

# KENTUCKY HAZ ALERT

## To Prevent Arborists Injuries:

- Never allow an aerial lift to be used as a crane or material lifting device.
- All trees and limbs should be inspected for structural weakness such as rot, before work starts.
- Arborists should wear appropriate personal protective equipment while performing tree trimming activities.

## Special Factors for Aerial Lifts:

- Do not exceed the boom and basket load limits specified by the manufacturer.
- When working from an aerial lift, use a body harness that is properly attached.

## ARBORISTS DIE AFTER FALLING

From October 2012 through June 2013, three Arborists were killed as a direct result of falling. Two of the workers were using aerial lifts and one of the workers had climbed up into the tree. Following are the case descriptions for the three deaths:

**Case 1:** A 42-year-old male Arborist with 20 years experience was working from an aerial lift on municipal property. He fell from the bucket and was killed instantly. He was not wearing a body harness nor was he tied off.

**Case 2:** A 29-year-old male Arborist was topping out a tree while using a bucket truck to lower the treetop. The weight of the treetop attached to the bucket caused the boom to break. The Arborist was thrown from the bucket and fell 60 feet to the ground. He was killed instantly.



He was not wearing a body harness nor was he tied off.

**Case 3:** A 36-year-old male Arborist was cutting the top of a tree, while ground workers used rope to pull the treetop away as it fell. The Arborist climbed the tree to reach the part being cut. The treetop hit the lower part of the tree and the branch the worker was standing on. The branch he was on was rotten inside. The Arborist fell 30 feet and landed on a chain link fence. The worker was wearing buck straps, a body harness and a catch line.

**ARBORISTS SHOULD NEVER ALLOW AN  
AERIAL LIFT TO BE USED AS A CRANE OR  
MATERIAL LIFTING DEVICE!**

## NEVER ALLOW AN AERIAL LIFT TO BE USED AS A CRANE OR MATERIAL LIFTING DEVICE

Never use your aerial device as a crane or hoist. Continued operations that exceed the load limit of the basket will lead to failure of the upper boom. This is what happened in Case 2, causing the boom to break and throwing the Arborist from the bucket of the aerial lift.

## ALL TREES AND LIMBS SHOULD BE INSPECTED FOR STRUCTURAL WEAKNESS SUCH AS ROT BEFORE WORK STARTS

Stem factors such as splits, cracks, wounds, decay and tree species should be considered when performing tree trimming operations. Branch factors such as cracks, splits, decay, dead branches and weak crotches should also be examined. As part of the inspection, a pull test should be performed: the arborist sets a climbing line in the tree and pulls on the tree from all directions to observe movement. This may have prevented Case 3

## ARBORISTS SHOULD WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT WHILE PERFORMING TREE TRIMMING ACTIVITIES

Personal protective equipment for Arborists recommended by OSHA include: head protection, (a hard hat or a helmet), eye protection with side shields, gloves chosen for the anticipated job hazards and approved protective footwear. Arborists working aloft must use appropriate fall protection that would include tree climbing harnesses and climbing belts. The Arborists must be secured at all times while aloft.

## DO NOT EXCEED THE BOOM AND BASKET LOAD LIMITS SPECIFIED BY THE MANUFACTURER

Do not exceed the load-capacity limits. Take the combined weight of the worker(s), tools and materials into account when calculating the load. The worker in Case 2 was using an aerial lift to lower the tree and the added weight of the tree top exceeded the load-capacity limit, causing the boom to fail.

## WHEN WORKING FROM AN AERIAL LIFT, USE A BODY HARNESS THAT IS PROPERLY ATTACHED

Use a body harness with a lanyard attached to the boom or basket to prevent the worker(s) from being ejected or pulled from the basket. Body harnesses are designed to minimize stress forces on a worker's body in the event of a fall. Lanyards must meet strength requirements and be protected against being cut or abraded. In Case 1 and Case 2 each of the incidents described, the decedent was not wearing a body harness.

### For more information, contact:

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

### References

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