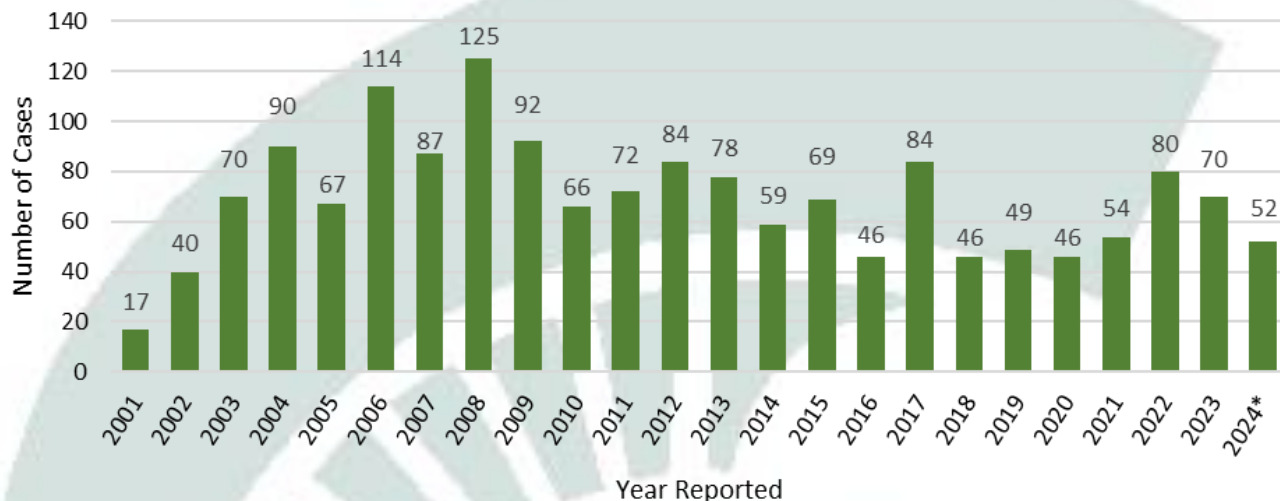


# Occupational Pesticide-Related Illnesses and Injuries in Michigan 2024

Additional Information Available at: [www.oem.msu.edu](http://www.oem.msu.edu)

## Summary Statistics

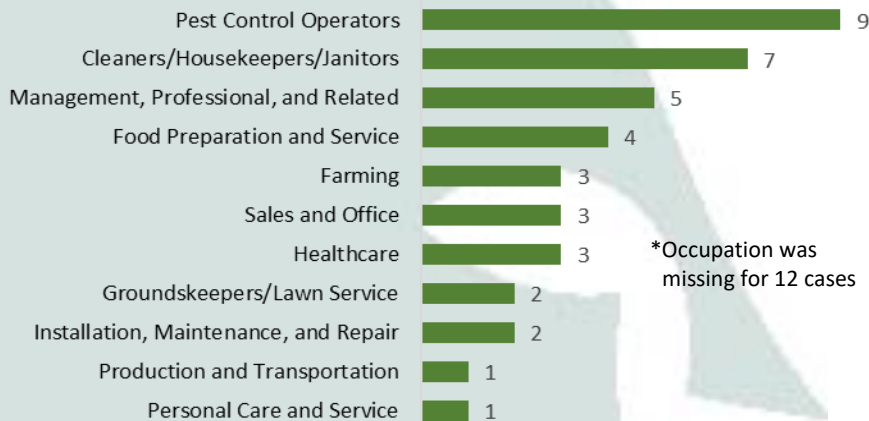
### Number of Confirmed Occupational Cases



\*2024 preliminary data as of 1/14/2025

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 125. Overall, 55% of the cases involved men and 45% involved women, while in 2024, 58% of the cases involved men and 42% involved women. Of the 26 cases where race of the exposed individual was known, 81% were white, 15% were black, and 4% were of other or unspecified race. Of the 22 cases where the ethnicity of the exposed individual was known, 27% were Hispanic.

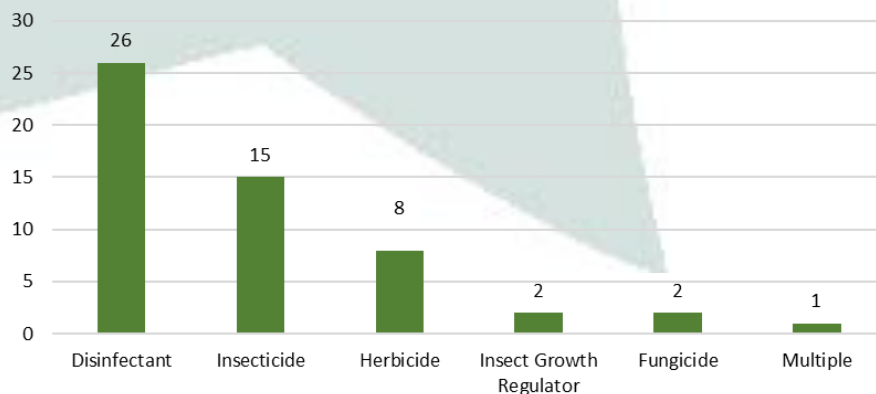
### Cases by Occupation\*, 2024



\*Occupation was missing for 12 cases



### Cases by Pesticide Type\*, 2024



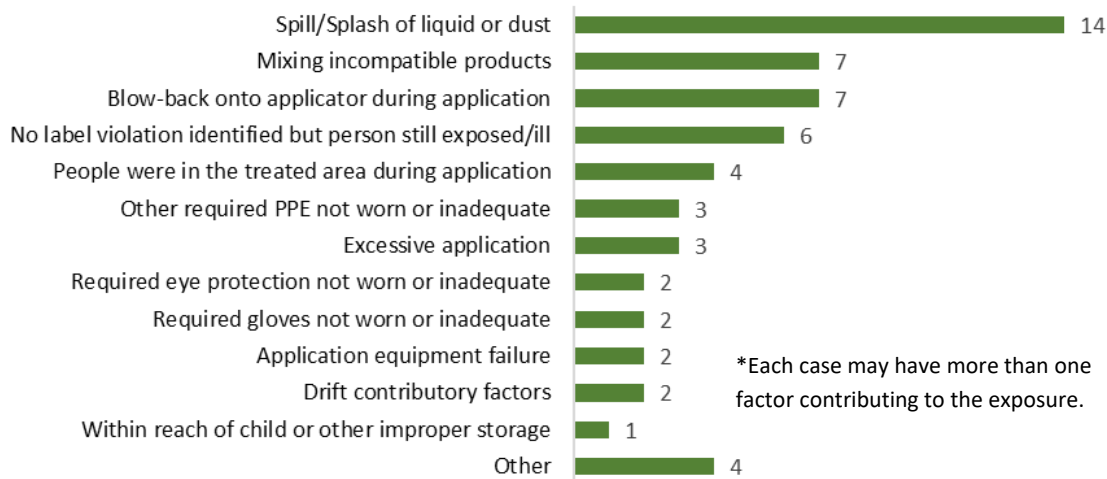
\*Type of pesticide was missing for 7 cases.

There may be more than one type of pesticide per case.

## Background

The Michigan Occupational Pesticide-related Illness and Injury Surveillance program began in 2001. 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.

### Contributing Factors\*, 2024



## 2024 Work-related Pesticide Illness and Injury Select Narratives

- A male in his 40s and a male in his 30s were working as electricians installing solar panels when a tractor spraying an herbicide drove by and sprayed them. They both developed sore throats and irritated and watery eyes. The first male also developed redness of his skin and a headache. The second male developed a rash and irritation to his skin, a cough, chest pain, muscle weakness. The first male sought medical assistance in the emergency department the day of the exposure. When his symptoms did not subside two days later, the second male sought medical assistance in the emergency department where they consulted with the poison center.
- A female in her 20s was working as a quality manager for a cherry packing company when an ammonia pipe began leaking. She inhaled the fumes and developed a cough, trouble breathing, a sore throat, and painful and watering eyes. She sought medical assistance in the emergency department where they consulted with the poison center.
- A male in his 30s was working as a pesticide applicator for a pest control service when the backpack sprayer he was using to apply an insecticide leaked on his skin and misted back in his face. He developed a headache, dizziness, and tingling to his hands and arms. He sought medical advice from the poison center and then sought medical assistance in the emergency department at the advice of the poison center.
- A female in her 40s was working as a home healthcare aide when she mixed an ammonia-based cleaning agent with bleach. She inhaled the fumes and developed shortness of breath and wheezing. She sought medical advice from the poison center.
- A 19-year-old male was working as a janitor for a commercial restaurant cleaning company when a spray disinfectant splashed back in his eye. His eye and surrounding skin became red and painful. He sought medical assistance in the emergency department where they diagnosed him with a corneal burn.