

# MICHIGAN



## MICHIGAN STATE UNIVERSITY: Prevention of work-related injuries & illnesses through research & investigation

### FALLS FROM SCAFFOLDS CAN BE DEADLY – PREVENTION IS KEY!

Hazard Alert Scaffolds 3/13/19

From 2001-2018, **26 Michigan workers have died while erecting or working on or near a scaffold\***. Nine workers fell from a scaffold edge, nine workers died when the scaffold collapsed due to improper construction/securement, three workers were electrocuted when erecting/working on the scaffold, two workers on the ground were killed when they were struck by sections/product after the scaffold collapsed, one individual died when he fell while climbing the scaffold frame, one individual, while working in the scaffold was knocked off the scaffold when struck by ductwork he was removing, and one individual committed suicide by jumping from a 50-foot high scaffold. All but one death was in Construction; the one other was in Wholesale Trade.

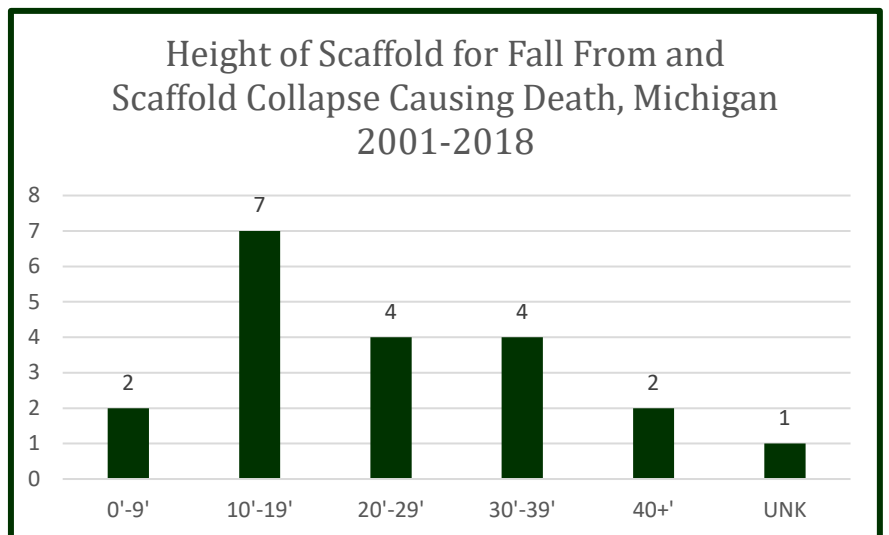
\*(Another fifteen Michigan workers died in incidents involving roof bracket scaffolds or scaffolds/platforms lifted by rough terrain forklifts and powered industrial trucks.)



**Plan Ahead. Provide Proper Scaffold. Train Everyone.**

### WORK-RELATED FATALITY NARRATIVE EXAMPLES SCAFFOLD FALLS IN MICHIGAN

- A laborer was killed when the scaffold platform he was working from collapsed, and the 183-pound hoist motor, which he had been using to raise and lower a corner of the platform, fell on him.
- A journeyman mason/foreman died as a result of falling 35 feet from an unguarded working surface of a Hydro Mobile 2 scaffold. The scaffold had been repositioned without reinstalling the guardrails at the ends of the working platform and without proper planking. He was working in a backward direction and fell from the unguarded edge to the concrete surface below.
- A masonry company co-owner was on a 10-foot high scaffold when he stepped off the scaffolding onto an aluminum extension ladder. The ladder slid away as he was taking his first step, causing him to lose his balance and fall 10 feet to the concrete below.
- A scrap metal hauler fell 15-18 feet from a scaffold while performing building demolition to procure HVAC ductwork. When using a sledgehammer to break the straps holding the duct work, a 20-foot long piece of duct work struck him, causing him to fall from the scaffold.
- A painter fell 120 to 130 feet from a water tower that he had been painting. He had moved the cable supporting the single-point adjustable scaffold “spider” he was working from to the other side of a post on the top of the tower. When he reassembled his equipment, he placed only one eye of the two-eyed choker into the shackle on the cable that secured the spider to the supporting equipment on the tower. He was not using a lifeline with a harness and rope grab.



## PREVENTING WORK-RELATED FATALITIES FROM SCAFFOLD

- **Train! Train! Train!**
  - **Employees who erect, disassemble, move, operate, repair, maintain, or inspect a scaffold must be trained by a competent person to:**
    - ✓ Recognize nature of scaffold hazards,
    - ✓ The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold in question,
    - ✓ The design criteria, maximum intended load-carrying capacity and the scaffold's intended use.
  - **Employees who perform work while on a scaffold must be trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards. The training must include (at a minimum) the following areas, as applicable:**
    - ✓ The nature of any electrical hazards, fall hazards and falling object hazards in the work area;
    - ✓ The correct procedures for dealing with electrical hazards and for erecting, maintaining, and disassembling the fall protection systems and falling object protection systems being used;
    - ✓ The proper use of the scaffold, and the proper handling of materials on the scaffold;
    - ✓ The maximum intended load and the load-carrying capacities of the scaffolds used;
  - **Retraining is required in at least the following situations:**
    - ✓ Where changes at the worksite present a hazard about which an employee has not been previously trained; or
    - ✓ Where changes in the types of scaffolds, fall protection, falling object protection, or other equipment present a hazard about which an employee has not been previously trained; or
    - ✓ Where inadequacies in an affected employee's work involving scaffolds indicate that the employee has not retained the requisite proficiency.
- **Ensure a qualified person designs the scaffold and that it is constructed and loaded in accordance with that design.**
- **Ensure a competent person inspects the scaffold for visible defects before each work shift** as well as after any occurrence that could affect its structural integrity.
- **Ensure a competent person qualified in scaffold erection, moving, dismantling or alteration supervises/directs these activities** using only experienced and trained employees selected by the competent person.
- **When working on a scaffold 10 feet or more above the floor or ground:**
  - **Construction:** Provide guardrail system and/or personal fall arrest systems (Part 12)
  - **General Industry:** Provide guardrail system, safety net, travel restraint, personal fall arrest system (Part 2)
- **Maintain appropriate clearances from power lines.**

### DID YOU KNOW?

- **Competent person:** capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
- **Qualified:** a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project.

### RESOURCES

- MIOSHA Resources
  - Construction Safety and Health Standard Part 12: Scaffolds and Scaffold Platforms. [https://www.michigan.gov/leo/0,5863,7-336-78421\\_11407\\_15368-39938--,00.html](https://www.michigan.gov/leo/0,5863,7-336-78421_11407_15368-39938--,00.html)
  - General Industry Safety and Health Standard Part 2: Walking and Working Surfaces [https://www.michigan.gov/leo/0,5863,7-336-78421\\_11407\\_15368-39941--,00.html](https://www.michigan.gov/leo/0,5863,7-336-78421_11407_15368-39941--,00.html)
- A-Z (Click on F – Fall Protection and/or S - Scaffolds): [https://www.michigan.gov/leo/0,5863,7-336-78421\\_11407\\_15368---,00.html](https://www.michigan.gov/leo/0,5863,7-336-78421_11407_15368---,00.html)
- OSHA "Stop Falls" Fall Prevention Campaign: [www.osha.gov/stopfalls/](http://www.osha.gov/stopfalls/)
- Center for Construction Research and Training: <http://stopconstructionfalls.com/>