

# Tracking Work-Related Skull Fractures in Michigan

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

## Summary Statistics



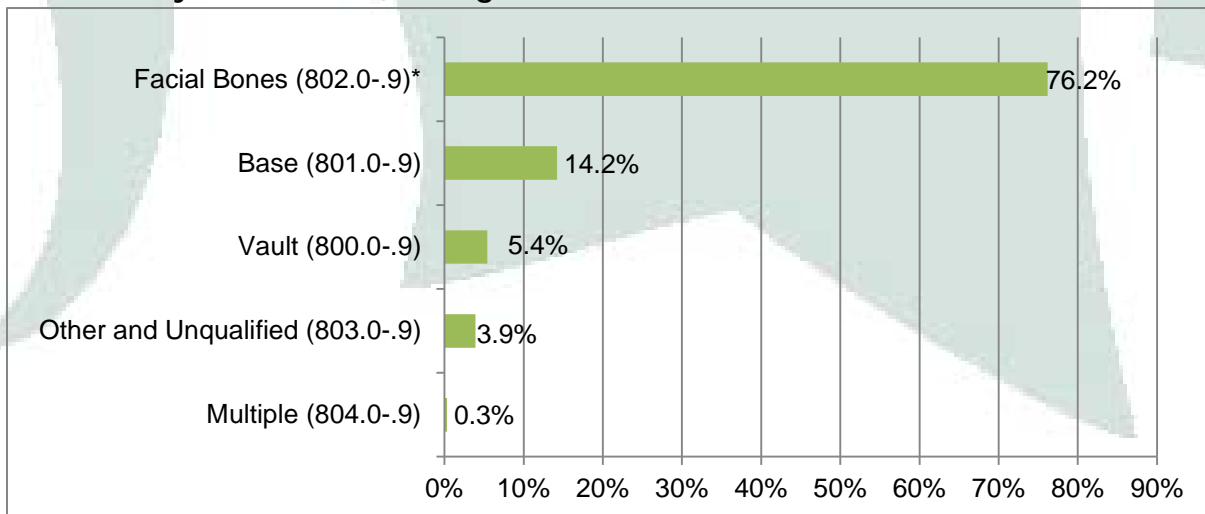
<sup>1</sup>Nasal fractures treated in hospitals/EDs were unavailable in the 2010 and 2011 totals. The 2010 and 2011 totals do, however, include the 19 and 22 nasal fractures, respectively identified in Workers' Compensation.

\*2016 preliminary data as of 4/3/2017

One thousand three hundred and twenty four individuals were identified with work-related skull fractures in Michigan from 2014-2016, eight of whom died. Skull fractures were more common among men (~75%) and Caucasians (~87%). The age of the injured workers varied from 16 to 85 years of age; the average and median age was in the early 40's.

For 2014 and 2015, the Bureau of Labor Statistics (2016 data not yet available), the official source of work-related statistics, reported 170 skull fractures for Michigan.

## Fractures by Part of Skull, Michigan 2013



\*ICD-9 disease diagnosis codes in parentheses.

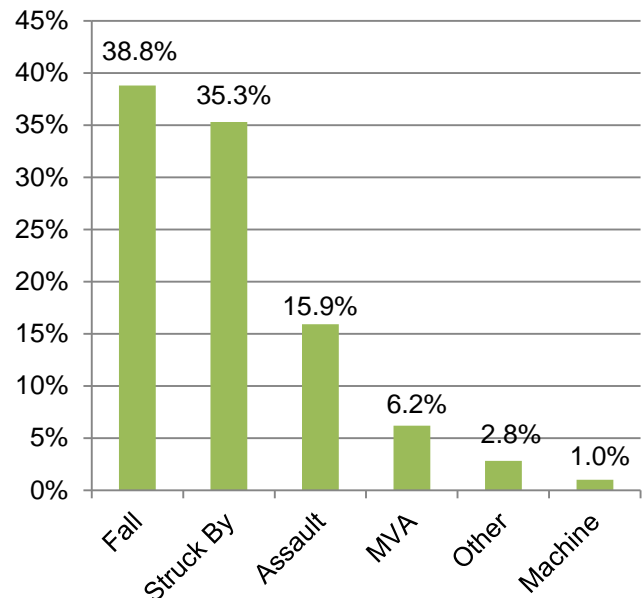
## Background

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' 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).

## 2013 Results

- 332 individuals had skull fractures from injuries at work.
- Three quarters of all the skull fractures occurred to facial bones (253; 76.2%).
- 29 workers had comminuted skull fractures.
- 76 workers lost consciousness.
- Fall was a cause of injury in 112 (38.8%) of workers, followed by 'Struck by' incident in 102 (35.3%) of workers.
- Workers' Compensation paid lost work time and medical costs for 39.2%.
- The Construction industry had the most work-related skull fractures (48, 17.2%) and the highest rate (23.1 per 100,000).
- 13 (3.9%) injured workers were self-employed.
- 85 (25.6%) individuals were hospitalized, and 177 (53.3%) were treated in the Emergency Department.

**Cause of Skull Fracture, Michigan 2013\***



\*The cause of skull fracture was unknown for 43 (12.5%) individuals.

## 2013 Work-Related Skull Fractures Narratives

- A 61-year-old male fell from scaffolding that was placed on uneven ground.
- A 17-year-old female was hit and knocked down by a gate that was charged by a cow.
- A 30-year-old female health worker was head-butted by a patient.
- A 32-year-old male welder was working on a 700-lb. piece of metal when the clamps let go, causing the metal to slide out and hit him.
- A 79-year-old male school employee was struck by a truss which fell from 9 feet above.
- A 45-year-old female was working on a production line for car parts, when a spring-loaded device snapped back up into her face.
- A 29-year-old male was trapped in a high pressure sanding machine.
- A 52-year-old male working with an apple machine was struck when the basket broke off and fell.
- A 47-year-old female was plowing snow, but not wearing a seat belt, when she hit a gradient and was thrown against the windshield.
- A 34-year-old male fell off a sky tractor platform.