NIOSH Health Hazard Evaluation Program

May 2016

What are our priorities?

The National Institute for Occupational Safety and Health (NIOSH) Health Hazard Evaluation (HHE) Program evaluates potential workplace hazards through field visits and phone consultations in response to requests from workers, unions, and employers. On the basis of investigation findings, the program provides recommendations to improve the health and safety of the U.S. workforce. The HHE program focuses on these areas:

- Reducing or eliminating hazards and preventing work-related illnesses
- Identifying new and emerging hazards

What do we do?

- Complete timely, high quality investigations that meet stakeholder needs.
- Make and promote recommendations that are relevant, feasible, and effective to prevent adverse effects of workplace health hazards.
- Raise awareness about hazards, emerging issues, and recommended controls through HHE reports, trade publications and meetings, social media, and scientific publications and meetings.
- Encourage HHE Program requests:
  - From underserved populations, small businesses, labor unions, and local health departments.
  - That address emerging occupational health problems.
  - That are likely to have findings that can apply to many workplaces.
- Encourage research on emerging hazards identified by HHE investigations.

What have we accomplished?

- Responded to 185 HHE requests, including making 31 visits for new field investigations and issuing 120 final reports in 2015.
- Released report on the high risk of carpal tunnel syndrome among poultry processing workers. Our findings continue to have national impact through an Occupational Safety and Health Administration enforcement initiative and an updated U.S. Department of Agriculture regulation.
- Selected as a finalist in the HHS Innovates Program with a proposal to redesign HHE reports to better meet stakeholder needs.
- Worked with state and local health departments to identify opportunities for HHE investigations in two high priority areas:
  - Occupational hazards in the electronic cigarette industry.
  - Exposures and working conditions for vulnerable workers in nail salons.
- Enhanced awareness of the HHE program among OSHA field staff through a webinar that reached over 1,000 participants. We received two HHE requests prompted by referrals from OSHA following the webinar.
- Brought attention to the issue of lung disease related to flavoring chemical exposures at a coffee processing facility through a medical journal publication and national media. Employers or employees at 8 other facilities subsequently requested HHEs.
- Developed a webpage on coffee processing, with information on flavoring chemicals, air sampling methods, NIOSH proposed exposure limits for diacetyl and 2,3-pentanedione, and recommended workplace interventions.

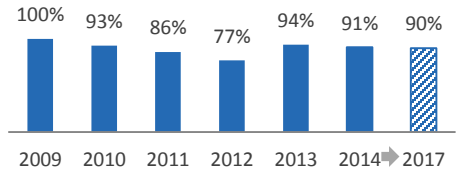
What's next?

- Respond to at least 200 HHE requests, including at least 24 initial site visits and 150 final reports in 2016.
- Publish first findings on flame retardant exposures in the electronics recycling and flavoring chemical exposures in coffee processing.
- Conduct medical and environmental evaluations at coffee processing facilities to characterize exposures to flavoring chemicals, assess health outcomes, and recommend ways to prevent lung disease in workers.
- Evaluate and expand outreach to 500 local health departments.
- Release a new HHE promotional video featuring stakeholder testimonials.
- Initiate new project to develop educational materials about musculoskeletal risks for Hispanic employers in the food service industry.

At-A-Glance

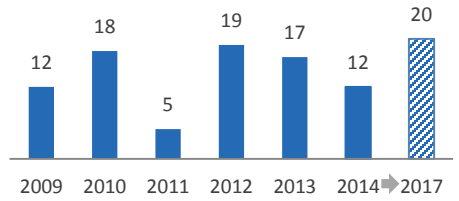
The Health Hazard Evaluation (HHE) Program provides studies of requesting workplaces to learn whether workers are exposed to hazardous materials or harmful conditions. This snapshot shows recent accomplishments and upcoming work.

Percent of respondents reporting that workplace conditions improved after HHE was completed



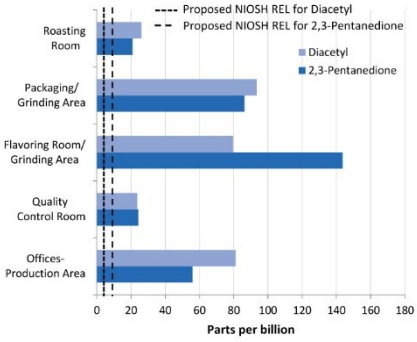
Source: NIOSH Program Records

Number of HHE field investigations in new or rapidly growing industries



Source: NIOSH Program Records

Mean personal 2,3-pentanedione and diacetyl air sampling results by location at a coffee processing facility with five sentinel cases of obliterative bronchiolitis, November 2012.



Source: Bailey, R.L. et al. Am J Ind Med 2015 Dec; 58(12): 1235-1245

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