Polio strain highlights importance of strengthening vaccine effectiveness

The cause of an unusually severe outbreak of poliomyelitis that hit Congo in 2010 has been identified: a strain of poliovirus that sometimes resists the immune responses mounted by vaccinated people.

Fortunately, people who have recently received the live, oral polio vaccine, which provides the strongest immunity, are protected against the strain. Its spread in Congo was stopped by orally re-vaccinating the entire population of the surrounding areas.

However, a new study, published on August 18 in the *Proceedings of the National Academy of Sciences*, suggests that a portion of those who receive the weaker, dead vaccine would have been vulnerable. This vaccine is now common in developed countries. What's more, the researchers who characterized the strain warn that something similar may appear again during the final stages of the global effort to eradicate polio.

Although the world is on the cusp of stamping out polio completely through vaccination, periodic outbreaks still occur. The 2010 outbreak infected 445 people, killing almost half of them. It is still not clear how many of those who died were vaccinated, but the unusually high rate of deaths puzzled scientists.

Read the full, original story: Congo polio strain can resist vaccine