

Healthcare-Associated Infections & Antibiotic Resistance Prevention Program www.ldh.la.gov/hai

In the Know

Antibiotic Stewardship Edition

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Welcome New Employees

Please welcome our new Antibiotic Resistance Experts to the Louisiana Department of Health - HAI/AR Prevention Program, Dr. Fatima Brakta and Dr. Kirbie St. James!



Fatima Z. Brakta, PharmD., BCPS- AQ ID; Clinical Pharmacy Manager; Residency Program Director of PGY1; University Medical Center in New Orleans (UMCNO).

Dr. Fatima Brakta has a successful professional and leadership background in clinical pharmacy practice. Prior to joining UMCNO, Dr. Brakta worked as a Clinical Assistant Professor at Xavier University College of Pharmacy in Louisiana for five years. She also worked as a clinical pharmacist in Internal

Medicine/Critical Care at Louisiana State University Medical Center (LSU) in Shreveport and an Infectious Diseases Clinical Pharmacist at Ochsner Medical Center in New Orleans, Louisiana.

Before getting promoted to Clinical Manager, Dr. Brakta was UMCNO's Infectious Diseases Clinical Pharmacist and Co-Coordinator of the hospital's Antimicrobial Stewardship Program (ASP). Under her leadership, the hospital's ASP won a mentorship grant through American Society of Health System Pharmacists (ASHP) and a Teaching, Revenue, Research, Access, Quality, and Service (TRAAQ) award through the LSU Health System in 2012. UMCNO's ASP has since continued to result in improvements in patient care and safety, decreased costs and antibiotic utilization, and showed stabilization in antimicrobial resistance. More importantly, this successful program has led to the expansion and development of similar approaches for the entire LCMC Health System in Louisiana by coordinating implementation of a system-wide ASP program.

Dr. Brakta earned her Doctorate degree of Pharmacy through Xavier University of Louisiana followed by a Post Graduate Year in Pharmacy Practice at Ochsner Health System in New Orleans, LA. She is a Board-Certified Pharmacotherapy Specialist and has Added Qualifications in Infectious Diseases. Dr. Brakta has research experience and publications in antimicrobial utilization and antimicrobial stewardship. Dr. Brakta enjoys providing service to her community by regularly organizing and attending community health fairs where she provides pharmaceutical care to patients.



Kirbie Guerin St. James, PharmD is an ASHP-accredited residency trained clinical pharmacist with an advanced teaching certification. Dr. St. James is currently working as an Infectious Diseases Clinical Pharmacy Specialist at University Medical Center of New Orleans (UMCNO) where she also serves as a Co-Coordinator of the hospital's Antimicrobial Stewardship Program. With her assistance, UMCNO has been recently designated as an Antimicrobial Stewardship Center of Excellence by the Infectious Diseases Society of America.

Dr. St. James a native New Orleanian who earned a bachelor's degree in Business Marketing from Louisiana State University in 2005. After a short career with Pfizer in pharmaceutical sales, Kirbie decided

to become a pharmacist. In 2014, she received a Doctor of Pharmacy degree from Philadelphia College of Osteopathic Medicine – Georgia Campus. Then in 2016, she completed a Postgraduate Year One pharmacy residency at Sacred Heart Hospital in sunny Pensacola, Florida. During this time, Kirbie also obtained a Resident Teaching and Learning Program

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certificate at Harrison School of Pharmacy – Auburn University where she was an Affiliate Clinical Instructor of Pharmacy Practice. In addition to her love for healthcare, Kirbie enjoys drawing, reading, watching movies, and spending time with family and friends.

Antibiotic Consumption Increase

An international team of researchers conducted <u>a study</u> on worldwide use of antibiotics. They found that human consumption of antibiotics increased by 39% per person between 2000 and 2015. During this time, the total number of doses increased by 65% and the rate of antibiotic consumption in low and middle income countries increased by 77%. Worldwide, usage increased from 11.3 daily doses to 15.7 daily doses per 1,000 people. And alarmingly, the use of new and last-resort antibiotic classes, such as linezolid, carbapenems, and colistin, increased significantly in nearly all countries. On a positive note, in high-income countries, rates of antibiotic consumption actually declined slightly since 2000. The results are published in the Proceedings of the National Academy of Sciences.

Vital Signs MDRO Report

More than 23,000 Americans die each year from infections caused by germs resistant to antibiotics. On April 3, 2018 the CDC released a Vital Signs Report which focused on Containment Strategy of Multi Drug Resistant Organisms (MDRO). This aggressive strategy aims to slow the spread of unusual resistance by methods of rapid detection, infection control assessments, colonization screenings and coordination between healthcare facilities. Previously, an outbreak response may wait until a cluster of cases was identified. Now, with enhanced lab and response infrastructure, response occurs after a single case. This is important because once resistance spreads and becomes common, it is harder to control—like a wildfire. Unusual resistance organisms can cause potentially untreatable infections. These germs are resistant to all or most antibiotics tested and have special genes that allow them to spread their resistance to other germs. Examples include: Vancomycin-resistant Staphylococcus aureus (VRSA), Candida auris, and certain types of "nightmare bacteria" such as carbapenem-resistant Enterobacteriaceae (CRE). CDC estimates show that even if only 20% effective, the Containment Strategy can reduce the number of "nightmare bacteria" cases by 76% over three years (in one area).

Inter-facility Transfer Tool

The <u>inter-facility transfer tool</u> is an infection control patient transfer form that can assist in providing communication during transitions of care. It is a simple one-page document that identifies isolation precautions, present or past MDROs, current antibiotics, existing indwelling devices, and more. It can be modified and adapted to meet the needs of individual facilities.

APIC Long-Term Care Workshops

On March 21st and March 22nd 2018, the Healthcare-Associated Infections and Antibiotic Resistance Program of the Louisiana Department of Health partnered with APIC Consulting Services to provide 2 one-day long-term care practitioners training workshops. The target audience was new or intermediate infection preventionists (IPs) within the nursing home setting. The training was a success. A total of 82 participants were educated on things such as basic principles for infection prevention in long-term care settings and interventions to mitigate risk within healthcare facilities. 68 respondents filled out surveys giving the training an overall rating of 4.91 out of 5.

Louisiana Morbidity Report

The Louisiana Morbidity Report is published every other month by the Office of Public Health/Infectious Disease Epidemiology Section. The two reports from 2018 are summarized below. For more information, please contact them at: P.O. Box 60630, New Orleans, LA 70160 - Phone: (504) 568-8313.

The **Louisiana Early Event Detection System (LEEDS)** tracked emergency department (ED) data throughout the state from December 1, 2017 to January 18, 2018. Their findings suggested that winter-related incidents increased with colder temperatures. These events were primarily related to hypothermia and injuries from slipping on ice. LEEDS also tracked ED data to conduct syndromic surveillance during the 2018 Mardi Gras season. Six syndromes related to infectious disease were

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monitored: fever, gastrointestinal complaints, influenza-like illness, lower respiratory tract infections, skin and soft tissue infections, and upper respiratory tract infections. The enhanced surveillance did not show any significant spikes in the percentage of emergency department visits for any syndrome, nor were any sustained increases in the trends identified.

The National Healthcare Safety Network (NHSN) Standardized Utilization Ratio (SUR) demonstrates infection exposure risks to patients on indwelling devices such as central lines and urinary catheters. SURs are useful for facilities to compare their respective device usage to other NHSN reporters. The SUR provides a benchmark to assess risk of device-associated infections for patients. Values less than 1.0 are considered better than expected, and values greater than 1.0 demonstrate excess usage. For central lines used in adult critical care units, each time period from January 1, 2015 to June 30, 2017 demonstrated statistical significance for SUR greater than 1.0. Conversely, urinary catheter utilization in adult critical care units was significantly less than 1.0 for each time period with the exception of the second half of 2016. Acute care hospitals that report device-associated infections into NHSN may review their device utilization by accessing the Analysis Reports function of the Patient Safety Component. Questions about this report may be sent to Erica Washington at Erica.Washington@la.gov.

The Louisiana **Pregnancy Risk Monitoring System (PRAMS)** rates are on the rise and now exceed the minimum threshold for the CDC. PRAMS collects population-based survey data on women's behaviors and experiences before, during and after pregnancy. Topics include, but are not limited to, preconception health, pregnancy intention, Medicaid and WIC participation, breastfeeding, experiences of discrimination, etc. After ten years of declining response rates and inability to reach the CDC-required threshold, Louisiana PRAMS took active steps to improve response rates through various methods including materials redesign, improved phone number search protocol, increased gift card reward amount, utilization of partner relationships for targeted outreach, etc. As a result, Louisiana's weighted response rate increased from 52% in 2012 to 66% in 2015, thereby exceeding the CDC's minimum threshold of 55%. This ensures that the responses received are more representative of Louisiana women, and thus results are generalizable to the state.

Five Tips on Zika for Pediatricians: 1) Screen all mothers of newborns for possible Zika exposure: As of August 30, 2017, there are no areas within the U.S. with local transmission of Zika. 2) Identify newborns with Zika-related birth defects: Zika infection during pregnancy can cause serious birth defects, including microcephaly in addition to other congenital defects. 3) Contact the Office of Public Health if there is a concern about a newborn with possible Zika risk: http://new.dhh.louisiana.gov/index.cfm/page/2554 or (800) 256-2748. 4) Test newborns for Zika: preferably within two days of delivery. 5) Protect children and families against Zika: transmission has not been linked to breastfeeding so mothers exposed to Zika should continue to breastfeed. Please refer to http://new.dhh.louisiana.gov/index.cfm/page/2554 or contact Julius Tonzel at (504) 568-829 for further details concerning Zika information.

Active Surveillance Cultures (ASC) can identify intra-facility transmission of antibiotic resistant organisms. ASC organisms include: Carbapenem-resistant Enterobacteriaceae (CRE), Vancomycin-resistant Staphylococcus aureus (VRSA) and panresistant organisms. The CDC outlined steps for a facility approach in evaluation of newly identified CRE colonized or infected patients which are: 1) Notify appropriate personnel as well as public health (if required). 2) Place patient on contact precautions, reinforce hand hygiene and educate healthcare personnel about transmission prevention. 3) Consider screening epidemiologically linked patient contacts (e.g., roommates) for CRE. 4) If screening identifies additional CRE colonized or infected patients, consider additional surveillance cultures of contacts or ongoing point prevalence surveys of affected units until no further transmission is identified. 5) Ensure if patient transferred within the facility that precautions are continued and ensure, if discharged and readmitted, there is a mechanism to identify patient at readmission.

Motor Vehicle Crashes are a top ten cause of death among people from 1 to 54 years old. Louisiana motor vehicle crash deaths in 2013 resulted in nearly 750 lost lives, most of which were young adults ages 20-34 years old. These crashes cost the state over \$1 billion in medical expenses and work loss costs in 2013 alone. For prevention methods and cost estimates, please visit https://www.cdc.gov/motorvehiclesafety/pdf/statecosts/la-2015costofcrashdeaths-a.pdf.

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Copies of the 2018 reports can be found at: January/February Morbidity Report and March/April Morbidity Report.

If you would like to see anything featured that we may have overlooked or are curious about anything related to ASPs, please let us know. Feel free to send any inquiries and comments you may have about this newsletter and its contents to Kirbie St. James at Kirbie.StJames@la.gov.