

**Saskatoon has confirmed its second case of DED adjacent to the Montgomery neighbourhood; the first was in July of 2015.**

**What is Dutch elm disease (DED)?**

It is a vascular disease caused by two closely related species of fungi, *Ophiostoma ulmi* and *Ophiostoma novo-ulmi*, both of which are transmitted by elm bark beetles and through root grafts. It blocks water movement and eventually leads to death of the entire tree. It only impacts elm trees and no elm species is totally resistant. A tree can be infected by:

- elm bark beetles that transmit the disease;
- through root grafts between trees; and,
- by pruning tools.

**How quickly can it kill an elm tree?**

As quickly as a few weeks or sometimes it may take several years.

**What is the best way to prevent Dutch elm disease?**

- Do not store or transport elm wood – Provincial regulations prohibit the storing or transporting of elm wood. Elm wood must be disposed of at the City landfill.
- Do not prune elm trees during the provincial elm pruning ban from April 1<sup>st</sup> to August 31<sup>st</sup>.
- Sanitation – The removal of dead and dying tree limbs which are a breeding site for beetles that can act as a vector.
- Sanitize tools after working on elm trees.
- Keep elm trees healthy and rapidly remove infected trees.

**What is the City doing in response to this confirmed case?**

Saskatoon has a graduated response plan for DED which includes the following:

- Removal of the tree that tested positive and disposal of the wood at the landfill.
- Sampling of any symptomatic trees within 1 km of the infected tree.
- Increased surveillance of the neighbourhood where the tree tested positive to search for elm wood.
- Providing media with information.

Saskatoon continues with its regular elm surveillance and cyclical pruning of trees in parks and on our boulevards.

**Dutch elm disease response update – September 15, 2020**

- A Media Scrum was held on September 15, 2020, to inform the media and the public that a DED positive tree had been identified. Area community associations were also informed directly.
- The DED positive tree will be removed on September 16, 2020.
- Surveillance of the Montgomery, Fairhaven, Meadowgreen and South Industrial areas will begin immediately in an effort to remove potentially infected elm trees and elm wood.

- Surveillance of these areas includes checking every property for elm firewood or brush and removing it when it is found. If a resident is not home, staff will remove the elm wood and leave an Elm Infraction Notice with a note indicating that the wood was removed.
- We will continue to sample symptomatic elm trees.
- Training crews for increased surveillance.
- A communication plan will be developed for the 2021 growing season to inform residents in the surrounding neighbourhoods about our efforts to eliminate elm wood and sample symptomatic trees, as well as educating Saskatoon residents on how they can help prevent DED.

### **What role does the Provincial Government have?**

- Provincial Crop Protection Lab provides free sampling services.
- As part of the *Forest Resource Management Act*, the *Provincial Dutch Elm Disease Regulations, 2005* allow Inspectors to enter private property to inspect for elm wood, remove elm wood, and sample private elm trees. In accordance with the regulations, property owners will be asked to remove and dispose of infected elm trees.
- In accordance to the Act, there are restrictions on who can prune elm trees for remuneration. They must meet the requirements in the Provincial Act.

### **What can the public do to help?**

- Support sanitation efforts by making sure you do not have elm wood or brush stored on your property. Please report any potential elm firewood by calling Customer Care at 306-975-2476.
- Have your private elm trees pruned. Crown cleaning to remove dead and dying limbs reduces elm bark beetle breeding habitat. Ensure you hire someone with training that meets the provincial regulations (i.e. Certified Arborist) and make sure they have insurance.
- Remove dead or dying elm trees on private property. Complete elm removal can take place during the ban. All elm wood needs to go to the Saskatoon landfill and cannot be stored. The stump must be removed or debarked to 10cm (4") below ground level.
- In fall it is difficult to detect symptoms of Dutch elm disease. Instead, please watch for symptoms of Dutch elm disease during the growing season (June 1-August 15) and report any suspicious trees to the City at 306-975-2476. Someone from Urban Biological Services will inspect and take samples for testing if deemed necessary.

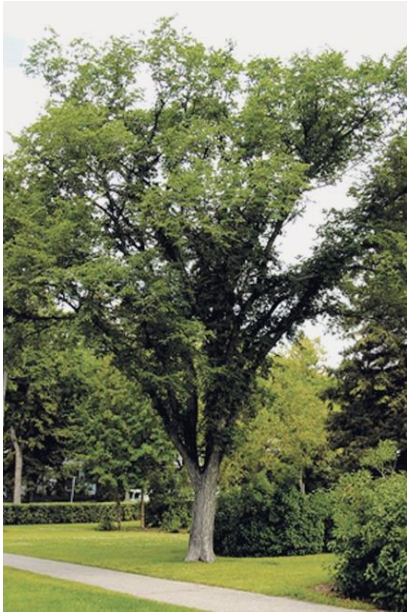
### **Historical Points**

DED was first identified in the Netherlands and northern France in 1919. The disease was brought to Europe from the Dutch East Indies in Southeast Asia during the late 19<sup>th</sup> century. The first infection in North America was observed in the U.S. in Ohio in 1930. In Canada the disease was found in Richeleau County, Quebec in 1944. DED was first detected in Manitoba in 1975. The initial outbreaks of the disease were likely due to the transport by campers of infected wood from other areas. From 1975 to 1980 DED spread rapidly throughout southern Manitoba and into Saskatchewan. Regina had its first confirmed case of DED in 1981. Saskatoon has now had its second confirmed case.

## What does an elm tree look like?

### Look for a vase or umbrella-like shape

From a distance, the American elm is one of the easiest trees to identify. The trunk is quite straight and often flares at the base. It forks into a few large, ascending limbs which divide repeatedly into fanning, drooping branchlets, forming a graceful umbrella shaped crown.



*American elm tree*

### Look at the leaf and bark

The oval leaf has a prominent double-toothed edge and an uneven base (one side is longer than the other). Leaves are about 4 1/2 inches (11 cm) long and 2-3 inches (5.5 cm) wide. The bark is generally dark grey to grey-brown in colour. The outer bark has broad, intersecting ridges and a rough flaky appearance.



*Elm bark*



*Elm leaves*

### What does DED look like?

Early symptoms include wilting or drooping of leaves on one or more of the major branches followed by flagging (leaves turn yellow and then brown and shrivel). As it advances branches may die and more of the tree becomes infected. If infected later in the summer the leaves may turn yellow and then droop and premature leaf drop can occur. This can be mistaken for early fall colouration which can happen as early as August.

Other things can cause wilting, flagging, yellowing leaves on elm trees including broken branches, insect damage, drought, root damage, and other diseases including Dothiorella wilt and Verticillium wilt.



*Elm tree with DED*



*Wilting, drooping leaves (early stages)*



*Flagging leaves (advanced)*

For more information on DED, visit [www.saskatoon.ca/dutcheImdisease](http://www.saskatoon.ca/dutcheImdisease).

Sources of information include:

Dutch Elm Disease in North Dakota: A New Look, North Dakota State University, Fargo, ND January 2013

Manitoba Elm Survival Guide, The Coalition to Save the Elms

How to Identify and Manage Dutch Elm Disease, United States Department of Agriculture, Author Linda Haugen Plant Pathologist with the USDA Forest Service, Northeastern Area State and Private Forestry, St. Paul, Minnesota.