

## Pharmacists Play Crucial Part in Measles Prevention

Pharmacists are in a unique position to educate parents on the importance of getting the measles-mumps-rubella (MMR) vaccine for their children and reminding adults to ensure they are up-to-date as well. Pharmacists are considered a highly trusted source of information about vaccination. Measles is a highly contagious disease that can spread very quickly when it reaches groups of people who are unvaccinated. Therefore, it's crucial for parents to understand the importance of timely vaccination and the risks measles can present.

They should also remember to ask families about their travel plans to other countries; MMR vaccine can be given to children as young as 6 months of age, if they are traveling internationally. Some adults may have missed out on vaccination in the past or may have only received one dose of measles vaccine, so adults should be reminded to get their MMR vaccine as well, including before international travel.

Pharmacists are encouraged to check the immunization registry in their state to obtain the patient's vaccination status and to ensure that any vaccines administered by the pharmacist are added to the state vaccine registry and communicated with patients' primary care provider.

### Measles in the U.S.

The U.S. measles vaccination program started in 1963. Before that time, about 3 to 4 million people got measles each year in this country. Of those people, 400 to 500 died, 48,000 were hospitalized, and 1,000 developed chronic disabilities from measles encephalitis. The U.S. was able to eliminate measles by 2000 because our vaccination program is very effective and our strong public health system quickly detects and responds to measles cases that are brought into the country. MMR vaccine is very effective, providing 97% protection with two doses.

Even though we declared that measles was eliminated from the United States, that doesn't mean we no longer have cases. Elimination means that measles is no longer considered an endemic disease with continuous, year-round circulation and transmission of the measles virus. Every year, measles cases are brought into the United States by unvaccinated people who get the disease while they are in other countries. Since 2000, the annual number of reported measles cases has ranged from a low of 37 cases in 2004 to a high of 1,282 cases in 2019.

Measles is still common in many parts of the world, including some countries in Europe, Asia, the Pacific, and Africa. Unvaccinated travelers that are infected with measles abroad continue to bring the disease into the United States; once they do, it quickly spreads when it reaches communities with groups of people who are unvaccinated. Most of the outbreaks in recent years have resulted from imported cases spreading in an unvaccinated population.

### Measles Transmission

Measles is one of the most contagious of all infectious diseases. About nine out of 10 susceptible people who have close contact with someone with measles will develop the disease. The virus spreads through direct contact with infectious droplets or through the air when an infected person breathes, coughs, or sneezes. Measles virus can remain infectious in the air for up to two hours after an infected person leaves an area. Infected people are considered to be contagious from four days before through four days after the rash appears.

If you encounter a patient with fever and rash, check their vaccination history and ask about recent international travel, exposure to people who recently traveled internationally, or if there is measles in their community. If you suspect measles, follow the [recommended guidelines](https://www.cdc.gov/measles/hcp/) ([www.cdc.gov/measles/hcp/](https://www.cdc.gov/measles/hcp/)) for isolating patients and reporting cases.

## Prevention of Measles in Exposed People

People exposed to measles who cannot readily show that they have [evidence of immunity against measles](http://go.usa.gov/3q38z) (<http://go.usa.gov/3q38z>) should be offered post-exposure prophylaxis (PEP) or be excluded from the setting (school, hospital, childcare). MMR vaccine, if given within 72 hours of initial measles exposure, or immunoglobulin (IG), if given within six days of exposure, may provide some protection or modify the clinical course of disease.

## CDC Needs Help From Pharmacists

Pharmacists are a crucial community source of information on vaccinations for potentially life-threatening diseases, like measles. Pharmacists should recommend routine childhood MMR vaccination, starting with the first dose at 12 through 15 months of age, and the second dose at 4 through 6 years of age or at least 28 days after the first dose. Adults need at least one dose of MMR vaccine if they don't have evidence of immunity. Before any international travel:

- Infants 6 months through 11 months of age should have 1 dose of MMR vaccine. If they receive 1 dose of MMR before their first birthday, they should get 2 more doses of the vaccine at the regularly recommended intervals (one at 12 through 15 months of age and another dose at least 28 days later).
- Children 12 months of age or older should have 2 doses separated by at least 28 days.
- Adolescents and adults who do not have evidence of immunity should get 2 doses separated by at least 28 days.

Pharmacists can help address questions and concerns that patients may have about vaccinations by using [CDC materials](http://www.cdc.gov/vaccines/conversations/) ([www.cdc.gov/vaccines/conversations/](http://www.cdc.gov/vaccines/conversations/)).

Pharmacists should also ensure that vaccines administered are entered into the immunization information system, so that all healthcare professionals who care for that patient are aware of which vaccines the patient has received.

## More Information

More information and guidance for healthcare professionals can be found at [CDC's measles web page for healthcare professionals](http://www.cdc.gov/measles/HCP/) ([www.cdc.gov/measles/HCP/](http://www.cdc.gov/measles/HCP/)).

To see up-to-date information on measles cases and outbreaks, visit this [Measles Cases and Outbreaks](http://www.cdc.gov/measles/cases-outbreaks.html) ([www.cdc.gov/measles/cases-outbreaks.html](http://www.cdc.gov/measles/cases-outbreaks.html))

For measles resources for parents, see [CDC's provider resources to share with parents](http://www.cdc.gov/vaccines/conversations/) ([www.cdc.gov/vaccines/conversations/](http://www.cdc.gov/vaccines/conversations/)).