

# The “THREE TYPES” of Polio: Vaccination Caution for Polio Survivors

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With the current reports of an American man in lower New York State paralyzed by polio and poliovirus found in wastewater in lower New York State, New York City and Long Island, there have been no statements by state or federal officials regarding the implications of community spread of the virus and whether polio vaccination – either all four doses or a single booster dose - is recommended for polio survivors.

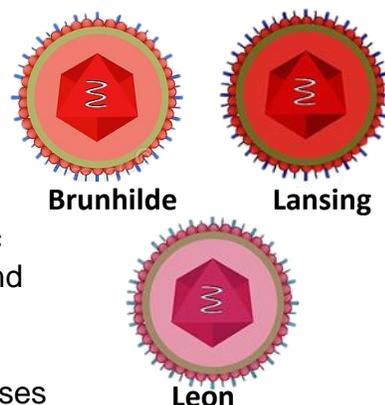
Polio survivors should be very careful about their belief, often without evidence or as part of family lore, regarding the “types” of polio they had when deciding about the need for vaccination.

During the polio epidemics, and still today, there is confusion about there being three types of poliovirus and three types of clinical polio.

**THREE POLIOVIRUS TYPES.** There are three polioviruses you could have had:

- Type I (Brunhilde, the epidemic strain that caused most cases of polio),
- Type II (Lansing),
- Type III (Leon).

Each of the three types of poliovirus is genetically different and therefore each requires its own unique polio vaccine type to get the body to generate the specific antibodies needed to counteract each type of virus. The injectable (killed virus) and oral (live, but attenuated virus) polio vaccines contain all three polio types.



**THREE TYPES OF CLINICAL POLIO.** Unfortunately, the three different polioviruses get confused with the “three types of clinical polio”:

- Bulbar Polio indicates the virus affected your brain stem and would cause trouble swallowing and breathing;
- Spinal Polio indicates the virus affected your spinal cord and would cause limb paralysis;
- Bulbar-Spinal Polio indicates the virus affected both your brain stem and your spinal cord, which would cause limb paralysis and trouble swallowing and breathing.

Some polio survivors were told that the body areas affected were determined by infection with specific types of poliovirus. So, someone who had bulbar polio might have been told that they had *one* type of poliovirus, while someone with bulbar-spinal polio might have been told that they had *two* types of poliovirus. Any of the three polioviruses could have caused spinal, bulbar or bulbar-spinal symptoms.

The symptoms that you experienced were *not* determined by the type of poliovirus that got into your body.

When you talk to your doctor about the need for vaccination or a booster dose, don't depend on your original polio symptoms or family memory to determine the type of poliovirus you had and type of vaccine you may need now.

**FOR THOSE IN THE U.S. - CHECK YOUR STATE'S HEALTH DEPARTMENT AND CDC WEBSITES AND THEN TALK TO YOUR DOCTOR ABOUT THE NEED FOR VACCINATION.**

- Adults who are unvaccinated or are unsure if they have been fully immunized (including polio survivors, who likely had only one type of polio) would need a total of 3 vaccine doses.
- Adults who only have had 1 or 2 doses of the polio vaccine would need to get all 3 doses.
- Adults who are at increased risk of exposure to poliovirus and who have previously completed a routine series of polio vaccine can consult with a health care provider and receive one lifetime "booster" dose of Injectable polio vaccine.

Source: [www.cdc.gov/vaccines/vpd/polio/hcp/recommendations](http://www.cdc.gov/vaccines/vpd/polio/hcp/recommendations)