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What we know and don’t know about children and Covid-19

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For much of the pandemic, Covid-19 posed the biggest risk to adults — particularly the elderly and those with pre-existing medical conditions — with children making up a small subset of the severely affected.

But the emergence of the highly transmissible Delta variant has increased infections and disease even among children, a worrisome development given that most children still are not cleared for vaccines.

Sam Fazeli, a Bloomberg contributor who covers the pharmaceutical industry, answers questions about the increased risks children face.

What do we know about Covid-19’s risk to children at this point?

We know children are at lower risk of severe Covid-19, but some risk still exists. Unfortunately, much of our experience with infection rates and severity of disease come from the past 12 months. For much of this time, vaccines weren’t widely available, and most of our efforts at keeping the virus at bay were centred on practices such as wearing masks and social distancing.

Many children attended virtual school or had smaller class sizes, and there was no Delta variant. So our data is not necessarily a good guide to the future.

Why are children less susceptible to Covid-19 in the first place?

Several factors are at play here. One is that younger children have fewer of the receptors (called ACE2) that the virus’s spike protein attaches to in order to infect human cells.

A virus variant such as Delta, though, which is better at multiplying more quickly in our respiratory tracts, will also become better at infecting children. That said, children have much healthier immune systems compared with those in adults, especially older adults. And they tend not to have the comorbidities, such as obesity or diabetes, that older adults have.

What are the risks of long Covid-19 in children?

There was one report out of Italy that showed that one or two Covid-19 symptoms lingered in as many as one-third of children for up to four months after an infection, with about a quarter having three or four persistent symptoms. Data from a UK study looked a bit better, finding that 4.4% of infected children between the ages of 5 and 17 had an illness that lasted at least 28 days, with only 1.8% reporting symptoms beyond 56 days.

Could we get a mutant strain that’s more dangerous specifically for children?

I am not sure. Anything is possible with this virus, but if you think about the reasons that children are at lower risk of developing severe Covid-19, then the probability would be low.

How do we keep schools safely open in this environment?

There are a few things that can make a big difference, beyond vaccination. The first is to improve ventilation to make sure that the same air is not recirculated without being filtered or exchanged with fresh air. Using carbon dioxide monitors can help to assess how stale the air is. Wearing masks and modulating class sizes would also help. And, of course, regular testing.

Should we accelerate the approval of vaccines in younger children? Does that come with safety concerns?

Many of the vaccines that we get in our life are given to us when we are very young, and the human population has continued to grow at a good clip precisely because they are safe and effective at preventing premature death from infectious diseases. So we know how to do this. The trials have to run their course with a good body of safety data. Once we have that, we should be good to go. Should parents and other adults, even those who are vaccinated, change their behaviour to account for Delta and the risk to children?

WEARING MASKS AND MODULATING CLASS SIZES WOULD ALSO HELP. AND, OF COURSE, REGULAR TESTING

We already know that vaccinated people can catch the virus and pass it on to others, even if they are much better protected against disease. No shot is 100% effective against an infection; their purpose is to prevent disease. This is especially true with the Delta variant. Of course the risk of transmission from a vaccinated person is expected to be lower, but how much lower is not clear. So to avoid passing the virus on to their unvaccinated children, parents should do the best they can to not get infected.

This means taking steps we’ve all become familiar with by now, such as wearing masks in busy public spaces where social distancing is not possible and people’s vaccination status isn’t known, and so on.

It may seem such as a step backwards, but for the health and wellbeing of your children, it’s a small sacrifice.