

Managing covid-19 in Australian and Israel Schools: Lessons for Scotland

Around the world, schools have started to readmit children in the last few weeks and months. Although, nationwide school closures were implemented as cases of COVID-19 surged around the world, once pupils were readmitted – typically in phased fashion and with reduced capacity – national closures were not reintroduced.

The risks from schools reopening depend, of course on the mitigations to reduce infection that schools put in place. This is new territory for schools and there is a critical need to understand from other countries how schools can open safely at close to full attendance.

This summary looks at Australia and Israel to see if there are any lessons for Scotland before children return to school at fully capacity on 11th August 2020.

Key lessons:

1. Outbreaks of 2 cases or more will very probably occur in schools.
2. Suppressing the virus in the wider community to reduce the risk of transmission is critical before schools can open at full capacity. It will also minimise future disruptions to learning; if local outbreaks occur, other facilities where the risk of transmission is high (such as pubs or gyms) and non-essential shops should be closed, before considering school closures
3. An effective monitoring regime linked to a sufficiently scaled and rapid TTI system will allow the majority of cases to be isolated and keep schools open.
4. If cases arise in the community, where schools cannot implement distancing measures, masks may be a useful tool to suppress the spread of the virus.
5. The provision of clear and transparent guidelines on how schools should operate depending on the number of cases in the community must be provided to avoid confusion.

Lessons from Israel

As COVID-19 cases surged across the country, schools closed on 12th March; one of the first sectors to be shutdown. At this point, there were a total of 1,622 COVID-19 cases, 10 new daily cases (13 cases based on 7-day moving average) and 35 daily deaths in the country at this time.

Seven weeks later, on 3rd May 2020, children in grades 1-3 and 11-12 were allowed to return to school for phased in-person teaching or to attend revision classes before key exams. Children with disabilities were also able to return to school at this point. One week later, nurseries and kindergartens opened on a full-week or rotating half-week schedule, respectively. The decision to prioritise younger children and those with disabilities pupils was to allow parents to return to work and because the early years are fundamental to reducing educational inequalities, a political and economic decision.

The move to reopen schools was initially boycotted by several municipalities and many parents who cited poor government preparation, but since then many have become accustomed to a return to school. However, school attendance has been optional for all children, except for those taking matriculation exams.

More than two months later, Israel is still operating at partial capacity, leveraging rotating schedules to allow for distancing measures to be employed in schools. It is also one of the countries in which the use of masks has been mandated, typically for older age groups or pupils are travelling or mixing with others or cannot practice sufficient physical distancing. The testing strategy is also comprehensive; a positive case typically results in the whole school being tested. Parents also have to sign a health form confirming that their child and/or family members do not have COVID-19 before being permitted into school.

As wider lockdown restrictions eased in the country, COVID-19 cases began to surge in the country in early June. Since then clusters have appeared linked to multiple schools across the country resulting in total school closures; some reports suggest that 12% of new cases – mostly in the 10-19 age group - were detected in a school setting, though this does not imply that the school was the source of the infection. This includes more than 100 cases from a single school in Jerusalem; which may have been the result of a low probability “super spreading event”. In mid-June, at least 300 students and teachers

had tested positive for COVID-19 and more than 100 schools had been shut. A senior source in Israel has suggested that local experts believe that transmission of the virus is typically from adults to children. However, this remains unclear without data stratified by age, and regular monitoring of infections in symptomatic and asymptomatic children. The media has suggested that this may have been a result of relaxed rules on the wearing of masks during a heatwave, but this has not been verified.

More recently, the Education Ministry Director-General has asked schools to prepare for three scenarios from the start of the school year in September, depending on the number of COVID-19 cases detected¹. In the best-case scenario, schools will operate at full capacity. Although, middle schools and high schools will combine in-person and remote learning, while elementary and kindergarten students will continue with the existing framework, with added health regulations. In a second scenario, older students from fifth to twelfth grades will study remotely, while their younger peers in first to fifth grades are divided into small groups in schools, allowing distancing to be implemented. Only preschool students will remain in full-size classrooms with enhanced hygiene. Finally, in a worst-case scenario, all children, including pre-schoolers will split into small groups too. Local middle and high schools will be used to accommodate them with additional staffing.

Lessons from Australia

In Australia, the Federal Government did not mandate nationwide school closures, as per advice from the Australian Health Protection Principal Committee. This drew a lot of criticism from local governments and schools. In March, after the federal government released their response plan for COVID-19 - which stated that state and territory governments are responsible for operational aspects of social distancing – some territory and state governments brought forward school holidays and asked pupils who could work from home to do so to allow them to implement social distancing and appropriate hygiene measures.

On 12th April, at the start of the new term, schools that had closed implemented a phased and optional return of students. To mitigate the risk of the virus, schools implemented blended learning, distancing, and enhanced facilities for cleaning school property, regular handwashing, and decluttering. Masks or face coverings were not a requirement for children or teachers in schools.

In mid-May, when there were ~48 COVID-19 cases (7-day moving average), school attendance was made compulsory in most state and territories in Australia for those who are not in any high-risk categories. Further restrictions were lifted between 15th June and 3rd week of July (depending on the state/territory, making Australia one of the few countries where distancing measures have now been lifted for children (staff and parents are still required to keep a distance on school grounds) to allow schools to operate at close to normal capacity.

A study looking at the transmission of the virus in both primary and secondary schools, conducted by Australia's National Centre for Immunisation Research and Surveillance found that there was "very limited" spread in schools. The study, from March to mid-April, looked at transmission rates from nine students and nine staff members who tested positive for Covid-19 from 15 different schools. Despite 735 students and 128 staff coming into close contacts with these initial 18 cases, only two people were found to have contracted the virus.

Since reopening, there have been few outbreaks in schools. Two colleges in Sydney were closed at the end of May 2020 after one student in each school tested positive for COVID-19, followed by two primary schools in Melbourne with isolated cases. A childcare centre in the Melbourne was also closed for cleaning after a child tested positive. More recently, a large combined primary and high school in Melbourne was closed in mid-June after two pupils also tested positive. The number of infections linked to the school in Melbourne began to grow and eventually, all 2,000 students and 300 staff members were ordered to isolate and be tested. The cluster of cases rapidly ballooned to 102 cases by early July,

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becoming the state's second-largest outbreak. While most clusters in schools around the world involve students being infected by family or teachers, the chief health officer stated that there was a significant student to student transmission in this school, primarily in the upper year levels. This is still thought to be an outlier in Australia, where cases in schools are found to have been acquired at home or outside of school.

UPDATE

New Study out on South Korea: largest to date in terms of number of people (65,000) and detail. Key findings are: 'Children younger than 10 transmit to others much less often than adults do, but the risk is not 0. Roughly half as likely as adults to spread the virus. Unclear why. And those between the ages of 10 and 19 can spread the virus at least as well as adults do.'

→ might mean re-looking at secondary schools including use of face coverings by students if community transmission is occurring. Study reinforces that primary schools should go back full-time with no distancing especially in the context of low community transmission.

Overall these decisions need to be taken at a local level based on community transmission and local prevalence.

New Study out on Germany (Saxony): largest study in Germany on schoolchildren and teachers including testing in schools where there were COVID outbreak. Of 2000 samples, only 12 had antibodies. 1500 pupils and 500 teachers. Schools are planning to reopen as normal after schools holidays at end of August but with conditions of mask wearing and distancing where possible. But should only be read in the context of low infection rates.

<https://www.theguardian.com/world/2020/jul/13/german-study-covid-19-infection-rate-schools-saxony>