

COVID-19 – Update – Professional Guidelines Medical Technology Board

Globally we are currently facing extraordinary challenges in the wake of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) which is the virus strain that causes coronavirus disease 2019 (COVID-19), a respiratory illness. COVID-19 has developed in record time into a serious human pandemic and economic crisis of global dimensions, and we in South Africa are also observing its evolution with much anxiety, concern and uncertainty.

As a result, medical technology professionals across the country have had to react rapidly and implement appropriate safety measures to help contain the spread of SARS-CoV-2 that causes this disease.

Since the start of the pandemic, the HPCSA as a Regulatory Council has issued numerous communiques (18 March 2020, 25 March 2020, 26 March 2020 and 27 March 2020) providing general advice to professionals on how to manage the COVID-19 pandemic and referring professionals to the National Department of Health and the National Institute of Communicable Diseases (NICD), clinical guidelines for health workers, as well as information provided by these sites on frequently asked questions, quick reference infographics and information on communicable diseases to assist healthcare professionals.

The HPCSA is concerned about the wellbeing of medical technology professionals and those under their care and recommends following the NICD directives when dealing with COVID-19. Moreover, the HPCSA urges professionals to also take care of their own health and to seek help when needed. Furthermore, the Department of Health, the Department of Labour and Employment and the National Institute for Communicable Diseases amongst others provided detailed guidelines for workplaces and the public. This communique serves to supplement these guidelines whilst contextualising measures specific for pathology practices.

As a regulator, the Professional Board for Medical Technology has an important responsibility towards patients and professionals, as well as a social responsibility to protect the health and well-being of all persons in South Africa. As a Board we take all obligations seriously and has participated through various platforms to assist in the development of practice guidelines.

SARS-CoV-2 is a new strain of the coronavirus group and as such the pool of knowledge surrounding the virus and its attributes is rapidly evolving. So too is the literature, and as such it is understandably difficult for the Board to provide a set of guidelines that are lasting, as the disease epidemiological and pathological profile is dynamic and ever-changing. However, the

Board will provide a set of generic guidelines and recommendations that may be used in practice, in addition to the universal precautions on infectious disease management protocols once the national lockdown is eased or uplifted. It is essential to recognise and acknowledge that these guidelines may in the future become obsolete as research generates new information about this disease, its diagnosis, pathology, treatment and prevention.

Members of the Board for Medical Technology have provided input to develop guidelines. We urge professionals to follow the guidelines issued by structures such as the National Institute for Communicable Diseases (available at www.nicd.ac.za). Please refer also to the reference list to access some of these guidelines.

Protecting the patient and the pathology practice staff

Considering the activities and work processes within medical technology, i.e. phlebotomy techniques when collecting samples, sample sorting and preparation in pre-analytical departments or sample manipulation when testing for specific analytes or organisms; it can be anticipated that the professional's level of risk to Covid-19 (or other infectious diseases) is different.

As a Board we caution that staff like Medical Technicians in Phlebotomy may be more at risk of contracting the virus owing to their close proximity to patients when performing their respective duties; as well as through the high throughput of sick individuals that they are exposed to when visiting phlebotomy depots. This is in itself a challenge as some patients are asymptomatic and unaware of their status. Considering the high risk of transmission in this environment all patients must be treated with due diligence to infection control protocols and with specific preventive measures pertaining to SARS-CoV-2.

Laboratory staff manipulating patient samples are at risk of being exposed to the virus through their required duties when handling known, and mostly unknown, SARS-CoV-2 infected samples. Employers are obligated to provide a safe working environment to their staff and therefore have to supply the required personal protective equipment (PPE).

As it is almost impossible to distinguish between asymptomatic and non-contagious patients it is very important to protect both patients and professionals. Therefore, it is essential that pathology laboratory staff (and even administrative staff) employ precautionary measures such as wearing extensive protective clothing (not limited to medical masks, caps, gloves, goggles or face shields, shoe covers up to the knee and surgical gowns). The Board urges professionals to source PPE

from reputable suppliers. The PPE should be allocated in a defined way, aimed at the level of risk that practitioners are exposed to.

It is imperative that risk assessments are performed and control measures are put in place to prevent the infection and spread of SARS CoV-2. The following are recommended:

- Hygiene: Regular Handwashing, Regular Change and Proper Disposal of PPE
- Regularise Health & Safety Communication and Training
- Encourage continuous co-operation in adherence to Health and Safety Policies
- Encourage disclosure of suspect infections in communities, family, workers or public places that workers may have been exposed to in a respectful manner.

Treatment of patients

Healthcare services have been defined as an essential service in terms of the Disaster Management regulations. The Board trusts that professionals will use their clinical acumen, apply sound clinical reasoning, and due diligence in assessing pathology requests from patients.

Reorientation of work spaces

Laboratory work spaces need to be arranged in such a way that patient and staff are not compromised while enforcing minimum distances between persons. Staffing should be reviewed in line with resources and capacity. Cognisance must be given to clean areas, time between patients/staff (settling of bio-aerosols), entrance and exit points etc.

The Department of Health and the Department of Employment and Labour has issued guidelines on the Workplace Preparedness. Refer to the reference list provided for detailed guidelines.

Quarantine

“Quarantine” – which entails separating asymptomatic individuals potentially exposed to disease from non-exposed individuals in order to slow down pathogen transmission – may be used. Quarantine may be voluntary (e.g. asking contacts of infectious cases to stay at home or a designated facility for 14 days) or involuntary (i.e. using legal powers to enforce quarantine against a person’s will). Quarantine may be applied at an individual patient level or at the level of a group or community of exposed persons.

Exposure and infection guidelines with regard to quarantine or self-isolation should be followed pedantically.

Examinations

The Board has taken steps to ensure that medical laboratory professionals are able to retain their registration, and further details of the examination dates will be made available once there is certainty about the easing or end of the lockdown.

Student Training

The board understands that student training, and especially practical and clinical training has been compromised. The Board is engaging with the Dept. of Higher Education, the Council on Higher Education and the Universities and Universities of Technology to ensure that student training is adapted but remains of a high standard. The Board will cooperate with Higher Education Institutions to ensure that alternate teaching and assessments methods are employed, and that adjustments are made to the programme to ensure that adequate, quality assured teaching and learning occurs, and that students graduate as competent professionals.

Annual Registration and Fees

The HPCSA has informed all professionals that the due date for annual renewals and payment of registrations has been extended from 1 April 2020 to 1 July 2020. Professionals should ensure that their annual fees are paid by the 30 June 2020. Professionals are once again encouraged to utilise the online portal for the renewal of their registration, where they will also access their annual practising certificate. Professionals may also access their profile using the HPCSA mobile app that is available on this link: <https://hpcsamobileapp.co.za>

NB: All annual practising certificates which expired on 31 March 2020 are now valid until 30 June 2020.

Continuous Professional Development

Healthcare professionals have a responsibility to continually update their professional knowledge and skills for the end benefit of the patient or client. To this end the HPCSA has implemented a Continuing Professional Development programme. Every professional is required to accumulate their respective Continuing Education Units (CEUs) per twelve-month period. See relevant guideline.

Professionals are encouraged to continue to engage in CPD during this period. Various activities, both formal and informal, accredited and non-accredited, can be undertaken. These activities include, but are not limited to, online meetings, webinars, seminar presentation, reading journal

articles, attending formal online workshops and studies. A search of the internet reveals numerous low-cost or free CPD activities that have been made available during this period. It has to be noted that the Medical Technology Board is a developmental board for Maintenance of Licensure policies, which is an endorsed project by Council and therefore the activities need to be continued. Professionals may also access the relevant documents relating to CPD on this link: <https://www.hpcsa.co.za/?contentId=229>

Communication

There have been many changes in how business is now conducted in light of Lockdown regulations. The Board encourages electronic or digital communication formats as far as is reasonably possible and ethical to provide a good quality pathology service.

Economic impact

The Board understands that this current situation is dire and recognises the economic impact of the lockdown, and in general the decline in revenue that can be expected currently and in the future. The Board urges professionals to carefully review their employment contracts and finances in the face of uncertainty.

Conclusion

As a Board we remain optimistic and there will be positives to be taken away from this global crisis. We have already seen suggestions and developments from professionals within the ambit of the profession, as well as professionals assisting and collaborating with each other to address and overcome challenges, and this is commendable. It is more important than ever that we stay safe, respecting social distancing and hygiene recommendations, remain calm, show solidarity with the governments and stand by each other. Everyone's health is our outmost priority and we are convinced we will overcome this obstacle together.

We wish all of you, your families and your staff a safe and successful return to normal activity. Please take care of your loved ones, your colleagues, your patients and your family and friends. Please find attached some recommendations below.

Warm regards

Some ways to keep your working environment safer during the COVID-19 crisis

In order to keep yourself, your colleagues and your patients safe we have compiled a list of procedures and precautionary measures that you can implement.

1. Disinfection/Sterilisation

There are three principal modes of virus spread. These are:

- **airborne spread**—owing to exposure to bodily fluids and generated droplets, spatter and aerosols;
- **contact spread**—owing to contact with bodily fluids, patient materials
- **surface spread**—since coronaviruses can persist on various surfaces for a prolonged time (depending on the type of surface).

Disinfect the working space

Effective and strict disinfection measures in both work areas and public areas should be rolled out. The work place should be cleaned and disinfected regularly in accordance with current safety protocols, as should the public areas and appliances, including door handles, chairs, desks and pens.

2. Patient/Self evaluation

Due to the very fact that patients are ill, it is advisable to screen if they have had confirmed contact with persons with Covid-19. Regular staff self-screening is also encouraged to prevent spread of SARS CoV-2 in the early stages of infection. Visitor's to laboratories like service engineers are required to adhere to the facility policies and should also be screened before entering the premises. Use a standardized structured questionnaire, also including the measurement of body temperature and then taking adequate steps to address the results. It is strongly recommended that a contact-free infra-red forehead thermometer be used.

The following set of screening questions can help identify potential infection. This list is not exhaustive, and should be adapted to suit your needs, in keeping with current research and guidelines:

- a. Do you have a fever or have you experienced a fever within the past 14 days?
- b. Have you experienced a recent onset of respiratory problems, such as a cough or difficulty in breathing, within the past 14 days?
- c. Have you, within the past 14 days, travelled to areas with documented COVID-19 cases?
- d. Have you come into contact with a patient with confirmed COVID-19 infection within the past 14 days?

- e. Have you come into contact with people who had recent fever or respiratory problems within the past 14 days?
- f. Have you recently participated in any gathering, meetings, or had close contact with many unacquainted people?

Following the screening questionnaire:

- If the person replies yes to any of the screening questions, and the body temperature is below 37.3°C, you can postpone the treatment until 14 days after the exposure event.
- If the person replies yes to any of the screening questions, and the body temperature is 37.3°C or higher, then the patient should be advised on immediate quarantine, and you should report the case to the Coved Infection Officer or the local health department. The method and place of quarantine should be as per the current guidelines mandated by the government.
- If the person replies no to all the screening questions, but his or her body temperature is 37.3°C or higher, the person should be directed to the nearest appropriate facility for further medical care.

3. Hand Hygiene

Regular hand washing with soap is advised. Alcohol based hand sanitizers may also be used to augment the hand hygiene regimes. Before and after working with any patients, hands must be washed/sanitized.

NOTE: Everyone should take extra care to avoid touching their own eyes, mouths and noses.

4. Personal Protective Measures

The following protective measures are recommended:

- **Standard protection** in the clinical settings: Disposable working caps, surgical masks and working clothes, protective goggles or face shields, and disposable latex or nitrile gloves as per risk assessment.
- **Advanced protection** based on duties: Additional disposable isolation clothing or surgical clothes over working clothes in addition to standard protection.
- **Strengthened protection** for being in contact with patients with suspected or confirmed COVID-19.

5. Medical waste

Waste, including disposable PPE, should be regarded as infectious medical waste and should be appropriately and timeously discarded. Refer to the Department of Health Practical Manual for Implementation of the National Infection Prevention and Control Strategic Framework (<http://www.health.gov.za/index.php/component/phocadownload/category/626#>)

6. Ventilation

The laboratory, work spaces, procedure rooms and other facilities, such as waiting rooms, should be adequately ventilated. Whilst the use of air conditioning is discouraged, but should they be a necessity then approved hospital-quality multi filtration systems (a filtration system that includes a prefilter, true HEPA filter, carbon filter and a UV-C light) should be sourced and regularly changed.

7. Emotional Support

At all times, medical personnel are to work in a safe and ethical manner. Extend confidentiality to fellow co-workers as far as possible to prevent the emotional trauma of stigmatization and isolation. The Lockdown, due to Covid-19, has had major financial impact on many people as well as anxiety inducing fears. If the employer does not have a Wellness programme any person may make use of the below resources:

- The South African Depression and Anxiety Group: www.sadag.org
- <https://sacoronavirus.co.za/2020/04/10/covid-19-lockdown-and-your-mental-health/>
- Whilst the Board acknowledges that none of these precautions can prevent or resolve COVID-19 on their own, all of them can contribute to keeping the pathology work place, staff and patients safer and healthier—whether there is an ongoing viral epidemic or not.

References

1. Department of Health
COVID-19 Disease: Infection Prevention and Control Guidelines Version 1 - April 2020
<http://www.health.gov.za/index.php/component/phocadownload/category/626>
2. Department of Labour
<https://www.labourguide.co.za/workshop/1773-covid-19-guideline-mar2020/file>
3. National Institute for Communicable Diseases
<https://www.nicd.ac.za/diseases-a-z-index/covid-19/covid-19-guidelines/>
5. National Department of Health. Corona Virus (Covid-19) – Updated. Available on
www.health.gov.za/
6. General Medical Council. Ethical Guidelines. Available on www.gmc-uk.org/ethical-guidance/ethical-hub
7. Rolling updates World health Organization:
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>
8. <https://sacoronavirus.co.za>.
9. www.sadaq.org