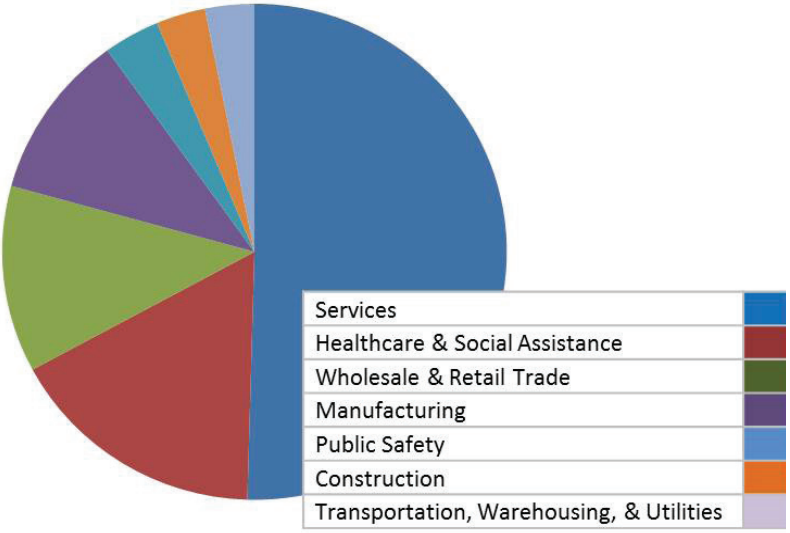
2013 Annual Report

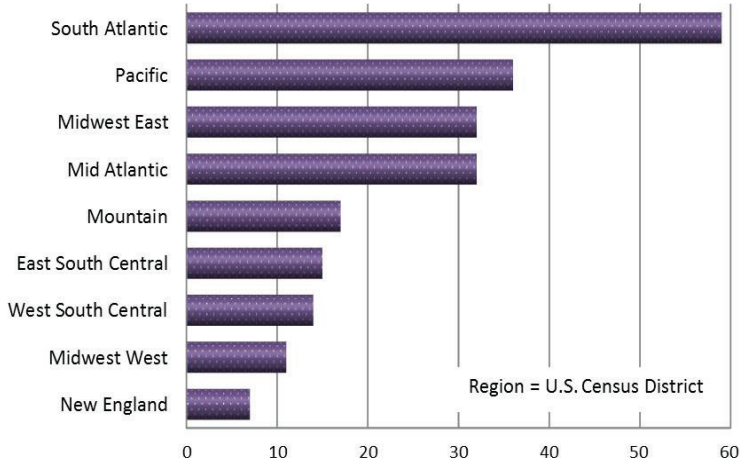
Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

HHE Requests in 2013

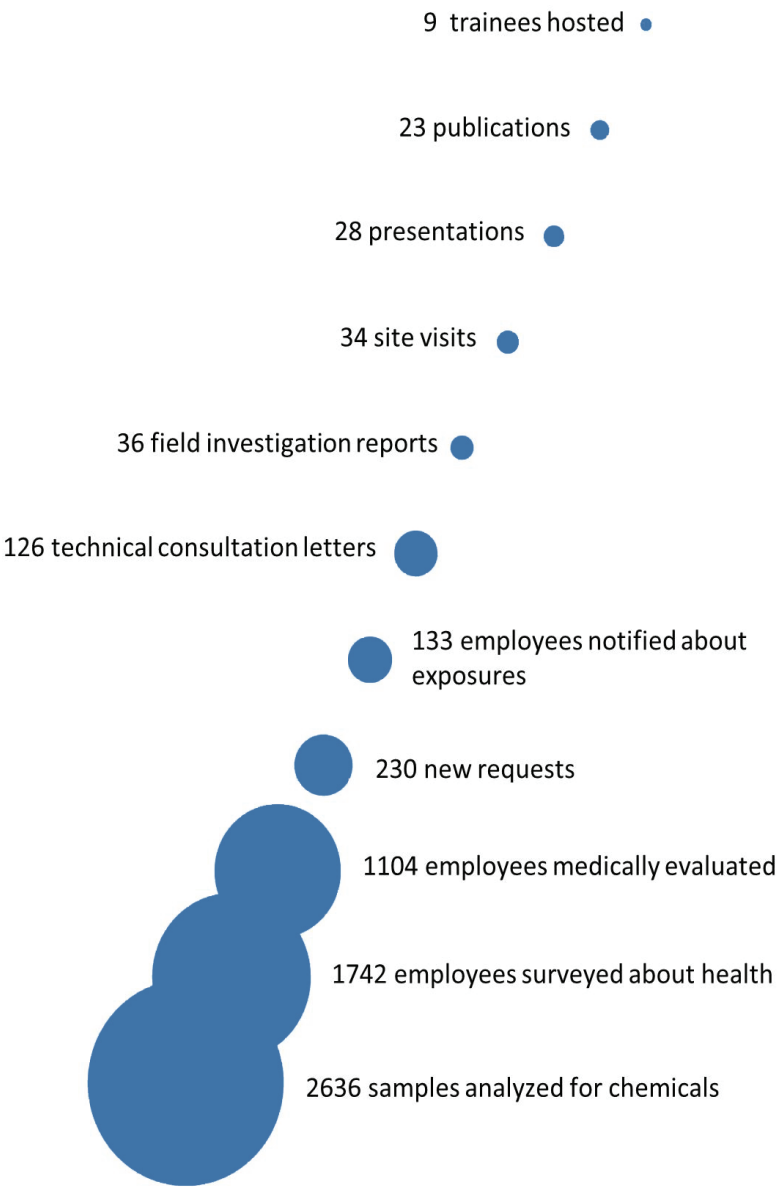
… by industry group



… by U.S. region



By the Numbers



At the request of a union, we evaluated exposures and health effects at a poultry breading plant employing more than 400 workers. Reported health symptoms included asthma, bronchitis, and nasal symptoms. During our site visit we took air samples for inhalable flour dust, wheat, and soy. We also analyzed employees' blood to see if they were allergic to flour dust, wheat, garlic, onion, soybean, corn, or paprika.

We found that employees in almost all areas of the plant had the potential for exposure to flour dust levels above 0.5 milligrams per cubic meter. This is the exposure limit, known as the threshold limit value®, recommended by the American Conference of Governmental Industrial Hygienists®. Employees who were allergic to flour dust, wheat, corn, or onion were more likely to report work-related asthma symptoms than those who did not have these allergies. Exposures to flour, uncooked breaded product, and other ingredients were associated with sensitization to flour dust and wheat. Sensitized employees may be more susceptible to health problems with continued exposure.

Photo by NIOSH

We recommended that the employer:

- Use an enclosed system to transfer powdered ingredients to the dispensing hoppers.
- Use local exhaust ventilation to lower flour dust levels.
- Use the threshold limit value for flour dust as a guidance value to best protect employees' health.
- Start a plant medical surveillance program.
- Implement a respiratory protection program until engineering controls and improved work practices can reduce exposures.

This report is available at:
http://www.cdc.gov/niosh/hhe/reports/pdfs/2009-0131-3171.pdf

We assessed heating, ventilation, and air-conditioning systems and other environmental controls at four homeless facilities. Each facility had evidence of past or ongoing tuberculosis disease transmission.

We found that the ventilation systems could have contributed to airborne disease transmission among shelter guests. Our assessments showed that the ventilation systems were:

- Not supplying outdoor air to the occupied spaces.
- Generally in good working order, but some had no filter or improper filter configurations; others had condensate leakage.

The shelters we evaluated had improved their ability to identify guests showing signs and symptoms of tuberculosis. We made additional recommendations to prevent disease outbreaks such as:

- Strategically repositioning supply and exhaust grills to improve airflow in occupied spaces.
- Identifying areas to separate guests suspected of having tuberculosis or other respiratory diseases from the remainder of the guest population.

Photo by NIOSH

- Developing written plans for infection control; operating and maintaining the heating, ventilation, and air-conditioning systems; and a respiratory protection program for shelter employees.

These reports are available at:
http://www.cdc.gov/niosh/hhe/reports/pdfs/2012-0155-3180.pdf
http://www.cdc.gov/niosh/hhe/reports/pdfs/2012-0263-3181.pdf
http://www.cdc.gov/niosh/hhe/reports/pdfs/2012-0264-3182.pdf
http://www.cdc.gov/niosh/hhe/reports/pdfs/2012-0265-3183.pdf

“Very well done. NIOSH was the only resource that could investigate these issues to the degree needed.” – Local government agency manager

“This is my second one [HHE] in 10 yrs. Guys like me depend on people like NIOSH.”
– Union at a large manufacturing company

To generate the words in this graphic, we polled current and former HHE Program staff. We asked respondents to list “the top three words that come to your mind when explaining the HHE Program to others.” One hundred eleven people responded, listing 103 unique words. We ranked them by frequency and used words listed by three or more respondents to create the graphic.

We invited all employees of a midwestern, suburban school district to participate in an online survey about influenza (flu). We surveyed 412 of 841 employees. Of the respondents, 58% reported getting the flu vaccine for the 2012–2013 season.

We found that employees who had positive attitudes and perceptions about the flu vaccine and those who received the flu vaccine the year before were more likely to have been vaccinated. The most common reasons for not getting the flu vaccine were beliefs that:

- Employees did not need the vaccine.
- The vaccine did not work.
- Employees did not have time to get vaccinated.

Photo by CDC / Douglas Jordan, M.A.

A total of 120 employees reported flu-like illness symptoms during the 2012–2013 flu season. Of these, 92 reported working while feeling sick. The two most common reasons cited for working while sick were "I have a professional obligation to my students" and "I did not think I was contagious or could make other people sick."

We recommended the school district:

- Work with local health care providers to offer the flu vaccine to employees at each school.
- Educate employees about the flu and the flu vaccine.

We recommended the employees:

- Get the flu vaccine every year.
- Stay home from work when ill with flu-like symptoms, which include fever, cough, and sore throat.

This report is available at:
http://www.cdc.gov/niosh/hhe/reports/pdfs/2013-0064-3191.pdf

At the request of a union, we evaluated concerns about indoor lighting, indoor environmental quality, and job stress at a government call center. We did the following:

- Measured illumination.
- Examined the ventilation systems.
- Measured temperature, relative humidity, and carbon dioxide.
- Surveyed employees about their health and safety concerns and their perceptions of the psychosocial work environment.

We determined that although the level of light met the requirements listed in the building lease, the lighting design may produce glare. In evaluating the ventilation system, investigators found that air was not evenly distributed to all areas of the call center. Investigators also found that job stress and employee concern for their health and safety at work was moderately high.

We recommended the employer:

- Try different lighting patterns and ask employees for input.
- Test and balance the ventilation systems.
- Give employees feedback to improve their communications with customers.
- Give employees an opportunity to debrief with a supervisor or coworker immediately after a call with an unfriendly customer.

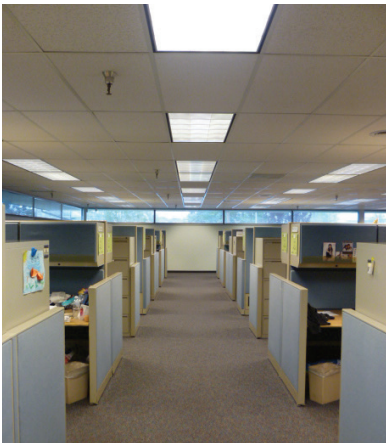


Photo by NIOSH

- Advise employees to immediately report suspicious behavior or expressions of violence made by coworkers or immediate supervisors.
- Advise employees to seek counseling if they experience symptoms of anxiety, anger, depression, or other mental health issues.

This report is available at:
http://www.cdc.gov/niosh/hhe/reports/pdfs/2012-0081-3169.pdf

Recommendations We Made in 2013 for Common Problems

1. Refer employees with a persistent rash to a dermatologist knowledgeable in occupational medicine.

Example: At a wood furniture manufacturing plant some employees were reassigned because of skin reactions to workplace chemicals. Others had skin rashes but had not seen a doctor. In addition to recommending gloves suitable for the chemicals in the plant, we recommended medical follow up of employees with possible work-related skin problems. A physician with expertise in occupational medicine can do a full evaluation to determine work-relatedness.

2. Assess the building for water intrusion and damage and high relative humidity. Correct these upon discovery.

Example: Employees in a water-damaged building had dry, itchy, or burning eyes; cough; and sinus problems. Investigations revealed multiple sources of water incursion and conditions favorable to microbial growth. Regularly checking for and taking steps to correct these problems can help prevent building-related illness.

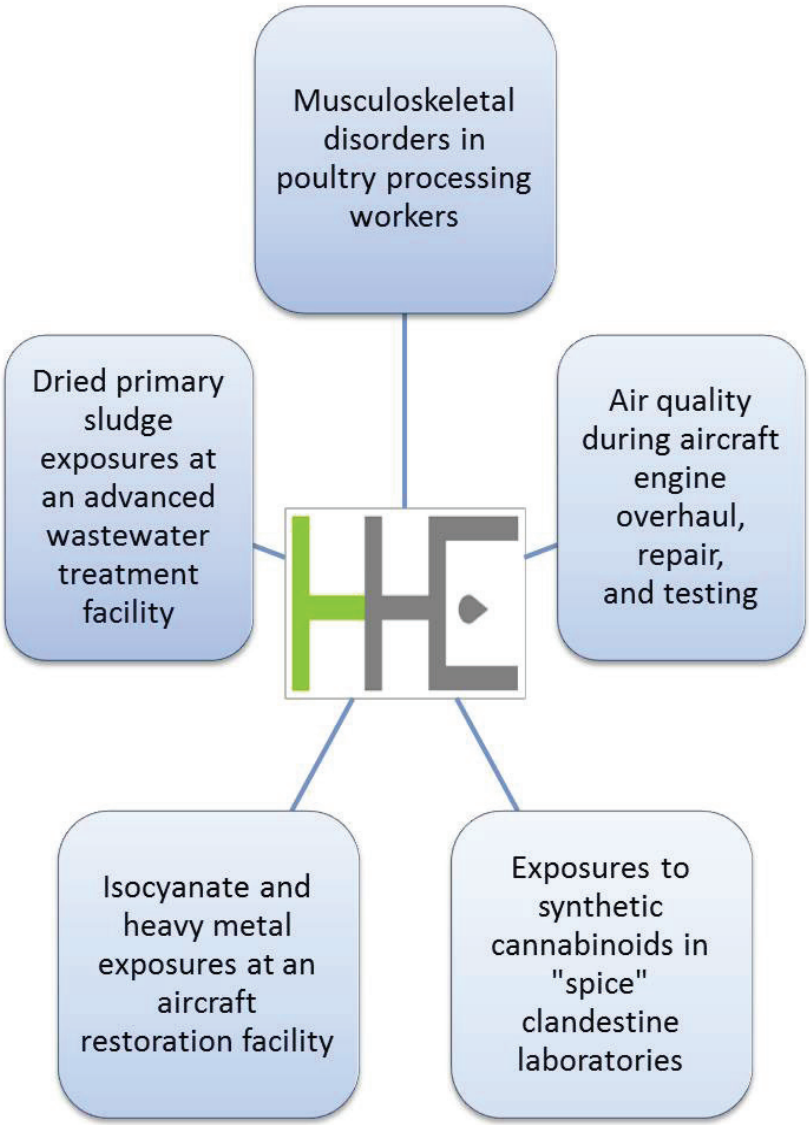
3. Sample the air for chemicals after adding local exhaust ventilation.

Example: At a cream cheese manufacturing plant, employees weighed powdered ingredients in an area with inadequate ventilation. The ingredients included flavoring chemicals with possible effects on respiratory health. We recommended installing local exhaust ventilation to control exposures. After installing controls, monitoring is important to ensure proper operation and exposure reduction.

4. Provide disposable shoe covers and on-site laundering of work clothes to prevent take-home lead contamination.

Example: Wipe sampling showed that lead contamination was present throughout an aircraft repair facility and on employees' hands. Lead on surfaces adds to employees' overall exposure and makes it possible to contaminate objects outside the workplace, thus potentially exposing others. Steps to prevent take-home contamination are important for protecting employees' families.

What We Are Looking At in 2014



HHE Health Hazard Evaluation Program

The mission of the NIOSH Health Hazard Evaluation Program is to respond to requests from employees, employers, and union representatives to evaluate potential health hazards in their workplace. These evaluations are done at no cost to the requestor. Once the evaluation is complete, recommendations are made on ways to reduce or eliminate identified hazards. Health Hazard Evaluations can help reduce hazards and create more healthful workplaces.

If you have questions, please contact the HHE Program Monday–Friday, 9 a.m. – 4:30 p.m. EST
Phone: 1-513-841-4382

HHERequestHelp@cdc.gov

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