Michigan State University and Michigan Department of Health and Human Services

Occupational Pesticide-related Illnesses and Injuries in Michigan, 2015

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. Overall 55% of the cases are men; 57% of 2015 cases were men.

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.

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

2015 Work-related Pesticide Illness and Injury Narratives

- A blueberry packer in her 30s was one of 28 workers in a blueberry field when a neighboring field was sprayed. She felt the insecticide spray hit her, after which she felt weak and anxious; was tachypenic; and had difficulty breathing, tachycardia, a headache, and painful, itchy eyes. She was taken by EMS to an emergency department. All the workers went home early that day to shower and all returned to the field the next day. The incident was reported to the Michigan Department of Agriculture and Rural Development but no violations were found.
- A crew leader for a landscaping company in his 20s was pulling weeds on a farm about 30 minutes after it had been sprayed with an herbicide. He developed nausea, loss of appetite, headache, dizziness, weakness and a cough. He went to an emergency department and an urgent care clinic. He lost two weeks of work.
- A groundskeeper for an apartment complex in his 20s was spraying an insecticide for bees when a gust of wind blew some of the mist back in his eye. His eye was itchy and irritated and he called poison control.
- A supervisor of a donut shop in her teens dropped a bottle of sanitizer and it fell so that the cap broke and sanitizer splashed in her face. She had second degree burns on her face and it was red, painful and itchy. She went to an urgent care center and followed up with her doctor the next day.
- A breakfast-bar staff person at a motel in her 40s cleaned with bleach and developed asthma exacerbation with shortness of breath, wheezing, rapid breathing, chest tightness and a cough. She was taken by EMS to a hospital where she was seen in the emergency department and admitted to the ICU.