

## Vaccines to Prevent Mumps

Mumps is a contagious disease that is caused by a virus. Most people with mumps will have swelling of their salivary glands, which causes the puffy cheeks and a tender, swollen jaw. Other symptoms may include fever, headache, muscle aches, tiredness, and loss of appetite. Mumps can be prevented with vaccination.

- [MMR](#): contains measles, mumps, and rubella combination vaccines ([Spanish](#))
- [MMRV](#): contains measles, mumps, rubella, and varicella (chickenpox) combination vaccines ([Spanish](#))
- [VACCINE BASICS](#)
- [ABOUT MUMPS](#)
- [TAKE ACTION](#) Children should receive two doses of MMR vaccine.

### FOR INFANTS AND CHILDREN

- The first dose at 12 through 15 months of age
- The second dose at 4 through 6 years of age MMR vaccine is very safe and effective. MMR vaccine is the best way to protect children against mumps and to prevent them from spreading the disease to others. Anyone born during or after 1957, who has never had mumps or has never been vaccinated, is at risk for mumps. They should get at least one dose of the MMR vaccine. Two doses are recommended for adults at higher risk, such as students in college, trade school, and training programs; [international travelers](#); and [healthcare professionals](#). Women who are planning to become pregnant should make sure they are protected against mumps before they get pregnant. Most women of childbearing age were vaccinated as children with the MMR vaccine, but they should confirm this with their doctor. If they need to get vaccinated for mumps, they should avoid becoming pregnant until one month (28 days) after receiving the MMR vaccine.
- Pregnant women who are not protected against mumps should wait until after they have given birth to get MMR vaccine.
- If you are not sure if you are protected against mumps, first try to find [your vaccination records](#) or documentation of mumps immunity. If you do not have written documentation of mumps immunity, you should get MMR vaccine. Another option is to have a doctor test your blood to determine whether you're immune, but this is likely to cost more and will take two doctor's visits. There is no harm in getting another dose of MMR vaccine if you may already be immune to mumps.

### FOR ADULTS

- MMRV vaccine is licensed for children 12 months to 12 years of age and may be used in place of MMR vaccine if varicella vaccination is also needed. A healthcare provider can help decide which vaccine to use.

## Mumps Cases and Outbreaks

Language: [English](#) | [Español \(Spanish\)](#)

### Mumps Cases

Mumps is no longer very common in the United States. From year to year, mumps cases can range from roughly a couple hundred to a couple thousand. For example in 2010, there were 2,612 cases, and in 2012, there were 229. Before the U.S. mumps vaccination program started in 1967, about 186,000 cases were reported each year. Since the pre-vaccine era, there has been a more than 99% decrease in mumps cases in the United States.

Number of mumps cases by year since 2010

Year	Cases
2010	2,612
2011	370
2012	229
2013	584
2014	1,151
2015*	422

\*Cases as of September 18, 2015 Source: [Morbidity and Mortality Weekly Report \(MMWR\), Diseases and Mortality Tables](#)

### Mumps Outbreaks

In some years, there are more cases of mumps than usual because of outbreaks. Mumps outbreaks can occur any time of year but often occur in winter and spring. A major factor contributing to outbreaks is being in a crowded environment, such as attending the same class, playing on the same sports team, or living in a dormitory with a person who has mumps.

MMR vaccine prevents most, but not all, cases of mumps and complications caused by the disease. Two doses of the vaccine are 88% (range: 66 to 95%) effective at protecting against mumps; one dose is 78% (range: 49% to 92%) effective. Outbreaks can still occur in highly vaccinated U.S. communities, particularly in close-contact settings. In recent years, outbreaks have occurred in schools, colleges, and camps. However, high vaccination coverage helps limit the size, duration, and spread of mumps outbreaks.

### Past Mumps Outbreaks

- In 2011-2013, there were several smaller mumps outbreaks reported on college campuses in California, Virginia, and Maryland. However, these all had limited spread, and national case counts for these years were at usual levels (several hundred cases per year).

- In 2009 to 2010, two large outbreaks occurred.
  - One multi-year outbreak involved about 3,000 people and mostly affected high school-aged students who were part of a close-knit religious community in New York City and attended schools in which they had very close contact. The outbreak started when an infected student in this religious community returned from the United Kingdom where a large mumps outbreak was occurring.
  - The second outbreak involved about 500 people, mostly school-aged children, in the U.S. Territory of Guam.
- In 2006, the United States experienced a multi-state mumps outbreak involving more than 6,500 reported cases. This resurgence predominantly affected college-aged students living in the Midwest, with outbreaks occurring on many different Midwestern college campuses.
- For more information about mumps outbreaks see [Mumps Outbreak Articles](#).
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- [Outbreak-Related Questions and Answers for Patients](#)