

Position statement: Return of South African Children to School during the 'Second Wave'

1 February 2021

This statement is an update to the one published on 30 May 2020, and presents the latest available evidence and considers the implications of a new virus variant (501Y.V2).

Summary

The South African Paediatric Association (SAPA) strongly recommends children return to school as soon as is safely possible. COVID-19 will continue for the foreseeable future, with infection rates increasing and decreasing in waves. Children are much less likely than adults to become severely ill with COVID-19 and are also less likely to transmit SARS-CoV-2 (coronavirus) to their contacts. The role of schools in promoting community transmission of the virus is not firmly established, but in most settings schools have contributed minimally to community transmission. Conversely, not returning to school has profound negative consequences, including detrimental effects on education, nutrition, mental and physical health, and finances. Consequently, returning to school will be beneficial to children, their parent(s) and the broader community. Non-pharmaceutical interventions must be strictly adhered to in schools and teachers should be prioritised for SARS-CoV-2 vaccination.

Background

Controversy continues regarding the reopening of schools in South Africa during the 'second wave' with conflicting views expressed by government, teacher trade unions, political parties, civil society organisations, school governing bodies, and parents. This has led to much parental, caregiver and child anxiety.

The preponderance of available evidence shows that children are both less likely to acquire SARS-CoV-2 infection, less likely to become severely ill when infected and less likely to transmit to others. Proper mitigation measures can reduce this risk even further.

Children and adolescents are less susceptible to SARS-CoV-2 than other age groups, and are less likely to be hospitalized following infection. This has been demonstrated during the first and second COVID-19 waves in South Africa. As of 2 January 2021, individuals aged ≤ 19 years made up 9.2% of laboratory-confirmed COVID-19 cases and 3.9% of all COVID-19-associated admissions in South Africa, while comprising 37% of the total population of SA.

This position statement represents the views of the South African Paediatric Association and the Paediatric Management Group (PMG). These two paediatric bodies represent all paediatricians in the public and private sectors in South Africa.

Evidence to support recommendations

Evidence has, and will continue to, emerge as the pandemic evolves. Data from less well-resourced settings are eagerly awaited.

Based on the current best evidence:

1. Acquiring SARS-CoV-2

- a. Children are less likely to acquire SARS-CoV-2 than adults. They account for 1-3% of reported cases. Children and young people have lower susceptibility to SARS-CoV-2, with 56% lower odds of acquiring infection following contact with a confirmed case.¹
- b. Children and adolescents are less likely to become infected with SARS-CoV-2.²
- c. Children have a lower incidence of acute SARS-CoV-2 infection compared to adults^{3,4,5},
- d. Children and adolescents younger than 20 years have 44% lower odds of secondary infection with SARS-CoV-2 compared with adults 20 years and older; this finding was most marked in those younger than 10 to 14 years.⁶
- e. Current SA statistics show that although the new virus variant present during the second wave has increased virus transmission compared to the first wave,⁷ children are not at higher risk of being affected by the new strain compared to adults.

2. Transmission by children:

- a. The ability of children to transmit SARS-CoV-2 is dependent on their susceptibility, symptoms, viral load, social contact patterns and behaviour.¹
- b. Younger children are less likely to transmit the virus to each other and staff compared to adolescents and adults.^{8,9,10}
- c. At a population level, children appear to be less likely to transmit and have a minor role in overall viral transmission. A systematic review of household cluster studies suggests that children were the index (transmitting) case in only 3 of 31 (10%) individual cluster studies.¹¹
- d. Adolescents are likely to have a slightly lower or similar rate of transmission compared to adults.^{6,12,13,14}
- e. Children are unlikely to have boosted the pandemic.¹⁵
- f. There are minimal published studies on the mechanisms of transmission of SARS-CoV-2 by children. A large recent study showed a clear relation between age and SARS-CoV-2 viral load, with children (<12 years) showing lower viral loads independent of sex and symptom duration.¹⁶

- g. Children are more likely than adults to have upper respiratory tract involvement, including nasopharyngeal carriage. They may also have prolonged respiratory and faecal shedding.¹⁷
- h. Young children are less likely to transmit the new variant too. The new UK variant is about 30 percent to 50 percent more contagious than its predecessors but recent research from Public Health England detailed contact-tracing of about 20,000 people infected with the new variant — including nearly 3,000 children under 10 — showed that young children were about half as likely as adults to transmit the variant to others. There is no data on the SA variant.

3. Severity of Disease

- a. In general, children have much less severe disease, accounting for less than 1% of severe cases and deaths.
- b. Children are more likely to have an asymptomatic infection than adults.
- c. When children and adolescents are infected, they are more likely to only have mild disease.^{18,19,20,21,22,23}
- d. There are no differences in the proportion of children admitted to public hospitals, admitted to ICU, or dying in hospital during the first and second COVID-19 waves in South Africa.⁸

4. Teachers

- a. Teachers have the same risk of acquiring Covid as other professions or individuals in the community.²⁴
- b. Teachers and non-teachers have similar Covid-19 infection rates, demonstrating that schools are not a setting of increased transmission and that schools are not increasing community transmission²⁵
- c. Teachers are not at high risk of being infected by children. Teachers are at higher risk of contracting the virus from other adults, e.g. colleagues in tearooms, at home or in the community (outside school).
- d. Teachers with comorbidities are at increased risk for severe COVID-19.
- e. Staff members need to be more vigilant for exposure both within and outside educational settings to protect themselves, their families, their colleagues and their students. Within education settings, stringent infection control measures, particularly between staff, need to be reinforced, including limiting use of common staff rooms and 'cross covering staff across bubbles'.²⁶

5. School transmission

- a. As schools have reopened internationally and in South Africa, school-related cases of COVID-19 have been reported, but there is little evidence that schools contribute significantly to community transmission.^{24,27}

- b. A 17 country European Centre for Disease Prevention and Control report found that 12 countries reported between 1 to 400 school-based clusters, but most involved < 10 cases and these often could not be definitively linked to in-school versus community-based transmission. (a) Similarly, in the United States, COVID-19 incidence among the general population was similar in counties where schools offered in-person education and those offering only virtual/online education. There was no increase in COVID-19 hospitalization rates associated with in-person education.²⁷
- c. There has been no noticeable effect (including both number of cases, admissions, and deaths) associated with the timing of opening or closing of schools in South Africa.⁷ This suggests that schools are not an important mechanism of community transmission.
- d. COVID-19 incidence in South Africa will inevitably continue to vary over the next year with recurring new waves. . Postponement of re-entry to school to reduce transmission risk to negligible would entail a delay of many months before schools could reopen.
- e. Attending school or child care is not associated with receiving positive SARS-CoV-2 test results among children and adolescents aged <18 years. Rather close contact with persons with COVID-19 and gatherings with persons outside the household and lack of consistent mask use in school were associated with SARS-CoV-2 infection.²⁸

6. Reduction of Transmission

- a. Mitigation policies such as masking, physical distancing, and hand hygiene, resulted in minimal clusters of SARS-CoV-2 infection and low rates of secondary transmission in schools, and did not cause a larger community infection burden.²⁹
- b. Adherence to non-pharmacological interventions (NPI) including 1) engineering controls – (*what we can do to the environment* to reduce transmission), such as ensuring ventilation and sufficient space; 2) administrative controls – (*what we can arrange* to reduce transmission), such as staggered time-tabling, screening, hand hygiene, cough etiquette and appropriate environmental cleaning; and 3) personal protective equipment (PPE) – (*what we can wear* to reduce transmission, such as non-medical (cloth) face masks and eye protection visors) should reduce the spread of the virus from the individual with COVID-19 to other learners or staff in schools.

7. Additional considerations

- a. Most South African schools will be unable to easily keep children 1 metre apart in classrooms, and conditions may limit outdoor learning and other efforts to improve classroom ventilation. Similarly, ensuring that physical distancing is maintained during school transport may be problematic.
- b. A recent South African survey of parents suggested that only 53% of adults think schools should not re-open until COVID-19 situation improves.³⁰ Parental anxieties need to be acknowledged but countered with effective education and interventions.

8. Indirect effects of the pandemic

- a. Impact on communities: lack of social contact, reduced access to health care, dependence on technology for access to health care and education³¹
- b. Impact on families: poorer parent mental health, competing demands and increased stress, job losses and reduced income, impacts on perinatal and mental health³¹
- c. Impact on children: poorer mental health and increasing behavioural and developmental concerns, lack of access to play and social opportunities, increased isolation, academic impacts, child abuse and neglect.³¹
- d. In all of these aspects, disadvantaged families seem to be disproportionately affected³¹

9. Risk-benefit analysis

- a. The **benefits of returning to school**, particularly for poorer children, include the positive impact on their learning, access to the School Nutrition Programme (one meal per day), and mental health and well-being gains. Only about 20% of school children benefit from online schooling according to the Department of Basic Education. School reopening will increase parents' and caregivers' ability to return to work.
- b. Schools provide so much more than just education in terms of providing nutrition and food security, physical and psychological safety which should be maintained at all costs in the face of potential COVID collateral damage to children.

Recommendations

Return to school:

1. SAPA supports the position that children should be returning to school as soon as is safely possible.
2. Most children, including those with asthma, allergic conditions and HIV can return to school. Children with severe immunosuppression, uncorrected significant congenital heart conditions, chronic organ failure, chronic severe respiratory disease and severe neurodevelopmental disability may be safer at home. Advice from relevant healthcare professionals should be sought if there is uncertainty.
3. Early Child Development (ECD) settings promote physical health, emotional safety, social connections and engaged learning. Reopening ECD settings can provide children with much-needed emotional support, learning opportunities and offers reliable childcare options for parents returning to work.³²
4. Children with limited mobility (who cannot avoid coming into close contact with others nor practice preventative measures), and those with cognitive impairment or difficulty understanding the importance of practicing preventative measures, may be at increased risk of acquiring Covid-19 infection and may be safer at home.³³

Transmission reduction practices:

5. Schools should undertake measures that are known to reduce pathogen transmission. Schools should provide water, sanitation and waste management facilities and follow environmental cleaning and decontamination procedures. Wherever possible, disinfection measures to clean high traffic areas should be conducted at the start and end of each day and regularly during the course of the day. The focus should be on surfaces that are frequently touched (railings, lunch tables, sports equipment, door and window handles, toys, teaching and learning aids, etc.) Cleaning of the environment should be with soap and water and/or wiping with alcohol or chlorine-based solutions. Safety during school transport requires similar attention.
6. For individual children, measures such as physical distancing (learners at least 1 meter apart), masking, regular handwashing with soap (or sanitiser use, if water is unavailable) should be implemented. The use of decontamination tunnels or spraying of children has no benefit and may be harmful.
7. Where all the above measures are not available, SAPA's view is that educational activities should nevertheless commence as safely as is possible, while attending to addressing any deficiencies.
8. An individual child aged 6 years or older should be required to wear a cloth face mask to prevent disease transmission. Use of plastic shield masks or other higher safety category masks is unnecessary, although not discouraged. There is no need for children to routinely put on aprons, gloves or other protective gear.

9. Children should receive intensive age-appropriate education around the behaviour change required from them during the first few days back at school, and regularly thereafter.
10. Additional measures such as different break schedules and splitting classes to attend on alternate days should be considered to reduce learner congregation. Extracurricular activities at schools, including contact sports, should be strictly controlled to reduce transmission risk. The implementation of these additional measures should be guided by what is feasible, practical and acceptable and tailored to the needs of each school setting.
11. There is no role for nutritional supplements, medication, or other agents as none are currently proven to prevent COVID-19 disease acquisition or recovery in children.
12. Teachers should take standard workplace precautions, including physical distancing in staff-rooms, to reduce the risk of SARS-CoV-2 transmission. Teachers with medical comorbidities or other risk factors for severe COVID-19 should preferably be allowed to participate in lower-risk activities at school, undertake virtual jobs or teach remotely.

Symptom screening, close contacts, and symptoms of Covid-19:

13. Symptom screening should be undertaken at school entry each day, however there is minimal benefit for routine thermal screening. Sick learners, teachers and other staff should not go to school. Children who have a fever, cough, runny nose, sore throat, or diarrhoea and vomiting should stay at home. It should, nevertheless, be recognised that most children (and many teachers) will be asymptomatic during SARS-CoV-2 infection.
14. Children who are well but who have an infected household contact should remain at home for 10 days from the onset of the contact's symptoms. There should be no requirement for children to have a negative SARS-CoV-2 test before being allowed to return to school.
15. Children who have a SARS-CoV-2 infected classroom contact - defined as close contact (less than 1.5 m) with an infected learner or teacher for 15 or more minutes while not wearing a mask - should be advised to stay at home for 10 days.
16. If a child develops symptoms of COVID-19 disease, he/she should be tested. If negative, with no contact history, he/she can return to school immediately. If positive, or if no testing is done, the child must remain at home for 10 days from the onset of his/her symptoms (see National Institute of Communicable Diseases guidelines).³⁴
17. Children with high-risk individuals at home (such as the elderly) should be advised to reduce contact time with them and do this more safely (e.g. wearing a mask during contact time), with more vigilant attention to home cleansing, and developing a home routine that minimises risk such as limiting the sharing of towels and kitchen utensils.

Outbreaks in schools:

18. There is Department of Basic Education guidance on what constitutes a school outbreak and when a school should be considered for full or partial closure because of an excessive number of COVID-19 cases. This situation can be managed by educational authorities in conjunction with

public health experts on a case-by-case basis once schools reopen. Entire school closures should be avoided unless necessary. Individual class closure(s) is/are a more practical and sustainable solution.

The way forward:

19. Regular reassessment and evaluation of the situation will be crucial over the forthcoming months.
20. We acknowledge that parental anxiety is not unfounded, with some children at higher risk for severe disease. Parental and caregiver autonomy must be respected. High-risk children and those children whose caregivers elect not to send them to school are as entitled to education and efforts should continue to facilitate this.
21. Learner representation should be included into future decision making.³⁵

These recommendations may, and will, be amended based on emerging and accumulating evidence.

SAPA and PMG remain committed to the health and wellbeing of children in South Africa and to that of parents, teachers and others in the learning environment.

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