Tracking Work-Related Skull Fractures in Michigan





Summary Statistics

¹Nasal 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. *2018 and 2019 preliminary data as of 1/16/2020

One thousand six hundred and eighty-six individuals were identified with work-related skull fractures in Michigan from 2014-2017, 26 of whom died. Skull fractures were more common among men (77%) and Caucasians (84%). The age of the injured workers varied from 16 to 93 years of age; the average and median age was in the early 40's.

For the years 2014 through 2016, the Bureau of Labor Statistics, the official source of work-related statistics, reported 230 skull fractures for Michigan.



Fractures by Part of Skull, Michigan 2014-2017

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 <u>www.oem.msu.edu</u>.

2014 - 2017 Results

- 1,686 individuals had skull fractures from injuries at work.
- Three quarters of all the skull fractures occurred to facial bones (1,309; 77.5%).
- 368 workers had depressed skull fractures.
- 413 workers lost consciousness.
- 'Struck by' incident was a cause of injury in 510 (33.7%) of workers, followed by a fall in 498 (32.9%) of workers.
- Workers' Compensation paid lost work time and medical costs for 37.5%.
- The Services (except Public Safety) NORA Sector Group had the most work-related skull fractures (436, 31.5%) and The Oil and Gas Extraction NORA Sector Group had the highest rate (195/100,000 workers).
- 69 injured workers were self-employed.
- 461 (27.3%) individuals were hospitalized, and 1,013 (60.0%) were treated in the Emergency Department.



Cause of Skull Fracture, Michigan 2014-2017*

*The cause of skull fracture was specified for 1,513 (89.6%) cases.

Work-Related Skull Fractures Narratives

- A man in his 70's lost consciousness and was hospitalized for 15 days after 30 sheets of plywood fell on him.
- A man in his 30's died after falling approximately 30 feet off a ladder while installing chimney liner.
- A man in his 60's was hospitalized for one day after falling from a wagon while baling hay.
- A male in his teens was pumping up a tire when it exploded, and a rim hit him in face.
- A female healthcare worker in her 20's was helping to restrain a patient when she was struck by the patient.
- A male in his teens had a syncopal episode and fell off a hi-lo.
- A male in his 30's was filling an oxygen tank when an air hose struck him in the face causing him to fall down.

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