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

For all age groups, amputation rates are much higher for male workers than female workers. At highest risk of these injuries are males aged 20-24 years.

Nearly all (96%) work-related amputations involve the fingers. Most finger amputations (83%) involve only the distal phalanx. The sections that are most frequently amputated are illustrated below.
**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.

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**Work-related amputation rates by industry, 2006-2015**

![Chart showing amputation rates by industry from 2006 to 2015.](chart.png)

**Leading Causes of Amputations**

1. Saws (18%)
2. Presses (12%)
3. Pinched between objects (12%)
4. Struck by an object (9%)
5. Caught in chain/pulley/gears/belt (9%)

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**Work-Related Amputation Narratives**

- A 54-year-old male was cutting wood with a circular saw. His glove was grabbed by the saw, pulling his hand into the blade. He lost half of his left index, middle and ring fingers.
- A 32-year-old male was using his foot to push wood into a chipper when he slipped. His right foot went into the chipper amputating his heal. At the hospital, he subsequently had a below-knee amputation.