

## Chickenpox

Chickenpox (varicella) is a highly contagious viral disease caused by the varicella-zoster virus (VZV). The main symptom is a blistering skin rash. Outbreaks are more common in winter and early spring. Children and adults can be immunised against chickenpox.

Children with chickenpox should not go to school, kindergarten or creche until the last blister has dried. You should tell your child's school, kindergarten or creche if your child has chickenpox, as other children may need to be immunised or treated.

For most healthy people, chickenpox is mild and the person recovers fully without specific treatment. Complications do occur in approximately one per cent of cases. Chickenpox is more severe in adults and in anyone (of any age) with impaired immunity. Immunisation is the best way to prevent chickenpox.

### Symptoms of chickenpox

The symptoms of chickenpox include:

- Low-grade fever
- General discomfort, illness or lack of wellbeing (malaise)
- Intensely itchy skin rash – appears as small blisters surrounded by irregularly-shaped patches of inflamed skin known as 'dew drop on a rose petal' (blisters first form on the body and later on the head and limbs and the blisters usually burst and develop crusts after about five days)
- Ulcers – might develop in certain areas, including the mouth and vagina.

### Complications of chickenpox

The possible complications of chickenpox include:

- Scarring – chickenpox can leave pockmark scars on the skin
- Cellulitis – a type of bacterial infection of the skin
- Pneumonia – infection and inflammation of the lung can occur in adults and can be fatal
- Encephalitis – inflammation of the brain, usually mild, but sometimes severe
- Bleeding disorders – rare but can be fatal
- Death – in rare cases.

### Complications of chickenpox during pregnancy

Nine out of ten pregnant women have immunity against chickenpox. Although contact with chickenpox is common during pregnancy, few women become infected during pregnancy (approximately three in 1000 pregnancies have complications caused by chickenpox).

If you have chickenpox for the first time during pregnancy you can become seriously ill with conditions such as pneumonia, hepatitis and encephalitis. If a pregnant woman is infected with chickenpox in the first 20 weeks of pregnancy, there is risk of congenital varicella syndrome, which can cause abnormalities. After 20 weeks, the risk is lower.

The complications for the unborn and newborn baby include:

- Scarring of the skin, eye defects, small limbs and neurological abnormalities – if the mother is infected in the first 20 weeks of pregnancy

- Shingles in the first few years of life – if the mother is infected between weeks 20 and 36 of pregnancy
- Chickenpox in the newborn – if the mother is infected up to four weeks before the birth
- More severe effects for the newborn – if the mother is infected within seven days of the birth.

Shingles occurs in people who have previously had chickenpox but it does not appear to cause complications to the unborn baby.

## **Causes of chickenpox**

Chickenpox is spread by air-borne droplets from the upper respiratory tract (droplets are caused when the infected person coughs or sneezes) or from touching the fluid from the blisters on the skin. An infected person is contagious for one to two days (possibly five days) before the onset of the rash and remains infectious until the blisters form scabs (usually around day five of the illness).

For chickenpox, the time from infection to the appearance of the rash (incubation period) is around 14 to 16 days. A few days before the appearance of the rash, the person may feel feverish and have a sore throat and headache. The skin may be marked for some months after the rash has cleared.

## **High-risk groups**

People at increased risk of catching or having complications from chickenpox include:

- Newborn babies – there is an increased risk of severe illness in the first 28 days of life.
- Pregnant women – who have not had chickenpox or been immunised for chickenpox.
- People who have a weakened immune system – people with leukaemia or Hodgkin's disease, or those taking immunosuppressive medications, are at risk of longer and more serious illness.

## **Diagnosis of chickenpox**

Chickenpox is usually diagnosed by physical examination. The diagnosis can also be confirmed using tests such as taking a sample of the blister fluid to check for the presence of the virus.

## **Treatment for chickenpox**

In cases of severe illness, treatment with an antiviral medication may be needed. In most cases, chickenpox is mild and gets better without the need for specific treatment. Treatment aims to relieve symptoms and reduce the risk of complications. Options may include:

- Bed rest
- Extra fluids to drink – to avoid dehydration
- Paracetamol to bring down the fever – aspirin should be avoided because of a possible increased risk of complications
- Lukewarm baths with baking soda or oatmeal added to the water – a cup of oatmeal can be put into an old, clean pair of panty hose, then tied and left in the bath while the water runs
- Cream, such as calamine lotion, to reduce the itching – if you have a skin problem like eczema, you may need to ask a health professional about other creams you can use
- Avoidance of salty or citrus foods
- Mittens to prevent scratching – can be worn by babies and young children.

## **Chickenpox and shingles**

As well as causing chickenpox, the VZV can cause shingles in some people who have had chickenpox. Following an attack of chickenpox, the virus becomes latent (lies dormant) in nerve cells in the body. The dormant virus may reactivate and give rise to an attack of shingles later in life.

People who have never had chickenpox illness or been immunised against chickenpox can get chickenpox (not shingles) if they come into contact with the fluid in the blisters of a person with shingles.

## Immunisation against chickenpox

Immunisation against chickenpox can be achieved with either of two vaccines. The first is a combined immunisation containing vaccines against measles, mumps, rubella and varicella (MMRV). The second is the varicella vaccine (VV), which immunises only against chickenpox.

Protection against chickenpox is available free of charge under the National Immunisation Program Schedule. In Victoria, immunisation against chickenpox is free for:

- Children at 18 months – immunisation against chickenpox is given as the combination MMRV vaccine (from July 2013)
- Students in year seven of secondary school – students who have not already had chickenpox or have not already been immunised against chickenpox will receive the VV
- Children up to and including seven years – catch-up immunisations are available for children who have not been fully vaccinated.

Other people for whom immunisation against chickenpox is recommended (but who must pay for it themselves) are people who have not had chickenpox or have not been immunised against chickenpox. These at-risk groups include:

- People in high-risk occupations such as healthcare professionals, teachers and childcare workers
- Women prior to pregnancy, to avoid congenital or neonatal chickenpox
- Women immediately after delivery
- Parents of young children
- People who share a house with someone who has impaired immunity.

MMRV is not recommended for people 14 years and over and so people in this age range will be immunised with VV. Your immunisation provider can provide more information.

## Pregnancy and chickenpox immunisation

If you are thinking of becoming pregnant or early in your pregnancy, your healthcare professional can check your immunity with a blood test. If you are not immune and not pregnant, you may decide to be immunised before you become pregnant.

If you are not immune during pregnancy, you should avoid contact with people who have chickenpox and you should contact your doctor, midwife or hospital as soon as possible if you are exposed to anyone with chickenpox. You will be advised to have an injection of varicella zoster immune globulin (VZIG).

## Where to get help

- Your doctor
- In an emergency, always call triple zero (000)
- Emergency department of your nearest hospital
- Your local government immunisation service
- Maternal and Child Health Line (24 hours) Tel. 132 229
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
- Immunisation Program, Department of Health, Victorian Government Tel. 1300 882 008
- National Immunisation Information Line Tel. 1800 671 811
- Your local pharmacist

## Things to remember

- Chickenpox (varicella) is a highly contagious viral disease.
- In most cases, chickenpox is mild and gets better without medical treatment.
- The main symptom is a characteristic blistering skin rash.
- Treatment options aim to relieve symptoms and include bed rest, calamine lotion and lukewarm baths.
- A vaccine is available to protect against chickenpox.

**This page has been produced in consultation with, and approved by:**

Department of Health - Communicable Disease Prevention and Control Unit

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