



### **Operator Crushed When Tractor and Sprayer Roll Over**

#### **INCIDENT FACTS**

**REPORT #: 71-184-2019s** 

**REPORT DATE:** July 16, 2019

**INCIDENT DATE:** August 18, 2018

VICTIM: 58 years old

**INDUSTRY:** Apple orchard

**OCCUPATION:** Orchard laborer

SCENE: Gravel county road

**EVENT TYPE:** Tractor rollover









A 58-year-old orchard laborer died when the tractor he was operating with an attached sprayer went down an embankment and rolled over, crushing him.

The victim was using the tractor and attached sprayer to deliver a water and calcium solution to apple trees in his employer's orchard.

The tractor was a narrow, open station tractor.





He filled the sprayer tank at a solution mixing station then drove the tractor approximately a third of a mile to an orchard block where he began spraying. Over the next several hours, he made two trips back to the mixing station to refill the sprayer tank.

At about 9:30 a.m. he began another trip back to the mixing station. He drove out of an orchard block and onto a gravel county road. As he was driving along a slight downhill section in the road, the tractor and sprayer went off the left side of the road, down an embankment, and rolled over.

He was thrown from his seat and the tractor landed on top of him, fatally crushing him.





Investigators found that the tractor had a foldable rollover protective structure (ROPS), or roll bar, but the operator did not have it in the "up" position as required.

While driving on the road, the tractor did not meet the Washington State ROPS exemption allowed in orchards where height clearances would interfere with normal operations.

Additionally, the tractor did not have a seatbelt.









Photo 1. Overturned tractor with sprayer at the incident scene.









**Photo 2.** The operator was driving down a slight hill on a county road when the tractor went off the left side of the road, down an embankment and rolled over.







**Photo 3.** The tractor with its ROPS in the "down" position and no seatbelt installed.



Photo 4. The sprayer.









Photo 5. The orchard where the operator had been spraying apple trees.







# Requirements

- Employers must provide a rollover protective structure (ROPS) for each employee-operated tractor that is covered by <u>WAC 296-307-080.</u>
  See <u>WAC 296-307-08009.</u>
- Where ROPS are required by WAC 296-307-080 employers must:
- a) Provide each tractor operator with a seat belt;
- b) Require each employee use the seat belt while the tractor is moving;
- c) Require that each employee tighten the seat belt sufficiently to confine the employee to the ROPS protected area. See <u>WAC 296-307-08012</u>.







## Recommendations

- Employers should train tractor operators to use ROPS and a seatbelt to provide a protective zone for tractor operators in case of a rollover. The use of ROPS and a seat belt is estimated to be 99% effective in preventing death or serious injury if a tractor should rollover.
- When traveling downhill, operators should ensure that they operate the tractor at a safe speed and in an appropriate gear for the slope and terrain, this is especially important when towing equipment such as a sprayer.







## Resources

#### <u>Rollover Protection and Operating Tractors Safely</u> — OSHA

Spanish language version





This bulletin was developed to alert employers and employees of a tragic loss of life of a worker in Washington State and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.

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