WASHINGTON State FACE Program
Fatality Assessment & Control Evaluation

CONSTRUCTION FATALITY NARRATIVE

INCIDENT FACTS

REPORT #:
71-210-2021

REPORT DATE:
September 17, 2021

INCIDENT DATE:
November 7, 2020

Workers:
55 and 27 years old

INDUSTRY:
Painting and carpentry contractors

OCCUPATION:
Painters

SCENE:
Exterior of church

EVENT TYPE:
Electrocution

The 48-foot aluminum extension ladder.

For a slideshow version, click here.

Father and Son Painters Electrocuted when Ladder Contacts Power Line

SUMMARY

A 55-year-old painting and carpentry contractor and his 27-year-old son were both electrocuted when the aluminum extension ladder that they were moving contacted an overhead power line.

Church steeple, power line, and aluminum extension ladder.

For the past month, the contractor and his son along with three other members of their painting crew had been painting the exterior of a two-story church that had a 60-foot steeple. It was a windy day. The wind was blowing at 15 to 30 mph with gusts up to 40 mph. They had finished painting for the day and were cleaning up the site. The contractor and his son were moving the aluminum extension ladder that was at its full extension of 48 feet. The contractor and his son held the ladder in the vertical position as his son attempted to retract the ladder's extension. A gust of wind blew the ladder onto a 14,460-volt overhead power line. Electrical current traveled from the power line through the conductive aluminum ladder. Both were electrocuted. The contractor died at the scene and his son died nearly a month later.

Investigators found: 1) Measures were not in place to protect against the ladder contacting the energized power line. 2) No account was taken of windy conditions when handling the ladder. 3) The distance from the power line to the face of the building was 10 feet 8 inches.

REQUIREMENTS

- If work is to be performed near overhead lines, the employer must deenergize and ground the lines, or they must provide other protective measures before work is started. If the lines are to be deenergized, the employer must make arrangements with the person or organization that operates or controls the electric circuits involved to deenergize and ground them. If using protective measures, such as guarding, isolating, or insulating, these precautions must prevent employees from contacting such lines directly with any part of their body or indirectly through conductive materials, tools, or equipment.
  See WAC 296-155-428(17)
- Employers must use ladders with nonconductive side rails where the ladder could contact uninsulated, energized electric lines or equipment. See WAC 296-876-40035

RECOMMENDATIONS

FACE investigators concluded that, to help prevent similar occurrences:

- Identify the location of overhead power lines as part of all initial worksite surveys for jobs involving the use of ladders. Note power line heights and distances from work areas on site diagrams and provide information to site supervisors and workers.
- Perform a job hazard analysis of the worksite.
- Use non-conductive ladders around power lines.
- Lower the extension ladder and transport it horizontally.
- Be aware of windy conditions while moving a ladder near power lines.

RESOURCES

Preventing Worker Deaths and Injuries from Contacting Overhead Power Lines with Metal Ladders.
www.cdc.gov/niosh/docs/wp-solutions/2007-155/pdfs/2007-155.pdf

This narrative is an alert about the tragic loss of life of a worker and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or the cause of the fatality. Developed by WA State Fatality Assessment and Control Evaluation (FACE) Program and the Division of Occupational Safety and Health (DOSH), WA State Dept. of Labor & Industries. The FACE Program is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH grant# 5U60OH008487). For more information visit www.lni.wa.gov/safety-health/safety-research/ongoing-projects/work-related-fatalities-face.