



# Respiratory syncytial virus (RSV)

## What is RSV

Respiratory syncytial virus (abbreviated as RSV) is a virus that can cause cold-like symptoms but can also lead to severe breathing difficulties or even a severe infection of the lung. Almost all children have already once been infected with RSV by their second birthday. Since there are a lot of different forms of RSV, one can be infected several times in life.<sup>1</sup>

## At risk for an RSV infection

Everybody can be infected by RSV. Usually people don't really note this, but have a cold or snuffle and recover within a few days. But the virus can also cause a very severe infection. Certain people are at risk for a more severe infection and may require hospitalisation, need of oxygen therapy and long-term damages like asthma.

### At risk for a more severe infection<sup>2</sup>

- preterm babies
- young children (particularly up to 6 months)
- children with heart or lung disease (especially up to 2 years)
- certain congenital anomalies (for example trisomy 21)
- children with a neuromuscular disease (for example children who cannot swallow easily or have problems clearing mucus secretions)
- elderly
- people who have a weak immune system

### Additional risk factors for the babies are for example<sup>2</sup>

- multiple birth
- male
- siblings in early childhood
- passive smoking
- close domestic conditions
- malnutrition, lack of breastfeeding
- family history of allergic diseases or asthma

## Symptoms of an infection with RSV

The symptoms of an infection with RSV are similar to common cold symptoms, like runny nose, coughing or wheezing (a whistling sound during breathing) and a decreased appetite. An adult infected with RSV can show symptoms, but does not have to, while children usually do show symptoms. Especially in very young children the symptoms might consist of irritability and decreased activity and appetite. Also breaks in breathing (apnoea) might occur. Fever can be a symptom, but is not always present.

At the beginning, the symptoms might be relatively low pronounced, but especially in people at risk for a more severe infection it can lead to hospitalisation and severe inflammation of the small airways in the lung (bronchiolitis) and infection of the lungs (pneumonia).<sup>1</sup>

## Ways of transmission of the virus

The virus is mainly spread by droplets from a person who is infectious to another person. This means by sneezing or coughing of an infected person into the air. When a person inhales these droplets or when they touch the mouth, nose or eye, this can lead to an infection. Also a direct or indirect contact with nasal or oral secretions from a contagious person can lead to an infection. Be aware that also kissing can lead to a transmission of the virus. Another possible form of being infected with RSV is by touching something (surfaces, toys, doorknobs, gloves,...) that an infectious person had touched before and then rubbing eyes or nose. People who are infected with the virus, but do not show symptoms or only light symptoms can still be contagious for others.<sup>1</sup>



*Prof. Luc Zimmermann, Netherlands:*

*“RSV is a virus that is widely spread among the population, but many people don’t know about its existence. Since the lungs of preterm babies are not fully developed when they are born, they have an increased risk for a severe infection with RSV. As a neonatologist, I therefore see the need to inform parents about the virus, the problems it can cause in preterm babies, and of course, what parents can do in order to help prevent an infection with RSV.”*

## You can help protect your baby by taking some precautions

The virus is able to survive quite a long time on hands (about half an hour), tissues (up to an hour) and toys/surfaces (several hours).<sup>3</sup> Therefore the following precautions and recommendations are very important to be followed:<sup>4</sup>



Wash your hands frequently and wipe hard surfaces with soap and water (15-20 seconds!) or disinfectant



Don't share your mug, plate or cutlery with others



Avoid rubbing your nose or eyes



If possible, avoid interaction with high-risk children if you have cold-like symptoms



When coughing or sneezing cover your mouth and nose with a tissue and throw it away afterwards



Stay at home when you have cold-like symptoms



Don't kiss high-risk children while you or they show cold-like symptoms



High-risk children should spend little time in potentially infectious places (for example child-care centres)



Don't smoke near your child. Wash your hands after smoking



Breastfeeding reduces the risk for an infection with RSV



## Treatment of RSV

Most people who are infected with RSV only show a mild form of infection and usually do not need treatment at all. For the ones suffering from a more severe form of the disease, there is no causal therapy and only the symptoms can be treated by for example lowering fever and drinking enough. Some children may even require hospitalisation and need help with breathing.<sup>4</sup>

## Vaccination against RSV

At the moment there is no vaccine that can help prevent RSV infection.<sup>3</sup> Nevertheless there is a medicine that can be used to prevent an RSV infection for babies who are at high risk for a severe course of an RSV infection. This medicine is applied as a series of monthly injections during the RSV season.<sup>3</sup> And of course you can help prevent RSV infection by using the already mentioned tips for hygiene!

For further questions please ask your paediatrician.

### About EFCNI

The European Foundation for the Care of Newborn Infants (EFCNI) is the first pan-European organisation and network to represent the interests of preterm and newborn infants and their families. It brings together parents, healthcare experts from different disciplines, and scientists with the common goal of improving long-term health of preterm and newborn children. EFCNI's vision is to ensure the best start in life for every baby.

For more information: [www.efcni.org](http://www.efcni.org)

Special thanks to Prof. Luc Zimmermann for his support and advice.

The topic "Respiratory syncytial virus (RSV)" is kindly supported by AstraZeneca.

Between 2008-2020 the topic RSV was kindly supported by AbbVie.

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