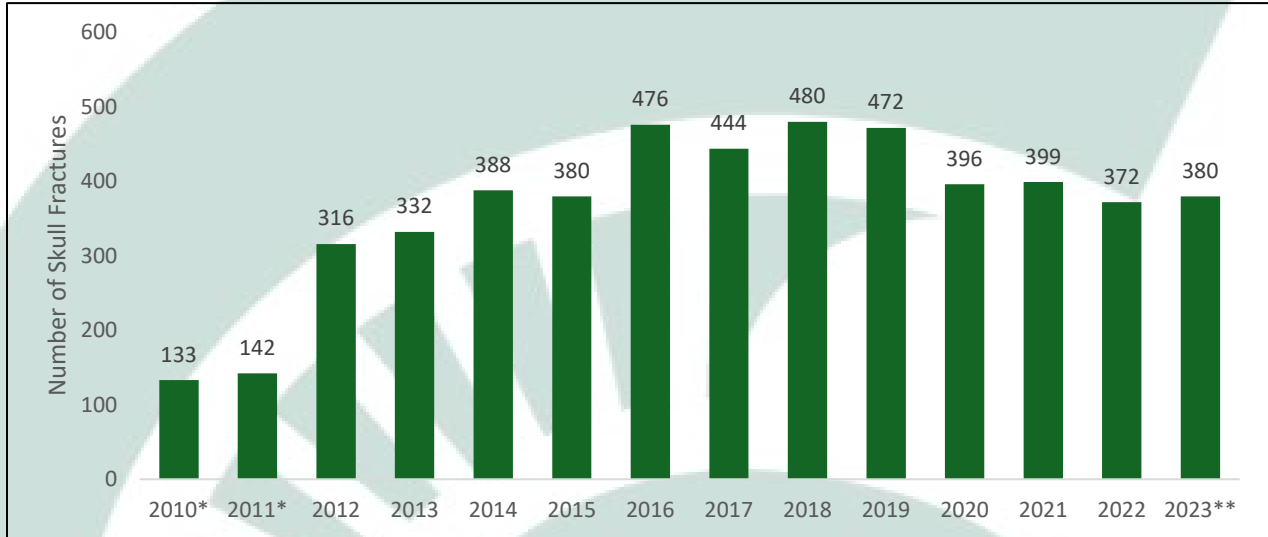


# Tracking Work-Related Skull Fractures in Michigan

Additional information available at [www.oem.msu.edu](http://www.oem.msu.edu)

## Summary Statistics

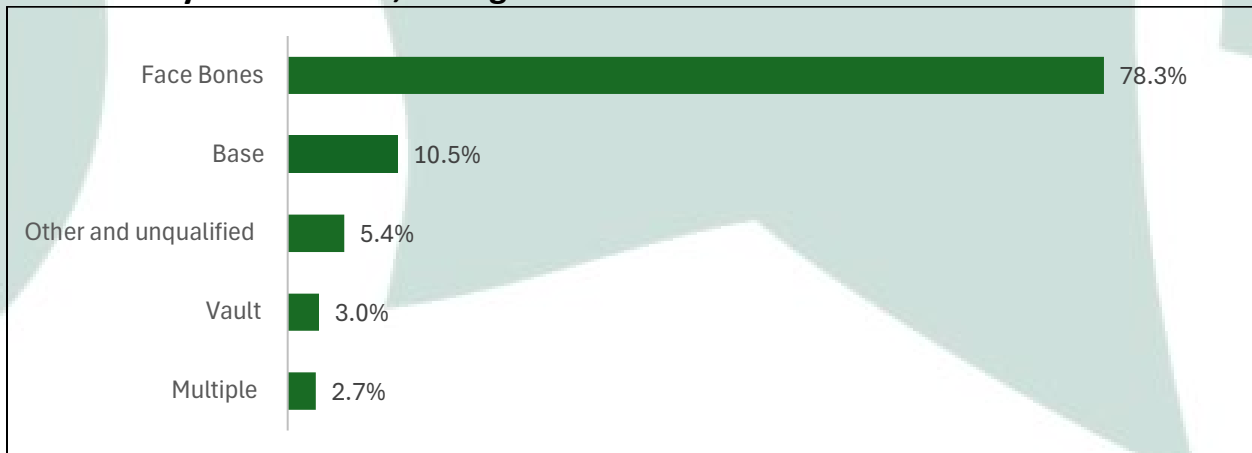


\*Nasal fractures treated in hospitals/EDs were unavailable in the 2010 and 2011 totals. The 2010 and 2011 totals do, however, include the 19 and 22 nasal fractures, respectively identified in Workers' Compensation.

\*\*2023 consist of preliminary data as of 2/14/2024.

Annually since 2016, there have been 372–480 work-related skull fractures in Michigan, 4–11 of which were fatal. In the year 2022 skull fractures were more common among men (76.1%) and the rate of work-related skull fractures was 1.4 times as high for Black/African American versus White workers while the rate for Hispanic workers was 1.5 times as high as non-Hispanic workers. The age of injured workers varied from 16 to 83 years of age; the average age was 41.5 and median age was 40. The Bureau of Labor Statistics, the official source of work-related statistics, estimated 50–110 skull fractures each year in Michigan.

## Fractures by Part of Skull, Michigan 2022\*



\*The part of skull was specified for 332 (89.2%) of all cases

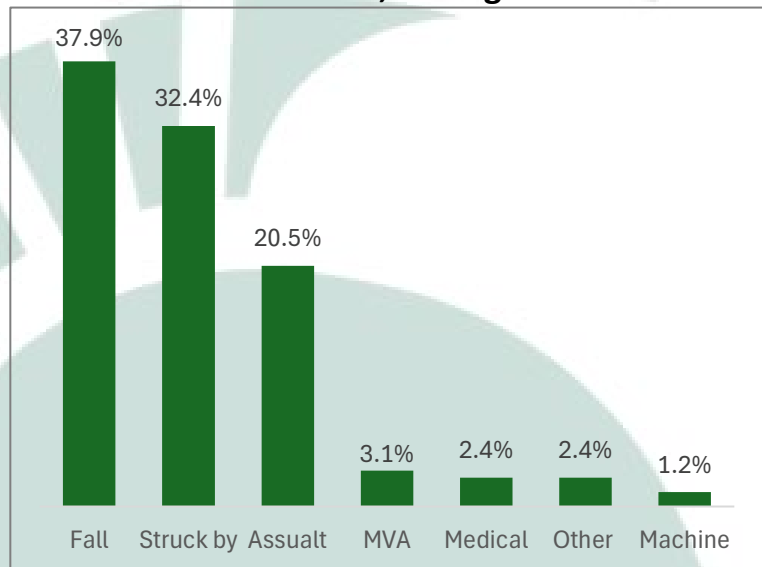
## Background

In September 2010, Michigan promulgated rules requiring health professionals and health facilities to report individuals with traumatic injuries, including skull fractures, regardless of cause when requested by the state or a local health department. Michigan's hospitals, Workers' Disability Compensation Agency, and Michigan's Fatality Assessment Control and Evaluation Program are the sources for occupational skull fractures. The Occupational and Environmental Medicine Division at Michigan State University prepares periodic reports on work-related skull fractures, available at [www.oem.msu.edu](http://www.oem.msu.edu)

## 2022 Results

- 372 individuals had skull fractures from injuries at work.
- 78.3% of all skull fractures occurred to facial bones.
- 24 workers had depressed skull fractures.
- 70 workers lost consciousness.
- Fall was cause of the skull fracture in 124 (37.9%) of workers, followed by a "struck by" incident in 106 (32.4%) of works.
- The Services (except Public Safety) NORA Sector Group had the most work-related skull fractures (74, 37.4%) and Agriculture NORA Sector Group had the highest rate (40.0/100,000 workers).
- 22 injured workers were self-employed.
- 83 (26.6%) individuals were hospitalized, and 217 (69.6%) were treated in the Emergency Department.

### Cause of Skull fracture, Michigan 2022\*



\*Cause of injury was specified for 327 (87.9%) cases.

## Work-Related Skull Fractures Narratives

- A male electrician in his late 20's touched a device and was electrocuted causing him to fall 15ft to the ground and hit his face on a steel post.
- A female semitruck driver in her 60's struck a wall on highway causing a skull fracture.
- A male construction worker in his early 50's was working near an excavator, which knocked down a large tree that struck the patient causing him to fall and hit his head on a brick wall, while another piece of the tree also hit his head.
- A female farm worker in her 30's was hit in the head by a gate that sprung open after a cow put pressure on the gate to hit the woman in the head.
- A man in his early 20's was chlorinating a well, when the backpressure from the well caused a metal pipe to rise into the man's forehead.