

Kids get coronavirus, but do they spread it? We'll find out when schools reopen ^[1]

Author: Aubrey, Allison

Source: NPR

Format: Article

Publication Date: 20 Jul 2020

AVAILABILITY

Access online ^[2]

EXCERPTS

As scientists study the burden of COVID-19 around the globe, it's pretty clear that despite some cases of serious illness, kids tend to get infected with the coronavirus less often and have milder symptoms compared to adults.

"It seems consistently, children do have lower rates of infection than adults," says Dr. Alison Tribble, a pediatric infectious disease specialist at C.S. Mott Children's Hospital at the University of Michigan.

What's much less understood is the extent to which kids can spread the illness among themselves — or to the adults with whom they come in close contact.

A lack of testing early in the pandemic has been part of the problem, says Dr. Judy Guzman-Cottrill, an infectious disease pediatrician at Oregon Health and Science University. "We need more robust epidemiologic studies to evaluate how children are part of the transmission chain," she says.

Given the uncertainty, the decisions on how to safely reopen schools are tricky.

"Kids don't seem to be super spreaders," says Dr. Aaron Carroll, a pediatrician at Indiana University School of Medicine. But, since most schools around the country closed in March as the virus began to circulate more widely, it's really an unanswered question.

"Schools will now be the experiment," Carroll says. "We're going to see a bunch of schools open with varying levels of control, and then we will see what happens."

There are a handful of preliminary studies from other countries that suggest there's less transmission of the virus from kids to adults or kids to other kids, especially among younger children.

For instance, a study from Switzerland included children who were diagnosed with COVID-19 at a hospital in Geneva. Contact tracers identified the children's household contacts. They found that the child was the suspected spreader of the virus in only three of the 39 cases.

Another analysis from Australia included nine students and nine adults, who were infected with the coronavirus and came into contact with more than 700 other students and more than 125 staff members. The researchers found that only two infections were known to be linked to these exposures.

In a commentary published in *Pediatrics*, two pediatric infectious disease experts concluded that while these studies are "far from definitive, the [research] provides early reassurance that school-based transmission could be a manageable problem."

However, as testing of children has increased, scientists are learning more. Just last week, a top health official in Victoria, Australia, cautioned that child-to-child transmission is "more apparent" than was previously understood, as more kids have started to be tested.

Other recent research suggests that the age of children may be a factor. Data from contact tracing in South Korea suggest that older children are more likely to spread the virus to their close contacts compared to younger children, particularly in a home setting. Researchers analyzed thousands of contacts of about 5,700 coronavirus patients (from January through March of 2020), looking at the age of the first infected person in a household. In homes where the first person infected in a cluster was 10 to 19, about 19% of their household contacts got COVID-19. In contrast, only 5.3% of the household contacts of younger children aged 0 to 9 were known to be infected.

Note: schools were closed during the period of the study, so it's not clear how the classroom environment influences risk.

And, adding to the concern, there are also some signs that reopening schools can increase the spread of the virus. For instance, researchers analyzed what happened after many students returned to school in Germany in late May. While rates of infection did not appear to increase among teachers and staff, the infection rate did increase among students. The study, which is released in pre-print,

concludes that the increase may be attributed to the difficulty of social distancing when schools are at full capacity.

But the returning students in this analysis encompassed a mix of grades including many older students. In contrast, the return of groups of younger students in Germany earlier in May did not seem to correspond with increased cases.

Overall, it's difficult to tease out the specific effect of school closures since so many communities around the globe simultaneously took other steps aimed at slowing the spread of the virus, including stay-at-home advisories.

But many experts agree that the rate of community spread is an important factor in determining whether to return to in-person instruction. The more widely the virus is circulating in a community, the riskier it is to open schools.

"It is reassuring that in other countries that successfully did reopen schools, they didn't in general experience large outbreaks in their schools," says Anita Cicero, deputy director of the Johns Hopkins Center for Health Security.

But she points out that these countries that successfully reopened schools had low community transmission on the date they reopened.

"For instance in Japan, South Korea, Finland and France, each of those countries had about 1 or fewer cases per 100,000 people when they reopened," she says. In contrast, there are currently some U.S. counties with 80 or more new daily cases per 100,000.

And while there's no standard metric for determining what rate of community spread is too high to have schools open, many epidemiologists say that when a county has more than 25 new cases a day per 100,000, the county is considered in the "red" zone and should consider shelter-in-place advisories, which would include keeping schools closed.

"So we really need to be doing all we can to drive those numbers down so that we can return children to school buildings," Cicero says.

Given the fact that the virus is still circulating widely in many areas of the U.S., experts say school reopening plans must include measures to safeguard students and teachers.

"The way we can do this safely is really by having very strong plans laid out ahead of time as to how to essentially limit interactions," says Dr. Bill Miller, an epidemiologist and physician at Ohio State University.

This is why many school plans call for pods or splitting classrooms into smaller groups to "make bubbles of kids," as Miller describes it, so that you're not crossing groups of kids across different classes. Limiting class sizes also makes social distancing more feasible.

Overall, when it comes to opening schools, "I think the benefits outweigh the risks," Miller says. But, he cautions that many places in the country have infection rates that are spiraling upward. "So it's really going to take a lot of attention and caution, and at any point I think it would be appropriate to pull the trigger and say, no, we can't [open]," he says, or that we need to close schools again.

To have the best chance of successfully remaining open, "schools should consider postponing bringing kids back into the classroom in regions where there is substantial community transmission of the virus," Cicero says.

"This should be a national priority," she says, "It's measurably more important than reopening bars and restaurants."

Related link:

Region: [United States](#) [3]

Tags: [health and safety](#) [4]

Source URL (modified on 22 Jul 2020): <https://childcarecanada.org/documents/child-care-news/20/07/kids-get-coronavirus-do-they-spread-it-well-find-out-when-schools>

Links

[1] <https://childcarecanada.org/documents/child-care-news/20/07/kids-get-coronavirus-do-they-spread-it-well-find-out-when-schools> [2]

<https://www.npr.org/sections/health-shots/2020/07/20/892354171/kids-get-coronavirus-but-do-they-spread-it-well-find-out-when-schools-reopen> [3]

<https://childcarecanada.org/taxonomy/term/7865> [4] <https://childcarecanada.org/category/tags/health-and-safety>