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Importance of Vaccines

Diseases such as measles, polio, cholera, and the seasonal flu can all be prevented with a vaccine. Vaccines are safe, effective ways to keep people from contracting these deadly diseases. Vaccines can come in the form of an injection or an orally taken substance. While some vaccines can cause mild side effects, such as soreness of the injection site or slight fever, the lasting benefits of vaccines far outweigh the temporary pain.

Vaccinating children is one key part in eliminating diseases. Some are becoming rare or extinct because there are no viable hosts for the disease. Although these diseases are more and more rare, it is still important to keep vaccinating against them. In Japan in 1974, there were only 393 cases of whooping cough due to almost 80 percent of children being vaccinated for the disease. Because people were thinking the vaccine was not needed anymore, only 10 percent of babies were vaccinated against whooping cough by 1976. The result was over 13,000 cases of whooping cough and 41 deaths in 1979. After infants were being vaccinated again, the number of whooping cough cases in Japan fell again. So, persistent vaccination for these diseases is absolutely necessary. Diseases that have been gone for years could come back if we stopped vaccinating people.

One such disease that has been eliminated from the United States through vaccinations is polio. Polio is caused by the poliovirus and attacks the central nervous system, causing paralysis.

The polio vaccine was available starting in 1955 and due to widespread immunity from the disease, there has not been a case of polio that originated in the United States since 1979. Again, especially with polio, it does not matter that there are no cases within the United States. If children in the U.S. are not vaccinated against polio, and just one case is introduced to an unvaccinated child, polio could make a comeback in the United States. Polio is still a common disease in Afghanistan, Nigeria, and Pakistan. It is being reintroduced to 18 other countries. As long as children around the world are going unvaccinated against this disease, it is a threat to everyone.

In recent years, there have been multiple measles outbreaks in the United States, despite the fact that the disease was declared eliminated from the country in 2000. There have been 1,261 confirmed cases of measles from January 1st to November 7th, 2019. Most of these cases are in unvaccinated people. In 2015, there was a measles outbreak that originated in Disneyland, which resulted in 147 cases of measles. It was proven that the measles virus that affected the people at Disneyland is the same one that caused a large outbreak in the Philippines in 2014. The Disneyland outbreak is believed to have been caused by an unvaccinated overseas traveler, who brought the measles to Disneyland, infecting other unvaccinated people. It is astonishing that so many cases of measles occur in the United States, as "It costs approximately one US dollar to immunize a child against measles." With a cheap, effective, and safe way to protect the nation against this disease, there should not be as many cases as there are.

There is no connection between autism spectrum disorder and vaccines. The study that was published in 1998 by Andrew Wakefield saying that the measles vaccine causes autism has since been retracted. It was based on "scientific misconduct," and therefore, had no place in the

scientific record. Four years after the original study, in 2002, Wakefield released another study saying how the measles vaccine causes autism, but this too was withdrawn from the scientific record. A study by the Center for Disease Control and Prevention in 2013 produced more evidence that there is no correlation between autism and vaccines. Many other studies, such as one from Brent Taylor published in The Lancet, a prestigious medical journal.

Vaccinations are a necessary step in our path to eradicating these preventable diseases. Without persistent use of vaccines, diseases that have previously gone extinct could come back. Get vaxxed!

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