

RSV Prematurity and Synagis®



What is RSV:

Respiratory syncytial virus (RSV) is a virus that causes infections of the lungs and respiratory tract. It's so common that most children have been infected with the virus by age 2. [...] Infection with respiratory syncytial virus can be severe in some cases, especially in premature babies and infants with underlying health conditions. RSV can also become serious in older adults, adults with heart and lung diseases, or anyone with a very weak immune system (immunocompromised).

Reduce the Risk of Respiratory Problems:



Wash your hands frequently, and teach your children to do the same. Also, make sure people who care for your child wash their hands and understand the importance of this habit in preventing the spread of infection.

See that your child gets all of his or her vaccines. Diphtheria, tetanus, and pertussis (DTaP), Haemophilus influenzae type b (Hib), and pneumococcal vaccines are especially important.



Breast-feed your baby for at least the first 6 months after birth, if possible. Breast milk seems to offer some protection against RSV infection, but more study is needed.² Breast milk does not prevent RSV infection.

Separate a child diagnosed with RSV from others in the home as much as possible.



If you smoke, quit. If you cannot quit, do not smoke in the house or car. Secondhand smoke irritates the mucous membranes in your child's nose, sinuses, and lungs, making him or her more susceptible to infections.

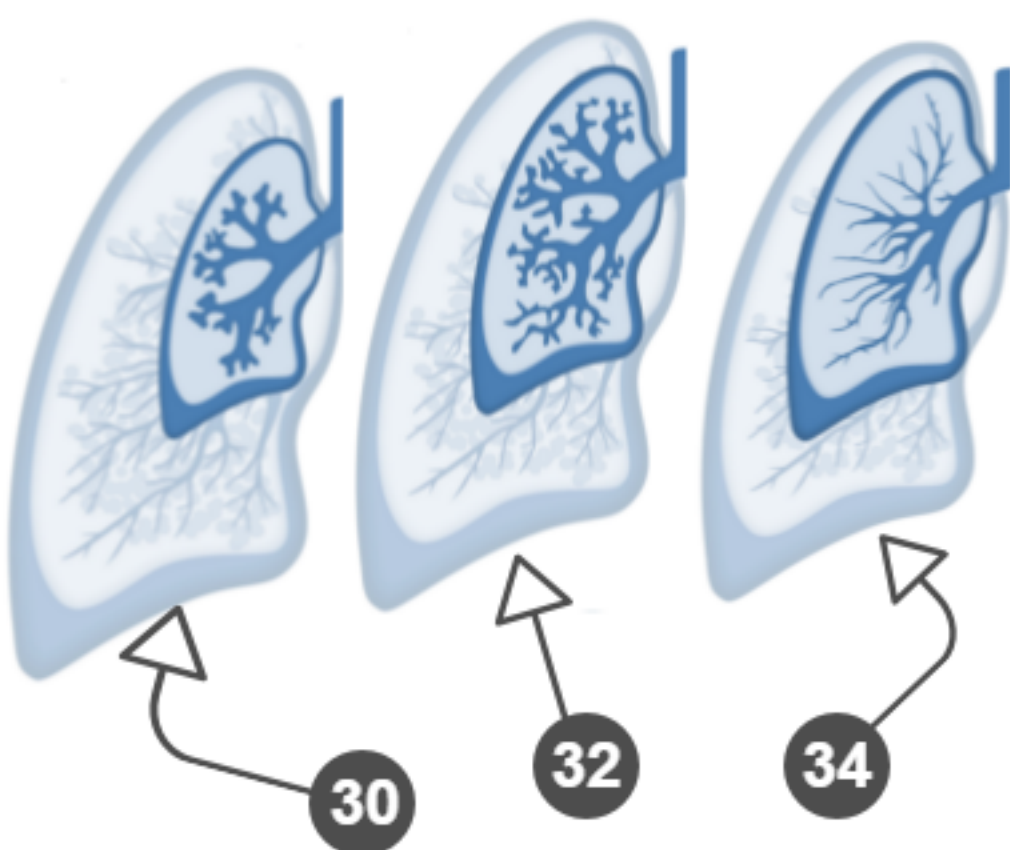
<http://www.webmd.com/lung/tc/respiratory-syncytial-virus-rsv-infection-prevention>

Risks to Premature Infants

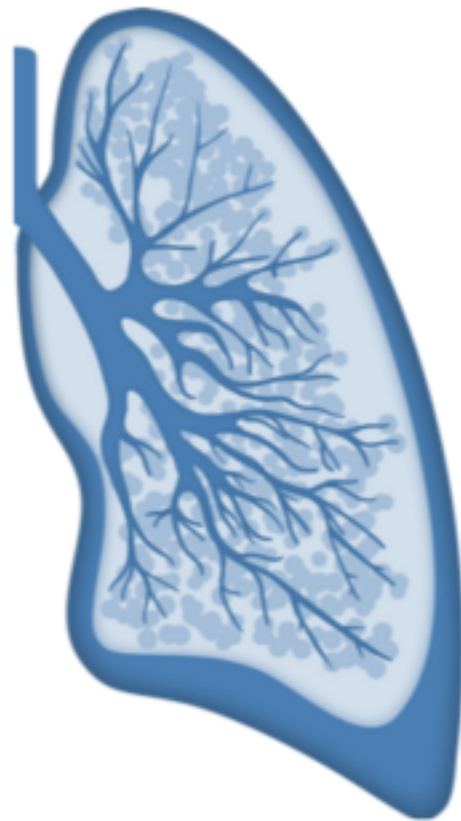
Infants, especially those who were born early are at an increased risk of severe and sometimes life threatening reaction to RSV.



Interrupted Lung Development



Full-Term
(≥40 weeks GA)



Who is at Risk of Infection

- Infants younger than 6 months of age
- Younger children, especially under 1 year of age, who were born prematurely or who have an underlying condition, such as congenital heart or lung disease
- Children with weakened immune systems, such as those undergoing chemotherapy or transplantation
- Infants in crowded child care settings
- Older adults
- Adults with asthma, congestive heart failure or chronic obstructive pulmonary disease
- People with immunodeficiency, including those with certain transplanted organs, leukemia or HIV/AIDS

<http://www.mayoclinic.org/diseases-conditions/respiratory-syncytial-virus/basics/risk-factors/con-20022497>

Things to Keep in Mind:

Synagis (Palivizumab) is a monoclonal antibody NOT a vaccination and cannot completely prevent infection.



The criteria to receive the injection changes almost yearly and it has become increasingly difficult for preemies to qualify beyond age 1.

Synagis can help with prevention of RSV and is administered to patients deemed a higher risk of severe reaction to infection



Due to the expense of the medication, providers are required to submit for approval prior to receiving the drug for each dose.

RSV season changes each year, the first dose should be administered prior to the start of the RSV season



<http://www.cdc.gov/rsv/about/transmission.html>
<https://www.synagis.com/hcp/high-risk-patient-types/premature-infants.html>
<http://www.cdc.gov/rsv/about/transmission.html>
http://nationalperinatal.org/Resources/Respiratory_Syncytial_VirusPrevention_12-12-13.pdf
<http://www.fda.gov/drugs/developmentapprovalprocess/howdrugsaredevelopedandapproved/approvalapplications/therapeuticbiologicapplications/ucm093366.htm>
<http://pediatrics.aappublications.org/content/134/2/415.full>
<http://www.neonatologytoday.net/newsletters/nt-nov14.pdf>
<http://www.mayoclinic.org/diseases-conditions/respiratory-syncytial-virus/basics/complications/con-20022497>