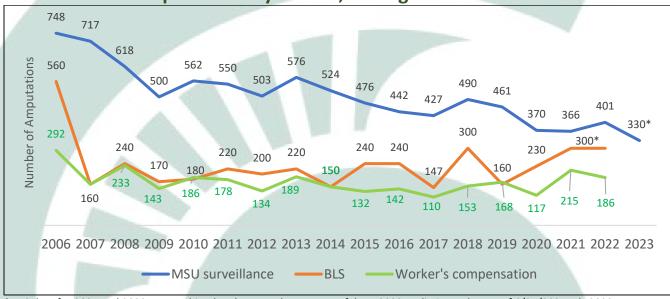
# **Tracking Work-Related Amputations in Michigan**

#### www.oem.msu.edu

### **Summary Statistics**

The MSU work-related amputation surveillance system identifies significantly more cases each year than other traditional sources, as illustrated in the figure below.

## Work-Related Amputations by Source, Michigan 2006-2023



<sup>\*</sup> BLS data for 2021 and 2022 are combined and reported as one set of data. 2023 preliminary data as of 6/25/2024, Bls 2023 Survey and 2023 Workers' Compensation data are not available currently.

Among all age groups in the years 2021–2022, amputation rates were more than seven times higher for male than female workers. Males aged 19 to 21 years were at the highest risk of a work-

related amputation with a rate of 25.1 amputations per 100,000 workers. The rate of work-related amputations for Black/African American and White workers were relatively equal and the rate was 3.8 times as high for Hispanic versus non-Hispanic workers. The majority (94.9%) of work-related amputations involved fingers. Most finger amputations (75.5%) involved the distal phalanx, with the index finger most effected (22.5%). Thirtyone percent of the amputations occurred in the manufacturing sector. Within manufacturing, wood products manufacturing had the highest rate of work-related amputations (112.1 amputations per 100,000 employed persons). From 2006 to 2022, the number of work-related amputations fell by 47.0% and the rate fell by 48.9%.



Table saws are a common form of amputations in the workforce. Improper guards and improper handling of the machine may lead to amputations.

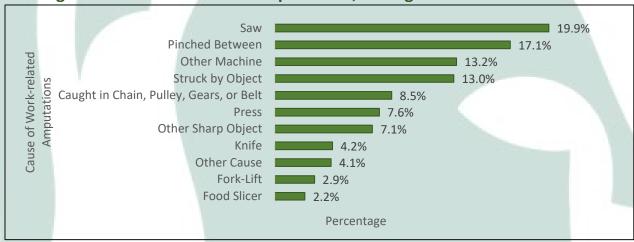
#### **Background**

In 2004, staff in the Occupational and Environmental Medicine Division within Michigan State University's College of Human Medicine began reviewing hospital records to identify patients treated for work-related amputations and referring cases meeting designated criteria to MIOSHA. MIOSHA referrals were tracked through 2005. Beginning with 2006 data, a system to track all work-related amputations treated at Michigan hospitals was established. In addition, data were obtained from the Michigan Workers' Compensation Agency to supplement the hospital-based data and provide a more complete count of work-related amputations.

Work-Related Amputation Rate by Industry, Michigan 2021–2022



### Leading Cause of Work-Related Amputations, Michigan 2021–2022\*



<sup>\*</sup>Does not include amputations with unknown injury cause

#### **Work-Related Amputation Narratives**

- A male in his mid-30's amputated his fingertip with a utility knife while cutting drywall.
- A male in his 30's was cleaning the gears in a laminating machine and dropped a roll of paper towels into the machine. When he went to grab the towels, his hand became lodged in machine, amputating two of his fingers.
- A woman in her late 40's had her thumb amputated when it was caught in gears of a box making machine when she was trying to clean it.

#### **MICHIGAN STATE UNIVERSITY**