

Between 2015 and 2018, five Washington workers suffered amputations while using an electric table top bud trimming machine. The amputations were either of the thumb, index, or middle finger. All amputations happened when workers placed their hands near the grate covering of the machine's rotating fan blade.

Worker Amputates Finger Tip on Bud Trimmer Blade

Incident

A worker was on her fourth day of using a fan trimmer to remove large leaves off the bud during harvest season. The table top bud trimming machine consisted of a rotating fan blade beneath a grate with approximately one-half inch gaps. There was no guarding on the machine.

The worker had been employed with the company for two months, but had roughly five years experience in the cannabis industry. She had been trained to use the trimmer by a co-worker who was also the grower. The grower had used the trimmer in the past.

As she was moving the branch above the rotating blade, her gloved left index finger went between the grate gap and contacted the fan blade, amputating her finger tip. The branch may have grabbed her finger before being pulled into the blade. She saw her finger tip fly off.

She was taken to the emergency room where doctors had to surgically remove the rest of her finger tip at the second knuckle.

Investigation

Investigators found that the employer did not ensure that the point of operation on the fan trimmer was guarded. The lack of guarding on the blade and the placement of her hand too close to the grate contributed to the amputation of the worker's finger tip.

The rotating fan blade creates suction that can pull in fingers, gloves, long hair, and clothing. It is important to keep objects and body parts clear of the rotating fan blade. Blade guarding, appropriate personal protective equipment, and effective training are also necessary for safe use of equipment like bud trimming machines.

Investigators also found that the employer did not have a written Accident Prevention Program or any currently first-aid certified personnel on site.



Photo 1: The table top bud trimming machine the injured worker was using.



Photo 2: The bud trimming machine the worker was using when her gloved finger went into the fan blade and was amputated.



Photo 3: Closer view of the fan blade and grate. The gaps in the grate are approximately 1/2 inch.

Recommendations

- **Purchase equipment manufactured with guarding** or systems that will prevent workers' hands from reaching into the hazard area. Never alter manufactured equipment.
- **Train workers on the safe use of all equipment**, including to:
 - Never wear loose fitting clothing or place hands around rotating or moving machine parts. If gloves are required, use tight-fitting chemical resistant gloves.
 - Stop and turn off power to bud trimming machines before clearing off grate or cleaning.
 - Perform a visual safety inspection of equipment before each use. Inspect for internal and external defects such as loose parts, deformed or missing pins, damaged power cord, or damage to the guard. Tag and remove machine from service if damage is found.
- **Review safety training at the start of each harvest season.** Employers and supervisors should do spot checks to make sure safety training is being followed.
- **L&I's Consultation Program** offers confidential, no-fee, professional advice and assistance to Washington businesses. These services can help you find and fix hazards in your workplace and strengthen your safety program.

Requirements

- **Machine guarding-** The point of operation of all machines must be guarded. The guard must be designed and constructed to prevent the operator from having any part of the body in the danger zone during the operating cycle. See [WAC 296-307-30021\(2\)](#)
- **Accident Prevention Program-** Employers must develop a written Accident Prevention Program (APP) tailored to the needs of the business and the types of hazards involved. [WAC 296-307-030\(2\)](#)
- **First-aid trained personnel-** Employers must make sure that first-aid trained personnel are available to provide quick and effective first aid treatment. See [WAC 296-307-03905](#)
- **Documented safety meetings-** Employers must conduct and document safety meetings. See [WAC 296-307-033](#)
- **Injury Reporting-** Employers are required to contact DOSH within 8 hours of a workplace fatality or in-patient hospitalization of any employee and within 24 hours of a non-hospitalized amputation or loss of an eye of any employee. See [WAC 296-27-031](#)

Resources

The safety rules that apply to cannabis processing may fall under different chapters of the Washington Administrative Code (WAC).

- **Safety Standards for Agriculture:** <https://app.leg.wa.gov/wac/default.aspx?cite=296-307>
- **Safety Standards for Machine Safety:** <https://app.leg.wa.gov/wac/default.aspx?cite=296-806>
- **Request an L&I Consultation:** <https://lni.wa.gov/safety-health/preventing-injuries-illnesses/request-consultation/>