

What is *C. botulinum*?

It rarely happens. But, when it does, it can be deadly. The pathogen *Clostridium botulinum* causes botulism. This is because a toxin attacks the body's nerves and causes difficulty breathing, muscle paralysis, and even death. The spores grow and make toxin under the following conditions:

***Low-oxygen or no oxygen (anaerobic) environment**

***Low acid, sugar, or salt**

A certain temperature range that supports growth of *C. botulinum

Improperly home-canned foods can provide these conditions to allow *C. botulinum* spores to grow.

Botulism Outbreak in Home-canned Peas

It has happened again. Improperly home-canned vegetables have been linked to a botulism outbreak. This was due to improperly canned peas.

In June, 2018, three women were hospitalized in New York for respiratory failure and cranial nerve palsies (paralysis). These symptoms lead to a diagnosis of botulism. Typical symptoms include nausea, dizziness, blurred vision, slurred speech, thick-feeling tongue, and shortness of breath. This diagnosis was after about 14 hours of eating a homemade potato salad containing the home-canned peas.

The peas were canned 1-2 weeks earlier because of a malfunctioning freezer. A peach preserves recipe that uses the boiling water bath canning method was used by substituting the peaches with the frozen peas. The person who did the canning was a novice and unaware of the risks. After canning, one jar did not seal, and it was refrigerated. But because of the improper canning method and inadequate heating, none of the jars were safe to consume, including the refrigerated jar.

Plain vegetables and meat require pressure canning to eliminate *C. botulinum* spores. This incident also emphasizes the fact that just because the jar seals, does not mean it is safe!

For more information about safe canning methods, contact your local extension office. Ask about any workshops that maybe held that can teach you safe canning

methods. In the Meadowlark Extension District, we have a comprehensive food preservation workshop scheduled for June 19. Participants will have the opportunity to learn about safe, recommended methods for pressure canning, boiling-water bath and drying foods. Registration is limited. For more information, contact Cindy at the Oskaloosa Office at 785-863-2212.

We also have information about safe canning of various fruits and vegetables. These are available at each of the Meadowlark Extension Offices. When you are coming, be sure to bring your dial-gauges to be check for accuracy. It only takes a few minutes and there is no charge for this service. We can only check dial-gauges; we can't check the weighted-gauges.

If you have other food preservation, foods or food safety questions, please contact your local extension office. We want you to have a safe, enjoyable food preservation experience. To reach the various Meadowlark Extension District Offices—Seneca—785-336-2184; Holton---785-364-4125 or Oskaloosa---785-863-2212.