



COVID-19 UPDATE

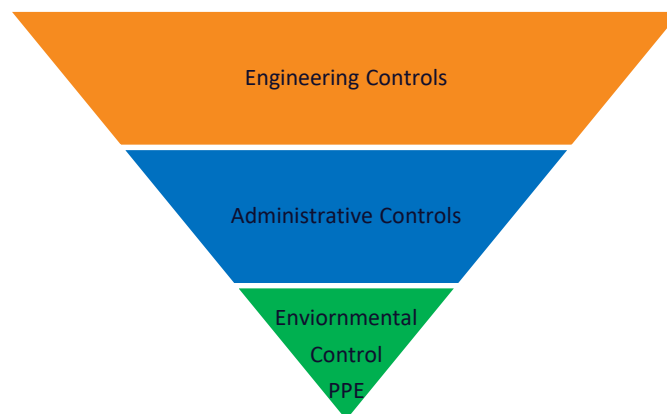
INFECTION PREVENTION & CONTROL IN THE TECHNICAL DEPARTMENT

The purpose of this document is to provide guidelines to prevent the transmission of known and / or unknown pathogens, including SARS-CoV-2, in the Technical Department and to Technical staff working in clinical areas.

ELIMINATION AND SUBSTITUTION

The hierarchy of Infection Prevention and Control (IPC) measures to prevent and reduce the risk of transmission of pathogens include the following in order of priority:

- Engineering Controls
- Administrative Controls
- Environmental Controls: Including personal protective equipment (PPE)



These are the most effective measures to reduce risk and include **Standard Precautions**, which have to be implemented first. It has however to be **done in conjunction with consistent practices both at work and while off duty to be effective and prevent staff becoming infected in the community**. Always perform hand hygiene after touching surfaces, avoid touching your face, eyes, nose and mouth, social distancing, open windows to ensure adequate ventilation, avoid gatherings and wear a cloth mask when off-duty.

ENGINEERING CONTROLS

Engineering controls are physical changes which can be made to the environment to reduce transmission.

- **Social Distancing:** Ensure at least 1.5 – 2 meter distance between workstations/work benches. If that is not possible, face shield/eye protection must be worn.

- **Ventilation should be adequate** in the Technical Department to ensure a continuous flow of fresh air either by opening windows or installing an extraction fan or similar technology to ensure a supply of fresh air and removal of contaminated air.

ADMINISTRATIVE CONTROLS

Administrative controls refer to the following:

- A set of well-designed policies and procedures guiding IPC practices.
- Access control procedures and the follow up of staff who fail access control.
- Process for follow up and monitoring of contacts
- Work from home and shift rotation protocols if possible and where applicable.

ENVIRONMENTAL CONTROLS

Environment controls include Standard Precautions, which consist of the following (to mention a few that are relevant to the Technical Department):

- Hand hygiene
- Environmental cleaning
- Cough etiquette
- Social distancing
- Universal masking
- Universal face shields
- Personal Protective Equipment (PPE) where applicable

STANDARD PRECAUTIONS

TOPIC	ACTIONS
Hand hygiene	<p>Perform hand hygiene:</p> <ul style="list-style-type: none"> • Before touching your face • Before putting on your mask • Before eating and drinking • Before contact with the environment • After contact with the environment • After coughing or sneezing • After working with equipment • After visiting the bathroom • Before putting on and removing PPE <p>NOTE: Hand hygiene can be performed by rubbing the hands for 20 – 30 seconds with 2-3 ml 70% alcohol based handrub or until dry. The hands have to be covered with the alcohol based handrub.</p> <p>Alternatively, hands can be washed with soap and running water for 20 – 30 seconds and dried properly with a single use paper towel when hands are visibly soiled. Alcohol based handrub has to be available in the Technical Department.</p> <p>NOTE: Posters about hand hygiene should be displayed in the Technical Department.</p>
Maintenance of a clean environment	<p>Ensure that the Technical Department is cleaned on a daily basis which includes cleaning and disinfection of all surfaces, furniture and equipment.</p> <ul style="list-style-type: none"> • First clean the area with a detergent (soap) and water to remove dirt and organic material. • Disinfect all areas after cleaning, using 70% alcohol surface disinfectant or hypochlorite 1:1000 ppm solution or equivalent. • Disinfectant wipes are a useful alternative to regularly clean frequently touched areas and equipment. • Frequently touched areas that have to be cleaned more frequently are: <ul style="list-style-type: none"> ○ Workbenches ○ Door handles

	<ul style="list-style-type: none"> ○ Telephones ○ Equipment ○ Keyboard, mouse and surfaces around each computer station ○ Access control keypads ○ Photostat machines and other shared equipment ○ Waste bin lids <p>NOTE: Please use Addendum 1 to record the cleaning process.</p>
<p>Deep-cleaning <i>(An exceptional cleaning and disinfection process of the environment or an area, usually related to an outbreak or increase in incidence of an infectious disease)</i></p>	<p>Deep-cleaning must be done if there is an increase in COVID-19 cases amongst technical staff or when there is a concern about potential transmission in the Technical Department.</p> <ul style="list-style-type: none"> ● Surfaces and equipment have to be cleaned with detergent and water, followed by disinfectant such as hypochlorite 1:1000 ppm or 70% alcohol surface disinfectant (specific equipment, areas and objects are listed below), depending on the manufacturer’s guidelines. ● All non-porous containers and objects in the Technical Department have to be cleaned and disinfected and surfaces allowed to dry. ● Floors of the entire Technical Department have to be cleaned thoroughly with a detergent and water (following removal of any gross spillage as necessary beforehand), followed by disinfection with hypochlorite 1:1000 ppm and allowed to dry. <p>Hydrogen peroxide fogging can be considered as an additional process following completion of the cleaning process (deep cleaning) when there is an increase in positive cases (cluster or outbreak) within a specific timeframe and potential transmission in the Technical Department. It is however not recommended for routine use and should be done after consultation with the IPC Manager.</p> <p>NOTE: Please ensure that a certificate/proof of fogging is received from the company doing the fogging.</p>
<p>Personal Protective Equipment (PPE)</p>	<p>Gloves</p> <ul style="list-style-type: none"> ● It is not appropriate to routinely wear disposable gloves in the Technical Department. ● Hand hygiene has to be performed frequently. ● Gloves should be worn when working in clinical areas on equipment that might be contaminated with blood and body fluids. ● Equipment for repair must be cleaned and disinfected in clinical areas before being sent to the Technical Department. ● Disposable gloves should be worn when working on equipment where there may have been leakage of body fluids or debris inside a closed casing. ● Gloves must be worn when working on any equipment or in areas in contact with sewage. ● Discard in Healthcare Risk Waste (HCRW) container after removal <p>Aprons</p> <ul style="list-style-type: none"> ● Disposable aprons are not indicated for use in the Technical Department. <p>Masks</p> <ul style="list-style-type: none"> ● Cloth masks have to be worn while travelling, coming on duty, entering the hospital and when working in the Technical Department. Surgical masks should be worn when entering clinical areas. ● Wear a surgical mask to protect the respiratory tract from infectious agents and to prevent infected droplets from an asymptomatic/pre-symptomatic healthcare worker being transmitted to colleagues and patients. ● The mask has to fully cover nose and mouth at all times to prevent fluid penetration or dispersion. ● Discard in Healthcare Risk Waste (HCRW) container after removal. ● Perform hand hygiene before application and after the removal. <p>NOTE: Never let a mask hang around your neck as this increases the risk of self- contamination during re-application.</p> <p>Goggles or face shield/visor</p> <p>To protect mucous membranes of the eyes, nose and mouth.</p>

	<ul style="list-style-type: none"> Goggles have to fit snugly over and around eyes. Face shield/visor has to be worn in areas where social distancing (1.5-2 meter) is difficult. Face shield/visor has to cover forehead, extend below chin and wrap around sides of the face. Perform hand hygiene before application and after removal. Avoid touching the face, eyes, nose and mouth <p>NOTE: Always clean the goggles or face shield after use with soap and water and disinfect with 70% alcohol surface disinfectant or hypochlorite 1:1000 ppm. See COVID-19 Update (2020 07 01): Rationale for the universal use of face shields/visors</p>
Decontamination of equipment	<ul style="list-style-type: none"> Equipment and tools handled by various staff members should be cleaned after use.
Healthcare Risk Waste (HCRW) Management	<ul style="list-style-type: none"> Handle healthcare risk waste according to the Corporate policy: Waste: Collection, removal and disposal
Cough etiquette/ respiratory hygiene	<p>Promote respiratory hygiene/ cough etiquette:</p> <ul style="list-style-type: none"> Cover mouth and nose with a tissue when coughing or sneezing. Make use of a disposable tissue or your flexed elbow. Dispose of the used tissue immediately in a waste bin. Perform hand hygiene after coughing or sneezing. Ensure that alcohol based handrub is available and easily accessible within the Technical Department. <p>NOTE: Posters about cough etiquette should be displayed in the Technical Department.</p>
Social Distancing	<ul style="list-style-type: none"> Maintain a distance of at least one meter from other people. If that is not possible in the working environment, wear a face shield.
Kitchen and tea room	<ul style="list-style-type: none"> Kitchens have to be cleaned according to the cleaning schedule at the beginning and the end of the day. Additionally the area has to be cleaned after each tea and lunch break. Products must be available for staff to clean the surface where they sit during breaks prior to and after consuming food and beverages. No eating utensils, plates or cups should be shared. Staff must not share food. The fridge, microwave, kettle and surfaces in the kitchen have to be thoroughly cleaned with detergent and water, and wiped down with disinfectant.
Toilets	<ul style="list-style-type: none"> Toilet facilities have to be cleaned thoroughly and disinfected at least three times a day according to the procedures from the contracted cleaning company.

INFECTION PREVENTION AND CONTROL SPECIFICALLY RELATED TO THE TECHNICAL DEPARTMENT

The following **Standard Precautions** apply in all areas in the Technical Department:

- Hand hygiene before and after contact.
- Environmental cleaning: Regular cleaning and disinfection of surfaces and frequently touched equipment or objects in the Technical Department, at least twice a day.
- Preventative measures:
 - Face shields/eye protection.
 - Cloth masks must be worn at all times.

Additional IPC precautions

Transmission based precautions in clinical areas:

- The implementation of transmission based precautions and the use of PPE will depend on the work that will be done in the clinical areas, vacuum and ventilation systems, the type and duration of interaction and the type of disease/infection.

- Droplet precautions:
 - Surgical masks
 - Gloves
- Contact precautions
 - Gloves
 - Apron
- Airborne precautions
 - N95 or FFP2 respirator
- When working with sewerage and spillages
 - Impervious clothing
 - Visor/eye protection
 - Industrial gloves

PPE to be used in dedicated COVID-19 areas:

- When doing general maintenance in a COVID-19 area where no aerosol generating procedures (AGPs) are performed:
 - Apron
 - Mask
 - Visor/eye protection (goggles)
 - Gloves
- When doing general maintenance in a COVID-19 area where AGPs are performed:
 - Gown over clothes
 - N95/FFP2 respirator (Seal checked)
 - Visor/eye protection (goggles)
 - Industrial gloves if applicable alternatively disposable gloves
- **When cleaning air conditioners and ventilation grills:**
 - Apron
 - Mask
 - Visor/eye protection
 - Gloves
- **When climbing into ducts and ventilation systems:**
 - Scrubs
 - N95 respirator (Seal checked)
 - Goggles
 - Industrial gloves
- **When working on vacuum system:**
 - Scrubs
 - N95 respirator (Seal checked)
 - Goggles
 - Gloves
- **Tools that was used in COVID-19 area:**
 - Cleaned with a detergent and water and disinfected with 70% alcohol based surface disinfectant or hypochlorite depending on the manufacturers guidelines.
 - **NOTE:** Alcohol handrub cannot be used for the disinfection of equipment due to the emollient that it contains.
- **Consumables or spares that was replaced in COVID-19 area**
 - To be discarded as normal waste in COVID-19 area.
- **Equipment that needs to be repaired outside Covid-19 area**
 - To be cleaned with detergent and water and disinfected with 70% alcohol based surface disinfectant or hypochlorite depending on the manufacturer's guidelines.

IMPORTANT: All staff must report any flu-like symptoms (e.g. fever, cough, sore throat, body aches, loss of smell and/or taste and difficulty in breathing) to their Technical Manager and appropriate steps must be followed. Access control application must be completed before coming on duty.

REFERENCES

1. National Department of Health. 2020. Practical Manual for Implementation of the National Infection Prevention and Control Strategic Framework. Available from: <https://www.nicd.ac.za/wp-content/uploads/2020/04/Practical-Manual-for-implementation-of-the-National-IPC-Strategic-Framework-March-2020-1.pdf> (Accessed 2020 05 10).
2. National Department of Health. COVID-19 Disease: Infection Prevention and Control Guidelines. Version 2 (21st May 2020).

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