New York State Occupational Health and Safety Surveillance and Intervention
New York State Department of Health (NYSDOH)
Bureau of Occupational Health and Injury Prevention (BOHIP)
OVERALL AND OCCUPATIONAL HEALTH INDICATORS
July 1, 2015 – June 30, 2016

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BRIEF OVERVIEW OF PROJECT
This project supports general occupational health surveillance activities including the occupational health indicators, the NYS Occupational Health Clinic Network, and special projects.

ACCOMPLISHMENTS AND OUTPUTS

Occupational Health Indicators
- NYSDOH staff has continued to generate all of 23 of the occupational health indicators (OHIs) on an annual basis. The 2013 data was submitted to NIOSH and CSTE in June 2016.
- NYSDOH staff continues to provide technical assistance for the three OHIs involving the use of hospitalization data (OHI #2 - work-related hospitalizations, OHI #6 - work-related hospitalized burns, OHI #9 - pneumoconiosis and OHI #22 - work-related severe traumatic injury hospitalizations). In addition, NYSDOH provides technical assistance for the work-related asthma indicator (OHI #21). Staff was responsible for the 2016 annual update to these indicators in the How-To document.
- The project director continues to participate in quarterly OHI workgroup conference calls as an active member of the workgroup. The project director also continues to be an active member of the OHI sub-state analysis workgroup. Work was recently completed on the official OHI sub-state guidance document, which was approved by the CSTE occupational subcommittee at the annual CSTE meeting in June.
- Staff provided 2014 county-level OHI data for the NYS Community Health Indicator Report annual update. The data includes the pneumoconiosis and asbestosis hospitalization rate among those NYS residents ages 15 years and older, the work-related hospitalization rate per 100,000 employed persons ages 16 years and older, and elevated blood lead levels (>=10 µg/dL) per 100,000 employed persons ages 16 years and older. The geographical distribution of these occurrences is also provided in map format. The data is published on the DOH website to improve community access to occupational health data - http://www.health.ny.gov/environmental/workplace/occupational_health_surveillance/.
- Staff is working on a multi-year summary of the OHI’s including trend analyses, and analyses by race, ethnicity and sex. State specific indicators are included. Some indicators are being further examined by geography, race and age. The first two reports examining the profile of workers in NYS since 2000, and blood lead levels among adults are currently posted on the updated NYSDOH OHI webpage. Two additional chapters have been completed for the NYS OHI report: “Work-related Emergency Department Visits in New
York State: 2005 – 2010” and “Work-related Hospitalizations in New York State: 2000-2010”. As each indicator report is completed, they will be posted to the same site.

- Staff is working to incorporate information from six occupational health indicators into the Environmental Public Health Tracking (EPHT) program at the state level for the years 2000-2014 (if available). All indicators will be added to the portal, and county-level data and maps will be added for elevated blood lead levels, both >=10 mcg/dL and >=25 mcg/dL, work-related hospitalizations, pneumoconiosis hospitalizations, asbestosis hospitalizations, fatal occupational injuries, and mesothelioma. Appropriate messaging for data interpretation will be included. All of the state-wide CSTE indicators from 2000-2013 will also be included in the EPHT portal. Data will be updated on an annual basis.

- Staff has been working to incorporate programmatic databases from ICD9 to ICD10. This includes a crosswalk from ICD9 to ICD10 to aid decision within the many BOHIP programs.

- Staff has explored the New York State Trauma Registry (TR) data to better describe occupational cases of traumatic injuries. The use of TR data can aid in identifying severe injuries that are not covered or reported by Worker’s Compensation and can help to direct prevention efforts at the state and regional level. Traumatic work-related injuries were compared to all other types of injuries to explore how the characteristics of work-related injuries differ.

**Special Projects**

- Industrial hygiene staff participated in an environmental evaluation of a Post Office in conjunction with a TB contact investigation. The evaluation consisted of a visual assessment of the mail sorting area as well as a qualitative characterization of indoor airflow patterns using a visible smoke tracer. Findings were used to select primary contacts for follow-up evaluation.

- Industrial hygiene staff assisted local and state TB staff to identify worker and inmate contacts to an inmate who had been symptomatic with TB disease for several months after intake. Staff evaluated floor plans, HVAC blueprints, and clinical and epidemiologic data regarding the various areas of the facility where the inmate was housed, worked, recreated, and attended classes. Findings were used to select primary contacts for follow-up evaluation.

- Staff continue to oversee and support the eleven clinics in the NYS Occupational Health Clinic Network which aid in the recognition, diagnosis and treatment of occupational diseases. Over 7,900 patients were seen in more than 11,800 visits.

- Staff participated in workgroups with the Governor’s Traffic Safety Committee, the National Safety Council Northeast Regional Health and Safety committee, the Northeast Occupational Network planning committee, the Traumatic Brain Injury Coordinating Council, Traffic Incident Management team, Young Workers Safety Group, the September 11th Worker Protection Task Force, the Occupational Health Clinic Network Oversight Committee, and Prescription Drug Overdose Prevention. Staff also assisted the State University of New York (SUNY) at Albany School of Public Health with recruitment for an Assistance Professor in Occupational Health.

- Staff participated with the SUNY at Albany School of Public Health on the dissertation committee for a doctoral student examining surveillance methodology for injuries in the agriculture and forestry industries.
POTENTIAL OUTCOMES

- Staff continue to participate in the NYS Nail Salon Industry Enforcement Task Force. Two NIOSH Health Hazard Evaluations (HHE) were initiated at NYSDOH request to evaluate exposures and health effects. Staff assisted the Department of State in writing ventilation legislation and produced a report on the health effects of nail salon chemicals to workers.
- Industrial hygiene staff assisted the hospital compliance program regarding an ongoing outbreak of aspergillus infections in a hospital emergency department. Staff conducted an environmental assessment of the facility, including the construction of a new building adjacent to the ED. Numerous breaches in environmental control and containment practices were identified. Staff discussed the findings in a conference call with hospital administrators and provided a letter with recommendations. The hospital complied with all recommendations within one month.
- A report on Safe Patient Handling identifying best practices, sample polices and resources was released. Staff participated on the workgroup and assisted in writing the report.

Presentations

- “Use of Facebook Advertising to Direct a Targeted Audience to Educational Webpages on Reducing Poisonings from Flea and Tick Control Treatments” (poster). Council of State and Territorial Epidemiologists, June 2016, Anchorage AK.

Publications

- The Council of State and Territorial Epidemiologists, Occupational Health Surveillance Subcommittee, Occupational Health Sub-State Measures Workgroup’s document, “Occupational Health Sub-State Measures Technical Guidance and Examples” was completed and finalized in June 2016. Will be posted on the CSTE OHI webpage in the near future.
New York State Occupational Health and Safety Surveillance and Intervention
New York State Department of Health (NYSDOH)
Bureau of Occupational Health and Injury Prevention (BOHIP)
ADULT BLOOD LEAD EPIDEMIOLOGY AND SURVEILLANCE
July 1, 2015 – June 30, 2016

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BRIEF OVERVIEW OF PROJECT
This project supports the adult blood lead program which collects information on all blood lead tests for those 16 years and older in New York State (NYS).

ACCOMPLISHMENTS AND OUTPUTS
- Staff developed adult blood lead management guidelines. In collaboration with NYSDOH Wadsworth Laboratory staff, the guidance document and a letter will be mailed to all NYS laboratory directors for their reference in interpreting blood lead levels in adults. Wadsworth Laboratories oversees the Clinical Laboratory Evaluation Program in NYS.
- Staff collaborated with the Children’s Lead Poisoning Prevention and Primary Prevention Program and the Wadsworth Center on revisions to the Blood Lead Standard for NYS laboratories. The changes are in respect to single use screening devices and guidance on lowering the reference value to 5 mcg/dL on all blood lead results. Health care providers and laboratories will be provided with guidance in interpretation as discussed above.
- Staff is working to update the NYS Heavy Metals Registry Report. The report will present data for tests conducted from 2010-2015 and is intended as a resource for programs providing preventative health care and for public health officials concerned with reducing overall morbidity from heavy metals poisonings.
- Staff assisted the childhood lead program with an article for the Medicaid newsletter regarding lead exposure among pregnant women.
- Industrial hygiene staff conducted outreach and provided educational materials to a local police department regarding lead exposure in firing ranges after the department received a grant to revitalize its range. Ongoing technical assistance for this project will be provided. The NYSDOH “Aim at Safety” brochure was also provided.
- The adult blood lead program continues to work with the Children’s Lead Poisoning Prevention and Primary Prevention Program in identifying pregnant women with elevated blood lead levels and informing the local health departments of the case with the due date to ensure the newborn gets their lead level tested and appropriate interventions occur. Since July 2015, HMR staff has followed up on 45 pregnant women cases to reduce their lead exposures prior to the birth of their child.
- Staff identified a case with an extremely elevated blood lead level (80+ µg/dL) on a self-employed residential construction contractor. Educational materials on lead exposure prevention was sent to the case as well as guidance references for the treating physician. Staff continue to work with the testing physician to monitor the case's BLL.
POTENTIAL OUTCOMES

- The project director submitted 2015 adult blood lead data to NIOSH’s Adult Blood Lead Epidemiology and Surveillance (ABLES) program. Included in the data submission are basic demographics (age, sex, ethnicity) of all adults (age 16 or older) with blood lead levels equal to or greater than 10 mcg/dL and their occupation, industry and exposure source, if known. There were 5,761 blood lead tests reported to the NYSDOH’s Heavy Metals Registry during 2015.

Presentations

New York State Occupational Health and Safety Surveillance and Intervention
New York State Department of Health (NYSDOH)
Bureau of Occupational Health and Injury Prevention (BOHIP)
NEW YORK FATALITY ASSESSMENT AND CONTROL EVALUATION (NY FACE)
July 1, 2015 – June 30, 2016

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BRIEF OVERVIEW OF PROJECT
The New York State Department of Health (NYSDOH) Fatality Assessment and Control Evaluation (FACE) program investigates work-related fatalities and researches and develops prevention measures to reduce and prevent occupational injuries and fatalities.

ACCOMPLISHMENTS AND OUTPUTS
• Staff identified 91 work-related fatal incidents.
• Staff established a database of 423 worker fatality cases (2012-2015). The database will be used to create an online interactive worker fatality map.
• Staff published twelve monthly fatality announcements. These were sent directly to the NY FACE listserv comprised of 300 individuals with a specific interest in occupational health and safety, and were printed in the Injury Prevention News - a monthly e-Newsletter. The Newsletter was developed by the Bureau of Occupational Health and Injury Prevention of NYSDOH and is disseminated to 550 local public health and traffic safety professionals.
• Staff assisted NYSDOH Public Affairs Group in preparing for a response to an inquiry submitted by the Altamont Enterprise, a local newspaper, about a wood chipper fatality and the NY FACE program. The information included NY FACE program functions, and an earlier investigation of a chipper fatality conducted in 2005.
• Staff did a presentation at Eastern New York Chapter of the American Society of Safety Engineers Technical meeting. The presentation included an introduction of the NY FACE program and a worker fatality case (“Flatbed Truck Starts on Its Own, crushing Auto Body Shop Worker”). Staff also talked about the national Safety Stand-Down and encouraged participation. There were approximately 30 people attended the meeting. The attendees were from local manufacturing, insurance, and EHS consulting companies. Representatives of OSHA and NYSDOL also attended the meeting.
• Staff completed an article titled “A Ladder Can Cause Serious Injuries and Deaths – A free ladder safety app can help you prevent injuries”. The article was published on the June issue of “Talk of the Town”. “Talk of the Town” is a bi-monthly magazine published by the Association of Towns of the State of New York that represents over 900 towns and villages in New York State.

INTERMEDIATE OUTCOMES
• The Government Affairs Coordinator of New York State Restaurant Association (NYSRA) agreed to send the factsheet “Dumbwaiters Can Kill-Interlocks on Doors Prevent Tragedy” to its 2000 members statewide. The Coordinator stated that NYSRA members would find the fact sheet very informational and helpful for preventing dumbwaiter related injuries.
• An announcement of the NIOSH ladder safety app was printed in the April Issue of Injury Prevention News - a monthly e-Newsletter.
• Fulton County Public Health Department posted a message on its facebook page to raise awareness about ladder-related injuries and encourage people to download the free ladder safety app developed by NIOSH.
• Hunter College incorporated two worker fatality cases investigated by NY FACE into an 8-hour Hazardous Waste Operation and Emergency Response (HAZWOPER) annual review and refresher training package. The case information of 10NY060 (“A Department of Public Works Worker and a Volunteer Firefighter Died in a Sewer Manhole”) and 03NY027 (“City Engineer Killed in Landfill Manhole when Retrieving Flow Meter”) were included in the confined space safety module of the package. The trainings were provided to approximately 350 NYSDEC field employees in January and February in central and field offices throughout the state.
• The Director of Industrial Hygiene Service of the Occupational and Environmental Health Center of Eastern New York incorporated the following NY FACE reports into the OSHA 30-hour construction safety training curriculum: “Operator Killed when Horizontal Auger Boring Machine Overturned” (11NY043), “Truck Driver Run Over by Trash Compactor in Municipal Landfill” (02NY007), and “Truck Driver Buried by Mulch at Town Solid Waste Site” (06NY084). The training was conducted in collaboration with the International Union of Operating Engineers Local 158 in Glenmont, New York. Approximately 40 workers attended the training.
• The Director of Industrial Hygiene Service of the Occupational and Environmental Health Center of Eastern New York incorporated the following NY FACE reports into a 40-hour HAZMAT training curriculum: “City Engineer Killed in Landfill Manhole when Retrieving Flow Meter” (03NY027), and “A Department of Public Works Worker and a Volunteer Firefighter Died in a Sewer Manhole” (10NY060). The training was conducted in collaboration with the International Union of Operating Engineers Local 158 in Glenmont, New York. Approximately 30 workers attended the training.
• Staff contacted the Assistant Director of Trenchless Technology Center of Louisiana Tech University and provided her with a copy of the NY FACE report “Operator Killed when Horizontal Auger Boring Machine Overturned (11NY043)”. TTC promotes research, development, and technology in the trenchless technology industry. It also provides training and education to engineers, contractors, and government agencies. TTC is going to run a 10-day training class on trenchless operations and the NY FACE report can be used for discussion of safety and accident prevention.
• Staff sent the video “Driver Buried in Smoldering Mulch” and the NY FACE report “06NY084 Truck Driver Buried by Mulch at Town Solid Waste Site” to the Media Director of Keith Manufacturing Company in Madras, Oregon. Keith manufactures walking floors, an unloading device that is widely used by solid waste and recycling companies. The media director intended to share it with her network of dealers and customers.
• A survey questionnaire was posted on the NYSDOH YouTube channel to collect viewers’ feedback on the two NY FACE videos. Thirteen completed the survey by the end of February. The response was overall very positive with 77% rated the video quality as good or excellent. Viewers pointed out that the prevention message should
emphasize employer’s responsibility and suggested improvement of certain digital
technique. The following are some of the comments from the viewers:

- I loved the way the video was organized—it was brief, yet informative and presented in a
  way to actually share with our employees.
- The video clips were well done, nicely chosen shots to illustrate the narration/voice over.
- Great sequencing and effects of images. Tells story nicely. Especially like the
  “remember” segment. Done with taste, seriousness, and imagery helps solidify
  information.
- Thank you for doing this. It is greatly appreciated and I hope to see more of them in the
  future!
- Great and to the point.
- More videos please!

Presentations


Publications

- Zhu J. A Ladder Can Cause Serious Injuries and Deaths – a free ladder safety app can help you prevent injuries. Talk of the Town, June 2016.
BRIEF OVERVIEW OF PROJECT

The New York State Department of Health (NYSDOH), Bureau of Occupational Health and Injury Prevention’s (BOHIP) Occupational Lung Disease Registry conducts surveillance of work-related lung disease through state mandated reporting. Under the reporting regulations, physicians, health facilities and clinical laboratories are required to report any patient with clinical evidence of occupational lung disease. Emergency department data and hospital discharge data are used to identify potential cases seen in hospitals. The NYSDOH also partners with other NYSDOH programs and State Agencies to identify additional cases. The program analyzes the data from the Occupational Lung Disease Registry and population-based data from the Behavioral Risk Factor Surveillance System (BRFSS) Asthma Call Back Survey to characterize occupational lung disease and work-related asthma in NYS. The program conducts worker and company follow-up and provides intervention services to help prevent ongoing or future exposures, and to protect other persons who may be at risk.

ACCOMPLISHMENTS AND OUTPUTS

- Work-related Asthma awareness messages were developed and posted to the NYSDOH social media accounts (Facebook, Twitter).
- The Occupational Lung Disease Registry reporting guidelines, including ICD10 reporting criteria, were updated and provided to every hospital in NYS.
- NYS Occupational Health Clinic Network data was analyzed to identify occupational lung diseases cases for 2012-2015 for inclusion in the Occupational Lung Disease Registry.
- Hospital discharge data and emergency department data were analyzed to identify occupational lung diseases for 2013-2015. After medical record review and/or patient confirmation, this information is included in the Occupational Lung Disease Registry.
- Over 250 medical records on potential work-related asthma cases for 2013-2015 have been reviewed. Medical record review is on-going.
- Over 600 occupational poison control center reports were reviewed for respiratory ailments and further follow-up.
- The OHI documentation and how-to guide for work-related asthma was reviewed and updated. Technical assistance was provided to States when needed.
POTENTIAL OUTCOMES

- Data on work-related asthma cases from 2009-2012 was submitted to NIOSH. This data is aggregated with data from the other four NIOSH-funded states (California, Massachusetts, Michigan and New Jersey) conducting work-related asthma surveillance for use in NIOSH’s research and for publication in the eWoRLD tables.
- An outreach campaign regarding silicosis and mining was distributed to physicians in ten counties with the largest number of surface mines. The mailing includes information about the number of mining operations in their community, information for the physician on silicosis and workers at risk, and a tip sheet for mine workers on silica exposure and the risk of silicosis. In addition, links to resources on the NYSDOH website were provided, including information about the NYS Occupational Health Clinic Network, which is an excellent resource for patient consultations and referrals.
- Industrial hygiene staff reviewed and inspected ventilation systems, conducted on-site walk-throughs, and took indoor air samples at two New York hospitals to assess indoor air quality following employee respiratory complaints.

Fact Sheets:

- “Silicosis and Silica Exposure: What Physicians Need to Know” was developed. A corresponding webpage was also developed - http://www.health.ny.gov/environmental/investigations/silicosis/providerfact.htm
- The fact sheet “Silicosis and Mining: Information for Workers” was developed. A corresponding webpage was also developed - http://www.health.ny.gov/environmental/investigations/silicosis/mineworker.htm

Web Pages:

- A silicosis web page was developed – www.health.ny.gov/silicosis.
- The NYSDOH web resource “Silicosis and Crystalline Silica Exposure: Resources & Materials” was developed - http://www.health.ny.gov/environmental/investigations/silicosis/resources.htm
- The NYSDOH work-related asthma web page was updated. Improvements continue to be made - www.health.ny.gov/publications/2775/index.htm.

Publications:


INTERMEDIATE OUTCOMES

- Statistics on work-related asthma from the Occupational Lung Disease Registry and the NYS Behavioral Risk Factor Surveillance System, information on types of workplace exposures that can cause or make asthma worse, and details on the NYS reporting requirement on lung diseases were provided to a member of the NYS Occupational Health Clinic Network for use in medical grand rounds being conducted on work-related asthma.
• 2,500 of our safety tip cards on working with cleaning chemicals were provided to the Louisiana Department of Health and Hospitals for use as an educational safety tool in a campaign directed at underserved service workers.

• Through our partnership with the American Academy of Allergy, Asthma & Immunology, our safety tip cards on working with cleaning chemicals were distributed to the American Cleaning Institute.

• Our recommendations and safety tip cards on working with cleaning chemicals were used in a presentation on safe cleaning at the 2016 Hawaii Buildings, Facilities and Property Management Expo.

• Our recommendations and safety tip cards on working with cleaning chemicals were provided to a researcher from Harvard for use in a school based intervention project with a safe cleaning component.

• Work-related asthma findings were used by the Healthy Schools Steering Committee as a key work-related component to the Clean, Green, and Healthy Schools Program.

• Information on respiratory illness and day care providers was provided to the NYSDOH Bureau of Immunization to be used in their flu immunization campaign.

• Information and recommendations on silicosis and mines were provided to three of the NYS Occupational Health Clinic Network regions where over 1,000 active mines are located. The information is being used in a campaign in response to the new silica standard.

• A tip sheet for mine workers on silica exposure and the risk of silicosis was provided to the Mine Safety Training Program at the NYS Department of Labor for use in their trainings.

• Information on silicosis and road construction was provided to the On-Site Consultation program at the NYS Department of Labor for use by the Safety and Industrial Hygienists that frequently visit construction sites, including road construction.

• Information on engineered stone and silicosis was provided to the NYS Occupational Health Clinic Network for use in their clinic activities.

• Industrial hygiene staff provided education to the health and safety manager of a major airline carrier about the hazards of silica dust. Staff was informed that large quantities of sand were left on the asphalt, then eventually brought into the building from open doors and employee traffic. As a result, new procedures for sand clean-up were implemented, a respiratory protection program was developed, and redesign of entry doors were being considered to prevent dust from entering buildings.

• Industrial hygiene staff provided education to a hair salon on the risks associated with hair straightening products and formaldehyde which resulted in the salon no longer offering these services.

• Technical assistance was provided to the NYS Attorney-General’s office on issues related to formaldehyde in keratin hair straighteners that resulted in a favorable result in a worker protection case.

• Technical assistance was provided along with continued follow-up to a worker with permanent respiratory damage as a result of exposure to peracetic acid at a chicken processing plant. Information provided assisted in the worker being awarded workers’ compensation for his occupational lung disease.