

Back to school: Safe for children with underlying medical conditions

Mike Starr

IN RESPONSE to the COVID-19 pandemic, almost 200 countries have implemented country-wide school closures,^{1,2} although the evidence for doing so is equivocal.² Schools in some Australian states and territories have been closed, but fortunately, at the time of writing, most are reopening. Parents and teachers will have understandable concerns about the risks to students and staff.

Children account for only 1–5% of diagnosed COVID-19 cases,^{3,4} and at least 90% have asymptomatic or mild disease.³ Children who appear to be at highest risk for more severe disease are infants <1 year of age and those with underlying medical conditions. Among 2572 paediatric COVID-19 cases reported recently by the US Centers for Disease Control and Prevention, the most common underlying conditions were chronic lung disease, cardiovascular disease and immunosuppression.⁴ Importantly, only three deaths were reported.⁴

More recently, in countries that are experiencing widespread community-based transmission of SARS-CoV-2 and therefore much higher rates of paediatric disease, a small number of children have been reported to develop a significant systemic inflammatory response.⁵ The syndrome has provisionally been called paediatric inflammatory multisystem syndrome temporally associated with SARS-CoV-2 (PIMS-TS). To date, there have been no reported paediatric cases of this presentation in Australia.

The National Centre for Immunisation Research and Surveillance has been

investigating COVID-19 cases in schools in NSW since early March 2020. A recent report summarises the preliminary findings to 21 April 2020.⁶ Despite initial cases occurring in nine students (including two students in two schools) and nine teachers in 15 primary and high schools, there were only two secondary cases, both in students. There was no evidence of children infecting teachers.

Based on this information and reports from countries such as China, Italy and the USA, and the fact that community transmission of COVID-19 is very low in Australia, it is safe for children to return to school. This is also true for those with underlying medical conditions who would otherwise have been attending school, although specialist advice should be sought for those with severe or unstable underlying disease or significant immunosuppression. Examples include children with cyanotic congenital heart disease and those taking prednisolone ≥ 2 mg/kg/day for >14 days. The Australian & New Zealand Children's Haematology/Oncology Group (ANZCHOG) recommends that it is safe for children receiving treatment to continue to attend school. However, some Australian children's cancer centres recommend that children who are receiving therapy or who have had a bone marrow transplant within the past 12 months should not attend school.⁷

Older staff and those with underlying medical conditions should seek medical advice regarding the risk of returning to school. Although there is limited evidence, it does not appear that pregnant women are at increased risk of acquiring COVID-19 or of developing more severe disease.⁸

Given that children do not appear likely to infect teachers with SARS-CoV-2, the greatest risk of transmission in the school environment will be between adults. Thus, teachers and parents should maintain physical distancing between themselves and each other at school. Staff and students should practise good hygiene to prevent the spread of COVID-19. This includes washing hands at regular intervals throughout the day, covering the mouth and nose with a bent elbow or tissue when coughing or sneezing, placing used tissues immediately into a bin and avoiding touching one's eyes, nose and mouth. Anyone who is unwell should stay away from school until they have recovered. Finally, everyone aged ≥ 6 months should be vaccinated against influenza this year.

Education is a strong predictor of the health and wellbeing of a community. We are fortunate to have excellent schools in Australia, and it is welcome news that most are reopening.

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