





# World ≥ Polio ≥

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World Polio Day provides an opportunity to promote and sustain the commitment of all actors for the eradication of polio and the certification process.

In the last decade, the overall incidence of polio cases has decreased more than 99%.



As of October 2018, only 19 cases of wild poliovirus (WPV) and 53 cases of circulating vaccine derived poliovirus (cVDPV) have been detected worldwide.

Since 1991, the Region of the Americas has been free from the circulation of wild poliovirus. In 2017, there was a decrease in the regional vaccination coverage against polio.



The analysis of coverage at the subnational and local levels demonstrates the urgent need to implement vigorous actions to reduce the pockets of susceptible populations. This situation requires the immediate attention of health authorities in order to reduce these gaps as soon as possible.

The risk of importing a case of WPV or the emergence of cVDPV persists, so it is necessary to improve compliance with epidemiological surveillance quality indicators and be prepared to detect a polio event or outbreak in a timely manner.



Polio is still a risk and we must be prepared.







## 

01



#### **Moving towards eradication**

At the beginning of the 20th century, polio was one of the most feared diseases, paralyzing hundreds of thousands of children each year. However, shortly after the introduction of effective vaccines in the 1950s and 1960s, polio was controlled and is now practically eliminated as a public health problem.

In 1988, when the Global Polio Eradication Initiative (GPEI) began, polio paralyzed more than 1,000 children every day around the world. Since then, 2.5 billion children have been immunized, backed by an international

investment of more than 14 billion dollars. Currently the worldwide incidence of polio cases has decreased by 99%. However, the polio endgame is still a difficult task to face.

The commitment of the endgame is to complete the eradication and containment of all wild and vaccine related polioviruses, so that no child will suffer from paralytic poliomyelitis again.

Vaccination is the only way to **prevent polio** in the family and among the community.

#### 02



World Polio Day commemorates the birth of Jonas Salk, who led the team that developed the first polio vaccine. This day represents an opportunity to draw the attention of leaders, partners, benefactors, journalists, social leaders, defenders of the right to health, providers of health services, parents and caretakers of children to maintain the commitment to polio eradication and the certification process.

Every October 24th is an opportunity to promote vaccination; sensitize the public and health personnel; advocate for health systems to comply with the international standards for vaccination coverage, epidemiological surveillance, and poliovirus containment;

and urge countries to be prepared to respond to a possible event or outbreak of polio in their country.

It is a time to remember the victims of polio, to honor the survivors and heroes that made eradication possible, and to promote the importance that all children, in every corner of the Americas, exercise their unrestricted right to access safe, effective and quality vaccines.

Finally, it is a space for reflection and self-evaluation to avoid complacency and overconfidence for the achievements that have been made, and to remember that as long as there is still one case of polio in the world, the risk persists for the countries of the Region.

#### 03



### **Global Situation:** the last mile of a marathon is the toughest

During 2018 (data through 3 October), worldwide, 19 cases of wild poliovirus and 53 cases of circulating poliovirus derived from the vaccine (cVDPV) were detected. The cases of wild poliovirus occurred in two endemic countries: Afghanistan and Pakistan; of the

53 cases of cVDPV, 14 occurred in the two endemic countries and 39 in non-endemic countries (Democratic Republic of the Congo, Niger, Nigeria, Papua New Guinea and Somalia). The common denominator continues to be the fragility of the coverages.

#### 04



### **Situation in the Americas:** Maintaining the achievements

The Region of the Americas remains free of the circulation of wild poliovirus. The last case of polio was reported in 1991; since then, for over 27 years, all countries and territories of the Region have remained free of this disease.

In 2017 there was a decrease in polio vaccination coverage at the regional level. The existence of large

pockets of unvaccinated children in some countries is disturbing; this situation requires the immediate attention of the health authorities in order to reduce these gaps as soon as possible. Polio is still a risk and we must be prepared.

05



In the Americas, the certification process for the global eradication of polio, led by the Regional Certification Commission and the National Certification Committees, with the support of PAHO as the technical secretariat, has begun with the verification of the information provided by countries.

The components of polio eradication certification that the countries present a progress report on are: i) population immunity, ii) epidemiological surveillance, iii) poliovirus containment, iv) risk assessment, v) risk mitigation, and vi) outbreak preparedness.

#### Polio eradication continues to be a priority on the global agenda

To achieve this objective requires global coordination and multisectoral national commitment.



"Ministers of Health recognize the importance of eradicating polio and building on best practices and assets to strengthen routine immunization programs and health systems, while also planning for an eventual transition of assets".

Declaration of the G20 Health Ministers, Mar del Plata - Argentina, October 4, 2018



Is it possible to eradicate polio?

Yes, it is possible. Since the goal of polio eradication was established in 1988, the number of cases has decreased by over 99% and there are only three countries that have never stopped the endemic transmission of polio. Currently, more than 80% of the world's population lives in regions where polio elimination has been certified.

Of the three known types of wild polioviruses, only wild poliovirus type 1 circulates. Wild poliovirus type 2 was declared eradicated in 2015. Type 3 was isolated for the last time in 2012.

The last case of polio caused by a wild poliovirus in the Region of the Americas was reported in Peru in 1991.

If polio is no longer a public health risk, is it necessary to keep vaccinating children?



Yes. Despite the significant progress that has been made since 1988, as long as there is one child infected with poliovirus, children in all other countries remain at risk of contracting the disease if they are not vaccinated.

## What is vaccine derived poliovirus?

The oral polio vaccine (OPV) contains an attenuated vaccine virus that activates an immune response in the body. After the administration of OPV, the attenuated vaccine virus replicates in the intestine for a limited time, generating the production of antibodies that confer immunity or protection. During that time, the vaccine virus is also excreted in the stool. In areas with inadequate sanitation, the excreted vaccine virus can spread to the nearby community, and this can confer protection to other children through indirect immunization.

In rare cases, in communities with low vaccination coverage, the excreted vaccine virus can continue to circulate for a longer period, and the longer it survives, the more genetic changes it undergoes. In even more rare cases, the vaccine viruses can undergo genetic changes that confer the ability to produce paralysis, thus creating the so-called circulating vaccine derived poliovirus (cVDPV).

Before 2016, more than 90% of cVDPV cases were due to the type 2 component of the trivalent oral polio vaccine (tOPV). Considering this situation, in April 2016, trivalent OPV was replaced with bivalent OPV in immunization programs worldwide. This switch was successfully done in the Region of the Americas.

In the case of poliomyelitis, what is the difference between an 'event' and an 'outbreak'?



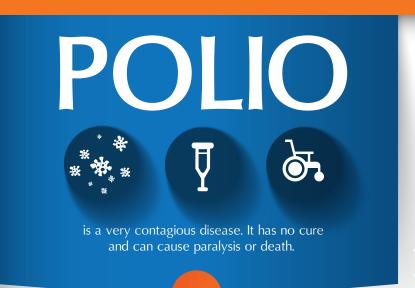
**Event:** when any type of polio virus is detected, be it wild poliovirus (WPV), vaccine derived poliovirus (VDPV), immunodeficiency-related vaccine-derived poliovirus (iVDPV) or ambiguous (aVDPV) [that is to say when it's origin is not known]. An event can occur in a person with acute flaccid paralysis or in an asymptomatic person; or could be detected in environmental samples. It is called an event because there are no signs of transmission; that is, it has not spread to other people or to other places.

Outbreak: any detection of poliovirus as described above, with indications of transmission, meaning it has spread in more than one person (symptomatic or not) or place.

#### Sources:

- World Health Organization. Health Topics, Poliomyelitis. Available at: www.who.org
- Global Polio Eradication Initiative. Available at: www.polioerradication.org
- Pan American Health Organization. Polio Eradication, Practical Guide.
- Standard operating procedures: Responding to a poliovirus event and outbreak. Document adapted by PAHO from an original document prepared by WHO.
- Weekly Polio Bulletin, PAHO / WHO Vol.33 N. 37

#### Communicating with the public is essential



Listen, talk and promote vaccination!



All children should be vaccinated at 2, 4 and 6 months of age.



Later, they should receive two booster doses. Compliance with the vaccination schedule is very important. The vaccination card helps to remind parents when the child should receive their vaccinations.



Health personnel are well trained to answer questions about polio and vaccination. Check with them if you have questions.

### **Vaccination**

Is the only way to prevent polio in the family and among the community.





Polio vaccination is done along with other vaccines. In a single day, the child is protected against multiple diseases.

On World Polio Day we celebrate the great advances that humanity is making to eradicate this disease. It is an opportunity to inform, persuade and discuss the importance of disease prevention and vaccination. Communicate with parents and the community, provide them with this information, ask them to share it, and ask if they have questions and to take action.



