

# Experts explain why rates of RSV are surging this year

November 21 2022, by Chrissie Jones and Saul Faust

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Credit: AI-generated image ([disclaimer](#))

[Respiratory syncytial virus](#) (RSV) is a very common virus, typically causing infection in children during the colder months. In most cases, RSV causes a mild illness, with symptoms similar to that of a regular cold.

But it can also cause lung infections, such as [bronchiolitis](#) or [pneumonia](#), especially in [infants, premature babies and children](#) with underlying health problems. It is the most common cause of hospital admission in [young children](#), with around [26,000 children](#) under the age of two admitted to hospital with RSV every year in the U.K. alone.

Cases tend to rise in October and hit a peak in December before beginning to fall from February. But this year, cases are particularly high and are already at levels that clinicians wouldn't normally expect to see until later in the season. And it's not only the U.K. that's seeing a rise in case numbers—the [U.S.](#) and [Europe](#) are also currently experiencing an early and high rise in RSV.

Alongside the spike in case numbers, there are [also reports](#) that [hospitalizations have rapidly risen](#). With cases of influenza and COVID-19 also on the rise, there are concerns that the NHS and other health services may be unable to cope with this increased pressure.

## **What has changed?**

Changes in the pattern of this usually winter virus have been seen both during and since the pandemic.

Throughout 2020–2021, very [few cases of RSV](#) were recorded. In June and July 2021, cases rose to a small summer peak in England, and then unusually there were far fewer children with RSV during the normal winter season.

This year, cases of RSV rose again a little during the summer months. But now there has been an increase in cases sooner than had been expected.

Part of the reason for this change in pattern—and for the early and rapid

rise in cases this year—are the measures used to prevent COVID-19 transmission. These measures—such as wearing masks and socially distancing—were also effective at [decreasing the spread of other respiratory viruses](#) such as the common cold, flu and RSV while they were in place.

But decreased exposure to these viruses means that a child's immunity has not been boosted naturally. This means fewer children have protection against them. So, as COVID-19 restrictions were lifted and people began to mix normally, respiratory viruses began to [spread again](#), at all times of year.

Many adults also weren't exposed to many viruses during the pandemic, meaning they have lower levels of antibodies to RSV. This is particularly important for young infants, since they have not been exposed to viruses before. This means they rely on the immunity of those around them to protect them from infection. It also means that babies born during the pandemic or just after restrictions ended received fewer protective antibodies from their mother while in the womb. As a result, they may have lower levels of protection against RSV in the first months of life.

Other [family members](#) will also have less specific protective immunity and are therefore more likely to get infected and pass RSV to the infant.

This difference between expected immunity levels in a population and the immunity levels we're seeing now is termed the "immunity gap" or "[immunity debt](#)." This doesn't mean that people's immune systems are weaker or unable to respond normally to infections. Rather, it means that people may have reduced protection to specific viruses (such as RSV), making them more likely to catch and spread the virus.

## **Global fight against RSV**

We'll likely see RSV peaks return to normal in a couple of years. But tackling the [virus](#) remains a high priority—as even in years with normal seasonal patterns, RSV is associated with [over 100,000 deaths](#) globally in children under five.

There has been promising news in the [development of vaccines](#) to prevent RSV. Pfizer has recently announced positive results of a [phase 3 clinical trial](#) of a single-dose vaccine given to pregnant women. The vaccine proved to be 82% effective against severe infection from RSV in the first three months of an infant's life and 69% through to six months of life. The vaccine was safe for both mothers and babies. This is a major breakthrough as until now, RSV vaccines have not been available.

The [European Union](#) and U.K. have also approved an antibody treatment for use in young infants following successful [phase 3 studies](#). Only one dose of this treatment is needed to provide immediate, long-lasting protection against RSV.

Researchers are [currently enrolling infants](#) in the U.K., France and Germany to see whether the treatment can reduce the number of RSV hospital admissions. If the trial is successful, this [antibody treatment](#) would be far more effective at tackling RSV in infants and cheaper than the [only antibody treatment](#) used in the U.K. for RSV.

Both vaccines and antibody treatments could help to prevent dangerous RSV infections in young infants in the future, reducing the impact on families and easing pressures on the NHS. But until they're available, there are many things parents and those who work with young children can do to [reduce the risk](#) of passing on infection—such as washing your hands often or cleaning and disinfecting surfaces.

Parents should also know the [symptoms of serious RSV infection](#) in

young babies—which include problems with breathing or difficulties feeding. If you recognize these symptoms, seek immediate medical attention.

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