# What You Need To Know: Measles, Mumps & Rubella

#### Why get vaccinated?

Measles, mumps, and rubella are serious diseases.

#### Measles

- The measles virus causes rash, cough, runny nose, eye irritation, and fever.
- It can lead to ear infection, pneumonia, seizures (jerking and staring), brain damage, and death.

# Mumps

- The mumps virus causes fever, headache and swollen glands.
- It can lead to deafness, meningitis (infection of the brain and spinal cord covering), painful swelling of the testicles or ovaries, and, rarely, death.

#### Rubella (German Measles)

- The rubella virus causes rash, mild fever, and arthritis (mostly in women).
- If a woman gets rubella while she is pregnant, she could have a miscarriage or her baby could be born with serious birth defects.

You or your child could catch these diseases by being around someone who has them. They spread from person to person through the air. Measles, mumps, and rubella (MMR) vaccine can prevent these diseases. Most MMR-vaccinated children will not get these diseases. Many more children would get them if we stopped vaccinating.

## Who should get MMR Vaccine and when?

# Children should get two doses of MMR vaccine: the first at 12-15 months old and the second at 4-6 years old.

These are the recommended ages; children can get the second dose at any age as long as it is at least 28 days after the first dose.

Some adults should also get the MMR vaccine. Generally, anyone 18 or older and who was born after 1956 should get at least one dose of MMR vaccine, unless they can show that they have had either the vaccines or the diseases. The MMR vaccine may be given at the same time as other vaccines. Ask your healthcare provider for more information.

#### Some people should not get MMR vaccine or should wait

- People should not get the MMR vaccine if they have ever had a life-threatening allergic reaction to gelatin, the antibiotic neomycin, or a previous dose of MMR vaccine.
- People should not get the MMR vaccine if they are moderately or severely ill at the time the shot is scheduled and should wait until they recover before getting the vaccine.
- Pregnant women should wait to get the MMR vaccine until after they have given birth. Women should avoid getting pregnant for four weeks after getting the MMR vaccine.
- Some people should check with their doctor to see if they should get the MMR vaccine, including anyone who:
  - Has HIV/AIDS, or another disease that affects the immune system
  - Is being treated with drugs that affect the immune system (such as steroids) for two weeks or longer
  - Has any kind of cancer
  - Is taking cancer treatment with x-rays or drugs
  - Has ever had a low platelet count (a blood disorder)
- People who recently had a transfusion or were given other blood products should ask their doctor when they may get the MMR vaccine. Ask your doctor or nurse for more information.

## What are the risks from MMR vaccine?

A vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of the MMR vaccine causing serious harm, or death, is extremely small. Getting the MMR vaccine is much safer than getting any of these three diseases. Most people who get the MMR vaccine do not have any problems.

# Mild Problems

- Fever (up to one person out of six)
- Mild rash (about one person out of 20)
- Swelling of glands in the cheeks or neck (rare)

If these problems occur, it is usually within 7-12 days after the shot. They occur less often after the second dose.

# **Moderate Problems**

- Seizure (jerking or staring) caused by fever (about one out of 3,000 doses)
- Temporary pain and stiffness in the joints, mostly in teenage or adult women (up to one out of four)
- Temporary low platelet count, which can cause a bleeding disorder (about one out of 30,000 doses)

## Severe Problems (Very Rare)

- Serious allergic reaction (less than one out of a million doses)
- Several other severe problems have been known to occur after a child gets the MMR vaccine. This happens so rarely, experts cannot be sure whether they are caused by the vaccine or not. These include:
  - Deafness
  - Long-term seizures, coma, or lowered consciousness
  - Permanent brain damage

## What if there is a moderate or severe reaction? What should I look for?

Any unusual conditions, such as a serious allergic reaction, high fever or behavior changes. Signs of a serious allergic reaction include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heart beat or dizziness.

# What should I do?

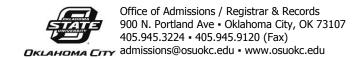
- Call a doctor, or get the person to a doctor right away. (Explain what happened, the date and time it happened, and when the vaccination was given.)
- Ask your doctor, nurse, or health department to file a Vaccine Adverse Event Reporting System (VAERS) form. You can also file this report through the VAERS website at <a href="https://www.vaers.hhs.gov">www.vaers.hhs.gov</a> or by calling 1-800-822-7967. VAERS does not provide medical advice.

### How can I learn more?

- · Ask your provider. They can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department's immunization program.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO)
  - Visit CDC website at: www.cdc.gov/vaccines

Updated 03/01/2012 www.immunize.org/vis

# What You Need To Know: Hepatitis B



#### Why get vaccinated?

Hepatitis B vaccine can prevent hepatitis B, and the serious consequences of hepatitis B infection, including liver cancer and cirrhosis.

Hepatitis B vaccine may be given by itself or in the same shot with other vaccines. Routine hepatitis B vaccination was recommended for some U.S. adults and children beginning in 1982, and for all children in 1991. Since 1990, new hepatitis B infections among children and adolescents have dropped by more than 95 percent; 75 percent in other age groups. Vaccination gives long-term protection from hepatitis B infection, possibly lifelong.

# Who should get the hepatitis B vaccine and when?

# Children and Adolescents

• Babies normally get three doses of hepatitis B vaccine:

1st Dose: Birth

2<sup>nd</sup> Dose: 1-2 months of age 3<sup>rd</sup> Dose: 6-18 months of age

Some babies might get four doses, for example, if a combination vaccine containing hepatitis B is used. (This is a single shot containing several vaccines.) The extra dose is not harmful.

#### Adults

- All unvaccinated adults at risk for hepatitis B infection should be vaccinated. This includes:
  - sex partners of people infected with hepatitis B
  - men who have sex with men
  - people who inject street drugs
  - people with more than one sex partner
  - people with chronic liver or kidney disease
  - people under 60 years of age with diabetes
  - people with jobs that expose them to human blood or other body fluids
  - household contacts of people infected with hepatitis B
  - residents and staff in institutions for the developmentally disabled
  - kidney dialysis patients
  - people who travel to countries where hepatitis B is common
  - people with HIV infection
- Other people may be encouraged by their doctor to get the hepatitis B vaccine; for example, adults 60 and older with diabetes. Anyone else who wants to be
  protected from the hepatitis B infection may be vaccinated.
- Pregnant women who are at risk for one of the reasons stated above should be vaccinated. Other pregnant women who want protection may be vaccinated.

Adults getting the hepatitis B vaccine should get three doses with the second dose given four weeks after the first and the third dose five months after the second. Your doctor can tell you about other dosing schedules that might be used in certain circumstances.

# Who should not get hepatitis B vaccine?

- Anyone with a life-threatening allergy to yeast, or to any other component of the vaccine, should not get the hepatitis B vaccine. Tell your doctor if you have any severe allergies.
- Anyone who has had a life-threatening allergic reaction to a previous dose of the hepatitis B vaccine should not get another dose.
- Anyone who is moderately or severely ill when a dose of vaccine is scheduled should probably wait until they recover before getting the vaccine.
   Your doctor can give you more information about these precautions.

#### What are the risks from the hepatitis B vaccine?

Hepatitis B is a very safe vaccine. Most people do not have any problems with it. The vaccine contains non-infectious material and cannot cause the hepatitis B infection.

Some mild problems have been reported:

- Soreness where the shot was given (up to about one person in four)
- Temperature of 99.9°F or higher (up to about one person in 15)

Severe problems are extremely rare. Severe allergic reactions are believed to occur about once in 1.1 million doses. A vaccine, like any medicine, could cause a serious reaction. But the risk of a vaccine causing serious harm, or death, is extremely small. More than 100 million people in the United States have been vaccinated with the hepatitis B vaccine.

# What if there is a moderate or severe reaction? What should I look for?

Any unusual conditions, such as a high fever or unusual behavior. Signs of a serious allergic reaction can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heart beat or dizziness.

## What should I do?

- · Call a doctor, or get the person to a doctor right away.
- Tell your doctor what happened, the date and time it happened, and when the vaccination was given.
- Ask your doctor, nurse, or health department to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form. Or you can file this report through the VAERS website at <a href="https://www.vaers.hhs.gov">www.vaers.hhs.gov</a>, or by calling 1-800-822-7967. VAERS does not provide medical advice.

#### How can I learn more?

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