Pathogenic
Shade Tree Diseases

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Disease	Host	Symptoms
Anthracnose	Sycamore, rarely on others	Caused by fungus. Necrosis or brown areas along leaf veins. Leaf drop. Bud and twig die-back
Aspen Leaf Spot	Aspen, willow	Fungal disease. Irregular brown to black target spots that enlarge and lead to eventual defoliation
Apple Scab	Apple	Fungal disease. Spots on leaves, fruit, premature defoliation. Olive green scab on leaf, turns brown, leaf yellows, then drops. Olive green spots on fruit, turn brown or black.
Black Knot	Chokecherry	Fungal disease. Black rough growths on that surround branches. Growth beyond the infections die back
Crown Gall	Many species; common on poplar, aspen, willow, oak, and rose	Bacterial disease. Irregular, corky growth on roots and base of tree
Coryneum Blight	Prunus spp; more serious on fruiting varieties	Fungal disease. Shot-hole symptoms on the leaves. Dieback of twigs. Purple lesions around dead buds. Spots on fruit.
Cytospora or Perennial Canker	All species	Fungal disease. Twig or branch dieback, black pimpled areas. Orange jelly-like ooze when fungus is active
Dutch Elm Disease	American elm and other species (Siberian elm is resistant)	Fungal disease, Yellowing foliage, Dead branches and trees, Bark beetles usually present
Dwarf Mistletoe	Juniper, fir, others	Parasitic perennial seed plant, Abnormal growth that attack the plant tissue, Cause "witches broom" side shoots
Fire Blight	Apple, pear, ornamentals in the rose family	Bacterial disease, Blackened flower, twigs, and fruit
Ink Spot	Aspen	Fungal disease, Dark, brown or black raised spots on leaves, Entire leaf may die while unaffected leaves remain green, Black areas may fall out leaving holes
Leaf Blister	Oak, maple, others	Fungal disease, Lesions on leaves, Often colored on upper surface while undersurface remains tan, Leaf remains attached
Needle Drop	Needle-type evergreens	Early drop of needles, Needles usually turn yellow or brown prior to dropping off, This usually occurs gradually but may occur suddenly
Phytophthora Root Rot	Many species	Poor growth, Small leaves and fruit, Rotted roots and tree, Death

Disease	Host	Symptoms
Powdery Mildew	Many species	Fungal disease, Twisted and dwarfed leaves, Powdery white leaves and twigs
Rust	Serviceberry, aspen, others	Fungal disease, Swollen spots on backsides of leaves which break open and release orange liquid or powder
Slime Flux or Bacterial Wet Wood	Willow, elm, poplar, mulberry and others	Frothing slime or ooze coming from pruning wounds or crotch areas, Foaming ooze common in willows
Sooty Mold	Lindens, maples, other aphid susceptible trees	Blackish powdery mold growing on tree leaves
Tar Spot	Maple (primarily native maples in canyons)	Fungal disease, Small water soaked spots on leaves, Develops numerous small black spots on upper leaf surface
Thyronectria Canker	Honeylocust	Fungal disease, Sunken, pink cankers, Excessive gumming
Trunk Rot	All woody plants; soft wood species are more susceptible	Rotted wood; fruiting bodies can be hard conks or soft fungal growth
Verticillium Wilt	Maple, many others	Discoloration of the vascular tissue under the bark, Branch die-back or tree death in severe cases

Control
Sprays not usually needed unless outbreak is severe. Avoid sprinkling leaves. Fixed copper, Daconil, Bayleton, at bud break repeat until warm, dry, weather comes
Keep sprinklers from hitting trees. Usually not a life-threatening problem. Daconil, Bayleton, or fixed copper at budbreak; repeat every two weeks until warm, dry weather comes.
Keep sprinklers off trees. Remove leaf debris. Apply fungicide if severe.
Remove damaged branches by pruning. Spraying not recommended
No chemical control. Avoid injury to crown and roots. Bacterial bio-control agents available for pre-plant treatment only
Sprays are not usually necessary on ornamentals. Prune out damaged areas. Avoid sprinklers hitting the foliage.
Prevent stress, winter damage and other injuries. Prune out dead or infected wood. Fertilize regularly. Water as needed.
Remove dead trees, Protect valuable trees with preventive fungicide, Strict sanitation measures, including girdling of trees 2 inches deep, and trenching between trees to remove root grafts may halt spread of disease, Remove bark from cut trees immediately
Prune out witches brooms and remove severely infected trees
Prune out affected tissue, Spray with fixed copper or streptomycin during bloom, Avoid over-fertilizing plants
Rake up and destroy infected leaves, Fungicides are usually not recommended, Disease is only a problem in higher mountain areas
Usually not warranted as the disease is not usually fatal, Fungicides are only recommended where appearance is critical, Use Daconil or fixed coppers
No problem if there is no drop of new or healthy needles, Water trees adequately but do not overwater, Evergreens may need water in late fall or winter during dry years.
Avoid planting sensitive species on wet or poorly drained sites, Cut back on water, Improve soil drainage, Drench soil with Subdue or Alliete

Control
Ignore problem unless severe, Use naturally resistant species, Increase air circulation, Treat with approved fungicide prior to symptom development
Sprays are not usually necessary in Utah's dry climate, Some rust diseases have alternate hosts; removing the alternate host sometimes helps
Cures are not likely, Cut away damage, Wash with 10% bleach solution on localized cankers
Control severe aphid outbreaks, Wash undersides of leaves to remove aphid droppings
Spraying is usually not recommended, Spray with fixed copper in the spring if season is wet, Rake and destroy fallen leaves
Maintain tree health, Use proper pruning techniques, Remove badly damaged trees
No control possible once infection starts, Avoid pruning large branches and avoid trunk injury, Remove decayed trees that present hazards
Prune out dead limbs, Fertilize moderately, Irrigate to keep soil moist but not wet, This is a soil-borne fungus so no sprays are effective