

Texas Department of State Health Services (DSHS)
Occupational Health and Safety Surveillance Project (OHSSP)
Annual Report of Major Outputs and Outcomes
July 1, 2015 – June 30, 2016

Fundamental Surveillance

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Program Overview and Overall Aims

The state-based occupational health and safety surveillance system is intended to provide information essential to protecting workers by determining underlying causes of injuries and illnesses in the workplace, investigating workplace practices, directing intervention strategies, and evaluating the effectiveness of those strategies.

The overall aims of the Texas Fundamental program are to:

- Compile occupational health and safety surveillance data for the 23 currently defined OHIs, and report summarized results annually and in a timely manner to CDC NIOSH.
- Conduct detailed analyses of OHIs data, including demographic and temporal trends, and publish annual and/or periodic reports of findings on the DSHS website, on the CDC Occupational Health Clearinghouse website, and/or peer-reviewed journals.
- Continue using current case report follow-up procedures, continue entering surveillance data into SPIDER database, continue pesticide data to NIOSH, and improve case finding efforts for work-related pesticide exposure.
- Pilot other data sources and explore their capacity to identify cases of other occupational illnesses, injuries, deaths, hazards, and/or exposures and assist in the proposal and development of OHIs.
- Identify high risk occupational groups and provide training and/or educational materials to enhance safety awareness and reduce future occupational morbidity and mortality.
- Collaborate with occupational medicine physicians and researchers to help review, evaluate, and improve the occupational health and safety surveillance system in Texas.

Major Accomplishments & Outcomes

- Compiled and reported 2013 OHI data for 23 indicators to CSTE/NIOSH in June 2015. Hospital discharge data and mortality data needed to calculate specific 2013 indicators were successfully obtained to meet our goal.
- Published a report reviewing occupational health indicators from 2003 to 2012. The report describes trends of Texas indicators and can be found at: <http://www.dshs.state.tx.us/epitox/reports/Texas-OHIs-2003-2012.pdf>
- Participated in pilot testing of OHIs proposed by CSTE/NIOSH sub-state measures workgroup.
- Analyzed linked crash and trauma data to assess county-level associations between oil and gas well activity and commercial motor vehicle-associated crash fatalities. Presented preliminary results at the 2016 Epidemiology Congress of the Americas. Continuing to gather additional variables for analysis.
- Completed data entry of all 2014 and 2015 occupational pesticide and disinfectant exposure cases into SPIDER database.
- Conducting follow-up procedures for cases reported in 2016.
- Included ozone as a pesticide.
- Examined annual age-adjusted rates of asbestosis and silicosis in Texas Health Status Report for year 2004 – 2013 using hospital discharge data and mortality data.
- Updated Silicosis Occupational Incidence report for 2004 – 2013; uploaded to Asbestosis and Silicosis DSHS program webpages.
- Carried out occupational pesticide and disinfectant exposure follow up, interviews, and medical record reviews on 211 reported cases, resulting in the following classification: Definite 8.06%; Probable 18.48%; Possible 43.13%; Suspicious none; Unlikely 0.95%; Insufficient Information 21.84%; Exposed/Asymptomatic 7.58%; and Unrelated none.
- Reviewed and evaluated surveillance system process through regular staff meetings with the occupational safety and health surveillance team.
- Identified a vape shop to participate in an air sampling event with NIOSH to evaluate air emissions from electronic cigarettes.
- Reviewed occupational health curriculum for DSHS Community Health Worker Certification Program.

Intermediate Outcomes:

- Provided information and held educational sessions on the OHIs and occupational pesticide exposure surveillance across Texas to a variety of stakeholders / audiences (e.g., presentations, health fairs, mail-outs).
- Participated in Weston meeting in Denver, Colorado, September 2015; NIOSH Occupational Lung Disease meeting, Denver, Colorado, September 2015; Occupational Health (OH) Surveillance Partners and Council of State Territorial Epidemiologists (CSTE) OH meeting in Cincinnati, Ohio, December 2015; and SENSOR-Pesticides 2016 Winterfest Workshop, Seattle, Washington, March 2016.

- Obtained de-identified data reported to OSHA for severe traumatic injury involving hospitalization and/or amputation.
- Working on a data use agreement with OSHA, which would allow state access to unedited data including the injured employee's name and demographic information.
- Constructed an Access relational database to contain data and allow periodic updates as new data becomes available.
- Evaluating pesticide exposure cases from the Texas Department of Agriculture. Most of these cases appear to be due to drift and are non-occupational.
- Translated DSHS pesticide brochure into Spanish.
- Maintained subscription with the OSHA/NIOSH/ NORA-Construction Sector Fall Prevention Campaign providing access to the campaign webpage's wealth of training and preventative resources from both Texas occupational health websites in English and Spanish.
- Provided educational material and held educational sessions on OSHA Fall Prevention Campaign across Texas to a variety of stakeholders / audiences (e.g., presentations, health fairs, mail outs).
- Updated content for program's Occupational Health Surveillance English/Spanish webpages.
- Built Access database to cross-reference data from SPIDER database with the Texas Poison Control Network database for improved QA/QC of data entered into SPIDER.
- Submitted a NIOSH e-news articles "New Occupational Health Indicators Report in Texas" in March 2016, and "Oil and gas well activity associated with commercial motor vehicle-related crash fatality rates in Texas" in December 2015.

Significant Outputs

Publications:

Acute Occupational Pesticide-Related Illness and Injury – United States, 2007-2010. Geoffrey M. Calvert, John Beckman, Joanne Bonnar Prado, **Heidi Bojes**, Prakash Mulay, Justin Waltz, Michelle Lackovic, Yvette Mitchell, Stephanie Moraga-McHaley, Kathy Leinenkugel, Sheila Higgins, MMWR, Morb Mortal Wkly Rep 2015; 62(No. 54):5-10.

DSHS staff (**Jenny Karnik**) was a contributing author to the CDC MMWR Surveillance Summaries: Elevated Blood Lead Levels Among Employed Adults – United States, 1994-2012 MMWR Morb Mortal Wkly Rep 2015; 62(No. 54):52-75.

Trueblood AB, **Forrester MB**, Han D, Shipp EM, Cizmas LH. Pesticide-related poison center exposures in children and adolescents aged ≤ 19 years in Texas, 2000-2013. Clin Toxicol (Phila) 2016 [Epub ahead of print]

Presentations:

"Comparison of occupational household and industrial cleaner exposure reported to the Texas Poison Control Network during 2000-2014", poster presentation at the 2016 Texas Public Health Association Annual Education Conference, Galveston, Texas, April, 2016.

“Oil and gas well activity associated with commercial motor vehicle-related crash fatality rates in Texas”, poster presentation at the 2016 Epidemiology Congress of the Americas, Miami, Florida, June 2016.

“Silicosis and Asbestosis – Awareness and Prevention,” and “Fall Prevention in Residential Construction” presentations at Ventanilla de Salud, Austin, Texas, October 3 and 19, 2015, January 18, 2016, February 1 and 16, 2016, and March 3 and 21, 2016; April 7 and 18, 2016; May 5 and 16, 2016; and, June 2 and 20, 2016.

“Silicosis and Asbestosis – Awareness and Prevention,” presentation at City of Austin Health Fair, Austin, Texas, June 2016.

“Silicosis and Asbestosis – Awareness and Prevention” presentation at El Paso Health Fair, Texas, April 2016.

Partnerships/Collaborations:

- Staff joined CSTE Oil and Gas Workgroup to further explore the environmental and occupational impacts related to this industry
- Continued Partnership with Ventanilla de Salud (Window on Health) at Mexican Consulate (Austin, Texas) providing training and education on prevention concerning health issues with a focus on occupational health. Staff joined the planning committee.
- Staff meeting with Worker Defense Project.
- Continued Partnership with the OSHA/NIOSH/ NORA-Construction Sector Fall Prevention Campaign
- Continued collaboration with National Center for Farmworker Health (NCFH - Buda, Texas) to help address and improve underreporting of pesticide exposure to farmworkers.
- Continued collaboration with OSHA regional office (Austin, Texas) in educating the public on occupational health conditions with a focus on fall prevention in the construction industry.
- Continued partnership with Texas Department of Agriculture in the mutual referral of occupational pesticide exposure cases, strengthening partnership between the two agencies.