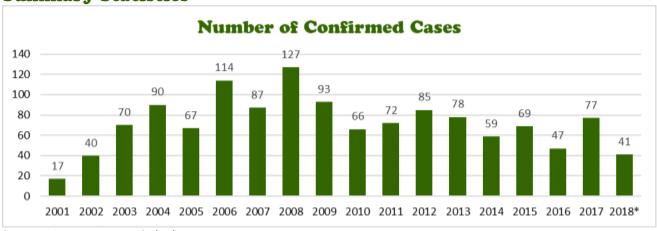
#### Michigan State University & Michigan Department of Health and Human Services

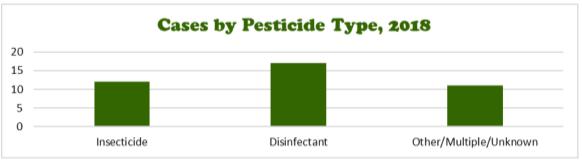
# Occupational Pesticide-related Illnesses and Injuries in Michigan, 2018

### **Summary Statistics**

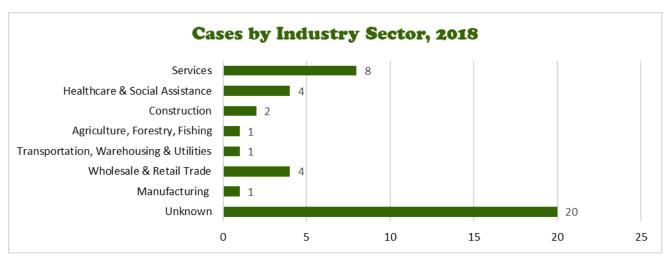


<sup>\* 2018</sup> preliminary data as of 2/21/2019

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 46 to 127. Overall 56 percent of the cases were men.



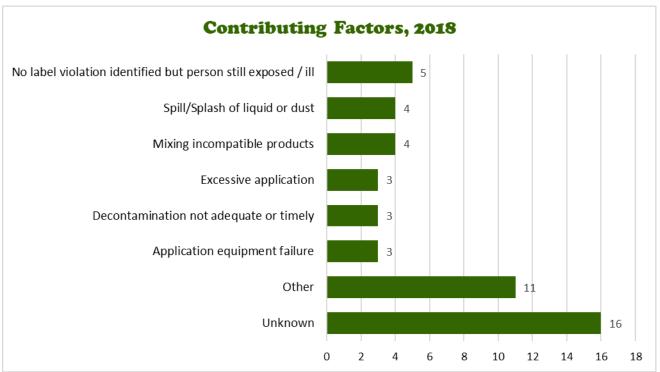
<sup>\*</sup>Multiple means one product had more than one type of pesticide. A case could also be exposed to more than one product.



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 all three criteria are considered confirmed cases.



<sup>\*</sup>Each case may have more than one factor contributing to the exposure.

## 2018 Work-related Pesticide Illness and Injury Narratives

- A fertilizer technician for a landscaping company in his 60s sprayed several lawns with an herbicide. He
  diluted it correctly and used a riding sprayer that he calibrated regularly. Despite wearing the required PPE
  (Personal Protective Equipment) he developed stomach pain, nausea, vomiting, and pinpoint pupils. He
  went to an urgent care and was sent to an emergency department. He followed up with an ophthalmologist
  and lost seven days of work.
- A teacher in a high school in her 20s was teaching in a room across the hall from the pool. The pool was over-treated and the smell of chlorine started to spread. The school was evacuated and HazMat was called. She became lightheaded, had a headache, was nauseous, and developed high blood pressure. She went to an emergency department.
- A pest control operator in his 30s was releasing pressure on a sprayer filled with insecticide when the valve exploded into his face. It got in his eyes, nose, and mouth. He developed nausea, vomiting, abdominal pain, a burning sensation when breathing, cough, and numbness down his arms. He went to an emergency department and was admitted for one night to the hospital.