

What is the hazard?

Logging was the deadliest civilian occupation in 2015 in the U.S., with a fatality rate of 132.7 per 100,000 full-time equivalent workers; in total, 62 workers were killed.¹ The most common cause of death was being struck by falling trees and limbs. **Since Jan 2016, 8 loggers have been killed by falling trees or limbs during felling operations in Kentucky.**²



Examples of felling– related logging fatalities that have occurred in Kentucky since January 2016 include:

Case 1: A logger had just felled a tree without incident, when he was struck by a falling branch from a nearby tree. He died several days later from severe head injuries.

Case 2: A logger was cutting trees on a hillside with a chain saw. The tree fell, the fork caught another tree and the tree split, striking the logger on the back.

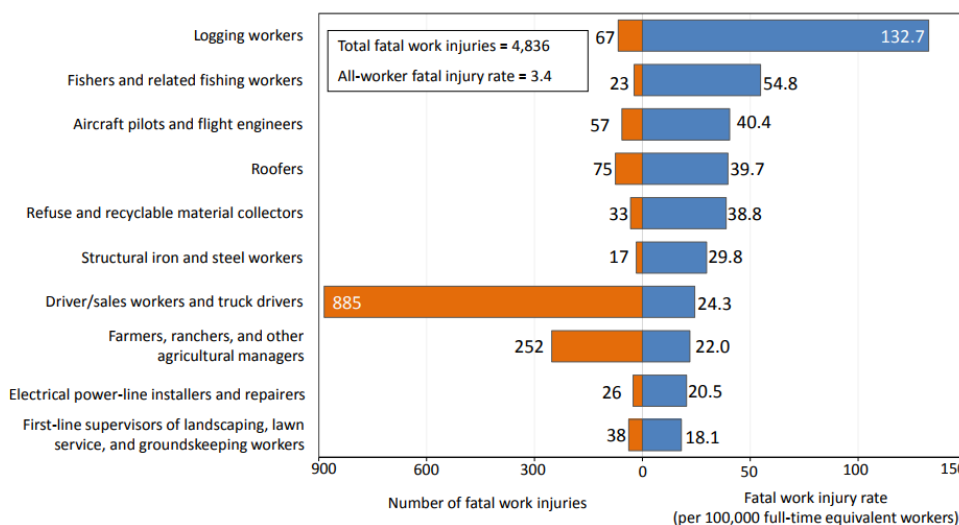
Case 3: A logger was cutting a felled tree into logs. His cut released pressure on a felled tree next to it, which rolled, and a limb from the tree struck him on the head.

Case 4: The tree a logger was felling struck a second tree, causing branches to fall and strike him.

Recommendations:

- During felling, assess all overhead hazards, including adjacent dead snags, broken branches, and vines that are connecting trees.
- After determining the fall direction of the tree, identify and establish clear escape paths before felling.
- Always wear Personal Protective Equipment, especially head protection.
- Ensure that all coworkers are at least two tree lengths away during felling process [per 1910.266(h)(1)(iv)].
- During felling, start at the bottom of the hill and proceed up or along the hillside to prevent issues with rolling or sliding logs.

Civilian occupations with high fatal work injury rates, U.S., 2015



Potential Felling Hazards

Hazard	Recommendation to Eliminate or Avoid
Throwback When the tree has been cut and is falling through other trees or objects, objects or branches can be thrown back towards the logger, resulting in injury or death.	Before cutting, check to ensure that the tree will not fall into other objects or trees. Never turn your back as the tree is falling; keep your eye on the tree as you move quickly from the fall path.
Terrain If the tree falls onto stumps, rocks, or uneven ground, a hazard can result.	Avoid felling on obstacles such as stumps, rocks or other debris by using directional felling techniques.
Lodged Tree A tree that hasn't yet fallen to the ground due to being stuck or leaning against another tree.	Avoid working around lodged trees. If necessary, have the lodged tree pushed or pulled down safely by a machine.
Widowmaker Limbs that are broken off, yet still suspended in the air, hanging from limbs in the tree to be felled or nearby trees.	Knock the limbs down, or pull them down with a machine. Avoid working beneath them, as they may fall and strike you.
Snag Standing dead tree, standing broken tree, or a standing rotting tree which is to be felled or is near a tree you will be felling.	Use a machine to bring the snag down. –or– Ensure that it is felled or that you avoid it by two tree lengths, unless the employer can demonstrate that a shorter distance will not place any workers in harms way.
Spring Pole A tree, part of a tree, or a limb that is under stress due to another tree or object pushing against it.	When at all possible use a machine to release spring poles. Only use a chainsaw if the operator has been trained specifically on spring pole release and then only if a machine is not available.
Extreme Weather Strong wind.	Never fell trees during high winds or otherwise dangerous weather.
Entanglement Vines or limbs of other trees tangled with the tree or limbs to be felled.	Use a machine to fell the tree safely. –or– Cautiously use proper directional felling techniques.

Potential Felling Hazards adapted from OSHA eTool: Logging. [<https://www.osha.gov/SLTC/etools/logging/>].

For more about KY FACE:

<http://www.mc.uky.edu/kiprc/face/index.html>

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¹Civilian occupations with high fatal work injury rates, 2015. Census for Fatal Occupational Injuries, U.S. Bureau of Labor Statistics, (2016), PDF.

²Kentucky FACE Database, Jan 2016-Aug 2017 exploratory analysis.