

# Tracking Work-Related Burns in Michigan

[www.oem.msu.edu](http://www.oem.msu.edu)

## Summary statistics



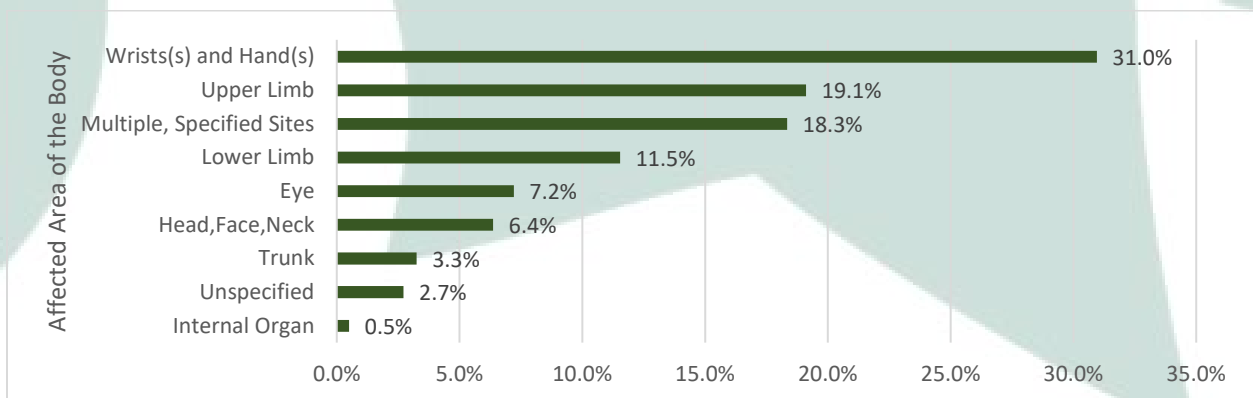
\*2021 and 2022 preliminary data as of 1/12/2022

Occupational burns are a preventable cause of work-related injury. There were 2,982 work-related burns in Michigan from 2019 – 2020; 65% were men and 77% were Non-Hispanic White. The age of individuals with a work-related burn ranged from 14 to 90 years, with an average of 34.6 years and a median of 31 years.

In 2019 and 2020, the Bureau of Labor Statistics (BLS), the official source of work-related statistics, estimated based on employer reports that only 1,160 work-related burns occurred in Michigan. BLS data for 2021 are not yet available.



*There are many common burn hazards present in most restaurants; hot oil, deep fryers, steam, stoves, and grills.*



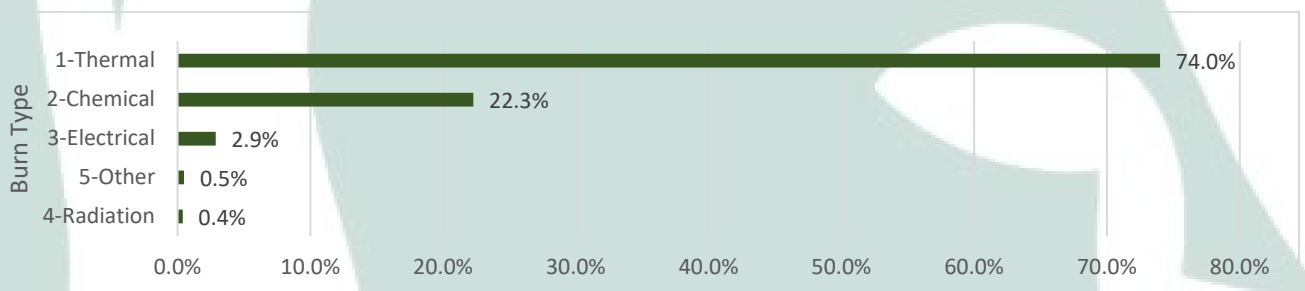
## Background

In September 2010, The Michigan Department of Health and Human Services promulgated rules requiring health facilities and health providers to report traumatic injuries when requested by the Department. Occupational burns are an important injury that may occur at a workplace. Michigan's hospitals, Workers' Compensation Agency, and the state's sole Poison Control Center are the sources for identifying occupational burns. The Occupational and Environmental Medicine Division at Michigan State University prepares periodic reports on work-related burns, available at [www.oem.msu.edu](http://www.oem.msu.edu).

## 2019-2020 results

- There were 2,982 work-related burns among workers in Michigan.
- Thermal exposures caused the highest percentage of burns (74.0%), followed by chemical exposures (22.3%), and electrical exposures (2.9%), and radiation (0.4%).
- There were 1,278 workers diagnosed with first-degree burns, 1,323 with second-degree burns, 148 with third degree burns. There were 233 cases with an unknown burn-degree.
- The most common affected parts of the body injured were wrists and hands (923 burns), followed by upper limbs (570 burns), multiple specified sites (547 burns), lower limbs (344 burns) eyes (215 burns), head face and neck (190 burns), trunk (97 Burns) and other or unspecified (81 burns).
- The most common type of medical encounter was an emergency department visit (2,362 cases), followed by an inpatient hospitalization (216 cases), and 161 other cases (e.g., outpatient, wound clinic) and unspecified visits.
- Among cases identified by medical records, Workers' Compensation paid lost work time and medical costs for 9.8% of cases and medical cost for 54.1% of cases.

**Work-Related Burn Type, Michigan 2019-2020**



## Work Related Burn Narratives

- An employee working at a plastic products supplier was purging an injection molding machine when a gas bubble burst spraying the worker's forehead and face with hot plastic. The employer was cited by MIOSHA for not providing the worker a face shield.
- An employee working at an inn tripped over a bucket of au jus sauce that was on a walkway floor. The employee suffered second and third degree burns to their lower extremities and required extensive surgery. The employer was cited by MIOSHA for three citations and was fined \$2,700

**MICHIGAN STATE UNIVERSITY**

Department of Medicine Occupational and Environmental Medicine East Lansing, MI 48824

January 27, 2023