

## Young people should have their immunisation status checked

When adolescents have missed their measles, mumps and rubella vaccinations, they should bring them up to date as quickly as possible. Records of previous vaccinations are found in the certificate of vaccination. The next visit to the doctor or the 1st adolescent screening (J1) examination are good opportunities to catch up on vaccinations.



### Any plans for a student exchange?

To prevent measles outbreaks in schools and universities, some countries require that students have been previously vaccinated against measles.

### When should an adult be vaccinated?

With increasing numbers of young adults contracting the disease, the STIKO has been recommending since 2010 a one-time vaccination against measles for all those born after 1970 who were not or only once vaccinated. For this vaccination, preference should be given to the MMR vaccine.

Especially parents and young adults working in community-based institutions or providing healthcare services, should have their immunisation status checked. When you are protected against measles, you cannot, for example, pass the disease on to infants who are too young to be vaccinated.

### Who pays?

The health insurances pay the costs of recommended vaccinations. Work-related vaccinations are usually covered by the employer.



## Fewer risks with immunisation than with the disease

After vaccination, redness or swelling may develop at the injection site as the result of the body's immune response. This may be painful. Transient mild fever, headache or gastrointestinal symptoms may also occur.

Febrile seizures have been observed in infants in rare cases. Young adults may, for example, report joint problems. Since it is a live virus vaccine, a mild measles-like rash may develop a few weeks after the vaccination; however, it is not contagious.

Severe side effects, such as allergic reactions, are very rare. World-wide, very few isolated cases of possible encephalitis have been reported.

Despite potential side-effects, the risks of the vaccination are significantly lower than those of the disease. While, for example, after MMR vaccination encephalitis was observed in less than one in a million cases, about one in every thousand patients with measles developed it.

### Note

Egg protein allergy is usually not a contraindication to vaccination. Live virus vaccines should not be given to pregnant women. Likewise, it may at times not be possible to vaccinate people with acquired or congenital immunodeficiencies. Please talk to your doctor about it

## FOR FURTHER INFORMATION

please see ...

- the BZgA website: [www.impfen-info.de](http://www.impfen-info.de)
- the Robert Koch Institute website: [www.rki.de/impfen](http://www.rki.de/impfen)
- the BZgA's "Vaccination" leaflet  
Order number: 11128070
- the BZgA's "Unsere Kinder" ("Our Children") brochure  
Order number: 11070000
- the BZgA's "Gesund groß werden" ("Grow up healthy") parent information package  
Order number: 11130000

### Order from BZgA Media:

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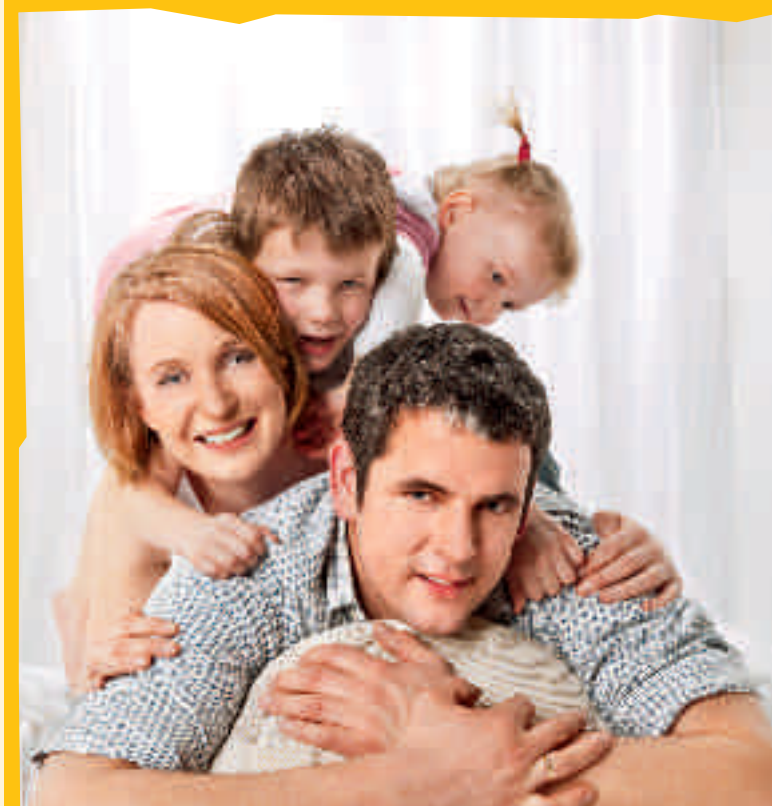
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# Measles · Mumps · Rubella

# Vaccination

## To protect children, adolescents and young adults

**BZgA**  
Bundeszentrale  
für  
gesundheitliche  
Aufklärung

## Measles, mumps and rubella: Underestimated diseases

Measles and alike are often seen as harmless childhood diseases. A survey of the BZgA found that more than a third of the interviewed parents think measles are harmless. A common misperception: By no means, measles, mumps and rubella are without complications.

Because measles, mumps and rubella are highly contagious, almost everyone had them as a child in the time before the vaccinations were introduced. That's why they are perceived as childhood diseases. However, the truth is: Everybody who is not vaccinated or did not have the disease can contract it – including adolescents and adults.



### Measles and alike could be history

Thanks to increasing vaccination rates, measles, mumps and rubella today are much rarer in Germany compared to only 30 to 40 years ago. Still each year several hundreds of measles cases are reported. And sporadic fatalities do occur.

In other regions of the world, measles have already been irradiated through immunisation programmes, e.g. in the Americas. The same can be achieved in Germany too, if the vaccination rate among children, adolescents and young adults continues to increase.



### What are measles?

Measles start with flu-like symptoms: high temperature, cough and runny nose. Only a few days later, the typical measles rash appears. The rash begins in the face and behind the ears, spreads to the trunk and legs, and disappears again after a few days.

The most common complications of measles are bronchitis, otitis media, and pneumonia. Approximately one in every 1,000 cases develops a life-threatening encephalitis. Very rarely, a brain decomposition occurs which is always fatal. This late complication is known as subacute sclerosing panencephalitis or short SSPE.

#### No targeted treatment available

For measles, mumps and rubella, symptomatic relief is all that is available. There is no causal therapy. Antibiotics are ineffective in viral infections

**Important to know:** Because measles are already highly contagious before the rash appears, it is a rapidly spreading infection. Almost every unprotect person exposed to the virus will contract the disease.

#### Without immunisation extremely infectious

The infectious agents (viruses) causing measles, mumps and rubella are spread by droplets – for example, with speaking, coughing or sneezing

### How is mumps diagnosed?

Mumps (epidemic parotitis) also begins with flu-like symptoms: fever, headache and earache. In approximately one in every three cases, there is a noticeable swelling of the parotid gland on one or both sides.



Meningitis occurs in up to 10 percent of cases. An inflammation of the auditory nerves may result in permanent hearing impairment. What's more: Mumps can cause painful inflammation of the testis and epididymis– primarily affected are older boys. This may lead to infertility later in life.

### Why is rubella dangerous?

In children, rubella are generally a mild disease. The typical rash is often missing. Therefore, many cases of rubella go undiagnosed, but the disease can still be spread.

Rubella infections are particularly dangerous during pregnancy. If a pregnant woman gets infected, her unborn child may suffer damage and be born with a condition called congenital rubella syndrome which is characterised by severe defects. To prevent this serious complication, young women and men should be protected by vaccination against rubella – ideally already as a child. If you are planning to have a baby, it is a good idea to double-check your immunisation status.

#### One vaccination – triple protection

One vaccine provides protection against three diseases: Measles, mumps and rubella (MMR vaccination)

### When should children be vaccinated?

The German Standing Vaccination Committee (STIKO) recommends two MMR vaccinations for children: The first at an age of 11 to 14 months, and the second until the age of 23 months. The childhood screening visits U6 and U7 may be used to vaccinate the children.

Children attending a child care centre before the age of 11 months can be vaccinated already at an age of 9 months. The 2<sup>nd</sup> vaccination should be given once the child has turned two years old.

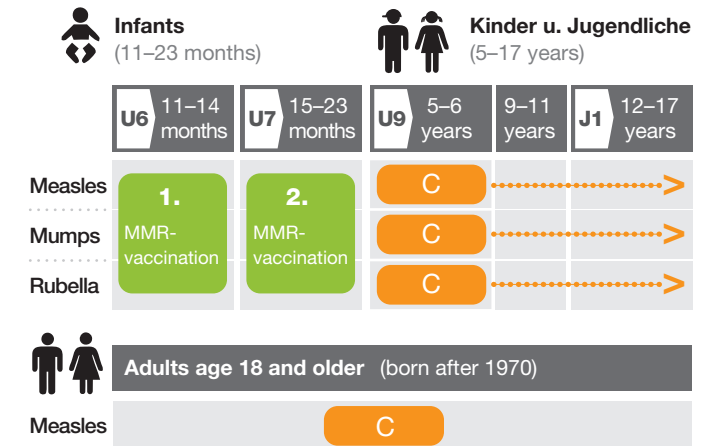


Fig. 1: Recommendations for MMR vaccination (according to STIKO Vaccination Calendar)  
C = Catch-up vaccination (in case of incomplete vaccination status)

#### Remember the 2<sup>nd</sup> vaccination

Today, almost all school children have been vaccinated once against measles, mumps and rubella. However, the 2<sup>nd</sup> vaccination is quite often missed and immediate catch-up vaccination is recommended.

MMR vaccination can be administered together with other vaccinations recommended for that age, e.g. varicella and pneumococcal vaccinations

### The vaccine

For the vaccination against measles, mumps and rubella, a so-called live virus vaccine is used. This contains attenuated viruses which have the ability to proliferate, but lost their ability to bring about the disease.