Occupational Pesticide-related Illnesses and Injuries in Michigan, 2016



Summary Statistics

The number of confirmed work-related pesticide illness and injury cases in Michigan has varied since the surveillance system became fully operational in 2003, ranging from approximately 60 to 125. The dip in 2016 is likely due to a change in hospital coding. Overall 55% of the cases are men; 55% of 2016 cases were men.



*Multiple means one product had more than one type of pesticide. A case could also be exposed to more than one product.



The "Services" sector includes "Services to Buildings and Dwellings", such as structural pest control or landscaping, as well as "Accommodation and Food Services" such as hotels and restaurants, where many disinfectant exposures occurred.

Background

The Michigan Occupational Pesticide-related Illness and Injury surveillance program began in 2001. The goals are to: 1) identify groups at risk for pesticide-related illnesses and injuries, 2) detect trends, 3) identify high-risk active ingredients, 4) identify and refer cases to regulatory agencies as appropriate, and 5) provide information for interventions including education and outreach programs. Pesticide-related Illness and Injury Surveillance is funded under a cooperative agreement with the National Institute for Occupational Safety and Health (NIOSH). A pesticide is any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any pest. The term pesticide can refer to insecticides, herbicides, fungicides, rodenticides, disinfectants, and various other substances. Reported cases are classified based on criteria related to (1) documentation of exposure, (2) documentation of at least two adverse health effects, and (3) evidence supporting a causal relationship between pesticide exposure and health effects. Cases that meet the criteria are considered confirmed cases.



*Each case may have more than one factor contributing to the exposure.

2016 Work-related Pesticide Illness and Injury Narratives

- A medical center custodian in her 30s reached up to get a gallon container of disinfectant down from an overhead shelf. It spilled on her face and head. She washed right away and showered when she went home. The next morning she woke up with a rash on her face, blisters that were draining, and sores on her head. She called poison control and went to see her doctor.
- A yard hand in his 30s was spraying weeds around a building. The pressure release valve on a 5-gallon sprayer popped and some herbicide splashed on his face and got into his eyes. He inhaled it and might have ingested a small amount. He had been wearing safety glasses but pushed them to the top of his head to see better when he was refilling the container. No protective equipment was required. He developed eye and throat pain, difficulty swallowing, and had dry heaves. He went to an occupational health clinic and was diagnosed with a corneal abrasion.
- A university worker was in an office when an insecticide was sprayed right outside the building vent, causing a strong odor in the office. Seven workers were exposed. She was one of three workers who became nauseous and had eye irritation. She was pregnant and left the building.
- A construction contractor in his 30s was getting rid of roots in a drain field. He re-filled a hole he'd dug by adding dirt and root killer in layers. He used a 5-cup measuring cup to add the root killer. Later that day he developed shortness of breath, a cough and a sore throat. He saw his doctor and lost three days of work.
- A fruit packing worker in his 20s was pouring out a disinfectant at work and inhaled fumes. He developed shortness of breath, a cough, wheezing, hoarseness, and pain with deep breathing. He was taken by ambulance to an emergency department.