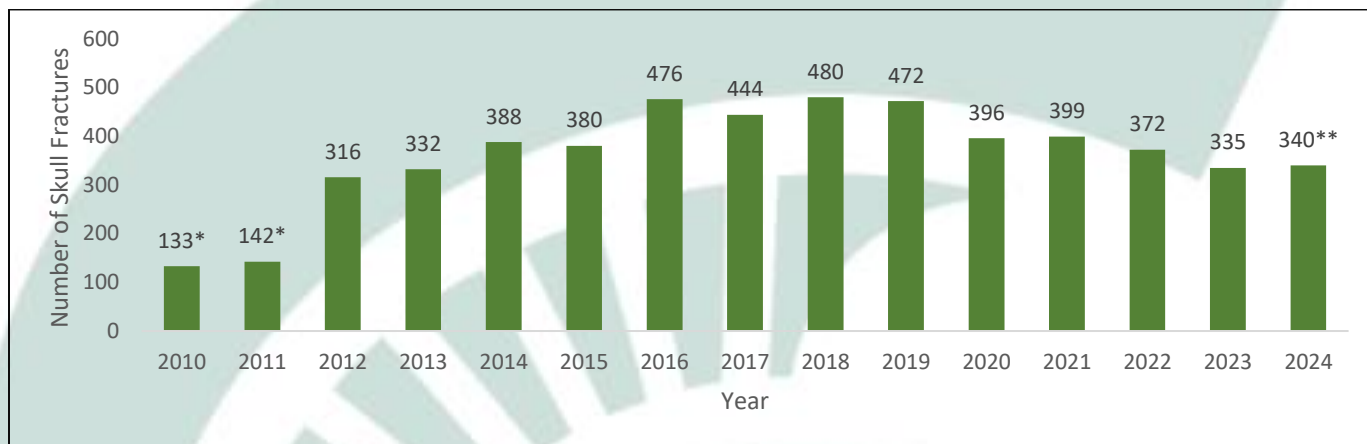


# Tracking Work-Related Skull Fractures in Michigan

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

## Summary Statistics

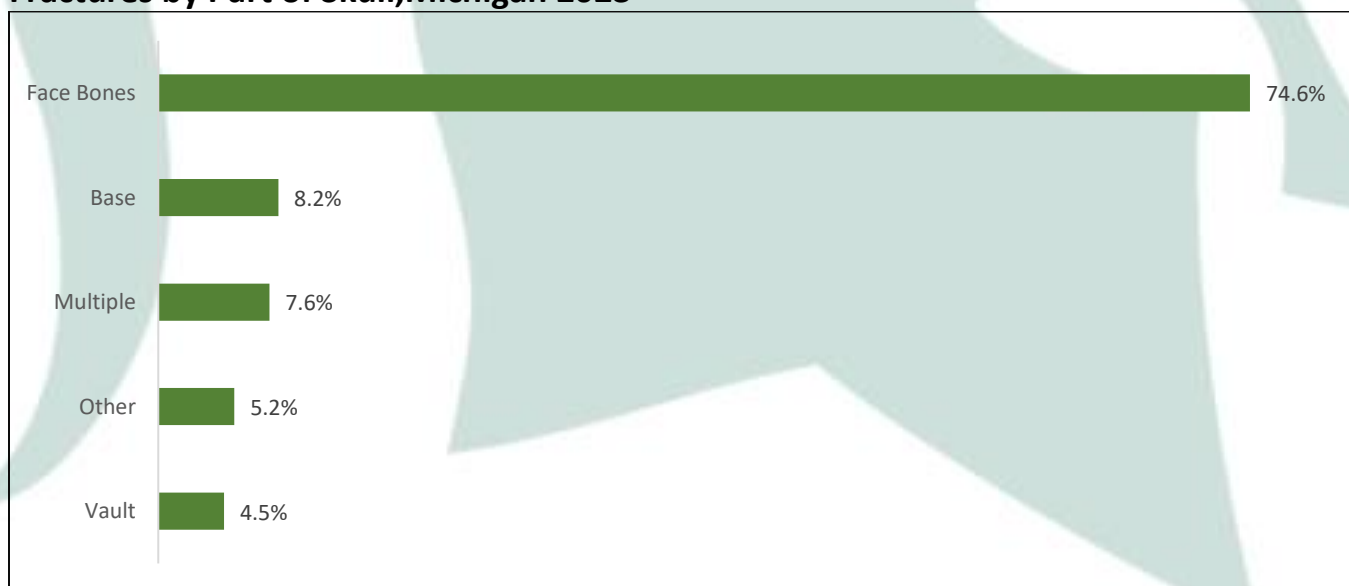


\*Nasal fractures treated in hospitals/EDs were unavailable in the 2010 and 2011 totals but are included in all other years.

\*\*2024 consist of preliminary data as of 2/11/2024.

Annually since 2016, there have been 335 to 480 work-related skull fractures in Michigan, 1 to 11 of which were fatal. The Bureau of Labor Statistics, the official source of work-related statistics, estimated 50 to 110 skull fractures each year in Michigan from 2010 to 2022. In the year 2023, skull fractures were more common among men (74.0 %) and the rate of work-related skull fractures was 50% higher for Black/African American workers than White workers and 60% higher for Hispanic workers than non-Hispanic workers. The age of the injured workers ranged from 16 to 90; the average age was 41.7 and the median age was 41.

## Fractures by Part of Skull, Michigan 2023\*



\*The part of skull was specified for 291 (86.8%) of the 335 workers.

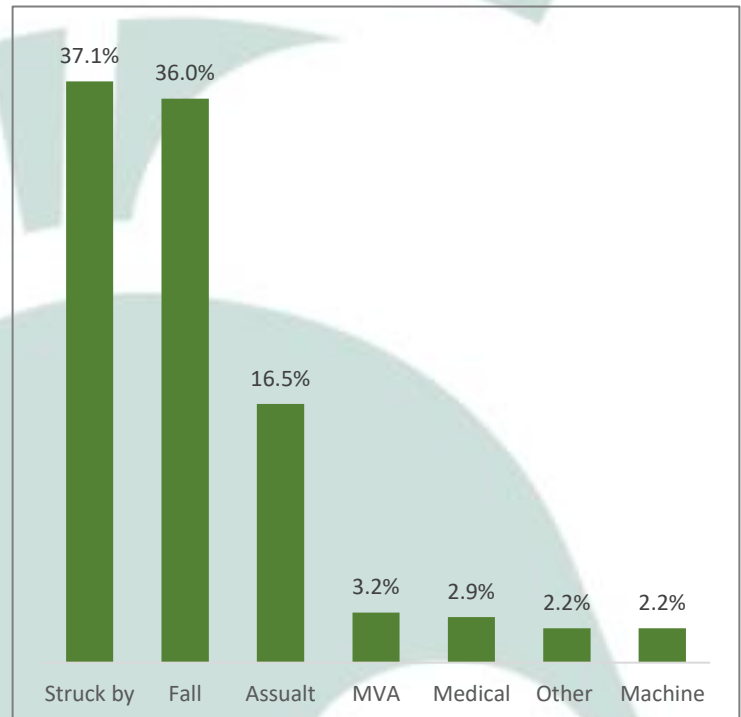
## Background

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)

## 2023 Results

- 335 workers had skull fractures from injuries at work.
- 74.6% of all skull fractures occurred to facial bones.
- 25 workers had depressed skull fractures.
- 65 workers lost consciousness.
- A "struck by" incident was cause of the skull fracture in 103 (37.1%) workers, followed by falls in 100 (32.4%) workers.
- The Services (except Public Safety) NORA Sector Group had the most work-related skull fractures (51 workers, 21.9%) and Agriculture NORA Sector Group had the highest rate (35.3/100,000 workers).
- 10 injured workers were self-employed.
- 67 (23.0%) workers were hospitalized, and 218 (75.0%) were treated in the Emergency Department.

## Cause of Skull fracture, Michigan 2023\*



\*Cause of injury was specified for 278 (83.0%) of the 335 workers.

## Work-Related Skull Fractures Narratives

- A male in his early 40's working on a manufacturing line was hit in the face and knocked to the ground by a hydraulic machine.
- A male construction worker in his early 20s stepped in a hole in the ceiling of a house and fell through the insulation and landed 20 ft below. He suffered an extensive skull fracture.
- A male farm worker in his early 30s was kicked in the head by a calf and he fell backwards hitting his head a second time on a gate.
- A woman tree cutter in her late 40s was working in a cherry picker when the bucket caught on a tree and spring forward. She fell forward and hit her face on the bucket causing a skull fracture.
- A male construction worker in his 20s suffered extensive skull fractures when he was hit by a vehicle going 40 miles per hour.

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