

Experts warn that Syria polio outbreak may threaten Europe

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Two infectious disease experts have written to The Lancet warning that a new outbreak of polio (due to infection with wild-type polio virus 1, WPV1) in Syria, recently confirmed by WHO, might endanger neighbouring regions, including Europe.

Professor Martin Eichner, of the University of Tübingen, and Stefan Brockmann, of Reutlingen Regional Public Health Office, in Germany, explain that most European countries today use inactivated polio vaccine (IPV) rather than oral [polio vaccination](#) (OPV), which has been discontinued in most areas due to rare cases of it causing acute flaccid paralysis (AFP), the main symptom of polio.

IPV is highly effective in preventing polio disease, but provides only partial protection from infection. In Europe, where the circulating polio viruses have been eliminated for decades, transmission can only be prevented by IPV if [vaccination coverage](#) is continually very high, and if the population has high hygienic standards and low crowding. As large numbers of refugees are fleeing Syria and seeking refuge in neighbouring countries and Europe, there is now a chance that the virus could be reintroduced into areas which have been polio-free for decades.

The authors warn that in regions of Europe where vaccination coverage is low (including Bosnia and Herzegovina, Ukraine, and Austria), herd immunity may be insufficient to prevent sustained transmission if the [polio virus](#) is reintroduced into the community. Moreover, because only one in 200 WPV1 infections causes symptomatic disease, the authors

calculate that the virus might be circulating for nearly a year before a single case of AFP arises and an outbreak can be detected, even though by this time hundreds of individuals might carry the infection.

According to the authors, "Vaccinating only Syrian refugees—as has been recommended by the European Centre for Disease Prevention and Control—must be judged as insufficient; more comprehensive measures should be taken into consideration."

"Oral polio vaccination provides high protection against acquisition and spreading of the infection, but this vaccine was discontinued in Europe because of rare cases of vaccination-related acute flaccid paralysis. Only some of the European Union member states still allow its use and none has a stockpile of oral [polio](#) vaccines. Routine screening of sewage for poliovirus has not been done in most European countries, but this intensified surveillance measure should be considered for settlements with [large numbers](#) of Syrian refugees."

More information: [www.thelancet.com/journals/lan... \(13\)62220-5/abstract](http://www.thelancet.com/journals/lan... (13)62220-5/abstract)

Provided by Lancet

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