

# COMMON ILLNESSES THAT CAUSE A RASH

MEASLES
GERMAN MEASLES
CHICKEN POX
SCARLET FEVER

# MEASLES

#### MEASLES (RUBEOLA) IS A VIRAL INFECTION SPREAD THROUGH THE AIR BY RESPIRATORY DROPLETS PRODUCED BY COUGHING OR SNEEZING.

#### SIGNS AND SYMPTOMS OF MEASLES

Signs and symptoms appear 10 to 14 days after exposure to the virus. The infection occurs in sequential stages over a period of two to three weeks.

#### First 2 to 3 days:

- $\succ$  fever,
- > cough
- runny nose
- inflamed eyes (conjunctivitis)
- $\succ$  sore throat
- white spots on the inside of the cheek (Koplik's spots)







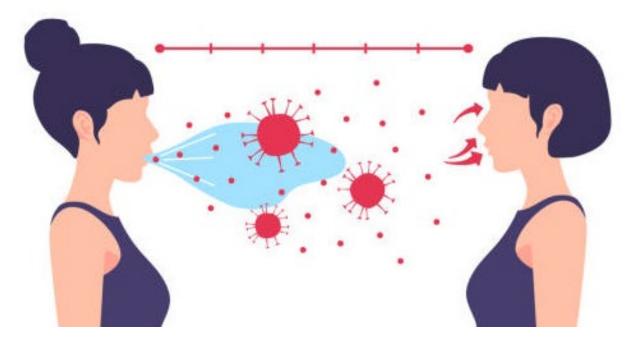
#### **MEASLES RASH**

The rash begins about 7–18 days after exposure, usually on the face and upper neck. It spreads over about 3 days, eventually to the hands and feet. It usually lasts 5–6 days before fading.



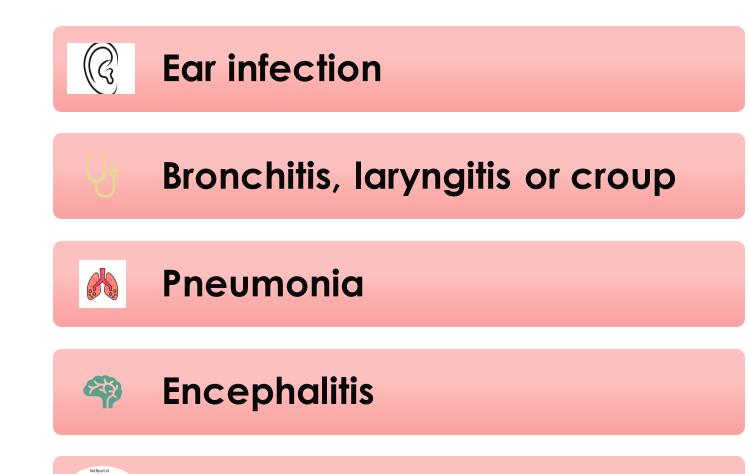
#### **MEASLES COMMUNICABLE PERIOD**

A person with measles can spread the virus to others for about 8 days, starting 4 days before the rash appears and ending when the rash has been present for 4 days.





#### **RISK FACTORS FOR GETTING MEASLES**



Low platelet count

COMPLICATIONS SEEN WITH MEASLES



RUBELLA (GERMAN MEASLES) IS A VIRAL INFECTION CAUSED BY THE RUBELLA VIRUS (RuV), A DIFFERENT VIRUS THAN THE ONE THAT CAUSES MEASLES.

## **SIGNS AND SYMPTOMS OF RUBELLA**

#### Up to 50% of people have no symptoms at all but can still spread rubella.

Signs and symptoms begin about 10 days after exposure to the virus through respiratory droplets. Symptoms include:

- Low fever
- Cough
- Sore throat
- > Runny nose
- Swollen lymph nodes









- > Headache
- Conjunctivitis

- > Joint pain
- > Malaise
- > Rash

#### **RUBELLA RASH**

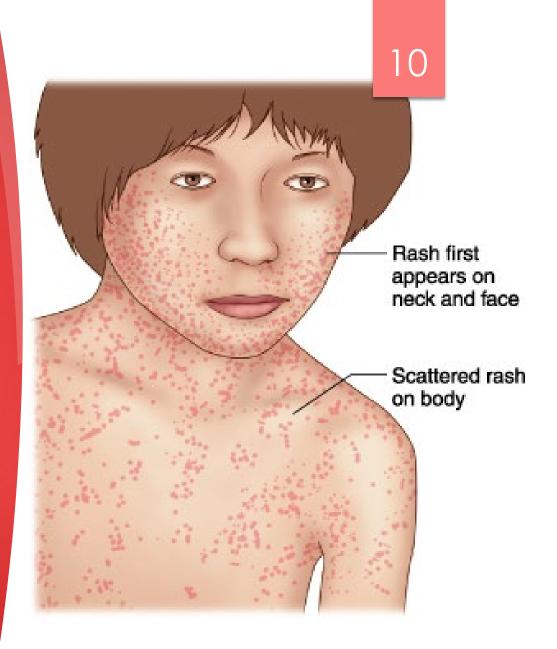
The rash appears after a mild fever.

It starts on the face and moves down the body.

The rash consists of pink or light red spots that may merge.

It may itch.

The rash lasts a few days.



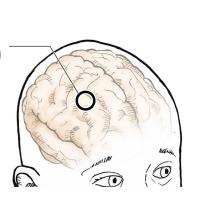
## GERMAN MEASLES COMMUNICABLE PERIOD

A person with German measles (Rubella) can spread the virus to others for about a week before and a week after the rash appears.



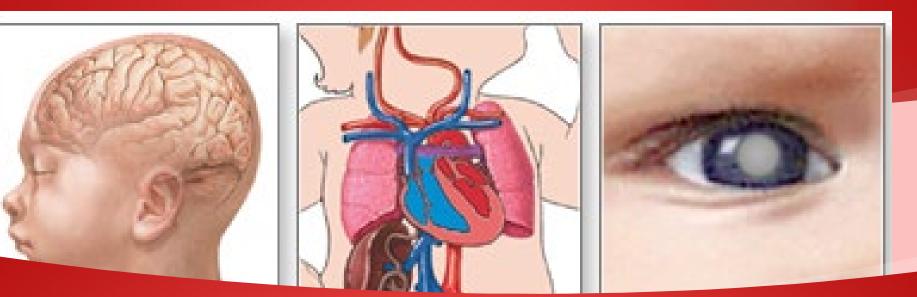
## **COMPLICATIONS FROM RUBELLA**

- 1. Congenital rubella syndrome
- 2. Pregnancy loss (miscarriage)
- 3. Arthritis
- 4. Brain swelling (encephalitis)
- 5. Thrombocytopenia

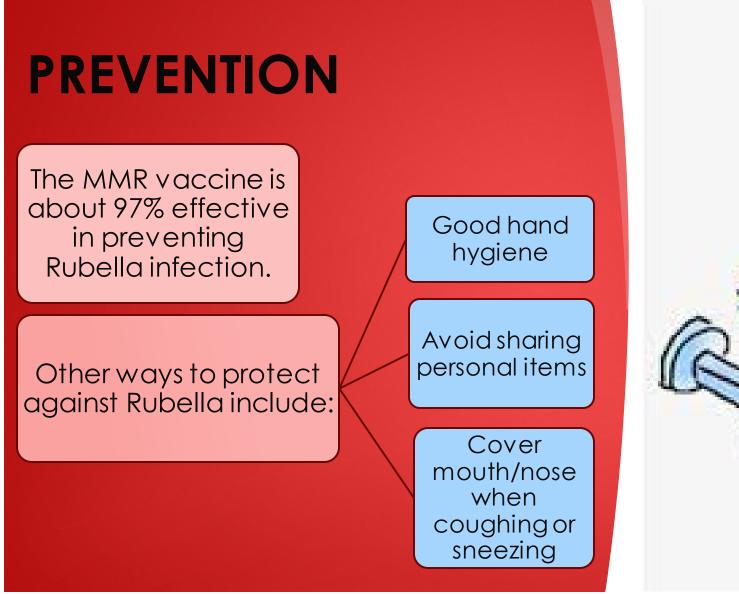








CONGENITAL RUBELLA SYNDROME  Congenital rubella syndrome is the most serious form of rubella and happens when a pregnant person passes rubella to the fetus.
 This can cause microcephaly, heart problems, and cataracts as well as skin and hearing problems.







# CHICKENPOX

# CHICKENPOX IS A VIRAL INFECTION CAUSED BY THE VARICELLA-ZOSTER VIRUS (VZV).

#### **CHICKENPOX STAGES**

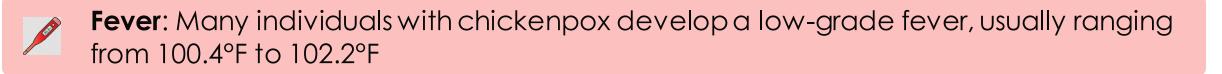
16

Chickenpox follows a distinct progression, typically characterized by 3 stages: the incubation period, prodromal stage, and blistering stage.

- 1. Incubation Period: around 10 to 21 days. During this phase, the virus replicates in the body without causing any noticeable symptoms.
- 2. **Prodromal Stage**: marked by the appearance of initial symptoms like fever, headache, and body aches. Sometimes loss of appetite and fatigue are present. These symptoms usually last for a couple of days.
- 3. Blistering Stage: characterized by the development of a red, itchy rash that can last for 7 to 10 days.



**Rash**: The primary symptom of chickenpox is a rash that starts as red bumps and progresses into fluid-filled blisters.





**Headache and Body Aches**: Chickenpox can cause mild to moderate headache and body aches, similar to symptoms experienced during a common cold or flu.



**Fatigue and Loss of Appetite**: Infected individuals may experience fatigue and a decreased desire to eat due to the viral infection.

## **SIGNS OF CHICKENPOX**

#### **CHICKENPOX RASH**

First appears as small, raised bumps on the face, chest, and back. These spread over entire body, even inside the eyelids, mouth, and genital areas.

The raised bumps quickly progress into fluid filled blisters.

The rash can cause intense itching.

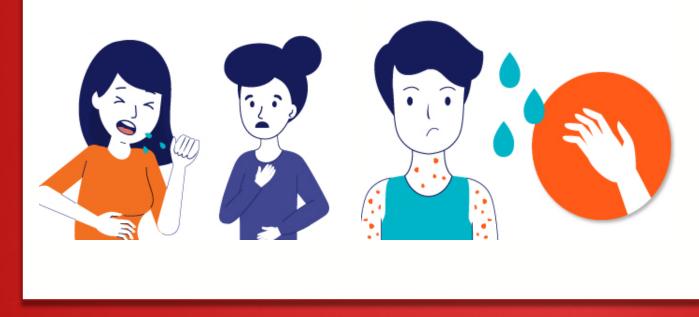
It generally takes about one week for the rash/blisters to develop into scabs and then heal.



BREATHING IN AIR DROPLETS WHICH CONTAIN VIRUSES PRODUCED WHEN AN INFECTED PERSON COUGHS, SNEEZES OR SPEAKS COMING INTO CONTACT WITH SURFACES CONTAMINATED BY DROPLETS OR FLUID FROM AN INFECTED PERSON'S BLISTERS



It becomes highly contagious 1-2 days before the occurrence of rash until blisters crust over. Those vaccinated are immune to it.



## CHICKENPOX PREVENTION

Varicella vaccine reduces risk and minimizes severity of illness.

Other ways to protect against chickenpox include: Good hand hygiene

Avoid close contact with those infected

> Disinfect surfaces



#### **CHICKENPOX TREATMENT**

For most, chickenpox will run its course without complications. Rare complications include skin infections and pneumonia. Rest is very important. Other measures that can be helpful include:

- Calamine lotion
- Tylenol
- Antihistamines such as Benadryl, Allegra, etc.





## TREATING THE DISCOMFORT OF CHICKENPOX

#### 22

#### Measures that can be helpful to ease discomfort include:

- Finely-ground (colloidal) oatmeal has been shown to contain several compounds that can relieve irritation, inflammation, and itching when added to bath water.
- ozing fluid, a soak in lukewarm
  - For blisters that have ruptured and are oozing fluid, a soak in lukewarm bath water mixed with baking soda can help dry out the blisters and relieve itching and should be done 2 to 3 times a day.
    - Use one cup baking soda per inch of bath water
    - Alternatively make a paste to apply to blisters.

## **SCARLET FEVER**

23

#### UNLIKE MEASLES AND CHICKENPOX, SCARLET FEVER IS CAUSED BY THE BACTERIA, GROUP A STREPTOCOCCUS, NOT A VIRUS.





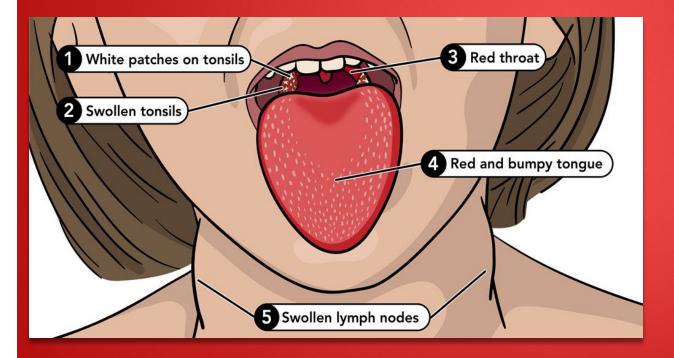






GENERAL SYMPTOMS OF SCARLET FEVER

## PHYSICAL SIGNS OF SCARLET FEVER



- Whitish coating on the tongue, early in the illness
- Strawberry" (red and bumpy) tongue
- > Very red throat
- Red and swollen tonsils
- White patches or streaks of pus on the tonsils
- Tiny, red spots on the roof of the mouth, called petechiae
- Swollen lymph nodes in the front of the neck

#### **SCARLET FEVER RASH**

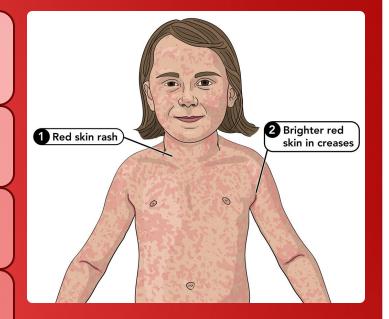
The rash may first appear on the neck, underarm, and groin. Over time, the rash spreads over the body.

The rash usually begins as small, flat blotches that slowly become fine bumps that feel like sandpaper.

Although the cheeks might look flushed (rosy), there may be a pale area around the mouth.

Underarm, elbow, and groin skin creases may become brighter red than the rest of the rash

The rash from scarlet fever fades in about 7 days. As the rash fades, the skin may peel around the fingertips, toes, and groin area. This peeling can last up to several weeks.





## **HOW SCARLET FEVER SPREADS**

Group A strep bacteria often live in the nose and throat. People who are infected spread the bacteria by talking, coughing, or sneezing, which creates respiratory droplets.

27

People can get sick if they:

- Breathe in respiratory droplets that contain the bacteria
- Touch something with those droplets on it and then touch their mouth or nose
- Drink from the same glass or eat from the same plate as a person infected with group A strep

#### THE SPREAD OF SCARLET FEVER

People can get sick if they touch sores on the skin caused by group A strep (impetigo) or contact fluid from the sores.

People are contagious even with no symptoms.



## COMPLICATIONS FROM SCARLET FEVER

Treatment with antibiotics prevents most complications Abscesses around the tonsils

- Swollen lymph nodes in the neck
- Ear, sinus, and skin infections
- Pneumonia (lung infection)
- Rheumatic fever (a disease that can affect the heart, joints, brain, and skin)
- Glomerulonephritis(a kidney disease)
- > Arthritis (joint inflammation)







#### FIRST AID FOR SCARLET FEVER

MEASLES AND MORE

> Jean Justad, MD Medical director, DDP 2024





