

Update on NIOSH Projects

Background Material:

- Characterizing adoption of precautionary risk management guidance for nanomaterials, an emerging occupational hazard. Mary K. Schubauer-Berigan, Matthew M. Dahm, Paul A. Schulte, Laura Hodson, Charles L. Geraci. *J. Occ and Env Hyg*, 2014

NIOSH Scientist: Beth Whelan, NIOSH

Dr. Beth Whelan, of the National Institute for Occupational Safety and Health (NIOSH), Industrywide Studies Branch (IWSB) will give an update on current research funded, in part, through an interagency agreement with the NTP. The overview will include current information about three ongoing studies and two studies just beginning:

- 1) "Occupational Exposure Assessment Of Manganese Fractions In Welding Fume" characterized welders' exposures to manganese, determining valence state. Ten surveys were completed at oil refineries, heavy equipment manufacturing, appliance manufacturing, shipyard and steel fabricators. Three publications are expected, one is at the journal now and two are in NIOSH review.
- 2) "Industrywide Exposure Assessment Study of Workers Exposed to Carbon Nanotubes and Carbon Nanofibers" characterized workers' exposures to carbon nanotubes and nanofibers at 18 sites, sampling 121 workers. One paper characterizing the industry was published in 2014, another paper describing exposure at the first 14 sites was submitted to the journal, others are planned.
- 3) "Occupational Exposure to Bisphenol A in the United States" characterized workers exposures to Bisphenol A (BPA) at six facilities that manufacture BPA, polycarbonate or other plastics, or use BPA in investment casting foundry operations. Sampling visits are still being conducted.
- 4) "Assessment of Exposure to Coal Tar Pitch Volatiles Containing PAHs in Coal Tar Sealant Applications" is a new study that aims to assess the exposures of workers applying coal tar sealants in blacktop pavement coatings. The study will assess exposures through collection of air and urine samples to coal tar sealants and PAHs (polyaromatic hydrocarbons).
- 5) "Assessment of Occupational Exposure to Flame Retardants" is a new study that aims to assess exposure in US workplaces to nine alternative flame retardants in addition to the phases out PBDEs (polybrominated diphenyl ethers). Fourteen site visits are planned for workers in construction, plastic goods manufacturing, gymnasium workers, and firefighters. Exposure will be assessed through air, urine, and sera samples.

Additional information on the NIOSH Division of Surveillance, Hazard Evaluation, and Field Studies is available at <http://www.cdc.gov/niosh/contact/im-dshe.html>.