Tracking Work-Related Amputations in Michigan

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

Work-Related Amputations by Source, Michigan 2006-2016

Among all age groups, amputation rates are much higher for male workers than female workers. Males aged 55 to 64 years were at the highest risk of a work-related amputation.

Work-Related Amputation Rate by Body Part and Severity, Michigan 2016

The majority (92.8%) of work-related amputations involved a finger or fingers. Most finger amputations (72.8%) involve only the distal phalanx. The sections that are most frequently amputated are illustrated in the diagram to the right.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little finger distal phalanx</td>
<td>6.0%</td>
</tr>
<tr>
<td>Ring finger distal phalanx</td>
<td>11.1%</td>
</tr>
<tr>
<td>Middle finger distal phalanx</td>
<td>19.3%</td>
</tr>
<tr>
<td>Index finger distal phalanx</td>
<td>22.9%</td>
</tr>
<tr>
<td>Thumb distal phalanx</td>
<td>13.5%</td>
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</tbody>
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January 22, 2019
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.

2016 Results

Work-Related Amputation Rate by Industry, Michigan 2016

Leading Causes of Work-Related Amputations, Michigan 2016*

Work-Related Amputation Narratives

- A 38-year-old male working in a food manufacturing facility caught his hand in a conveyor belt, resulting in the amputation of his index finger.
- A 21-year-old female was working as a temporary employee in a motor vehicle parts manufacturing facility when she lost her index finger at the distal interphalangeal joint while using a mechanical power press.