# QUICK REFERENCE GUIDE TO SUPPORT THE RESPONSE TO INDIVIDUALS WITH COVID-19 IN SCHOOLS

## **BACKGROUND**

These guidelines apply to schools including primary and secondary schools and early childhood development settings (exclude post-school education and training settings). This guideline aims to provide a practical step-by-step approach to:

- 1. Managing an individual with a confirmed or suspected COVID-19 diagnosis in the school setting;
- 2. Containing school-associated SARS-CoV-2 transmission;
- 3. Managing a cluster of individuals with confirmed or suspected COVID-19 diagnosis

# I. **DEFINITIONS**

**Close Contact:** Staff or learners who have been in contact with an individual with confirmed COVID-19 (even if they did not have symptoms) for:

- >15 minutes within 1 meter without a mask or
- sharing a closed classroom or workspace for >2 hours with a mask.

**Casual/Distant Contact:** Staff or learners who are a contact but do not meet the criteria for a direct/close contact. For more detail on assessing risk to contacts, see Table 1: Risks to contacts of confirmed cases depending on exposure type and setting.

**Suspected COVID-19:** When staff or learners appear ill or display symptoms compatible with COVID-19 based on symptom screen/NICD case definition, but have either not tested or are awaiting SARS-CoV-2 test result.

**Confirmed COVID-19:** When staff or learners test positive for SARS-CoV-2 using laboratory tests (usually PCR) with or without symptoms.

**Cohorting:** the practice of keeping the same learners and staff in the same small group at all times during the school day. Cohorting helps limit the number of contacts each individual has. As a result, if quarantines or dismissals are needed, they may affect fewer people, resulting in fewer disruptions to learning. Learners may be in multiple cohorts, e.g. taxi ride to school, classroom, an activity.

**Classroom cohort:** All learners occupying the same physical space (classroom).

A cluster of cases (or a cluster outbreak, or 'linked cases'): Two or more individuals from separate households with confirmed or suspected COVID-19 within seven calendar days in the same classroom or friendship group or between individuals working in the same area. Cases are "linked"

if the cases have had contact with each other (e.g. in class room, school activity, friendship group) during the 14 days before their symptoms began. A cluster of cases suggests a common source of the infection and/or lapses in the infection control practices in the school.

**School outbreak:** Two or more cluster outbreaks (involving classrooms or cohorts) in a school confirmed COVID-19 within a 10 to 14-day period.

**Period of Infectivity:** Time the individual with confirmed COVID-19 was present in the school while in the infectious period as determined by:

- In an individual with confirmed COVID-19 who has symptoms, the infectious period begins 48 hours prior to symptom onset and lasts until ten days after symptom onset.
- In an individual with confirmed COVID-19 with no symptoms:
  - Where the <u>source of infection is unknown</u>, the infectious period may be regarded as commencing 48 hours before the date of the sample, to ten days after the sample was taken.
  - Where the <u>source of infection is known</u>, the infectious period can be estimated based on a minimum incubation period of 2 days following exposure.

**Quarantine:** A period during which *a contact* is separated from people and observed for the development of symptoms of COVID-19. This is for ten days in the case of COVID-19. Quarantine can be involuntary if demanded by the State.

**Isolation:** A period during which someone who **is** *sick* (suspected or confirmed to have COVID-19) is separated from healthy people. The period stops if an individual with suspected COVID-19 tests negative or according to de-isolation guidelines for individuals with confirmed COVID-19 (currently 10 days of isolation). Isolation can be involuntary if demanded by the State.

**Self-isolation:** A term used widely in the context of COVID-19 to imply that an individual who either has COVID-19 or has been exposed to someone with COVID-19 voluntarily selects to separate themselves from other healthy people. During this period, the individual should not go out, wear a mask in the home, and have separate living and ablution facilities where possible.

**De-isolation:** An individual with confirmed COVID-19 can stop isolation precautions and return to school or work after ten days from the day symptoms start (if mild symptoms) or the date when the test was done (if no symptoms). If admission to hospital is needed for treatment of COVID-19, at least ten days from discharge and when well enough to return to school. Repeat testing for SARS-CoV-2 is **NOT** required before return to school or work.

**Environmental disinfection:** All equipment and rooms where individuals who have confirmed COVID-19 have been within the last 48 hours should be identified for appropriate cleaning. Following a thorough cleaning, surfaces are wiped, not sprayed, with disinfectants such as 1000 ppm

chlorine (hypochlorite) or 70% alcohol, as recommended. It is not necessary for companies to be called in to do disinfection.

**COVID-19 related non-pharmaceutical interventions (NPIs):** NPIs are non-drug interventions to prevent the spread of the SARS-CoV-2 from staff or learner with COVID-19 to other learners or staff in schools. NPIs are categorised as:

- 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 regular environmental cleaning; and
- 3. personal protective equipment *what we can wear* to reduce transmission, such as non-medical (cloth) face masks and eye protection visors.

## II. ROLES AND RESPONSIBILITIES

- a. Containing the spread of SARS-CoV-2 infections in schools requires the Provincial Education Departments (PEDs) to work closely with the Department of Health (DoH) in provinces at provincial, district and local level.
- b. At school level, the Principal should coordinate all COVID-19 prevention and response activities. The Principal may delegate this responsibility to a member of the School Management Team (SMT) who becomes the COVID-19 point person.
- c. The Principal (at the school) and Provincial Education Departments (PEDs) will be responsible for the following:
  - Hygiene and infection prevention, control measures and supplies at the school
  - Effective communication with learners, parents, and other role-players
  - Ensuring that all learners, staff and visitors are screened for COVID-19 symptoms, and the isolation of sick, symptomatic and individuals with a fever in the designated area while awaiting further assessment by a health practitioner on or off-site.
  - Providing training to school cleaning staff and volunteer food handlers on cleaning and disinfecting procedures (assisted by DoH).
  - Reporting on COVID-19 cases in learners and staff within 6-12 hours of being aware thereof to the district/area education focal point person responsible for the management of COVID-19 cases as well as to the district Integrated School Health Team (ISHT).
  - Schools, district and provincial offices to keep daily records of reported confirmed
     COVID-19 cases including COVID-19 related fatalities.
  - Cleaning and disinfection of areas occupied by the learner or staff with suspected or confirmed COVID-19.
- d. The Department of Health (DoH) will be represented on the ISHT by a school health nurse, CDC coordinator or member of the contact tracing team and will be responsible for the following:
  - Providing advice and support when requested by the PEDs, including environmental cleaning, school closures and additional preventative measures needed.
  - Linking each school with a professional nurse and health care facility and providing contact details thereof to the School Management Team (SMT) and School-Based Support Team (SBST) for screening.
  - Providing training to education officials on procedures for screening of learners, school personnel and visitors, and supporting the screening of learners.

- Ensuring that learners and school personnel who are symptomatic, are managed and referred appropriately in line with local protocols for COVID-19 triage and testing.
- Notifying the school of any cases that have been identified within the school.
- Providing contact tracing where individuals with confirmed COVID-19 are identified in the school, assisting the school to conduct a risk assessment and advising about any additional actions the school should take in support of this.
- Seek further advice from a provincial or national epidemiologist regarding need for further investigation if there are cluster of cases, especially if the cases are linked.
- e. Decisions regarding closure and re-opening of a school or parts thereof is the DBE's decision guided by the recommendations and advice of the accountable health authority.

# III. WHAT TO DO BEFORE IDENTIFYING AN INDIVIDUAL WITH COVID-19 CASE/S IN SCHOOLS:

- a. The School Principal or their delegated representative (a member of the school management team) should be identified as the school COVID-19 focal person. If the Principal delegates this responsibility, the person should be sufficiently capacitated to take responsibility for the actions required to manage COVID-19 related activities in the school. This includes liaising with the School-Based Support Team, Principal, SMT, school governing body representative, learner representative/s and identified individuals and partner organisations.
- b. Point person/s should be trained on how to recognise and take initial action with suspected or confirmed COVID-19 case/s and to recognise a cluster of cases in schools.
- c. The point person should be in contact with a district or provincial Integrated School Health Team (ISHT) and Circuit Manager /IDSO/ Cluster manager or the COVID-19 response team to assist with decision making.
- d. The COVID-19 point person or principal should ensure regular and current communication within the school community; schools need to manage the concerns during the COVID-19 pandemic.
  - i. Aim to send out a circular at least monthly regarding school plans and progress regarding preparedness.
  - ii. Emphasise that keeping the school community healthy is a joint partnership between the school, staff and learners and their caregivers.
  - iii. Acknowledge the risks that while children, in general, have mild disease, the spread into schools is likely to follow the trend in the wider community.
  - iv. Emphasise the need for preparedness and a high degree of vigilance.
  - v. Sick children and staff should not come to school.
  - vi. COVID-19 prevention practices of hand hygiene and social distancing need to be continued outside of school and in homes.

# IV. WHAT TO DO FOLLOWING RECOGNITION OF A COVID-19 CASE/S IN A SCHOOL

- a. The COVID-19 point person should identify and investigate cases and contacts. COVID-19 positive cases and contacts are defined at the beginning of this document.
  - Cases should be interviewed to understand if they might have contracted COVID-19
    at school or outside school, and if they are 'epidemiologically linked' to other cases
    at the school (see Definition above for 'linked cases').
  - Key questions to ask include
    - Have you been exposed to anyone with COVID-19 in the last 14 days?
    - o Does anyone in your household have COVID-19?
    - o Have you been to any social gatherings in the last 14 days?
    - o Does anyone in your class at school have COVID-19?
    - O Does anyone whom you travel with to and from school have COVID-19?

If there are other cases of COVID-19 in the school, ask the following questions to determine if the cases are 'linked'

- O Do you know the other person/people with confirmed COVID-19? (this requires that the other cases names are made known to the individual).
- O Have you had contact with this person in the last 14 days? (Probe, and give examples when this may have occurred)
- Contacts should be interviewed to understand their risk of getting COVID-19.
   Information from the interview can be used along with Table 1 below to understand the person's risk of getting COVID-19. Key questions to ask are
  - How close were you to the person who was diagnosed with COVID-19?
  - How long were you close to the person who was diagnosed with COVID-19?
  - Were you wearing a mask when you were close to the person with COVID-19?
  - Was the person with COVID-19 whom you were close to wearing a mask?
  - o Did you have physical contact with the person?
  - O Did you eat a meal with the person?
- b. The COVID-19 point person should follow the algorithm in Figure 1 and Table 2 to determine appropriate responses. Figure 1 is an algorithm which identifies which scenario is present. Table 2 lists the scenarios and describes appropriate responses.
- c. Early communication to key stakeholders (circuit manager, staff, parents, learners, unions) following the identification of the COVID-19 case/s should be designated to the School Principal or his/her designate (COVID-19 Point Person) in consultation with the

- Integrated School Health or COVID-19 response team leader, to prevent misinformation and reduce anxiety.
- d. An initial communication regarding the situation needs to be made within 6-12 hours following the report of a positive case and preferably as soon as practically possible. This initial communication should clearly state:
  - What is known about the COVID-19 situation at that point in time and what is not known.
  - What initial steps have been taken to address the situation.
  - How persons can prevent themselves from becoming ill (i.e. strict adherence to prevention measures).
  - Be transparent and always provide a rationale for any actions taken.
  - Retain confidentiality and avoid stigmatising language, e.g. 'person with possible coronavirus' rather than 'suspected case.'
  - Draft communication specific to each event, but in general state:

We would like to inform you that a [population: learner, staff, teacher] has been identified as [possibly having coronavirus/having coronavirus/in contact with someone with coronavirus]. All school protocols were followed to ensure minimal transmission to others. The [population: learner, staff, teacher] is now in the care of [state hospital/quarantine/self-isolation at home], and the appropriate education and health authorities have been informed.

We will [describe action, e.g. closure, non-closure dependent on nature event] as advised by the guideline or provincial/district COVID-19 response team. This is because [provide a clear and coherent rationale for the plan of action].

Our thoughts are with the individual and their family at this time.

Table 1. Risks to contacts of confirmed cases depending on exposure type and setting

Exposure Setting*	Exposure Type*	Risk of contracting COVID-19	Action for the exposed person
Members of the school community who are exposed to COVID-19 in a household or congregate setting in community (e.g. religious gathering or party)	Exposure to a person with confirmed COVID-19 living in the same household or congregate settings (e.g., dormitories, shelters, group homes, detention centres, child/day care centres), who was not self-isolating.	High	Quarantine for 10 days
	Exposure to a person with confirmed COVID-19 while the case was self-isolating and both the case and the contact were applying consistent and appropriate precautions (i.e., physical distancing, hand hygiene, masking, frequent environmental cleaning).	Low	No quarantine necessary. Monitor for symptoms
Members of the school community who are exposed to COVID-19 at school or in a school context, example at sports events or whilst travelling to or from school	<ul> <li>Had direct contact with infectious body fluids of the case (e.g., coughed on or sneezed on)</li> <li>Had close (&lt;1 m), prolonged (&gt;15 min), unprotected (no mask) contact.</li> <li>Shared the same, unventilated room for &gt;15 minutes whilst not wearing masks but were not within 1m of the case.</li> <li>Shared a meal and/or eating utensils with the COVID-19 positive person</li> </ul>	High	Quarantine for 10 days
	<ul> <li>Both the case and the contact had consistent and appropriate use of masks for the duration of interaction, AND without other factors that would increase the overall risk of the interaction (e.g., physical contact, prolonged duration of exposure)</li> <li>Had prolonged unprotected contact but only while the case was consistently physically distancing (&gt;1 m) in a well ventilated space (e.g. outdoors)</li> <li>Had close prolonged contact while separated by an appropriate barrier (e.g. behind a Perspex shield)</li> </ul>	Low	No quarantine necessary. Monitor for symptoms

<sup>\*</sup>At the present moment, persons who have received COVID-19 vaccines are still required to quarantine for 10 days if they meet the definition of a close contact.

Table 2. Six possible scenarios and appropriate responses following identification of suspected or confirmed cases of SARS-CoV-2 in a school.

SCENARIO 3: CLUSTER OF COVID-19 CASES	SCENARIO 4: SECONDARY CONTACT i.e. CLOSE PROXIMITY TO A PERSON WHO IS A CONTACT OF A CONFIRMED CASE
Three or more Staff or Learners who are confirmed or suspected cases within seven days in the same classroom or amongst individuals working in the same area	Staff or Learner has been exposed to:  A member of staff or learner with Suspected COVID-19 (symptoms compatible with COVID-19, but either not tested or awaiting test result) OR  A contact of an individual with confirmed case of COVID-19 (secondary contact)
<ul> <li>A cluster of cases may indicate a breakdown in the COVID-19 preventative strategies in the school and possible spread of infection within the school.</li> <li>Early identification and remedial step can contain and stop onward transmission and improve implementation of COVID-19 preventative strategies.</li> <li>The School Principal or the COVID-19 point person must report all clusters of cases to the Circuit Manager and the Integrated School Health Team (ISHT) or COVID-19 response team immediately, as well as information pertaining to the cases contained in the case investigation form (Appendix 2).</li> <li>Manage the suspected or confirmed case/s and their contacts as per scenario 1 and 2.</li> <li>Assessment by the ISHT or COVID Response Team to determine potential breaks in Infection prevention and control and advise on appropriate actions. (See part B of Guideline).</li> <li>The School Principal and School-Based Support Team are responsible for implementations of the recommendations of the ISHT or COVID Response Team in the school.</li> </ul>	<ul> <li>No restrictions or special control measures are required.</li> <li>Continue to maintain COVID-19 related Non-pharmaceutical interventions and symptom screening.</li> <li>If the learner who is exposed appears ill or displays symptoms compatible with COVID-19 based on symptom screen, manage as scenario 1 Therefore, there is <b>no action</b> that the school needs to take until the outcome of test results if performed is known.</li> </ul>

### SCENARIO 5: A CONTACT OF A CONFIRMED CASE

Staff or Learner has been exposed to an individual with a **confirmed COVID-19** (either during or outside of school hours) during the period of infectivity (usually 48 hrs before the onset of symptoms, up to 10 days after the onset of symptoms). Can be a direct/close contact (within 1 meter without a mask or sharing a closed classroom or workspace for >2 hours without a mask) or casual/distant contact (contact with the case but not meeting the above definition)

- The School Principal and the COVID-19-point person must report staff or learners exposed to individuals with confirmed COVID-19 to the Circuit Manager and the Integrated School Health Team (ISHT) immediately.
- The Principal and ISHT will assess the case and decide on the actions to be taken.
- Staff and/or Learners in direct/close contact with the individual with confirmed COVID-19 during the period of infectivity should be informed to quarantine for a period of ten days.
- The Department of Health will assist with determining the period of infectivity
  and identifying direct/close contacts and will advise on any further actions or
  precautions to be taken.
- All **direct/close contacts** (must be identified and requested to quarantine for a period of ten days from the date of exposure while being monitored for symptoms and not attend school/come to work.
- Should the staff or learner who is a direct/close contact show any symptoms
  compatible with COVID-19 while in quarantine, the ISHT should be informed and
  the Contact Tracing Team can be called for medical assistance and further
  assessment/testing.
- Staff members must apply for special leave if they are requested to quarantine.
- All casual/distant contacts should continue to attend school or come to work and should be monitored daily for symptoms on entry to school premises according to the guidelines above.
- Testing of direct/close contacts of an individual with confirmed COVID-19 should be based on the current NICD guidelines. The current guideline state that only contacts with symptoms compatible with COVID-19 should be tested.

## SCENARIO 6: CLOSURE OF CLASS, GRADE OR SCHOOL

Multiple unlinked cases at school such that normal functioning of the school is not possible

#### OR

The number of cases in a cluster/s in a class or grade or group (e.g. sports team) is so many that it impossible to continue normal school (or group) activities

### OR

A cluster/s of cases has occurred, and the risk to class, grade or group is high or unquantifiable because exposure risks are unclear.

OR

Five or more clusters of cases are identified in the grade or school

- The School Principal and the COVID-19-point person must create and maintain a list of staff or learners who are diagnosed and exposed to COVID-19, and describe the circumstances of the cases and clusters.
- The School Principal or the COVID-19-point person must identify which group/s within the school are at risk. Only those group/s should be closed.
- The line list, circumstances of the cases and clusters and decision to close the group/s should be presented to the Circuit Manager and the Integrated School Health Team (ISHT) immediately.
- The **Integrated School Health Team (ISHT)** should review and confirm the decision of the School Principal or suggest an alternative strategy.
- The School Principal should communicate clearly with the school community. They should describe what has happened, who is at risk and what steps have been taken to contain the spread of COVID-19. The School Principal should request all persons in the affected group to remain in quarantine or isolation for 10 days after the date of symptom onset in the last person to become symptomatic.
- When the 10-day period is completed and the group/s resume usual activities, the COVID-19 point person should continue to monitor the affected group for symptoms in the usual way.

## VI. Closure of a Class/Cohort or School:

Following the recognition of a cluster of cases in a school, it may be appropriate to temporarily close a classroom, cohort, or section of the school. Closure should be confined to the smallest possible group that is at risk for uncontained transmission of COVID-19. In exceptional situations the entire school may need to be closed.

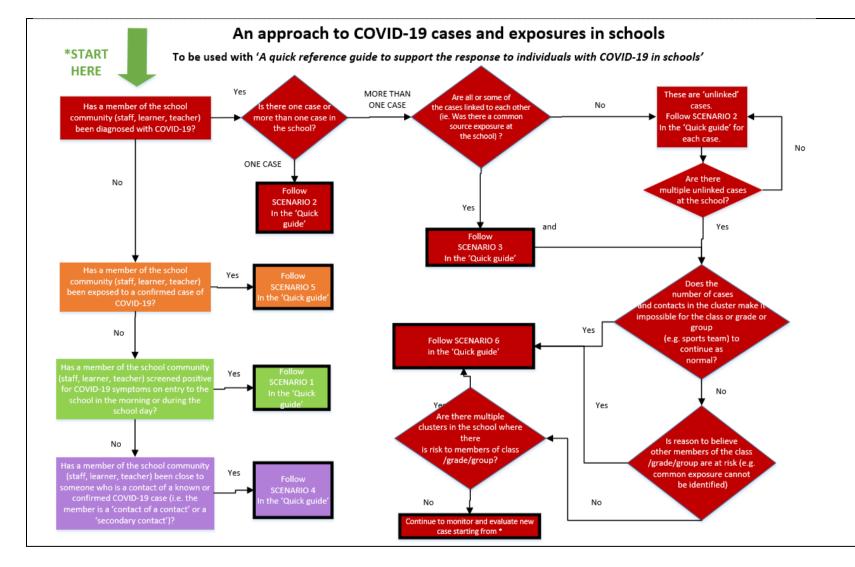
The algorithm in Figure 1 and the scenarios listed in Table 2 should be used to guide the school's response to cases, clusters and grade or school closure.

When the algorithm in Figure 1 suggests that closure of a group is appropriate, the COVID-19 point person should collate a description of each cluster of cases. The group/s at risk should be identified. The affected group/s should be closed for 10 days at a minimum.

A school outbreak can be declared over when at least 10 days, but ideally 14 days, have passed with no evidence of any new cases amongst the affected group.

The outbreak does not necessarily need to be over to re-open the school. Cohorts without evidence of transmission can be gradually brought back to school as additional epidemiological information and test results become available. Consideration should be given to implementing additional preventive measures and active surveillance as part of re-opening.

Figure 1. An algorithm to guide school management of COVID-19 cases and exposures.



#### **Definitions**

Close Contact: Staff or learners who have been in contact with an individual with confirmed COVID-19 (even if they did not have symptoms) for:

- >15 minutes within 1 meter without a mask or
- sharing a closed classroom or workspace for >2 hours with a mask.

Casual/Distant Contact: Staff or learners who are a contact but do not meet the criteria for a direct/close contact. For more detail on assessing risk to contacts, see 'Table 1 Risks to contacts of confirmed cases depending on exposure type and setting'

Suspected COVID-19: When staff or learners appear ill or display symptoms compatible with COVID-19 based on symptom screen/NICD case definition but either not tested or awaiting SARS-CoV-2 test result.

**Confirmed COVID-19:** When staff or learners test positive for SARS-CoV-2 using laboratory tests (usually PCR) with or without symptoms.

Cluster of cases ('linked cases'): Two or more individuals from separate households with confirmed or suspected COVID-19 within seven calendar days in the same classroom or friendship group or between individuals working in the same area. 'Linked cases' mean that the cases had contact with each other (e.g. in class room, school activity, friendship group) during the 14 days before their symptoms begin

School outbreak: Two or more cluster outbreaks (involving classrooms or cohorts) in a school confirmed COVID-19 within a 10-14-day period..

## VII. Environmental dis-infection:

All equipment and rooms (classrooms and other indoor areas) where the individual with COVID-19 have been within the last 48 hours (in previous section it says 7 days) should be identified, in order that these may be appropriately cleaned. The South African COVID-19 Disease Infection Prevention and Control guidelines<sup>1</sup> should be followed. Human coronaviruses can remain infectious for several hours on porous surfaces and several days on hard surfaces.<sup>2</sup> Therefore, frequent cleaning of the environment is paramount and is covered in detail in the 'Practical manual for the implementation of the national strategic plan for infection prevention and control strategic framework' (2020)<sup>3</sup>.

Where clusters of cases have been identified, intensified environmental cleaning and disinfection is critical to reduce the potential for further infections through indirect contact with virus-contaminated surfaces and equipment. Routine cleaning with detergent and water will remove dirt and reduce levels of contamination for most pathogens, including SARS-CoV-2. The coronavirus' viral envelope is easily disrupted by detergent and most commonly used hospital disinfectants, killing the virus.

For COVID-19, the major differences to routine cleaning of schools are: increased frequency of cleaning and use of disinfectants. Following thorough cleaning, surfaces are wiped, not sprayed with disinfectants such as 1000 ppm chlorine (hypochlorite) or 70% alcohol, as recommended.<sup>4</sup> Universal disinfectant wipes which combine cleaning and disinfection are impregnated with peracetic acid and or hydrogen peroxide and may be used but these are expensive.

Each area of the school must be cleaned and disinfected at least twice daily, before start and end of classes, with a proper schedule, checklist and programme. Students should be able to assist with the cleaning. Where clusters of cases have been identified, the environment must be cleaned and disinfected at least 2 times per day and checked by the supervisor. To facilitate easy cleaning, all surfaces should be kept clutter free. Cleaning should focus on the most contaminated areas:

<sup>1</sup> Ibid

<sup>&</sup>lt;sup>2</sup> Kampf G, Todt D, Pfaender S, Steinmann E. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. Journal of Hospital Infection. 2020;104(3):246-51 https://doi.org/10.1016/j.jhin.2020.01.022 (accessed March 22, 2020).

<sup>&</sup>lt;sup>3</sup>Practical manual for the implementation of the national strategic plan for infection prevention and control strategic framework (2020) https://www.nicd.ac.za/wp-content/uploads/2020/04/Practical-Manual-for-implementation-of-the-National-IPC-Strategic-Framework-March-2020-1.pdf

<sup>&</sup>lt;sup>4</sup> World Health Organization. Water, sanitation, hygiene, and waste management for the COVID-19 virus. 23 April 2020.

- high-touch surfaces phones, keyboards, gate buzzers, door handles, light switches, taps
- heavily contaminated areas toilets, common areas