

## OzSAGE comment on the NCIRS report “COVID-19 Delta variant in schools and early childhood education and care services in NSW, Australia: 16 June to 31 July 2021”.

OzSAGE welcomes the collection of detailed data on transmission in schools, presented in the NCIRS report “COVID-19 Delta variant in schools and early childhood education and care services in NSW, Australia: 16 June to 31 July 2021”. The report shows that transmission risk is five times higher for Delta than previous variants of SARS-COV-2, and also confirms that children and adults working in schools and child-care are at risk of infection, and that this can then spread in affected households. The attack rate is lower in educational facilities than in households. The report showed that 2.4% (70/2864) required hospital admission between June 16-August 19<sup>th</sup>. There are currently almost 30,000 active cases (all ages) in Australia, which would translate to hundreds of children requiring hospitalisation. As the epidemic grows, particularly once schools open and restrictions are lifted, this will translate to substantial numbers of children needing inpatient care.

Importantly the data for this report was collected during a period of low epidemic activity (three cases on June 16<sup>th</sup> to 212 daily new cases by July 31), when schools were only open to children of essential workers, reflected in the small number of infected individuals (59) attending school settings during that time. School activities were heavily restricted due to the lockdown in NSW, and classrooms were sparsely populated. The report notes that only the early childhood education and care services (ECECS), which had the largest proportion of cases, were fully open during the study period. Schools were closed or sparsely attended during this period. This means that conclusions cannot safely not be drawn from this data about what covid transmission we can expect to find in schools during normal operating conditions or when there are high numbers of community cases.

The report does not mention Aboriginal and Torres Strait Islander children. It does not mention the legal duty of educational facilities under work health and safety legislation to provide a safe environment, nor any mitigations to make the school environment safer for all.

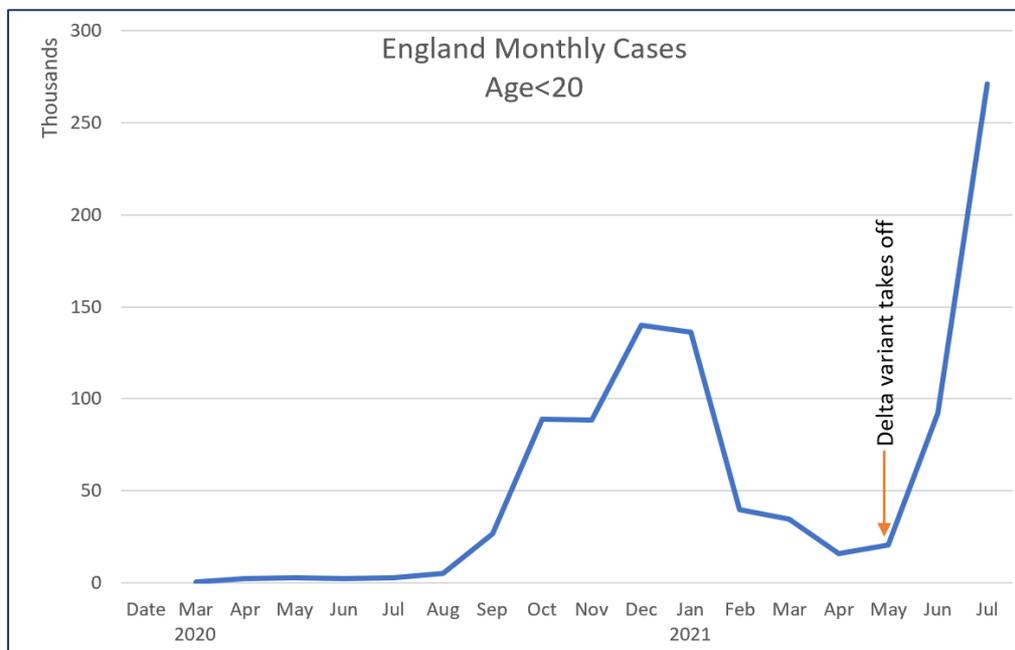
As schools re-open in October 2021 over 1000 daily cases in the community are likely, and if restrictions are relaxed there will be full classrooms and a high level of mixing amongst children. This is a warning of impact on a much larger scale when schools re-open with widespread epidemic activity and most children unvaccinated. A recent Center for Diseases Control (USA) study predicts that [75% of school-children](#) would get infected in three months in the absence of vaccines and masks. Safe air is a key issue in schools, and we commend the plans for safe indoor air in Victorian schools, advised by expert paediatricians, building on their work on [safe schools](#) from 2020. The NSW Teachers Federation president has [called for similar measures](#) in NSW schools.

Australian children 12 and over, who are eligible for vaccination, are not expected to have high rates of vaccination until 2022, with vaccination of this group commencing in

September and supply restrictions persisting. OzSAGE is concerned about children under 12 years old in early childhood education and care services (ECECS) who will remain unvaccinated during this period.

We can see what is likely to happen in Australia by looking overseas, to places where schools have already reopened with substantial community transmission. For instance, in Florida schools were [“drowning” in cases](#) within one week of starting term. In California, [one case study](#) showed an attack rate (number of students infected) of 50% in one affected classroom.

In England the delta variant took hold during May 2021. English schools took a cautious approach, placing school children in “bubbles” - groups which did not mix. After school, children were required to go directly home and not be in contact with anyone else. Nonetheless, within three months, more children were getting infected than ever before. Cases in July 2021 were around double the previous worst month of December 2020.



The NCIRS report finding that delta is five times more transmissible than previous variants is a particular cause for concern, since the Doherty Modelling Report predicted that 1.4 million children would be infected in the next six months, based on an assumption that delta is only twice as transmissible, which is an underestimate

Ultimately, vaccination of children will be needed to fully control SARS-CoV-2, or it will become a pandemic of the young, with unknown but likely significant long-term health effects. [New research](#) has found that one in seven infected children may go on to develop “long covid”, a debilitating illness which can impact patients for years. This is an important area where more research is required given the potential for suffering and long term burden of disease and healthcare costs.

In addition to serious [outbreaks of Delta in schools](#), new data shows [children 0–3 years](#) of age transmit virus to adults more than older children do, challenging outdated theories that children do not contribute to transmission. Safe schools and childcare (better ventilation, as well as vaccination of teachers and childcare staff) are a key part of lifting restrictions while protecting unvaccinated children. OzSAGE reiterates its summary advice that children and staff working in schools and ECECS should be protected with a comprehensive layered approach. We reinforce calls to expedite the COVID safe plans for education settings in NSW which include safe indoor air, staggered schedules, mix of face to face and online, so that school closures should only rarely be necessary. A full OzSAGE advice document on schools and children will follow, but in summary:

- Current data on infection rates and severity of illness in Aboriginal and Torres Strait Islander children are required.
- The ratio of adults to children is lower in many Aboriginal communities, which can affect care of children in the event of a COVID-19 outbreak, so a highly precautionary approach is needed.
- Current data on infection rates and severity of illness in medically complex children or those with underlying medical vulnerability is required.
- Schools for children with disabilities and special needs, and children with chronic medical conditions require a precautionary approach (all recommendations below).
- Work Health and Safety legislation and regulations must be complied with, based on the mandated precautionary principle.
- Mandate masks for all staff and school aged children (K-12). Teachers should wear a mask while teaching.
- Recommend masks for children aged 2 and over as the American Academy of Pediatrics and the Centers for Disease Control and Prevention (CDC) have done.
- Improve ventilation of classrooms and schools, which can be achieved at low cost by simply opening windows/doors or using [portable air cleaners](#) with a HEPA filter. See our advice on safe air.
- Departments of Education and private providers should immediately embark on a process of measuring ventilation levels at every school and improving ventilation where required. Carbon dioxide monitors are a cheap and effective way of testing ventilation and occupational hygienists can advise on both assessment and improvements.
- Vaccinate all children 12 years and older as soon as possible.
- Priority vaccination for all teachers and ECECS carers, and families of children in school or ECECS.
- Mandate vaccination for teachers as NSW has done.
- Develop flexible blended learning models to allow a sliding scale of indoor/outdoor learning at schools as well as online/face-to-face learning.
- The use of outdoor facilities should be encouraged wherever possible, with guidance from educators as to what is achievable.