Tracking Work-Related Amputations in Michigan

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Summary Statistics

The MSU work-related amputation surveillance system identifies substantially more cases each year than employer reports or workers' compensation (See figure below).

Work-Related Amputations by Source, Michigan 2006-2021



*2021 and 2022 preliminary data as of 1/12/2022, BLS 2021 and 2022 Annual Survey and 2021 and 2022 Workers' Compensation data are not currently available.

Among all age groups from 2018-2020, workrelated amputations rates are six times greater for men than women with male rates being over six times ager than female. Men 19 - 21 years were at the highest risk of a work-related amputation (26.1 amputations per 100,000 workers). Most work-related amputations involved fingers (92.7%). Most finger amputations (71.3%) involved the distal phalanx, with the index finger being the most common (29.0%) effected. Amputations most commonly occurred in manufacturing (38.6%). Within manufacturing, wood products manufacturing had the highest rate of workrelated amputations. (148.3 amputations per 100,000 employed persons). From 2006 to 2020, the number of work-related amputations fell by 50.5% and the rate fell by 48.9%.



Table saws are a common source of amputations. An improper guard or lack of any guard may lead to an amputation.

Background

In 2004, the Occupational and Environmental Medicine Division within Michigan State University's College of Human Medicine began reviewing hospital records to identify patients treated for workrelated amputations and referring cases meeting designated criteria to Michigan OSHA. 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' Disability 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 2018-2020





Leading Cause of Work-Related Amputations, Michigan 2018-2020*



Work-Related Amputation Narratives

- An employee reached into the debris chute of a lawn mower to remove grass clippings and had a near complete amputation of his right second and third digit.
- A male in his late teens had his thumb amputated when he attempted to push meat back into a meat grinder. MIOSHA inspected the worksite and found the grinding plate guard had an excessive opening and was fined \$3,600.
- An employee working in a butcher shop was using an electric band saw cutting meat when the saw jerked and caught his thumb on the blade cutting off the tip of the thumb.
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