Reducing Occupational Lead Exposure

What was the problem/situation?

Lead adversely affects numerous body systems and causes various forms of health impairment and disease that arise after periods of exposure as short as a few days (acute) or as long as several years (chronic). Lead poisoning occurs when a person swallows, absorbs, or inhales lead in any form. The frequency and severity of medical symptoms increases with the concentration of lead in the blood. Long-term (chronic) overexposure to lead may result in severe damage to the blood-forming, nervous, urinary, and reproductive systems.

How was Tracking involved?

The state of Missouri participates in the National Institute for Occupational Safety and Health (NIOSH) Adult Blood Lead Epidemiology and Surveillance (ABLES) Program which collects blood lead concentration levels (BLLs) for adults (16 years of age or older.) In June 2014, the Missouri Department of Health and Senior Services (MDHSS) Bureau of Environmental Epidemiology and the Environmental Public Health Tracking (EPHT) program, entered into a Memorandum of Understanding (MOU) with the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) to reduce work-related illnesses from lead exposure and ensuring safer and healthier workplaces. Twice a month the program queries the ABLES data and makes a referral to OSHA with a list of employers where one or more employees have the following blood lead levels (BLLs) of whole blood: BLLs >50 μg/dL for the general industry and BLLs >60 μg/dL for the construction industry.

What action was taken to resolve the problem?

Lead referrals to OSHA are only made after verification that the laboratory report documents: the agreed upon BLLs, the sample type is venous, the employer, and Missouri residence status. Upon receipt of the referrals, OSHA evaluates each referral and provides the program copies of any citations issued to employers as a result of a referral. Once each case file is closed, OSHA either advises the lead referral did not result in an inspection or provides the program with the results of the inspection, such as lead monitoring results, employer’s abatement, and type of work.
performed by the employee. Since the inception of the MOU with OSHA, 13 workers have been identified with highly elevated BLLs and seven companies have been referred to OSHA, with one company prosecuted for criminal contempt for hindering a lead-level investigation.