A Disease that kills Elm Trees
Dutch elm disease is caused by an aggressive fungus that kills elms regardless of their health. It is considered the most costly shade tree disease ever and will remain active in a community as long as there are susceptible trees. The fungus invades the water transporting vessels and produces toxins to which the tree reacts. In defense to the toxins the tree produces gums and internal growths designed to block the advance of the fungus. The combination of the toxins and the defense mechanisms of the tree inhibit water flow to the crown, which causes wilting and tree death.

How Dutch Elm Disease Spreads
Female elm bark beetles lay their eggs beneath the bark of dead and dying elm trees. If the elm is infected with Dutch elm disease the newly hatched beetles will emerge from the tree carrying the deadly fungus on their bodies. The beetles fly to healthy trees to feed on 2 - 4 year old branches and thereby spread the disease.

Besides beetle transmission, Dutch elm disease may also spread through grafted roots. When elms grow in close proximity to each other, their roots can come into contact and graft together. This common root system provides the fungus with a pathway to spread through an entire stand of healthy elms very quickly.

Disease Symptoms
- Symptoms begin to develop 4 - 6 weeks after infection.
- Wilting or “flagging” of one or more branches, starting at the branch tip.
- Infected branches turn dull green to yellow, curl, and become dry and brittle.
- Canopy die-back from the top down.

Preventive Treatment
Arbotect® Systemic Fungicide Injection
- Protects your elm from the disease by evenly and completely distributing a fungicide chemical throughout the entire canopy of the tree.
- The highly effective macro-fusion injection provides a protective fungicide barrier through the entire tree.
- Arbotect® fungicide does not protect elms from root graft infection. You need to physically sever the root system from neighboring trees by trenching at least 36” down.

Rainbow Treecare guarantees your elm tree will be free from over land DED infection while under warranty. Contact us for more information on the benefits of this guarantee.