



CMSA

The Colleges of Medicine of South Africa NPC

Nonprofit Company (Reg No. 1955/000003/08)
Nonprofit Organisation (Reg. No. 009-874 NPO)
Vat No. 4210273191

27 Rhodes Avenue, PARKTOWN WEST, 2193

Tel: +27 11 726 7037; Fax: +27 11 726 4036

**College of Public Health Medicine
Under the CMSA**

Website:

www.cmsa.co.za

Guidance Document 4

Reducing transmission of COVID-19 in the school environment: informing public health recommendations (30th April 2020)

Background

- COVID-19 is caused by the SARS-CoV-2 virus and spreads from person-to-person through respiratory droplets produced when an infected person coughs or sneezes, and from touching contaminated surfaces
- Close contact with people with known infection should be avoided and remains the mainstay of current prevention measures (physical distancing¹)
- Predominant symptoms include those of the respiratory tract including cough, fever, sore throat and shortness of breath; although other symptoms are increasingly being reported
- Current experience indicates that 80% of COVID-19 infections will be mild; 20% will be more severe, and some will require ICU treatment; most people will recover
- In general, the severity of COVID-19 infection is associated with older age groups and vulnerable populations with comorbidities
- Children and adolescents usually exhibit mild or no symptoms
- The specific rate of transmission within schools remains unknown but is likely to be a source of transmission in the community; the large degree of mixing and contact among and between children and adults in the traditional school environment presents many challenges to achieving physical distancing
- Guidance is required regarding 1) school closures, 2) implementation of hygiene and physical distancing measures, and 3) managing learners and staff who have had contact with individuals who have suspected or confirmed COVID-19 infection or are displaying symptoms of COVID-19

Current risk of community transmission of SARS-CoV-2 in South Africa

The World Health Organization (WHO) categorises the coronavirus and COVID-19 into four categories: Stage 1 - imported by travellers; Stage 2 - clustered transmission; Stage 3 - local transmission; Stage 4 - widespread community transmission. At 4,793 individuals with confirmed infection (27th April 2020), South Africa is now moving towards Stage 3 transmission.

¹ The term *physical distancing* replaces the term *social distancing* as it highlights the need to keep physically apart while recognising that people should still try to spend time together through digital technology and telephonic communication to maintain good mental health.

Evidence of school closures and physical distancing practices on reducing transmission

A recent review² of the current research evidence assessed the effects of school closures in reducing transmission during coronavirus infection outbreaks. We judged the overall risk of bias in the review to be low with some concerns, including that the search strategy was limited to the English language resulting in potential language bias and no evaluation of individual study quality; however the authors acknowledge the limitation of the evidence identified in the review.

MAIN FINDINGS OF REVIEW:

- ➔ 16 studies were eligible from 616 articles identified in a search of three databases
- ➔ School closures were deployed rapidly across mainland China and Hong Kong for COVID-19. However, there are no data on the relative contribution of school closures to transmission control.
- ➔ Data from the SARS outbreak in mainland China, Hong Kong, and Singapore suggest that school closures did not contribute to the control of the epidemic.
- ➔ A review and study from the SARS outbreak in Singapore found that school temperature monitoring did not contribute to control of infection transmission
- ➔ Modelling studies of SARS produced conflicting results.
- ➔ Recent modelling studies of COVID-19 predict that school closures alone would prevent 2–4% of deaths, less than other physical distancing interventions.
- ➔ Policy makers need to be aware of the equivocal evidence when considering school closures for COVID-19, and that combinations of physical distancing measures should be considered. Other less disruptive physical distancing interventions in schools require further consideration if restrictive physical distancing policies are implemented for long periods.

In summary, this rapid review was relatively well-conducted but failed to address individual study quality. It found that the evidence base to support school closures for reducing coronavirus transmission is limited and that temperature screening is unlikely to be effective. The authors urge that modelling and observational studies are needed to guide policy on the opening of schools once the pandemic is under control.

Hygiene and physical distancing measures to consider for reducing SARS-CoV-2 transmission in the school environment

When schools are opened, implementation of hygiene and physical distancing measures will be an imperative. The aim of this Guidance is to provide schools with practical measures founded on public health principles to reduce the school environment becoming a source of COVID-19 transmission.

Considering the limited evidence for school closures to reduce transmission, and the likelihood of schools opening in May 2020 according to the South African risk-adjusted strategy, we considered the following when developing the guidance:

- We develop guidance using the overriding ethical principle of “first do no harm”.
- Overarching benefits versus harms are assessed whilst also taking into account uncertainties, unknowns, and issues of feasibility, with equity foregrounded.

² Viner RM, Russell SJ, Croker H, Packer J, Ward J, Stansfield C, Mytton O, Bonell C, Booy R. School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *Lancet Child Adolesc Health*. 2020 May;4(5):397-404. doi: 10.1016/S2352-4642(20)30095-X. Epub 2020 Apr 6.

- In the school setting we present hygiene and physical distancing measures within three major focal points of transmission viz. 1) before school, 2) to and from school, 3) at school.
- We note that school administrators and teachers are not solely responsible for ensuring adequate hygiene and physical distancing measures, but that caregivers and learners also have personal responsibilities to contribute to the reduction in overall community transmission.
- This guidance does not seek to determine when schools should open, but what to do once this decision has been made in order to prepare schools.

Specific population or setting challenges:

- Water, sanitation and hygiene are not equally accessible and hygiene and physical distancing measures are not feasible in many communities. This guidance may be considered aspirational in some settings and will require further efforts from the relevant national and provincial departments to achieve adequate preparation to manage infection prevention and control in schools prior to re-opening.
- Schools which serve learners with mental or physical developmental challenges may need to consider additional measures in addition to this guidance.
- Schools which include boarding facilities may need to consider additional measures to this school-based guidance in order to prevent transmission in accommodation facilities.

Cultural and Behavioural factors:

- Societal norms and possible stigmatisation may negatively impact on implementation of this guidance.
- Incorrect use of masks (such as mask not covering nose, worn inside-out, worn when wet or moist, repeated touching of the mask) would not only reduce the potential benefits, but may cause harm in being a source of infection when worn by those with confirmed or asymptomatic infection.

Transmission factors:

- Consideration of pre-symptomatic and asymptomatic transmission, which may or may not be prevented by the wearing of facemasks, is an important driver for ensuring that hand-washing and physical distancing continue to be promoted as the most effective means of prevention.
- Combination of measures, rather than a single 'magic bullet' measure, appears to be the most effective means of reducing transmission.

Recommendations regarding implementation of hygiene and physical distancing in the school environment to reduce transmission of COVID-19

1. What to do before going to school each day

a. Hygiene:

- *Personal responsibility:*
 - ✓ Caregivers to do a 'physical check-in' on their children on a daily basis before school to assess for any symptoms of any illness – do not send child to school if ill with *any* symptoms.
 - ✓ Staff to do a 'physical check-in' on themselves on a daily basis before school to assess for any symptoms of any illness – do not attend school if ill with any symptoms.
 - ✓ If child or caregiver or staff diagnosed with COVID-19, to alert school to allow for contact tracing, and to follow national guidance for self-isolation

- ✓ If child or caregiver has been in contact with an individual with a suspected or confirmed COVID-19 infection, to inform school and to follow national guidance for self-quarantine
- *School responsibility*
 - ✓ Schools to promote daily symptom screening for all learners and staff at home before coming to school
 - ✓ Schools can consider use of symptom screening apps to deliver via cellular phone technology to all learners, caregivers and staff on a daily basis.
 - ✓ Actively encourage disclosure by families and staff with COVID-19 illness to school authorities to permit contact tracing, without fear of stigma or discrimination.

b. Physical distancing

- *Personal responsibility:*
 - ✓ Caregivers to emphasise “no touch” connection with others at home, such as waving, nodding, smiling as forms of greeting and engaging, and to refrain from hugging, kissing, play-wrestling, etc.

2. What to do when going to and from school each day

a. Hygiene

- *Personal responsibility*
 - ✓ Caregivers to provide clean cloth mask (if mandatory according to regulations) (see <http://www.health.gov.za/index.php/component/phocadownload/category/631>)
- *School responsibility*
 - ✓ Schools to promote appropriate hygiene measures (sanitizing, cough etiquette) during travel to and from school for all learners and staff
 - ✓ Provision of hand-washing or hand sanitization points at sites of drop-off and collection (see forthcoming CPHM Guidance on hand-sanitizers)
 - ✓ Provision of reserve stock of emergency clean cloth masks for learners arriving without masks, or damaged, inappropriate masks etc.

b. Physical distancing

- *Personal responsibility*
 - ✓ Caregivers to select appropriate transport choices for learners aligned with regulations. See CPHM guidance on public transport regarding adequate ventilation, sanitization and reduced capacity in public transport conveyances (bus, train, taxi) https://www.cmsa.co.za/view_news_item.aspx?NewsID=149
- *School responsibility*
 - ✓ Schools to promote physical distancing for all learners and staff when arriving and leaving school
 - ✓ Provide clear demarcations (with tape or barriers) for staggered queuing allowing 2m space between individuals queuing for bus or taxi (see [queuing pattern](#) in Appendix)
 - ✓ Arrange drop-off and collection times to be staggered for different grades to allow for less crowding during queuing

3. What to do at school each day

a. Hygiene

- *Personal responsibility*
 - ✓ Learners and staff to wear clean cloth masks appropriately if mandatory and to follow advice on how to don and doff (see <http://www.health.gov.za/index.php/component/phocadownload/category/631>)
 - ✓ Learners and staff to frequently sanitise personal devices and touch screens in their use.

- *School responsibility*

- ✓ Schools to promote regular hand-washing for 20 seconds and cough and sneeze etiquette for all learners and staff
- ✓ Have a clear plan and protocol to follow should a learner or staff member be at risk of contact with an individual with COVID-19 or develops symptoms at school (see [checklist](#) and [protocol](#) in Appendix, which includes a dedicated isolation room).
- ✓ Learners and staff to be encouraged to inform staff if they develop symptoms or have had contact with an individual with confirmed or suspected COVID-19 so that the necessary transfer to the isolation room can begin.
- ✓ School to follow national guidelines for isolation and quarantine of learners or staff who meet criteria as informed by the local health authorities
- ✓ Provision of hand-washing or hand sanitization points at easily accessible sites throughout school.
- ✓ Sanitization to be provided at entrances to class-rooms and any gathering venues.
- ✓ Training of how to wear a cloth mask appropriately, to only touch the ear-strings, not the mask itself, and how to clean it.
- ✓ Provision of masks and visors to all teachers and guidance on adequate wearing and cleaning.
- ✓ Ensure that there are no activities where students are expected to hold hands or walk directly behind each other, or next to each other
- ✓ Cleaning staff to regularly clean frequently-used surfaces including door handles, doorknobs, light switches, tables, countertops, desks, phones, keyboards, toilets, taps and sinks. (Essentially any surface that people touch regularly.)
- ✓ Schools to ensure that cleaning staff have adequate cleaning supplies, are adequately trained, have appropriate personal protective equipment. If isolation room requires cleansing, schools to ensure that appropriate personal protective equipment is available for designated trained cleaning staff.
- ✓ Schools with limited resources must escalate to District Circuit Manager to ensure adequate water supply and hand-washing facilities as well as provision of sanitiser before learners should be permitted onto school property.

b. Physical distancing

- *Personal responsibility*

- ✓ Learners and staff to maintain adequate physical distancing and to follow instructions of teaching staff.
- ✓ Learners to alert staff if they develop symptoms or have had contact with an individual with confirmed or suspected COVID-19.

- *School responsibility*

- ✓ Schools to promote physical distancing for all learners and staff in the school and to avoid close contact (no hugging or shaking hands).
- ✓ School to actively encourage authentic information and communication regularly regarding COVID-19.
- ✓ School to discourage all stigma and discrimination regarding COVID-19.
- ✓ Teachers over the age of 60 and with comorbidities should work from home, or if selecting to work at school, to have no contact with children and minimal contact with other staff during the work day.
- ✓ Consider staggering classes to reduce size of class.
- ✓ Limiting classrooms to the number of learners that still permits adequate physical distancing.
- ✓ Consider use of large venues (e.g. school halls) for teaching in settings where crowded classrooms will not permit adequate physical distancing.
- ✓ Cancel or postpone any gatherings e.g. assemblies, or prize-giving.
- ✓ Cancel all sporting and cultural events and regular sports or cultural activities.

- ✓ Refrain from incentivising attendance or punishing absenteeism.
- ✓ Encourage learner leadership to promote health promotion and consider peer-to-peer health promotion activities.
- ✓ Schools to provide referral for mental health support when necessary due to the high levels of anxiety circulating within the school community regarding COVID-19.

Summary statement

- Evidence indicates that school closures may not contribute significantly to coronavirus epidemic control. Should schools be re-opened, implementation of other hygiene and physical distancing measures would be an imperative. The aim of this Guidance is that schools do not become sources of COVID-19 transmission.
- Guidance for schools is focused around hygiene and physical distancing measures within three major focal points of transmission:
 - 1) before school
 - 2) to and from school
 - 3) at school
- Continuous communication, education and monitoring of these measures should form part of the school's daily routine; in particular discouraging stigma of any learner or staff member with COVID-19.
- School administrators and teachers are not solely responsible for ensuring adequate hygiene and physical distancing measures, and caregivers and learners also have personal responsibilities to contribute to the reduction in overall community transmission.

The **KEEP** mantra for school administrators to apply

Keep – yourself at home if you are sick

Keep – washing your hands for 20 seconds

Keep – your physical distance from others

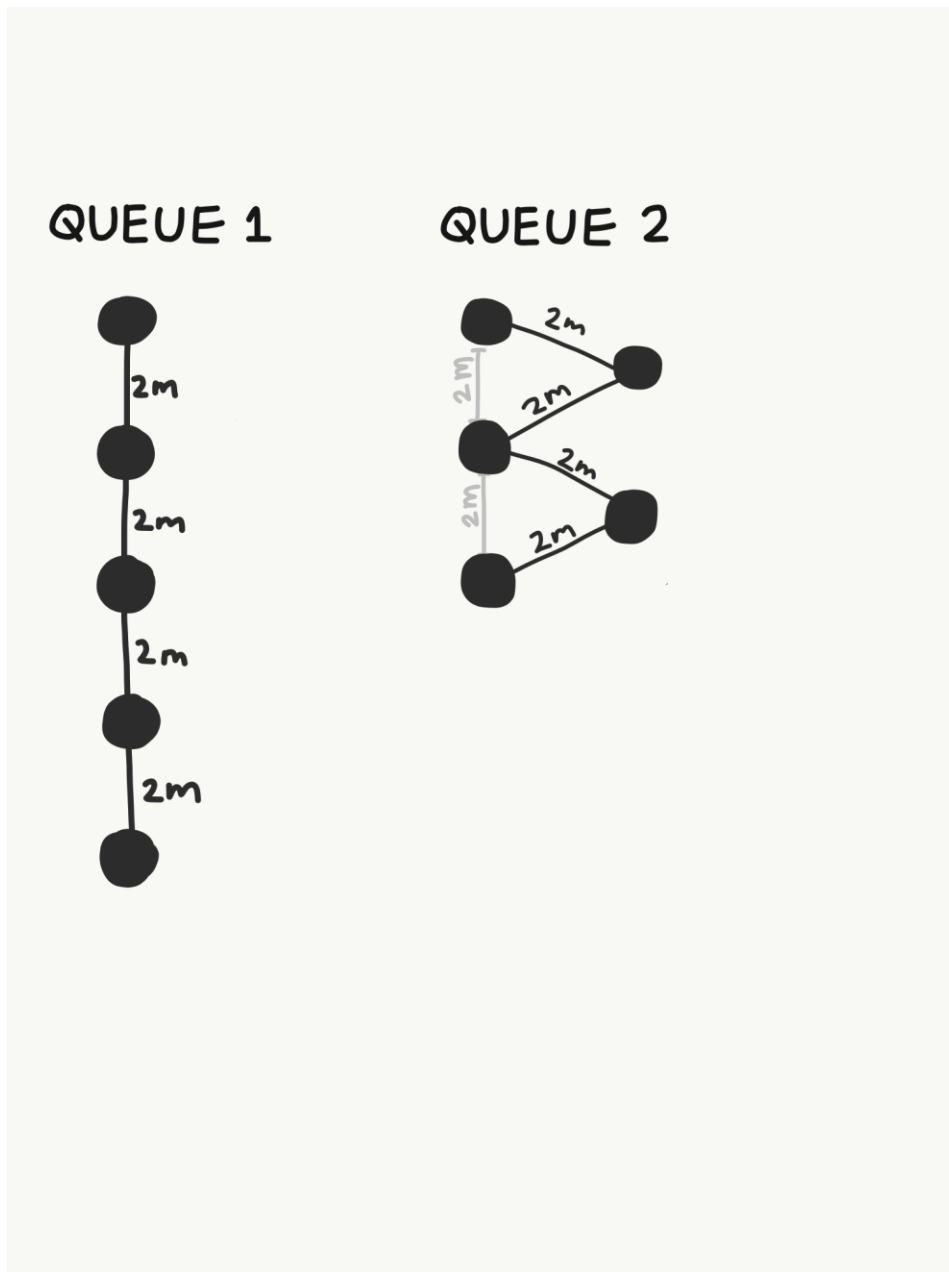
Keep – away if you cough or sneeze and cough and sneeze into your elbow







Released by the College of Public Health Medicine COVID-19 Evidence-based Guidance Task Team³ & the CEO for the CMSA, Prof Eric Buch
Version 3 30th April 2020

³ The CPHM COVID-19 Evidence-based Guidance Task Team comprises CPHM Fellows: Kerrin Begg, Mary-Ann Davies, Rene English, Bernice Harris, Dishiki Kalonji, Alishka Rajman, Kate Rees, Nandi Siegfried, Jim teWaterNaude.
Contact: Dr Nandi Siegfried nandi.siegfried@gmail.com; Dr Kerrin Begg, kerrin@begg.co.za

Queuing Pattern

Queue 2 demonstrates how a zig-zag pattern can accommodate more people into the same length of a queue



CHECKLIST	Preparing school to sensitively manage learners or staff who may be contacts or who have or may have COVID-19 symptoms
	Identify at least two designated staff members (and a learner leader if desired) to be responsible for implementing protocols for managing learner and staff infection; hereafter referred to as the Point Person
	Provide Point Person with cell telephone and SIM card to ensure they can be contactable and make calls as necessary
	Communicate and publicize Point Person and contact details widely among the school community (posters, social media) so that everyone knows whom to contact should a learner or staff member require isolation
	<p>Point Person supported by school principal to identify and prepare a room for isolation. The room should be:</p> <ul style="list-style-type: none"> ✓ Adequately ventilated, with windows if possible ✓ Easy to locate ✓ Be minimally furnished – table and two chairs, no carpets or soft furnishings ✓ Provided with a clean supply of medical masks
	<p>Point Person to ensure that the necessary telephonic contact details for local response team is clearly visible on a poster in the room</p>
	<p>Point Person to ensure that the cleaning manager is familiar with the protocol for cleaning the isolation room</p>
<p>NICD PUBLIC HOTLINE 080 002 9999</p>	

PROTOCOL	A learner or staff member has been exposed to a person with suspected or confirmed COVID-19, or has COVID-19 symptoms
1.	If individual is seriously ill or injured or their life is at risk follow usual school protocol to call emergency services and note that the individual is a contact or may have COVID-19 [.....] (campus emergency number)
2.	If life is not at risk or not seriously ill, immediately contact the designated Points Person [tel:.....] to implement the protocol and hand-over procedure to the Points Person
3.	Points Person to immediately do the following
	<ul style="list-style-type: none"> ✓ Reassure and comfort the individual ✓ Ensure that there is no stigmatization and that the process ensures little or no emotional trauma ✓ Provide individual with new medical face mask ✓ Accompany individual to the adequately-lit isolation room and if possible shut the door if adequate ventilation assured e.g. open window ✓ Do not allow friends or others to sit with the individual – allow 2 metres between any other people in the vicinity ✓ Ask individual to avoid touching people, surfaces and objects and be advised to cover their mouth and nose with a disposable tissue when they cough or sneeze and put the tissue in the bin. If no bin is available, put the tissue in a bag or pocket for disposing in a bin later. If no tissues available, they should cough and sneeze into the crook of their elbow ✓ If they need to go to the bathroom whilst waiting for medical assistance or transfer to their isolation or quarantine venue, they should use a separate bathroom if available ✓ Wash hands well according to handwashing guidelines
4.	Points Person to contact the school designated healthcare provider to await further instructions for transfer of individual For learners: [.....] For staff: [.....]
5.	Point Person to arrange for isolation room to be cleaned once the learner or staff member has been transferred.
NICD PUBLIC HOTLINE 080 002 9999	