Home-canned Vegetables are the Most Common Cause of Botulism Outbreaks in the United States

On April 21, 2015, the Fairfield Medical Center (FMC) and Fairfield Department of Health contacted the Ohio Department of Health (ODH) about a patient suspected of having botulism in Fairfield County, Ohio. Botulism is a severe, potentially fatal neuroparalytic illness. A single case is a public health emergency because it can signal an outbreak. Within two hours of health department notification, four more patients with similar clinical features arrived at FMC's emergency department. Later that afternoon, one patient died of respiratory failure shortly after arriving at the emergency department. All affected persons had eaten at the same widely attended church potluck meal on April 19. CDC's Strategic National Stockpile sent 50 doses of botulinum antitoxin to Ohio. Twenty-seven of the 29 patients initially went to FMC. Twenty-two patients were transferred from FMC to six hospitals in the Columbus metropolitan area approximately 30 miles away; these transfers required substantial and rapid coordination. Twenty-five patients received botulinum antitoxin, and 11 required endotracheal intubation and mechanical ventilation; no other patients died. Of 12 food specimens collected from the church dumpster, six were positive for botulinum neurotoxin type A; five contained potato salad and one contained macaroni and cheese that might have been contaminated after being discarded. The attendee who prepared the potato salad with home-canned potatoes reported using a boiling water canner, which does not kill C. botulinum spores, rather than a pressure canner, which does eliminate spores. The combined evidence implicated potato salad prepared with improperly home-canned potatoes, a known vehicle for botulism. This was the largest botulism outbreak in the United States in nearly 40 years.

Close adherence to ESTABLISHED home-canning guidelines can prevent botulism and enable the safe sharing of home-canned produce.

These ESTABLISHED guidelines can be found:

- Online at the National Center for Home Food Preservation: nchfp.uga.edu
- In the most recent version of the Ball Blue Book
- In the book titled So Easy To Preserve, which is published by the same entity that operates the National Center for Home Food Preservation, the book can be purchased here: setp.uga.edu
- In the USDA’s Complete Guide to Home Canning which can be found online for free download, also on the National Center for Home Food Preservation’s website: https://nchfp.uga.edu/publications/publications_usda.html
- The USDA’s Complete Guide to Home Canning can also be purchased from Purdue University: mdc.itap.purdue.edu

The methods and recipes in these resources are RESEARCH-BASED.

NOTE: If you have a dial gauge pressure canner, it is time to get it tested. Local Extension offices can test these brands Presto, National, Maid of Honor, and Magic Seal. We cannot test All American gauges.
If you have questions about how to can food safely, contact Kaitlin Moore, Nutrition, Food Safety & Health Agent. Phone: 785-243-8185 Email: kaitlinmoore@ksu.edu.

Information about the 2015 botulism outbreak in Ohio was found at cdc.gov.

-30-

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

K-State Research and Extension is an equal opportunity provider and employer.