

April 2019 Polio Newsletter

to all Rotarians in Rotary District 5040

Surveillance - the Key to Ending Polio

Polio surveillance underpins the entire polio eradication initiative. It identifies where and how the wild poliovirus is still circulating, or to verify when the virus has been eradicated in the wild. Polio surveillance identifies new cases and detects importations of the virus. Surveillance is an on-going process and focuses the polio effort response strategy. See the **attached map** of polio in Pakistan dated April 1st 2019, which shows confirmed cases of polio and positive environmental samples.

Acute Flaccid Paralysis (AFP) Surveillance



Nationwide AFP (acute flaccid paralysis) surveillance is the gold standard for detecting cases of poliomyelitis. AFP is an abnormal condition characterized by the weakening or the loss of muscle tone. It may or may not be caused by the poliovius. The four steps of surveillance are:

- finding and reporting children with acute flaccid paralysis (AFP)
- transporting stool samples for analysis
- isolating and identifying poliovirus in the laboratory
- mapping the virus to determine the origin of the virus strain.



Environmental surveillance involves testing sewage or other environmental samples for the presence of the poliovirus. Environmental surveillance often confirms wild poliovirus infections in the absence of cases of paralysis. Systematic environmental sampling (e.g. in Egypt and Mumbai, India) provides important supplementary surveillance data. Ad-hoc environmental surveillance elsewhere (especially in polio-free regions) provides insights into the international spread of the poliovirus.

The Global Polio Laboratory Network (GPLN): 146 labs in 92 countries.



Effective polio surveillance requires virologists, epidemiologists, and clinicians backed up by a global network of laboratories. The Global Polio Laboratory Network (GPLN) was established in 1990 by WHO and national governments. It consists of 146 WHO accredited polio laboratories, in 92 countries across the six WHO regions of the world. The labs follow WHO-recommended procedures for detecting and characterizing polioviruses from stool and sewage samples collected from AFP cases and the environment. The GPLN processes over 220 000 stool samples from AFP cases (and their contacts), and more than 8 000 sewage samples per year.

Polio Surveillance: You can read MORE and watch an animated video.

Environmental Surveillance

Why the last mile is so important



Seven questions with Michael K. McGovern, International PolioPlus Committee chair. Rotarians should continue to be optimistic and to support

eradication. We also need Rotarians to recognize the need for continued funding and advocating. We can't lose sight of the goal. Read <u>MORE</u>.

Rotaract Club supports Polio



Vancouver Young Professionals Rotaract raised funds for polio at their pub & trivia night on March 12th. Hosted by Red Truck Beer, the event raised \$1,250 and after the 2x match from the Gates Foundation, will provide funds for 4,600 doses of polio vaccine.

Rotary Polio Walk 2019 - mark the date.



The 2019 Polio Walk will take place on May 26th, at the River Market, New Westminster. The route is 2K or 5K on the boardwalk by the Fraser River. Registration is at 9am, walk begins at 10am.

More information HERE.

Country Updates (as of April 3rd, 2019).

since the February newsletter.

- Afghanistan:
 - One new case of WPV1 has been confirmed. The number reported in 2019 is now 3.
- Pakistan:
 - Two new cases of WPV1 have been confirmed. The total for 2019 is now 6.
- Nigeria:
 - No new cases of the wild polio virus have been detected since 21-Aug-2016.

Countries	YTD 2019		YTD 2018		Total 2018	
	WPV	cVDPV	WPV	cVDPV	WPV	cVDPV
Afghanistan	3	0	7	0	21	0
DR of the Congo	0	0	0	3	0	20
Nigeria	0	4	0	0	0	34
Pakistan	6	0	1	0	12	0
Other non-endemic countries	0	0	0	0	0	51
TOTAL	9	4	8	3	33	105

Case breakdown by Country (as of April 3rd, 2019).

Reference Links

- End Polio Now
- Global Polio Eradication Initiative
- The Bill and Melinda Gates Foundation



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