



Three Types of Poliovirus

By: [Dr. Richard Bruno, HD, PhD](#)
Director, International Centre for Polio Education
www.postpolioinfo.com

On the topic of there being THREE Types of Polio

Question: If a person had polio can that person get it again or be a carrier? And is it true that are three polioviruses causing different types of polio?

Dr. Bruno's Response: Get polio more than once? Yes. There are three polioviruses. You could get Type I, Type II and Type III. If you'd had a given type of poliovirus you'd have enough antibodies (if not immunocompromised) not to be a carrier of that poliovirus and shed virus if you were infected again, nor would you get symptoms.

Is it true that each of the three polioviruses caused three different types of polio? No. But there has always been confusion about there being "three types of polio: bulbar, spinal and bulbar-spinal." Genetically, there are three different types of poliovirus as described above. Each type therefore requires a different polio vaccine made from each of the three viruses to generate the specific antibody's needed to counteract each.

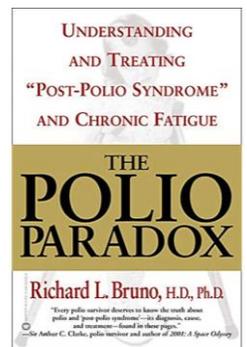
Anatomically, there aren't three types of polio. Everyone who had paralytic polio had some degree of damage to their spinal cord and brainstem. So everyone who had paralytic polio, and many who had polio but showed no symptoms at all ("non-paralytic" polio), had bulbar and spinal polio. This is all covered in detail in [The Polio Paradox](#).

Excerpt from the Polio Paradox (page 22):

"There are three different types – each named for the location where it was found, wither in a city or inside a person: Brunhilde, Lansing and Leon. The three types are different because your immune system makes a different antibody for each. But, they are also different in terms of how common they are and their ability to cause harm.

- Almost all of history's polio epidemics have been the result of Type 1 poliovirus, which caused leg, arm and sometimes breathing muscle paralysis.
- The Type 2 virus seems to have been least likely to cause paralysis but may have damaged the "stem" at the bottom of the brain, just above the spinal cord and was responsible for huge outbreaks of "nonparalytic" polio and something called the "Summer Grippe" (See Chapter 17).
- Type 3 poliovirus, the most rare, also caused leg and arm paralysis but was most likely to produced so-called "bulbar" polio, in which the bulb or stem of the brain was severely damaged. This damage caused difficulties with swallowing, breathing and blood pressure that were sometimes fatal."

In addition to the Polio Paradox, you can find numerous articles under the topic "poliovirus" in the [Encyclopedia of Polio and PPS](#).



Check out [The Encyclopedia of Polio and Post-Polio Sequelae](#) on our website.

It contains all of Dr. Richard Bruno's newly published and updated: articles, monographs, commentaries, videos and "Bruno Bytes" (Q & A articles) and links to his book.

You can easily access it from Dr. Bruno's website as well: www.postpolioinfo.com