

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, 2016 – June 30, 2017

Principal Investigator: Kitty Gelberg, Ph.D., MPH (kitty.gelberg@health.ny.gov)

Project Director: Alicia Fletcher, MPH (Alicia.fletcher@health.ny.gov)

Contact Information: 518-402-7900; Fax: 518-402-7909

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 2014 data was submitted to NIOSH and CSTE in June 2017.
- 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 2017 annual update to these indicators in the How-To document.
- The project director continues to participate in quarterly Occupational Health Indicator workgroup conference calls as an active member of the workgroup.
- Staff provided 2015 county-level occupational health related indicator data for the New York State (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 ($\geq 10 \mu\text{g/dL}$) 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 in a user-friendly environment.
- In October 2015, the ICD-10-CM replaced ICD-9-CM as the coding system for medical records. Staff has been working to incorporate the new ICD-10-CM coding scheme in our programmatic medical data. This includes a crosswalk from ICD-9-CM to ICD-10-CM to aid trend analysis across these two coding systems. Staff has also been responsible for providing input into the CSTE-OHI workgroup discussions regarding newly proposed case definitions for some of the occupational health indicators, as part of the ICD-9-CM to ICD-10-CM transition. Further examination of data trends due to the definition changes was examined and will be presented to all for further discussion regarding the development of the new indicator criteria.
- The New York State Trauma Registry (TR) data has been explored to better characterize the occupational injuries that are not covered or reported by Workers' Compensation (WC) in

the inpatient hospital data and to investigate the potential pattern and understand why work-related injuries would not claim WC.

- Emergency discharge and hospital discharge data, along with data from BLS' Census of Fatal Occupational Injuries was examined to look at both mechanisms and rates of assault and homicide in New York during the time period 2012-2014. The impact of poverty (defined as 20% or more of the population living at or below the federal poverty level) on nonfatal work-related assault risk was also evaluated.
- Work-related hospitalization and emergency department data was examined by leading cause of work-related injury and was calculated by gender, race, ethnicity. Leading cause data was also calculated for NYS, NYC and upstate NYS and on the county-level. The top five causes of work-related injuries - assaults, cuts, falls, machinery and struck by - were examined by county also. Data will be summarized and made available on the NYSDOH webpage.
- Staff met with staff from the Office of Quality and Patient Safety to discuss the possibility of uploading injury and occupational health data to data.ny.gov. This move would allow for the use of data visualizations on existing bureau websites, with support through existing initiatives being undertaken by the Department. This would allow for the creation of an enhanced statistics web page with live tables and visualizations linked to uploaded data, which would facilitate yearly updates.
- Staff participated in the annual 2017 Annual Northeast Occupational Health Network Conference held in Connecticut in May. The meeting is a multi-state collaborative where attendees discuss and present the latest topics in occupational health. Staff assisted in the organization of the conference.

Special Projects

- 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 8,100 patients were seen in more than 12,200 visits from July 2016 through June 2017.
- Data on occupational exposures and diagnoses among female patients seen at the NYS Occupational Health Clinic network was provided to the Occupational Health Clinical Center (OHCC) in Syracuse. Bureau of Labor Statistics data on violence among female workers in New York State was also provided.
- Data on respiratory diagnoses and etiologic agents among patients working in the beauty industry seen at the NYS Occupational Health Clinic network was provided to the Occupational Health Clinical Center in Syracuse.
- Because of their expertise in overseeing the Occupational Health Clinic Network, staff was asked to review RFA proposals for the New York State Children's Environmental Health Center of Excellence.

POTENTIAL OUTCOMES

- The report "New York State Occupational Health Clinic Network Report – Key Updates 2006-2015" was completed and is undergoing internal review. The report represents an update of a selected subset of figures from the initial NYS Occupational Health Clinic Report to include data from 2006- 2015. It provides updated data to better reflect current trends in diagnoses and exposures and a more detailed description of data found in previous reports

Presentations

- “Work-Related Assaults and Homicides, New York State (NYS), 2012-2014” (poster*). 2017 Council of State and Territorial Epidemiologists, June 2017, Boise Idaho. *The poster was a CSTE poster award finalist.
- “Identifying Work-related Injuries in Trauma Data: A Comparison of Methods in New York State”. 2017 Council of State and Territorial Epidemiologists, June 2017, Boise Idaho.
- “New York State OHCN Report – Key Updates 2006-2015”. NYS Occupational Health Clinic Network Quarterly meeting. March 2017, Albany, NY.

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, 2016 – June 30, 2017

Principal Investigator: Kitty Gelberg, Ph.D., MPH (kitty.gelberg@health.ny.gov)

Project Director: Alicia Fletcher, MPH (Alicia.fletcher@health.ny.gov)

Contact Information: 518-402-7900; Fax: 518-402-7909

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

- 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 38 pregnant women to reduce their lead exposures prior to the birth of their child.
- Staff identified a woman with an elevated blood lead level (greater than 30 µg/dl) with exposure to lead from the renovation of her 200 year old home. Educational materials on lead exposure prevention during renovation were provided. Staff collaborated with the county and physician to ensure follow-up of the case and her family occurs.
- Staff identified a pregnant woman with an elevated blood lead level (greater than 30 µg/dl) with 10 children, six of whom had blood lead levels exceeding 5 µg/dl. No exposure sources were identified but it is suspected that the family came to the United States with elevated levels. Staff collaborated with the county health department and physicians to ensure follow-up care was given. The newborn will also be tested upon birth.
- Staff identified a retired male with an extremely elevated blood lead level (greater than 50 µg/dl). He had multiple lead exposures over the course of his lifetime including work in the military using leaded weights, target shooting, and currently is renovating a 150-year-old house. Education regarding personal protection and hygiene was shared and other material including shooting range and renovation brochures were mailed to the case.
- Staff provided expertise and consultation assistance to the Bureau of Community Environmental Health and Food Protection regarding their update to the lead prevention brochure “What you need to know about working with lead-based paint” for residential homeowners. Detailed information and photos were provided on how to work with lead-based surfaces before you paint and how to deal with surfaces to reduce exposures.
- The project director provided expertise to a newer ABLES state regarding New York’s case follow-up process, lessons learned and modifications made to the system after a program evaluation. Data collection instruments including the questionnaire and fact sheets and other resources available on the NYSDOH website were also shared.
- Multiple years of data from the lead questionnaire have been analyzed and evaluated. The analysis and subsequent written summary will focus on the patterns and predictors of

consistent personal protective equipment utilization and workplace hygiene among workers with elevated BLLs. Overall trends in time and by BLL will also be reviewed. The paper is currently undergoing internal review.

POTENTIAL OUTCOMES

- The 2016 adult blood lead data was submitted 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 3,336 blood lead tests reported to the NYSDOH's Heavy Metals Registry during 2016.
- The report "New York State Heavy Metals Registry, 2010-2015" was completed and will be published on the NYSDOH website. The report presents data on arsenic, cadmium, mercury and lead tests conducted on New York State residents and workers from 2010-2015.
- In conjunction with the Center for Environmental Health's Outreach and Education and the DOH's Bureau of Marketing and Creative Communications, staff at BOHIP created a digital and social media campaign targeted to women of childbearing age (16-44) regarding lead exposure in pregnancy. The campaign also featured web banner ads. The campaign ran for the month of June.

Presentations

- "Protecting the Newborns of Mothers with Elevated Blood Lead Levels". 2017 Council of State and Territorial Epidemiologists, June 2017, Boise Idaho.

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)
Fatality Assessment and Control Evaluation (NY FACE)
July 1, 2016 – June 30, 2017

Principal Investigator: Kitty Gelberg, Ph.D., MPH (Kitty.Gelberg@health.ny.gov)
Contact Information: Bureau of Occupational Health and Injury Prevention / NYSDOH
Corning Tower, Room 1325
Empire State Plaza
Albany, NY 12237
518-402-7900; Fax: 518-402-7909
Project Director: Julia Zhu (Julia.Zhu@health.ny.gov)

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.

OUTPUTS

- Staff identified and recorded 63 work-related fatal incidents; staff completed two FACE investigation reports.
- Staff finalized 2013 and 2014 worker fatality data to be used to create an online interactive worker fatality map displayed in the Environmental Public Health Tracking program.
- Staff developed monthly worker fatality summaries and disseminated the summaries to over 1000 recipients.
- Staff redesigned the NY FACE webpage - <https://www.health.ny.gov/environmental/investigations/face/index.htm> and revised the NY FACE program brochure - <https://www.health.ny.gov/publications/6596.pdf>.
- Staff provided the Assistant Regional Administrator for OSHA's Enforcement Program with data on worker deaths related to wood chippers from 1992 - 2014. The data will be used by OSHA to create a Safety and Health Information Bulletin.
- Staff provided the Director of Division of Safety and Health, NYS Department of Labor, with data on fatal occupational injury cases from 2011-2014. This will be used to determine if any workers who suffered fatal occupational injuries had participated in OSHA 10 hr. or 40 hr. training programs.
- Staff compiled a list of search words that were used to trigger the worker fatality and fall prevention messages for an upcoming social media campaign. The list contained 274 search words for worker fatality and 165 for fall prevention.
- Staff compiled construction-related fatality cases in NYS and calculated the fatality rates between 2010 and 2016. This was part of the coordinated effort among the seven FACE states to assist NIOSH in collecting construction industry fatal injury data.
- NY FACE submitted a worker fatality case story "*Truck Driver Buried by Mulch at Solid Waste Site*" for the National Truckers Association's monthly column "Safety Issues". The case story was emailed to 18,000 NTA members national wide. The publications will also be posted on the NTA website.

- Staff presented a Confined Space training in the form of a webinar to the Basic Environmental Health Program (BEHP) attendees. The training incorporated the updates in the OSHA Confined Space Standard. It also included relevant NYS fatalities related to atmospheric and physical hazards.

POTENTIAL OUTCOMES

- Staff attended a lift maintenance training at Hunter Mountain. The training was sponsored by the Ski Areas of New York (SANY). Staff disseminated NY FACE publications including Logging Safety – A Field Guide, and snowmaking training cards during the training.
- Staff conducted outreach at the 2016 Upstate Latino Summit hosted by Centro Civico and Ibero American Action League. Approximately 350 community activists, educators, business owners, social workers, and advocates for immigrant and minority rights attended the panel discussions focusing on education, economic development, health, and issues related to Latino population in rural and farming communities. Injury prevention materials were disseminated during the Summit.
- Staff emailed information about NY FACE, an article “Hispanic/Latino Fatal Occupational Injury Rates” by BLS, a list of 145 cases of Hispanic worker fatality reports to the Senior Director of Health Policy & Advocacy for Hispanic Health Network. This would be used for a panel discussion on Latino health disparity and wanted to add discussions and information on occupational safety and health for Latino workers.
- Staff attended Electrical Safety for First Responders training and disseminated NY FACE brochures and the Logging Field Guide during the training. The training was sponsored by Northline Utilities. Approximately 40 volunteer firefighters, EMTs, safety and health professionals, and home owners attended the training.
- Staff sent the NY FACE investigation report “*Flatbed Truck Starts on Its Own, Crushing Auto Body Shop Worker*” to the Automotive Service Association, National Auto Body Council, Society of Collision Repair Specialists, Capital District Auto Body Association, Westchester-Putnam-Rockland Auto Body Association, and NYS Association of Service Stations and Repair Shops who were asked to share the report with their members.
- Sixty-five copies of *Logging Safety: A Field Guide* were mailed to a NYSDEC forest ranger who teaches chainsaw safety for DEC forest service throughout the state. He also teaches a chainsaw safety course at the NY Wildfire and Incident Management Academy every year. Each student was given a copy of the Field Guide. He considered that the Field Guide is excellent for the trainees to learn the OSHA requirement on personal protective equipment and the efficient chainsaw cutting techniques.
- Five hundred Logging Field Guides were sent to the Deputy Director of New York Center for Agricultural Medicine and Health (NYCAMH). The Logging Field Guides will be disseminated at Maple Producers Expo and NY Farm Show. NYCAMH also works with a certified Game of Logging instructor to deliver the Field Guides to trainees.
- Staff attended Worker Memorial Day ceremony sponsored by unions (NYSUT, CSEA), Occupational and Environmental Health Center of Eastern New York, Northeast New York Coalition for Occupational Safety and Health (NENYCOSH), and Labor-Religion Coalitions. More than 100 union members, worker rights activists, safety and health professionals, and state and federal labor department representatives attended.
- The director of NENYCOSH contacted NY FACE and proposed to collaborate on developing and disseminating wood chipper safety and injury prevention products. Staff

informed the director of the research work that NY FACE has done including an investigation of a chipper incident when a 23 years old worker was pulled into a wood chipper on the first day of his job.

- Staff emailed a list of 85 utility worker fatality reports to the instructor of the Electrical Safety for First Responders and the Business Development Manager of Northline Utilities. The fatality cases would be used for upcoming lineman training. NY FACE's email was forwarded to all managers companywide and they were encouraged to use the information.

INERMEDIATE OUTCOMES

- Staff observed three workers working in a trench at a construction site in Albany NY. The unprotected trench was approximately six feet deep and five feet wide and had water in the bottom. She asked an equipment operator at the site to immediately contact the company safety and health person. She emphasized that no worker should work in a trench that is five feet deep or greater unless the trench has a protective system to prevent it from collapsing. A company representative admitted that the trench was over five feet deep. He said that he would use steel plates to shore the trench right away. Staff then contacted Albany OSHA office to report the situation. She also emailed OSHA the links to the FACE report "A Plumber Dies after the Collapse of a Trench Wall" and the video "Plumber Killed in a Catastrophic Trench Collapse" and asked OSHA to share them with the company. OSHA office immediately notified the owner of the company about the alleged hazards. OSHA sent the links of the FACE report and video to the owner of the company and asked him to share them with their employees.
- Legislation is now in effect that includes sanitation trucks in the SLOW DOWN, MOVE OVER law. This legislation was the result of staff working with Hispanic worker advocates and a legislator. Staff presented occupational fatality data at several Workers' Memorial Day events across the state. The data showed that Hispanic sanitation workers were at high risk for serious injuries. Advocates were particularly interested in the death of a young Hispanic sanitation worker in Suffolk County and approached a legislator for assistance. The legislator contacted staff for data on sanitation worker deaths across NYS. Staff provided the data indicating traffic risk for sanitation workers statewide. Legislation was initiated and passed this year to include sanitation trucks in the SLOW DOWN, MOVE OVER law and the new provisions recently went into effect. The NYS Police conducted a campaign at Thruway rest stops across the state to increase awareness of the law and its requirements.

Presentations

- "Confined Space Safety" (webinar). Albany, NY October 19, 2016.

Publications

- FACE investigation report: "*Two Construction Workers Fatally Crushed when Cement Formwork Collapsed*" available at <https://www.health.ny.gov/environmental/investigations/face/docs/13ny080.pdf>
- FACE investigation report: "*Mechanic Electrocuted when a Mobile Light Tower Contacted Powerline*" available at <https://www.health.ny.gov/environmental/investigations/face/docs/12ny018.pdf>
- Worker fatality case story "*Truck Driver Buried by Mulch at Town Compost Site*" for the National Truckers Association's monthly column "Safety Issues".

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)
Occupational Lung Disease Program
July 1, 2016-June 30, 2017

Principal Investigator: Kitty Gelberg, Ph.D., MPH (Kitty.Gelberg@health.ny.gov)
Bureau of Occupational Health and Injury Prevention / NYSDOH
Corning Tower, Room 1325
Empire State Plaza
Albany, NY 12237
518-402-7900; Fax: 518-402-7909

Project Director: Karen R. Cummings, MPH (Karen.Cummings@health.ny.gov)

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 New York State (NYS). The program conducts worker and follow-up to help prevent ongoing or future exposures, and to protect other persons who may be at risk. It provides technical assistance to employers, unions, and government agencies on respiratory protection and exposure prevention. The program also seeks to educate various entities on the recognition, diagnosis, and management of occupational lung diseases, most notably work-related asthma.

ACCOMPLISHMENTS AND OUTPUTS

- Over 700 occupational calls to the NYS Poison Control Centers were reviewed for respiratory ailments and further follow-up. There were 76 identified as having an inhalation exposure resulting in a clinical effect involving the respiratory system.
- There were 86 workers' compensation claims reported involving occupational lung disease.
- Over 700 medical records on potential work-related asthma cases for 2013-2015 have been reviewed. Medical record review is on-going.
- There were 194 cases interviewed regarding work-related asthma and exposures in their work environment. The NYS language line was used to conduct non-English interviews in Burmese, Polish, and Spanish.
- Contact with 501 people with potential work-related asthma was made by mail and/or phone to provide resources on occupational lung disease management and prevention, as well as information on the Occupational Health Clinic Network.

- 2014 NYS Asthma Call-back Survey continues to be analyzed annually. Over 830,000 (49%) NYS workers with asthma report that something in their work environment caused or made their asthma worse.
- NYS continues to be the lead on the work-related asthma occupational health indicator. The occupational health indicator documentation and how-to guide for work-related asthma was reviewed and updated. Technical assistance was provided to States when needed. The indicator was calculated and submitted to CSTE.
- NYS continues to be the lead on the pneumoconiosis hospitalizations occupational health indicator. The occupational health indicator documentation and how-to guide for this indicator was reviewed and updated. Technical assistance was provided to States when needed. The indicator was calculated and submitted to CSTE. Pilot testing occurred for an expansion of the silicosis indicator to include review of death certificates for identification of priority-area silicosis cases.
- Staff joined the Occupational Health Reportable Condition Knowledge Management System Work-group. The Reportable Condition Knowledge Management System enhances public health reporting to the Department and aligns with national initiatives supporting interoperability and the implementation of electronic case reporting. NYS involvement in the workgroup will enhance the surveillance for, and health provider reporting of, occupational lung disease.

POTENTIAL OUTCOMES

- The Public Health Live webcast on the recognition and diagnosis of work-related asthma was disseminated to the Association of Asthma Educators, the American Board for Occupational Health Nurses, the American Association of Occupational Health Nurses, the American Medical Association, the American College of Physicians, the American Academy of Physician Assistants, and the American College of Occupational and Environmental Medicine.
- LinkedIn is the world's largest professional network with a mission to connect the world's professionals to make them more productive and successful. LinkedIn ad posts were used to target physicians in NYS about the recognition and diagnosis of work-related asthma and direct them to NYSDOH resources.
- Digital ads to raise awareness of work-related asthma were developed. The ads appeared on the internet and were triggered when users searched for relevant content on Google. Links to the work-related asthma resources on the NYSDOH website were embedded in the digital ad.
- Facebook sponsored ads were utilized to deliver work-related asthma messaging to a defined target audience. The content of the ad delivered a short prevention message and links to the NYSDOH website.
- Banner ads are embedded ads with images and text on a web page that attract traffic to a website. The work-related asthma banner ads were animated to show the various jobs that could trigger asthma. The ads linked to the work-related asthma resource on the NYSDOH website.

Fact Sheets:

- “Silica and Road Construction” was updated to increase road construction worker awareness concerning occupational silicosis and crystalline silica exposure.
www.health.ny.gov/environmental/workplace/lung_disease_registry/docs/silicosis_road

Web Pages:

- A new work-related asthma webpage was designed to deliver resources to both workers and health care providers on the recognition and diagnosis of work-related asthma. The website is also designed to give action items for both target audiences.
www.health.ny.gov/WorkRelatedAsthma

Presentations:

- Cummings, KR. Silicosis and Mining, New York State Department of Health's Center for Environmental Health Director Rounds, Albany, NY September 13, 2016.

INTERMEDIATE OUTCOMES

- The NYSDOH internal policies and guidelines on respiratory protection were reviewed and updated. This information is being used in the Department's emergency preparedness activities.
- Staff worked with the NYSDOH Bureau of Toxic Substance Assessment to provide technical assistance to hospitals to improve fresh air make-up and increased air flow to improve indoor air quality.
- Information on occupational lung disease and its relevance to low income and vulnerable workers was provided to the NYS Worker Exploitation Task Force for use in their activities and programs.
- Staff participated in NIOSH's Health Hazard Evaluation (HHE) that was conducted at two area nail salons. Recommendations from the evaluation are being used to improve health and safety at these salons, and the recommendations are made available to others in the industry.
- Respiratory protection recommendations and training were provided to workers assigned to inspect cooling towers for legionella bacteria.
- Resources on occupational lung disease, including work-related asthma, were provided to the Healthy Capital District Initiative.
- Information on work-related asthma was provided to a member of the American College of Preventive Medicine's committee to address the Centers for Disease Control and Prevention 6|18 initiative which targets six common and costly health conditions, including asthma.
- Our Public Health Live webcast titled "Work-Related Asthma: Recognition and Diagnosis" was incorporated onto the National Asthma Educator Certification Board's website. Health educators who view the webcast can earn professional credits towards their certification requirements. <https://naecb.com/certificant-corner.php>