

Cases of child RSV are swamping hospitals. What are the symptoms, treatments?

October 25 2022, by Dennis Thompson



Pediatricians' offices, children's hospitals, urgent care centers and

emergency rooms across the United States are being overwhelmed by an early, heavy surge of respiratory syncytial virus ([RSV](#)) among infants and young children.

Reported cases of RSV started rising dramatically in September, and by mid-October were at their [highest levels](#) in at least two years, according to the U.S. Centers for Disease Control and Prevention.

"It's causing a lot of strain on the system, and it's a phenomenon that's happening across the country," said Dr. Ron Keren, chief medical officer with the Children's Hospital of Philadelphia.

While RSV infection manifests as just a common cold in most kids, some will develop very serious breathing problems that require medical attention and potentially hospitalization.

"Definitely what we're seeing through our doors is a lot of what we would call respiratory viral illness," said Dr. Sarah Ash Combs, an emergency medicine physician at Children's National Hospital in Washington, D.C. "Anything from a sniffle all the way up to children really needing help to breathe because of how sick they are, and a lot of times it is indeed down to RSV."

Unfortunately, this early surge indicates that parents are in for a long, harsh RSV "sick season," said Dr. William Schaffner, medical director of the National Foundation for Infectious Diseases.

"It usually doesn't start until October," Schaffner said. "If it's starting early, it's likely to continue throughout the winter, so we anticipate that many more children may well be infected."

What is RSV?

Respiratory syncytial virus is a very common virus that is transmitted via exhaled respiratory droplets, in much the same way COVID-19 spreads, Combs said.

Almost all children will have had an RSV infection by their second birthday, the CDC says. RSV is the most common cause of bronchiolitis and pneumonia in children younger than 1 in the United States, [according](#) to the CDC.

[Bronchiolitis](#) is inflammation of small airways inside the lung called bronchioles, Combs said. These small branching airways help to deliver oxygen and take away carbon dioxide throughout the lungs.

"The way I like to explain it and explain it to parents as well is they're like very thin, tiny straws. Imagine if you had a thin, tiny straw and you put some mucus in it and you made some inflammation around that, clogged it up a little bit. Given that it's already thin and tiny to start, it takes a very small amount of inflammation or mucus to get it really significantly clogged up," Combs said.

"In [older people](#), even if we get our airways clogged up, we'll feel uncomfortable, we'll have a cough, we'll be producing some mucus, but we can deal with it," Combs continued. "In the tiny babies, the airways get so clogged, so narrowed, so congested that they actually can't breathe in and out effectively."

The problem is that in infants, difficulty breathing can quickly cascade into other health problems, Keren said. Children struggling to breathe often won't drink or eat, leading to dehydration.

Are certain children at higher risk?

Pediatricians are mainly concerned about children younger than 1,

because their airways are so tiny, Combs said.

However, RSV also tends to be harsh on children who were [born prematurely](#), Combs said.

"Even if you are a little older, maybe you're a 1-year-old, but you were born at 24 weeks of age, you are at higher risk," Combs said.

Children with a history of lung illness or [congenital heart problems](#) also are at higher risk for a severe RSV infection, Combs said.

This is an odd year for RSV, however, because even kids who should weather the virus well are coming down with bad cases, Combs added.

"What's a little different this year is so far we have also been seeing atypically some otherwise healthy children—so not these very young infants, not these children with longstanding health conditions—getting sicker than we would expect from RSV," Combs said.

Why is RSV surging?

Doctors think they are seeing more cases of RSV, as well as more severe cases, because of a concept called "immune debt," Keren said.

Kids' immune systems typically grow strong as they are exposed to various germs through their normal course of social interactions.

"On average, kids get exposed to probably dozens of viruses," Keren said. "They get maybe 8 to 10 colds a year."

But that didn't happen over the past few years due to COVID-19 precautions like masking and social distancing.

"During the pandemic there were a few cohorts of infants born who, due to social distancing and [masking](#), probably didn't get exposed to these respiratory viruses, including RSV," Keren said. "And so they were not able to build up an immune defense to RSV and other respiratory virus, leaving them vulnerable now."

Now that COVID precautions have ended, [young children](#) are being introduced to viruses like RSV for the first time, and their immune systems are not well-prepared for the encounter.

"Now that we're all back to normal, it's as though we're giving these viruses an opportunity to spread," Schaffner said. "These children may not have had the so-called benefit of an early infection, which could be mild, and now that they're a little bit older their infection may potentially be more severe."

What should parents look for?

RSV typically causes cold symptoms like a runny nose, coughing, sneezing and fever, the CDC says.

Parents with a sick child should keep an eye on their breathing patterns, Combs said. If they're struggling to breathe, it's a sign they need medical attention.

"Lift up the child's shirt and if you see their [chest wall](#) caving in, their belly squeezing in and out, that's a sign that their using their muscles to force air in and out because of how clogged those little bronchioles are," Combs said. "That would be an indication to bring your child to the emergency department."

Dr. Katie Lockwood, chair of pediatrics with the Children's Hospital of Philadelphia, agrees.

"When your child is working harder to breathe and that's impacting their feeding, or you see them using their chest muscles or flaring their nostrils to breathe, that's a sign that you may want to seek care," Lockwood said.

Caring for a child with RSV at home

The most important thing when taking care of a child sick with RSV is to keep them well-hydrated, said Lockwood.

"[Dehydration](#) is one of the reasons that they end up going to the hospital often, so any way you can, get fluids into your child," Lockwood said. "I always say this is a time to bribe them with things that pediatricians don't usually like, which include sugary beverages like juice or ice pops. Any way that you can get them to take little sips of fluid."

Steam also can help loosen up a young child's airways, Lockwood added.

"I love steam. Running a hot shower and doing your nighttime routine in that steamy bathroom air can help break up some of that mucus and loosen a cough," she said. "A cough that actually sounds a little bit more wet and loose can be a good thing as they start moving some of that mucus up and out."

Parents can use over-the-counter remedies to help reduce fevers, dry runny noses and ease coughs, the doctors said.

What can parents do to shield kids from RSV?

There's no vaccine for RSV, but parents can still make sure their kids are protected against vaccine-preventable diseases, Lockwood said.

"First and foremost, I would recommend that you keep your child up to date with their routine childhood immunizations, as well as getting the COVID vaccine and seasonal influenza vaccine, so we can try to keep those illnesses away and minimize risk of getting at least a few infections this winter," Lockwood said.

Teaching your child good [hand hygiene](#) also can help them avoid a case of RSV, she added.

"I'm a parent and I don't know if you've ever watched your child wash their hands, but they often are not doing what we recommend, which is a full 20 seconds and getting into all of the nooks and crannies between their fingers and on their wrists," Lockwood said. "I try to reinforce washing hands before eating and after using the bathroom or any time that they feel like their hands are dirty. Particularly if they're coughing or sneezing, they should be cleaning their hands afterwards."

Kids can also help prevent spread to other children by covering their cough or sneeze. Parents should also keep a child with a cough or fever home from school until they are well, to protect their classmates, Lockwood advised.

Combs pointed out that even though COVID-19 restrictions have relaxed, [parents](#) of a high-risk child should consider continuing to mask and socially distance.

"I would say if you're a parent or a caregiver and you're worried about a child or a baby in your home, I do think it makes sense for you to mask, certainly when you're out in a public space," Combs said.

Children at high risk for a severe RSV infection do have a [monoclonal antibody treatment](#) available to them, Combs noted.

The catch is that the drug, [palivizumab](#), must be given before RSV season begins, because it can't be used to treat an active infection, Combs said.

"It's given in a series, so you have to go in for a few doses," Combs said. "Ideally, you actually want to have already started that. Most people with a child in their life who is in that category will have started even over the summer to be getting those doses."

With RSV raging across the United States, what is the advice for the holidays if you have a high-risk child?

"The temptation is, 'Oh, it's finally going to be a holiday we can all spend together. There's going to be a big 100-person family reunion in an indoor space in the middle of December,'" Combs said.

"You have to look at that as a family and decide if the risk/benefit is worth it, because I would say that's probably a high risk for transmission of any viral illness. So, if you have a young, vulnerable child or infant at home, you might want to skip that event and instead do something on a smaller scale, do something with a smaller number of family members, do something virtual."

More information: The U.S. Centers for Disease Control and Prevention has more about [RSV](#).

Copyright © 2022 [HealthDay](#). All rights reserved.

Citation: Cases of child RSV are swamping hospitals. What are the symptoms, treatments?

(2022, October 25) retrieved 26 June 2024 from <https://medicalxpress.com/news/2022-10-cases-child-rsv-swamping-hospitals.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.