# Tracking Work-Related Skull Fractures in Michigan

Additional Information Available at www.oem.m/u.edu

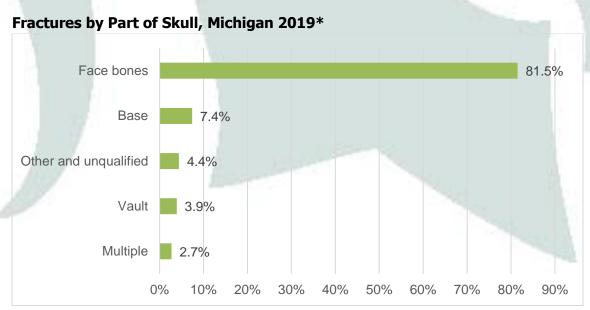
## **Summary Statistics**



<sup>1</sup>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. \*2020 thru 2022 preliminary data as of 1/10/2023

Annually since 2016, there have been 400-500 work-related skull fractures in Michigan, 4-11 of which were fatal. Skull fractures were more common among men (82.6%) and Caucasians (87.4%). The age of the injured workers varied from 16 to 95 years of age; the average and median age was in the early 40's.

The Bureau of Labor Statistics, the official source of work-related statistics, estimated 50-110 skull fractures each year in Michigan.



<sup>\*</sup>The part of skull was specified for 406 (86%) cases.

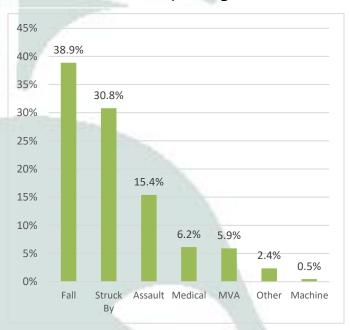
### **Background**

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.

#### 2019 Results

- 472 individuals had skull fractures from injuries at work.
- Eighty percent of all the skull fractures occurred to facial bones.
- 62 workers had depressed skull fractures.
- 123 workers lost consciousness.
- Fall was a cause of the skull fracture in 164 (38.9%) of workers, followed by a 'struck by' incident in 130 (30.8%) of workers.
- Workers' Compensation paid lost work time for 32.5% of the injured workers.
- The Services (except Public Safety) NORA Sector Group had the most work-related skull fractures (135, 33.9%) and Agriculture NORA Sector Group had the highest rate (59.3/100,000 workers).
- 40 injured workers were self-employed.
- 163 (34.5%) individuals were hospitalized, and 251 (53.2%) were treated in the Emergency Department.

#### Cause of Skull Fracture, Michigan 2019\*



\*The cause of skull fracture was specified for 422 (89.4%) cases.

### **Work-Related Skull Fractures Narratives**

- A man in his early 40's was hospitalized for two weeks after being struck by a vehicle travelling
  50 mph while holding a slow/stop sign at a construction site.
- A female in her early 60's, who was stocking shelves with boxes, was hospitalized for four days after falling approximately 8 feet off a ladder while attempting to stop a box from falling.
- A man in his mid-40's was kicked in the face while milking a cow.
- A male in his teens, who was cutting tree limbs, was hospitalized for eight days after a large tree branch fell 30-40 feet onto him.
- A male in his early 20's was punched in the face by a resident of an adult living facility.
- A male truck mechanic in his mid-50's died when he was struck by the steel lever arm, which was used for lifting and lowering a logging trailer axle and broke off.