



This is a community disease – management by all growers of susceptible crops is necessary. In the circumstance when late blight gets out of control, early harvest and crop destruction options must be considered to limit development of inoculum that could pose heightened risk for other area producers.

How do I destroy and/or dispose of my late blight-infected tomato plants?

There are several methods of destroying infected plants:

- 1) Pull up plants by the roots, bag, leave in the sun for a few days for plant and pathogen to die, and put out for trash pickup. This method is OK for a few plants.
 - 2) For many infected plants, plants can be cut at the base and allowed to die in place. Once plants are dead, you can go in and remove stakes, strings, and plastic and dead plant material can be incorporated into the soil. Shallow incorporation of debris is recommended to avoid creating a warm, sheltered environment which would keep the plant tissue and pathogen alive for extended periods of time beneath the soil surface.
 - 3) Plants can be flame-killed with a propane or other torch.
 - 4) Infected plants can be pulled and placed in a small pile covered over with a dark colored plastic tarp and left in the sun. This will create heat in the pile from the sun beating on the plastic tarp and plants will die within a few days. The winter will provide an excellent freeze kill for exposed infected plants.
- **DO NOT COMPOST late blight infected plant material**, as many piles may have warm centers that can allow plant material and the pathogen to remain viable.
 - **The goal is to kill the plants and this will kill the pathogen.**

Are tomato fruits from late blight infected tomato plants safe to eat?

Healthy-appearing fruit from late-blight-infected tomato plants are safe for human consumption. If they have been infected, but aren't yet showing symptoms, they won't keep in storage. There are some concerns about canning infected fruit because bacteria can enter late-blight infected fruit and impact quality. UW-Extension food science extension specialist, Dr. Barbara Ingham recommends avoiding canning tomatoes that exhibit late blight infection. Further information can be found at:

<http://fyi.uwex.edu/news/2009/08/26/tomatoes-and-potatoes-infected-with-late-blight-are-they-safe-for-eating-or-preserving/> .

I have tomato or potato late blight in my garden – will I get it next year if I plant tomatoes again?

The strain of the late blight pathogen that we currently have in WI cannot survive outside of living plant tissue. Our strain or 'type' of late blight is probably US-23 which is known

to be an A1 mating type. What does this mean? Much like we have male and female 'mating types' in our human population, the late blight pathogen requires an A1 and A2 mating type to be present together to form persistent, overwintering, long term spores (oospores). Oospores can persist in soil for many years. However, without a compatible mating type in WI (we do not have any A2 strains at this time), there are no oospores produced and there is no risk of this season's late blight residing in the soil over winter. To reiterate, the late blight pathogen that we currently have in WI will not overwinter in the soil on its own. It requires living plants or plant parts to remain viable and infective. Therefore, it is critical to kill infected tomato plants and plant parts such as fruit. Potato tubers can also serve as a source of overwintering inoculum and should also be destroyed if found to be infected with the late blight pathogen.

How fast will late blight infected plants die?

This depends upon how many points of infection the plant received, the cultivar (some cultivars are more susceptible than others), the history of use of protectant fungicides (such as copper), and on the weather. Hot, dry, sunny weather typically holds back late blight; whereas cool, rainy, overcast weather will cause late blight to progress rapidly killing the plant in 7 to 10 days.

Can late blight be seedborne in tomatoes?

Generally, the late blight pathogen is not considered a seedborne pathogen in tomato.

The above information is excerpts from Managing Late Blight in Organic Tomato and Potato Crops by Amanda J. Gevens 2015. For additional information on dealing with late blight, contact your local University of Wisconsin Extension Office <http://counties.uwex.edu/> .