

Will polio be eradicated?

What it is

Poliomyelitis (“polio”) is a virus that spreads from person to person via the oral-fecal and oral-oral routes. **Ninety percent of polio infections are asymptomatic.** Paralytic polio occurs in less than one percent of cases and causes temporary or permanent paralysis. In the long-term, paralytic polio survivors may experience skeletal deformities, movement disability, or post-polio syndrome. A polio vaccine was developed in the 1950s but **there is no cure and no treatment for polio.** The high transmission season for wild poliovirus began in May and will continue until December.

Everyone – adults and children – can contract polio.

Full immunity requires vaccination or acquired immunity against all three serotypes of poliovirus:

1. **Poliovirus type 1 (PV1)** – most common type; most risky for paralysis
2. **Poliovirus type 2 (PV2)**
3. **Poliovirus type 3 (PV3)**

Currently, only 0.1% of the world is still vulnerable to polio. Thus, polio eradication is a very real and imminent possibility.

Outcome	Proportion of cases
Asymptomatic	90-95%
Minor illness	4-8%
Nonparalytic aseptic meningitis	1-2%
Paralytic polio	0.1-0.5%
- Spinal polio	- 79%
- Bulbospinal polio	- 19%
- Bulbar polio	- 2%

Outcomes of poliovirus infection (Hamborsky, McIntyre, and Wolfe, 2009)

Where it is

In 1988, the World Health Organization, UNICEF, and The Rotary Foundation launched a global effort to eradicate polio. As a result, **the number of annual diagnosed cases has fallen from 350,000 in 1988 to a low of 223 cases in 2013.** This year India – a country that once had millions of cases – was officially declared polio-free. Unfortunately, the poliovirus still exists in ten countries, primarily in South Asia and Africa. These are: Afghanistan (brought from Pakistan), Cameroon, Equatorial Guinea (brought from Cameroon), Ethiopia, Iraq (brought from Syria), Kenya, Nigeria, Pakistan, Somalia, and Syria.

World health “emergency”

Last year, the number of polio cases jumped to 416, and on 5 May 2014, the World Health Organization (WHO) announced that the spread of polio is a **world health emergency** and called outbreaks of the disease in Asia, Africa and the Middle East “extraordinary.” Already **74 polio cases have been recorded in 2014**, a huge increase compared to the 24 cases reported at this time last year (January 1 – April 30).

Of particular concern, Pakistan, Syria, and Cameroon are allowing poliovirus to spread across their borders into Afghanistan, Iraq, and Equatorial Guinea.

Pakistan

With 59 of this year’s 74 infections, Pakistan – and in particular, the northwestern border with Afghanistan – is the **world’s riskiest place for polio infection.** Only 26% of children in the Federally Administered Tribal Areas and 18% in Balochistan are fully immunized. In

addition to the challenge of reaching remote areas, there is cultural opposition to vaccination and vaccinators have been targeted by violence; *more than 30 have been killed* since 2012.

Syria

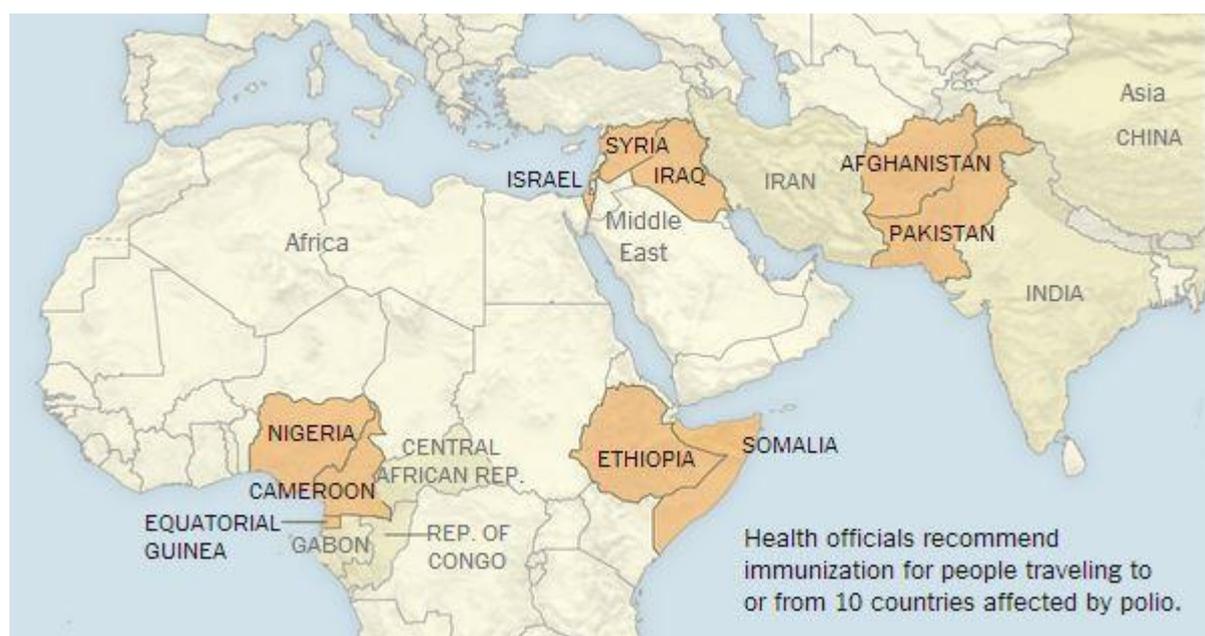
Before the war began in 2011, Syria's immunization rate was 90%. Due to displacement, however, *an estimated 700,000 children have not been immunized* and approximately 300,000 are in areas blocked off by the government or too dangerous to reach. Polio cases due to the Pakistan poliovirus strain were reported last year for the first time since 1999.

Cameroon

Approximately 40% of children in Cameroon have not been fully immunized. According to the WHO, the country is at high risk of exporting the virus to neighboring countries because of (1) continued poliovirus circulation; (2) surveillance gaps; and (3) influx of vulnerable *refugees from the Central African Republic*. Poliovirus spread to Cameroon from Nigeria, where incidence last year was the highest in the world.

Confirmed polio cases in 2014		
Country	Cases	Transmission
Pakistan	59	Endemic
Nigeria	2	Endemic
Afghanistan	4	Importation
Equatorial Guinea	3	Importation
Iraq	1	Importation
Cameroon	3	Importation
Syria	1	Importation
Ethiopia	1	Importation
Somalia	0	Importation
Kenya	0	Importation
Total	74	

Source: WHO, May 6, 2014, cited in <http://www.polioeradication.org/dataandmonitoring/poliothisweek.aspx>



For more information

- ❑ [Global Polio Eradication Initiative](#)
- ❑ [GAVI CSO Constituency news site](#)
- ❑ [End Polio Now \(Rotary International\)](#)
- ❑ [World Health Organization polio information site](#)
- ❑ [WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus](#)
- ❑ [WHO South-East Asia Region certified polio-free \(WHO press release\)](#)
- ❑ [Polio fact sheet 2013-2014](#)