Importance of Vaccinations

This month, the first case of polio in the U.S. in decades was detected in an individual in New York state. According to the Centers for Disease Control and Prevention (CDC), the U.S. has been polio-free since 1979 due to a successful vaccination program.

The CDC defines polio, or poliomyelitis, as a disabling and life-threatening disease caused by the poliovirus that spreads from person to person – and is highly infectious. While polio has been around for centuries, it began spreading widely in the U.S. in the 1900s. According to the World Health Organization (WHO), a major outbreak in New York City in 1916 killed more than 2,000 people, and the worst recorded outbreak in the U.S. occurred in 1952, killing more than 3,000 people.

While there were only six cases of polio reported globally in 2021, the WHO advises that as long as a single child remains infected with polio, children in all countries are at risk of contracting the disease – as it can easily be imported into a polio-free country and can spread rapidly among those who are not vaccinated.

The polio vaccine is the most effective way to protect yourself and others from the disease.

“I would say that if you are vaccinated, this newly discovered case of polio is most definitely less concerning. For children, we do like to give four doses and usually give it at two months, four months, between six and 18 months, and then again at four through six years of age,” says Dr. Safiat Amuwo, an OSF HealthCare internal medicine and pediatric physician.

According to the CDC, nearly 75 out of 100 people who get infected with polio will not have any symptoms. But it can be very serious, as it can infect your spinal cord, causing paralysis. The CDC adds that between two and 10 out of 100 people who have paralysis from a poliovirus infection die because the virus affects the muscles that help them breathe.

People who received the polio vaccine years ago may remember receiving it by mouth. This was called an oral poliovirus vaccine (OPV) that contained a weakened live virus. Today, however, the inactivated poliovirus vaccine (IPV) – which does not contain the live virus – is the only polio vaccine that has been used in the U.S. since the year 2000, and is given through a series of shots.

IPV is safe, effective, and eliminates the risk of vaccine-derived polio. If you or your child has not been vaccinated against polio, health experts urge you to do so.

“It is not too late to receive the polio vaccine. Adults receive a three series vaccination. For children who are catching up on vaccinations, we review the CDC guidelines to determine a catch-up vaccine schedule,” Dr. Amuwo explains.

Vaccination requirements for schools are put in place by state and local health departments. Most health departments require that children attending school and/or day care receive the polio vaccine.

Other required vaccines typically include: diphtheria, tetanus, and Pertussis (DTaP); measles, mumps, and rubella (MMR); and hepatitis B – to name a few. Furthermore, the American Academy of Pediatrics (AAP) strongly recommends immunizations as the safest and most cost-effective way of preventing disease, disability, and death.

Some parents are hesitant to vaccinate their children for a variety of reasons such as religious belief or personal beliefs and safety concerns. If you are hesitant about vaccinating your child, Dr. Amuwo recommends discussing your concerns with your child’s pediatrician who can talk through any concerns with you and help determine the best course action.

Even if your child is home schooled or does not attend day care, Dr. Amuwo advises parents to follow vaccine guidelines.

“In general, vaccines are important to protect the health of your child, your family members, and the community. It is also important to get vaccinated because there are some children who cannot become vaccinated for different reasons – perhaps a medical condition or specific illness,” says Dr. Amuwo.

A booster is not typically necessary for the polio vaccine. The CDC says, however, that adults who have had one or two doses of polio vaccine in the past could get the remaining doses regardless of how long it has been since your last one. The CDC adds that adults who are at increased risk of exposure to polio and who have previously completed the recommended vaccination series can receive one lifetime booster dose.

“If you are unsure if you received the polio vaccine in the past, you can always talk to your health care provider and they can obtain bloodwork for titers,” Dr. Amuwo advises.

Parents are urged to talk to their primary care provider about recommended vaccinations or to make an appointment for their child.