CULTURAL PRACTICES THAT REDUCE LAWN DISEASES

Starting Right:

Prepare the site well. Remove stumps, construction materials, and other debris. Check for good drainage. Fill in low areas. Test soil pH and adjust to 6-7. Break up lumps to provide uniform area for seed or sod.

Choose seed or sod carefully. Inspect sod for diseases or other problems. Choose high quality, pathogen-free seed. Many disease-resistant cultivars are now available and should be included in blends and mixtures. Genetic variability in lawn grasses will reduce the chance for epidemics that kill large areas.

Other landscaping decisions will affect lawn health. Pruning of tree branches may increase light penetration to allow better grass growth. Trees, shrubs, and other plantings should be placed to allow good air circulation, so grass will dry quickly after rain or dew. In very shady areas, shade tolerant grass cultivars or other groundcovers should be planted.

Seed should be planted only in well prepared soil with good drainage when temperatures stay in the 600 to 850 range to allow rapid germination and establishment. Keep soil and seed moist, but do not over-water.

Routine Care:
Fertilizers: Apply according to recommendations based on a soil test. Excess nitrogen will cause succulent growth that is more susceptible to disease. This is especially dangerous during:
a) leafspot season early in spring
b) hot, humid weather
c) just before dormancy in fall that leaves turf subject to winter injury. Some diseases are worse when nitrogen is deficient.
Herbicides: can stress lawn grasses and make them more susceptible to diseases. Apply carefully according to the label.
Liming: Adjust pH according to recommendations based on soil test. Diseases increase at pH extremes (too high or too low). Lime applied late in autumn can increase snow molds.
Mowing: Mowing wounds turfgrasses and spreads pathogens (disease-causing organisms). Minimize wounding and shredding of grass blades by keeping blades sharp and adjusted properly. Mow when grass is dry. Mow at a height of 1 1/2-2 1/2", using the maximum in hot weather. Mow only l/3 of the total height at each cutting to avoid stressing the grass. Don't "scalp". Mow in autumn until grass stops growing. Collect clippings only during disease outbreak.

Watering: Water is necessary for good plant growth, but too much water floods the air pores in the soil depriving roots of oxygen. Roots will then rot. Disease-causing fungi reproduce by spores that, like seeds, need water to germinate. Dry foliage reduces disease by reducing spore germination.

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Water infrequently but deeply- to a depth of 6”. Water early in the day, so grass will dry quickly. Night watering after dew appears may help with water conservation but is not recommended on hot, humid nights because it can increase some diseases. Avoid light, frequent sprinklings and do not water in the late afternoon or early evening.
In very hot, dry weather daily watering may be necessary to prevent wilt and dormancy. Areas along walls, sidewalks, and driveways that are susceptible to necrotic ring spot or summer patch may also need to be watered frequently.

Thatch: is an accumulation of decaying organic residues between the green portion of the grass plant and the soil. When it is more than 1/2” thick, it reduces nutrient and water absorption and harbors insect pests and disease pathogens. Prevent thatch formation by reducing fertilizer and fungicide applications. Thick thatch should be mechanically removed.

Compaction: In areas of poor grass growth due to compaction, coring will help aerify the soil and improve turf quality.