Respiratory syncytial virus (RSV)

What is RSV?
Respiratory syncytial virus, or RSV, is a virus that causes respiratory infections. Infections usually peak in late autumn or winter in NSW.

RSV can occur in children and adults. It can cause a cold with runny nose, sneezing, sore throat, fever and headache and also cough, wheezing and difficulty breathing.

Almost all children will have been infected by the age of 3 years. Recovery from RSV gives some immunity against getting infected again but is not long-lasting.

What are the symptoms of RSV?
For most people, RSV infection causes a mild respiratory illness. Symptoms usually begin around 5 days after exposure to the virus and can get worse over the first 3 to 4 days of the illness before an improvement. Symptoms can include:

- runny nose
- cough
- sneezing
- fever
- ear infection (less common).

RSV can also cause wheezing and difficulty breathing.

Babies under one year of age are more likely to develop breathing problems such as bronchiolitis or pneumonia. They can be unsettled and have difficulty feeding.

Young children may develop wheeze and difficulty breathing.

Older children and adults may also have breathing problems, especially if they have chronic heart, lung or immune problems. Some babies, children and older adults may need admission to hospital to help their breathing or hydration.

See ‘Monitoring RSV symptoms’ below for symptom management in children and adults.

How is RSV spread?
RSV is highly infectious. It can be spread through:

- droplets containing the virus when someone coughs or sneezes.
- touching items and surfaces (such as doorknobs or toys), and hands which are contaminated with droplets and then touching your nose or eyes.

A person is usually infectious for 3 - 8 days after symptoms begin but this may be longer in someone who has a weakened immune system.

Who is at risk of RSV?
RSV can affect anyone but usually causes a mild infection.

Some babies need admission to hospital to help their breathing and hydration, especially if they have lung, heart or immune problems or were born prematurely.
Children with viral wheeze or asthma may have symptoms triggered by RSV.
Older adults, especially those with chronic heart or lung disease or weakened immune systems may also become unwell with RSV.

**How is RSV prevented?**

There are currently no vaccines available for RSV. The best way to help stop the virus spreading is for everyone to always practice good hygiene, especially if you have flu-like symptoms:

- stay at home if you don’t feel well
- cover your nose and mouth when coughing or sneezing
- wear a mask in crowded places or if you are visiting high risk settings that have vulnerable people such as aged care facilities or hospitals
- avoid contact with high risk people such as infants, older people and those who are immunocompromised until you feel better.

The virus can survive on surfaces or objects for about 4 to 7 hours. It is therefore important to:

- wash your hands regularly with soap and warm water or use hand sanitiser
- avoid sharing cups and utensils you eat with
- regularly clean surfaces and items that may be contaminated with droplets using a household detergent
- wash toys that are shared among children with warm water and detergent at the end of the day or after it has been sneezed upon or mouthed. Let it dry in the sun.

Residential aged care facilities should:

- isolate or restrict the infected resident from group activities until their symptoms resolve
- increase cleaning around touch surfaces
- monitor other residents for respiratory symptoms.

**How is RSV diagnosed?**

Most children with coughs, colds and breathing problems can be diagnosed by their doctor. The virus can be identified by a PCR test (nose or throat swab).

Some pathology providers test for multiple viruses and may send you test results for RSV, influenza and COVID-19 at the same time.

**How is RSV managed?**

Most people’s immune system will fight off the infection. Most symptoms are mild and can be managed with:

- Bed rest
- Regular paracetamol and ibuprofen to relieve pain and, if the child is uncomfortable, fevers
- Keeping hydrated with regular sips of water or frequent feeds for babies.

Continue to take any medications you have been prescribed as usual. If you are unsure about continuing to take your current medication or treatment, or have any concerns about your health, call your doctor.

Sometimes both children and older adults may need to be hospitalised and treated with intravenous fluids and extra oxygen.

Antibiotics will not help the infection unless there is a secondary bacterial infection.

**Monitoring RSV symptoms in young children**

RSV can cause a chest infection called bronchiolitis. Babies with bronchiolitis can usually be managed at home. Visit the Sydney Children’s Hospitals Network website for bronchiolitis information and resources including videos with a health expert.

Call healthdirect on 1800 022 222 for free 24 hour health advice or make an appointment for your baby to see a GP if:

- they have a cough that is getting worse.
- they have less than half their normal feeds or are refusing food or drinks.
- they seem very tired or are more sleepy than usual.
- you are worried in any way.
Go to your local emergency department if your baby:

- has difficulty breathing (very fast or not regular breaths) or
- drawing in of the chest with each breath.

**What is the public health response to RSV?**

RSV is currently not a notifiable disease however will become notifiable from 1 September 2022. Trends in reports from selected laboratories are monitored each winter and reported in [NSW Health Influenza Surveillance Reports](https://www.health.nsw.gov.au/healthinfluenza/diseaseinfo/epidemiology.html) along with surveillance data on presentations of bronchiolitis to emergency departments.

**Further information**

If you or your child has symptoms of RSV and you are concerned, speak to your doctor. They know you and your child best.

You can also call healthdirect on 1800 022 222 for free 24 hour health advice or speak to your local pharmacist.