



How to Recognize and Prevent Tree Hazards

Eight Warning Signs Every Homeowner Should Know



Pacific Northwest Chapter
International Society of Arboriculture
PO Box 811, Silverton, OR 97381
Tel. 503/874-8263 or 800/335-4391
Fax 503/874-1509
info@pnwisa.org
www.pnwisa.org

2. Lean

One of the eight warning signs of a hazard tree is a tree that has begun to lean. Pay close attention to trees that have recently moved from a vertical position.

Recognizing Tree Hazards

Every year, our landscape changes as trees fall or break causing property damage, injuries, and power outages. While some tree failures are unpredictable, many can be prevented. By inspecting your trees for warning signs, many potential problems can be corrected before problems arise.

Trees should be inspected on a regular basis, especially before and after storms. Larger trees have a greater hazard potential than smaller trees. A hazardous tree is a tree that has significant structural defects that are likely to lead to failure and possibly cause injury or damage.

If a tree is deemed hazardous, keep people, pets, and vehicles out of the area until the hazardous condition has been corrected.

Seek professional help from a Certified Arborist to evaluate potential hazards before the next storm hits. Certified Arborists can recommend the proper course of action to keep your trees safer and healthier. The following guidelines can help you recognize the warning signs of hazard trees.

Eight Warning Signs of Hazard Trees

1. History. Past tree care and circumstances can affect the health of your trees. Construction, trenches, and tree topping can all have adverse effects on your tree. If roots have been cut or disturbed, the tree may become unstable.



1. History

2. Lean. Trees do not necessarily grow straight up. However, trees with a significant lean can indicate a problem. Look for cracked soil and exposed roots around the base of the tree which may indicate the tree has recently begun to lean (see cover photo).

3. Multiple Trunks. Some trees develop multiple trunks. Trees with multiple trunks can, however, break if the trunks are weakly attached. Trunks with splits or cracks have a high failure potential. Inspect these trees for cracks or splits where the trunks meet.

4. Weakly Attached Branches. Inspect branches where they attach to the trunk. Tight V-shaped forks are more prone to break than open U-shaped unions. Trees with splits, cracks, and/or several branches arising from the same point on the trunk can also present problems.



3. Multiple Trunks

(Above) Multiple trunks are susceptible to splitting.

(Bottom Left) Trenching in the critical root zone can cut anchoring roots and increase blow down risk.

(Below) Weakly attached branches can eventually lead to branch failure.



4. Weakly Attached Branches

5. Cavities & Decay Pockets

5. Cavities & Decay Pockets. Inspect the trunk or branches for peeling bark and hollow or decayed areas. Large decay pockets and decay where branches meet the trunk can indicate problems. Mushrooms or conks growing on or at the base of a tree are signs of decay-causing fungus.

6. Trunk & Branch Cracks. Inspect the trunk and large branches for cracks. Deep, large cracks indicate structural weakness in the tree and need careful evaluation.

7. Hangers. Hangers are broken branches still lodged in the tree. Whether partially attached or separately completed from the trunk, hangers are likely to fall and should be removed. Stubs left by broken branches should be pruned correctly.

8. Deadwood. Deadwood, or dead branches, are a normal part of a tree's growth pattern but will eventually fall. Branches over two inches in diameter can cause serious damage when they fall. Removal of all deadwood may not be critical, but deadwood should not be ignored.

Find Out More

Learn more about keeping your trees healthy and safe. For information about proper tree care and a list of Certified Arborists in the Pacific Northwest, visit the Pacific Northwest ISA website at www.pnwisa.org.



(Above Left) This oak tree with a large trunk wound is one example of a decay pocket.

(Above Right) This fungal conk is a sign of internal tree decay.

(Bottom Left) Hanging dead branches in this Douglas-fir are likely to fall and should be removed immediately.

(Center) Deadwood in this tree should be removed before failure occurs.

(Bottom Right) Trunk cracks are not always obvious as in this tree. Be sure to inspect both the trunk and large branches



7. Hangers



8. Deadwood



6. Trunk & Branch Cracks

How to Make Your Trees Safer

What you can do

- Learn to spot the eight warning signs of structural tree defects.
- Remove anything away from a potentially hazardous tree immediately.
- Call a Certified Arborist to examine the tree for remedy or removal.
- Inspect your trees regularly, and particularly during storm season, for warning signs.

What a Certified Arborist can do for you

Certified Arborists have been recognized by the International Society of Arboriculture by demonstrating an advanced level of knowledge and passing the ISA Certification Exam, a comprehensive exam developed by some of the nation's leading tree care experts.

From planting and pruning to removal and emergency tree care, Certified Arborists help maintain the valuable investment you have made in trees. *Depending on your tree care needs, a Certified Arborist might ...*

- Selectively remove branches and foliage to reduce weight and wind resistance
- Crown-clean trees by removing deadwood and hangers
- Remove large leaning trees with cracked soil and exposed root balls
- Remove or cable branches with V-crotches or weak branch attachments
- Recommend actions for long term tree care and health

Trees are alive. Their integrity and stability change over time. Inspect your trees regularly to ensure their longevity and health.



Look for the ISA Certification logo, a sign your arborist has the knowledge to help keep your trees healthy and safe.

Find Out More

The Pacific Northwest Chapter of the International Society of Arboriculture maintains a list of Certified Arborists in Alaska, Idaho, Oregon, Washington, and British Columbia. For more information about proper tree care and a list of Certified Arborists, visit our website at www.pnwisa.org.

Acknowledgements

This publication is funded in part with technical assistance from the Oregon Department of Forestry and the USDA Forest Service and with financial assistance from Oregon Emergency Management and the Federal Emergency Management Agency. The Pacific Northwest ISA acknowledges the assistance of Collier Arbor Care (Clackamas, Oregon, www.collierarbor.com) in developing this brochure.



Tel. 503/874-8263 or
800/335-4391
Fax 503/874-1509
info@pnwisa.org
www.pnwisa.org

Pacific Northwest Chapter
International Society of Arboriculture
PO Box 811
Silverton, OR 97381

