

RESPIRATORY SYNCYTIAL VIRUS



RECOGNIZING RSV

Respiratory syncytial virus, or RSV, is the leading cause of infant hospitalization in the U.S., which usually causes mild, cold-like symptoms. Antibiotics aren't indicated or helpful in RSV because RSV is a virus — antibiotics work only against infections caused by bacteria.

Symptoms of RSV infection usually include:

- Stuffy/Running nose
- Decreased appetite
- Cough
- Sneezing
- Fussiness
- Fever (Temp of 100.4 F and above)
- Wheezing

In very young infants with RSV, the only symptoms may be irritability, decreased activity and breathing difficulties.

RISK FACTORS

Those at greatest risk for severe illness from RSV include:

- Premature infants (before 35 weeks of gestation)
- Infants, especially those 6 months and younger
- Children less than 2 years old with chronic lung disease or congenital heart disease
- Immunocompromised children (e.g., severe combined immunodeficiency)
- Children who have neuromuscular disorders, including those who have difficulty swallowing or clearing mucus secretions

Historically, RSV season in most regions of the U.S. starts in the fall and peaks in the winter. Current trends show the season is starting earlier and lasting longer.

KNOW THE SYMPTOMS

Signs & Symptoms	RSV	FLU	COLD	COVID-19
Aches		Common		Occasional
Chills		Occasional		Occasional
Cough	Common	Common	Common	Common
Diarrhea		Occasional		Occasional
Difficulty Breathing	Common	Occasional		Occasional
Fatigue	Occasional	Common	Occasional	Occasional
Fever	Common	Common	Occasional	Common
Headache		Common		Occasional
Loss of Taste or Smell				Common
Nausea/Vomiting		Occasional		Occasional
Sneezing	Occasional	Occasional	Common	
Sore Throat	Occasional	Common	Occasional	Occasional
Stuffy/Running Nose	Common	Common	Occasional	Occasional
Wheezing	Common			

COURSE OF RSV ILLNESS

Most RSV infections are mild and go away on their own in a week or two, however in some infants and children, the infection may be severe and last 3 to up to 6 weeks. Currently, there is no specific treatment for RSV infection.

Typical expected course of illness:

- 7-10 days to recovery
- Peak of illness with worsening of symptoms between days 3 and 5 of illness
- Residual cough may linger for several weeks

RECOMMENDED SUPPORTIVE CARE

- Give acetaminophen or ibuprofen as needed for fever and pain
- Encourage fluids, including breastmilk or formula for infants; fever and higher respiratory rates increase their need for fluids
- Offer small amounts of fluids if baby is struggling to eat and breathe at the same time
- Suction nares frequently, especially before feeding, using saline drops as necessary

CARING FOR THE CHILD WITH RSV

Caregivers at home

- Nasal suctioning
- Hydration
- Cool mist humidifier
- Fever & pain management

Provider/ED

- Suctioning
- Respiratory swab
- Oxygen saturation test
- IV hydration
- Oxygen support
- Advanced airways (severe cases)

Not Indicated

- Antibiotics
- Cough medicine
- Imaging*
- Steroids*
- Albuterol*
- Nebulizer treatments*

**May be indicated for those with underlying pulmonary disease*

RECOGNIZING SEVERE SYMPTOMS

Trouble breathing can look like:

- Rapid breathing
- Using accessory muscles to breathe – watch for belly breathing and skin pulling in on chest and neck
- Grunting at the end of each breath
- Nostrils flaring with each breath
- Pale or blue lips/mouth
- Unable to breathe and drink at the same time
- Lethargy
- Head bobbing

Dehydration can look like:

- Refusal to drink liquids or breastfeed
- Decreased number of wet diapers (more than 8 hours without urinating or less than six wet diapers in 24 hours)
- Dry mouth, lethargy and lack of tears when crying

Reference:

[chop.edu/news/health-tip/how-treat-rsv-home-and-when-go-doctor](https://www.chop.edu/news/health-tip/how-treat-rsv-home-and-when-go-doctor)

PREVENTING RSV

Nirsevimab or Beyfortus is a long-acting monoclonal antibody for passive immunization expected to reduce the risk of severe RSV disease by about 80% among infants and young children.

Palivizumab or Synagis is also a monoclonal antibody for RSV for premature or high-risk infants.

Key difference between nirsevimab and palivizumab:

- Nirsevimab is expected to last 5 months, providing infants and toddlers with protection for an entire RSV season
- Nirsevimab is FDA approved and ACIP recommended for a wider population

DOSAGE

First RSV season for infants < 8 months of age:

- 50mg for infants weighing less than 5 kg (11 lbs)
- 100mg for infants weighing 5 kg (11 lbs) or more

For high-risk children, ages 8-19 months, eligible for nirsevimab during their second RSV season:

- 200mg total - administer 2 prefilled 100-mg injections at same visit at different injection sites

Beyfortus is supplied in single-dose prefilled syringes, 50mg and 100mg, and may safely be given at the same time as other immunizations.



Be prepared to educate families and respond to questions about the importance of protecting young kids against RSV disease.

INFANT MONOCLONAL ANTIBODY: NIRSEVIMAB

Recommendations during infant's first RSV season (typically Oct.-March):

- All infants < 8 months, born shortly before or entering first RSV season
- Mother did not receive RSV vaccine during pregnancy
- Mother's RSV vaccination status is unknown
- Infant born within 14 days of maternal RSV vaccination

Recommendations during child's second RSV season:

- Child 8-19 months who is at increased risk of severe RSV disease
- Child born prematurely and has chronic lung disease
- Child with severe immunocompromise
- Child with cystic fibrosis who has severe disease
- American Indian or Alaskan Native children in this age group

Children \geq 8 months old who are not at increased risk for severe RSV disease should not receive nirsevimab.



MATERNAL VACCINATION: ABRYSVO

- A single lifetime dose of the Abrysvo vaccine is recommended for pregnant mothers during 32-36 weeks of pregnancy from Sept.-Jan., to transfer protection to their baby
- CDC recommends either maternal RSV vaccination **or** infant immunization with RSV monoclonal antibodies

Pregnant women that have received the maternal RSV vaccine, Abrysvo, > 14 days before delivery will transfer protection to their infants and the infant should not receive nirsevimab.



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Instructions:

- 1 Open your phone's camera app.
- 2 Point it at the QR code.
- 3 Click the link on your phone screen.

