



Frequently Asked Questions About Dutch Elm Disease

Q: What is Dutch Elm Disease?

A: Dutch Elm Disease (DED) is caused by a fungal pathogen which affects American and European elm trees, including those in Portland. It is highly contagious between elm trees and can kill the trees. While DED poses no health risk to humans or animals, the fungus which causes the disease clogs the vascular tissue of elms, prohibiting water from moving throughout the tree and potentially causing it to die in a matter of weeks. The disease is named after the Dutch scientists who isolated and identified the fungus. It is thought to have originated in Asia, but is prevalent in the United States, having first presented in Ohio in 1930, and in Portland in 1977. Infected trees must be cut down and their wood destroyed to prevent further transmission of the disease to other elm trees. DED does not impact trees of other species.

Q: What does DED look like in a tree?

A: The most prominent symptom you can see is known as “flagging,” a sudden wilting or drooping of leaves in the tree, often on a single branch or limb. Flagging leaves quickly turn from grey-green to brown as the fungus invades the vascular tissue of the tree, blocking the tree’s water supply. Portland Urban Forestry crews monitor the approximate 3,500 elm trees in the city to look for signs of DED. An Oregon State University laboratory is used to confirm suspected cases at no cost to the adjacent property owner.

Q: Can DED be prevented?

A: Fungicide can be injected into elm trees as a preventative treatment. A certified arborist must supervise the fungicide injection procedure. Some communities in Portland have come together to fundraise, inoculate elm trees, and replant trees that have been removed due to Dutch Elm Disease. In Parks, Urban Forestry inoculates elm trees to help prevent them from contracting Dutch Elm Disease, and intends to continue to do so to protect these precious resources. Even so, please note that inoculation is not always 100% effective against Dutch Elm Disease.

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Portland Trees – www.Portlandoregon.gov/trees – permits, tree removal, report a downed tree.

Sustaining a healthy park and recreation system to make Portland a great place to live, work and play.
portlandparks.org | Amanda Fritz, Commissioner | Mike Abbaté, Director





Q: How does DED spread?

A: There are three ways the DED fungus spreads: bark beetles, root grafts, and human activity. In infected trees, spores of the DED fungus stick to the backs of bark beetles and are transported to new elms when beetles emerge in the spring and fly off to feed on healthy elms. Because fresh pruning wounds attract the elm bark beetle, elm pruning is restricted during times of beetle activity, which is April 15th through October 15th. Also, the state of Oregon has declared an emergency quarantine of all elm wood; elm wood must be chipped, or de-barked and buried, and cannot be stored for firewood. The fungus spreads most rapidly through root grafts, which form between trees growing in close proximity. Human activity, such as transporting elm wood infested with bark beetles, also spreads the disease.

Q: I suspect that a street tree next to my property may have DED. What do I do?

A: Contact Urban Forestry by email at trees@portlandoregon.gov or at 503-823-TREE (8733). Indicate the location of the tree and provide any photos if possible. Urban Forestry will send a staff person to assess the tree as soon as resources permit. Urban Forestry has a designated person on staff to monitor elm trees (for at least the 2017-2018 Fiscal Year).

Q: Who is responsible for the cost of removing street trees, including trees infected with DED?

A: Homeowners are responsible for addressing all tree issues and removal of trees when necessary in adjacent rights-of-way to their property (Urban Forestry permits are required for activities involving street trees). As of July 1, 2017, Portland City policy became consistent regarding a homeowner's responsibility for taking care of *all* street tree issues. If an elm tree on the right-of-way adjacent to a homeowner's property is found to have Dutch Elm Disease, Portland Urban Forestry will contact the private property owner and notify them of the needed steps to mitigate the problem. Consistent with all other street tree issues on adjacent rights-of-way, the property owner is the responsible party.

Q: How much will removal of an infected street elm cost me as a homeowner?

A: Each situation varies due to location, tree age and structure, nearby buildings, and other factors. Removing large trees can involve significant cost. However, each tree situation is unique. Homeowners should consult a [certified arborist](#)



(<https://www.portlandoregon.gov/trees/article/424016>) to learn more about their specific circumstances.

Q: As of July 1, 2017, the City reallocated funds previously used to remove DED-infected trees. How exactly is this money being used now?

A: Through the City budget process, resources were shifted to fulfill maintenance requirements for publicly-owned Heritage Trees. This shift gives needed attention to around 150 [Heritage Trees](https://www.portlandoregon.gov/parks/40280) (<https://www.portlandoregon.gov/parks/40280>) in Portland parks and within City rights-of-way which were not previously maintained due to a lack of resources. The shift in resources frees up to five months of work (approximately 80 full work days equaling \$230,000 in taxpayer money) which can now be dedicated to tree pruning, maintenance, and extended care of Heritage Trees and as well as park trees across Portland.

Q: Will the City continue to monitor and/or inoculate elm trees for Dutch Elm Disease?

A: Yes. The City will continue the practice of inoculating elm trees in parks and natural areas only (not street trees) to prevent them from contracting and spreading Dutch Elm Disease. Per City Code, Urban Forestry will continue testing *of all trees* (including street trees) with signs and symptoms of DED. If DED is found in an elm, property owners will be required to remove the tree within 30 days to halt the spread of the highly contagious fungus.

Q: Why is this such a big deal in Portland? What kind of numbers are we talking about?

A: Portland has one of the most impressive elm canopies in the country. Stately elms line several neighborhoods and destinations, including the popular South Park Blocks, Eastmoreland and Laurelhurst neighborhoods.

Urban Forestry estimates that Portland loses 1% of its elm population each year to DED. Elm tree removals from DED peaked in 1999 with 208 infected trees removed. 2016 saw 55 tree removals, down slightly from the 65 in 2015. Since the disease was identified in Portland, around 1,268 elm trees total have had to be cut down and destroyed as a result of DED.

Q: Which specific tree species are susceptible to Dutch Elm Disease?

A: American elms, Dutch elms, English elms, Wych elms, Camperdown elms, and Smoothleaf elms.



Q: Are *any* elm trees okay to plant in Portland?

A: Yes, some new elm cultivars are resistant to DED and are approved for planting. In fact, these new elm species are frequently used to replace elms that have been removed.

Remember, a permit from Urban Forestry is required to plant a street tree. Here is a link to lists of approved street tree species and plantings:

<https://www.portlandoregon.gov/trees/60043>

Q: Where are most of Portland's elm trees located?

A: You will find elm trees mostly concentrated in neighborhoods such as Laurelhurst, Eastmoreland, South Park Blocks, Ladd's Addition, and parts of Northwest Portland.

Q: What is the City's overall plan in response to DED?

A: The City of Portland has an [Urban Forestry Elm Management Strategy](https://www.portlandoregon.gov/parks/article/424029) (<https://www.portlandoregon.gov/parks/article/424029>). It includes a five-pronged approach which includes:

- Monitoring for DED by a designated specialist
- Rapid removal of impacted trees
- Sanitation: disposing of all elm wood in a controlled manner
- Inoculation: Urban Forestry continues to inoculate approximately 140 elm trees annually within parks and natural areas.
- Education and outreach to residents, neighborhoods and property owners regarding elm tree management