

Louisiana Occupational Health and Injury Surveillance – Fundamental Program
Louisiana Department of Health & Hospitals, Office of Public Health
Annual Report of Major Accomplishments and Outcomes
June 2014 – July 2015

Dianne Dugas, Principal Investigator

Tel: 225-342-8069; email: dianne.dugas@la.gov

Michelle Lackovic, Program Manager

Tel: 504-568-8160; email: michelle.lackovic@la.gov

The objectives of the program are to:

- Interact with state partners and stakeholders
- Collect, analyze, and interpret surveillance data
- Assess the strengths and limitations of each data source
- Develop new data sources and additional occupational indicators
- Produce a statewide report and disseminate findings
- Develop prevention strategies and interventions and respond to emerging issues

MAJOR ACCOMPLISHMENTS AND OUTPUTS

Occupational health indicator

The employment demographic profile and 18 occupational health indicators for 2012 were calculated and submitted to NIOSH and Council of State and Territorial Epidemiologists (CSTE) website for posting on CSTE's website. Several indicator reports were prepared: a report summarizing Louisiana's Occupational Indicators including trend data and comparison with US rates was updated with most recent data available for each indicator; a report summarizing results of heavy metal and carbon monoxide surveillance; and a report summarizing the findings our Pesticide Surveillance data for the past 10 years. All reports are posted on the Occupational Health & Injury Surveillance Webpage.

Our article summarizing 6 years of inpatient asthma hospitalization data was published in the Journal of the Louisiana State Medical Society. Summary findings were shared with the 9 Regional Medical Directors and were presented at the Louisiana Primary Care Association's Annual Meeting.

We continue to evaluate heat exposure through various research projects. Our SE regional analysis of occupational heat-related illness was accepted for publication in the Journal of Industrial Medicine. Findings from this study indicate that rates of ED and hospitalization visits for occupational HRI in Louisiana were significantly elevated compared with aggregated rate data from nine southeastern states. To further this work, we conducted an in-depth analysis of Louisiana's heat-related inpatient hospitalizations and ED visits for a 2-year period, including case review of severe hospitalizations (> 3 days) and fatalities. Cases were from 9 different industries, although almost half of the cases were involved in either construction or oil and gas work. Both fatalities occurred in workers who had been on the job for less than 1 week. Lastly, we are working with researchers at NIOSH and NCEH to evaluate increases in ED visits in Louisiana for select health conditions based on different temperature variables and location. Findings and discussion of our occupational heat-related illness work have been presented at various locations and formats including APHA, Louisiana Occupational Safety and

Health Conference, OSHA-Regional Topics webinar, and lectures at Xavier and Tulane University.

Potential outcome

All of these projects include reports/presentations and/or publications with recommendations on diagnosis, treatment, and prevention of occupational issues which, if implemented, will result in a reduction in work-related morbidities and fatalities.

Intermediate Outcome

Increased awareness and recognition of work hazards such as heat by healthcare providers and employers could result in improved worker education and prevention activities.

Interact with state partners and stakeholders

Workers' compensation (WC) data are integral to occupational health surveillance but historically Louisiana's WC data have had limited use because claims data were not electronically reported nor was there any disincentive for non-compliant insurers or employers. In 2014, legislative changes to reporting requirements and implementation of electronic reporting system presented an opportunity for LOHIS to partner with Louisiana's Office of Workers' Compensation (OWC) to submit a joint-PI funding request to NIOSH\Center for Workers' Compensation Studies. The proposal sought to maximize the use of WC data for surveillance of occupational injuries, illnesses, and exposures and use data to identify trends, emerging issues, high-risk occupations and industries. Although not funded during the first round, the proposal has established a strong foundation for continued collaboration.

LOHIS successfully received CSTE funding to host two students for the Occupational Health Internship Program, a paid summer internship program sponsored by the Association of Occupational and Environmental Clinics that is dedicated to helping students learn about the field of occupational health from workers' perspectives. In close partnership with the National Guestworker Alliance (NGA), a worker center in New Orleans, we developed an internship project to investigate and document safety and health issues faced by immigrant shipyard workers in SE Louisiana. Highlights from this project were shared with staff from OSHA-Baton Rouge, NGA, and LOHIS.

We continue to collaborate with other SE states, NIOSH, and the Sunshine ERC, to organize and conduct annual two-day conferences of the Southern States Occupational Network (SouthON). The 2015 meeting, held in Louisville Kentucky, had approximately 100 attendees. The 2016 meeting will be held in New Orleans.

We are engaging state partners in evaluating and assessing impacts of climate change as changing weather patterns threaten to severely impact Southeast Louisiana due to rising waters, stronger storms, and loss of wetlands. Most of Louisiana's industry is located in SE LA including oil & gas, chemical manufacturing, and transportation. We developed an interagency collaborative workgroup comprised of other environmental health programs, Infectious Disease Epidemiology, State Climatologist (LSU Baton Rouge), and faculty from LSU/HSC (New Orleans). As an initial project, we hosted a Tulane public health intern to calculate CSTE climate change indicators for Louisiana.

To commemorate Workers' Memorial Day, we partnered with OSHA-Compliance and the State Department of Labor to plan and host a 1-hour public memorial event at a

union labor hall commemorating workers who have lost their lives on the job. A short visual presentation of work-related fatality narratives was also incorporated into the event. Approximately 40 people attended. This successful event will serve as a foundation for future worker memorial events in Louisiana.

Intermediate Outcome

Collaborating with stakeholders on occupational health activities promotes and improves the occupational health capacity in the state and region.

Respond to emerging & emergent issues

The program continues to monitor and respond, as appropriate, to emergent events and emerging issues. Notifications of emergency events are received via various sources including state police reports, poison center calls, and calls to health department hotline.

Response activities include:

- Investigated mercury exposure to workers at an alumina manufacturing facility situated along the Mississippi River. A MSHA investigation found that nine contract workers were exposed to mercury while replacing rods in heat exchangers.
- Issued 2 referrals to OSHA regarding elevated lead levels during a bridge renovation project. Twenty-one workers had BLLs greater $\geq 25 \mu\text{g/dL}$, and 5 had BLLs ≥ 50 .
- Responded to CO exposures at 2 different schools. Both involved an unintentional release in the cafeteria, resulting in elevated COHb for 5 workers.
- Responded to a request for investigation from Orleans Parish Prison, Temporary Detention Center and Orleans Parish Criminal District Court regarding worker and prisoner complaints of indoor mold exposure throughout the prison and court buildings.

Intermediate Outcome

Investigation of worksites could identify hazards, which, if addressed, will prevent ongoing exposure.

PRESENTATIONS & PUBLICATIONS

Aubin K. Findings from Louisiana's Pesticide Surveillance Program. Presented at SENSOR-Pesticides Winter Conference, Feb, 2015.

Brinker K, Jacobs T, Shire J, Bunn B, Chalmers J, Dang G, Flammia D, Higgins S, Lackovic M, et al. Fatal Work-Related Injuries — Southeastern United States, 2008–2011. Accepted for publication in the AAOHN *Workplace Health and Safety*

Gamola F, Beckman J, Schwartz A, Higgins S, Prado J, Lackovic M, et al. Characteristics of Acute Paraquat and Diquat-related Illnesses in the US: 1998-2011. Accepted for publication in *Environmental Health Perspectives*.

Katner A, Lackovic M, Streva K, Soileau S. Evaluation of Available Data Sources to Prioritize Parishes for Arsenic Monitoring and Outreach –J Public Health Management Practice, 2015, 21(2 Supp), S93–S101

Lackovic, M. Understanding Occupational Health & Safety in the South. Presented at the American Public Health Association Annual Conference, December 2014.

Lackovic, M. Role of Public Health Departments in Occupational Safety and Health. Presented at Xavier Health Science Lecture, April 2015.

Lackovic, M. Occupational heat-related morbidity in Louisiana. Presented at the American Public Health Association Annual Conference, December 2014.

Lackovic, M. Too darn hot! Working in hot environments. Presented at the State-based Surveillance Meeting, Jan, 2015.

Lackovic M, Jocelyn Lewis. Evaluating & Responding to Occupational Issues in LA. Presented at LA Governor's Safety and Health Conference. Baton Rouge. Oct. 6, 2014

Lewis J, Construction Fatalities-Falls. Presented at Louisiana Office of Workers' Compensation.
July 23, 2014

Lewis J, Lackovic M, Soileau S. A review of adult asthma hospitalizations in Louisiana, 2006-2011. J La State Med Soc. Vol 167. March/April 2015

Lewis J. Louisiana's Occupational Health & Injury Surveillance Program. Presented at LSU Health Sciences Center- New Orleans, Occupational Health Seminar. Nov. 5, 2014

Lewis J, Williams E. Translating Lessons Learned from Tulane into a Career in Environmental Public Health. Presented at Tulane Univ. School of Public Health & TM, Global Environmental Health Sciences Seminar. Nov. 6, 2014

Lewis J . LA Asthma Hospitalization article findings. Presented at Clinician's Branch Summit Meeting; LA Primary Care Association's Conference; May 29, 2015

Lewis J, Lackovic M, Soileau S. A review of adult asthma hospitalizations in Louisiana, 2006-2011. J La State Med Soc. Vol 167. March/April 2015

Ramson, M. Keeping Pests Out of Head Start Centers using Environmentally Friendly Practices. Presented at the Louisiana Head Start Conference, August 2014.

Ramson, M. School Facility Chemical Safety. Presented at Louisiana State Facility Manager Association Annual Conference. April 2015

Ramson, M. Promoting Occupational Safety for School Custodial & Maintenance Staff. Presented at Iberville Parish Maintenance Training. May 2015.