

IMMUNIZATION WEEK

National Immunization Awareness Week 2020



The Impact of the Novel Coronavirus Pandemic on Vaccine-Preventable Diseases

With SARS-CoV-2 (the virus that causes the disease COVID-19) spreading rapidly around the world, news headlines are dominated with coverage of the pandemic. But what about the outbreaks of vaccine preventable diseases that continue to occur in many countries? And what does the novel coronavirus pandemic mean for immunization programs in those countries?

As the COVID-19 pandemic progresses, it is forcing countries to allocate finite health resources to preventing the spread of the novel coronavirus and treating the acute cases as they arise. However, other life-saving public health measures, such as routine vaccination, may fall to the wayside as a result. Many countries around the world are battling vaccine-preventable diseases such as measles and polio while simultaneously responding to COVID-19 cases (UNICEF, 2020a).

Health care systems may collapse under the strain of both a novel coronavirus outbreak and vaccine-preventable diseases, leading to rises in mortality in those countries (WHO, 2020a). It would be detrimental to those populations if a shift towards COVID-19 response is a shift away from



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vaccination efforts. In light of physical distancing measures, Governments are pausing mass immunization campaigns to prevent the spread of COVID-19, a policy that is making unvaccinated children especially vulnerable to measles, cholera and polio.

According to United Nations health agencies, more than 117 million children could miss out on immunization against measles as the novel coronavirus pandemic increases pressure on health services (Reuters, 2020). Amidst the chaos of COVID-19 and conversations about vaccine development against SARS-CoV-2, it is imperative that we pause to consider the other global pandemics going on in the background. Diseases for which we *already have vaccines* still cause significant morbidity and mortality around the world, with children being the most affected. Once the dust settles around COVID-19, we must intensify immunization programmes and prioritize the vulnerable children living in endemic countries.

Measles

Measles is a highly contagious disease caused by a virus. It causes fever, cough, rash, runny nose, red eyes, and can lead to serious complications like pneumonia and brain inflammation. Before the measles vaccine was introduced in 1963, major epidemics occurred approximately every 2–3 years and measles caused an estimated 2.6 million deaths each year (WHO, 2019a).

Measles today

More than 140 000 people died from measles in 2018 – mostly children under the age of 5 years, despite the availability of a safe and effective vaccine (WHO, 2019a). In the first six months of 2019, reported measles cases were the highest they have been in any year since 2006, with major outbreaks in countries around the world (WHO, 2019a). A measles outbreak last year infected 332,000 people in the Democratic Republic of the Congo (WHO, 2020b). This led to 6200 deaths, of which 85% were children under five years of age. (WHO, 2020b).

DID YOU KNOW...



Measles is **6 TIMES**
more infectious than
influenza.

1 IN 5 CASES

will develop **complications**, such as ear infection, pneumonia, permanent deafness, encephalitis or **even death**.



Children under 5 and adults over 20 are most at risk of **serious complications**.

What can be done?

Vaccinate! Between 2000 and 2018, measles vaccination resulted in a 73% decrease in measles deaths worldwide (WHO, 2019a). 99% of children who receive two doses of the measles vaccine develop immunity (WHO, 2019b).

Polio

Polio is caused by a virus that invades the nervous system, and can cause total paralysis in a matter of hours (WHO, 2019d). The virus is mainly transmitted person-to-person through the faecal-oral route or, less frequently, by contaminated water or food (WHO, 2019d). Poliomyelitis (polio) mainly affects children under 5 years old (WHO, 2019d). 1 in 200 infections leads to irreversible paralysis; 5% to 10% of those who become paralyzed will die when their breathing muscles become unable to function (WHO, 2019d).

Polio today

Polio is rarely seen anymore due to robust immunization programs, but polio does still exist! However, cases of polio have decreased by over 99% since 1988 when the vaccine was introduced. This is a drop from over 350,000 cases to 33 reported cases in 2018 (WHO, 2019d).

Despite this hard-won progress, as long as a single child remains infected with poliovirus, children in all countries are at risk of contracting the disease if they aren't immunized against polio (WHO, 2019d). Failure to eradicate polio from these last remaining strongholds could result in as many as 200,000 new cases every year, within 10 years, all over the world (WHO, 2019d).

Polio: What you see is only the tip of the iceberg

The poliovirus is sneaky, silent and highly contagious.

It doesn't respect boundaries or social class - it is an equal opportunity paralyzer.

Even 1 case is an outbreak...

for every one case of polio **200** more kids are infected

What can be done?

There is no cure for polio. Polio vaccine, given multiple times, can protect a child for life (WHO, 2019d). Many regions have successfully eradicated polio using proven immunization strategies, including India in 2011 and South East Asia in 2014 (WHO, 2019d). Failure to implement these approaches, however, leads to ongoing virus transmission. Endemic transmission of poliovirus is continuing to cause polio in Afghanistan and Pakistan (WHO, 2019d).

So what should countries do to prevent these vaccine-preventable diseases during the novel coronavirus pandemic?

In light of the novel coronavirus pandemic, the WHO has called for countries to prioritize routine immunization of children as an essential service, as well as some adult vaccinations for groups most at risk (WHO, 2020c). If immunization services must be suspended, the WHO recommends urgent catch-up vaccinations as soon as possible, prioritizing those most at risk (WHO, 2020c).

This paper has identified just a few of the many vaccine-preventable diseases that are an ongoing threat to people around the world. It will be important to continue to address vaccine-preventable diseases as countries prepare for, and respond to, the novel coronavirus pandemic. While there is not yet a vaccination that prevents infection with SARS-CoV-2, there are many safe, effective vaccinations that can prevent the unnecessary morbidity and mortality of vaccine-preventable diseases.

TEST YOUR KNOWLEDGE ON VACCINATION !

Click here to enter the chance to win a prize from I Boost Immunity

[Immunization Quiz](#)

EARN A VACCINE FOR SOMEONE IN NEED BY ANSWERING A QUIZ!

Click here to beat the average score, and I Boost Immunity will donate one vaccine to someone in need through UNICEF Canada. You could immunize a whole family, or even a village!

[Beat the quiz, Earn vaccines !](#)

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