SASA
SOUTH AFRICAN SOCIETY OF ANAESTHESIOLOGISTS

SASA COVID-19 UPDATE

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SASA COVID-19 FAQs

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Clinical practice

How do I apply appropriate personal protective equipment (PPE)?

A detailed document with the current SASA recommendations for PPE during the COVID-19 pandemic is available via this link.
https://sasaapi.sasaweb.com/Newsletters/Document/SASARecommendationsonCOVID-19PPE18.03.202011am_637201201788145303.pdf

Summary of minimum recommended PPE for COVID-19

Routine patient care	**High-risk procedures* (including intubation)**
Surgical mask Disposable gloves Apron (Optional: Eye protection)	Fit-tested N95/FFP2 respirator** Impermeable long-sleeve gown Eye protection and/or full face shield Disposable cap Disposable gloves (ideally double gloves)

*High-risk procedures are those that can generate aerosols (see below)
**The term 'respirator' includes disposable N95 and other 'masks' which filter inspired air.

How do I protect myself in clinical practice?

Please see the SASA PPE guidelines.

Other recommended resources include the following website of the WFSA:
https://www.wfsahq.org/latest-news/latestnews/943-coronavirus-staying-safe .

It includes guidelines for

i) Routine Care for Patients with Suspected or Confirmed COVID-19, and
ii) High Risk – Intubation and other Aerosol-generating medical procedures (AGMP).

Be sure you know and practice the steps of donning and doffing PPE. The step charts of the University of Toronto are excellent: https://www.anesthesia.utoronto.ca/news/coronavirus-and-safety-precautions or reference a short video (https://vimeo.com/397604374) as an example.

There are also training guidelines released by the National Institute for Communicable Diseases (http://www.nicd.ac.za/covid-19-training-for-clinicians/). We strongly recommend you watch this video.

Self-quarantine practices - how to protect yourself or family at increased risk of community infection

In order to prevent the spike in infective cases which will overwhelm the healthcare system, it is necessary to focus vigorously on containment of SARS-CoV-2 in order to try and 'flatten the curve' of infected cases. Containment involves hand washing, social distancing, avoiding unnecessary in person meetings and congregations and avoiding unnecessary travel. This is well documented in the NICD video http://www.nicd.ac.za/covid-19-training-for-clinicians/. Isolation is a critical element in stopping the spread of this infection.

Am I at increased risk of morbidity and mortality from COVID-19?

High-risk factors for morbidity include; i) age>60 years, ii) hypertension, iii) diabetes, iv) cardiovascular disease, v) chronic respiratory disease, or vi) cancer.

ACE-inhibitors: Dr. Karol Watson, associate editor with NEJM Journal Watch Cardiology, comments: "Some have suggested that utilization of renin–angiotensin–aldosterone system blockers may increase the ability of the virus to enter lungs, although there is no clinical data to support that this is actually true. This current statement should give clinicians comfort to continue use of RAAS blockers during these strange and unsettling times." *https://www.jwatch.org/fw116456/2020/03/17/heart-groups-patients-with-covid-19-should-continue-ace?query=pfwTOC&jwd=000020187028&jspc=AN*

Ibuprofen/ NSAIDs: SASA is aware of reports which raise concern regarding the use of non-steroidal anti-inflammatory medicines (NSAID's), and in particular ibuprofen, as part of the symptomatic treatment for COVID-19 infection. There is currently no scientific evidence establishing a link between ibuprofen and worsening of COVID-19 symptoms, morbidity or mortality. The use of NSAIDs may mask symptoms of worsening viral infections as detailed in package inserts. In the elderly or severely ill patient population it would be prudent to avoid the use of NSAIDs, particularly as it relates to acute kidney injury. Harm associated with ibuprofen in COVID-19 infection is extremely controversial. SASA's recommendation is therefore to utilise paracetamol as a first line agent for treating fever and sore throat and wherever possible avoid the use of ibuprofen (until further data is available). Should a NSAID (not ibuprofen) be absolutely required, not contra-indicated and not in patients at risk for acute kidney injury, it should be used for the shortest possible duration and at the lowest possible dose to prevent adverse effects.

SASA COVID-19 update for members over the age of 60

This SASA statement is coming soon.

Recommended pre-op screening questionnaire to identify potential SARS-CoV-2 infected patients

We recommend asking all patients before surgery the following questions, to identify patients at risk of SARS-CoV-2 infection.

Questions on the following;
i) Person with acute respiratory illness with sudden onset of one of the following; cough, sore throat, shortness of breath or fever ***and*** *in the last 14 days prior to the onset of symptoms met one of the following criteria; i) were in close contact with confirmed or suspected SARS-CoV-2 patient, or ii) travelled to an area with community transmission of SARS-CoV-2 infection, or iii) worked in, or attended a health facility treating SARS-CoV-2 patients, or iv) admitted with severe pneumonia of unknown aetiology.*

Any suspected SARS-CoV-2 positive patient should not have elective surgery, and should be advised to immediately self-quarantine and follow the NICD persons under investigation (PUI) guidelines. If you, as the healthcare worker should also follow the NICD guidelines.

How do I manage obstetric patients with known or suspected COVID-19?

SASA endorses the OOA and RCoA statement: https://icmanaesthesiacovid-19.org/obstetric-anaesthesia

What COVID-19 screening is in place?

All COVID-19 screening procedures need to follow the NICD guidelines: http://www.nicd.ac.za/diseases-a-z-index/covid-19/

What isolation procedures are in place?

Please engage your facility management and participate in establishing isolation procedures. Please see the FAQ Facility management section on the initial steps in preparing for COVID-19.

Where do I find personal protective equipment (PPE)?

Please see the SASA PPE guideline, to understand what is needed, and engage with your facility to ensure that you have the necessary PPEs.

How valuable is PPE in the management of patients with COVID-19? Don't forget the role of IPC measures.

PPE is only effective if it is used as part of a comprehensive infection prevention control (IPC) programme. The availability of PPE offers no protection to practitioners unless they are well versed in donning and doffing procedures. Even more importantly correct conduct and behavior while wearing PPE is paramount. The highest risk of exposure is when PPE is available but it is used incorrectly. We encourage all practitioners to seek refreshment in correct IPC practice. IPC and PPE are important for ensuring a healthy healthcare workforce to provide care for COVID-19 patients.

How do I manage a GA in a non-isolation operating theatre?

SASA is working on recommendations and a workflow for managing COVID-19 patients in the operating theatre. Refer to the PPE guidelines for the PPE that is required for intubation and extubation. It is prudent to stay in full PPE for aerosol-generating procedures for the duration of the operation, in case there is an accidental circuit disconnection or another emergency. Recovery of the patient is recommended in the operating theatre.

What are the principles of intubation of a suspected COVID-19 infected patient?

There is a large resource of airway materials including diagrams and flow charts available at www.openairway.org/covid-19-airway, and SASA will issue a recommendation soon. For now, the following principles apply:

1. Apply mask, goggles, disposable protective footwear, surgical gown and gloves. Follow the SASA PPE guidelines.
2. The most experienced anaesthetist should be available to perform the intubation.
3. Ensure that standard monitoring, IV access, airway instrumentation, drugs, ventilator and suction are available and checked.

4. Avoid awake fiberoptic intubation unless specifically indicated. Atomized local anaesthetic will aerosolize the virus, and is therefore not recommended. Consider video laryngoscopy if available.
5. Plan for rapid sequence intubation (RSI) and ensure a skilled assistant is able to apply cricoid pressure. If manual ventilation is anticipated, small tidal volumes should be applied.
6. Apply 5 minutes of pre-oxygenation with 100% oxygen.
7. Use a high efficiency hydrophobic filter between the face mask and anaesthesia circuit.
8. Intubate and confirm tube position.
9. All airway equipment must be sealed in double zip-locked plastic bags and removed for decontamination and disinfection.
10. Assistant should then wipe down all surfaces with an appropriate disinfectant.
11. After removing protective equipment, avoid touching hair or face before washing hands. Again please see SASA PPE guideline for recommendations on doffing PPE.

How should suspected or known COVID-19 patients be managed in recovery?

Patients with respiratory symptoms who are under investigation or who are not yet known to have COVID-19 should wear a surgical face mask after extubation to prevent droplet spread. Nasal oxygen at low flows (2-4 l/min) is safe and acceptable. High-flow nasal cannuli should be avoided. Known COVID-19 patients should be recovered in theatre before being transferred directly back to their isolation ward

Also see 'Examples of aerosol-generating procedures (AGPs)' in the SASA PPE statement.

Is there a place for non-invasive ventilation?

Non-invasive ventilation is not recommended. It is associated with increased aerosolization of the virus.

What do I do if I have occupational exposure?

Scenario 1: If you have occupational exposure with full PPE, you can continue to work with monitoring for symptoms for 14 days.

Scenario 2: If you have occupational exposure without full PPE, then you need to self-quarantine immediately. Do not visit your GP, but phone your GP regarding testing, and monitoring of symptoms. As a healthcare worker needed during this critical time, SASA believes it would be appropriate for you to ensure that your testing is expedited.

Please follow the NICD guidelines: http://www.nicd.ac.za/diseases-a-z-index/covid-19/

What are the healthcare worker testing recommendations for SARS-CoV-2?

The NICD guidelines should be adhered to. They are the current national testing guidelines. http://www.nicd.ac.za/diseases-a-z-index/covid-19/

The guidelines at present read as follows;

Criteria for Person Under Investigation (PUI)

Persons with acute respiratory illness with sudden onset of at least one of the following: cough, sore throat, shortness of breath or fever [≥ 38° C (measured) or history of fever (subjective)] irrespective of admission status AND

In the 14 days prior to onset of symptoms, met at least one of the following epidemiological criteria:

Were in close contact[1] with a confirmed[2] or probable[3] case of SARS-CoV-2 infection;

OR

Had a history of travel to areas with local transmission of SARS-CoV-2; (NB Affected countries will change with time, consult the NICD website for current updates);

OR

Worked in, or attended a healthcare facility where patients with SARS-CoV-2 infections were being treated

OR

Admitted with severe pneumonia of unknown aetiology

[1]Close contact: A person having had face-to-face contact or was in a closed environment with a COVID-19 case; this includes, amongst others, all persons living in the same household as a COVID-19 case and, people working closely in the same environment as a case. A healthcare worker or other person providing direct care for a COVID-19 case, while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection). A contact in an aircraft sitting within two seats (in any direction) of the COVID-19 case, travel companions or persons providing care, and crew members serving in the section of the aircraft where the index case was seated.
[2]Confirmed case: A person with laboratory confirmation of SARS-CoV-2 infection, irrespective of clinical signs and symptoms.
[3]Probable case: A PUI for whom testing for SARS-CoV-2 is inconclusive (the result of the test reported by the laboratory) or for whom testing was positive on a pan-coronavirus assay.

We have just moved into stage 2 of the epidemic, and so it is possible that these recommendations may change. We are monitoring this and will update if there is a change.

The 3 stages of the disease

Stage 1. Only imported cases.
Stage 2. Limited community transmission. This is the current position in South Africa.
Stage 3. Widespread community transmission.

What are the performance characteristics of the SARS-CoV-2 test?

The SARS-CoV-2 reverse-transcriptase (RT) PCR has a sensitivity of about 30 to 40%, and a specificity of about 90%.

What is the Government policy for self-quarantine and sick leave?

This can be found in the Western Cape Government circular '*3/3/1/1/4- Response to the COVID-19 outbreak*'. Essentially, self-quarantine will be unpaid or annual leave, and sick leave will only be approved with COVID-19 positive test.

What is PPS's claim policy for COVID-19?

A) The requirement for a sickness benefit for person under investigation (PUI) for COVID-19 is the following;

A declaration by Member (DBM) claim form completed by the member.
A declaration by Doctor (DBD) claim form completed by the treating medical practitioner.
Confirmation from the medical practitioner when the member was classified as a PUI and reported to the NICD.
Copies of all COVID-19 test results (whether negative or positive).
Confirmation from the medical practitioner when the member is no longer classified as a PUI.

B) The requirement for a sickness benefit for non-person under investigation (PUI) quarantined by SA Government for COVID-19 is the following;

A declaration by Member (DBM) claim form completed by the member.
A declaration by Doctor (DBD) claim form completed by the treating medical practitioner.
PPS will consider information available in the public domain and may request additional supporting evidence as appropriate.

C) PPS Claim period:

Positive test result

If a member tests positive for COVID-19 they can claim for both the acutely ill period plus the isolation period up until their ongoing tests show that they are negative for COVID-19, and are discharged from the hospital or advised that they can return to work.

Typically for positive test results;

The claim start period would be 24 hours prior to the sample collection date at the laboratory. This would allow a member to be tested shortly after being classified as a PUI. The claim end period would be at the end of both the acutely ill period plus the isolation period thereafter. The total sickness claim period will have to be provided by the doctor for each case. The acutely ill period generally would not exceed 7 days, except where complications occur. Thereafter, a 14-day isolation period would generally apply.

Negative test result

If a member tests negative for COVID-19 they can claim for the acutely ill period for the influenza-like symptoms they are displaying, and any home quarantine period that was deemed necessary by their treating medical practitioner (on the guidance of the NICD), from the time they were classified as a PUI to the date they tested negative, and they were no longer classified as a PUI by the treating medical practitioner.

Typically for negative test results;

The claim start period would be 24 hours prior to the sample collection date at the laboratory. This would allow a member to be tested shortly after being classified as a PUI. The claim end period would be the date a member is no longer classified as a PUI. The claim period would generally not exceed the 7-day waiting period for Sickness Benefit claims. PPS will consider the case management guidelines specified by the NICD for the case concerned when determining the claim period.
Persons who stay at home as a precautionary measure without being confirmed as a PUI would therefore not meet this claims definition.

Where do I get guidance on COVID-19 management?

A NICD Clinician Hotline COVID-19 communication and support for healthcare providers is available. The Clinician Hotline is 0800 11 1131, operating 24 hrs.

An established NICD hotline for Covid-19 is 0800 029 999 or a WhatsApp connection at 06000123456, or website http://www.nicd.ac.za/diseases-a-z-index/covid-19/

How long does coronavirus survive in the air and on surfaces?

The virus's median half-life was about 1 hour as an aerosol. No viable virus was detected after 4 hours on copper, 24 hours on cardboard, and 72 hours on plastic and stainless steel. https://www.jwatch.org/fw116458/2020/03/17/how-long-does-coronavirus-survive-air-and-surfaces?query=pfwTOC&jwd=000020187028&jspc=AN

Facility management

What are the initial steps that need to be taken to prepare a facility to handle COVID-19 cases?

Initial preparation of a facility includes the following;

i) Planning for personal protection and PPE management (see SASA PPE guideline),

Frequent donning and doffing simulations are needed now. In the private sector, we would encourage each member to take that lead in their own hospitals and day hospitals.

ii) Plans for patient isolation of positive cases,

iii) ICU guidelines for patient isolation in ICU, and ensuring that if you treat positive patients, that you are 'self-quarantined' away from elective COVID-19 negative ICU patients. Please assist with designated treatment area preparedness and isolation practices and policies,

iv) We recommend that all surgical patients should receive a short pre-op screening questionnaire about risk for SARS-CoV-2 infection;

Preop screening questionnaire

i) Person with acute respiratory illness with sudden onset of one of the following; cough, sore throat, shortness of breath or fever ***and*** *in the last 14 days prior to the onset of symptoms met one of the following criteria; i) were in close contact with confirmed or suspected SARS-CoV-2 patient, or ii) travelled to an area with community transmission of SARS-CoV-2 infection, or iii) worked in, or attended a health facility treating SARS-CoV-2 patients, or iv) admitted with severe pneumonia of unknown aetiology.*

Any suspected SARS-CoV-2 positive patient should not have elective surgery, and should be advised to immediately self-quarantine, and follow the suspected positive contact protocol.

v) Ensuring that your facilities have clearly communicated arrangements for the testing of staff and patients,

vi) Encourage Hospital heads to engage at a Provincial Department of Health level.

Recommendations for the management of anaesthesia for Elective Procedures

SASA will be providing a statement on this topic soon.

Education

Is COVID-19 a pandemic?

SARS-CoV-2 or COVID-19 has been declared a pandemic, which due to exponential transmission rates can result in an infection spike which overwhelms healthcare services and resources as has been evidenced in China and Italy. 40-70% of the planet's population is predicted to acquire the infection. The infection is mild in more than 85% of cases.

As frontline clinicians in this pandemic, it is essential that you understand how to protect yourselves and your families to ensure that we have a healthy workforce to manage this pandemic in the coming weeks. It is important to understand that healthcare workers were at increased risk of mortality in the early pandemic, before adequate and appropriate use of personal protective equipment (PPE) was employed. The SASA PPE guideline (https://sasaapi.sasaweb.com/Newsletters/Document/SASARecommendationsonCOVID-19PPE18.03.202011am_637201201788145303.pdf) is therefore extremely important for the health of our workforce and, therefore, our patients. SASA calls upon its members to ensure a calm, rational and deliberate management of their personal well-being and that of patients in your institution/s.

What is the concept behind 'flattening the curve'?

Infection in a community with no immunity can result in a devastating spike in infection which could overwhelm human and health resources.

Flattening the curve' is the concept of building immunity in the community. This decreases the number of transmissions per infected individual, as there are now individuals who are immune to the infection in the community. When the number of immune individuals reaches a certain threshold, 'herd immunity' is achieved, and the infection reaches a stable state within that community.

However, to increase the number of immune individuals initially requires a controlled infective exposure with a return of these individuals into the community. Mathematical modelling suggests that self-quarantine, with an 80% identification of positive contacts in SARS-CoV-2 infection. This is why 'social distancing' is so important. Self-quarantine to ensure no uncontrolled spread through a community without immunity.

Further updates of the FAQs

If you have any questions or would like to provide suggestions for revisions to the FAQs, please could you email them to covid19@sasaweb.com

Issued by: The SASA COVID-19 Task Team.

Queries can be emailed to **covid19@sasaweb.com**

All SASA COVID-19 statements, updates and FAQs can be viewed on the SASA Website: **click here**