Life Cycle of Citrus Canker

Wind-blown rain carries inoculum to uninfected plants.

Hedging, pruning, or other activities that cause injury create wounds for infection and/or transmit the bacteria mechanically.

Wounds open mesophyll tissues to direct infection.

Lesions are erumpent and consist of hyperplastic cells surrounding a sunken center of dead collapsed cells. A ring or chlorotic halo of cells often surrounds the lesion.

Further rain causes water splash of inoculum that is disseminated by wind.

Rain, irrigation, or dew causes bacteria to ooze out of lesions and onto plant the surface.

Wind-driven rain can cause water congestion of tissues, form a column of water between the plant surface and the mesophyll through the stomata, and promote stomatal infections.

Infections can form on foliage, fruit, and young stems.

Gottwald et al., 2002