Measles reappears in Canada, draws needed attention

ADAM R HOUSTON; JASON NICKERSON

As a medical organization, Doctors Without Borders/ Medecins Sans Frontieres (MSF) is no stranger to measles, which has long been a serious and ongoing concern in many places where MSF operates.

However, new challenges, such as the disruption of health systems caused by COVID-19, have underscored the importance of measles as a public health concern. A recent surge in cases in countries such as Canada from which it had largely disappeared has helped draw new attention to this old disease.

As expensive providing advice to MSF and advocating toward Canadian public health officials on emerging health threats, we have seen for years the serious impacts of measles in humanitarian crises, and the looming risk to Canadian and global public health.

We hope renewed attention to the risk and consequences of measles outbreaks in Canada will extend to ensuring the resources necessary to tackle measles are made available everywhere they are needed.

Measles is one of the most infectious diseases known to science; nine out of 10 susceptible people will become infected if exposed. Fortunately, widespread use of a highly effective vaccine means most people are protected.

Vaccination is such an effective tool that, in Canada, measles has been considered eliminated since 1998. This means endemic transmission was ended; all cases since that time have been the result of importation from elsewhere in the world.

However, 2024 has provided Canada with an unwelcome blast from the past, with more cases so far than in all of 2023, spread across multiple provinces. Worryingly, some of these cases have not been tied to travel, meaning community transmission maybe occurring.

In short, measles is emerging as a public health problem in Canada once again. The risk of measles, and the global nature of its resurgence, was underscored when Dr. Theresa Tam, Canada’s Chief Public Health Officer, issued a warning to Canadians travelling overseas about the risk of measles and the need to take precautions such as ensuring everyone is adequately vaccinated.

Any upsurge in measles is of real concern. In humanitarian settings like those where MSF operates, aggravated by poor living conditions and malnutrition, it can be disastrous. While it can affect adults, young children are at particular risk.

Measles can, and does, kill, even in well-resourced countries like Canada. Serious long-term complications include intellectual disabilities resulting from encephalitis (swelling of the brain) and hearing loss. Before widespread vaccination, measles was estimated to have been the cause of as high as 10 percent of cases of serious hearing loss. In lower-income countries, it also remains a leading cause of blindness in children.

Another characteristic of measles infection is it weakens the immune system, leaving those infected vulnerable to other diseases. For these reasons and more, vaccinating against measles is one of the first priorities for MSF teams in humanitarian emergencies, particularly in situations where people are forcibly displaced and living in crowded conditions like a camp.

In 2024, MSF is seeing record-breaking cases of measles in some of the places...
where our teams work, such as north-eastern Nigeria. A major factor is that disruptions to health systems during COVID-19 severely impacted routine childhood vaccinations, which fell dramatically around the world: nearly 40 million children missed a measles vaccine dose in 2021 alone.

Other vaccine-preventable illnesses such as diphtheria saw similar gaps in vaccination coverage emerge; MSF is currently responding to the largest ever outbreak of diphtheria in West Africa.

These gaps in coverage of vaccine-preventable diseases are having significant impacts on global public health. For several years, MSF has been warning of growing outbreaks of vaccine-preventable diseases in places where we work that have significant implications for people living there, but also for global public health—including impacts on countries susceptible to imported cases, such as Canada.

This is one reason why MSF has been advocating for more resources to be put towards catch-up vaccinations, to ensure all children up to at least age five who have missed some or all of their childhood vaccines have the chance to receive them.

The recent surge in measles cases in higher-income countries is unwelcome. It may, however, rekindle recognition of measles as the serious public health concern.

Adam R Houston and Jason Nickerson work in the faculty of law at the University of Ottawa.

THE CONVERSATION