

# HOME CANNING AND BOTULISM

Home canning is an excellent way to preserve garden produce, but it can be risky or even deadly if not done correctly and safely. Garden produce can become contaminated by an organism that causes botulism.



**Note:** The National Center for Home Food Preservation also reminds consumers that canning jar manufacturers do not endorse baking in their canning jars.

## What is Botulism?

Botulism is a rare, but serious illness caused by a pathogen called *Clostridium botulinum*.

The pathogen is found in soil and can survive, grow, and produce toxins in a sealed jar or can of food. This toxin can affect the nerves, paralyze muscles, and can even cause death. Even taking a small taste of food containing this toxin can be deadly.

## Early Symptoms Include:

- Double Vision
- Blurred Vision
- Drooping Eyelids
- Slurred Speech
- Difficult Swallowing
- Dry Mouth
- Muscle Weakness

**SEEK MEDICAL ATTENTION IMMEDIATELY IF YOU HAVE ANY OF THESE SYMPTOMS.**

## Outbreaks and Home-Canned Vegetables

Home-canned vegetables are one of the most common cause of botulism outbreaks in the United States. From 1996 to 2014, there were 210 outbreaks of foodborne botulism reported to CDC. Of the 145 outbreaks that were caused by home-prepared foods, 43 outbreaks (30%), were from home-canned vegetables. These outbreaks often occur because home canners did not follow canning instructions, did not use pressure canners, ignored signs of food spoilage, or were unaware of the risk of botulism from improperly preserving vegetables.

Further reading:

- [Large Outbreaks of Botulism Associated with Church Potluck-Ohio, 2015](#)
- [Three outbreaks of foodborne botulism caused by unsafe home canning of vegetables-Ohio and Washington, 2008 and 2009](#)

To read the full feature from CDC, visit <http://www.cdc.gov/features/homecanning/>.



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## Home canned food might be contaminated if:

The container is leaking, bulging, or swollen.



The container looks damaged, cracked, or abnormal.



The container spurts liquid or foam when opened.



The food is discolored, moldy, or smells



## 1. Use proper canning techniques.

Make sure your food preservation information is always current with up-to-date, scientifically tested guidelines. Don't use outdated publications or cookbooks, even if they were handed down to you from trusted family cooks.

You can find in-depth, step-by-step directions from the following sources:

- [The National Center for Home Food Preservation](#)
- [USDA Complete Guide to Home Canning](#)
- The [state and country extension service](#) of your state university

## 2. Use the right equipment for the kind of foods that you are canning.

Always use a properly sized pressure canner that meets [USDA recommendations for pressure canning](#) when canning low-acid vegetables (green beans, potatoes, and corn), meat, seafood, and poultry. Contact your local Cooperative Extension Service Office to find out if your pressure canner is recommended. Pressure canning is the only recommended method for canning low-acid foods. Do not use boiling water canners for low-acid foods because they will not protect against botulism poisoning.

Low acid foods have pH values higher than 4.6. They include red meats, seafood, poultry, milk, and all fresh vegetables (except for most tomatoes).

## Methods to Ensure Safe Canning Process

- Use a recommended pressure canner that holds at least four one-quart jars sitting upright on the rack.
- Be sure the gauge of the pressure canner is accurate
- Clean lid gaskets and other parts according to the manufacturer's directions.
- Vent the pressure canner before pressurizing and follow the recommended cooling steps.
- Use up-to-date process times and pressures for the kind of food, size of jar, and the method of packing food in the jar.

