Respiratory syncytial virus



Respiratory syncytial virus (RSV) infection is the most common cause of bronchiolitis and pneumonia among infants under 1 year of age.

Bronchiolitis is inflammation of small air passages in the lungs and pneumonia is inflammation of the lung tissue itself.

Infections may recur throughout life.

In South Australia, infections are most common during autumn and winter.

How RSV is spread

RSV is spread when an infected person talks, coughs or sneezes small droplets containing infectious agents into the air. The droplets in the air may be breathed in by those nearby.

Infection may be spread by contact with hands, tissues and other articles soiled by infected nose and throat discharges.

The virus survives outside of the body for a few hours.

Signs and symptoms

Most RSV cases present with a mild to moderate respiratory illness, but some groups of people may develop more severe disease.

Primary infection with RSV – most often seen in infants and young children aged under 2 years – is generally more severe than subsequent infections at older ages.

RSV is also an important cause of respiratory disease and hospitalisation in older people, Aboriginal and Torres Strait Islander adults, and people with conditions that increase their risk of severe RSV disease. Clinical features typically include:

- > fever
- > runny nose and nasal congestion
- > sore throat
- > cough
- > ear infections

Babies aged under 6 months can present with more severe clinical features, including:

- > wheezing
- > breathing difficulties
- > irritability
- > poor feeding.

Serious complications of RSV infection at any age can include:

- > pneumonia
- > acute respiratory distress
- > congestive heart failure
- myocarditis (inflammation of heart muscle) (rarely)
- seizures and encephalopathy (fewer than 1% of patients)
- worsening of some chronic conditions, such as chronic lung and heart disease.

Diagnosis

RSV is usually diagnosed through laboratory testing by Polymerase chain reaction (PCR). This test involves taking samples from the nose and throat.

Incubation period

(time between becoming infected and developing symptoms)

The average incubation period is 5 days, with a range of 2 to 8 days.

Infectious period

(time during which an infected person can infect others)

The infectious period is unclear, but is probably from before symptoms start until recovery. Most people recover from the infection within about 10 days.

Treatment

There is usually no need for treatment other than paracetamol for fever and maintaining adequate fluid intake.

Aspirin should not be given to children under 12 years of age unless specifically recommended by a doctor.

Very ill children and people at risk may require admission to hospital and treatment is supportive.

Because RSV is a virus, antibiotics do not help. There are no safe and effective antiviral drugs for routine use for RSV.

Prevention

- Exclude people with RSV from childcare, preschool, school and work until they are well.
- Frequent hand washing is the most effective means of preventing spread, as the virus is easily killed by soap and water.
- Avoid sharing cups, glasses and eating utensils with people who have respiratory infections.
- Cover a cough or sneeze with a tissue or your arm. Drop used tissues immediately into a rubbish bin, and then wash your hands.

Immunisation

RSV vaccines are recommended for all adults ages 75 and older and adults ages 60 – 74 who are at increased risk for severe RSV.

There are two immunisations recommended to protect infants from severe RSV:

- The maternal RSV vaccine (Abrysvo[®]) is given during weeks from 28 weeks of pregnancy. Maternal antibodies protect the baby against RSV for approximately 6 months after birth. Getting vaccinated against RSV during pregnancy is recommended to pass on immunity the baby and reduce the risk of severe RSVrelated illness from birth. A free RSV maternal vaccine (Abrysvo[®]) is available under the National Immunisation Program.
- > An RSV antibody (Beyfortus[™]) can be given to eligible unprotected babies whose mother did not receive the maternal RSV vaccine and some infants less than 2 years of age who are at increased risk of severe RSV infection. Beyfortus provides protection within a few days against RSV and lasts at least 5 months and is free under a state funded program from 1 April to 30 September 2025.

Useful links

- > SA Health website: www.sahealth.sa.gov.au
 - RSV maternal and infant protection program
 - Exclusion from childcare, preschool, school and work
 - Hand hygiene
- > Australian Immunisation Handbook: immunisationhandbook.health.gov.au
 - Respiratory syncytial virus (RSV)
- > NCRIS: ncirs.org.au
 - Respiratory syncytial virus (RSV) immunisation
- Australian Government Department of Health and Aged Care: <u>www.health.gov.au</u>
 - Respiratory syncytial virus (RSV) vaccine consumer fact sheet

You've Got What? Respiratory syncytial virus

Communicable Disease Control Branch Telephone: 1300 232 272 Email: HealthCommunicableDiseases@sa.gov.au The SA Health Disclaimer for this resource is located at www.sahealth.sa.gov.au/youvegotwhat

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