

- Child psychology / Immune system

Covid distancing may have weakened children's immune system, experts say

The Guardian Australia · 11 Jun 2021 · 28 · Natalie Grover

Scientists are concerned that measures to combat Covid-19 have weakened the immune systems of young children who have not been able to build up resistance to common bugs, leaving them vulnerable when mask-wearing and social distancing eventually end.



Contact with viral pathogens happens on a fairly regular basis and although it does not always lead to sickness, the exposure helps shore the immune system against the threat should the bugs be encountered again.

Over the past 14 months or so, protracted restrictions on mixing and travel, alongside mask-wearing and social distancing, have not only reduced the risk of Covid but other respiratory bugs such as the flu – cases of which were basically nonexistent last winter, according to surveillance data largely encompassing England compiled by the Royal College of GPs (RCGP). However, virologists are concerned about RSV, a virus that can cause serious lung infections requiring hospital admission, and sometimes even death, in children under the age of one – and for which there are no approved vaccines.

“Flu worries me, but there is a vaccine – and so the most vulnerable will still have access to the vaccines,” said Dr Catherine Moore, consultant clinical scientist for Public Health Wales. She warned that RSV currently has no vaccine. “Whereas what Covid has done has caused a big issue in our adult ICUs, we may see conversely problems in our paediatric hospitalisations and intensive care,” she said.

Pre-Covid, most children encountered most seasonal viruses before they turned 18 months old. But the biggest influx in paediatric hospital wards each winter are babies under the age of one who have for the first time been infected with RSV – because their lungs are not well developed, their bodies struggle to fight off the infection, explained Moore.

Scientists are worried that if life begins to go back to pre-Covid normality, respiratory viruses that typically circulate every winter will return alongside the coronavirus.

Moore said she was particularly worried about the risk of RSV in young children. “We’ve got two cohorts now of children who’ve never met the virus, so they are susceptible, but there’s two years’ worth of them!”

Before the pandemic, data suggested more than 30,000 babies and children under five were admitted to hospital every year in the UK because of RSV. Assuming “normality” resumes later this year, “we are preparing for a significant impact in paediatrics”, said Moore.

According to the RCGP, a few cases of RSV were detected last month, which is atypical given the virus normally circulates in the winter in the UK.

“Late May RSV is very unusual,” said Deenan Pillay, a professor of virology at University College London and a member of the Independent Sage group. It may be a reflection of more immunological susceptibility, the fact that some Covid restrictions have been relaxed, or indeed a change in the seasonal behaviour of the virus in response to the persistent collective effort to address Covid, he said.

But there are many unknowns and it is hard to predict exactly what will happen in the winter with RSV and other pathogens, said William Irving, a professor of virology from the University of Nottingham. “We didn’t see flu last winter so if it comes back this coming winter, it may be particularly nasty.”

However, there is a flu vaccine that could stave off a considerable chunk of disease, the scientists said, acknowledging that they are hoping the experience of Covid will enhance the uptake of the flu vaccine.

“I would think that it would be a good idea to maybe combine a flu vaccine with a booster dose of the [Covid] vaccine,” said Irving. Efforts to develop a Covid-flu combination vaccine are already under way.