

Two polio vaccines may give greater protection against crippling disease

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This April 7, 2014 file photo shows a Yemeni health worker giving a boy a polio vaccine during a house to house polio immunization campaign in Sanaa, Yemen. Polio has been wiped out of many countries thanks to massive use of oral vaccine. But new research suggests trying a one-two punch where the disease is still a threat: Giving a single vaccine shot to children who've already gotten the drops boosted their immunity. World Health Organization officials say the combination strategy could help finally eradicate polio. (AP Photo/Hani Mohammed, File)

(HealthDay)—Using two types of polio vaccines seems to provide stronger protection against the disease and may boost efforts to eradicate polio, a new study shows.

The research involving nearly 1,000 children in India found that giving the Salk inactivated poliovirus vaccine (IPV) to those who had already been given the Sabin live-attenuated oral poliovirus vaccine (OPV) appeared to improve their immunity to the virus that causes [polio](#).

The findings, reported in the Aug. 22 issue of the journal *Science*, could prove crucial in eliminating the world's remaining pockets of polio in places such as Iraq and Syria.

"This study revolutionized our understanding of IPV and how to use it in the global eradication effort to ensure children receive the best and quickest protection possible from this disease," study senior author Dr. Bruce Aylward, assistant director-general for Polio, Emergencies and Country Collaboration at the World Health Organization, said in a journal news release.

"IPV should be used to accelerate the eradication of the virus in populations that have limited access to vaccination," study author Dr. Hamid Jafari, WHO's director for polio operations and research, said in the news release. "The study has also provided the evidence for use of IPV among travelers to limit further international spread of the virus."

Since [polio vaccine](#) was developed in the 1950s, efforts to eradicate polio have relied mainly on OPV rather than IPV. However, these findings show that giving both vaccines to patients may be the best approach.

"The global eradication effort is at a critical crossroad," Jafari said. "Endemic polio is increasingly geographically restricted to populations in insecure and inaccessible areas. Yet the virus in these areas persists with incredible tenacity and threatens the increasingly vulnerable populations in polio-free countries with weak or conflict-affected health systems."

More information: "Efficacy of inactivated poliovirus vaccine in India," by H. Jafari et al. *Science*, 2014. www.sciencemag.org/lookup/doi/10.1126/science.1255006

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