factors, postmenopausal issues, overweight status, and excessive alcohol use can influence the risk for breast cancer, while alterations in two genes can account for most inherited breast cancer, which constitutes 5%-10% of all breast cancers. Since early detection improves the chances of survival, the National Cancer Institute recommends that women in their forties or older undergo screening mammograms every year. Women who are at

[1] See the CDC's Behavioral Risk Factor Surveillance System website: www.cdc.gov/brfss.

[2] From the National Cancer Institute (HTTP://CANCER.GOV), the American Cancer Society (WWW.CANCER.ORG), and the Louisiana Tumor Registry (HTTP://PUBLICHEALTH.LSUHSC.EDU/TUMORREGISTRY) resources and publications.

increased risk for breast cancer should seek medical advice about when to begin having mammograms and how often to be screened.

Cervical (cervix uteri) cancer afflicts about 215 Louisiana women each year. Increased use of the Pap test has contributed to a 70**%** drop in cervical cancer deaths since 1969. Cervical cancer screening should begin approximately three years after a woman begins having sexual intercourse, but no later than at 21 years old. The National Cancer Institute (NCI) recommends that women have a Pap test at least once every three years. The Food and Drug Administration has approved a vaccine to prevent the types of human papilloma virus (HPV) that are responsible for about 70% of the cases of cervical cancer worldwide.

Colorectal cancer caused the second largest number of cancer deaths in the years 2002−2006, although both incidence and mortality rates have generally declined nationwide for about two decades. Incidence and mortality rates in Louisiana are higher than the national ones, especially for men. A diet high in fruits, vegetables, and fiber and low in fat appears to reduce the risk of colorectal cancer while physical activity may also lower the risk. Increased screening and polyp removal has contributed to the reduction in the impact of this disease.

Kidney cancer accounts for about 4% of all new cancers detected in Louisiana. Cigarette smoking, overweight, heredity, high blood pressure, and certain occupational exposures have been linked to increased risk for this disease whereas beverages such as coffee, tea, and alcoholic drinks have not been found to be important risk factors. Among men about 40% of kidney cancer could be avoided by eliminating the use of tobacco; the figure is lower for women.

Leukemias together account for 2%-3% of the annual cancer incidence in the United States, and they constitute over one fourth of cancers in children under 20 years old. Rates for all types of leukemia are higher among males than among females, and for most leukemias, rates are higher among whites than blacks. Risk factors include cigarette smoking, benzene, ionizing radiation, and the human T-cell leukemia/lymphoma virus.

Lung cancer is the leading cause of cancer mortality in the United States. Difficult to detect and hard to treat, lung cancer causes 30% of all cancer deaths in Louisiana. Smoking is responsible for at least 85% of lung cancers. Recent research shows that black smokers are more sensitive to the effects of smoking than are whites or Hispanics. According to the CDC, the prevalence of smoking has been declining steadily in both the U.S. and Louisiana, but that for Louisiana is 15% higher than for the nation as a whole.

Melanoma of the skin incidence rates have tripled since 1973 in the U.S., butt mortality rates have risen only about 50%. Men account for the most dramatic increases. Earlier diagnosis of melanoma of the skin is associated with increased survival. Whites are over ten times as likely to develop melanoma as blacks. Risk factors include excessive exposure to ultraviolet radiation, occupational exposures, family history, and multiple or atypical moles.

Non-Hodgkin lymphoma cases increased dramatically in the 1970s and 1980s, partly because of AIDS-related cases, but the incidence has leveled off in recent years. Among the risk factors are impaired immune function, family history, 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 3% of all Louisiana malignancies in 2002 to 2006 and is two to three times as common among males as females. Heavy consumption of alcohol is associated with 70% of the cases of cancer of the oral cavity and pharynx, and the use of tobacco with 90% of cases. Epidemiological evidence indicates that, while smoking and drinking are independent risk factors, their combination increases the risk of cancer. The use of snuff or chewing tobacco is a primary cause of cancers of the gum and cheek, as well as other diseases of the teeth and gums. Pipes are associated with cancer in the areas of the lips that touch the pipe stem.

Ovarian cancer strikes almost 280 Louisiana women every year. Rates are declining slightly nationally, but not in Louisiana. Currently, the five-year survival rate is less than 50%. Reproductive history, family history, gynecological surgery, and estrogen alone as a postmenopausal therapy 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 5% of patients are alive five years after diagnosis. In the period from 2002 through 2006, it ranked eleventh in incidence among all cancers in the United States, but was fourth in cancer mortality. While the only established risk factor is cigarette smoking, others may include age, obesity, chronic pancreatitis, diabetes, physical inactivity, family history, occupational exposures, and possibly stomach problems.

Prostate cancer is the most frequently diagnosed invasive cancer in men but is a distant second to lung cancer as a cause of cancer deaths among men. Men who eat a diet heavy in red meat have a slightly higher risk of developing prostate cancer. Age, race, and family history are also important predictors, and 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. Doctors should discuss annual screening with men aged 50 and above (age 45 for blacks and for those with a family history of diagnosis at an early age).

Urinary bladder cancer was the fourth most common type of cancer in the period from 2002 through 2006 among men and the twelfth most common among women. It is especially prevalent among older white men. Since the mid-1980s, incidence and mortality rates have generally leveled off. The most important known risk factor is cigarette smoking, as smokers demonstrate twice the risk for urinary bladder cancer as non-smokers. Several occupational exposures such as those involved in the rubber, dye, paint, textile, chemical, and leather industries also increase the risk for bladder cancer, as does prolonged exposure to diesel exhaust fumes. Despite previous speculation, research shows that neither artificial sweeteners nor coffee drinking appears to increase the risk of cancer. Drinking more fluids and eating more vegetables may reduce the risk for bladder cancer.

Uterine (endometrial) cancer, the fourth most common cancer in women in Louisiana and the United States, accounted for approximately 6% of all cancer cases in women from 2002 through 2006. It has a good five-year survival rate of almost 85%. High cumulative exposure to estrogen is the major risk factor for the most common type of cancer of the uterine corpus, and low parity, diabetes, family history, and obesity are also linked to this disease.

To learn more about cancer, visit the following websites:

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

Louisiana Cancer Control Partnership's Parish Profiles:

http://www.lcltfb.org/laccp/ParishProfiles/default.htm

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

(developed by the National Cancer Institute and the CDC)

American Cancer Society: http://www.cancer.org

National Cancer Institute: http://www.cancer.gov

TABLE 1. Ten Most Common Among Cancers White Males: Average Annual Incidence Rates[1] By Geographic Region 2002-2006

PRIMARY SITE:	U.S.[2]	Louisiana	REGIONS							
			New Orleans	Baton Rouge	South-east	Acadiana	South-west	Central	North-west	North-east
INVASIVE CANCERS										
All Sites Combined	554.3	591.3*	555.8	579.8	567.8	619.5	607.3	582.2	626.4	596.0
Prostate	153.0	158.5*	127.3	184.1	139.2	174.4	171.4	151.7	178.9	159.8
Lung	77.7	104.5*	99.6	86.1	95.5	109.4	115.4	112.9	113.0	110.2
Colon and Rectum	56.9	66.5*	62.5	61.6	68.9	71.0	59.6	71.2	68.9	65.8
Urinary Bladder (Incl. In Situ)	40.3	40.2	40.8	40.4	43.7	41.4	33.3	36.1	40.1	39.0
Non-Hodgkin Lymphoma	24.4	25.1	23.5	23.2	27.8	25.5	28.2	19.6	24.5	24.7
Kidney	19.2	24.1*	24.0	25.3	26.6	23.2	25.1	25.5	24.2	20.4
Melanoma of the Skin	28.9	22.1*	21.6	24.6	15.5	18.1	20.8	18.1	26.8	28.7
Oral Cavity	15.7	18.8*	18.8	17.9	16.4	17.8	19.0	17.3	20.4	24.8
Leukemia	16.5	16.4	12.4	15.7	15.7	17.3	15.7	21.6	18.3	17.3
Pancreas	13.1	13.9	16.0	14.5	11.2	15.9	10.7	16.2	11.9	13.6

TABLE 2. Ten Most Common Cancers Among White Females: Average Annual Incidence Rates[1] By Geographic Region. 2002-2006

PRIMARY SITE:	U.S.[2]	Louisiana	REGIONS							
			New Orleans	Baton Rouge	South-east	Acadiana	South-west	Central	North-west	North-east
INVASIVE CANCERS										
All Sites Combined	420.5	407.6*	406.1	393.7	375.5	421.7	414.6	386.4	417.5	416.1
Breast	127.8	119.1*	125.2	126.6	110.5	120.7	111.6	100.2	116.6	115.3
Lung	54.8	60.8*	60.4	52.6	53.1	67.8	64.4	56.1	65.1	65.3
Colon and Rectum	42.1	44.3*	40.2	46.3	39.6	44.8	49.5	45.5	47.2	43.9
Non-Hodgkin Lymphoma	17.2	18.6*	19.1	16.8	20.6	18.1	17.6	18.5	18.0	15.9
Uterus	24.2	17.7*	17.8	15.5	16.3	18.1	17.6	18.2	20.2	21.1
Thyroid	15.0	13.6*	12.0	9.2	10.2	20.1	12.4	14.8	12.4	17.6
Kidney	9.9	13.2*	13.7	12.1	14.7	13.3	13.2	13.0	12.1	11.8
Melanoma of the Skin	18.7	12.6*	10.5	13.7	8.5	10.7	15.6	10.5	13.7	18.4
Ovary	13.8	12.6*	13.4	13.0	12.2	10.8	11.5	11.8	14.3	11.6
Pancreas	10.2	10.7	8.8	12.1	11.9	14.7	11.2	11.6	8.9	8.4

* Louisiana rate is significantly different from the U.S. rate ($p \leq 0.05$).
1. Rates per 100,000, age-adjusted to the U.S. 2000 standard.
2. U.S. incidence rate estimates are from the Surveillance, Epidemiology and End Results (SEER) Program of the National Cancer Institute.

TABLE 3. Ten Most Common Cancers Among Black Males: Average Annual Incidence Rates[1] By Geographic Region 2002-2006

PRIMARY SITE:	U.S.[2]	Louisiana	REGIONS							
			New Orleans	Baton Rouge	South -east	Acadiana	South-west	Central	North-west	North-east
INVASIVE CANCERS										
All Sites Combined	633.7	684.5*	647.1	732.3	688.7	677.8	666.6	636.6	732.4	689.6
Prostate	239.8	237.9	198.4	296.3	215.6	218.1	242.1	237.2	259.5	258.3
Lung	104.4	128.5*	123.3	128.6	134.8	138.7	131.9	116.9	129.7	133.9
Colon and Rectum	69.4	76.4*	79.1	76.8	84.6	72.7	59.2	67.9	86.2	70.5
Kidney	21.3	22.4	22.2	25.7	20.9	21.9	17.0	20.9	23.6	20.9
Oral Cavity	16.8	20.9*	20.0	20.5	22.3	20.3	23.6	18.5	24.5	17.4
Stomach	16.8	20.9*	23.4	16.7	31.0	15.4	24.6	18.6	22.5	19.0
Pancreas	16.6	18.8*	17.1	18.7	21.5	22.8	17.6	19.2	21.1	17.9
Urinary Bladder	20.0	18.7	21.3	18.5	13.9	21.8	27.5	17.3	14.7	15.6
Non-Hodgkin Lymphoma	18.3	17.0	21.0	15.6	13.5	15.5	21.5	^	16.0	12.0
Myeloma	14.3	16.4*	15.2	18.2	^	14.4	^	13.6	16.0	23.4

TABLE 4. Ten Most Common Cancers Among Black Females: Average Annual Incidence Rates[1] By Geographic Region 2002-2006

PRIMARY SITE:	U.S.[2]	Louisiana	REGIONS							
			New Orleans	Baton Rouge	South-east	Acadiana	South-west	Central	North-west	North-east
INVASIVE CANCERS										
All Sites Combined	398.9	402.5	402.9	410.3	402.7	404.6	395.7	412.0	400.1	405.1
Breast	117.7	122.5*	124.3	135.3	117.7	125.8	108.2	105.8	124.0	125.1
Colon and Rectum	53.5	56.4	52.6	56.7	46.6	57.3	62.0	56.3	63.8	57.5
Lung & Bronchus	54.7	50.9*	54.4	44.5	45.5	55.6	64.4	64.6	42.2	48.8
Uterus	20.3	18.5*	17.7	19.1	21.6	16.5	15.1	14.8	20.1	24.6
Pancreas	14.6	15.1	15.2	17.2	15.4	16.4	19.1	10.2	11.8	17.2
Cervix	10.4	13.5*	11.8	12.3	11.2	10.7	16.3	17.5	16.0	15.8
Kidney and Renal Pelvis	10.3	11.7	10.6	12.2	12.9	13.3	^	15.6	10.7	9.2
Non-Hodgkin Lymphoma	12.2	11.4	9.9	11.7	8.2	13.6	12.6	11.8	12.6	9.9
Stomach	9.0	11.1*	11.2	9.9	18.6	11.9	^	10.3	10.3	10.8
Myeloma	10.0	10.3	9.2	12.3	11.0	8.2	^	19.5	10.8	7.9

* The Louisiana rate is significantly different from the U.S. rate ($p \leq 0.05$).
1. Rates per 100,000, age-adjusted to the U.S. 2000 standard.
2. U.S. incidence rate estimates are from the Surveillance, Epidemiology and End Results (SEER) Program of the National Cancer Institute.
^ Rates are not calculated if the total number of cases for these five years was less than 16 for a given race-sex group.

Methodology Note: "Usually the use of a population estimate for July 1 of a particular year reflects the average population of that area for the year. Both Hurricane Katrina and Hurricane Rita struck the Gulf Coast area of the United States in 2005. This had the effect of displacing large populations. Since there weren't any population estimates by age, race, sex, and county for time periods just after the hurricanes, it is very difficult to estimate the actual population at risk for certain areas along the Gulf Coast for 2005. For Louisiana, only the first six months of incidence data for 2005, coupled with ½ of the population estimate for July 1, 2005, were used to calculate cancer incidence. . . For more details, see http://seer.cancer.gov/popdata/methods.html." (Ries LAG, Melbert D, Krapcho M, Stinchcomb DG, Howlader N, Horner MJ, Mariotto A, Miller BA, Feuer EJ, Altekruse SF, Lewis DR, Clegg L, Eisner MP, Reichman M, Edwards BK (eds). Introduction, *SEER Cancer Statistics Review, 1975-2005,* National Cancer Institute. Bethesda, MD). Available at http://seer.cancer.gov/csr/1975_2005/results_single/sect_01_intro_28pgs.pdf (cited 06/10/2008).

F. CHRONIC DISEASES: ASSOCIATED RISK FACTORS

1. HEART DISEASE AND STROKE: RISK FACTORS

Heart disease and stroke are, respectively, the first and third leading causes of death for all racial and ethnic groups in Louisiana and the United States. Almost 1 million people in the United States die from heart disease and stroke each year, accounting for approximately 40% of all deaths; with other diseases of the cardiovascular system causing substantial further death and disability.[3] Each year, heart disease kills more Americans than cancer. In Louisiana, heart disease caused 12,221 deaths in 2006, which accounted for 30.4% of all deaths that year.[4]

In addition to the approximately 13,000 Louisiana residents that die from heart disease and stroke each year, many more state residents experience a heart attack, stroke, or other non-fatal cardiovascular event. The majority of heart disease survivors will need medications for the rest of their lives, and some are left with permanent, severe disabilities including the loss of speech, or the inability to move an arm or leg.

Some conditions, as well as some lifestyle factors, can put people at a higher risk for developing heart disease. In principle, all persons can take steps to lower their risk of heart disease and stroke by living a healthy lifestyle and addressing the following controllable risk factors:

1.1 Tobacco Use

1.1.1 Cigarette Smoking

Cigarette smoking was the leading risk factor for disease, responsible for an estimated 6,379 deaths and 100,487 years of potential years of life lost in 2004[5]. Furthermore, cigarette smoking is responsible for one in three 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 662,000 adults,[6] 33,000 high school,[7] and 16,000 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

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, Bureau of Primary Care and Rural Health, Louisiana Department of Health and Hospitals. Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC) Report – Louisiana 2004.

6 Chronic Disease Epidemiology Unit, Bureau of Primary Care and Rural Health, Louisiana Department of Health and Hospitals. Behavioral Risk Factor Surveillance System (BRFSS) – 2008.

7 Centers for Disease Control and Prevention. Youth Tobacco Survey (YTS) – Louisiana, 2008.

8 CENTERS FOR DISEASE CONTROL AND PREVENTION. YOUTH TOBACCO SURVEY (YTS) – LOUISIANA, 2008..

them. The human and economic costs of cigarette smoking are substantial. Recent estimates show that the total annual healthcare cost directly caused by smoking in Louisiana is 1.47 billion for 2008.[9]

1.1.1.1 Cigarette Smoking Among Adults

1.1.1.1.1 Prevalence of Cigarette Smoking among Adults

Nearly one in five (20.4%) adults in Louisiana currently smokes cigarettes.[10] Rates of adult smoking in Louisiana have slightly declined over past years but have consistently been above the national mean which according to the 2008 BRFSS the national mean was 18.3%.

Rates of current smoking are higher among males, Hispanics, individuals in the 25 - 49 year age group, individuals with annual household income less than $15,000 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	19.7	**Male**	23.4	**White**	21.0	**Less than $15,000**	31.8	**Less than H.S.**	29.7
25-49	25.2	**Female**	17.7	**Black**	19.8	**$15,000-$24,999**	26.9	**H.S. or G.E.D.**	22.8
50-64	18.7			**Hispanic**	27.5	**$25,000-$49,999**	22.8	**Some post-H.S.**	22.8
65+	10.9					**$50,000+**	15.9	**College Graduate**	12.6

Source: Louisiana Department of Health and Hospitals Bureau of Primary Care and Rural Health, Chronic Disease Epidemiology Unit, BRFSS 2008

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 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.

9 Campaign for Tobacco Free Kids – Louisiana 2008.

10 Chronic Disease Epidemiology Unit, Bureau of Primary Care and Rural Health, Louisiana Department of Health and Hospitals. Behavioral Risk Factor Surveillance System (BRFSS) – 2008.

11 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2008.

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.

- 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 2008 Louisiana BRFSS show that approximately 377,000 current smokers have tried to quit smoking for at least one day in the past year. Trend data over the past ten years (1998 – 2008) show a gradual increase in the proportion of adults who are trying to give up the deadly addiction, from 50.0% to 57.0%.

1.1.1.2 Cigarette Smoking among Youth

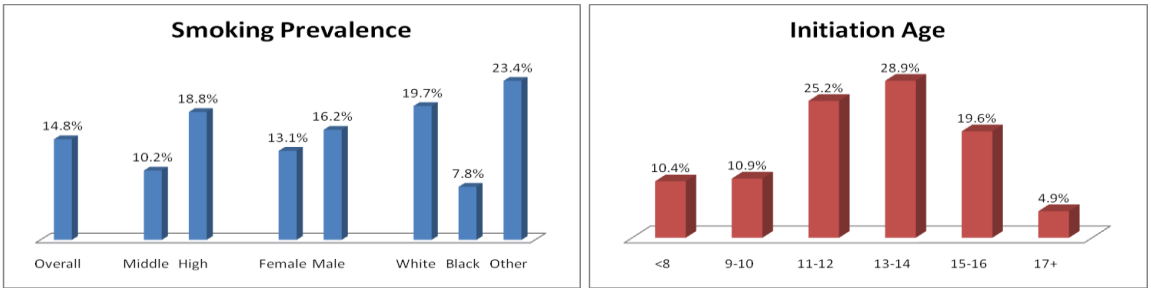
The younger one begins to smoke, the more likely one is to remain a smoker as an adult. Health problems associated with smoking are a function of the duration (years) and the intensity (amount) of use.[13] Earlier onset of tobacco use also provides more life-years to use tobacco and thereby increases the potential duration of use and the risk of a range of more serious health consequences. Moreover, more than a fifth (21.3%) of the students had smoked their first cigarette before the age of 11. 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 high risk 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]

1.1.1.2.1 Prevalence of Cigarette Smoking among Youth

Results from the 2008 Louisiana Youth Tobacco Survey (YTS) show that more than 50,000 (33.0%) public middle school students in Louisiana reported having ever smoked a cigarette, and 10.2% currently smoke cigarettes. In terms of high school students, nearly 90,000 reported having ever smoked a cigarette while 18.8% currently smoke cigarettes. (*These statistics are in terms of public middle school and high schools in the state of Louisiana who were eligible for being selected into the sample, these numbers do not include alternative or private schools.)* Apart from cigarette smoking, other forms of tobacco use reported by middle school and high school students include cigars (10.7%), bidis (small brown cigarettes from India consisting of tobacco wrapped in a leaf and tied with a thread) (4.7%), and smokeless or chewing tobacco (7.6%). The rates of cigarette smoking and use of other tobacco products increase with the transition from middle school to high school. Furthermore, those students identified as "other" race have higher rates of cigarette smoking compared to black and white students. .

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



Source: Louisiana Department of Health and Hospitals, Bureau of Primary Care and Rural Health Chronic Disease Unit, YTS 2008

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. Underage tobacco sales are going down. 40% of middle school students and 12% of high school students who are current smokers bought their last pack of cigarettes from a gas station, convenience, grocery, or drug store. These purchases among middle school students are down from nearly 47% in 2000. In addition, a greater proportion of white students (23.0%) reported buying from the above mentioned venues when compared to blacks (16%). 32% of white youth and 40% of black youth reported they get their cigarettes by "bumming," (asking for a cigarette from a friend) or having an 18 year old or older purchase them from them.

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 middle or high school stated that 52% of them wanted to quit smoking, of which 66.4% were of black race.

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. According to a report in the U.S. News on August, 2009 "taking one pinch of smokeless tobacco delivers the same amount of polycyclic aromatic hydrocarbons (PAHs) as smoking five cigarettes." This is very alarming considering may tobacco users feel that smokeless tobacco is less harmful because the effects of secondhand smoke are not there. However, the tobacco industry has taken this idea and ran with it. According to the same report"marketing and consumption of smokeless tobacco is on the increase, and some estimates suggest that sales of moist snuff (a form of smokeless tobacco) in America have doubled since the 1980s. The Federal Trade Commission's Smokeless Tobacco Reports for the years 2001-2005- further report that "during 2005, the five largest tobacco manufacturers spent a new record of $250.79 million on smokeless tobacco advertising and promotion, versus the previous record of $236.68 million in 2001."

1.1.2.1 Use of Smokeless Tobacco among Adults in Louisiana

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.

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, Bureau of Primary Care and Rural 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 2008 YTS show that 7.6% of middle school and high school students are current smokeless tobacco users. Of those 6.2% are middle school students and 8.7% are high school students. Significantly higher rates of use were observed among boys compared to girls (13.3% vs. 1.8%) and white students compared to blacks (11.7% vs. 2.2%).

1.1.3 Secondhand Smoke

There is a growing body of evidence to support the harmful effect of exposure to secondhand smoke (SHS) or Environmental Tobacco Smoke (SHS. The term ETS, more commonly called secondhand smoke today, is classified as a Group A carcinogen under the United States Environmental Protection Agency's (EPA) carcinogen assessment guidelines. Exposure to SHS causes lung cancer and has been linked to an increased risk for heart disease in nonsmokers. SHS 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 SHS exposure.

1.1.3.1 ETS Exposure at home

Results from the 2006 Louisiana BRFSS survey show that more than one in six adults (17.5%) in Louisiana allow smoking indoors or did not have any rules about smoking inside the house. Those individuals who are 18-24, make less than $25,000 annually, and who have less than a high school diploma show the highest rates of smoking inside the home. In terms of race, blacks and "other race"

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

show the highest rates at 22.5% and 27.6% respectively. Those who show the lowest rates of less than 11% are those who earn more than $50,000 per year and who have at least a college education.

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	22.8%	Male	18.5%	White	15.3%	Less than $15,000	29.4%	Less than H.S.	28.4%
25-49	16.5%	Female	16.5%	Black	22.5%	$15,000-$24,999	28.9%	H.S. or G.E.D.	23.5%
50-64	19.1%			Other	27.6%	$25,000-$49,999	20.9%	Some post-H.S.	14.2%
65+	13.9%					$50,000+	10.4%	College Graduate	11.0%

Source: The Louisiana Campaign for Tobacco-Free Living and The Louisiana Tobacco Control Program. Louisiana Adult Tobacco Survey, 2007

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 2007 Louisiana Adult Tobacco Survey show that one in four (19.9%) 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. Individuals in the 18 - 24 year age group, individuals with an annual household income between $15,000 and $24,999, and individuals with a 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.

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	30.1%	Male	24.5%	White	18.4%	Less than $15,000	24.8%	Less than H.S.	27.2%
25-49	19.0%	Female	15.2%	Black	21.6%	$15,000-$24,999	28.6%	H.S. or G.E.D.	26.5%
50-64	15.8%			Other	37.9%	$25,000-$49,999	18.4%	Some post-H.S.	18.5%
65+	17.1%					$50,000+	16.0%	College Graduate	15.5%

Source: Louisiana, Department of Health and Hospitals, Bureau of Primary Care and Rural Health, Chronic Disease Epidemiology Unit, BRFSS 2004

1.1.3.3 Youth Exposure to Secondhand Smoke

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

Results from the 2008 YTS, show that more than nine out of ten youth (91.3%) believe that exposure to SHS is harmful. Youth who are current smokers were less likely to believe that SHS exposure can be harmful, as compared to those who have never smoked (82.1% and 93.3%, respectively).

More than one out of three youth (44.8%) have been exposed to smoking in the home. Current youth smokers were significantly more likely to be living with someone who smoked, as compared to non-smokers, (57.8% and 42.8% respectively). Nearly one out of two youth (46.3%) in Louisiana rode in the car with someone smoking on at least one out of the seven days preceding the survey. Of these youth, 48% were current asthmatics.

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 2004, cigarette smoking contributed to an estimated 6,379 deaths in Louisiana, accounting for 15.0% of all deaths in that year. Also, an estimated 100,487 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 2004, it was specifically responsible for 47,456 years of potential life lost (31,481 male and 15,975 female). Cardiovascular disease (CVD) caused a loss of 36,700 years (22,957 male and 13,743 female) of potential life, while respiratory diseases caused 16,331 years to be lost (8,073 male and 8,258 female).

1.1.4.2 Economic costs

Results from SAMMEC also estimate the total direct and indirect costs for 2004 in Louisiana attributable to cigarette smoking at $1.97 billion. Smoking attributable direct medical costs totaled $1.45 billion:

- $215 million for ambulatory care
- $796 million for hospitalizations
- $243 million for prescription drugs
- $110 million for nursing home services
- $89 million for other professional services

Indirect costs due to loss of productivity resulting from the premature deaths for 2004 in Louisiana due to cigarette smoking were estimated at $2.13 million. This included $1.01 million due to malignant neoplasm, $867,159 due to CVD and $251,297 due to respiratory diseases.

1.2 Overweight and Obesity

Excess body fat is linked to higher LDL (bad) cholesterol and triglyceride levels; and to lower HDL (good) cholesterol, high blood pressure, and diabetes. 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 2008, 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] During the period between 1991 until 2008, the percentage of overweight and/or obese Louisiana residents increased from 49% to 65%.

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 2007 BRFSS survey, nearly one in three adult residents or 32.1% of Louisianans 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 heart disease.[19] Cholesterol plays a direct role in the atherosclerotic process, the disease process that causes 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.

In 2007, the percentage of Louisiana adults who had not had their blood cholesterol checked within the previous five years was 2.2%; never checked was 22.5%. Of persons who had ever been checked, 33.7% reported having high cholesterol levels.

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

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

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

1.5 Physical Inactivity

A lack of adequate physical inactivity is also related to the development of heart disease. 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 a reduction in the rates of heart disease and stroke, lower blood pressure, and a lower incidence of 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 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 heart disease. Healthy People 2010 recommends that adults should engage in vigorous-intensity physical activity three 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 five 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 38.6% in 2007, but is still below the national level of 49.5%.

Inadequate physical activity can impact other risk factors for heart disease including obesity, high blood pressure, diabetes, high triglycerides (bad cholesterol), and a low level of HDL (good) cholesterol.

1.6 Diet

An unhealthy diet, high in saturated fats and cholesterol, will raise blood cholesterol levels and promote atherosclerosis. High salt or sodium in the diet also causes higher blood pressure levels. Eating five or more servings of fruits and vegetables per day can help prevent heart disease, cancer, and other chronic conditions. In 2007, 80.4% of Louisianans reported that they did not consume at least five servings of fruits and vegetables per day.

1.7 Excessive Alcohol Use

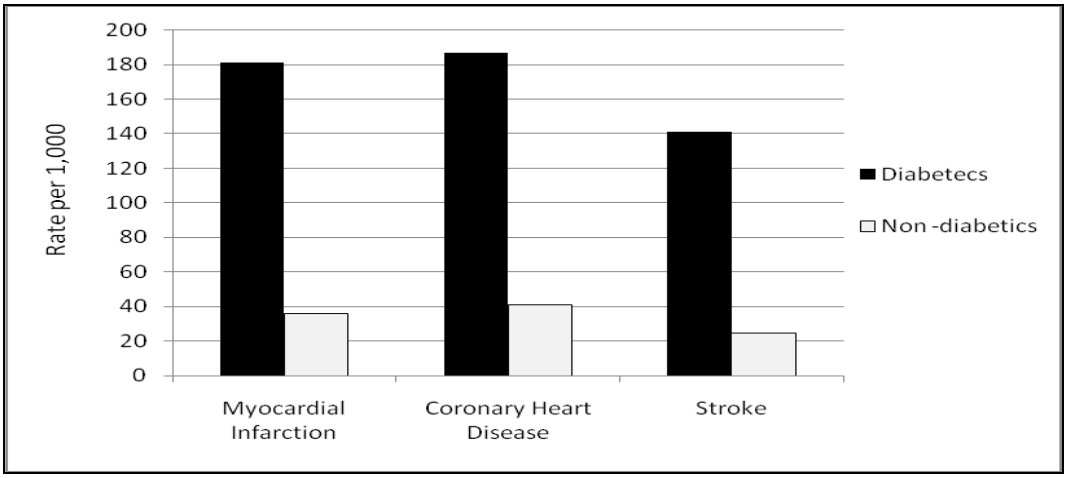
Excessive alcohol use leads to an increase in blood pressure, and increases the risk for heart disease. It also increases blood levels of triglycerides, which contributes to atherosclerosis. Control of this risk factor is especially needed by people who have already been diagnosed with heart disease.

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

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.

1.8 Diabetes and Co-Risk Factors for Heart Disease

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 five times the risk for myocardial infarction that non-diabetics have, four times the risk for coronary heart disease, and five times the risk for stroke.



Source: Louisiana Department of Health and Hospitals, Bureau of Primary Care and Rural Health
Chronic Disease Unit, BRFSS 2007

Reducing the burden of disease due to diabetes requires monitoring diabetics on their 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.

1.9 Uncontrollable Risk Factors

Uncontrollable risk factors for heart disease, or risk factors one cannot change, include the following:

- **Aging:** Mortality from heart disease increases with age.
- **Gender:** Males have higher mortality rates from heart disease than women, especially before menopause, (314/100,000 vs. 201/100,000 populations respectively).
- **Race:** African Americans generally have higher rates than whites (277/100,000 vs. 221/100,000 populations respectively)
- **Family History:** A family history of stroke or heart attacks at a young age, is an important uncontrollable risk factor.

2. DIABETES: MANAGEMENT

Diabetes mellitus (diabetes) is a metabolic disorder in which the body does not produce or properly use insulin. Insulin, produced by the pancreas, is a hormone that allows glucose (sugar) and starch to enter

cells and be converted into energy. Diabetes is characterized by the hyperglycemia (high blood glucose) and other conditions. Uncontrolled diabetes, the prolonged presence of glucose and fats in the blood, can damage vital organs and cause serious complications such as heart disease, stroke, kidney disease, blindness (loss of eyesight) and amputation. Obesity, poor nutrition, physical inactivity, family history of diabetes and history of gestational diabetes during pregnancy are risk factors for developing diabetes. Blacks, Hispanic/Latino Americans and American Indians have a higher risk for developing diabetes as compared to Whites.

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. In 2006, the total cost of diabetes for people in Louisiana was $2.431 billion. This includes $1.625 million in direct medical costs and $806.2 million in lost productivity (American Diabetes Association, 2008)

Diabetes is the fifth leading cause of death in Louisiana. In 2006, the age adjusted diabetes death rate for the state of Louisiana is 35.9/100,000, whereas the national age adjusted death rate is 23.3/100,000 people (CDC National Center for Health Statistics, 2006). In the United States, diabetes is 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 and American Optometric Association, 2006).

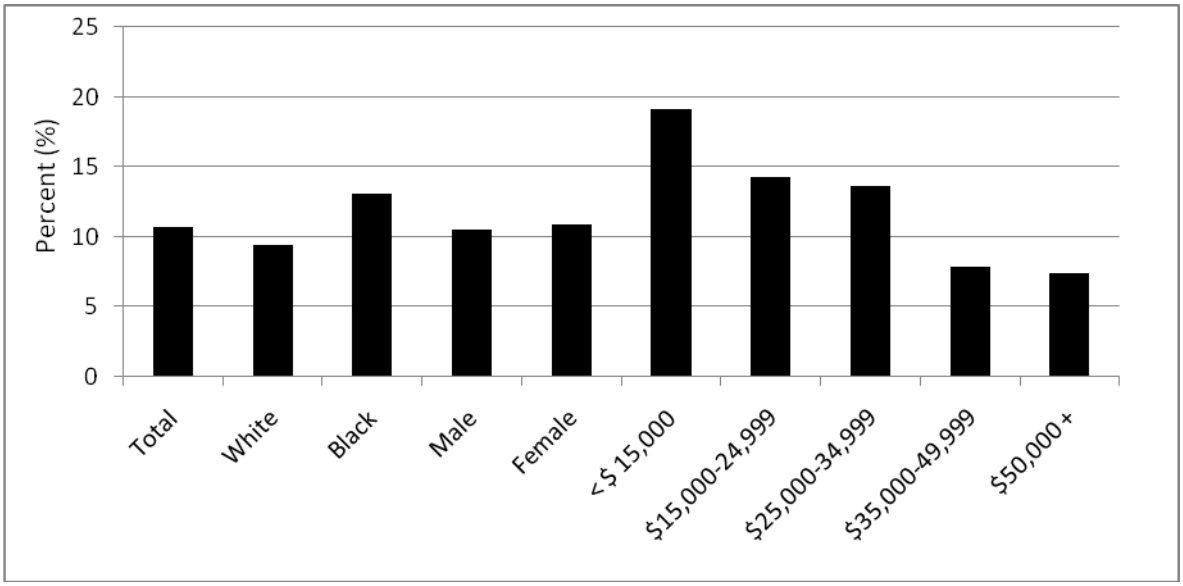
In 2001, approximately 16% (93,000) of Louisiana hospital discharges and 18% ($1.5 billion) of the costs associated with these discharges were attributable to people of all ages with diabetes as the principal or secondary diagnosis. This cost, which reflects estimates derived from known cases of diabetes,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

2.1 Prevalence

The overall prevalence of diabetes in Louisiana is 10.7% (BRFSS, 2008). 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 2008, blacks had a higher prevalence of diabetes than whites (13.1% vs. 9.4%), and that adult women had a higher prevalence than men (10.9% vs. 10.5%). The likelihood of having diabetes increases with age among Louisiana residents, with the highest prevalence found among those 65 years or older (23.2%).

Diabetes Prevalence, by Demographics Louisiana 2007



*Source: Louisiana Department of Health and Hospitals, Bureau of Primary Care and Rural Health, Chronic Disease Unit, BRFSS 2007

In terms of household (HH) income, the prevalence of diabetes is higher for adults in Louisiana from households with lower total incomes and for those with less than high school education. For persons living in households with a yearly income between $25,000-$34,999, 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 $35,000 (7.4%) (BRFSS, 2008).

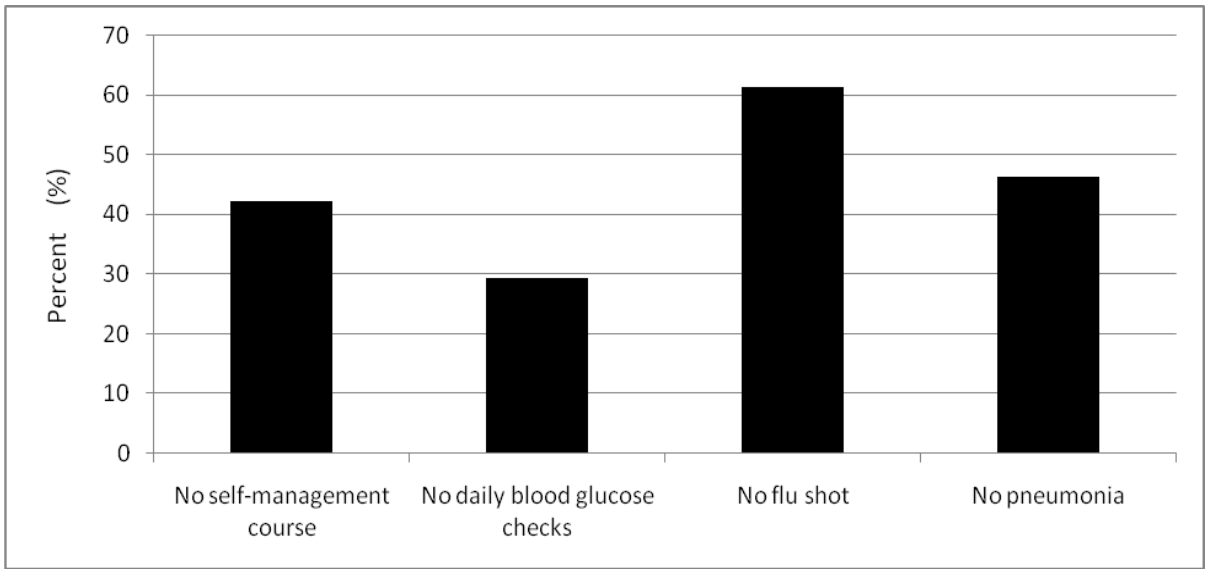
2.2 Preventive Practices

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 42.3% of Louisiana diabetics, however, have not yet taken such a course (BRFSS, 2007).

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. Also almost. half of diabetes aged 65-74 years of age are not likely to take a self-management course (47.0%) in between the age group of 45-64 years. In addition, more white diabetics (45.4%) than black diabetics (40.8%) reported that they have never taken a class on how to manage their diabetes.



Source: Louisiana Department of Health and Hospitals, Bureau of Primary Care and Rural Health
Chronic Disease Unit, BRFSS 2007

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, 29.3% of Louisiana's diabetics responded that they failed to check, at least, once daily (BRFSS, 2007).

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 2007, over half of Louisiana diabetics (61.4%) had received a flu shot within the last year. In terms of race, 47.1% of black diabetics and 33.9% of white diabetics reported that they had not received an annual flu shot. Approximately 61.1% of diabetics in the age of 18 to 44 and 39.9% 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, 46.2% of diabetics in Louisiana reported never having received a pneumonia vaccination (BRFSS, 2007). Black diabetics were less likely to have ever received a pneumonia vaccination than white diabetics (42.9% vs. 59.3%). Those with annual household incomes less than $25,000 were more likely to have had a pneumonia vaccination than those with annual household incomes over $35,000.

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. Individuals with diabetes should perform daily blood glucose monitoring 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 done 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 2007, only an estimated 56% reported that they had received even at least two HgA1c tests in the past 12 months. About 18.1% of blacks and 14.0% of whites responded that they had not had the test at least once in the previous year. Diabetics in the highest income bracket ($35,000 and over) comprise the lowest proportion not having received an HgA1c annually (10.3%). Those with a yearly household income of less than $25,000 have the highest proportion with 17.1% 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, 28% 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 (33.3% and 19.6%, respectively).

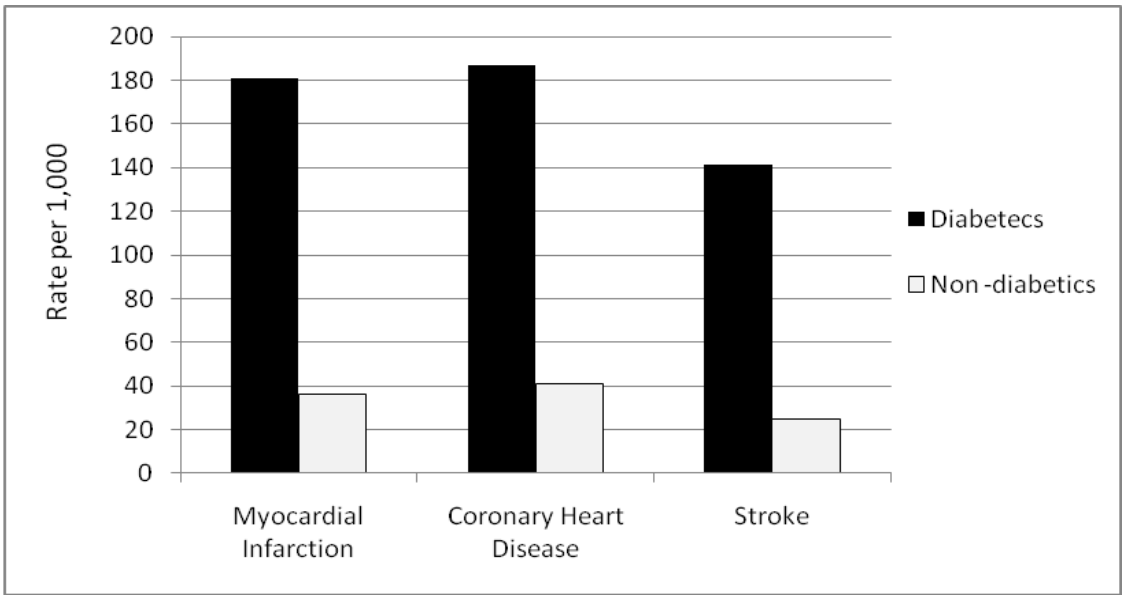
2.3.3 Eye Examinations

Diabetes is the leading cause of new cases of blindness in adults aged 20 to 74 years (American Optometric Association, 2006). 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 44% of Louisiana diabetics had 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 increases 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.

Cardiovascular Disease Outcomes in Diabetics and Non-diabetics



Source: Louisiana Department of Health and Hospitals, Bureau of Primary Care and Rural Health
Chronic Disease Unit, BRFSS 2007

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. 29.3% of Louisiana diabetics are overweight, and another 58.7% are obese. Hence, approximately 88.0% 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 (42.6%) 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 2007 was 73%. Of black diabetics in the state, 76.6% appear to be particularly affected by high blood pressure, relative to white diabetics (70.0%). 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 59.6% 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 (63.4%) (BRFSS, 2007).

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. ASTHMA PROGRAM

3.1 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 13.6% of adults in the United States in 2008 had ever been told that they had asthma, and 8.7% were current asthmatics.

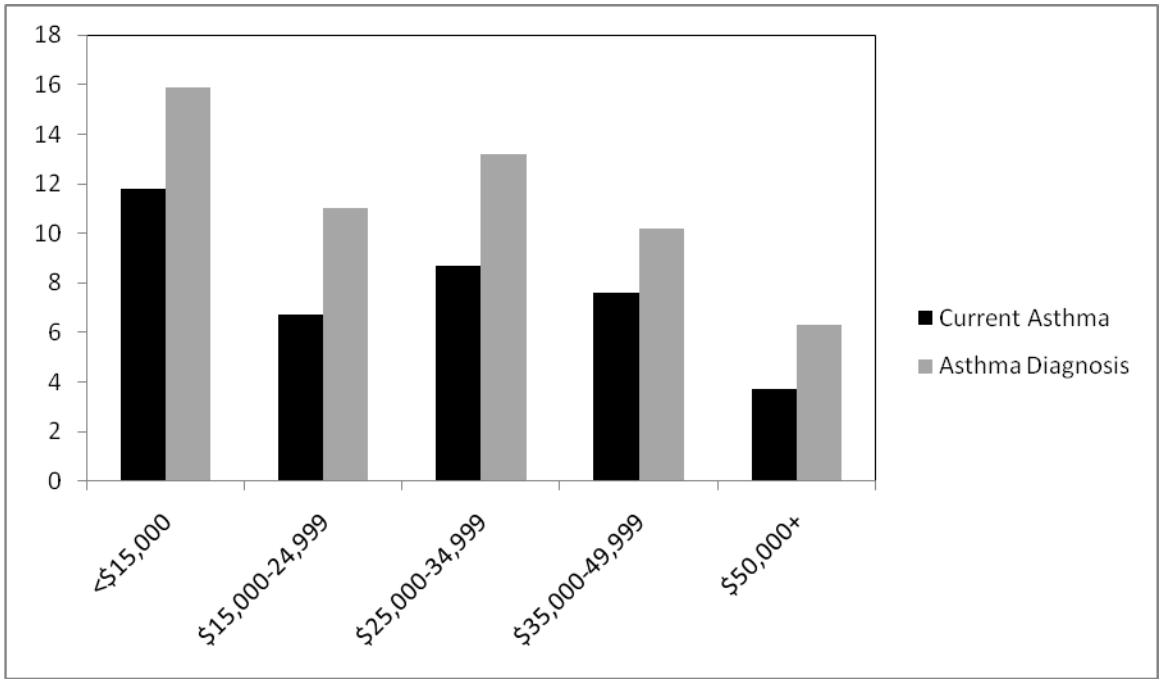
3.2 Adult Asthma in Louisiana

In 2008, the BRFSS 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 11.7% of adults in the state have had asthma at some time, and approximately 8.0%

currently have asthma. This is an increase from 2000 when only 8% of respondents had ever had asthma and 5% currently had asthma.

Demographically, African-American adults had a higher rate for reporting that he or she had ever been diagnosed with asthma when compared to Caucasian adults (11.6% vs.9.2%). When asked if they still had asthma, 8.2% of African-Americans and 5.2% of Caucasian adults reported that they did at the time of the interview. Survey respondents in the 18-24year age group had the highest prevalence of asthma diagnosis while the lowest prevalence occurred in those who were 45-54 years of age (14.4% vs. 8.8%).

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 more likely to have suffered with asthma at some time in their lives than those in the highest income bracket of over $50,000 (15.9% vs. 6.3%). These results were consistent with the current asthma analysis where 11.8% of those in households with earnings of less than $15,000 yearly had asthma at the time and only 3.7% 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. Chronic Disease and Prevention Unit, BRFSS 2008

3.3 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%.

3.4 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 in males (19.6% vs. 15.6%) and slightly lower for whites than for 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

3.5 Asthma Mortality

The national mortality rate for asthma in 2005 was 1.3/100,000. 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.

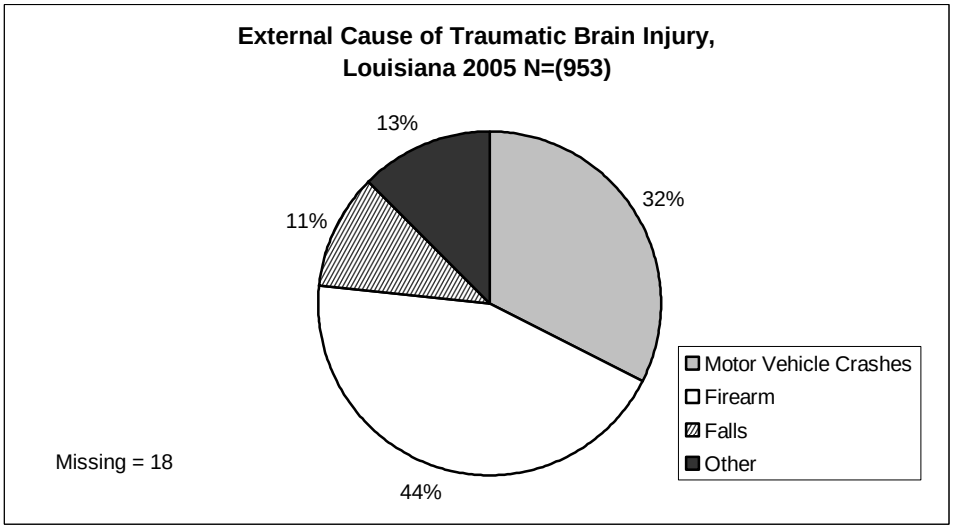
An analysis of 2005 Louisiana mortality data indicates that 953 individuals died as a result of a TBI. Several thousand more individuals will not recognize that they have sustained a preventable injury (as in closed head trauma from sports or falls) capable of causing long-term deficits. TBIs can have a deep impact on families and communities and are resource-intensive, both financially and emotionally.

TBIs can be markers of inadequate prevention policies, correctable environmental hazards (e.g., uneven sidewalks that precipitate falls), 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, 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 and intervention strategies.

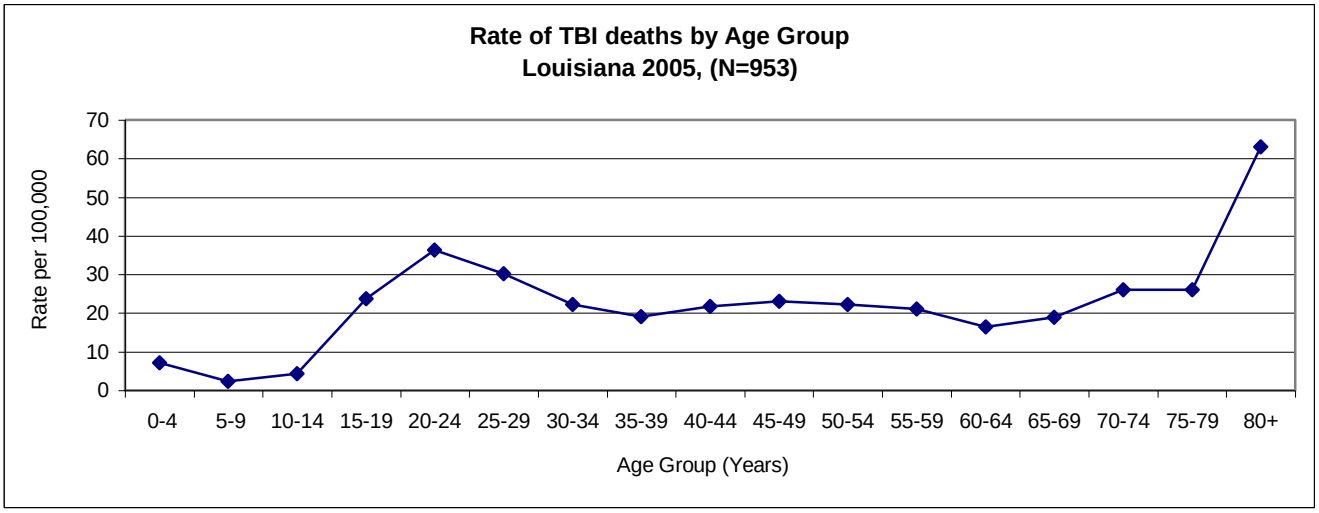
The majority of TBIs are preventable. That fact, coupled with the seriousness and prevalence of their occurrence, makes TBIs a public health concern. The Louisiana State Legislature has established the Traumatic Brain and Spinal Cord Injury Registry and has mandated the reporting of these events.

Traumatic Brain Injury Facts

In 2005, firearm related deaths were the leading cause of TBI deaths, followed by motor-vehicle crashes and falls. Analyzing TBI deaths 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.

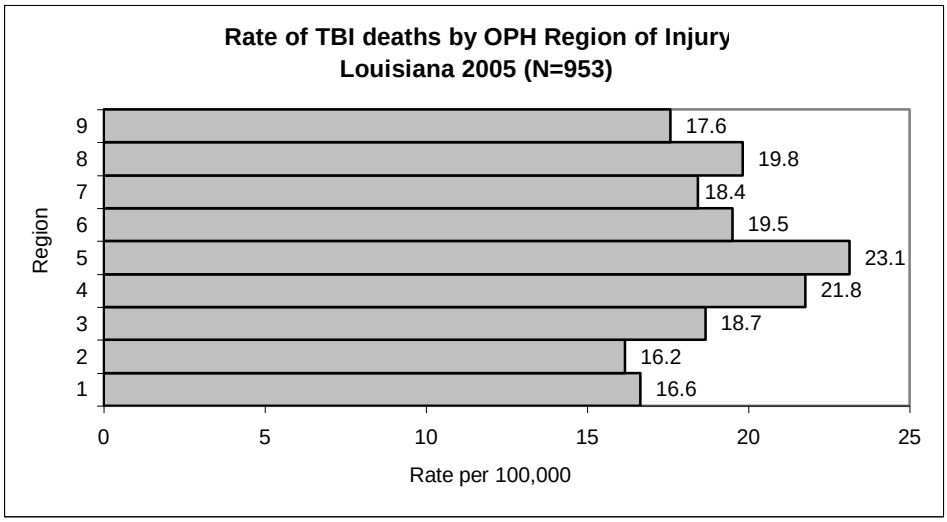


Source: Louisiana Department of Health and Hospitals, Office of Public Health
BEMS/Injury Research and Prevention Program



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

The following chart shows that Office of Public Health Regions 4 and 5 had high TBI mortality rates in 2005, whereas Region 2 had the lowest TBI mortality rate.



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

H. NONFATAL INJURY- RELATED HOSPITAL DISCHARGES

Injuries are the leading cause of death among Louisiana residents in the 1-44 year age group. While deaths only show part of the picture, injury hospitalizations reflect the more severe outcomes. Injuries are costly to society not only in terms of morbidity and mortality, but also in terms of treatment costs and years of productive life lost.

The Louisiana Hospital Inpatient Discharge Database, compiled by the OPH, Center for Health Statistics, is a population-based surveillance system. In addition to other conditions, it relays information on injuries serious enough to warrant hospitalizations and are, therefore, priority targets for prevention. All hospitals submit data through the Medicare Uniform Hospital Billing form (UB-04), which records the **E**xternal **C**ause of **I**njury **c**ode (**E code**). The data are cleaned, and quality-control checks are administered, before they are analyzed at the state, OPH Region, and parish levels so that community-based injury risk factors and prevention methods may be monitored at the community level.

In 2004, there were a total of 30,129 injury-related hospitalizations. The following table shows that falls were the most common cause (36%) of a nonfatal injury discharge, followed by poisonings (14.4%) and motor-vehicle traffic crashes (12.3%).

Nonfatal Injury Hospital Discharges by Cause (All Intents), Louisiana 2004		
Cause/Mechanism	**Total (All Intents)**	**Percent (%)**
Cut/Pierce	935	3.5
Drowning/submersion	30	0.1
Falls	9,637	36.0
Fire/Flame	439	1.6
Firearm	530	2.0
Machinery	141	0.5
MVT	3,295	12.3
Pedal cyclist, other	146	0.5
Pedestrian, other	28	0.1
Transport	498	1.9
Natural/environment	1,219	4.5
Overexertion	366	1.4
Poisonings	3,858	14.4
Struck by, against	1,137	4.2
Suffocation	130	0.5
Other specified and classifiable	1,733	6.5
Other specified not elsewhere classifiable	817	3.0
Unspecified	1,858	6.9
Missing	3,332	
Total	**30,129**	**100**

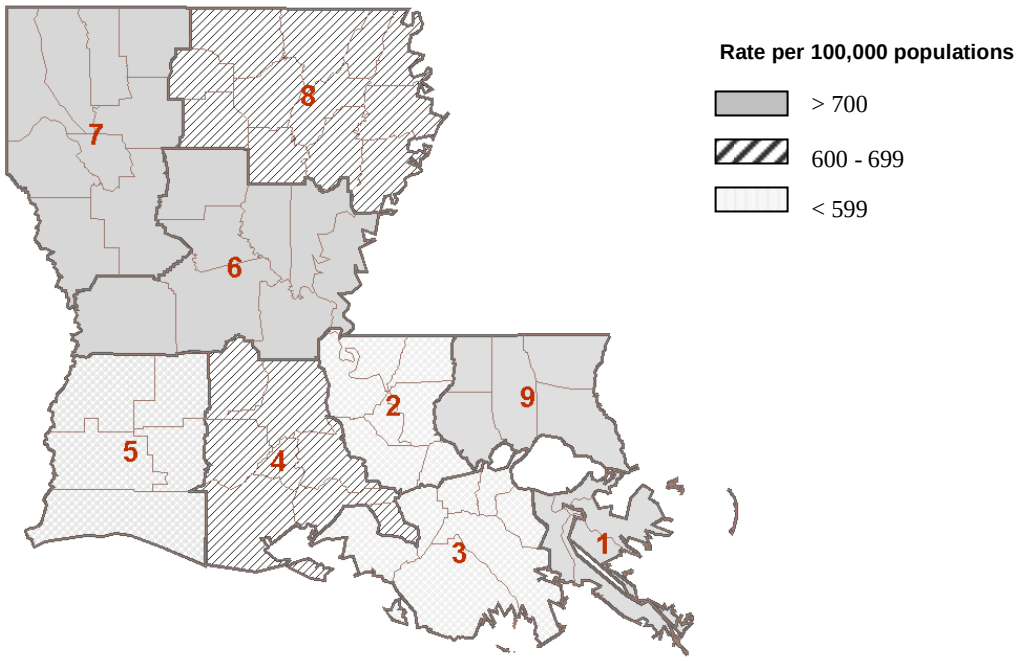
Source: IRP from LA OPH Health Statistics Program, Hospital Inpatient Discharge Data , 2004

The chart below shows that the rate of nonfatal injuries was high in OPH Region 6 (795.1/100,000) followed by Region 1 (776.4/100,000), Region 9 (748.1/100,000) and Region 7 (726.8/100,000) and was the lowest in Region 3 (455.9/100,000).

Number and Rate of Nonfatal Injury Related Hospital Discharges by OPH Regions in Louisiana, 2004		
OPH Region	**Number**	**Rate/100,000***
1	7,845	776.4
2	3,233	527.6
3	1,782	455.9
4	3,699	661.0
5	1,450	508.1
6	2,380	795.1
7	3,829	726.8
8	2,329	662.2
9	3,582	748.1
Total	**30,129**	**667.2**

Source: IRP from LA OPH Center for Health Statistics, Hospital Inpatient Discharge Data 2004
* Rate per 100,000 population calculated using 2004 US Census Population Estimates

Rate of Nonfatal Injury related Hospital Discharges by OPH Regions, Louisiana 2004



The next table ranks the top ten causes of nonfatal injury-related hospital discharges by age group and intent. Among all injury related hospitalizations 80% were unintentional in nature. The most common events resulted from falls and motor vehicle traffic related injuries respectively.

10 LEADING CAUSES OF NONFATAL INJURY HOSPITAL DISCHARGES BY AGE GROUP (ALL INTENTS), LOUISIANA -

	Age Groups (Years)										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Unintentional Falls 70	Unintentional Poisoning 163	Unintentional Falls 132	Unintentional MVT 119	Unintentional MVT 841	Unintentional MVT 540	Unintentional MVT 520	Unintentional Falls 777	Unintentional Falls 1,025	Unintentional Falls 6,438	Unintentional Falls 9,619
2	Unintentional Unspecified 24	Unintentional Falls 128	Unintentional MVT 90	Unintentional Falls 92	**Suicide Poisoning 540**	**Suicide Poisoning 384**	Unintentional Falls 498	Unintentional MVT 443	Unintentional MVT 276	Unintentional Unspecified 750	Unintentional MVT 3,292
3	Unintentional Poisoning 22	Unintentional Natural Environmental 112	Unintentional Natural Environmental 55	**Suicide Poisoning 81**	Unintentional Falls 199	Unintentional Falls 260	**Suicide Poisoning 460**	**Suicide Poisoning 292**	Unintentional Unspecified 223	Unintentional Other Specified & Classifiable 544	**Suicide Poisoning 1,910**
4	Unintentional Natural Environmental 19	Unintentional Fire/Burn 61	Unintentional Struck by, against 44	Unintentional Other Transport	Tied[4] 185	Unintentional Other Specified & Classifiable 161	Unintentional Other Specified & Classifiable 229	Unintentional Other Specified & Classifiable 238	Unintentional Other Specified & Classifiable 191	Unintentional MVT 397	Unintentional Other Specified & Classifiable 1,646
5	Unintentional Fire/Burn 16	Unintentional MVT 55	Unintentional Other Transport 30	Unintentional Struck by, against 54	Undetermined Poisoning 151	Unintentional Poisoning 154	Unintentional Poisoning 191	Tied[4] 222	Unintentional Poisoning 128	Unintentional Poisoning 265	Unintentional Unspecified 1,642
6	Unintentional Other Specified & Classifiable 14	Tied[1] 35	Unintentional Other Pedal Cyclist 29	Unintentional Natural Environmental 43	**Homicide Firearm 144**	Unintentional Natural Environmental 135	Unintentional Unspecified 184	Undetermined Poisoning 103	Unintentional Natural Environmental 116	Unintentional Natural Environmental 226	Unintentional Poisoning 1,335
7	Unintentional Suffocation 12	Unintentional Cut/Pierce 16	Unintentional Cut/Pierce 26	Unintentional Other Pedal Cyclist 30	Unintentional Struck by, against 133	Unintentional Unspecified 108	Unintentional Natural Environmental 164	**Homicide Struck by, against 91**	**Suicide Poisoning 108**	Unintentional Overexertion 126	Unintentional Natural Environmental 1,218
8	Unintentional MVT 11	Unintentional Unspecified 15	Unintentional Other Specified & Classifiable 22	Unintentional Other Specified & Classifiable 27	Unintentional Natural Environmental 126	Undetermined Poisoning 107	Undetermined Poisoning 127	Unintentional Struck by, against 84	Unintentional Struck by, against 61	Unintentional Struck by, against 118	Unintentional Struck by, against 693
9	Unintentional Other Specif Not elsewhere Classifiable <10	Unintentional Drowning 13	Undetermined Poisoning 20	Unintentional Unspecified 21	**Homicide Struck by, against 116**	Undetermined Struck by, against 83	**Homicide Struck by, against 103**	Unintentional Other Transport 72	Unintentional Other Specif Not elsewhere Classifiable 56	Unintentional Other Specif Not elsewhere Classifiable 99	Undetermined Poisoning 609
10	Undetermined Poisoning <10	Unintentional Suffocation 12	Tied[2] 10	Tied[3] 18	Unintentional Other Transport 104	**Homicide Firearm 80**	Unintentional Struck by, against 86	Unintentional Cut/Pierce 67	Undetermined Poisoning 48	Unintentional Fire/Burn 70	Unintentional Other Transport 498

Tied[1] - Unintentional Struck by, against /Other specified elsewhere classifiable Tied[2] - Unintentional Fire/Burn / Unspecified
Tied[3] - Unintentional Poisoning/ Fire/Burn. Tied[4] - Unintentional Poisoning /Other specified elsewhere classifiable
Tied[5]- Unintentional Natural/ Environmental/ Unspecified

Source: IRP using data from the LA OPH Center for Health Statistics Program, Hospital Inpatient Discharge Database, 2004

Reports

The Injury Research and Prevention Program can generate specific tables, reports, and analyses by cause of injury, residency, and a variety of demographic factors upon request. Nonfatal injury-related hospital discharge reports are available from the BEMS/Injury Research and Prevention Program on the following website www.dhh.louisiana.gov/offices/?ID=221.

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 diseases 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, HAV, HiB, MCV4, RVV, varicella (chickenpox), and pneumococcal (pneumococcal pneumonia).

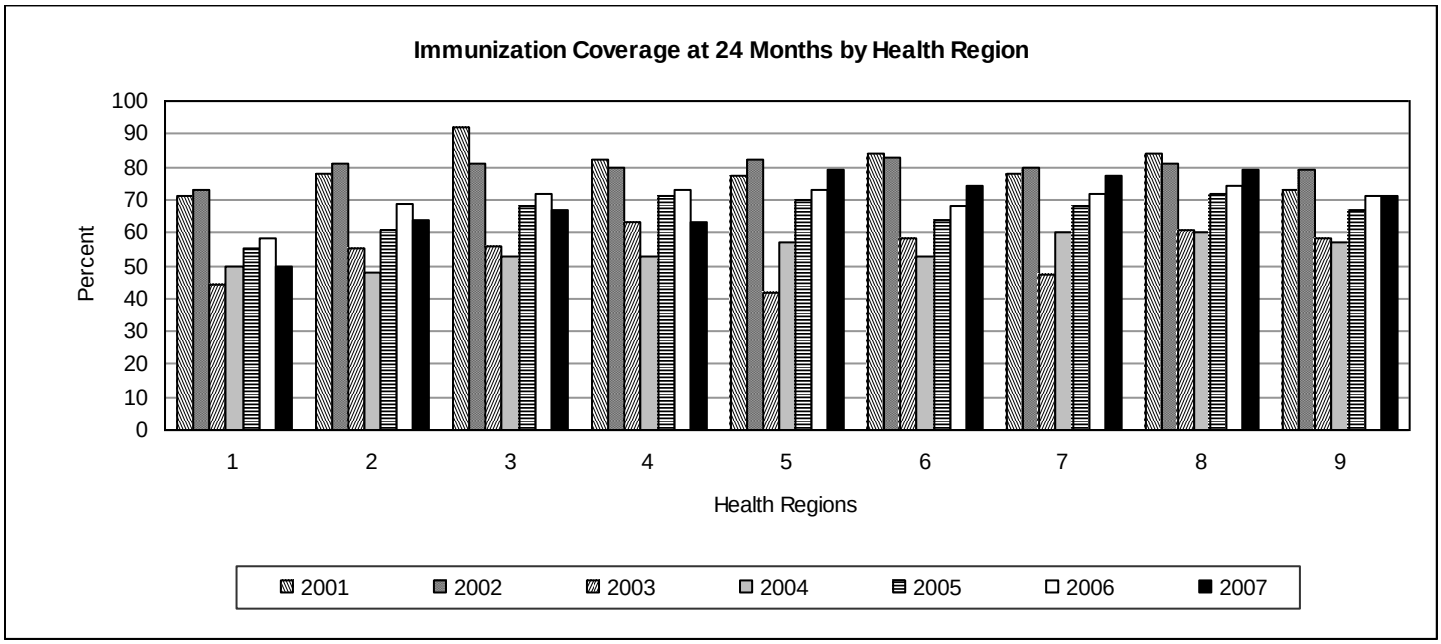
Two vaccines which protect from bacterial meningitis are *Haemophilus influenzae type B vaccine* and *Meningococcal Conjugate vaccine.* Drastic reductions in the occurrence of these serious diseases have taken place since the introduction of vaccines. For example, there were 894,134 cases of measles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

In addition to being reliable and effective, vaccines are also some of the most cost-effective medical procedures available. The 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 1- 2 cases out of every 1,000 cases dies, usually from complications with measles.

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 2007, though there have been variations between the nine OPH administrative regions over the years and a significant decrease reflected statewide in 2003.



The table on the following pages displays the percent of immunization coverage at age 24 months among those served by parish health units.

Immunizations: Percent Up-To-Date (UTD) at Age 24 Months* Louisiana 2008	
Clinic	**% UTD 2008 Results**
Region I	
Orleans-Edna Pilsbury	68
Orleans-Mandeville Detiege	N/A
Orleans-Mary Buck	N/A
Orleans-Katherine Benson	N/A
Orleans-Helen Levy	N/A
Orleans-St. Bernard Gentilly	N/A
Orleans-Ida Hymel	47
St. Bernard	59
Jefferson-Marrero	49
Plaquemines	100
Jefferson-Metairie	57
Region II	
Ascension	57
West Baton Rouge	73
West Feliciana	75
Iberville	82
East Feliciana-Clinton	68
Pointe Coupee	62
E. Baton Rouge	58
Region III	
St. James	67
Lafourche-Galliano	82
Lafourche-Thibodaux	72
Terrebonne	65
St. Mary	70
St. John	53
Assumption	64
St. Charles	76
Region IV	
Evangeline	70
St. Landry	68
St. Martin	76
Acadia	48
Vermilion	62
Lafayette	68
Iberia	62
Region V	
Allen	65
Calcasieu-Sulphur	87
Calcasieu-Lake Charles	86
Jefferson Davis	77
Beauregard	83
Cameron	75
Region VI	
Catahoula	88
LaSalle	90
Rapides	65
Grant	85
Winn	77
Vernon	74
Concordia	69
Avoyelles	73

Immunizations: Percent Up-To-Date (UTD) at Age 24 Months* Louisiana 2008	
Clinic	**% UTD 2008 Results**
Region VII	
Red River	83
Claiborne	84
Webster-Springhill	78
DeSoto	82
Natchitoches	75
Bienville	80
Sabine	80
Webster-Minden	79
Bossier-Bossier City	73
Caddo	77
Region VIII	
Morehouse-Bastrop	82
Franklin-Winnsboro	82
West Carroll-Oak Grove	89
Ouachita-Monroe	70
Caldwell	83
Tensas-St. Joseph	76
Lincoln	87
Jackson-Jonesboro	89
East Carroll	75
Union	77
Richland-Rayville	77
Ouachita-West Monroe	70
Madison	74
Region IX	
St. Helena	85
Washington-Franklinton	72
Washington-Bogalusa	71
Tangipahoa	75
St. Tammany	68
Livingston	74

*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, tabulation, and evaluation of pertinent 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 healthcare 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 healthcare 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 automatically mining data entered by emergency-room physicians and conditions at the emergency rooms. This project is 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, Clostridium 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 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 healthcare 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.

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. Examples of STD related consequences include: 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-OFFICE OF PUBLIC HEALTH Sexually Transmitted Disease (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.

2008 National Rankings

- Primary and secondary syphilis rates in Louisiana ranked the highest in the nation in 2008.
- Gonorrhea rate ranked 2nd highest in the nation in 2008.
- Chlamydia rate ranked 5th in the nation in 2008.

2008 Disease Statistics

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

Reports

The STD CONTROL PROGRAM maintains program databases and generates specific analyses and reports by cause, location, and demographic factors for individuals, communities, and agencies. The STD Program's Annual Report is available on the STD Program website.

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 the CDC to enhance surveillance activities. An improved methodology is being implemented to facilitate reporting and tracking.

2007 and 2008 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). According to the Centers for Disease Control and Prevention 2007 Surveillance Report, persons infected with HIV through high-risk heterosexual contact accounted for 16,800 new infections (31%), injecting-drug use accounted for 6,600 (12%), and men who have sex with men (MSM) and were also injecting drugs accounted for 2,100 (4%). The Third International AIDS Society

Conference on HIV in July 2005 estimated the lifetime cost of taking care of an AIDS patient with a life expectancy of 24.1 years at approximately $648,000.

According to the National Institute on Drug Abuse (NIDA) in 2006, 23.6 million persons aged 12 or older needed treatment for an illicit drug or alcohol use problem (9.6% of the persons aged 12 or older). Of these, 2.5 million (10.8% of those who needed treatment) received treatment at a specialty facility. Thus, 21.2 million persons (8.6% of the population aged 12 or older) needed treatment for an illicit drug or alcohol use problem but did not receive it. The cost to society of illicit drug abuse alone is $181 billion annually. When combined with alcohol and tobacco costs, they exceed $500 billion including healthcare, criminal justice, and lost productivity. Successful drug abuse treatment can help reduce these costs in addition to crime and the spread of HIV/AIDS, hepatitis, and other infectious diseases. It is estimated that, for every dollar spent on addiction treatment program, there is a $4 to $7 reduction in the cost of drug-related crimes. With some outpatient programs, total savings can exceed costs by a ratio of 12:1.

Epidemiology

Marijuana (27.9%) continues to be the most prevalent illicit drug used in 386 private and public secondary schools throughout the coterminous United States, according to data from the national 2008 Monitoring the Future study. The sample sizes were about 16,300, 15,500, and 14,600 students in 8th, 10th, and 12th grades, respectively. Four other drugs that made up the top five included: inhalants (13.1%), amphetamines (8.6%), LSD (5.6%) and crack (2.2%).

ALCOHOL abuse continued to account for the highest percentages of substance-abuse treatment admissions. The National Highway Traffic Safety Administration (NHTSA) reports that more than 17,000 people were killed in alcohol-related crashes in 2006. Data from the 2006-2007 National Survey on Drug Use and Health (NSDUH) placed states into five groups based on the magnitude of their percentages. In this survey, alcohol use in the State of Louisiana fell in the next to lowest group at 43.65% to 51.22% for persons aged 12 years or older. For persons aged 12 to 17 Louisiana was in the mid group of 15.60% to 17.11%, and for persons in age group 18 to 25, Louisiana fell in the next to lowest group averaging 55.34% to 60.78%. Another important decline in alcohol abuse indicators involve BINGE DRINKING AMONG YOUTH. Based on the Louisiana Caring Community Youth Survey (CCYS), binge drinking declined for youth in grades 6 – 12 from 17.75% in 2004 to 17.10% in 2006.

MARIJUANA continues to be the most commonly abused drug in Louisiana, and reports indicate that it is the gateway drug for teens and young adults to experiment with other illicit drugs. According to data from the national 2008 Monitoring the Future study, 12th-grade use of marijuana stands at 4.4%. The U.S. Drug Enforcement Administration reported in 2008 that cocaine, primarily crack cocaine, is the predominant drug threat in Louisiana. However, in some areas, methamphetamine is replacing crack cocaine as the primary drug threat due to its availability.

PRESCRIPTION OPIATE abuse continues to increase throughout Louisiana and the United States. The August 2009 Treatment Episode Data Set (TEDS) reports, admissions for primary opiate abuse accounted for nearly one-fifth of all substance abuse admissions in 2007. The most commonly abused opiates in Louisiana continue to be hydrocodone, oxycodone, and illicit methadone. The Louisiana Prescription Monitoring Program became fully operable on January 1, 2009. In a Pharmacy Board meeting in July 2009, it was reported that Louisiana has one of the highest rates of prescription drug usage in the nation.

AMPHETAMINE AND METHAMPHETAMINE abuse indicators continued to increase in areas throughout the state. In the Metropolitan Human Services District which encompasses Orleans, Plaquemines, and St. Bernard parishes, mention of methamphetamine during emergency-room visits in 2002 represented a significant increase over such mentions in 2000. The Calcasieu Parish Sheriff's Office in OPH Region V described methamphetamine as the "hottest drug" in the area. The manufacture and distribution of methamphetamine continued to be of growing concern.

The Louisiana CARING COMMUNITIES YOUTH SURVEY (CCYS), which was administered to Louisiana's youth in grades 8, 10, and 12 in 2008, was designed to measure the need for prevention services among youth in the areas of substance abuse, delinquency, antisocial behavior, and violence. The questions on the survey ask youth about the factors that place them at risk for substance use and other problem behaviors, along with the factors that offer them protection from problem behaviors. The survey also inquires about the use of what is called the "Gateway Drugs": alcohol, tobacco, marijuana, and inhalants. Results from the 2008 CCYS were distributed by the second week of May 2008. The survey itself was very successful, with a total of 122,677 students participating, 786 more than the number participating in the 2006 CCYS. The results for the 2008 Louisiana CCYS have been posted on the DHH website at http://www.dhh.louisiana.gov

The Louisiana Office for Addictive Disorders sponsored the administration of the bi-annual CORE Survey for institutions of higher education. Of 33 institutions participating, 26 are members of the Louisiana Higher Education Coalition (LAHEC), while 5 LAHEC members did not participate for various reasons. Seven technical schools also took part this year. Ten institutions administered the online survey; 24 administered the classroom paper survey (Centenary College of Louisiana administered both online and paper surveys). A total of 12,961 students responded for a response rate of 62% of the statewide sample, which was 7% of the 194,722 undergraduate students enrolled statewide.

Intravenous Drug Users Treatment

DHH Office for Addictive Disorders (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, 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 an 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.

STATEWIDE HIV PREVENTION COMMUNITY PLANNING GROUP (SCPG): The SCPG was designed to meet the guidelines of community planning and is comprised of the following: one OPH co-chair; one community co-chair; ten representatives from each region/district who generally represent at-risk communities or various areas of expertise (e.g., minority populations, men who have sex with men (MSM), IDUs); additional community representatives (e.g., the clergy); and representatives from the Department of Public Safety Corrections, the Department of Education, the OPH STD program, the OAD, and the Office of Mental Health.

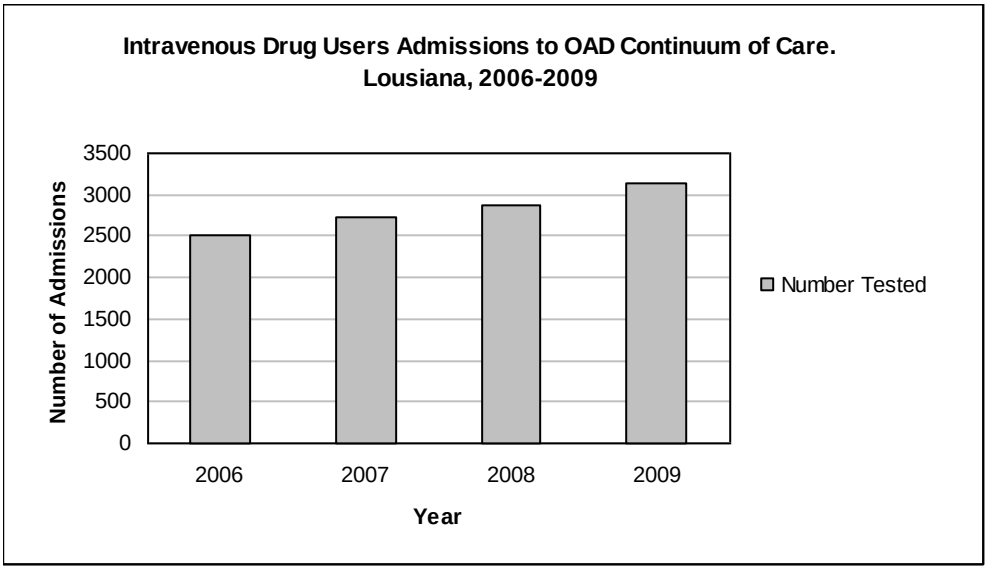
OAD participates in SCPG and two subcommittees, Nominations and Special Needs, at the regional level. The goal of the Group is to identify interventions that will assist in preventing future infections with HIV and STDs among Louisiana's residents. Groups targeted for intervention are racial and ethnic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

A comprehensive statewide HIV prevention program has been developed by statewide and regional community planning groups. This comprehensive plan is used in the development of the cooperative agreement between OPH and the Centers for Disease Control and Prevention regarding the distribution of prevention resources by OPH. The comprehensive plan also provides guidance to other governmental agencies and community-based organizations in planning and implementing HIV prevention activities.

State Fiscal Year (SFY) 2006-SFY 2009 Program Statistics

Intravenous Drug Users (IDUs)

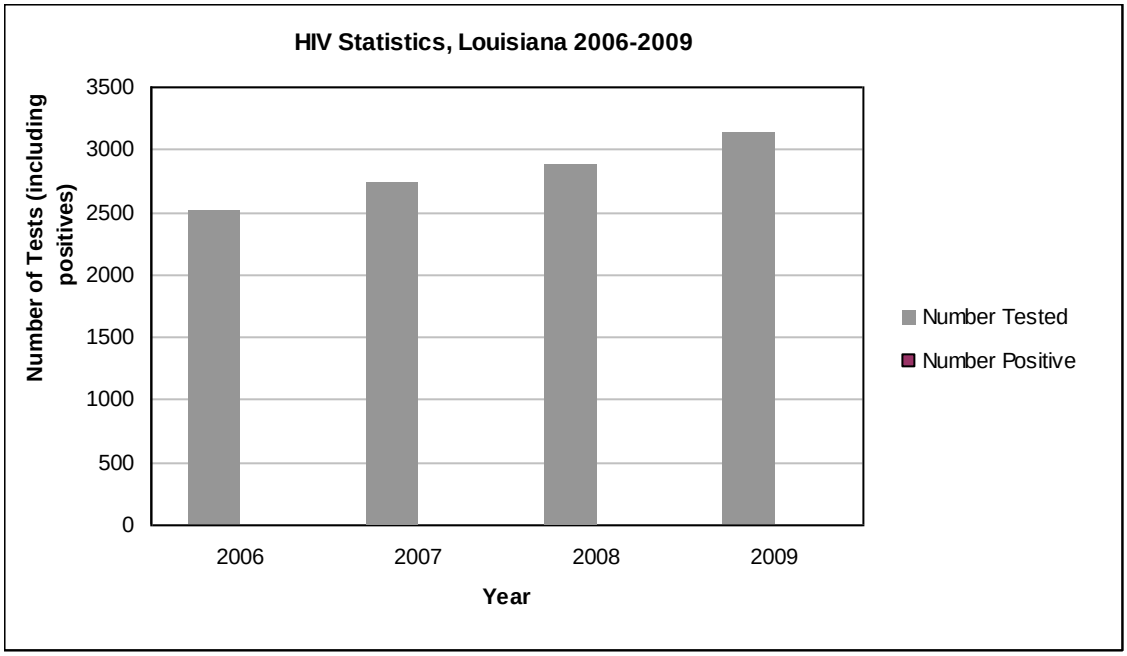
The Block Grant Quarterly Set Aside Report (an internal data collection instrument submitted by Regional Managers and Executive Directors) revealed that the number of admissions for IDU clients has increased an average of 8% each year. OAD admitted 2,502 IDU clients in 2006; 2,729 in 2007; 2,876 in 2008 and 3,135 in 2009. These figures do not include the Jefferson Parish Human Service Authority (JPHSA). OAD anticipates it would admit approximately 2,500 clients to its continuum of care and provide approximately 2,500 services to this population during SFY 2009.



HIV/AIDS

According to the 2006 Louisiana HIV/AIDS Annual Report & Epidemiologic Profile, 14,917 persons in Louisiana were known to be living with HIV/AIDS, of which 7,782 (52%) have progressed to 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. In the most recent CDC HIV/AIDS Surveillance Report (Vol. 18), Louisiana ranked 5th highest in the state AIDS case rates and 12th in the number of AIDS cases reported in 2006. The Baton Rouge Metropolitan Area ranked 4th and the New Orleans Metropolitan area ranked 8th in AIDS case rates in 2006 among the large metropolitan areas in the nation.

During 2005, 979 persons were newly diagnosed with HIV in Louisiana, and in 2006, 1,052 persons were diagnosed. New HIV diagnoses occurred in 58 of Louisiana's 64 parishes in 2006. The Baton Rouge region had both the highest number of new HIV diagnoses and the highest rate of new diagnoses (new cases per 100,000 population) in 2006. Previously, the New Orleans region always had the highest number of new HIV diagnoses. The decrease in new diagnoses in the New Orleans area was primarily due to the large decline in the population following Hurricane Katrina in August 2005. The HIV rate for blacks continues to be disproportionately high at five times that among whites. Although blacks make up only 32% of the state's population, 68% of newly-diagnosed HIV cases and 71% of newly-diagnosed AIDS cases were among that racial group in 2006. Women represented 32% of new HIV diagnoses in 2006. The HIV rate among men has declined since 1997, but the rate among women has remained relatively stable over time.

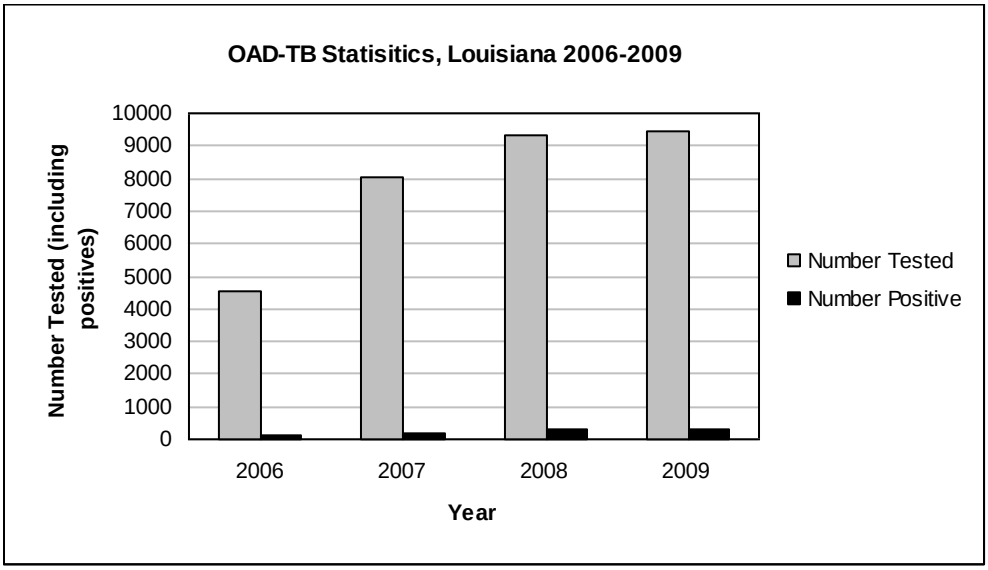


There has been a steady decline in the number of clients who have tested positive for HIV. The percentage continues downward from 2% in 2007 to <1% in 2009. In 2006, OAD tested 2,572 clients,

with 25 (<1%) yielding positive test results. In 2007, OAD tested 3,280 clients for HIV with 80 (2%) tests yielding positive results. In 2008, OAD tested 2,850 clients for HIV, with 32 (1%) yielding positive test results, and in 2009, OAD tested 3,897 clients; 25 (<1%) had positive test results. During SFY 2009, TB-related services were provided to 66,642 clients statewide. Of those services, 3,006 were rendered to HIV positive clients. . This figure does not include the Metropolitan Area Human Service District (MHSD) or the Jefferson Parish Human Services Authority (JPHSA). The data source for these figures is Quarterly Set Aside Reports compiled by Regional Managers and Executive Directors statewide.

Tuberculosis

In 2006, the Office for Addictive Disorders tested 4,567 clients for tuberculosis; of those, 129 (3%) were positive according to OAD Set Aside Reports. OAD tested 8,009 clients in 2007, and there were 203 (2%) positive results. During 2008, OAD tested 9,342 clients for tuberculosis; of those, 280 (3%) were positive. In 2009, OAD tested 9,475 clients for tuberculosis, with 306 (3%) yielding positive results. OAD provided 12,821 tuberculosis services for clients testing positive and served 9,730 TB clients during SFY 2009, according to the Quarterly Set Aside Reports submitted by Regional Managers/Executive Directors.



F. STATEWIDE CHILD DEATH REVIEW PANEL

Data from the state and local Child Death Review Panel (CDRP) investigations allow the injury epidemiologists to perform analyses of unexpected, unintentional deaths of children under age 15 years. These data can drive decision-making for preventive intervention strategies, resource planning, legislation, and special trainings on injury prevention at the state and local levels. Also, these data analyses are reported in the CDRP Annual Report to the Legislature.

Reports

Each year, the Panel submits a mandated Annual Report to the Legislature, which reports the findings from state and local Child Death Review Panels and data analyses performed by injury epidemiologists.

The report serves as an educational tool for state and local leaders and policymakers as well as the general public on the circumstances surrounding unexpected, unintentional child deaths in an effort to decrease the number of all child deaths in the future.

A report on the outcome of this surveillance project is available from the Bureau of Emergency Medical Services (BEMS)/Injury Research and Prevention Program (www.dhh.louisiana.gov/offices/?ID=221).

G. Personal Flotation Devices

The combination of natural bodies of water, swimming pools, and numerous 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 connunction with the Department of Wildlife and Fisheries. The results of the survey showed that only a small percentage of boaters used personal flotation devices. [MMWR, May 25, 2001/50(20); 413-4]

Reports

A report on this survey, accompanied by recommendations, is available from the EMS/Injury Research and Prevention Program (www.dhh.louisiana.gov/offices/?ID=233).

H. Injury Mortality Database

In 2005, the most recent year for which injury mortality data are available, 900 residents of Louisiana died as a result of a motor-vehicle crash (rate 20.0 deaths per 100,000). As is the case nationally, males died at a higher rate than females (male 27.6 per 100,000, or 640 deaths for males, vs. 11.9 per 100,000 or 260 deaths for females). Firearm use resulted in 825 deaths (18.3 per 100,000), while poisonings were responsible for 651 deaths (14.4 per 100,000), in 2005.

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.

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, upon request. Injury mortality information is also available on the Internet through the CDC's Web-based Injury Statistics Query and Reporting System (WISQARS).

I. INJURY MORBIDITY INFORMATION FROM HOSPITAL DISCHARGE DATA

Hospital discharge data allow 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. The 2004 report on nonfatal injury-related hospital discharges is available from the EMS/Injury Research and Prevention Program on the following website (www.dhh.louisiana.gov/offices/?ID=221)

J. 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 was to provide Louisiana adolescents with the opportunity to grow and prosper in a healthy, nurturing, and safe environment. AHI reached 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.

As the needs of the OPH Family Planning Program changed, there was a shift to Adolescent Services. Family Planning Adolescent Health Services consists of:

Parish Health Units

The Family Planning Programprovides reproductive health services to adolescents in 69 Parish Health Units (PHUs) throughout the state on a priority scheduling basis. In 2008, Family Planning served 12,889 adolescents in the PHUs.

Tulane University's Adolescent Drop-In Clinic

The Adolescent Drop-In Clinic has been contracted to provide clinical, informational, educational, social and referral services relating to family planning to clients who desire such services. The clinic will provide services during traditional and non-traditional hours with emphasis on patients 24 years of age and under who are homeless or at risk for homelessness and/or substance abuse The only clinic of its kind in the Greater New Orleans area, The Adolescent Clinic served 1,160 clients in 1,816 visits in 2008, a monthly average of 97 clients and 151 visits.

St. Thomas Community Health Clinic

The St. Thomas Community Health Clinic has recently been contracted to provide family-planning services in the Parish of Orleans, including Adolescent Health Services. Services include contraceptive

methods, pregnancy testing, laboratory testing, examinations, pap smears, STD/HIV testing, counseling, and referral.

K. 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 responds to public health needs across the state related 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 Investigation Programs

- Public Health Assessment/Health Consultation
- Pesticide Exposure Surveillance
- Occupational Health Surveillance
- Disease Cluster Investigations
- Environmental Public Health Tracking
- Health/Fish Consumption Advisories
- 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")

- Pesticide Exposure
- Occupational Health
- Mercury in Fish
- Hazardous Waste Sites

- Indoor Air Quality
- Children's Environmental Health Initiative
- Private Well Education

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

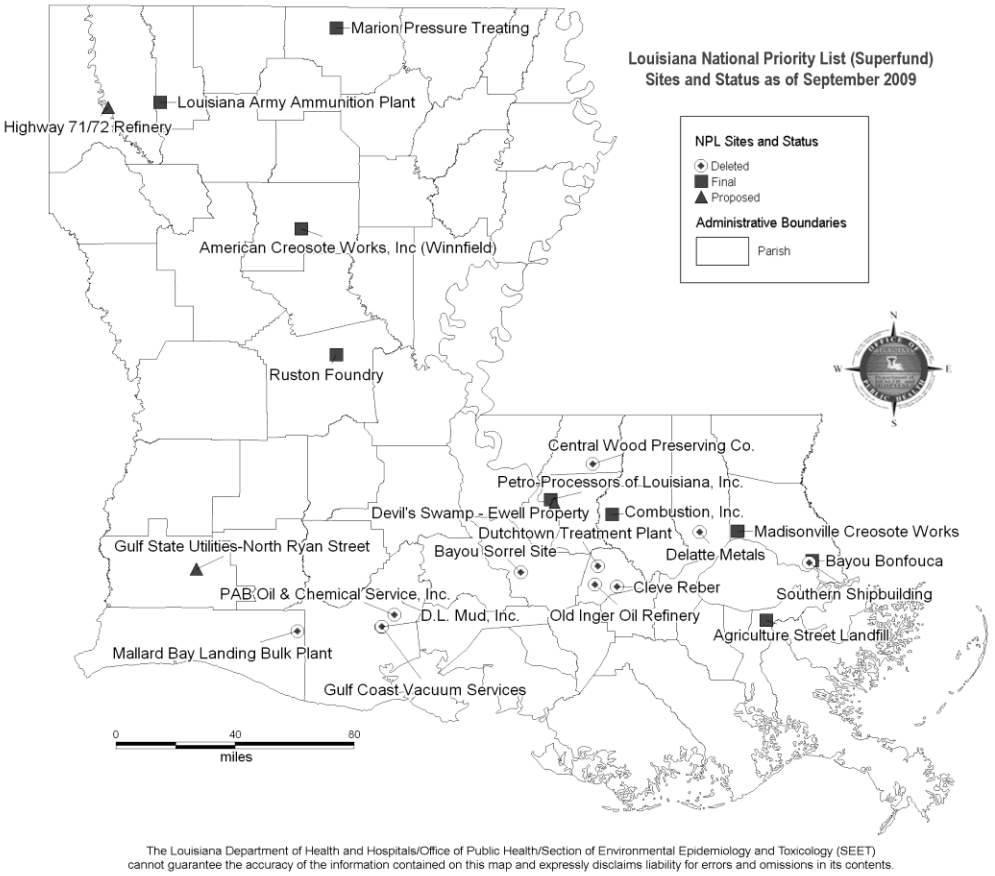
- Environmental Public Health Emergency Preparedness and Response
- Geographical Information System (GIS) Support Services
- Hazardous Substances Emergency Events Surveillance

Epidemiological and Toxicological Investigation Programs

Public Health Assessment/Health Consultation Program

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5752

In collaboration with the Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (CDC/ATSDR), 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 provide health information to communities near 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 2008, there were 164 confirmed inactive and abandoned hazardous waste sites in Louisiana, and 446 similar potential sites, according to the Louisiana Department of Environmental Quality (LDEQ). Currently, SEET is evaluating the public health impact of several of these sites. The potential for further involvement and/or work with additional sites is very likely.



Caddo Parish:

The Texaco Inc. site is located on 260 acres of land within the city limits of Shreveport, Louisiana. The property is currently called Anderson Island, and includes residential neighborhoods, a park, and commercial properties. Texaco operated as a topping plant and tank farm from approximately 1911 to 1939, distilling fuels from crude oil. There were forty-two 37,500-barrel storage tanks at this facility. From 1940 to 1945, Texaco leased thirty acres of property to operate a pipeline facility. In the early 1950s, residential development of the property began and was completed by 1980. In August 2007, LDEQ collected fish samples from three of the six bayous circumscribing the Anderson Island site. In the summer of 2008, LDHH conducted an evaluation of the data to determine if the fish samples posed a public health hazard. The final health consultation, *Anderson Island Site*, was completed in the winter of 2008.

Orleans Parish:

In response to public concern over arsenic concentrations in school yards, the LDEQ completed a soil sampling and analysis of outdoor play areas at four elementary schools within the New Orleans Recovery

School District. On August 14, 2007, LDEQ collected soil samples at Craig Elementary, Drew Elementary, Dibert Elementary, and McDonogh Elementary #42. Eight surface soil samples and one duplicate sample from outdoor play areas were collected and analyzed for arsenic in each of the four school yards. In the spring of 2008, LDHH evaluated the soil data to determine if contact with the soil would pose a public health hazard. The final letter health consultation, *Arsenic in Schools,* was completed in 2008.

The Thompson-Hayward facility located at 7700 Earhart Boulevard in New Orleans was involved in the formulation of pesticide products; the bagging of soda ash; and warehousing and distribution of dry cleaning fluids, commercial pest control products, and other industrial chemicals. In 1987, contaminants related to dry-cleaning processes were detected in municipal storm sewers flowing from the site, and pesticide and dry cleaning contaminants were detected in on-site soils. Remedial activities were completed in August 2007, and the site has been filled with clean soil and seeded with grass. Future property owners are required to either continue to use the site in an industrial capacity or must reevaluate the onsite media before converting the property for residential use. At the request of LDEQ, SEET reviewed confirmatory samples collected from the site to determine whether any residual contaminants in the excavated areas pose potential human health hazards. The final letter health consultation, *Evaluation of Post-Remediation Soil Samples, Thompson-Hayward Facility*, was completed in 2008.

Jefferson/Orleans/St. John the Baptist Parishes:

In the Ffll of 2008, LDHH completed a Health Statistics Review in which cancer incidence data from the years 1988-2002 were analyzed for all four of the Louisiana facilities that have been identified as receiving Libby, Montana vermiculite: Orleans Parish zip code 70117, Jefferson Parish zip code 70121, Saint John the Baptist Parish zip code 70084, and Orleans Parish zip code 70126. All sites were evaluated at the zip code level. The cancer incidence data were provided by the Louisiana Tumor Registry. Standardized Incidence Ratios (SIRs) were computed to compare the observed number of cases to the expected number of cases based on incidence rates for the State of Louisiana as a whole. Residents of these communities were provided with follow-up health education.

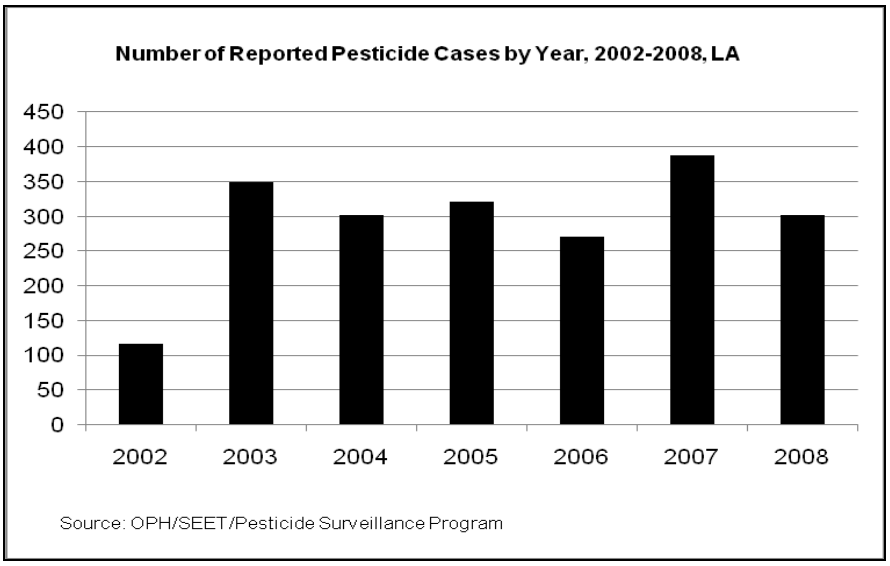
St. Bernard Parish:

Residents of Chalmette, in St. Bernard Parish have submitted numerous odor complaints to LDEQ about air quality in their neighborhoods. In order to address these public concerns, LDEQ and the Chalmette Refining, LLC plant instituted the St. Bernard Parish Enhanced Ambient Monitoring Program to evaluate ambient air quality in the area and to identify potential sources of pollutant emissions. Although the air monitoring performed to date does not indicate that the emissions detected pose long-term health hazards, residents of the Chalmette Vista neighborhood continue to be concerned that the monitors in place are not situated to detect contaminants carried to the surrounding communities by the prevailing winds. Therefore, the Louisiana Bucket Brigade (LBB) working with volunteers from St.

Bernard Parish developed an independent database of ambient air sampling data. This joint project with the St. Bernard Citizens for Environmental Quality is called the Chalmette Air Monitoring Project. Members of the Chalmette Air Monitoring Project requested that SEET assess the air quality data collected by the LBB and compare the results to data collected by the LDEQ. The final health consultation, *Ambient Air Quality Assessment for the Chalmette Air Monitoring Project*, was completed in 2008.

Pesticide Exposure Surveillance http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6679

The Pesticide Exposure Surveillance Program is a statewide program that aims to reduce pesticide illnesses and injuries in Louisiana. The program, a collaboration with CDC's National Institute of Occupational Safety and Health (NIOSH), obtains reports of pesticide exposure from various sources, investigates and evaluates pesticide exposure incidents, develops data for evidence-based public health actions to reduce pesticide exposures among residents and workers, and disseminates preventive strategies and focused interventions that can be used in the variety of settings where pesticide exposure occurs. Pesticide exposure cases are obtained from three major sources: the Louisiana Department of Agriculture and Forestry (LDAF), the Louisiana Poison Control Center (LAPCC), and laboratory reports. In 2006, a change in the Louisiana Sanitary Code mandated that all confirmed or suspected cases of pesticide poisoning must be reported by healthcare providers to LDHH within five business days. Investigations involve the collection and review of environmental and health data relevant to the pesticide exposure incident.



Louisiana's Registry of Pesticide Hypersensitive Individuals:

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. A review of all registry applicants was done by the Pesticide Surveillance Program to verify contact information.

Childhood Pesticide Poisonings:

http://www.dhh.louisiana.gov/offices/miscdocs/docs-249/LMR/2009/marapr09.pdf

Pesticide surveillance data indicate that children are at high risk of pesticide exposure. During a 5-year period (2003-2007), 250 children age 6 years and under with pesticide poisoning were investigated. Almost half of these cases were treated in an emergency room or hospitalized; there was one fatality, and 7 cases had severe, potentially life threatening exposures. Most of the exposures occurred when a child accidentally ingested or sprayed himself with a pesticide. These findings were published in the Louisiana Morbidity Report and disseminated to healthcare providers and public health officials. An educational project targeting households with small children is being planned with the Childhood Lead Poisoning Prevention Program.

Bug Bombs:

http://www.dhh.louisiana.gov/offices/publications/pubs-205/BugBomb_E07L_Louisiana.pdf

A review of illness and injuries related to total release foggers ("bug bombs") resulted in a study of 466 fogger exposure cases from eight states (including Louisiana) between 2001 and 2006. Twenty-two percent of the cases were from Louisiana. Most individuals had respiratory problems such as cough, shortness of breath and wheezing. In one case, a child was burned when a fogger exploded after it was placed under a stove with a lit pilot light. Foggers are often used in low-income neighborhoods rather than safer alternatives such as bait stations, gels and other less toxic methods. To educate homeowners about the risk of foggers, a pamphlet was developed in English and Spanish and widely distributed.

Pesticide Hospitalizations:

An evaluation of pesticide poisoning cases that resulted in hospitalization was conducted for the ten- year period 1998 to 2007. Significant findings include the elevated rate of hospitalizations among young children and men, and the large proportion of self-inflicted poisonings. The elevated rate among young children reinforces the importance of residential pesticide poisoning as an important environmental concern for this age group. The article was accepted for publication by Public Health Reports.

Occupational Health Surveillance

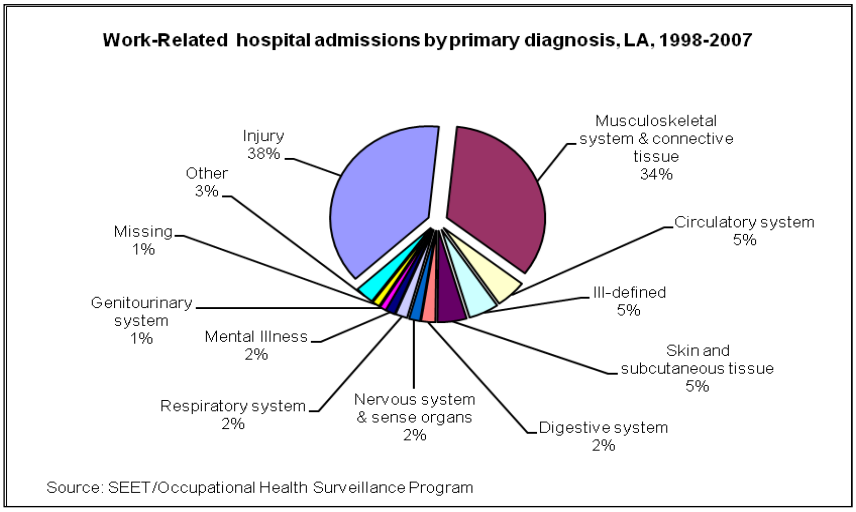
http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6737

The goal of the Occupational Health Surveillance Program, a collaboration with CDC/NIOSH, is to promote the health, safety, and quality of life of people working in Louisiana. Program activities include the following:

- Collect, analyze, interpret, and disseminate information about work-related injuries, illnesses, and hazards in Louisiana.
- Educate workers, employers, and healthcare providers about occupational health and safety issues.
- Use surveillance information to guide the development of prevention and outreach activities.

Work-Related Hospitalizations:

An analysis of hospitalization data for a ten-year period (1998-2007) was conducted. Injuries accounted for almost 40% of the hospitalizations and rates varied significantly by parish. Overall, fractures were the most common injury, followed by open wounds. More in-depth analysis is needed to link specific industries or occupations with the injuries. Musculoskeletal disorders (primarily back pain) accounted for 34% of the admissions.



Heavy Metal Surveillance:

http://www.dhh.louisiana.gov/offices/publications/pubs-205/LMR_julyaug08_adultpbarticle.pdf

The Occupational Health Program is the state program responsible for obtaining and evaluating several reportable conditions: heavy metal (arsenic, cadmium, lead, and mercury) and carbon monoxide. The Occupational Health Program electronically receives approximately 1,000 laboratory records per month. Records are entered into the program's surveillance system which permits ongoing and timely identification of elevated results among tested individuals, as well as identification of their exposure sources. This information identifies jobs and situations where workers may be at risk for exposure, which

directs targeted education and other preventive measures. Analysis of adult blood lead data revealed that construction-related trades accounts for a large percentage of cases and that younger, male workers are at greatest risk. Surveillance data also reveal an increase among Hispanic workers, particularly day laborers involved in demolition, renovation, and construction activities in the New Orleans area. The Program has partnered with OSHA to investigate worksites with high number of elevated cases. Surveillance findings were published in the Louisiana Morbidity Report.

Surveillance of Hospitalizations and Deaths during Emergency Events:

Following Hurricanes Ike and Gustav, a review was conducted to assess various data collection systems for use during an emergency event and summarize hurricane-related reports of occupational illnesses, injuries, and fatalities. The ensuing report (Conducting Occupational Health Surveillance during Emergency Events) resulted in a partnership with LDHH/OPH's Infectious Disease Program and Injury Prevention Program to establish an active emergency room surveillance system during emergency events. The surveillance system would capture both work-related and non-work-related visits.

Poison Control Surveillance:

Chemical calls referred from the Poison Control Center during a 2-year period (2004-2006) were analyzed to determine commonly occurring substances and occupations. The surveillance system highlighted the frequency of metal fume fever exposures. Almost all of these exposures occurred as a result of welding often in an enclosed space (such as inside a construction pipe) and frequently without the use of personal protective equipment. Eighty percent of the cases (21) occurred in southern Louisiana, reflective of the dominant industries in that part of the state (e.g., shipbuilding/repair, construction, oil rig building/maintenance). An article describing the results of the analysis and a description of metal fume fever's history, pathogenesis, clinical presentation, regulatory guidelines, and prevention recommendations was accepted for publication in the Journal of the Louisiana State Medical Society.

Disease Cluster Investigations

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5721

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 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. In 2008, SEET was notified about or responded to approximately 12 reports of disease clusters throughout the state. SEET often participates in phone consultations, community meetings, and other public events to address the residents' disease cluster concerns. The program staff is currently developing a user friendly publication on cancer to provide to the residents of Louisiana.

Environmental Public Health Tracking

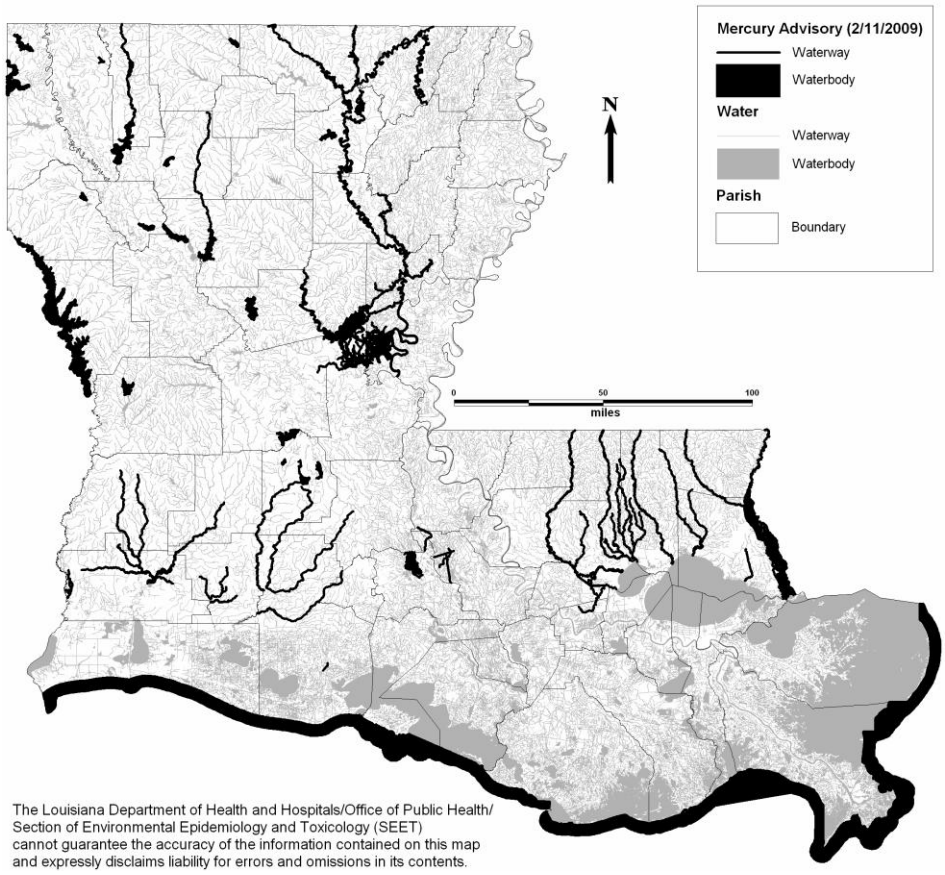
http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6502

In 2009, SEET obtained a grant from the CDC to implement a statewide Environmental Public Health Tracking Network. For decades, the United States has faced a fundamental gap in knowing how environmental contaminants affect people's health. In collaboration with the CDC is working to close this gap by improving surveillance through the Environmental Public Health Tracking Network. The Tracking Network is a dynamic web-based tool that tracks and reports environmental hazards and the health problems that may be related to them. The Tracking Network is unique because, for the first time, environmental data and public health data may be generated together from one place. This allows scientists, health professionals, policymakers, and members of the public to see where these hazards and health problems are occurring and how they are changing over time. Scientists will be better able to assess the connections between the environment and its effect on health. Public health professionals now can easily assess unusual trends and events to determine which communities may be at risk. Parents can learn about conditions such as asthma or the presence of contaminants in the air in areas where they live and take action to protect their children, and elected officials can see their community's air quality trends to determine if actions taken to reduce pollution levels are working.

Health/Fish Consumption Advisories

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5749

SEET issues fish consumption advisories in consultation with state environmental agencies when chemicals in sport fish reach levels that could potentially harm the public. 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 compound present in fish tissue, can cause birth defects and neurological problems when present at high levels. LDEQ samples fish from water bodies that are selected based on water quality, 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 500 water bodies tested to date in Louisiana, 48 health advisories for fish containing mercury have been issued. These advisories cover at least 76 freshwater bodies in or traversing 42 parishes, and include an advisory on king mackerel, cobia, greater amberjack, and blackfin tuna for parishes along the Gulf of Mexico.



Population-based Blood Mercury Services:

One of the most common sources of mercury exposure is by eating fish containing methylmercury. Because fish is an important dietary component for Louisiana residents, mercury toxicity due to the consumption of fish under advisory is a legitimate health concern. In 1998, 313 individuals from selected parishes in Louisiana participated in a blood mercury screening. Eighty-five percent of the study participants were within an expected range of mercury blood levels. The remaining 15% were advised to decrease fish consumption and, in some cases, were referred to their physician. The 1998 blood mercury services screening revealed that a majority of the participants with elevated blood mercury levels were from either Ouachita or Morehouse Parish. 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-six individuals from Morehouse, Union, and Ouachita parishes participated in the screenings. Fifty-five percent of those participants had a blood mercury level within the expected range. The remaining 45% were advised to decrease fish consumption and, in some cases, were referred to their physician. In June 2006, SEET amended the Louisiana Sanitary Code's list of reportable diseases and conditions to include heavy metals poisoning. Laboratory results for mercury, arsenic, lead, and cadmium are required under Louisiana state law to be reported to OPH by all laboratories and other healthcare providers. SEET has designed a database to track laboratory tests, regardless of results, for occupational and non-occupational exposures.

Since mandatory reporting was initiated in 2006, over 2,000 records have been received by OPH related to mercury exposure. A review of 2,062 blood mercury test results reported to SEET between January 1, 2007 and July 2, 2009 was conducted. Blood mercury levels were reported for approximately 5 out of every 10,000 people in Louisiana. Approximately 5% of individuals tested were above the national background levels (≥3 micrograms per liter (µg/L) for children and ≥6 µg/L for adults) and an estimated 2% met CDC's clinical case definition for mercury poisoning (>10 µg/L). These findings were published in the Louisiana Morbidity Report and disseminated to healthcare providers and public health officials (http://www.dhh.louisiana.gov/offices/miscdocs/docs-249/LMR/2008/novdec08.pdf).

Chemical Event Exposure Assessment

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6704

SEET responds to requests for information and investigations from the public, government agencies, and legislators regarding health effects of known and suspected toxic substances in the environment. SEET often provides health and exposure information and makes referrals. SEET also responds to emergencies, emerging issues, and other environmental public health concerns raised by individuals or communities. In some cases, these inquiries develop into comprehensive health investigations involving interagency workgroups.

Chinese Drywall:

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=8921

In 2009, a new challenge emerged for Louisiana residents still recovering from the ravages of recent hurricanes. In the process of renovating storm damages, many Louisiana residents used imported drywall. The drywall in combination with the humid Louisiana environment resulted in a combination of chemicals that are still being assessed for harmful effects and property damages. SEET is working with various federal agencies such as the Centers for Disease Control and Prevention, Consumer Product Safety Commission, Environmental Protection Agency, Agency for Toxic Substances & Disease Registry, and other states' health departments where this drywall was imported to help characterize the issue. A phone survey was administered to 477 Louisiana households, with responses compiled by SEET to document the types of health complaints and home conditions reported by people living in affected homes. As of October 2009, SEET's indoor-air quality (IAQ) hotline has received over 900 telephone calls from Louisiana residents concerned about foreign drywall. The survey instrument includes the Florida Department of Health-developed case definition to identify homes experiencing adverse effects potentially due to imported drywall.

Tools for Schools:

In 2007, SEET received in-kind funds from the Louisiana Asthma Management and Prevention Program (LAMP) to assist in developing a pilot intervention in two public schools using the EPA: Indoor Air Quality Tools for Schools program. The two schools (one urban and one rural) also had indoor air quality testing (Carbon Dioxide, Carbon Monoxide, Percent Relative Humidity, Temperature, and Particulate) performed

on classrooms that were shown to have IAQ problems through the pre-intervention checklists collected from teachers and the schools' administrations. Through the resulting recommendation report and the data collected, a plan of corrective actions was developed, prioritized, and delivered to the administrations of each of the schools involved. This initial intervention led to inexpensive, campus-based solutions to each school's IAQ issues.

L. 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 the VITAL RECORDS REGISTRY WITHIN THE DHH-OPH CENTER FOR RECORDS & STATISTICS (CRS).

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 CRS'S HEALTH STATISTICS (HS) program is to analyze vital statistics data and distribute findings to government programs, community organizations, universities, and interested members of the general public. The program 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. HS is also responsible for compiling information from the different DHH programs to create the legislatively mandated annual *Louisiana Health Report Card*.

2007 Statistics

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

Reports

Reports and data tables published by HS, 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.dhh.louisiana.gov/offices/?ID=275
HS 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.

M. 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 charged 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 and the antecedents of death.

In prioritizing the mandates of the CLEARINGHOUSE (which is housed within HS), the OFFICE OF PUBLIC HEALTH (OPH) 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. 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.

Act 410 was further amended in June 2008 with passage of Senate Bill 287, which the Governor signed into law as Act 537 that same month. The new legislation grants the Secretary of DHH the authority to appoint the members of the Health Data Panel among "health care purchasers, hospitals and other service providers, consumer and patient advocacy groups, quality improvement and health information technology groups, physicians, and any other individuals or groups as deemed necessary by the secretary." These members will serve the Secretary as an advisory council. In addition, the Panel "shall represent all interests involved in the collection and publication of provider and health plan specific cost, quality, and performance data elements."

Act 537 also mandates that "[a]ll state agencies and health professional licensing, certification, or registration boards and commissions, which collect, maintain, or distribute health data, shall provide to [DHH] such data as are necessary for the department to carry out its responsibilities as defined in" the statute. Furthermore, "[a]ll health care providers licensed by the state, including but not limited to hospitals, outpatient surgical facilities, and outpatient clinical facilities" will be required to submit information as stipulated by DHH rules and regulations promulgated by virtue of the Act.

While the amended statute explicitly assigns DHH the responsibility over the collection and dissemination of healthcare and health-plan data, the CLEARINGHOUSE anticipates a continued, supportive role on behalf of the Department and its Secretary.

History

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 and quarterly thereafter, from January 1999.

With the passage of Act 537 of 2008, the 1998 LAHIDD Rule will eventually be revised and superseded by a new Rule which will provide procedures and guidelines for the reporting and handling of LAHIDD and additional health-care/health-plan databases yet to be established with the assistance of the Health Data Panel.

Purpose

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 help DHH/OPH 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 System). Linking LAHIDD data to these other population-based databases will enable the development of effective prevention policies targeted at at-risk populations. For DHH/OPH programs such as Tuberculosis and HIV/AIDS, 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 healthcare 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 healthcare services as well as the underlying patterns of disease that necessitate these services. Through LAHIDD, the 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 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.

The CLEARINGHOUSE has completed analysis of LAHIDD data for the years 1998 to 2008 and released six summary reports so far which have been made available in hard-copy and/or electronic online versions. Hard copies are distributed annually to selected libraries and DHH offices and to all members of the Louisiana Legislature. Finalization of the 2008 data file is in progress, while the data for 2009 have been received and 2010 data are being collected. Beginning with 2003 data, a *LAHIDD at a Glance* fact card was produced, while a *LAHIDD at a Glance* poster was introduced with 2005 data; subsequent versions of both the fact card and the poster are being released annually.

It is the goal of the CLEARINGHOUSE that, along with LAHIDD, the new databases to be created by virtue of Act 537 of 2008 will provide a more complete picture of the health of Louisiana residents and especially help address the urgent concerns regarding the increasing threat of bioterrorism.

LAHIDD Summary

The following graph and tables present a brief summary of 2007 LAHIDD data. For a more comprehensive summary, see the online version of the *2007 LAHIDD Report* in the "Vital Statistics Publications" page of the CHS website (http://www.dhh.louisiana.gov/offices/?ID=275).

Number of Discharges by Sex & Age Group (in years), LA 2007							
Gender	**<1**	**12-Jan**	**13-17**	**18-44**	**45-64**	**65-84**	**85 &+**
Female	30583	9181	5903	101,805	61,299	74,695	22,686
Male	32924	11262	3209	32,169	60.688	60,521	10,426
Unknown	13	0	0	0	2	1	
Total	**63,520**	**20,443**	**9,112**	**133,974**	**121,989**	**135,217**	**33,113**

Invalid Values: Female = 2 , Male = 0 , Missing = 0

Chart 1. Hospital Discharges by Age Group (in years) Louisiana, 2007

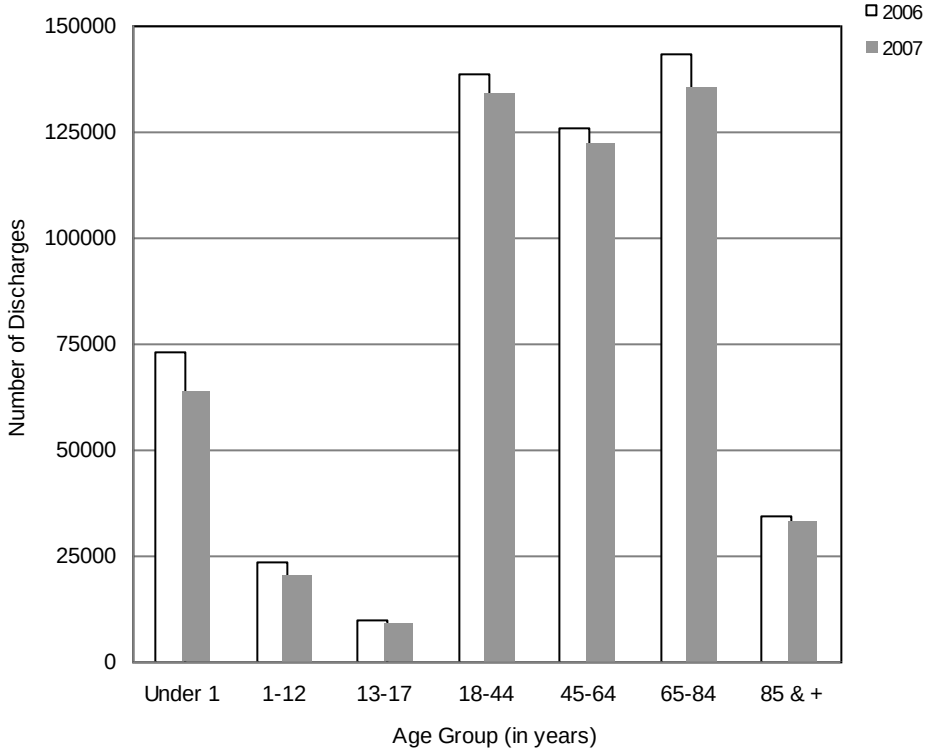
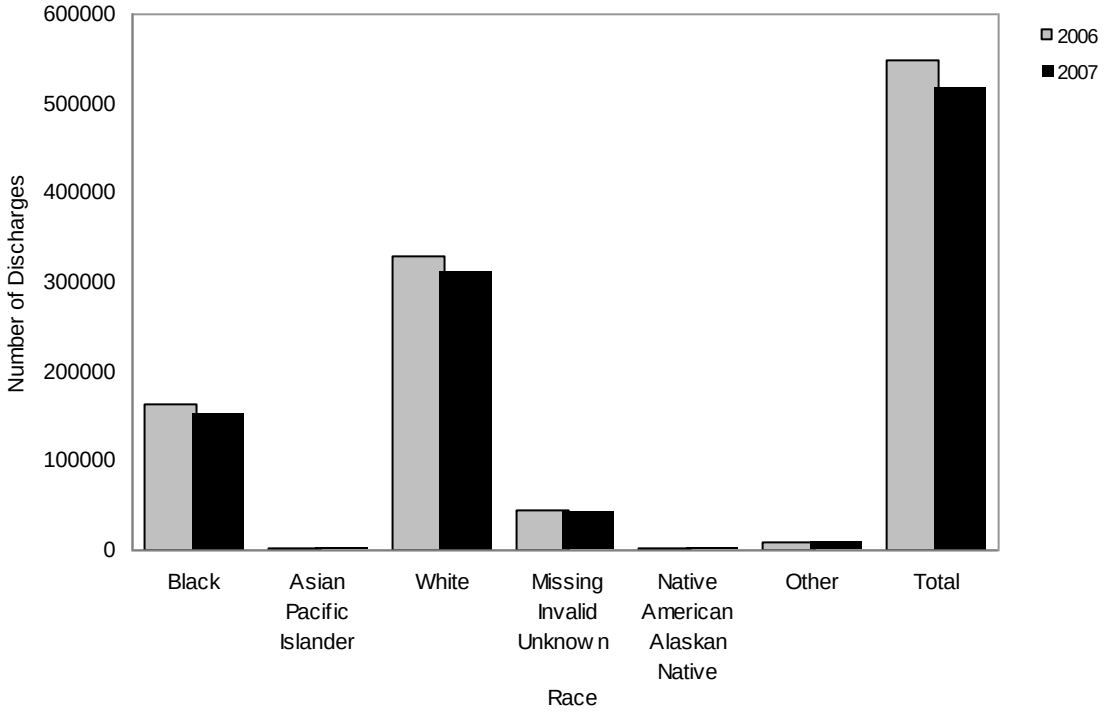


Chart 3. Number of Discharges by Race
Louisiana, 2006-2007



Top 15 Principal Diagnoses by Discharges. Louisiana - 2007					
	Principal Diagnosis	**Discharges**	**Rate**	**LOS**	**Charges**
1	Liveborn	51,286	119.46	3.8	9,465.60
2	Pneumonia (except that caused by tuberculosis or sexually transmitted diseases	19,620	45.70	5.3	20,919.70
3	Congestive heart failure, nonhypertensive	18,175	42.33	5.1	25,503.53
4	Coronary atherosclerosis and other heart disease	15,698	36.56	3.4	47,555.47
5	Skin and subcutaneous tissue infections	11,534	26.87	4.3	13,060.06
6	Other complications of birth, puerperium affecting management of mother	10,101	23.53	2.9	9,673.73
7	Nonspecific chest pain	9,761	22.74	2.1	13,370.32
8	Cardiac dysrhythmias	9,555	22.26	3.5	24,110.26
9	Urinary tract infections	9,386	21.86	4.9	15,824.55
10	Other complications of pregnancy	9,281	21.62	2.5	8,056.15
11	Septicemia (except in labor)	9091	21.18	8.6	4,2813.09
12	Chronic obstructive pulmonary disease and bronchiectasis	8375	19.51	4.8	19,533.87
13	Previous C-section	8333	19.41	2.8	10,855.27
14	Acute cerebrovascular disease	7659	17.84	6.1	30,3408.55
15	Rehabilitation care, fitting of prostheses, and adjustment of devices	7288	16.98	14.4	38,092.21

Disch=No. of Discharges;
Rate per 10,000 LA population (4,293,204), U.S. Census Bureau estimate 2007;
LOS=Average Length of Stay in days;
Charges=Average Charges in dollars;
Total Discharges of 2007 = 517,370

Top 15 Principal Procedures by Discharges. Louisiana - 2007					
	Principal Procedures	**Discharges**	**Rate**	**LOS**	**Charges**
1	Low Cervical Cesarean Section	21,068	49.07	3.4	12273
2	Other Manually Assisted Delivery	15,371	39.16	2.3	7327
3	Circumcision	12,047	35.80	3.0	4776
4	Prophylatic Administration of Vaccine Against Other Diseases Including Anthrax+	9,981	28.06	2.7	3937
5	Transfusion of Packed Cells	9,705	23.25	5.5	21488
6	Left Heart Cardiac Catheterization	7,491	22.61	3.4	27605
7	Repair of Other Current Obsteric Laceration Including Pelvic Floor, Perineum, Vulva	7,290	17.45	2.3	7538
8	Venous Catheterization Not Elsewhere Classified	7,207	16.98	9.5	6618
9	Esophagogastroduodenoscopy [EGD] With Closed Biopsy	6,758	16.79	5.2	22583
10	Total Knee Replacement	5,567	15.74	3.9	42713
11	Hemodialysis	4937	12.97	5.4	23172
12	Laparascopic Cholecystectomy	4302	11.50	4.3	29909
13	Other Incision With Drainage Of Skin And Subcantaneous Tissue*	4059	10.02	4.2	13899
14	Other Endoscopy Of Small Intestine	3683	9.45	5.7	24084
15	Episiotomy	3533	49.07	2.3	7471

Disch=Total No. of Discharges;
Rate per 10,000 LA population (4,293,204), U.S. Census Bureau estimate 2006;
LOS=Average Length of Stay in days; Avg. $ = Average Charges in dollars
+ Against Other Diseases Including Anthrax.
** ST=Subcutaneous Tissue.*

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 MCH 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 2009, 1,400 pregnant women initiated or received comprehensive prenatal care, while 55,157 women received prenatal, postnatal, and nutrition counseling and education in conjunction with the Women, Infants, and Children (WIC) Program services. Over 13,800 women came to the health units for pregnancy tests. The total number of maternity-related visits was 126,039. The Maternity Program also provides prenatal care in areas of the state with access problems through contracts with the Louisiana State University Health Sciences Center and Community Health Centers. Through these contracts, 556 women received prenatal and postpartum care in 2,623 visits. Over 440 children received 495 comprehensive health screenings, and 19,414 children received 24,197 health counseling and follow-up services in parish health units statewide.

Infant and Child Mortality

Feto-Infant Mortality Reduction Reviews (FIMR) and Child Death Review Panels (CDRP) have been established at the state level and in each public health region to examine the causes of fetal and infant deaths as well as unexpected, unintentional deaths of children under age 15 years, including sudden

infant death syndrome, through their respective formal review processes. Based on review findings, health interventions and injury prevention strategies are made for implementation at both the state and local/community levels. MCH Child Safety Coordinators address prevention of unintentional injuries, which are the leading causes of death among children. SIDS risk reduction, safe infant sleep environments, and such topics as motor vehicle, pedestrian, fire, bicycle, playground, firearm, and water safety are addressed by the safety coordinators through education and public awareness events.

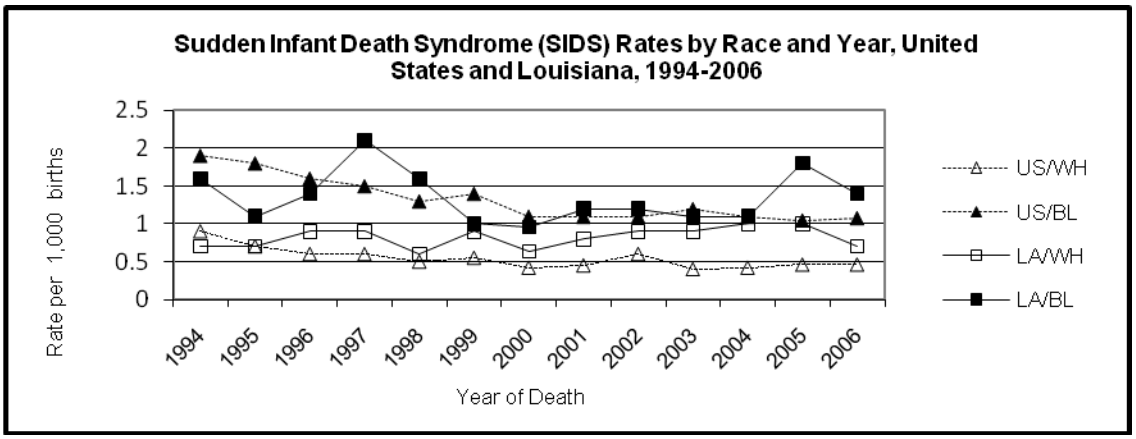
SUDDEN INFANT DEATH SYNDROME (SIDS)

In 2006, Sudden Infant Death Syndrome (SIDS) was among the leading causes of death for infants under 12 months of age, with a death rate of 0.9 per 1,000 live births in Louisiana. The United States' SIDS death rate per 1,000 live births was 0.54 in 2006. Louisiana's SIDS rates have consistently been higher than that of the United States. There continues to be a disparity between SIDS rates by race, both at the national level and in Louisiana, with blacks more likely to die from SIDS than whites. In 2006, Louisiana's SIDS rate by race per 1000 live births was 1.4 for blacks and 0.7 for whites.

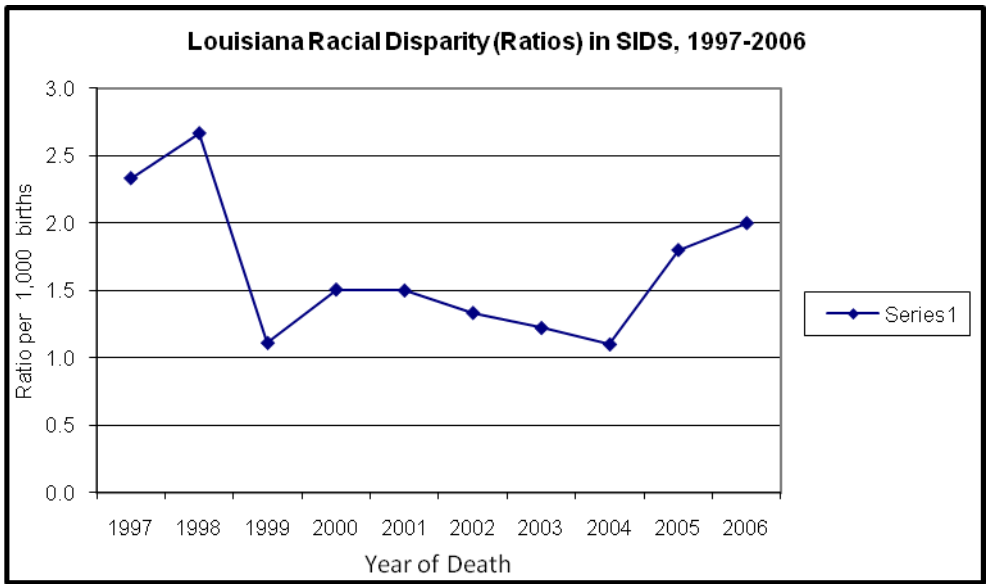
The DHH-OPH SIDS Risk Reduction and Safe Sleep Program is designed to increase public awareness and provide education on reducing the risk of SIDS and providing a safe sleep environment. The SIDS Program continues its social marketing campaign aimed at high risk areas of the state to encourage parents and caregivers of infants to follow the American Academy of Pediatrics (AAP) guidelines on reducing the risk of SIDS and promoting a safe sleep environment. Current campaign efforts continue to target racial disparities through media materials and media placement to reach target populations based on formative, qualitative, and market research. Educational materials promoting the new revised 2005 AAP guidelines regarding SIDS risk-reduction continue to be distributed to populations at risk. These materials include: flyers that provide basic SIDS information; posters that promote back sleeping; and collateral items. 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:

- Developed new media to educate the community on SIDS risk reduction.
- Provided professional education training to childcare providers, nurses, and other healthcare providers.
- Distributed educational materials on SIDS risk-reduction to physicians, childcare providers, and community groups statewide.
- Collaborated with the MCH Fetal and Infant Mortality Reduction Coordinators and MCH Child Safety Coordinators in regional risk-reduction activities such as educational summits, regional public relations campaign, educational programs, and health fairs.
- Provided technical assistance for the development of policy and/or regulatory standards related to safe sleep environment in licensed childcare.

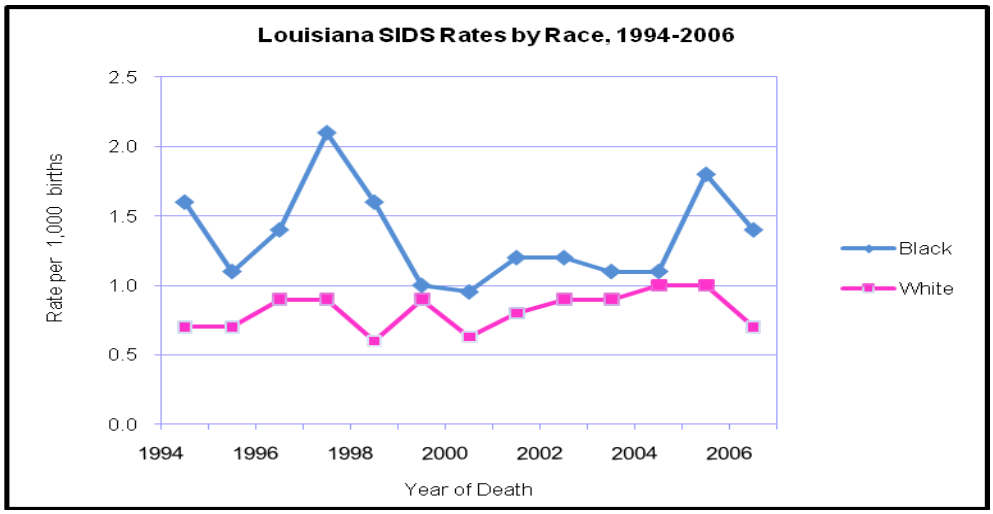
In addition to public and professional education and grief counseling, standard data are collected on each case with the hope of identifying preventable circumstances that are associated with unexpected deaths in infancy. Cases are assessed for SIDS risk factors, ethnic-racial trends, and geography-specific trends. A summit has been organized to educate the public on data trends regarding SIDS and sleep practices and identify ways to address modifiable risk factors associated with SIDS. The Safe Sleep Summit was scheduled for fall 2009.



*SOURCE: National Center for Vital Statistics and
Louisiana Office of Public Health-State Center for Health Statistics



*SOURCE: Louisiana Office of Public Health-State Center for Health Statistics



*SOURCE: Louisiana Office of Public Health-State Center for Health Statistics

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 CENTER FOR RECORDS AND STATISTICS, and the TULANE UNIVERSITY SCHOOL OF PUBLIC HEALTH AND TROPICAL MEDICINE provide technical assistance to LaPRAMS. CDC, along with the MATERNAL AND CHILD HEALTH program, provides funding for the project.

LaPRAMS data are collected from a representative random sample of new mothers through mail surveys and telephone interviews. About 3-4% of Louisiana women who have had a recent live birth are randomly selected to participate each year. Data collection was initiated in October 1997, and more than 20,000 women have received the LaPRAMS questionnaire since that time. Because LaPRAMS is based on a representative sample, the data collected can be generalized to represent the whole State of Louisiana for each year except 2005, when Hurricanes Katrina and Rita disrupted data collection. 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; sources of prenatal care and payment of delivery; birth-control use before and after pregnancy; complications during pregnancy; and postpartum maternal experiences and behaviors.

Data from LaPRAMS are 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 are used

to develop programs designed to identify high-risk pregnancies. In addition, LaPRAMS data continue to enhance the understanding of maternal behaviors and the relationship between these behaviors and adverse pregnancy outcomes, such as low birth weight and infant mortality.

Results

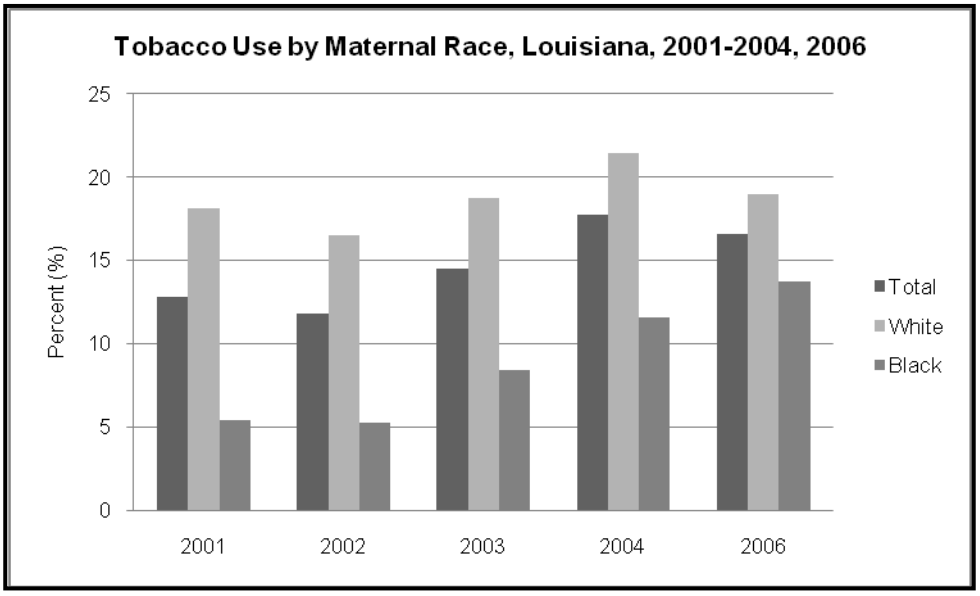
The following are selected findings based on LaPRAMS data.

- ***Preconception Care:***

  Preconception health care has been identified as a priority need for Maternal and Child Health in Louisiana. LaPRAMS data indicate that in 2006, only 26.7% of women reported that their doctor or healthcare worker talked with them about how to prepare for a healthy pregnancy and baby before they got pregnant.

- ***Tobacco Use (Cigarette smoking) during pregnancy*:**

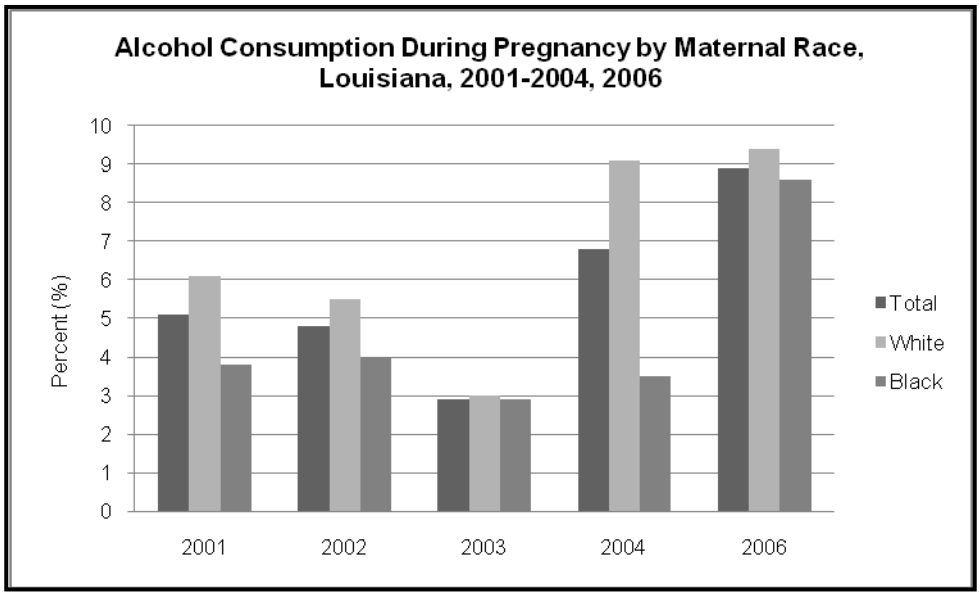
  The *Healthy Louisiana 2010* target for cigarette smoking among pregnant women is 1%. In 2006, 16.6% of Louisiana women reported smoking in the last 3 months of pregnancy, compared to 12% in 2000. Some of the factors associated with cigarette smoking in the last 3 months of pregnancy from 2000 to 2006 included white maternal race, maternal age over 20 years, being unmarried, not continuing education after high school, and having experienced stressful life events, such as moving, being in a physical fight, or having a lot of unpaid bills.



*SOURCE: LaPRAMS 2001-2004, 2006

- ***Alcohol use during pregnancy*:**

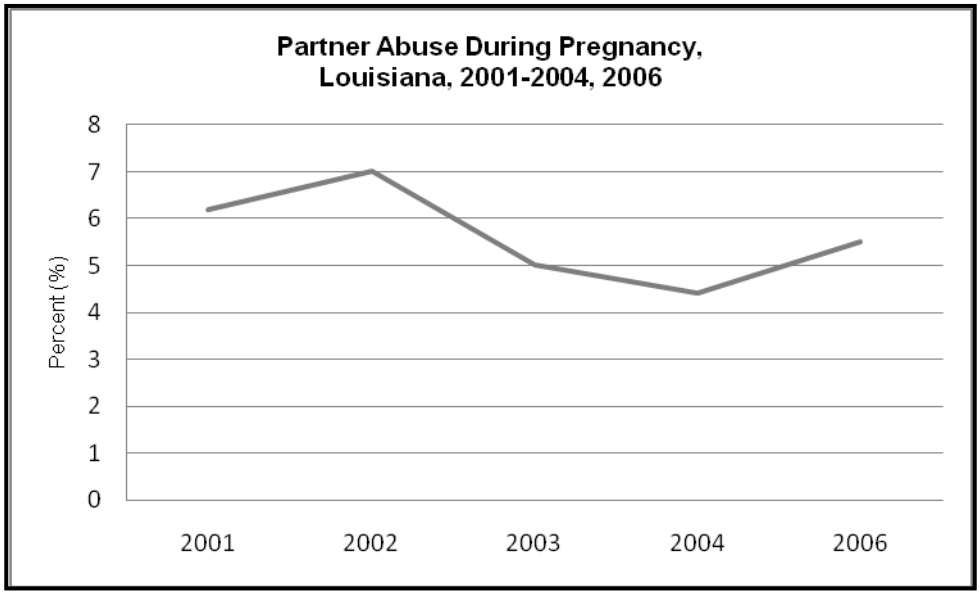
The *Healthy Louisiana 2010* target for alcohol use among pregnant women is 6%. In 2006, 8.9% of Louisiana women reported that they drank alcohol during the last trimester of their pregnancy, compared to only 3% in 2000. Some of the factors associated with alcohol use in the last 3 months of pregnancy from 2000 to 2006 included white maternal race, maternal age over 30 years, living in an urban area, and being in a physical fight.



*SOURCE: LaPRAMS 2001-2004, 2006

- ***Partner Violence during pregnancy*:**

In 2006, 5.5% of Louisiana women reported experiencing violence by their partner during pregnancy,

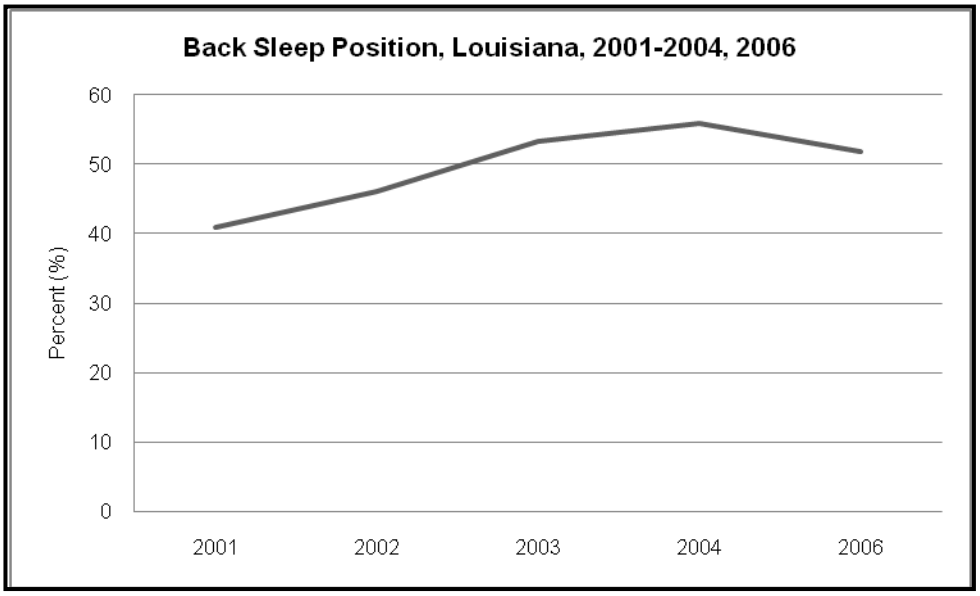


*SOURCE: LaPRAMS 2001-2004, 2006

compared to only 4.4% in 2004. Although rates decreased each year from 2001-2004, from just over 6% in 2001, to 4.4% in 2004, this represents an increase after 2004.

- ***Sleep Position***

The *Healthy People 2010* goal for infants to be placed on their backs to sleep is 70%. In 2006, nearly 52% of women reported placing their infants on their backs to sleep most of the time. This represents a decrease from 2004, when 56% of women reported using the back sleep position most of the time.



*SOURCE: LaPRAMS 2001-2004, 2006

PARTNERS FOR HEALTHY BABIES

The Partners for Healthy Babies (PHB) social marketing campaign via strategic planning, identified specific issues that need to be addressed in the next 3 years to improve birth outcomes. This includes focusing on preconception health. PHB continues to use a mix of communication strategies, including new strategies that will be developed and will include a viral media campaign and updated website. Formative research was conducted to assure that the project remain culturally sensitive and competent. In 2008, the Helpline received 3,172 calls and made referrals to medical and social services statewide.

Nurse-Family Partnership: Helping First-Time Parents Succeed

The Nurse Family Partnership (NFP) program targets first-time mothers of low socio-economic status. Home-visiting nurses follow well-developed guidelines that require weekly to biweekly visits to the family early in pregnancy to the child's 2nd birthday. 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 NFP reduced by 48% the verified reports of child abuse and neglect,

reduced by 32% the number of subsequent pregnancies in low-income unmarried mothers, and increased by 83% the rates of labor-force participation by the mothers at the time of the child's 4th birthday. In addition, the randomized controlled trials demonstrated 61% fewer arrests, 72% fewer convictions, and 98% fewer days in jail among the NFP mothers by the time the child reached 15 years of age. Furthermore, the latest follow-up study revealed improved school readiness in the NFP children, including improvements in language, cognition, and attention.

Since 1999, 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 2002, via partnerships with local, state, and community organizations, NFP was 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 a presence in all nine administrative regions of the state, for a total of 19 out of 64 parishes. Full 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. Two additional teams in Regions IV and V developed through grants and private case-management organizations. Two full teams were added to service additional parishes in northwest and central Louisiana. Expansion continues to provide more NFP services to Region II and Region IX. At present, the NFP program is available in 52 parishes, with the eventual goal to have NFP available in all parishes of the state. Since the inception of the program through June 2009, NFP in Louisiana has provided nearly 145,814 visits to 6,657 families.

A program implementation evaluation was conducted by the NFP National Service Office in 2009. This study indicated that all Louisiana NFP sites were implementing the program with fidelity to the model which produced the statistically significant results experienced in the randomized trials. Recent Louisiana NFP results indicate several positive outcomes in maternal and child health functioning including:

- 18% relative decrease in cigarette smoking by NFP prenatal clients
- 44% breastfeeding initiation rates for NFP mothers
- 94% immunization completion rates for NFP children at 24 months of age
- Over 92% NFP children have adequate to advanced language production scores at 21 months of age
- Over 86% of NFP children at 24 months of age are developmentally appropriate
- 61% of NFP mothers over 18 years of age are working by the time their child is 24 months old

Provider Training for Parenting Education & Child Abuse Prevention Intervention

The MCH program offers a number of trainings and educational programs aimed at improving parenting education and the ability of public health professionals to identify and respond appropriately to children

and families at risk for abuse and neglect. MCH continues to train nursing, social work, and other public health staff in Infant Mental Health in all regions of the state. Since 1998, OPH has offered this 30-hour training, completed in six separate sessions 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. Culturally-salient information regarding the needs of and approaches to working with minority and low-income families and adolescent parents, as well as recognition of personal biases and expectations regarding parenting, are incorporated into the trainings.

Incorporated into the IMH program is a six-hour training in Keys to Caregiving, a parenting education program developed at the University of Washington School of Nursing. Keys to Caregiving provides information to professionals and 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 well received by staff who work directly with infants and their caregivers, and is a required part of NFP training. The IMH/Keys to Caregiving training is offered twice per year, and to date, more than 700 public health and early childhood providers have participated. Through the Early Childhood Coordinated Systems (ECCS-Bright Start) initiative, MCH has broadened the availability of these and other trainings in infant mental health to include early childhood mental health, child protection, child care, early education, and early-intervention providers throughout Louisiana.

In addition, the MCH Program sponsors a variety of brief trainings via conference presentations video conferences, and on-site presentations, in infant mental health, childcare consultation, perinatal depression, perinatal loss and grief, and unique aspects of loss in sudden unexpected infant death (SUID).These trainings are offered to health, public-health, mental-health, early-intervention, childcare, and other professionals and paraprofessionals who work with infants, young children, and their caregivers.

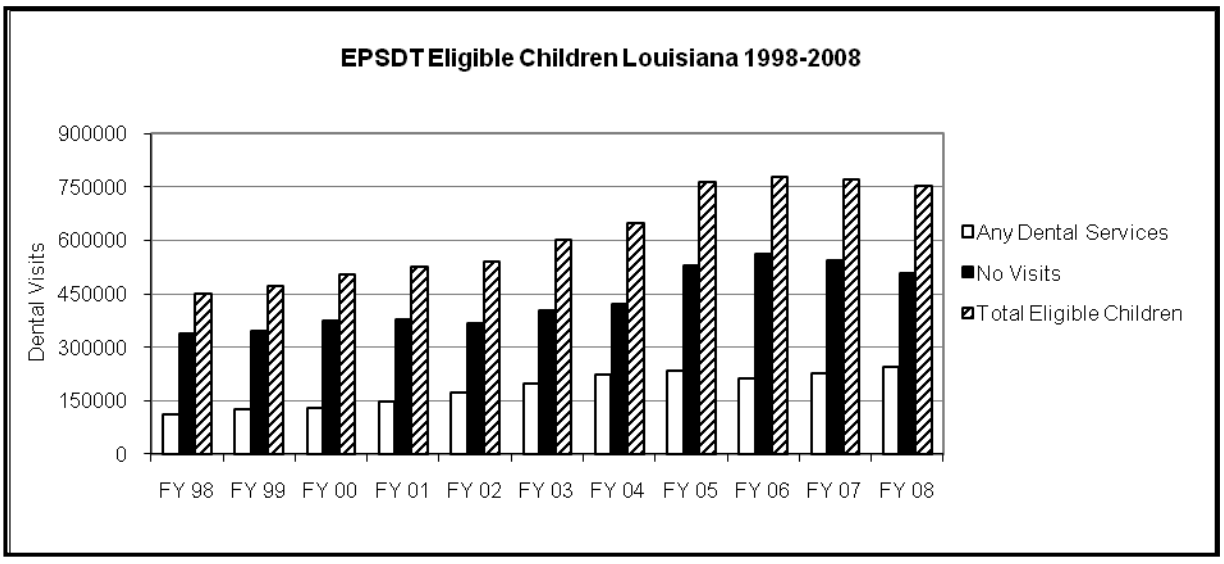
Infant mental-health consultation is available at five of the NFP sites, with two additional sites planned for 2009-2010. In collaboration with NFP in Orleans and Jefferson parishes, the Perinatal Depression Program also serves women in Healthy Start, focusing on pregnant women and women with young children up to age 2 years. In Region V, the mental-health consultant to NFP also provides services through the Best Start program. All of these mental-health consultants provide education and guidance to the NFP and Healthy Start staff regarding mental-health issues, including perinatal depression and other risks for abuse and neglect, as well as direct services to clients in the NFP and Healthy Start program.

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 adults, poor periodontal health has been linked to diabetes, cardiovascular disease, stroke, and adverse pregnancy outcomes and can lead to loss of teeth. The Oral Health Program of the Office of Public Health addresses the oral-health status of Louisiana's children and adults through education, a school-based dental sealant program, community water fluoridation initiatives, and support for Medicaid programs for children and pregnant women.

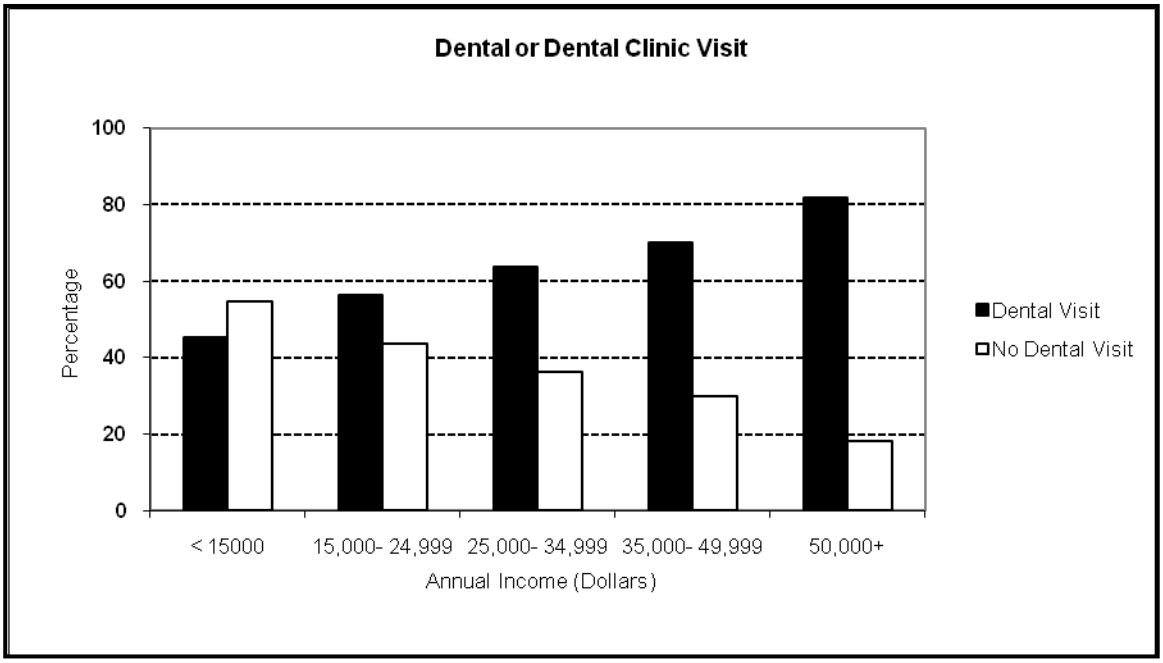
In 2008, the Oral Health Program conducted a Basic Screening Survey measuring the oral health of Louisiana's 3rd grade population. In this survey, 2,651 children were screened in 75 schools among 34 parishes. Of the screened children, 41.9% had untreated dental caries; 65.7% had previous dental caries experience; only 33.2% had dental sealants; and 42.7% had to be referred to dentists for treatment. A convenient sample of 3rd graders screened in 2002 showed that 37.3% of the children had untreated dental caries and the prevalence of dental sealants among the children was 18%. The *Healthy Louisiana 2010* objective for dental sealants states that 50% of children should have sealants on their permanent molars.

According to Medicaid claims data for the federal fiscal year (FY) 2008, the enrolled total number of eligible for Medicaid/Louisiana Children's health Insurance Program (LACHIP) eligible children in Louisiana has decreased as compared to the FY'07. However, the number of children receiving "any dental service", Medicaid definition, for the same time period has increased. A similar increase in the dental visits occurred between FY'06-'07. (See chart below). In spite of an increase in dental visits in FY'07 and '08, less than one-third of Medicaid-eligible children received dental services.



Source: Louisiana Medicaid

According to the Behavioral Risk Factor Surveillance System, Louisiana 2008 Dental Data, 69.8% of the population surveyed reported visiting a dentist within the past year for any reason. Among the Louisiana residents with an annual income of less than $15,000 per year, 54.7% did not visit a dentist or dental clinic. However, among the residents with an annual income of more than $50,000, only 18.2% did not visit a dentist or dental clinic. Whites were more likely to visit a dentist than blacks. Among the population aged 65 year and older, 23.2% had all their natural teeth extracted.



Source: Behavioral Risk Factor Surveillance System 2008

Community Water Fluoridation

Over 50 years of scientific research has demonstrated the efficacy of community water fluoridation in reducing tooth decay, regardless of age and socioeconomic status. The Oral Health Program is committed to preventing dental decay through increased community water fluoridation efforts. Pre-Katrina, 46% of the population of Louisiana received optimally fluoridated water. Currently, nearly 43% of Louisiana's population is now benefiting from community water fluoridation as compared to 69.2% of the United States in 2006. While this is certainly a gain, it is well below the *Healthy People 2010* objective of 75% of the population receiving optimally fluoridated water.

The Oral Health program in collaboration with the Office of Public Health Engineering Services Section monitors the water systems that adjust fluoride to ensure the optimal level of fluoride is maintained. Water systems report monthly on the daily determination of fluoride concentrations to the Office of Public Health Fluoridation Engineer. This information is then sent to the Centers for Disease Control and Prevention (CDC) and may be viewed online at the "Waters Fluoridation Reporting System" (WFRS) site, http://apps.nccd.cdc.gov/MWF/Index.asp

Child Care Health Consultant Program

The MATERNAL AND CHILD HEALTH PROGRAM coordinates the activities of the Child Care Health Consultant (CCHC) Program. The mission of the CCHC Program is to train healthcare and safety professionals to provide technical assistance and trainings to childcare providers on Health and Safety, which include but are not limited to medication administration, infection control, food safety, SIDS risk reduction, and safe infant sleep environments. The CCHC Program provides an annual conference to certify health and public health safety professionals as CCHC's. Currently, over 140 trained child care health consultants serve as a source of education, guidance, and support to childcare facilities. The CCHC Program also provides expertise and leadership in the development and enhancement of childcare standards; assists childcare providers to improve their scores on the environmental rating scales related to health and safety; and serves as a resource in the state on health and safety issues in childcare facilities.

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 healthcare providers and to parents. Healthcare 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 healthcare 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 2-year-old children receiving care at parish health units (PHUs) in Louisiana through 2002. The impact of PHU closures, lack of immunization opportunities due to 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 synergistically impacted the immunization levels among 2-year-old children in 2003, resulting in the lowest immunization level since the inception of the Shots for Tots Program. A steady improvement since 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 its 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, 1992-2008	
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%
2005	66%
2006	71%
2007	70%
2008	74%

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 (HSV) is early identification of communication disorders. A child's vision, hearing, and language development are critical milestones for lifelong learning. Early intervention has profound benefits for infants and toddlers with any of these disorders. Additionally, these interventions contain costs of special education and other services provided by the state.

During the year 2008, HSV continued to work collaboratively with public agencies and private providers to avoid duplication of services. Many services offered previously by OPH staff are now provided by community agencies. For example, the DEPARTMENT OF EDUCATION and private providers provide vision

screening. HSV offers vision screening training to school personnel and loans vision and hearing screening equipment to schools. In 2008, over 1,063 persons were trained in vision screening by two contract vision-screening specialists.

The HSV audiologists continue to work to ensure that audiological services are available in all areas of the state through Children's Special Health Services (CSHS), other public agencies, and the private sector. In 2008, HSV audiologists and speech pathologists provided 1,076 visits for infant/toddler screenings and audiology and otology clinic visits. One hundred sixty hearing aids were dispensed to CSHS eligible children.

HSV's Sound Start Program (SSP) made great strides in 2008. In 1999, the Louisiana Legislature mandated Universal Newborn Hearing Screening (UNHS). In 2008, 97% of newborns had hearing screening prior to hospital discharge. Of children identified with hearing loss, 67.5% of those were diagnosed by 3 months of age; this represents a significant improvement over the average age of identification prior to SSP, which was 2.5 years of age. Due to the success of this screening initiative, SSP now emphasizes follow-up and tracking to ensure that each child is not only screened, but also receives appropriate referrals for follow-up and intervention. HSV receives two federal grants to expand universal newborn hearing screening and intervention in Louisiana. The HSV 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) 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 ongoing basis. Some of the products and services provided by CSHS are medications, durable medical equipment, home health care, physical therapy, hospital care, parent training, care coordination of services in the community, and services to assist young adults as they transition to adult services. There are nine regional CSHS clinics.

According to the 2006 national State and Local Area Integrated Telephone Survey (SLAITS), Louisiana ranks twenty-sixth in the nation for population of children with special healthcare needs (CSHCN). This is a marked improvement from previous surveys, with 14.8% of children having a special health-care need versus 13.9% at the national level.

CSHS provides services to CSHCN with conditions such as congenital heart defects, cystic fibrosis, cleft lip and palate, spina bifida, craniofacial malformations, cerebral palsy, and other neurological disorders.

These conditions often require complex medical care including surgeries, hospitalization, and expensive drug therapies. CSHS strives to provide cost-effective treatment to CSHCN who often have limited or no access to medical care. The program provides direct medical services to these children by making pediatric subspecialists available in medically underserved areas, which prevents medical conditions from becoming worse and more costly to treat. In 2008, CSHS served 4,421 children with 19,025 visits in Office of Public Health facilities. CSHS also serves children in other facilities through contracts designed to improve access to care and care coordination. In FY 2008, CSHS served a total of 10,528 children. While CSHS continues to provide direct services to children to improve access to care, much of the impact of CSHS activities cannot be measured by direct services alone. Recent initiatives have focused on enabling, population-based, and infrastructure-building activities in addition to direct services.

Since 2000, CSHS has been a leader among states in encouraging and facilitating the Medical Home Concept in Louisiana. To date, CSHS has placed four care coordinators in pediatric practices, and has demonstrated dramatic improvements in CSHCN family satisfaction and the ability of practices to meet medical home criteria after the addition of a care coordinator. CSHS is also at the forefront of implementing Transition Services for teens with special healthcare needs, seeking to assure educational, vocational, and medical coverage for them as they become adults. CSHS actively contributes to the training of Tulane and Louisiana State University (LSU) Medical School pediatric residents in Medical Home, CSHCN, and Transition issues. CSHS partners with agencies and organizations such as the Louisiana Chapter of the American Academy of Pediatrics, LSU Health Sciences Center, Tulane University School of Medicine, Children's Hospital, Families Helping Families, Louisiana Area Health Education Centers, and other community agencies and groups concerned with children with special needs.

E. LOUISIANA BIRTH DEFECTS MONITORING NETWORK

Birth defects are the leading cause of infant mortality in the U.S., accounting for more than 20% of all infant deaths each year. The mission of the LOUISIANA BIRTH DEFECTS MONITORING NETWORK (LBDMN) is the prevention of birth defects and birth-defect related disabilities in Louisiana's children. In addition to collecting data on birth defects in children ages 0–2, LBDMN also provides information to affected families about locally available social, educational and medical services; analyzes collected data to determine the frequency and distribution of birth defects; and participates actively in birth-defect prevention efforts.

LBDMN is a relatively new program that is currently expanding to reach more areas of the state. In 2005, active data collection began in Regions 1, 2, 5, and 7. Since then, the program has expanded into Regions 4 and 9. In 2008, a Family Resources Coordinator was added to the staff to assist families with information about programs and services for children with special needs. Depending on funding availability, LBDMN is projected to reach statewide coverage by 2010.

Analysis of 2005 data showed that the most common type of birth defects were cardiovascular system malformations (heart, valves, and blood vessels). The second and third most common types were birth defects of the genitourinary system and gastrointestinal system, respectively. Due to the effects of Hurricane Katrina, Region 1 data were incomplete for 2005; as a result, these data could not be used for more detailed analyses. The following table shows the ten most common birth defects among children born to residents of Regions 2, 5, and 7 in 2005.

Ten Most Common Birth Defect Diagnoses and Rate per 10,000 Live Births among Residents of Regions 2, 5 and 7. Louisiana-2005

Rank	Diagnosis	Number of Cases*	Rate
1	Atrial Septal Defect	128	64.0
2	Ventricular Septal Defect	88	44.0
3	Patent Ductus Arteriosus	68	34.0
4	Hypospadias/Epispadias	61	30.5
5	Obstructive Genitourinary Defect	57	28.5
6	Pyloric Stenosis	38	19.0
7	Down Syndrome	25	12.5
8	Cleft Lip with or without Cleft Palate	25	12.5
9	Hydrocephalus	23	11.5
10	Microcephalus	22	11.0

*Counts are not unduplicated; children with multiple birth defect diagnoses may be counted in more than one category.

F. Newborn Heel Stick Screening and Follow-up

DHH-OPH's Genetic Diseases Program, in collaboration with the State 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., et seq and LAC 48: V. 6303). Screening for Phenylketonuria (PKU) began newborn screening in 1964, with screening for other diseases being added through the following years. The current official panel includes the following diseases:

Disorders of Amino Acid Metabolism	
Phenylketonuria (PKU)	Maple Syrup Urine Disease (MSUD)
Homocystinuria (HCY)	Citrullinemia (CIT)
Argininosuccinic Aciduria (ASA)	Tyrosinemia type I (TYR I)
Disorders of Fatty Acid Metabolism	
Medium Chain Acyl-CoA dehydorgenase Deficiencey (MCAD)	Trifunctional protein deficiency (TFP)
Very Long-Chain Acyl-CoA Dehydrogenase Deficiency (VLCAD)	Carnitine Uptake Defect (CUD)
Long Chain-3-Hydroxy Acyl-CoA Dehydrogenase Deficiency (LCHAD)	
Disorders of Organic Acid Metabolism	
Isovaleric Acidemia (IVA)	Methylmalonic Acidemia (MUT),(CBL A, B)
Glutaric Acidemia Type 1 (GA1)	Proprionic Aciduria (PROP)

3-Hydroxy -3-Methylglutaryl–CoA Lyase (HMG)	Multiple Carboxylase Deficiency (MCD)
β-Ketothiolase Deficiency (BKT)	3-Methylcrotonyl CoA Carboxylase Deficiency (3MCC)
Other Metabolic Disorders	
Biotinidase Deficiency (BIOT)	Galactosemia (GALT)
Endocrine Disorders	
Congenital Hypothyroidism (CH)	Congenital Adrenal Hyperplasia (CAH)
Hemoglobinopathies (Sickle Cell Diseases)	
SS Disease (Sickle Cell Anemia) (Hb SS)	SC Disease (Hb SC)
S/Beta Thalassemia (Hb S/βTH)	Other Sickling Diseases
Pulmonary Disorders	
Cystic Fibrosis (CF)	

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. Benefits to Louisiana residents and savings to the state have been substantial over the years as described below:

- Every year, on average, three 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 support. Since the expansion of metabolic screening, an additional 10 children a year are detected with a rare genetic metabolic disorder
- 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 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. The table shows the number of infants detected with a genetic disorder by disease and by race for each calendar year from 2003 to 2007.

Table 1: Louisiana Newborn Screening Detection by Year From 2003 - 2007

Congenital Disorders	2003		2004		2005		2006		2007**†	
	White	Non -white	White	Non -white	White	Non -white	White	Non -white	White	Non -white
Disorders of Amino Acid Metabolism										
Phenylketonuria (PKU)	2	1	1	0	5	0	4	0	3	1
CIT: Citrullinemia					1	0	1	0	0	0
Tyrosinemia Type I (TYR I)									1	1
Disorders of Fatty Acid Metabolism										

Table 1: Louisiana Newborn Screening Detection by Year From 2003 - 2007

Congenital Disorders	2003		2004		2005		2006		2007**†	
	White	Non -white	White	Non -white	White	Non -white	White	Non -white	White	Non -white
MCADD: Medium Chain Acyl-CoA dehydrogenase Deficiency					5	0	6	0	4	2
VLCAD: Very Long-Chain Acyl-CoA Dehydrogenase Deficiency									3	0
Disorders of Organic Acid Metabolism										
Glutaric Acidemia Type I									1	0
Other Metabolic Disorders										
Biotinidase Deficiency	3	0	1	0	3	1	4	3	1	1
Galactosemia	0	0	1	1	1	0	5	0	3	0
Endocrine Disorders										
Congenital Hypothyroidism*	25	16	22	25	17	18	10	4	14	11
Congenital Adrenal Hyperplasia							0	0	1	2
Sickle Cell Disease (SS,SC,S-THAL)	0	79	1	96	0	72	0	78	0	79
Pulmonary Disorders										
Cystic Fibrosis									11	1
TOTAL BIRTHS	37,066	27,623	37400	28,173	34,383	25058	36434	25924	N/A	N/A

* Definition for congenital hypothyroidism: patient requiring thyroid replacement medication for adequate thyroid functioning
** Provisional Data from Vital Records
† Cases reported to date. Data for 2007 are incomplete.

G. 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 major, preventable environmental health problem in the United States and Louisiana. In 1991, the Centers for Disease Control and Prevention (CDC) produced the document entitled “Preventing Lead Poisoning in Young Children” which recommended universal screening of all children unless there was sufficient information to make targeted screening recommendation and lowered the level of concern for blood lead from 25 micrograms per deciliter (µg/dl) to 10 µg/dl.

At low blood-lead levels, lead poisoning can affect a child's ability to learn and may affect behavior. At high levels, it can be extremely dangerous and can have devastating consequences, including encephalopathy, seizures, coma, and even death.

The Louisiana Childhood Lead Poisoning Prevention Program Rule (LAC 48:V.7007 & 7009) requires health providers to report a case of lead poisoning (that is, a case in which the blood-lead level is 15 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 to determine if all children are being screened. The rule also allowed DHH to designate areas as high-risk for lead poisoning and to mandate screening in those areas. Pursuant to Act 893 of 2004, which gave DHH authority to designate high-risk parishes for lead poisoning through rulemaking, the Lead Program Rule (LAC 48: V. 7005) was amended on October 20, 2008 to designate all parishes in the State of Louisiana as high-risk areas.

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 (NOCLPP) has played an important role in addressing lead poisoning. NOCLPPP 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 promoting increased screening, 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 and offers environmental inspections of the affected children to determine the source of lead poisoning.

Screening and Prevalence

Lead poisoning is a preventable disease that affects 4.4% of children in the United States between 6 months and 6 years of age. Data from 2008 show that 73,124 children in Louisiana (21.6%) were screened by private providers. Of the children screened, 1.9% had blood lead levels that were 10 µg/dl or greater. Efforts are underway to reach children who have not been screened.

Summary of The Numbers of Children with Elevated Blood Lead levels by Parish 2008

Parish	Population of Children less than 6 years (*)	Year 2008						
		Total Tested (n)	Total tested (%)	10-14.9	15-19.9	≥ 20	≥10	Total elevated (%)
				µg(microgram)/dl				
Acadia	5510	380	6.9	3	1	0	4	1.1
Allen	2083	539	25.9	4	0	1	5	0.9
Ascension	8129	1044	12.8	5	1	2	8	0.8
Assumption	1975	306	15.5	0	0	0	0	0.0
Avoyelles	3441	629	18.3	6	0	1	7	1.1
Beauregard	2701	399	14.8	6	1	1	8	2.0
Bienville	1216	277	22.8	3	0	2	5	1.8
Bossier	8689	1343	15.5	12	4	2	18	1.3
Caddo	19932	3265	16.4	37	7	11	55	1.7
Calcasieu	14634	3930	26.9	13	8	5	26	0.7
Caldwell	751	343	45.7	3	4	2	9	2.6
Cameron	583	242	41.5	2	2	2	6	2.5
Catahoula	822	273	33.2	3	0	1	4	1.5
Claiborne	1227	294	24.0	12	5	7	19	6.5
Concordia	1786	214	12.0	5	1	2	8	3.7
De Soto	2132	239	11.2	3	0	4	7	2.9
E Baton Rouge	32097	6561	20.4	63	26	32	121	1.8
East Carroll	884	67	7.6	1	1	1	3	4.5
East Feliciana	1713	249	14.5	5	4	10	19	7.6
Evangeline	3456	474	13.7	5	3	0	8	1.7
Franklin	1874	661	35.3	3	0	0	3	0.5
Grant	1656	155	9.4	1	1	0	2	1.3
Iberia	6620	716	10.8	0	1	0	1	0.1
Iberville	2636	261	9.9	4	1	3	8	3.1
Jackson	1167	281	24.1	2	0	0	2	0.7
Jefferson Davis	2909	649	22.3	3	0	1	4	0.6
Jefferson	29918	6627	22.2	54	18	32	104	1.6
La Salle	1017	178	17.5	1	2	0	3	1.7
Lafayette	16382	2041	12.5	4	0	5	9	0.4
Lafourche	7732	1108	14.3	5	3	0	8	0.7
Lincoln	3062	408	13.3	0	2	0	2	0.5
Livingston	8751	1332	15.2	3	1	0	4	0.3
Madison	1285	308	24.0	2	2	0	4	1.3
Morehouse	2524	471	18.7	10	0	1	11	2.3

Summary of The Numbers of Children with Elevated Blood Lead levels by Parish 2008								
Parish	Population of Children less than 6 years (*)	Year 2008						
		Total Tested (n)	Total tested (%)	10-14.9	15-19.9	≥ 20	≥10	Total elevated (%)
				µg(microgram)/dl				
Natchitoches	3344	502	15.0	2	0	0	2	0.4
Orleans	16149	6214	38.5	228	75	93	396	6.4
Ouachita	12469	2006	16.1	57	19	24	100	5.0
Plaquemines	1309	321	24.5	1	0	0	1	0.3
Pointe Coupee	1839	314	17.1	1	0	0	1	0.3
Rapides	10232	1530	15.0	26	8	4	38	2.5
Red River	888	137	15.4	1	0	0	1	0.7
Richland	1847	485	26.3	9	2	0	11	2.3
Sabine	1881	486	25.8	7	3	0	10	2.1
St. Bernard	658	311	47.3	2	0	0	2	0.6
St. Charles	4271	743	17.4	5	2	1	8	1.1
St. Helena	854	185	21.7	0	0	0	0	0.0
St. James	1802	248	13.8	2	1	1	4	1.6
St. John	4165	873	21.0	8	2	3	13	1.5
St. Landry	7637	982	12.9	5	1	0	6	0.6
St. Martin	4492	285	6.3	2	0	0	2	0.7
St. Mary	4897	830	16.9	2	3	1	6	0.7
St. Tammany	16305	2583	15.8	8	12	4	24	0.9
Tangipahoa	9289	1846	19.9	9	0	5	14	0.8
Tensas	527	121	23.0	1	0	0	1	0.8
Terrebonne	9436	723	7.7	3	1	0	4	0.6
Union	1917	390	20.3	1	1	3	5	1.3
Vermilion	4849	782	16.1	3	0	1	4	0.5
Vernon	5862	271	4.6	2	1	0	3	1.1
Washington	2616	951	36.4	13	5	2	20	2.1
Webster	3135	826	26.3	6	1	1	8	1.0
W Baton Rouge	1845	185	10.0	1	0	0	1	0.5
West Carroll	897	231	25.8	3	0	1	4	1.7
West Feliciana	826	52	6.3	1	0	0	1	1.9
Winn	1322	392	29.7	2	2	0	4	1.0
Missing		10599		136	41	37	214	2.0
Total	338854	73124		838	281	292	1411	1.9

Source: LACLPPP's Childhood Blood Lead Surveillance System (CBLSS)
(*) Estimated Population of Children 6 years old and under was taken from 2006 American Community Survey

Screening is an important component of lead-poisoning prevention and elimination as it is only through screening that lead-poisoned children are identified. As mandated by the Childhood Lead Poisoning Prevention Rule (LAC) 48: V.7005, 7007, and 7009, medical providers of routine primary-care services to children ages 6 months to 72 months who reside or spend more than 10 hours per week in any Louisiana

parish must have such children screened in accordance with practices consistent with the current CDC recommendation and in compliance with Louisiana Medicaid.

The Louisiana KIDMED screening program requires a lead-poisoning risk assessment by questionnaire at 6 months of age, screening of all children at 1 and 2 years of age with a blood-lead test, and testing children between 3 and 6 years of age if they have not been previously tested. It is a Medicaid Early & Periodic Screening & Diagnostic Treatment (EPSTD) requirement that a lead-screening blood test be performed to determine a lead-toxicity level for all Medicaid-eligible children. A risk assessment does not meet the EPSTD or blood-lead screening requirement for Head Start. A blood-lead screening test is mandatory for all children entering Head Start. Once identified, then LACLPPP can ensure that lead-poisoned children receive the necessary services to help decrease their blood lead levels.

Future Plans

Over the next year, LACLPPP will focus on expanding the scope of screening and increasing screening rates using the following approach:

- Work with medical providers to ensure their awareness of, and compliance with, the mandated screening legislation, screening of all children, and appropriate treatment, case management, and follow-up of affected children.
- Work with the state's Medicaid and Head Start programs to determine the number of children screened and ensure follow-up of children with lead poisoning.
- Work with other state and academic programs to improve outreach and screening rates in rural areas and in the northern part of the state.

LACLPPP also intends to spend the next year focusing on primary prevention and strengthening environmental activities by:

- Ensuring implementation of the statewide screening plan, which includes mandated screening in all parishes as specified by LAC 48 V. 7005.
- Implementing primary prevention activities for families to prevent lead-poisoning in children.
- Collaborating with program partners to promote lead-poisoning preventive measures and to increase abatement and remediation activities in the state.
- Implementing the childhood lead poisoning strategic plan to meet the *Healthy People 2010* objective of eliminating childhood lead poisoning by 2010.
- Partnering with the OPH Section of Environmental Epidemiology and Toxicology, the state Asthma Program, the OPH Injury Research and Prevention Section, and the Louisiana State University Agriculture Center to incorporate Lead Poisoning Prevention into the CDC Health Homes Initiative.

H. SAFE KIDS COALITION

The DHH/OPH Emergency Medical Services (EMS)/Injury Research and Prevention Program includes Louisiana SAFE KIDS. 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 actively 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, SAFE KIDS Louisiana may be contacted at (504) 219-4540.

I. 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 (SBHC), officially known as the Adolescent School Health Initiative, is directed by the DHH-OPH ADOLESCENT SCHOOL HEALTH PROGRAM. 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 and Tobacco Settlement monies, Maternal and Child Health 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 2006-2007, 52 OPH-funded SBHCs were operational in 23 parishes, serving 82 public schools and providing access to 46,285 students. In addition, OPH funded 9 communities to plan for new SBHCs that were schedule to become operational in 2007-2008. In the 2006-2007 school year, 25,114 students received services, comprising a total of 120,303 individual visits to the centers. This number does not include students who participated in group counseling sessions with mental-health professionals.

J. Louisiana's Service System for Persons with Developmental Disabilities

The Office for Citizens with Developmental Disabilities (OCDD) within the Department of Health and Hospitals serves as the single point of entry into the Developmental Disabilities (DD) Services System. OCDD conducts assessments of people requesting services to determine the person's eligibility for system entry. Eligibility is based on the definition of developmental disability contained in *Louisiana R.S. 28:451.1-455.2*.

Louisiana's DD services system includes public and private residential services and other supports and services for people with developmental disabilities. Services are administered through ten community services regional offices and Human Services Authorities/Districts and six supports and services centers, five Resource Centers, and several Community Support Teams located statewide, to provide a range of supports and services to enable people to achieve their identified personal outcomes and goals.

These community services regional offices and Human Services Authorities/Districts serve as the points of entry for individuals to receive DD services and offer a broad range of services including individual and family supports (i.e., support coordination, case management, personal care assistance, cash subsidy, respite, crisis intervention, and supported living services).

People with Developmental Disabilities Receiving Services, Louisiana July 1, 2008 through June 30, 2009			
TYPE OF SERVICE	**SERVICES TO CHILDREN**	**SERVICES TO ADULTS**	**TOTAL SERVICES**
Cash Subsidy (state funded)	1,496	Not applicable	1,496
Individual and Family Support (state funded)	2,682	Not applicable	2,682
Support Coordination			2,982
Children's Choice, Medicaid Home and Community Based Waivers	830	Not applicable	830
NOW Medicaid Home and Community Based Waivers	1,052	5,049	6,101
Support Waiver Medicaid Home and Community Based Waivers	61	1,487	1,548
EarlySteps	8,143	Not applicable	8,143
Public Large Intermediate Care Residential Facilities	87	1,036	1,123
Community Homes (residential)		195	195
Resource Centers – training and direct services			24,876
Community Support Teams (CSTs)-direct supports, consultations		807	807
Vocational/Rehabilitation Services			3,337
TOTAL SERVICES TO CHILDREN AND ADULTS July 1, 2008 through June 30, 2009	**50,783**		
TOTAL SERVICES TO CHILDREN July 1, 2008 through June 30, 2009	**14,351**		

Services provided through the OCDD are described as follows:

- 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 and human services authorities/districts 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, dental and medical services not covered by other sources, equipment and supplies, communication services, crisis intervention, specialized nutrition, and family education.

- The *Cash Subsidy Program* provides a monthly stipend to families of eligible children up to the age of 18 years with severe disabilities. Funds are intended to help families meet the extraordinary cost associated with maintaining their child in the home. Stipends are awarded on a first-come, first-serve basis to eligible children with exceptionalities identified through the Department of Education's Pupil Appraisal Evaluation.

- *Home and Community-Based Waiver Services* (HCBS) are offered through the New Opportunities Waiver (NOW), the Children's Choice Waiver, and the Supports Waiver. These Medicaid waivers offer a variety of services and supports to allow individuals to reside at home and in community settings other than in intermediate care facilities (ICD/DDs). A fourth developmental disability waiver, Residential Options Waiver (presently in the application process)

will enable Money Follows the Person strategies for people served in ICFs/DD and nursing facilities to move to a comprehensive HCBS waiver option.

- The *EarlySteps Program* is Louisiana's early intervention system for children from birth to age 3 years with disabilities and developmental delays and their families. Services include 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, psychology services, family training, nutritional services, and transportation.

- Six *Supports and Services Centers* in Louisiana are licensed as Intermediate Care Facilities for persons with Developmental Disabilities (ICF/DD). They provide an array of residential and comprehensive supports and services to people with developmental disabilities. The Supports and Services Centers are located throughout Louisiana: North Lake in Hammond; Northwest in Bossier City; Bayou Region in Thibodaux; Pinecrest in Pineville; Northeast in Ruston; and Acadiana Region in Iota. Additionally, these Centers operate two residential/employment centers, Leesville Residential and Employment Services and Columbia Community Residential and Employment Services, and 27 community homes.

- *Transition Services* are provided to people currently living in a Supports and Services Center and who choose to move to a community living setting. Transition services include the development of an Individual Support Plan to identify supports and services necessary for a person to move into a community living setting of his/her choice, and provisions for the move and ongoing monitoring and oversight of community supports and strategies for the person to ensure successful and safe living in the community.

- Five *Resource Centers* offer specialized information and expertise: the Resource Center on Aging with Developmental Disabilities, Bossier City; the Resource Center on Community Inclusion, Lake Charles; the Resource Center on Medical, Dental and Allied Health Supports, Westbank/New Orleans; the Expanded Resource Center of Central Louisiana, Pineville; and the Resource Center on Psychiatric and Behavioral Supports, Hammond. The Resource Centers provide leadership, enhance communication and collaboration, and increase the availability and capacity of support and services to people with developmental disabilities. Services provided include direct services to individuals and their families, training opportunities, training curriculum development, professional continuing education, resource materials, and peer and program reviews.

- *Community Support Teams* (CSTs) are located in various regions throughout the state, and are accessed through OCDD's regional offices and Human Services Authorities/Districts. CSTs are

professional staff who provide support and services to people with developmental disabilities needing intensive treatment intervention, thus allowing them to remain in their community living settings. CSTs consist of psychologists, social workers, nurses, and psychiatrists who provide supports and services on an as-needed basis 24 hours a day, 7 days a week. The services and supports include initial and ongoing assessments, psychiatric services, family support and education, support coordination, and other services critical to an individual's ability to live successfully in the community. Additionally, CST services are provided in the community rather than in office-based practices, and combine skills development with clinical management.

- Personalized services for people with developmental disabilities may also be provided by private provider agencies through contractual agreements, or through individualized agreements with individuals and families who obtain their own service providers, and are monitored by OCDD staff for quality services delivery.

K. NUTRITION SERVICES PROGRAM

The Nutrition Services Program in the Office of Public Health is comprised of several programs, including: the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); the Commodity Supplemental Food Program (CSFP); the Fruits and Veggies More Matters Program; and nutrition consultative services currently provided to the Genetics Program, Maternal and Child Health Program, Children's Special Health Services, and the Louisiana Obesity Council. The overriding goal of Nutrition Services is to promote health through nutrition education and, when necessary, through medical nutrition therapy.

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 5 years who meet eligibility criteria, including an income of less than 185% of the poverty level. WIC is available through a statewide system of 113 clinics located in parish health units and contract local agencies. The statewide participation in the WIC Program during state fiscal year 2009 was approximately 146,991 women, infants, and children representing a 6% increase in participation from fiscal year 2008.

The WIC Program in Louisiana is 100% federally funded by two grants from the United States Department of Agriculture (USDA): a Food grant and a Nutrition Services and Administration grant. The Program received $123,329,803 in federal funding during state fiscal year 2009; o that total, $92,532,784 were expended 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 food instruments, which are redeemed at approximately 700 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 to their babies.

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 6 years of age. The caseload allocated by the USDA to Louisiana CSFP for federal fiscal year 2009 was 64,123 individuals per month, of whom approximately 93% are senior citizens. 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. The federal funding for state fiscal year 2009 was $91,642,564.

The DHH-OPH Nutrition Services Program has been designated as the licensee for the national **Fruits and Veggies More Matters Program**. While no funding exists for this program, Louisiana does benefit from national public partnerships. 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.

Consultative services are provided statewide to Louisiana's population participating in the Maternal and Child Health Program, the Genetics Program and the Children's Special Health Services 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.

Obesity Initiatives: Nutrition Services provides a part-time position to coordinate the Louisiana Council on Obesity Prevention and Management. While no funding exists for this legislatively-mandated, state-wide Council, the members work together to strengthen the alignment, development and implementation of programs in the public, non-profit and private sectors to respond to the public health challenge of obesity. Partnerships are developed by members of the Council to affect policies to improve healthy food choices and physical activity in schools and other venues across the state.

Programs Targeting Infectious Diseases

L. 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 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 healthcare settings. The DIS staff also investigate each case of TB to assure timely identification and evaluation of contacts to TB. Of those patients whose TB cases have been designated "closed," 88.5% completed therapy in 2005 and 89.6% completed therapy in 2006, as compared with the 88.9% completing therapy among the "closed" cases in 2007. The high therapy completion was due to both the intense DOT efforts of DIS staff and to the utilization of incentives and enablers.

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

DHH/OPH aims to prevent the spread of STDs through a variety of methods including prevention, education, counseling, testing, 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.

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 HIV/AIDS program, Maternal and Child Health (MCH), Family Planning, correctional institutions, substance abuse centers, and other facilities where STDs may be prevalent.

HIV/AIDS

The goal of the HIV/AIDS Program (HAP) is to educate citizens regarding HIV/AIDS prevention, to monitor disease trends, and to offer client-centered services via the following components:

- Prevention: This unit of HAP is responsible for behavioral interventions and educational activities that are focused on reducing the spread of HIV in Louisiana. Prevention activities include HIV counseling and testing, prevention with HIV-positive individuals, outreach, partner counseling and referral services, and behavioral interventions.
- Care and Treatment: This unit helps low-income persons living with HIV gain access to and be maintained in primary medical care and supportive social services, such as HIV medication assistance, insurance assistance, home health, and housing.
- Surveillance: This unit is responsible for monitoring the progression of the HIV epidemic throughout the state. Surveillance also aids in the planning of prevention efforts and guides the allocation of resources for HIV treatment, care, and other supportive services.
- Evaluation: This unit is responsible for examining the services provided to persons infected or affected by HIV and the prevention activities targeted at reducing the spread of HIV to ensure the quality, effectiveness, and efficiency of those activities.

During FY 2008/09, OPH/HAP provided comprehensive primary medical care to 840 eligible clients in five of the nine DHH public health regions of the state; provided antiretroviral medication to 3,259 clients; maintained health and dental insurance premiums for 494 eligible clients; and assisted 799 clients with their co-payments and deductibles. Maintenance of health insurance reduces the burden of care on the state public medical-care system. HAP also provided medications for the prevention of opportunistic infections to 1,541 eligible clients. These medications prevent or reduce inpatient stays and HIV morbidity.

HAP also conducted 84,307 HIV tests and prevention counseling sessions in public health clinics, addictive disorder clinics, and community-based organizations; as a result, 802 new HIV infections were identified. Rapid testing was implemented as a routine part of medical care in LSU Health Care Services Division emergency rooms. HAP provided a statewide “infoline” that responded to over 1,000 calls for information and referrals to services. Disease Intervention Specialists counseled 500 partners of HIV-positive persons, tested 313 of them, and identified 60 new HIV-positive persons. Prevention of mother-to-child transmission also remained a priority of the program. In particular, the HIV/AIDS Program

disseminated information to ensure providers were aware of the new legislation enacted in 2007 which required providers to test for HIV as a part of routine prenatal care unless the woman declines.

Programs Targeting Substance Abuse

N. 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. According to the Johns Hopkins University's Innovators Award website (http://innovatorsawards.org/facts) updated as of June 27, 2007, the following are facts about substance abuse: "One in four US deaths can be attributed to alcohol, tobacco, or illicit drug use. Tobacco users run the biggest risk of harm, since the majority of those deaths—430,700 annually—are associated with smoking. Excessive alcohol use is responsible for 100,000 deaths annually. Sixteen thousand deaths annually are due to illicit drug use, but this estimate is likely to be conservative as substance abuse is indirectly associated with deaths from diseases such as HIV/AIDS, hepatitis, tuberculosis, homicides, and other violent crimes and incidental injuries." The research also addresses: "The economic burden of substance abuse to the US economy is estimated at a staggering $414 billion annually. Alcohol abuse alone costs nearly $166 billion each year. Illicit drug users make over 527,000 costly emergency room visits each year for drug related problems. One dollar out of every $14 of the nation's health care bill is spent to treat those suffering from smoking-related illnesses. Health care costs for employees with alcohol abuse problems cost nearly twice as much as those of other employees."

Other consequences enumerated indicated that drug offenders account for more than one-third of the growth in the state prison population and more than 80% of the increase in the number of federal prison inmates since 1985, and more than 75% of domestic violence victims report that their assailant had been drinking or using illicit drugs at the time of the incident. Substance abuse tends to be more common among certain occupations and industries; for instance, heavy alcohol and illicit drug use is highest among construction and foodservice workers, while auto mechanics, laborers, and light-truck drivers are among several populations that are more susceptible to alcohol abuse. Children from families with substance-abusing parents are more likely to have problems with delinquency, poor school performance, and emotional difficulties than their peers from homes without substance abuse. Children whose parents smoke are more likely to develop ear infections and asthma and to miss one-third more school days than their peers who live in smoke-free homes.

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. According to CESAR FAX, the prevalence of cigarette use among U.S. public high school seniors has reached the lowest point ever recorded, according to the most recent data from the national Monitoring the Future survey. Slightly more than one-fifth (21.6%) of 12th graders reported smoking cigarettes in the past 30 days, down from peaks of 36.5% in 1997 and 38.8% in 1976. At the same time, the percentage of students who perceived a "great risk "of harm from smoking one pack or more of cigarettes per day reached an all-time high of 77.6% in 2006. Previous research has found that increases in perceived risk of using a drug are related to decreases in the use of the drug.

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.

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. 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 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. 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. Louisiana treats 10% of adults identified as in need of treatment compared to the national average of 16.1%. According to a study conducted by the National Center on Addiction and Substance Abuse at Columbia University, the national average per capita expenditure for substance-abuse treatment services is $11.09, while it is $3.32 in Louisiana. This difference partly reflects the relative absence of private and Medicaid funding.

A cumulative report from the LOUISIANA DEPARTMENT OF SOCIAL SERVICES (DSS) indicates that, as of state fiscal year (SFY) 2006-2007, 2,219 assessments have been completed under the Family Independence Temporary Assistance Program (FITAP) Drug Testing Program. Office for Addictive Disorders (OAD) referral tracking records from SFY 2006-2007 show 174 recipients (8%) have been referred by DSS, with 60 (34%) 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.

OAD is the state authority for substance abuse; its services are delivered through a regionalized Community Services District/Regions structure. There are currently six regions under direct supervision of OAD. On July 1, 1997, the Department of Health and Hospitals (DHH) entered into an agreement with the Capital Area Human Services District (CAHSD) to manage programs and afford local communities the opportunity and authority to manage services and resources for the Region II Area. Effective July 1, 2004, two new districts, the Metropolitan Human Services District (MHSD), formerly Region 1, and the Florida Parishes Human Service Authority (FPHSA), formerly Region 9, were created. An additional entity, the Jefferson Parish Human Services Authority (JPHSA), formerly Region 10, operates and reports independently of OAD. Future plans within the scope of this document include the creation of two new districts: South Central Louisiana Human Services Authority (currently Region 3) and the Northeast Delta Human Service Authority (currently Region 8). As a single state agency within DHH, OAD retains its responsibility, as a recipient of Federal Block Grant funds, to ensure that all regions and districts receiving Block Grant funds comply with all grant-related requirements.

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 4.7%, which is among the best in the nation.

Research on RISK AND PROTECTIVE FACTORS has important implications for prevention efforts. Louisiana has been using the Risk and Protective Framework to guide prevention efforts aimed at reducing youth problem behaviors. Risk factors are characteristics of school, community, and family environments, as well as characteristics of students and their peer groups that are known to predict increased likelihood of drug use, delinquency, school dropout, teen pregnancy, and violent behavior

among youth. Protective factors exert a positive influence or buffer against the negative influence of risk, thus reducing the likelihood that adolescents will engage in problem behaviors. Louisiana students have similar levels of risk compared to students in other states. The highest risk factors in Louisiana communities for twelfth graders are Laws and Norms that Favor Drug Use (51.3%), Community Disorganization (44.6%), Low Neighborhood Attachment (44.3%), and Perceived Availability of Drugs (43.6%). The lowest risk factors in Louisiana communities are Perceived Availability of Handguns (35.9%) and Transitions and Mobility (33.7%). Complete details of this study can be found at http://www.dhh.louisiana.gov/offices/publications.asp?ID=23

THE LOUISIANA STATE INCENTIVE GRANT, which changed its project title from the Louisiana New Connections Incentive Project to Louisiana's Partners in Prevention (LaPIP), was committed to the advancement of the state's prevention system through strong interagency collaboration, development of a common vision, and a comprehensive statewide plan. The comprehensive statewide plan promoted and advocated systemic changes that would potentially produce and establish rewarding interagency collaboration while optimizing resources. The LaPiP Grant came to an end in September 30, 2006.

In September 2004, Louisiana was awarded $11.75 million to implement the STRATEGIC PREVENTION FRAMEWORK STATE INCENTIVE GRANT (SPF-SIG) - "The Governor's Initiative to Build a Healthy Louisiana", a data-driven, outcome-based planning process intended to achieve sustainable reductions in the abuse of alcohol, tobacco, and other drugs among targeted populations through evidence-based prevention. The purpose of the SPF is to develop a system that coordinates planning, funding, and evaluation for substance-abuse prevention at all levels for the past 18 months; state partners have been involved in SPF's Strategic Planning Process. At the state level, this process led to the development of a Statewide Strategic Plan for Prevention outlining five goals related to the following topic areas: Data, Capacity, Alcohol, Tobacco, and Illicit Drugs. In addition, 12 parishes were identified to receive funding to develop coalitions to address alcohol-related problems in their respective parish with the target population of 12-29 year olds; these parishes have agreed to participate in this important initiative. It is important to note that all regions/districts/authorities will be provided this training along with ongoing technical assistance in the Strategic Prevention Framework to develop regional/district plans that address the goals of the State Strategic Plan.

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 (SBHCs) in the state. An interdepartmental agreement for 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

O. Prevention of Sexual Violence

The BEMS/Injury Research and Prevention (IRP) Program provides statewide data, educational resources, funding, technical support, and leadership in public health methods to groups working for the prevention of sexual violence. This category includes child sexual abuse, date rape, and violence against women. To facilitate violence prevention initiatives within communities, staff and contractors organize training events and presentations, provide access to key agencies, offer inter-agency mentoring, and promote the creation of local groups.

The Louisiana Foundation Against Sexual Assault (LaFASA) is a coalition of the state's community-based Sexual Assault Centers (SACs) which are urban and rural non-profit agencies Services provided by the centers include 24-hour crisis hotlines, crisis intervention, individual and group counseling,and accompanying survivors to the hospital for the post assault examinations. The centers also provide education about sexual assault prevention in their communities, including schools, civic groups, churches, fraternities and sororities, and professionals who work with sexual assault victims, such as hospital staff and law enforcement offices. Although the IRP Program supports the centers, the centers rely heavily on volunteers to assist with services.

P. 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 Community Injury Prevention Program reviews research and existing injury prevention curricula and then tailors information to fit the specific needs of agencies. In addition, the curriculum includes fact sheets regarding data specific to injuries, prevention tips, and laws in Louisiana.

The BEMS/Injury Research and Prevention Program collaborates with the Maternal and Child Health (MCH) Program's nine Regional Safety Coordinators who coordinate their local Child Death Review Panel efforts and who provide education and resources for community activities which address deaths from unintentional injuries of children under age 15 years (including SIDS) and promote injury prevention. The Injury Prevention Program also collaborates with MCH and Louisiana Safe Kids, Inc. in their promotion of injury prevention policies and practices, public education campaigns, and injury prevention activities

regarding: wearing seat belts and bicycle helmets; pedestrian, home, playground, water, sports, fire, and firearm safety; fall prevention; and poison prevention.

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 BEMS/Injury Research and Prevention Program, please call (504) 599-1080 or visit the program's website at **www.dhh.louisiana.gov/offices/?ID=221**

Programs Targeting Pre-hospital Emergency Medical Services

Q. Emergency Medical Services (EMS) Program

Assuring that pre-hospital healthcare professionals receive appropriate training, examination, and certification is the responsibility of the OPH Emergency Medical Services (EMS) Program.

Certified Emergency Medical Technicians and Paramedic 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. These 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 others. Their pre-hospital actions often mean the difference between additional disability or death.

The approximately 20,000 EMS students, personnel, and instructors in Louisiana are dependent on testing and national certification handled by and through the Program. In any one year, approximately 3,000 to 5,000 of these individuals are processed by the Program for initial certification or for bi-annual recertification, as required by national standards. For real-time clinical testing, the Program 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 Program offers credentials for practice to those eligible. The Program 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 Program within the Center for Community Preparedness 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 DHH Office of Emergency Preparedness; the Louisiana State Police; the Office of the State Fire Marshal; the Commission on Highway Safety; pediatric, trauma, and emergency room physicians and nursing organizations; and the military. The Program also participates in traffic safety planning; State Trauma Plan initiation; 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. There are additional projects such as the extensive **A**utomatic **E**xternal **D**efibrillators (**AEDs**) training and distribution project with an emphasis on rural sites. AEDs can be used by trained bystanders to assist in cardiac emergencies prior to the arrival of trained personnel. Another supported project allows high school seniors to complete their Basic **E**mergency **M**edical **T**echnician (**EMT**) Training prior to graduation. This has the benefit of keeping more children in school, and of graduating children with highly marketable and desirable skills. Special training in recognition of stroke signs and symptoms for early treatment is also provided by the EMS Program.

Emergency Medical Services for Children: EMS-C

To serve children better, the EMS Program directs additional training toward childhood emergencies, including children with special needs. As a leader of the Governor's Council on EMS and Children, the Project 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 Project 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

R. 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.

S. Office of Mental Health (OMH) Programs

I. Summary of Programs and Accomplishments for Fiscal Year 2009

I.A. Funding and Distribution of Resources

Office of Mental Health					
FY 2008-2009 Budget					
Means of Financing	**Area A**	**Area B**	**Area C**	**Central Office**	**Total**
Grants	$806,484	$1,477,636	$54,686	$23,695,574	$26,084,380
IAT	$42,665,300	$56,548,347	$30,857,272	$10,054,813	$140,125,732
Other	$1,470,486	$3,642,217	$553,590	-	$5,666,293
SGF	$36,520,563	$78,069,027	$37,330,868	$22,328,908	$174,249,366
Total	$81,462,833	$139,737,227	$68,796,416	$56,079,295	$346,075,771

Office of Mental Health					
FY 2009-2010 Budget					
Means of Financing	**Area A**	**Area B**	**Area C**	**Central Office**	**Total**
Grants	$806,484	$1,477,636	$54,686	$23,695,574	$26,084,380
IAT	$52,906,815	$104,734,280	$33,316,767	$9,702,257	$200,660,119
Other	$360,291	$3,494,010	$375,590	-	$4,229,891
SGF	$15,120,871	$25,928,911	$30,682,035	$15,379,571	$87,111,388
Total	$69,194,461	$135,465,508	$64,429,078	$46,248,344	$315,337,391

Over the past fiscal year, funding continued to be distributed across budget areas A, B, C and Central Office. Area A includes OMH Region 3, Southeast Louisiana Hospital (SELH), and New Orleans Adolescent Hospital (NOAH). Area B includes OMH Regions 4 and 5, and Eastern Louisiana Mental Health System (ELMHS). Area C includes OMH Regions 6, 7, and 8 and Central Louisiana State Hospital (CLSH).

Central Office manages a number of statewide initiatives, grants, and special projects, including: Louisiana Spirit Hurricane Recovery, Early Childhood Support and Services (ECSS), and Louisiana Youth Suicide Prevention, as well as transformation funding for re-establishing mental health infrastructure for the New Orleans area with evidence-based programs including: Assertive Community Treatment (ACT), Forensic Assertive Community Treatment (FACT), Permanent Supportive Housing (PSH), Assistive Outpatient Treatment (AOT), and Child and Adolescent Response Teams (CART).

Current budget projections for FY2010 indicate the need for streamlining operations and developing mechanisms to serve the targeted population with increased attention to efficiency and effectiveness of services. With the anticipated integration of the Office of Mental Health and the Office for Addictive Disorders, there is an anticipated saving in administrative functions. When compared to other states, Louisiana's per capita distribution for OMH continues to be low t 3.48. Data from the National Association of State mental health Program Directors Research Institute's Expenditure reports have shown that Louisiana ranks 47th in the United States in community-based expenditures for mental health services.

I.B. Inpatient Services

Staffed Psychiatric Beds in Louisiana

OMH provides 30% of the available inpatient psychiatric beds in Louisiana. There is an estimated total of 2,307 Staffed Psychiatric Beds; this figure does not include the state forensic or U.S. Department of Veterans Affairs psychiatric beds. Of the total, there are 641 Public Adult beds (OMH operates 450, LSU operates 191) and 9 Geriatric Public Adult beds (all LSU operated), which are provided through both OMH and the LSU systems. There are an additional 1,029 Private Adult beds and 389 Private Geriatric beds. For Child/Adolescent, there are 57 Public Child/Adolescent beds (all OMH operated), and 182 Private Child/Adolescent beds (see table below).

Service Area A		
MHSD		
	Adult Beds	**Child/Adol Beds**
Public Beds	59	15
Private Beds	69	17
Total Beds	**128**	**32**
FPHSA		
	Adult Beds	**Child/Adol Beds**
Public Beds	104	30
Private Beds	105	0
Total Beds	**209**	**30**
JPHSA		
	Adult Beds	**Child/Adol Beds**
Public Beds	0	0
Private Beds	137	26

Total Beds	**137**	**26**
Region 3		
	Adult Beds	**Child/Adol Beds**
Public Beds	24	0
Private Beds	63	0
Total Beds	**87**	**0**
Service Area B		
Region 4		
	Adult Beds	**Child/Adol Beds**
Public Beds	20	0
Private Beds	305	10
Total Beds	**325**	**10**
Region 5		
	Adult Beds	**Child/Adol Beds**
Public Beds	14	0
Private Beds	177	8
Total Beds	**191**	**8**
CAHSD		
	Adult Beds	**Child/Adol Beds**
Public Beds	276	0
Private Beds	122	9
Total Beds	**398**	**9**
Service Area C		
	Adult Beds	**Child/Adol Beds**
Public Beds	76	12
Private Beds	69	52
Total Beds	**145**	**64**
Region 7		
	Adult Beds	**Child/Adol Beds**
Public Beds	51	0
Private Beds	281	0
Total Beds	**332**	**0**
Region 8		
	Adult Beds	**Child/Adol Beds**
Public Beds	26	0
Private Beds	90	60
Total Beds	**116**	**60**

Although not included in the overall figures in the table, there are 379 total designated forensic adult beds, which are used to treat clients who are admitted into the inpatient system under judicial order Forensic beds also serve persons in need of competency evaluations, competency restoration, patients who have been found not guilty by reason of insanity (NGBRI), and persons with long-term restoration treatment needs.

I.C. OMH Inpatient and Outpatient Data

The public mental-health system provides services to a large number of persons statewide. The table below represents all persons who were served through OMH's State Hospitals, Acute Units and Community Mental Health Clinics during FY 2009. A total of 56,615 persons were served through OMH; this total includes children, adolescents, adults, and the elderly. Of the total number of persons served, 51,983 (91%) received treatment through the outpatient Community Mental Health Clinics.

As indicated in the following table, the vast majority of persons can receive effective treatment through community services offered through OMH-operated and district-operated community mental-health clinics. The national and state trends in mental-health delivery continue to shift limited resources toward more cost-effective and less restrictive options of community-based mental-health services. For persons who do require hospitalization for treatment of mental illness, the state inpatient system remains a critical and much needed aspect of care. The second table on page 44 illustrates the number of persons who were admitted to OMH State Hospitals over the last fiscal year. The table presents the admissions data across the different OMH areas and across age. Area A represents Southern Louisiana, Area B represents Central Louisiana, and Area C represents Northern Louisiana.

Louisiana OMH Combined Outpatient and Inpatient Data

All Persons Served -- FY2009

AGE At ADMISSION	PROGRAM TYPE						TOTAL	
	2-STATE HOSPITALS		3-ACUTE UNITS		1-CMHC			
	Number	% of total	Number	% of total	Number	% of total	Number	% of total
CHILD (0-12)	44	3.50%	2	0.00%	5,362	10.30%	5,408	9.50%
ADOLESCENT (13-17)	154	12.40%	.	.	3,817	7.30%	3,971	7.00%
ADULT (18-64)	1,026	82.60%	3,379	99.60%	42,160	81.00%	46,565	82.10%
SENIOR (65+)	17	1.30%	10	0.20%	644	1.20%	671	1.10%
TOTAL	1,241	100.00%	3,391	100.00%	51,983	100.00%	56,615	100.00%

The following table shows the pattern of admission rates for the state-operated intermediate-care psychiatric hospitals, which includes Central Louisiana State Hospital (CLSH), East Louisiana State Hospital, (ELSH), Southeast Louisiana State Hospital (SELH), Feliciana Forensic Facility (FFF), and the New Orleans Adolescent Hospital (NOAH). Of these admissions, 52% were from southern Louisiana (designated as Area A), 28% were from central Louisiana (designated as Area B), and 20% were from

northern Louisiana (designated as Area C). Overall, the intermediate-care facilities are being used more conservatively, serving less than 1% of their overall population of persons served.

OMH State Hospitals Data								
All Admissions -- FY2009								
Age At Admission	Area of Residence						Total	
	A		B		C			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
CHILD (0-12)	28	10.50%	5	3.40%	5	5.00%	38	7.40%
ADOLESCENT (13-17)	67	25.10%	26	18.10%	24	24.00%	117	22.90%
ADULT (18-64)	166	62.40%	111	77.60%	70	70.00%	347	68.10%
SENIOR (65+)	5	1.80%	1	0.60%	1	1.00%	7	1.30%
TOTAL	266	100.00%	143	100.00%	100	100.00%	509	100.00%

Acute inpatient psychiatric hospitalizations involve lengths of stay from 3 days to less than 30 days in most cases. Over the last several years, the number of Acute Care inpatient units operated by OMH has decreased. The tables below represents all persons who were served in the remaining OMH Acute Units across the state during FY 2009. There were a total of 3,615 persons served, with a significant proportion being served through the acute care system at East Louisiana State Hospital.

Louisiana OMH/LSU State Psychiatric Acute Units								
All Persons Served -- FY2009								
Age At Admission	Acute Unit							
	EAST LA State Hospital		Southeast LA State Hospital		New Orleans Adolescent Hospital		W.O. MOSS	
	N	%	N	%	N	%	N	%
Adult (18-64)	1,175	99.80%	448	99.50%	452	99.30%	324	99.60%
Senior (65+)	2	0.10%	2	0.40%	3	0.60%	1	0.30%
Child (0-12)	.	.	.	.	.	.	.	.
Total	1,177	100.00%	450	100.00%	455	100.00%	325	100.00%

N=Number; % = Percent

Table 2.3B Louisiana OMH/LSU State Psychiatric Acute Units								
All Persons Served -- FY2009								
Age At Admission	Acute Unit							
	University Medical Center		Huey P. Long		Washington - St. Tammany		Medical Centerof LA at New Orleans	
	N	%	N	%	N	%	N	%
Adult (18-64)	414	99.70%	336	100.00%	353	99.70%	101	98.00%
Senior (65+)	.	.	.	.	.	.	2	1.90%
Child (0-12)	1	0.20%	.	.	1	0.20%	.	.
Total	415	100.00%	336	100.00%	354	100.00%	103	100.00%

N=Number; % = Percent

Table 2.3C Louisiana OMH/LSU State Psychiatric Acute Units All Persons Served -- FY2009		
Age At Admission	Acute Unit Total	
	Number	Percent
Adult (18-64)	3,603	99.60%
Senior (65+)	10	0.20%
Child (0-12)	2	0.00%
Total	3,615	100.00%

N=Number; % = Percent

I.D. Outpatient Clinic Data

Throughout Louisiana, there are 43 Community Mental Health Clinics and 27 Outreach locations, all of which are operated through OMH or one of the four local governing entities (LGEs). The only parishes which do not have an outreach location or a community mental health clinic are Bienville, Bossier, Cameron, Claiborne, Concordia, Franklin, Grant, Jefferson Davis, LaSalle, Livingston, St. Charles, and St. Helena.

The following three tables illustrate the number of unique persons who received outpatient services through Louisiana's Community Mental Health Centers. Of the total served (52,792), 53% (27,984) were served at LGEs, while 47% (24,810) were served at OMH regional facilities.

Louisiana OMH Community Mental Health Centers (CMHC) All Persons Served - FY2009								
ADMISSION TYPE	REGION							
	Region 5		Region 6		Region 7		Region 8	
	N	%	N	%	N	%	N	%
First Admission	1,072	63.80%	2,262	65.00%	2,184	69.80%	1,905	64.10%
Readmission	608	36.10%	1,218	35.00%	944	30.10%	1,066	35.80%
TRANSFER	.	.	.	.	.	.	.	.
Missing*	.	.	.	.	.	.	.	.
TOTAL	1,680	100.00%	3,480	100.00%	3,128	100.00%	2,971	100.00%

Louisiana OMH Community Mental Health Centers (CMHC) All Persons Served - FY2009								
ADMISSION TYPE	REGION							
	Region 1(Child/ Youth Clinics)		2-CAHSD		Region 3		Region 4	
	N	%	N	%	N	%	N	%
First Admission	875	91.50%	7,109	77.90%	4,320	64.80%	4,119	69.40%
Readmission	81	8.40%	2,006	22.00%	2,345	35.10%	1,810	30.50%
TRANSFER	.	.	.	.	.	.	.	.
Missing*	.	.	.	.	.	.	.	.
TOTAL	956	100.00%	9,115	100.00%	6,665	100.00%	5,929	100.00%

Louisiana OMH Community Mental Health Centers (CMHC)										
All Persons Served - FY2009										
ADMISSION TYPE	REGION								STATE TOTAL	
	9-FPHSA		JPHSA		1-MHSD		unknown			
	N	%	N	%	N	%	N	%	N	%
First Admission	3,133	70.00%	535	12.00%	8,331	83.80%	1	100.00%	35,846	67.80%
Readmission	1,342	29.90%	209	4.60%	1,606	16.10%	.	.	13,235	25.00%
TRANSFER	.	.	31	0.60%	.	.	.	.	31	0.00%
Missing*	.	.	3,682	82.60%	.	.	.	.	3,682	6.90%
TOTAL	4,475	100.00%	4,457	100.00%	9,937	100.00%	1	100.00%	52,794	100.00%

*JPHSA's data is preliminary as a result of changes in the data structures recently.

I.E. Community-based Services

As the state's Mental Health Authority, OMH continues to encourage the development of an integrated system of services for adults with serious mental illness and children with serious emotional disorders. In regions where it is the service provider, OMH has expanded its capacity to deliver services beyond the capacity of clinics and hospitals through its strong relationship with the private non-profit human-service community. An ongoing responsibility of the agency is to assure that the people of Louisiana have the best possible access to care as feasible within the context of the resources allocated. During 2009, OMH maintained over 227 contracts for community-based service programs.

In order to build a sustainable infrastructure within local communities, OMH utilizes the framework for professional interventions and nationally-supported treatment models which have been clearly specified by the Surgeon General of the United States' *Mental Health: A Report of the Surgeon General* (1999). By utilizing this Accountable Care framework, OMH either directly provided or, through consultation to LGEs, encouraged the provision of the following services during the 2009 Fiscal Year:

*** Early Childhood Supports and Services (ECSS)**

*** La. Youth Enhanced Services (LA-YES)**

*** Assertive Community Treatment (ACT)**

*** Forensic Assertive Community Treatment (FACT)**

*** Multi-Systemic Therapy (MST)**

*** Assistive Outpatient Treatment**

*** Louisiana Spirit Hurricane Recovery**

*** Child and Adolescent Response Team (CART)**

*** Permanent Supportive Housing**

I.F. Legislative Updates on Implementation

2008 Legislative ACT	Legislative Intent	Status
ACT 153	Allows for the mechanism of performing emergency certificates through via telemedicine utilizing video conferencing technology.	COMPLETED - OMH policy developed, reviewed, posted.
ACT 373	Provides relative to the governance, functions, and responsibilities of human services districts.	COMPLETED - Readiness Assessment developed, reviewed, and approved, initial implementation with SCLHSA successful. DHH prepared to provide TA for LGE's in accordance with ACT.
HCR 155	Urges and requests DHH to study the development and implementation of civil commitment procedures for the treatment of sexually violent predators and child sexual predators.	COMPLETED – Committee constituted, literature reviewed, expert TA provided, Report / recommendation prepared and submitted to Louisiana Legislature March 2009.
HCR 184	Creates the Mental Health Care Improvement Task Force to study the ongoing mental health care crisis in Louisiana and make recommendations on how to efficiently implement and find funding sources for key recommendations in LA's Plan for Access to Mental Health Care.	COMPLETED – Task Force constituted, report and recommendations / endorsement submitted to Louisiana Legislature March 2009.
ACT 447	Development of Licensing Standards (DHH Health Standards) for crisis receiving centers. DHH develop a plan for establishment of implementation of regional crisis receiving centers in each region/LGE. Each Crisis Response System designed by a local collaborative with members from: local provider of MH, SA, and DD services, Coroner's Office, Local EMS system, Local Law Enforcement, Consumer representative, advocacy representative, public and private hospital ED.	COMPLETED - Joint meetings were held between OMH and DHH Health Standards, National Consultant provided guidance, each region / LGE has created and continue to develop local Crisis Response Systems designed by local collaborative with broad service stakeholder representation as outlined in the legislation.
ACT 407	Provides for assistive outpatient placement. (8/15/08)	COMPLETED - Assistive Outpatient Treatment Policy and Procedure developed, reviewed, posted. Training provided and implementation continues.

Additional legislation passed during the 2008 Legislative Session and acted upon by Office of Mental Health staff as required included: assuring background checks for those individuals working with children; participation in the creation of a council on the social status of black men and boys; a provision for assigning a division of the District Court (Morehouse/Ouachita) as a Mental Health Court; the amendment/re-enactment of several Children's Code Articles to improve clinical and judicial efficiencies; legislative acknowledgement/support for the need for reform of children's MH system and the creation of a joint legislative SA/MH Caucus; and urging Louisiana's Public Broadcasting network to broadcast programs similar to "Road to Recovery" statewide.

Several studies and workgroups were also authorized, looking into areas such as forensic services privatization, Alzheimer's disease, electronic medical records posting, mental-health care improvement, and the transfer of certain state property. Office of Mental Health staff also participated in providing technical assistance, and consultation to other legislation as it pertained to, or required input for mental-health related issues.

I.G. Evidence-Based Practices

1.) ACT, FACT and Permanent Supportive Housing

The year 2008 saw the rapid start-up of two Assertive Community Treatment (ACT) programs (one in JPHSA and one in MHSD), one Forensic Assertive Community Treatment (FACT) program (accepting referrals from both MHSD and JPHSA), and a Permanent Supportive Housing (PSH) services program through Volunteers of America – Greater New Orleans (VOAGNO).

One year later, each program is at its capacity of 100 persons served. Referrals for the PSH program have been made through the ACT and FACT teams; VOAGNO has been successful in finding safe, secure housing for 206 individuals who were either homeless or at risk of homelessness.

2.) Assistive Outpatient Treatment (AOT)

There were 5 AOT petitions in FY 2009, all from the Greater New Orleans Area. In 2008, prior to AOT, there were 45 hospitalizations and 7 incarcerations combined. In the 26 months since AOT began, there have been 6 hospitalizations and 5 arrests combined.

3.) Multi-Systemic Therapy (MST)

MST is an intensive, home-based wraparound model that combines a variety of individual and family interventions within a systemic context. MST, which has been evaluated with youth at risk for detention/incarceration and at risk for psychiatric or substance-abuse hospitalization, has shown significant results in reducing out-of-home placement, externalizing problem behaviors, decreasing rates of recidivism, and lowering costs of treatment. The program is operating in Orleans, Plaquemines, and St. Bernard parishes.

MST teams began accepting cases in December 2008 and have received 73 cases to date. As of July 30, 2009, 33 were either ineligible or treatment was rejected by the family/agency. Of the remaining 40 cases, 10 have successfully completed treatment, 9 were closed unsuccessfully, and 17 are currently receiving treatment. There is a waiting list of 4 cases.

Programs Targeting Environmental Health

T. 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. In Louisiana, the Parish of Plaquemines and the City of Amite, have recently passed ordinances to implement community water fluoridation with the potential to reach an additional 31,000 state residents.

U. Environmental Health Advisories

The OPH's 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.dhh.louisiana.gov/offices/page.asp?id=205&detail=5749

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 compound present in fish tissue, can cause birth defects and neurological problems when present at high levels. LDEQ samples fish from water bodies that are selected based on water quality, 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 500 water bodies tested to date, 48 health advisories for fish containing mercury have been issued. These advisories cover at least 76 freshwater bodies in or traversing 42 parishes, and include an advisory on king mackerel, cobia, greater amberjack, and blackfin tuna for parishes along the Gulf of Mexico.

V. ENVIRONMENTAL HEALTH EDUCATION

Pesticide Exposure

http://www.dhh.louisiana.gov/offices/page.asp?ID=205&Detail=6686

Worker education/outreach:

Pesticides are widely used in Louisiana, especially by pesticide applicators whose occupation places them at greatest risk of exposure. Outreach to this worker population occurs in partnership with the Louisiana Department of Agriculture and Forestry (LDAF) and the Louisiana State University AgCenter (LSU AgCenter). The LSU AgCenter, which is statutorily authorized to conduct certification and training of all pesticide applicators is an important statewide resource for disseminating SEET's surveillance findings and implementing outreach and prevention activities. In 2009, presentations of industry-specific surveillance findings were done at 3 re-certification trainings which include aerial applicators, LSU Extension Agent training, and LDAF Inspectors.

Residential education/outreach:

Most residents have a collection of pesticide products stored in and around their home. Educating residents about health effects related to pesticide exposure is an important component of SEET's outreach activities. A fact sheet describing health and injury hazards of bug bombs was developed and widely distributed to residents; it is available in English and Spanish.
http://www.dhh.louisiana.gov/offices/publications/pubs-205/BugBomb_E07L_Louisiana.pdf

Healthcare/public health program outreach:

The Louisiana Morbidity Report (LMR) is a bi-monthly OPH publication that is widely distributed via email and hard copy to Louisiana healthcare providers, public health officials, and organizations with an interest in public health. The following article was recently printed in the LMR:
Pesticide Exposures among Children Less than Seven Years of Age – Louisiana, 2003-2007.
http://www.dhh.louisiana.gov/offices/miscdocs/docs-249/LMR/2009/marapr09.pdf

Recent publications in peer-reviewed journals include the following:

- Acute Pesticide Poisoning in the U.S. Retail Industry, 1998-2004. Public Health Reports. 2007:232-244.
- Centers for Disease Control and Prevention. Illnesses and Injuries Related to Total Release Foggers – Eight States, 2001-2006, MMWR, Vol 57; No 41, October 2008
- Acute Pesticide Poisoning Among Agricultural Workers in the United States, 1998-2005. Am J Ind Med. 51:883-898, 2008.
- Characteristics of Pesticide-Related Hospitalizations, Louisiana: 1998-2007. Accepted for publication by Public Health Reports.

Occupational Health

Education of healthcare providers about heavy metal (lead, arsenic, mercury, and cadmium) poisoning was done through the development of four detailed web-based documents that summarize information on the sources, exposure pathways, laboratory testing, recognition, and reporting of heavy metal poisoning (http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=8411). In addition, several occupational-health surveillance reports were published in the Louisiana Morbidity Report:

- Carbon Monoxide Exposure in Office Building Sickens Employees – Louisiana, 2007. Louisiana Morbidity Report, May-June 2007.
- Adult Blood Lead Testing, Louisiana 2007. Louisiana Morbidity Report, Vol 19 No 4, 2008.
- Blood Mercury Levels, Louisiana, 2007, Louisiana Morbidity Report, Vol 19 No 6, 2008.

Mercury in Fish

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5749

Working jointly with representatives of LDEQ, LDWF, the Sierra Club, and the Louisiana Audubon Council, SEET produced two informational brochures in 2008, one on mercury in locally-caught fish and another on making health choices when consuming seafood. The publications are widely distributed throughout Louisiana at community health fairs, public libraries and via the web. SEET also published its findings from a recent review of fish-tissue data in the Louisiana Morbidity Report which is disseminated to healthcare providers and public health officials: http://www.dhh.louisiana.gov/offices/miscdocs/docs-249/LMR/2008/janfeb08.pdf

Hazardous Waste Sites

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5752

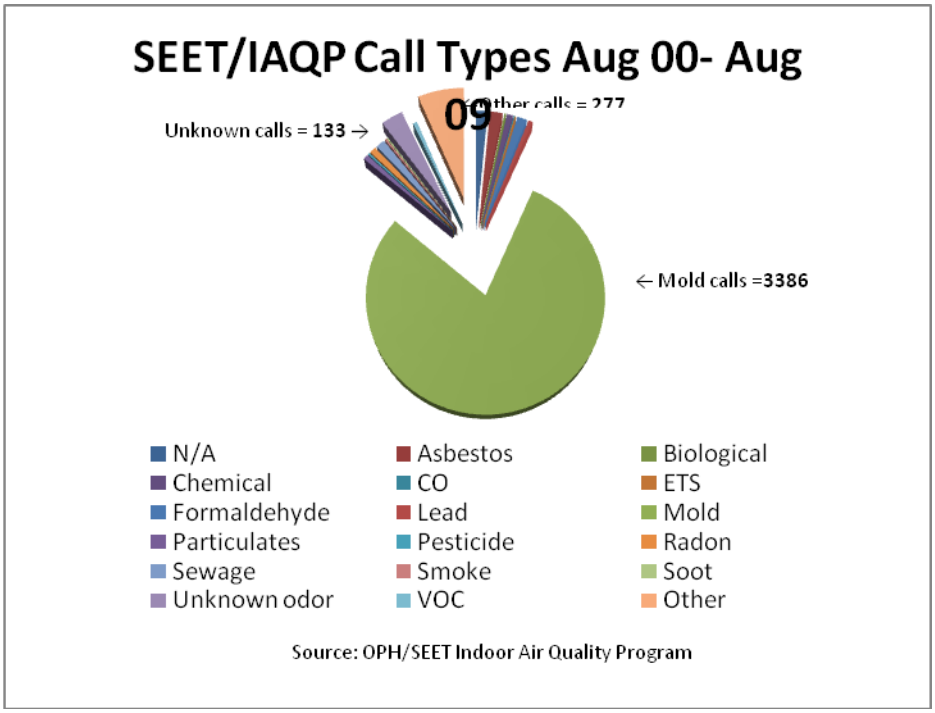
SEET conducts community outreach for residents, physicians, and other healthcare professionals located near hazardous-waste sites. Information provided focuses on site contaminants, health effects from exposure, and clinical descriptions of the diagnosis and management of cases of chemical exposure. SEET develops, publishes, and distributes environmental health education materials; prepares and presents environmental health information to schools, physicians and communities; conducts public meetings and listening sessions; and coordinates all education and outreach activities with site stakeholders, including local, state, and federal agencies and community groups.

Indoor Air Quality

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5750

SEET provides indoor air quality (IAQ) phone consultations to Louisiana residents, mails information, and provides lectures/presentations upon request. Indoor air quality phone consultations generally consist of a discussion of the complaint/inquiry followed by an appropriate referral, if any is indicated. These calls have been tracked by SEET since August of 2000 through a Complaint Form with daily data entry into an

Access database. The SEET/IAQ Complaint database allows analysis of the calls by type, location, and resolution or referral action. Of all the IAQ complaints received by SEET's telephone hotline, 64% are mold-related. Analysis of the mold- complaint data shows that 86% of those telephone calls involve Louisianaschools.



During the year following hurricane Gustav, SEET conducted over 750 IAQ phone consultations for the residents of Louisiana. The majority of callers sought guidance on proper clean-up and safety measures for returning to the area. As a result of significant wind damage and the resulting storm devastation, information was distributed across the state and throughout the country. SEET's updated fact sheets and informational bulletins such as "Coming Home: Steps to Stay Safe as You Return to Your Home", "Mold: What You Need to Know about Your Health and Your Property", and the "Hurricane Public Information Packet" continue to be an ongoing environmental information resource. Many Louisiana residents affected by hurricane Gustav are still in the process of repairing their homes. SEET continues to endorse the expansion of the EPA: Indoor Air Quality Tools for Schools program in area public schools and child daycare centers to help reduce asthma triggers and improve indoor air quality in these settings.

Children's Environmental Health Initiative

http://www.dhh.louisiana.gov/offices/publications.asp?ID=205&Detail=2794

In an effort to protect the health of all children in Louisiana, SEET developed the Louisiana Children's Environmental Health Initiative. The goal of the Initiative is to educate families and healthcare providers about environmental health hazards effecting children and to promote a healthy environment in which

children can grow. SEET developed a brochure to provide to parents, childcare and health care providers, and other individuals who live and work with children. SEET has formed partnerships with other federal, state, and local agencies with common interests including the Louisiana Childhood Lead Poisoning Prevention Program and Louisiana State University Ag Center, Research and Extension, Family and Consumer Program. The Section plans to expand its outreach efforts in the future to protect more Louisiana children from being exposed to environmental hazards.

Private Well Education

http://www.dhh.louisiana.gov/offices/publications/pubs-205/Private_Water_Wells.pdf

Through a partnership with the Louisiana Department of Transportation and Development (DOTD), SEET recently established the Private Well Education Program. SEET provides well owners who have registered a well with DOTD with the OPH brochure "*Private Water Well Testing in Louisiana: What You Need to Know to Protect Your Water"* and a letter informing them of the importance of well testing. The brochure contains information on how to protect private water supplies, stresses the importance of well testing, and provides specific contact information for registering, cleaning, disinfecting, and testing wells. To date, SEET has distributed approximately 2,000 letters with brochures to well owners in 48 parishes.

W. Environmental Health Emergency Response Programs

Environmental Public Health Emergency Preparedness & Response

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. SEET maintains a surveillance system of emergency chemical releases in the state by screening event notifications from the Louisiana State Police, LDEQ, and the National Response Center of the U.S. Coast Guard. SEET also receives notifications of Poison Control Center cases that involve exposure to chemicals and maintains a database with the details of each exposure. 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. Appropriate OPH regional staff members are notified when chemical events requiring a response occur in their region. SEET generates maps of incident locations pinpointing critical facilities and susceptible populations that may potentially be affected. In 2008, SEET screened nearly 12,000 event notifications. There were no notifications that required a SEET on-scene response.

Geographical Information System (GIS) Support Services

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6710

The GIS Support Services maintains public health related location 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. In addition to completing the various mapping requests for other portions of SEET and OPH, SFY 2008 saw SEET GIS staff train OPH regional staff on how to use GIS software.

Hazardous Substances Emergency Events Surveillance

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5748

In the fall of 2000, SEET began collaboration with the Agency for Toxic Substances & Disease Registry within CDC to participate in the Hazardous Substances Emergency Events Surveillance (HSEES) system. Currently, 13 other states also participate in this project. SEET collects information on acute hazardous-substance events and enters it into a comprehensive database, which includes releases to the air, water, land, and threatened releases that lead to public-health actions. Data are also collected about associated public-health consequences including evacuations, injuries and deaths. The database includes data collected from the National Response Center (NRC), LDEQ, the Louisiana State Police (LSP), the Poison Control center, and 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 SFY 2008, SEET screened over 11,500 events reported to the LSP and the NRC; of those, approximately 1,273 events were entered initially to the HSEES database system. Of the events initially entered into the HSEES system, 1,019 met the criteria for final 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. Using these data, SEET targets 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 are developed to reduce such consequences.

Mississippi River Industrial Corridor Fact sheet:

HSEES staff developed a fact sheet that summarized and described the most common incidents and releases that occurred in the Mississippi River Industrial Corridor (Baton Rouge to the mouth of the Mississippi River). This fact sheet also described what safety precautions residents can take in the event of a chemical release. In addition, the fact sheet also provided safety precautions that industries can take to prevent releases and to prepare their communities for a chemical emergency.

Calcasieu Industrial Corridor Fact sheet:

HSEES staff developed a fact sheet that summarized and described the most common incidents and releases that occurred in the Calcasieu Industrial Corridor (Calcasieu Parish). This fact sheet also described what safety precautions residents can take in the event of a chemical release. In addition, the fact sheet also provided safety precautions that industries can take to prevent releases and to prepare their communities for a chemical emergency.

Transport of Hazardous Substances Pamphlet:

HSEES staff developed a pamphlet entitled "What You Can Do to Decrease and Prevent the Release of Hazardous Substances During Transit" that summarized and described the most common incidents and releases that occur during transportation in the State of Louisiana. The pamphlet provided instructions on what should be done in the event of a hazardous-substance release during transit as well as techniques for preventing hazardous-substance releases during transit.

V. LOUISIANA STATE HEALTH CARE SYSTEM

A. Analysis of Health Care in Louisiana

In the United Health Foundation's *State Health Rankings 2009*[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: Diabetes age-adjusted mortality, ranking 1st (38.7 deaths per 100,000 population); AIDS age-adjusted mortality, ranking 2nd (9.2 deaths per 100,000 population); Infant Mortality, ranking 2nd (10.1 deaths per 1,000 live births); Physical Inactivity, ranking 2nd (30%); Neonatal Deaths, ranking 4th (5.8 per 1,000 live births); Prevalence of Obesity, ranking 4th (30.7%); Heart disease age-adjusted mortality, ranking 5th (255.7 per 100,000 population); and Prevalence of Hypertension, ranking 6th (32.3%) when compared to the other inland states. 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 infant mortality of race groups, at 7 deaths per 1,000 live births for non-Hispanic whites to a high of 14.9 deaths per 1,000 live births for non-Hispanic blacks.

Despite the negative findings, there were also some positive points. Louisiana ranked 8th in the Adequacy of Prenatal Care measure, with 87 % of all pregnant women in the state receiving adequate prenatal care, as defined by the Kessner Index. Additionally, the percentage of persons under age 18 in poverty decreased from 25.2 % to 20.6 %, the immunization coverage for children aged 19 to 35 months increased 50 % to 74.9 %, and the prevalence of smoking decreased from 24 % to 20 %.

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 August 2009, the Shortage Designation Branch within the Health Resources and Services Administration, Bureau of Health Professions (HRSA/BHPR) recognized 261 primary-care shortage areas in 64 parishes within the state: 53 whole parish, 11 partial parish geographic areas, 6 whole parish and 13 partial parish population groups; and 173 healthcare facilities, consisting of 108 Rural Health Clinics, 64 Federally Qualified Health Centers, and 1 Federally Qualified Health Center Look Alike. There are also 172 designated dental shortage areas consisting of 53 whole parish and 3 partial parishes, as well as 60 whole parish mental health designations.

In addition to the shortages of primary-care physicians, other healthcare occupations identified by the National center for Health Workforce Analysis 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] United Health Foundation State Health Rankings 2009 © 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, mental health, and dental practitioners 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. Since July 2005, a total of 71 primary care providers participated in the State Loan Repayment Program, 53 in rural underserved communities and 18 in urban underserved communities.
- 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 and the Louisiana AHECs. Established in 2002, the program has recruited 255 primary-care health-care professionals to date to serve in designated areas within the state.
- 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. In 2009, Louisiana had 49 primary-care and specialty physicians serving in 36 clinics.
- The Greater New Orleans Health Service Corps (GNOHSC) aims to increase health care access in Orleans, Jefferson, Plaquemines and St. Bernard parishes (Region 1) by recruiting and retaining primary care, mental health and dental health providers. This funding was designed to enhance the professional workforce supply in the greater New Orleans area and to increase patient access by offering payments to assist in the recruitment or retention of eligible healthcare professionals. The program's goals were to reduce the shortage of critical healthcare professionals in the area and to increase access to healthcare services for the low-income population living in the area.

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 2007 [2]	
Alabama	16.1%
Arkansas	22.5%
Louisiana	21.4%
Mississippi	19.2%
Texas	11.9%
United States	14.8%
Percent of Population Not Covered by Health Insurance in 2007 [2]	
Alabama	13.9%
Arkansas	17.5%
Louisiana	19.4%
Mississippi	18.8%
Texas	24.4%
United States	15.4%
Change in Percent of Population Uninsured: 2003 to 2007 [2]	
Alabama	12.7
Arkansas	3
Louisiana	14.9
Mississippi	6.7
Texas	10.9
United States	1.5
Rate of Physicians in Primary Care per 100,000 Population in 2007 [2]	
Alabama	85
Arkansas	82
Louisiana	96
Mississippi	69
Texas	77
United States	99
Rate of Beds in Community Hospitals In 2007 per 100,000 Population [2]	
Alabama	339
Arkansas	336
Louisiana	355
Mississippi	435
Texas	244
United States	266
Average Stay(in Days) in Community Hospitals in 2007 [2]	
Alabama	5.1
Arkansas	5.2
Louisiana	5.5
Mississippi	6.4
Texas	5.2
United States	5.5
Number of Health Maintenance Organizations (HMOs), Louisiana, 2008 [2]	35
Percent of Population Enrolled in HMOs in 2008 (National Percent = 24.8%) [2]	9%
Number of Nurses, Louisiana, November, 2008 [3]	51,408
Number of Physician Assistants, Louisiana, 2008	545

[2] Morgan, K.O. and Morgan, S. (Eds.).2008. *Health Care State Rankings 2009*.

[3] Louisiana State Board of Nursing

C. Louisiana Health Care Access

Number of Hospitals and Beds Louisiana, 2009		
Type of Hospital	**Hospitals**	**Licensed Beds**
Acute	102	18,708
Children's	2	263
Critical Access	27	730
Long Term	40	1,915
Psychiatric	39	2,443
Rehabilitation	22	540

Source: Health Standards Section, DHH

Health Facilities Louisiana, 2009	
Type of Facility	**Number**
Alcohol/Drug Abuse Facilities	187
Community Health Centers	72
State Developmental Centers	6
Hospitals	233
Mental Health Clinics	35
Rural Health Clinics	107
Parish Health Units	77

Source: Health Standards Section, Bureau of Primary Care/Rural Health DHH

Licensed Nursing Home Statistics Louisiana, 2009	
Number of Nursing Homes	304
Number of Beds	
Licensed Beds	37,773
*Medicaid **	32,857
*Average Annual Occupancy (Medicaid)**	71.9%

*From April 1, 2008 thru March 31, 2009
Source: Health Standards Section, DHH

Lack of Access to Primary Care* Louisiana, Neighboring States, and United States, 2007		
State	**Percent**	**Rank****
Alabama	22.0	5
Arkansas	9.8	28
Louisiana	35.8	1
Mississippi	31.7	2
Texas	12.1	19
United States	11.1	-

* 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.). 2008. *Health Care State Rankings 2008*

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 2008/09 (July 1 2008 to June 30 2009)

	Unduplicated Recipients			
Race/Ethnicity	**Male**	**Female**	**Unknown**	**Grand Total**
White	183,509	265,354	24	448,887
Black	254,047	365,802	39	619,888
American Indian or Alaskan Native	1,716	2,579	1	4,296
Asian	4,007	5,613	2	9,622
Hispanic or Latino (no other race info)	9,666	15,144	1	24,811
Native Hawaiian or Other Pacific Islander	184	282	0	466
Hispanic or Latino and one or more other races	2,349	3,618	2	5,969
More than one race indicated (and not Hispanic or Latino)	1,030	1,202	2	2,234
Unknown	21,459	30,159	47	51,665
Grand Total	477,967	689,753	118	1,167,838

Louisiana Medicaid Program
SFY 2008/09 (July 1 2008 to June 30 2009)

	Payments *			
Race/Ethnicity	**Male**	**Female**	**Unknown**	**Grand Total**
White	1,009,239,455	1,385,479,927	28,451	2,394,747,833
Black	1,024,136,538	1,425,529,585	185,920	2,449,852,044
American Indian or Alaskan Native	5,509,846	8,715,589	3	14,225,439
Asian	9,441,422	14,178,780	1,487	23,621,689
Hispanic or Latino (no other race info)	24,960,991	42,695,393	1,167	67,657,552
Native Hawaiian or Other Pacific Islander	296,395	756,848	0	1,053,243
Hispanic or Latino and one or more other races	5,197,588	7,640,022	4,929	12,842,539
More than one race indicated (and not Hispanic or Latino)	1,885,313	2,042,593	2,367	3,930,273
Unknown	147,910,046	210,155,015	308,815	358,065,061
Grand Total	2,228,577,594	3,097,193,754	533,139	5,325,995,672

* Figures have been rounded to the nearest dollar.
Source: DHH / Division of Health Economics (Medicaid)

Louisiana Medicaid Program, SFY/2008		
Age Group (Years)	**Total Number of Recipients**	**Total Payments**
Under 1	72,386	$372,408,022
1- 5	208,583	$342,589,924
6 - 14	308,344	$453,664,099
15 - 18	127,584	$279,347,974
19 -20	36,571	$120,979,879
21-44	213,937	$1,224,770,325
45-64	99,579	$1,304,129,151
65-84	86,932	$713,407,587
85+	20,370	$328,828,717
Total	1,174,215	$5,140,125,678

Source: Division of Health Economics (Medicaid), SFY 2008

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 2007 & 2008			
State	**Medicaid Enrollment+**	**Medicaid Expenditures ***	**Medicaid expenditures per enrollee +**
Alabama	724,000	$4,325,000,000	$6,085.49
Arkansas	626,000	$3,573,000,000	$5,502.08
Louisiana	935,000	$6,006,000,000	$5,699.38
Mississippi	548,000	$3,158,000,000	$6,740.65
Texas	3,002,000	$22,187,000,000	$7,140.23
United States	45,962,000	$322,027,000,000	$6,838.42

* Figures correspond to year 2008 +Figures correspond to year 2007
Source: Morgan, K.O. and Morgan, S (Editors) 2009. Health Care State Rankings 2009.

Medicaid Statistics Louisiana, Neighboring States, and United States, Fiscal Year 2007 & 2008		
	Percent change in Medicaid expenditures (2007- 2008)	**Estimated per Capita Medicaid Expenditures (2008)**
Alabama	3.8%	$928
Arkansas	11.5%	$1,251
Louisiana	15.9%	$1,362
Mississippi	4.7%	$1,075
Texas	7.7%	$912
United States	5.5%	$1,059

Source: Morgan, K.O. and Morgan, S (Editors) 2008. Health Care State Rankings 2009.

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 639,499 Louisiana residents were enrolled in the Medicare program in 2007.[2]

Medicare Statistics
Louisiana, Neighboring States, and United States, 2007

State	Medicare Enrollment	Percent of Population Enrolled
Alabama	789,250	17.1%
Arkansas	496,336	17.5%
Louisiana	639,499	14.9%
Mississippi	469,402	16.1%
Texas	2,708,229	11.3%
United States	44,263,111	14.3%

Source: Morgan, K.O. and Morgan, S (Editors) 2008. Health Care State Rankings 2009.

Medicare Statistics
Louisiana, Neighboring States, and United States, 2007

State	Medicare Program payments	Medicare payments per enrollee
Alabama	$5,246,000,000	$7,815
Arkansas	$3,200,000,000	$7,313
Louisiana	$4,968,000,000	$9,388
Mississippi	$3,654,000,000	$8,440
Texas	$21,983,000,000	$9,542
United States	$287,442,000,000	$8,246

Source: Morgan, K.O. and Morgan, S (Editors) 2007. Health Care State Rankings 2009.

[2] Source: Morgan, K.O. and Morgan, S (Editors) 2008. Health Care State Rankings 2009.

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) are also discussed.

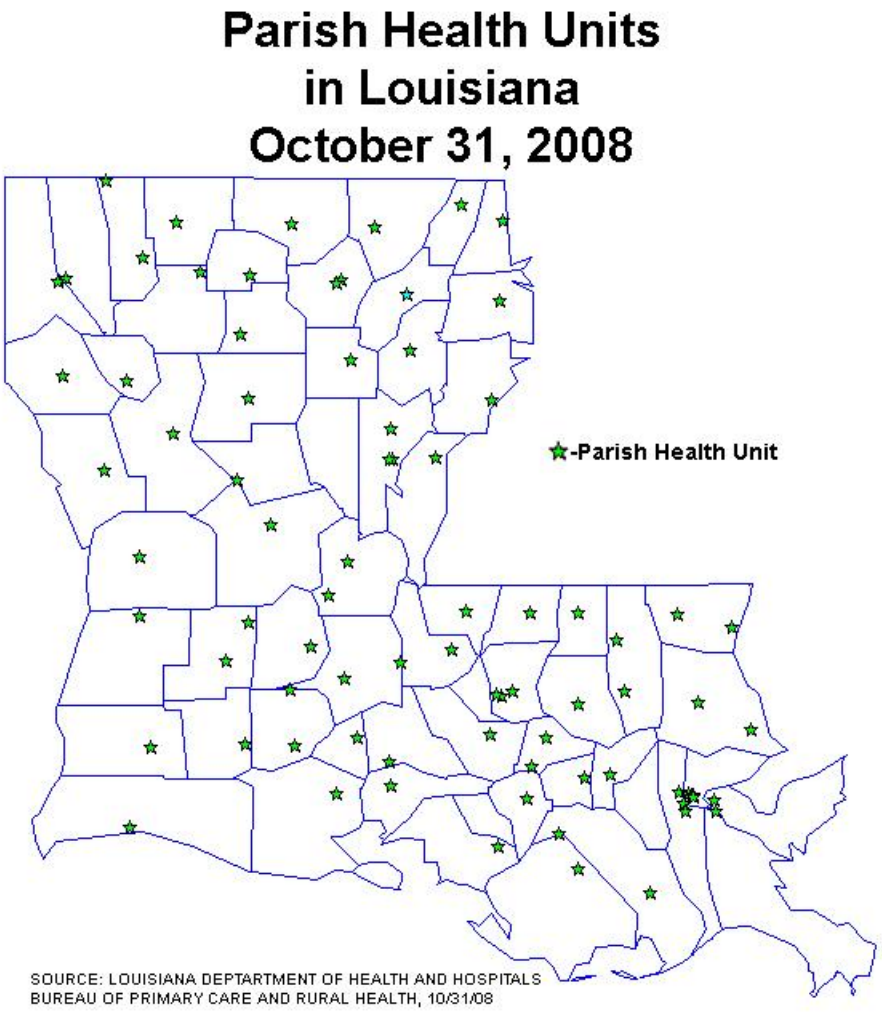
State Charity Hospitals

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 (served 1928 to 1932). 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.

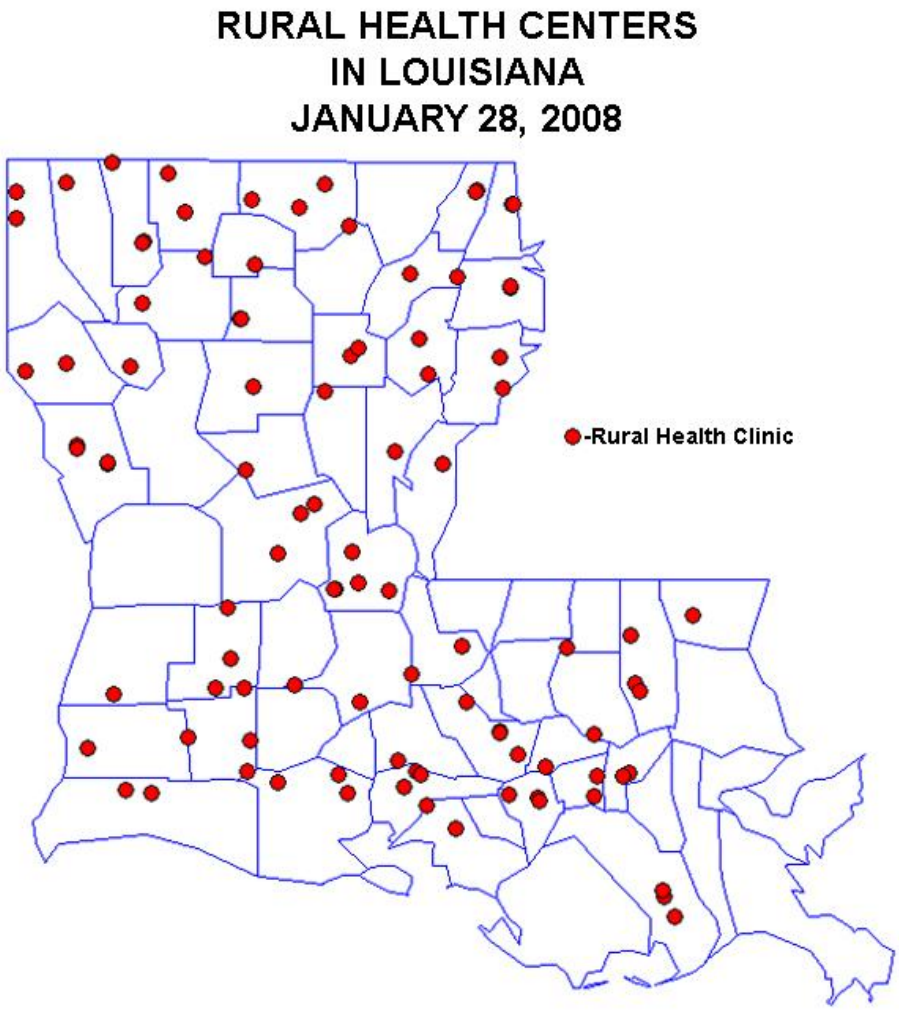
Parish Health Units

Louisiana has 77 parish health units operated by DHH-OPH (see map below) providing 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.



Rural Health Clinics

Louisiana has 108 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.



Source: Department of Health and Hospitals Bureau of Primary Care and Rural Health, 10/27/08

Small Rural Hospitals

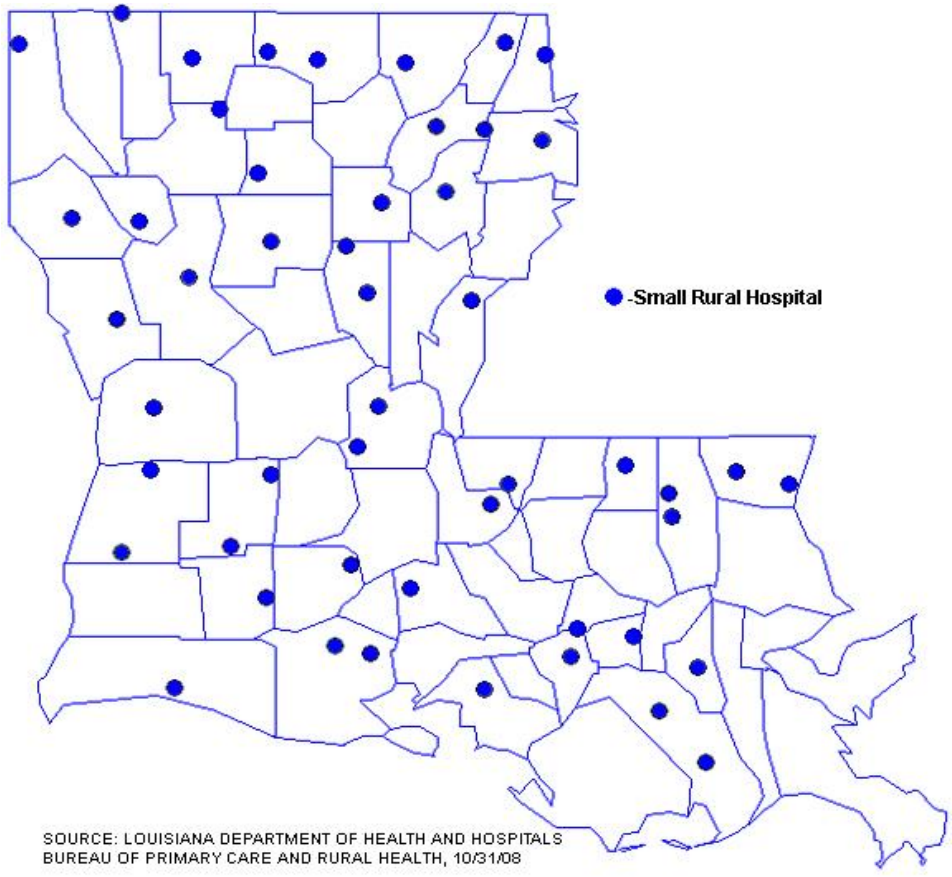
Louisiana has 49 Small Rural Hospitals. A Small Rural Hospital is defined as a hospital, other than a long-term care hospital, rehabilitation hospital, or free-standing psychiatric hospital, but including distinct-part psychiatric units, meeting the following criteria:

a. had no more than 60 hospital beds as of July 1, 1994, and is located in a parish with a population of less than 50,000 or in a municipality with a population of less than 20,000; or
b. meets the qualifications of a sole community hospital under 42 CFR §412.92(a); or
c. had 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
d. had no more than 60 hospital beds as of July 1, 1997 and is a publicly-owned and operated hospital that is located in either a parish with a population of less than 50,000 or a municipality with a population of less than 20,000; or
e. had no more than 60 hospital beds as of June 30, 2000 and is located in a municipality with a population, as measured by the 1990 census, of less than 20,000; or
f. had no more than 60 beds as of July 1, 1997 and is located in a parish with a population, as measured by the 1990 and 2000 censuses, of less than 50,000; or
g. was a hospital facility licensed by the State Department of Health and Hospitals (DHH) that had no more than 60 hospital beds as of July 1, 1994, which hospital facility:
   i) has been in continuous operation since July 1, 1994;
   ii) is currently operating under a license issued by DHH; and
   iii) is located in a parish with a population, as measured by the 1990 census, of less than 50,000; or
h. 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; or
i. has no more than 60 hospital beds or has notified DHH as of December 31, 2003, of its intent to reduce its number of hospital beds to no more than 60; and
   i) is located, as measured by the 2000 census, in a municipality with a population of less than 7,000;
   ii) is located, as measured by the 2000 census, in a parish with a population of less than 53,000; and
   iii) is located within 10 miles of a United States military base; or
j. has no more than 60 hospital beds as of September 26, 2002; and
   i) is located, as measured by the 2000 census, in a municipality with a population of less than 10,000; and

ii) is located, as measured by the 2000 census, in a parish with a population of less than 33,000; or

k. has no more than 60 hospital beds as of January 1, 2003; and
i) is located, as measured by the 2000 census, in a municipality with a population of less than 11,000; and
ii) is located, as measured by the 2000 census, in a parish with a population of less than 90,000; or

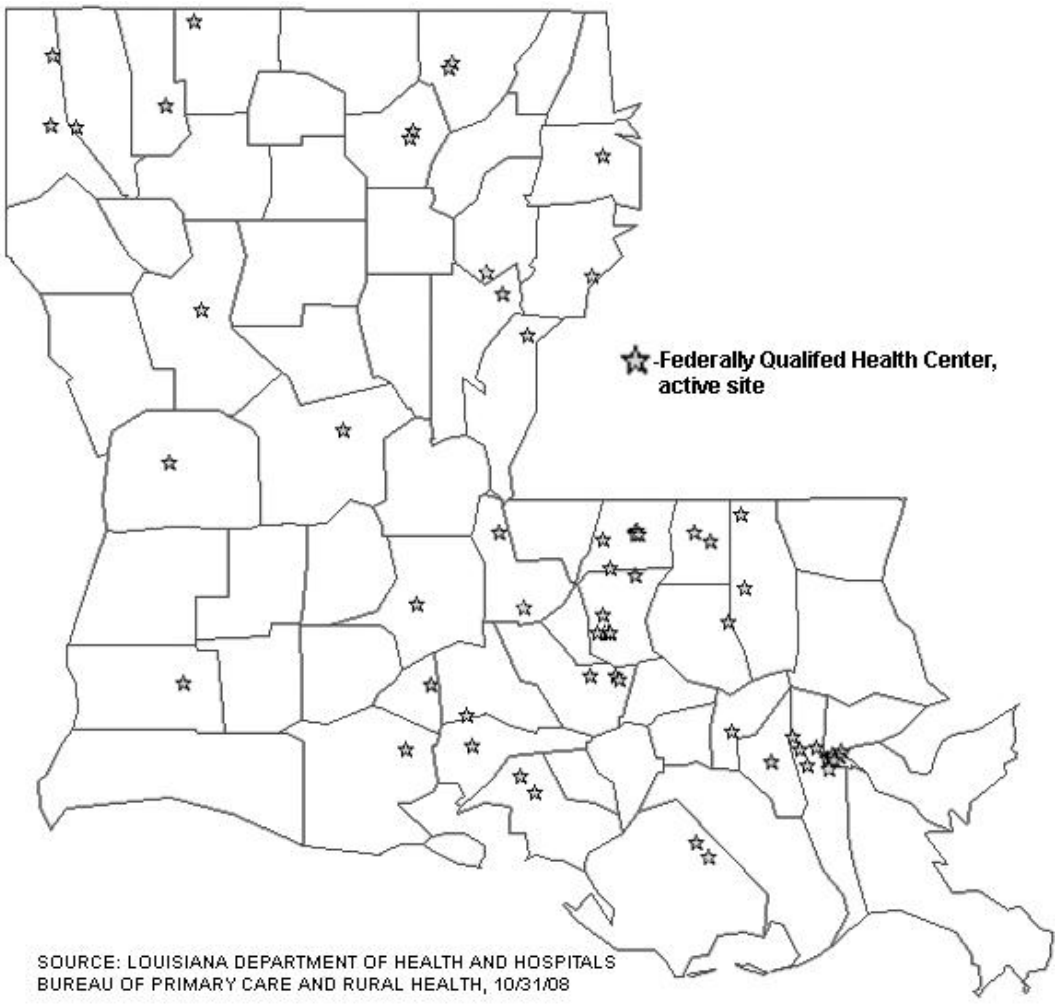
l. has no more than 40 hospital beds as of January 1, 2005, and
i) is located in a municipality with a population of less than 3,100; and
ii) is located in a parish with a population of less than 15,800 as measured by the 2000 census.



SOURCE: LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS
BUREAU OF PRIMARY CARE AND RURAL HEALTH, 10/31/08

Federally Qualified Health Centers (FQHCs)

Louisiana has 25 grantees for community health centers delivering services to 72 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.



SOURCE: LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS
BUREAU OF PRIMARY CARE AND RURAL HEALTH, 10/31/08

CommunityCARE

CommunityCARE is a Medicaid primary-care case-management (PCCM) managed-care program that operated in specific parishes in Louisiana under the authority of a 1915(b)(1) waiver from 1992 through April 2001. In May 2001, DHH embarked on a statewide expansion of the program and, in December 2003, CommunityCARE was fully implemented statewide. Effective April 1, 2006, the Centers for Medicare and Medicaid Services (CMS) approved Louisiana's request to operate the CommunityCARE program as a State Plan Amendment program instead of a waiver program. CommunityCARE is designed to assure Medicaid recipients a "medical home".

The program links most Medicaid recipients with a physician, clinic, FQHC, or RHC that serves as the primary care provider (PCP). The PCP is responsible for coordinating and providing preventative acute care and health education and maintaining a comprehensive integrated health chart. Referrals and authorizations for medically-indicated specialty care, outpatient hospital services, and other ancillary health services are an integral component of the PCP responsibilities.

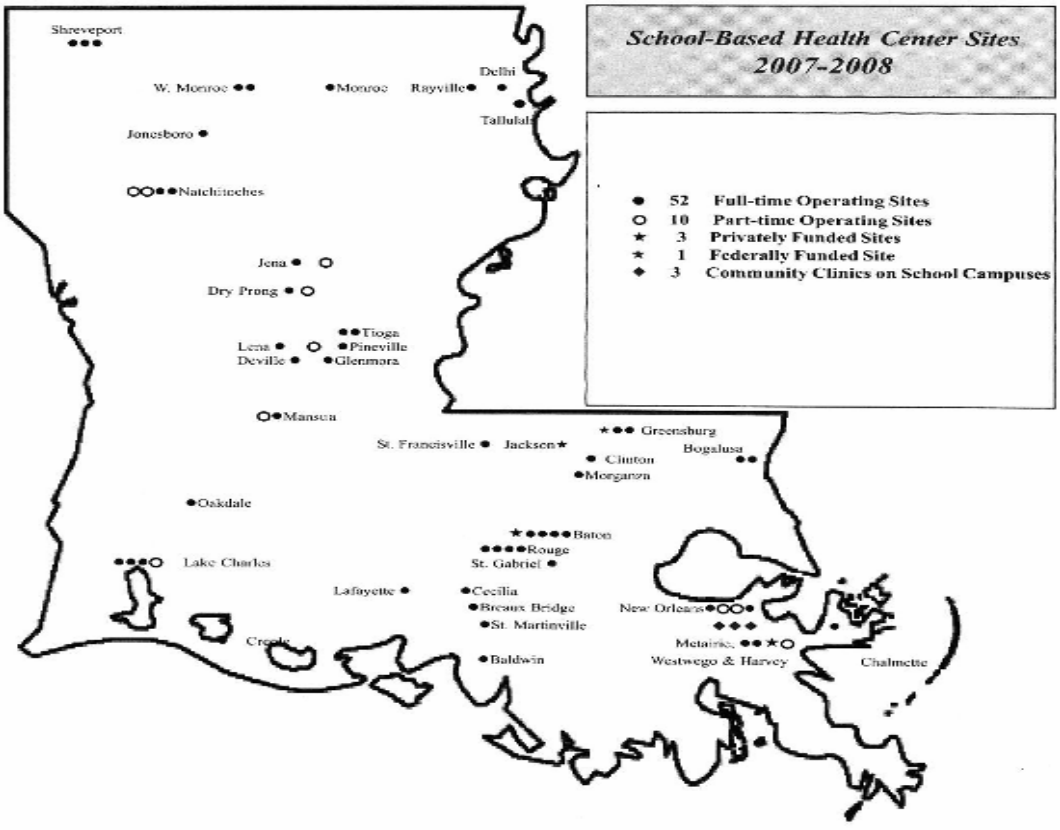
The primary goal of CommunityCARE is to provide a "medical home" to all enrollees to assure access to quality, continuity, and preventive-health care for Medicaid enrollees participating in the CommunityCARE program. The CommunityCARE program provided services to 816,900 recipients during SFY 2006/07 at a total cost of $22,727,316.

As a result of recommendations by advisory groups of 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 while maintaining the quality of care. The CommunityCARE quality unit, a staff of registered nurses, conducts ongoing quality improvement projects based on the Health Plan Employer Data and Information Set (HEDIS), the national data collection and reporting instrument that CMS recommends for Medicaid managed care, supplemented by other widely utilized quality measures.

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 47 state-funded sites, one foundation funded site, one federally-funded site, and one funded by other sources. These school-based health centers are sponsored and operated at the local level by a health or education agency under contract with 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.



Supports and Services Centers

There are six large supports and services centers licensed as Intermediate Care Facilities for people with developmental disabilities (ICF/DDs), providing 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. Additionally, these Centers provide a variety of services such as extended family living, supported living in one's own home, supported employment, day habilitation, and support services to people with developmental disabilities living in the community. The Support and Services Centers include Northlake at Hammond, Northwest at Bossier City, Bayou Region at Thibodaux, Pinecrest at Pineville, Northeast at Ruston, and Acadiana Region at Iota.

The state also operates two total community-based operations serving people with developmental disabilities including Columbia Community Residential and Employment Services and Leesville Residential and Employment Services Center.

Note: A symbol may not be geographically correct for each location
Source: Office for Citizens with Developmental Disorders

Mental Health Clinics

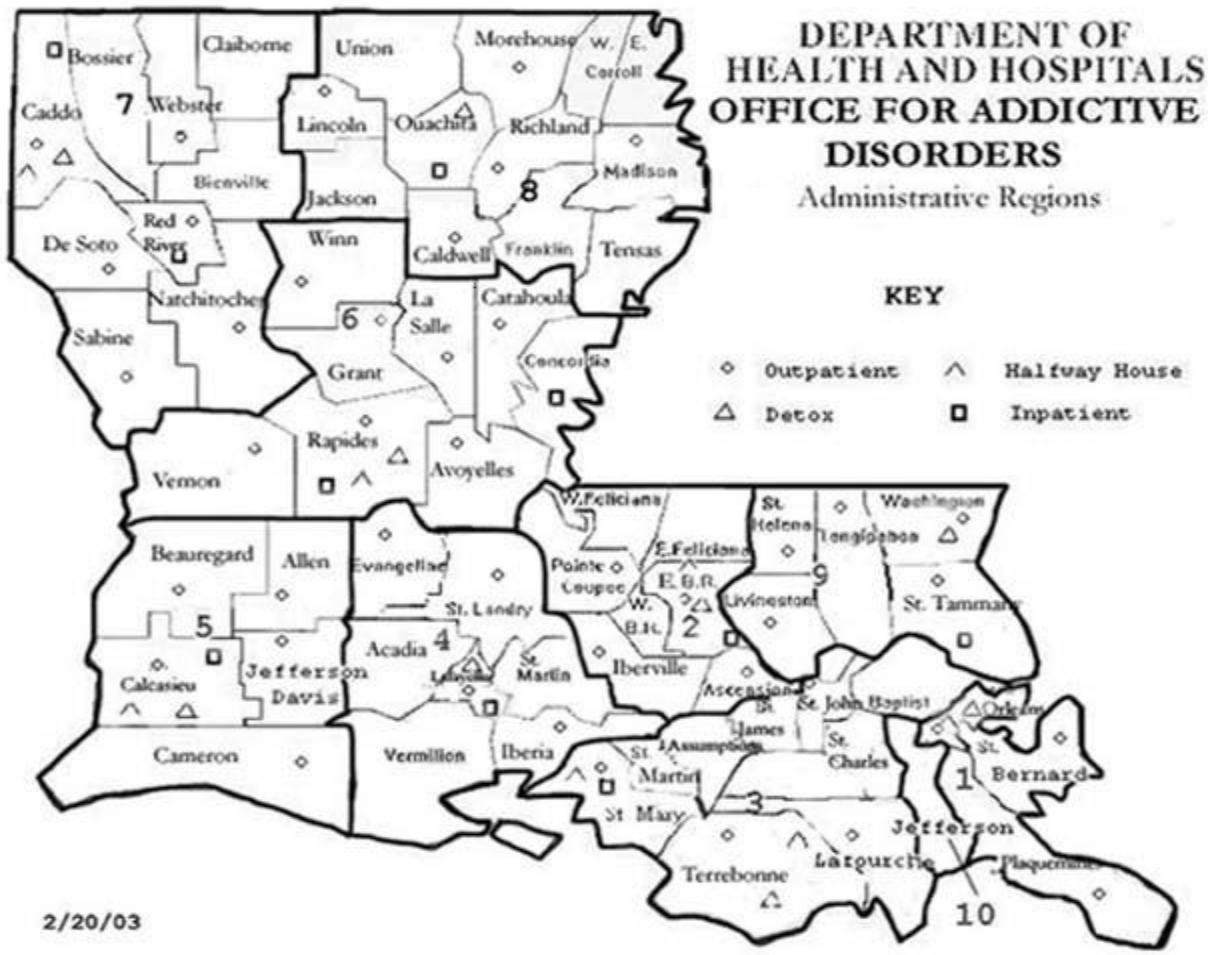
THE DHH Office of Mental Health (OMH), either directly or through partnerships with private and university resources, provides an array of community-based and hospital-based services, the range of which is consistent with national models for public mental-health care for individuals with serious mental illnesses. Statewide, there are currently 43 community mental-health centers, 33 outreach sites, six acute treatment units, three 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

Office for Addictive Disorders (OAD) Treatment and Prevention Programs

During SFY 2008-2009, OAD treatment delivery system was composed of six treatment delivery regions and four Human Service Districts/Authorities. OAD had 15 inpatient clinics (12 adult and 3 adolescent), 13 detoxification clinics, 17 halfway houses, 30 outpatient clinics, 41 dual-outpatient and intensive outpatient clinics, 47 Oxford Recovery Homes, one Three-Quarter Home, 7 residential facilities, and a 40 bed-adolescent inpatient unit opening in September 2009. OAD prevention has a total of 65 providers; 55 are Community-Based Prevention Providers, including 13 Children of Alcoholic (COA) program providers and 10 are Synar Contractors. The 55 Community-Based Prevention Providers are providing a total of 80 programs.



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

Existing Health Maintenance Organizations

Louisiana currently has 35 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 2008, approximately 388,398 Louisiana residents (9% of the population) were enrolled in HMOs. 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 - 2008									
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	14			6	2	5	27	1	8
Allen	6	1		3			10		4
Ascension	8	1		12	1	6	28	1	22
Assumption	4			1			5	1	2
Avoyelles	6	3		4			13		10
Beauregard	7			2	3	3	15		6
Bienville	3					1	4		3
Bossier	17			24	6	8	55	2	31
Caddo	81		2	243	39	80	445	36	164
Calcasieu	57	2		56	12	17	144	16	92
Caldwell	1			1			2		2
Cameron				1			1		0
Catahoula	1					1	2		1
Claiborne	7			1		1	9		3
Concordia	5			3	1	1	10		5
DeSoto	2	1		1			4	1	4
East Baton Rouge	98	7	1	256	48	116	518	39	577
East Carroll	2			2			4		0
East Feliciana	4	3		4	1		12	3	14
Evangeline	7			7	1	1	16	1	1
Franklin	3			1			4		3

Number of Selected Health Professionals by Parish
Louisiana - 2008

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
Grant						2	2		4
Iberia	15			10	3	10	38		18
Iberville	6			7	1	4	18		14
Jackson	1			2			3		3
Jefferson	88	8	4	274	60	101	531	48	376
Jefferson Davis	6			6	2	3	17	2	7
Lafayette	63	3		101	19	47	233	21	181
Lafourche	20	1		14	5	8	48	3	23
LaSalle	3	1		1			5		1
Lincoln	6			13	2	4	25	1	15
Livingston	5	1		5		4	15		25
Madison	1	1		3		1	6		2
Morehouse	10			3	1	2	16		3
Natchitoches	7	1		7	3	8	26	1	15
Orleans	47	5	3	385	46	221	704	108	798
Ouachita	53	3		58	8	25	147	13	96
Plaquemines	3	1		1			5		4
Pointe Coupee	6			2			8		8
Rapides	46			64	9	31	150	17	111
Red River	2			2			4		3
Richland	9	1		6	1		17		5
Sabine	2	1		2		1	6		3
St. Bernard	2			6			8	1	15
St. Charles	3			10	1	4	18		14
St. Helena	3						3		1
St. James	4			3	1	2	10	1	6
St. John	6			6	3	4	19	1	12
St. Landry	29	1		14	6	13	63	2	26
St. Martin	7			2		2	11		4
St. Mary	14			9	3	2	28	1	7
St. Tammany	36	3	1	120	22	54	236	22	214
Tangipahoa	22			33	9	12	76	6	59
Tensas									0

Number of Selected Health Professionals by Parish Louisiana - 2008									
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
Terrebonne	14	1		31	10	18	74	6	39
Union	1	1		4		1	7		11
Vermilion	6			7	3	2	18	2	14
Vernon	6			10	1	3	20	3	5
Washington	7	1		9		2	19	1	11
Webster	13			2	2	2	19	1	9
West Baton Rouge	3	1		2			6		4
West Carroll	3			2		2	7		2
West Feliciana	5			1		1	7		11
Winn	2	2		3		2	9		2
Total	1025	110	11	2034	448	439	4531	418	3133

Source: Louisiana Board of Medical Examiners, January 2008

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.

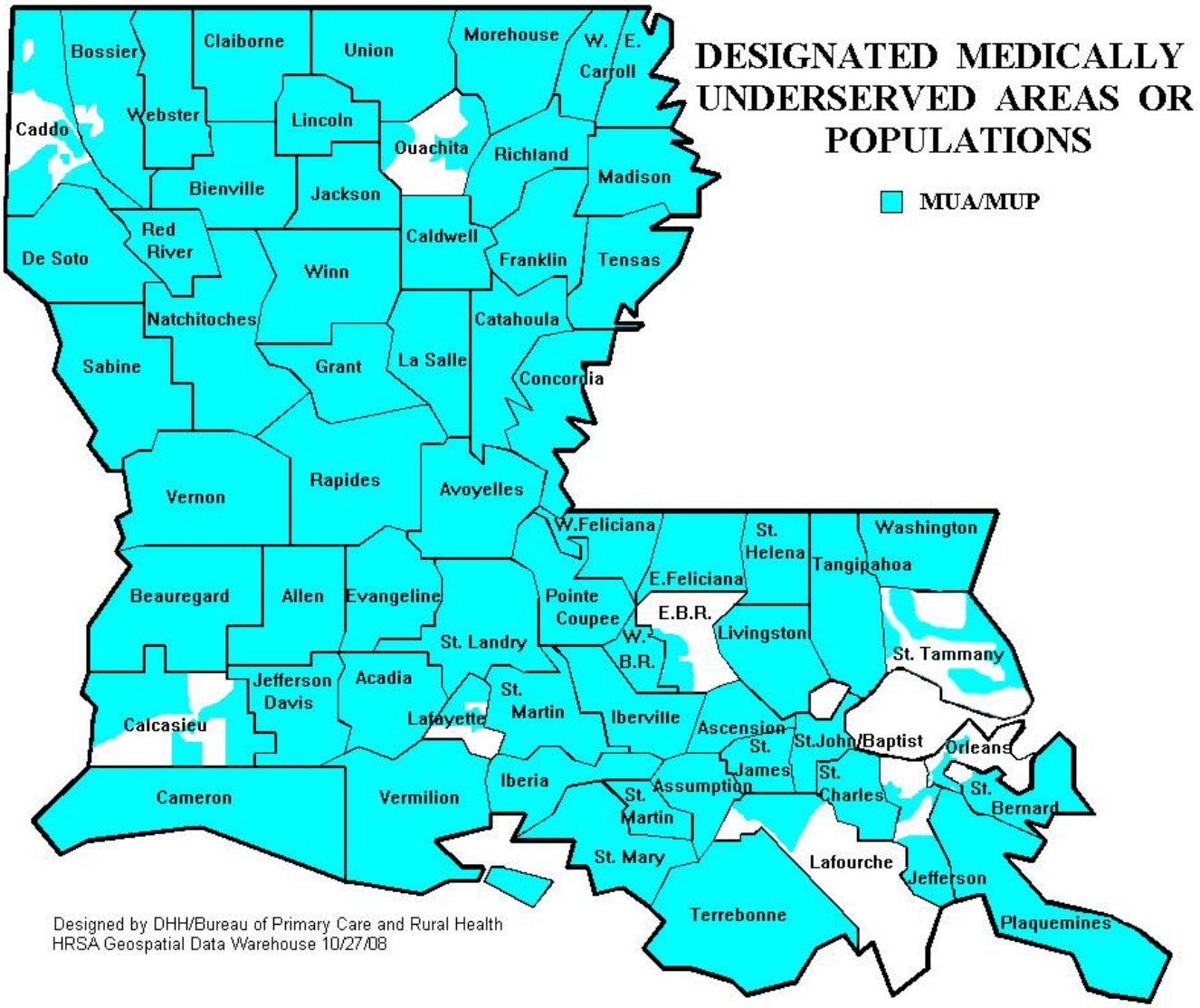
Designation requests and reviews are the responsibility of the DHH BUREAU OF PRIMARY CARE AND RURAL HEALTH. After analysis and review, the designation requests and recommendations are forwarded to the Shortage Designation Branch in the Health Resources and Services Administration/Bureau of Health Professions, 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 36 federal programs utilizing HPSA designations. The following are examples:

- National Health Service Corps Scholarship and Loan Repayment Program
- State Loan Repayment Program
- Conrad 30/J-1 Visa Waiver Program
- Critical Access Hospitals
- Rural Health Clinic Program
- Community Health Clinic Program
- Community Health Centers
- Medicare HPSA Bonus Payment

Degree of shortage is based on the ratio of the population to the one full-time equivalent primary care physician and the presence or absence of unusually high health needs

Source: Louisiana Office of Primary Care and Rural Health



Medically Underserved Area and Population designations entitle a provider to many of the same benefits as do Health Professional Shortage Areas (HPSA).

Medically Underserved Areas (MUA) may be a whole parish or a group of contiguous parishes, a group of parish or civil divisions, or a group of urban census tracts in which residents have a shortage of personal health services.

Medically Underserved Populations (MUPs) may include groups of persons who face economic, cultural, or linguistic barriers to health care.

CONTACT INFORMATION

Louisiana Department of Health & Hospitals	http://www.dhh.state.la.us/
Office of Public Health	http://www.dhh.louisiana.gov/offices/?ID=79
Office for Addictive Disorders	http://www.dhh.state.la.us/offices/?ID=23
Office for Citizens with Developmental Disabilities	http://www.dhh.state.la.us/offices/?ID=77
Office for Community Services	http://www.dss.state.la.us/
Office of Mental Health	http://www.dhh.state.la.us/offices/?ID=62
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/suboff.asp?ID=242
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/?ID=252
Women, Infants, & Children (WIC) Nutrition Program	http://www.dhh.louisiana.gov/offices/?ID=269