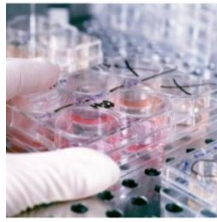




**NATIONAL HEALTH
LABORATORY SERVICE**



**NATIONAL INSTITUTE FOR
OCCUPATIONAL HEALTH**

Division of the National Health Laboratory Service



**NATIONAL INSTITUTE FOR
COMMUNICABLE DISEASES**

Division of the National Health Laboratory Service

COVID-19 TRAINING FOR NHLS

NHLS SHE DEPARTMENT

26 March 2020

Introduction

- The CEO has communicated information indicating that Top Management is committed to ensure COVID-19 is prioritized
- HR have communicated around leave and social distancing
- Second live presentation
 - Online
 - Email through the SHE Sections in the Regions
- Aim of the presentation:
 - Create an awareness of COVID-19 in the NHLS workplace
 - To promote a common response to dealing with COVID-19
 - Safety, Health and Environment perspective
- To address broadly the occupation groups within the NHLS



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COVID-19 OVERVIEW

DR GRAHAM CHIN

OCCUPATIONAL MEDICINE PRACTITIONER

NHLS SHE DEPARTMENT

EMAIL: grahamc@nioh.ac.za

SITUATION ANALYSIS

1 Largest diagnostic pathology service in South Africa

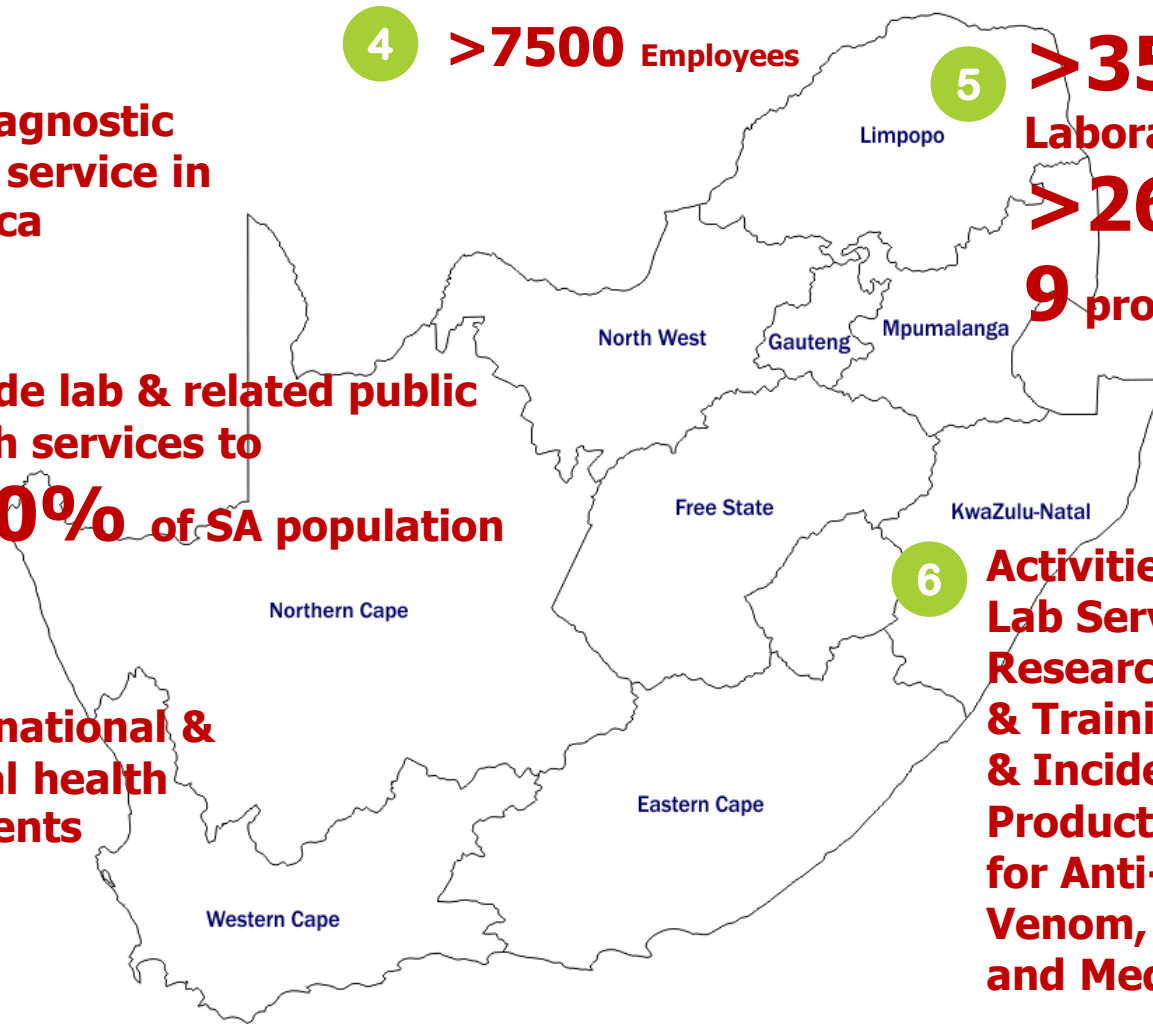
2 Provide lab & related public health services to **>80%** of SA population

3 Support national & provincial health departments

4 **>7500** Employees

5 **>350** Laboratories across **>260** sites, in all **9** provinces

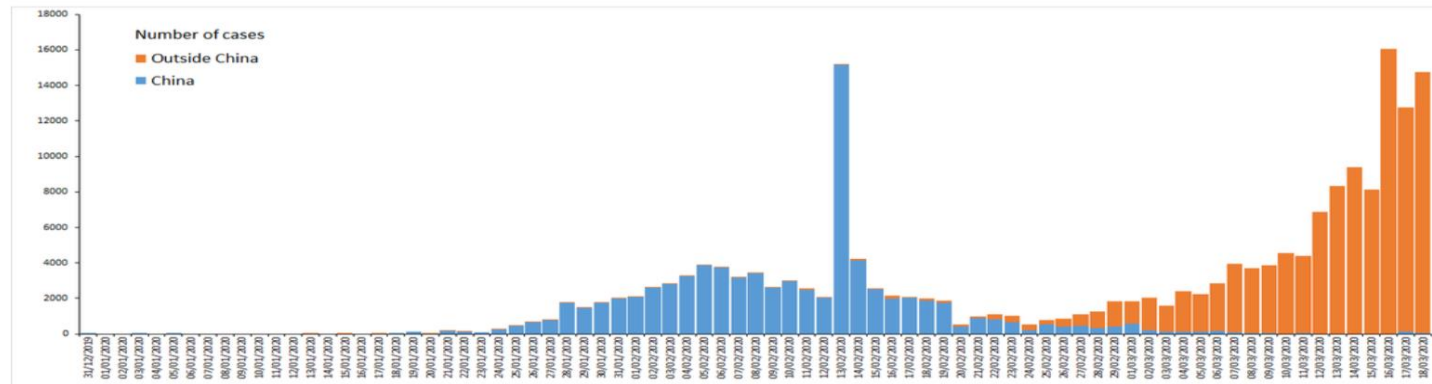
6 **Activities: Diagnostic Lab Services, Research, Teaching & Training, Outbreak & Incident response, Production of Sera for Anti-Snake Venom, Reagents and Media**



INTRODUCTION

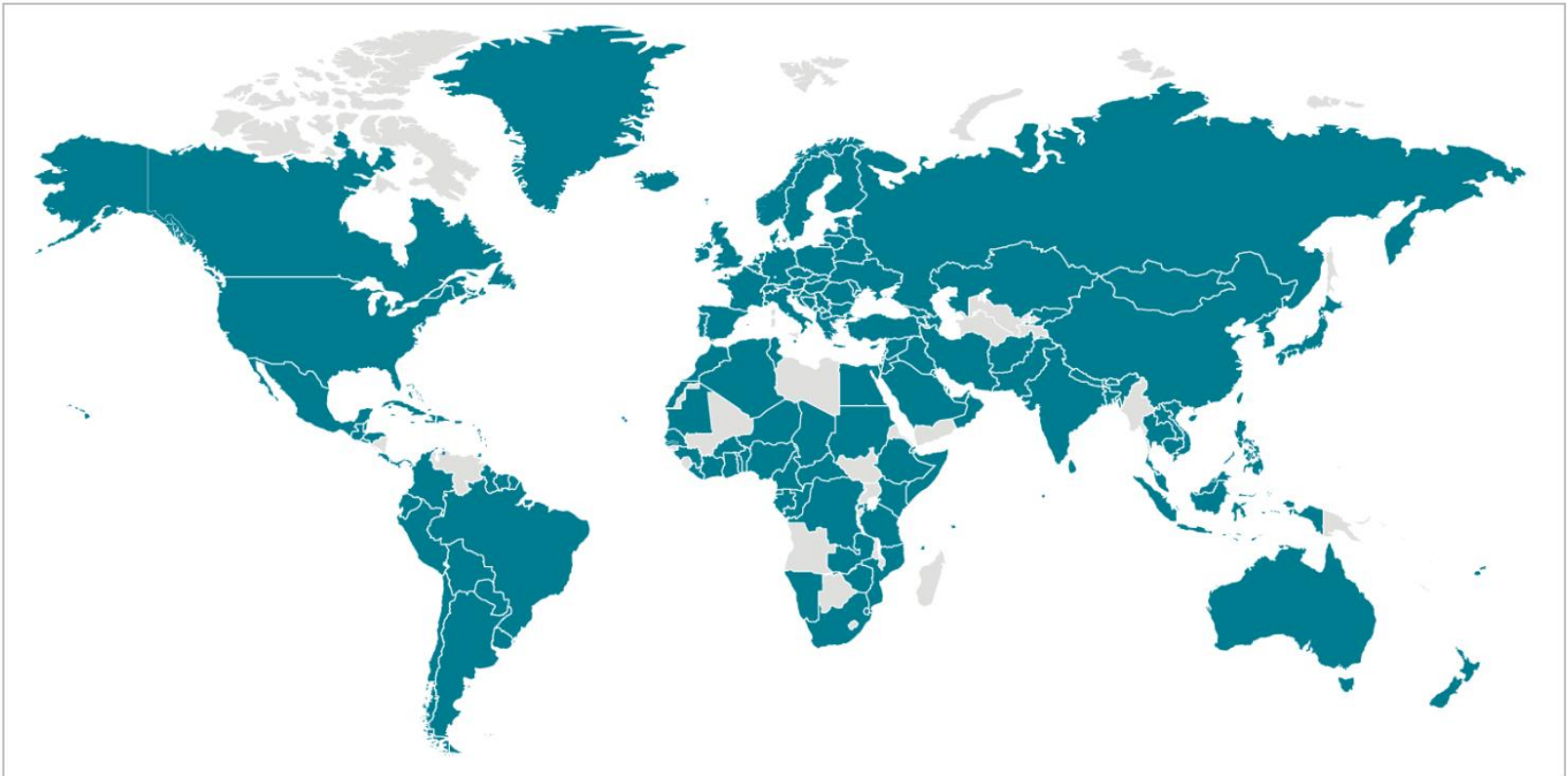
- 31 December 2019, the World Health Organization (WHO) China country office reported a cluster of pneumonia cases in Wuhan, Hubei Province of China
- A virus was identified which was subsequently called SARS-CoV-2. The disease caused by this virus is known as COVID-19
- Initially the majority of the cases were epidemiologically linked to seafood, poultry and live wildlife market (Huanan Seafood Wholesale Market) in Jiangnan District of Hubei Province
- Number of cases continued to increase rapidly, and evidence of person-to-person transmission mounted

Distribution of COVID-19 cases worldwide, as of 18 March 2020



Countries affected by COVID-19

As of 12:00 p.m. ET March 24, 2020



SOUTH AFRICAN COVID-19 CASES

- 5 March 2020, South African Minister of Health Dr Zweli Mkhize announced the country's first confirmed coronavirus (COVID-19) case
- On 15 March 2020 the President of the Republic of South Africa declared the outbreak a National Disaster
- On 23 March 2020 the President of the Republic of South Africa announced a lock-down of South Africa
- 25/03/2020 (Midday): 709 cases
- Initially all positive cases were imported, subsequently we are picking up positive cases of local transmission



What is Coronavirus?

Coronaviruses are a large family of viruses that cause illness ranging from the common cold to more severe diseases like pneumonia, MERS and SARS

- Severe Symptoms
- High Fever
- 38°C
- Pneumonia
- Kidney Failure
- Death

TRANSMISSION

Coughs or sneezes from infected person or touching contaminated objects



COMMON SYMPTOMS

- Fever
- After 2 to 7 days develop a dry cough
- Mild breathing difficulties at the outset
- Gastrointestinal issues
- Diarrhea
- General body aches

* Source: Centers for Disease Control and Prevention/ USA Today

EXPRESS

SARS = Severe Acute Respiratory Syndrome

MERS = Middle East Respiratory Syndrome

CHARACTERISTICS OF SARS-COV-2

- Main route of transmission is through respiratory droplets
 - through the air by coughing and sneezing.
 - by touching an object or surface with the virus on it, then touching your mouth, nose or eyes before washing your hands.
- Incubation period 2-14 days (mean 5.2 days)
- 14 days of isolation or quarantine is suggested (Li, 2020)
- In early stages, epidemic doubled in size every 7.4 days
- Basic reproductive number was estimated 2.2 (95% CI, 1.4 to 3.9) - on average each infectious case gives rise to just over 2 infectious cases



CLINICAL AND EPIDEMIOLOGICAL 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 [$\geq 38^{\circ}\text{C}$ (measured) or history of fever (subjective)] irrespective of admission status

AND

Were in close contact¹ with a confirmed² or probable³ case of SARS-CoV-2 infection;

OR

Had a history of travel to areas with presumed ongoing community transmission of SARS-CoV-2*

OR

Worked in or attended a health care 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

* For updated list of countries please refer to NICD website

SPECIMEN COLLECTION

- Respiratory samples are the primary method of diagnosis
- Lower respiratory tract samples are preferred
- Respiratory samples include:
 - Combined nasopharyngeal and oropharyngeal swab in ambulatory patients
 - Sputum (if produced)
 - Tracheal aspirate or bronchoalveolar lavage in patients with more severe respiratory disease
- The specimens must be clearly labelled with the patient name, date of birth and specimen type

Table 1. Type of specimens that can be collected for 2019-nCoV diagnostics and the transport requirements of these specimens



Specimen type	Collection materials	Storage and transportation	Dangerous goods shipping category	Comment
FOR SYMPTOMATIC PATIENTS:				
Sputum*	Deep cough sputum in sterile leak proof container	Refrigerate and ship at 2-8 °C up to 48 hrs, if >48 hrs freeze at -70°C and ship on dry ice	Biological substance, Category B	The preferred sample but need to ensure the material is from the lower respiratory tract
<u>Bronchoalveolar lavage*</u>	2-3 ml in sterile leak proof container	Refrigerate and ship at 2-8 °C up to 48 hrs, if >48 hrs freeze at -70°C and ship on dry ice	As above	There may be some dilution of virus but still a worthwhile specimen
(Endo)tracheal or nasopharyngeal aspirate*	2-3 ml in sterile leak proof container	Refrigerate and ship at 2-8 °C up to 48 hrs, if >48 hrs freeze at -70°C and ship on dry ice	As above	
Nasopharyngeal and oropharyngeal swab	Dacron or nylon flocced swab in Universal Transport Medium (UTM) in a sterile leak proof container	Refrigerate at 2-8 °C up to 5 days, if >5 days freeze at -70°C and ship on dry ice	As above	Nasopharyngeal and oropharyngeal swabs should be placed in the same tube to increase the viral load
Serum	Serum separator tube**	Store upright for at least 30 minutes after collection. a Refrigerate and ship at 2-8 °C within 5 days	As above	Collect paired samples: <ul style="list-style-type: none"> • Acute – first week of illness • Convalescent – 2-3 weeks later
Lung tissue from biopsy or autopsy	Sterile container with saline	Refrigerate and ship at 2-8 °C up to 24 hrs, if >24 hrs freeze at -70°C and ship on dry ice		

* Aerosol-generating procedures may pose an infection risk for health care workers. ** Children and adults: collect 1 tube (5-10ml) of whole blood. Infant: a minimum of 1ml in a serum separator tube.

WHAT IS NEEDED TO TAKE A SPECIMEN?

- Specimen submission form, person under investigation form, and contact tracing form
- Nasopharyngeal and oropharyngeal swabs
- Sterile container for sputum/lower respiratory tract specimen
- Tongue depressor
- Biohazard bag for disposal of non-sharp materials
- Ziplock plastic specimen bag
- Cooler box and cooled ice packs
- Ensure practitioner taking the sample from the patient observes standard safety precautions

COMPLETE THE CORRECT FORMS

- For each person under investigation (PUI) a laboratory specimen submission form, a person under investigation (PUI) form and contact list form has to be completed and submitted together with the specimens
- Always check on the NICD website that you have the current version of the forms <http://www.nicd.ac.za/diseases-a-z-index/novel-coronavirus-infection/>

CRDM unique no: _____ CRDM lab no: _____ Trak no: _____ Date received: _____

**Centre for Respiratory Diseases and Meningitis
Specimen Submission form**

Patient Information		Submitter Information (contact person for results)	
Identifier or Hospital no		Surname	
Surname		First name	
First name		Laboratory	
Age/Date of birth		City, Country	
Gender		Contact number (country code)+()	
Facility/Hospital		Email address	
Specimen Details			
Specimen collection date:	dd-mm-yyyy		
Specimen type:		<input type="checkbox"/> Nasopharyngeal (NP) aspirate	<input type="checkbox"/> Nasal swab
		<input type="checkbox"/> Bronchoalveolar lavage (BAL)	<input type="checkbox"/> Sputum
		<input type="checkbox"/> Oropharyngeal (OP) swab	<input type="checkbox"/> CSF
		<input type="checkbox"/> Pleural fluid	<input type="checkbox"/> Serum
		<input type="checkbox"/> Tracheal aspirate (TA)	
		<input type="checkbox"/> Blood culture	
		<input type="checkbox"/> Whole blood	

**Person under investigation (PUI) form for coronavirus disease 2019 (COVID-19):
Request for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) testing**

Internal use
CRDM unique no: _____

Tel: (+27) 386 6392/ (+27) 386 6410 | Fax: (+27) 11 882 9979 | Hotline: (+27) 82 883 9920 | (+27) 66 562 4021
Forward original forms with the specimen collected.
Email completed specimen submission form and PUI form to ncov@nicd.ac.za

Today's date: DD/MM/YYYY Form completed by (Name, Surname): _____ Contact number(s): _____

All suspected COVID-19 cases are Category 1 **notifiable medical conditions** under "Respiratory disease caused by a novel respiratory pathogen". Notify as per NMC procedures. If using NMC app provide case ID indicated on alert email.

Case ID: _____

Is this a: New clinical query Contact of a known case If contact of a known case, provide case details:

Known case first name: _____
Known case surname: _____
Known case DOB: DD/MM/YYYY _____

Detected at point of entry? Y N Unkn If yes, date: DD/MM/YYYY Please specify the point of entry: _____

COVID-19 CONTACT LINE LIST

Complete a contact line list for every person under investigation and every confirmed Coronavirus disease 2019 (COVID-19) case

Details of person under investigation/confirmed COVID-19 case					Details of health official completing this form		Today's date		
NICD Identifier		Date Symptom Onset	DD/MM/YYYY	Surname		Name		DD/MM/YYYY	
Surname		Name		Role		Facility name			
Contact number		Alternative number		Email address		Telephone number(s)			
Travel (provide details of all: 7 days before onset)			Travelled by	Bus <input type="checkbox"/> Plane <input type="checkbox"/>					
Air/bus line		Flight/bus #		Seat #					
Details of contacts (With close contact ¹ 7 days prior to symptom onset, or during symptomatic illness.)									
Surname	First name(s)	Sex (M/F)	Age (Y)	Relation to case ²	Date of last contact with case	Place of last contact with case (Provide name and address)	Residential address (for next month)	Phone number(s), separate by semicolon	HCW ³ (Y/N) if yes, facility name
1					DD/MM/YYYY				

DOCUMENTS AVAILABLE ON NICD WEBSITE:

- Quick reference (includes case definition, specimen collection and equipment needed)
- Guidelines
- Specimen submission form
- Person under investigation (PUI)
- Contact list form
- And more.....

Always check for latest update

www.nicd.ac.za, click on C in disease index A-Z, click on COVID-19, all documents etc. come up



17 February 2020

Coronavirus disease 2019 (COVID-19) Quick Reference for Health Workers

Centre for Respiratory Diseases and Meningitis
National Institute for Communicable Diseases (NICD)
24-hours hotline number: 082-883-9920 | 066-562-4021

Background:

On the 31st December 2019, the World Health Organization (WHO) China country office reported a cluster of pneumonia cases in Wuhan City, Hubei Province of China. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has been confirmed as the causative virus of Coronavirus disease 2019 (COVID-19). Several other cities in China and other countries have also reported cases. Most cases to date have links to China and person-to-person spread has been confirmed. For a list of countries where cases have been identified click [here](#).

Clinical presentation and management of suspected cases

The main clinical signs and symptoms are fever and cough with a few patients presenting with difficulty in breathing and bilateral infiltrates on chest X-rays. Lymphopaenia may be present. Treatment is supportive. The differential diagnosis for this syndrome is broad. Consider the possibility of influenza (Northern Hemisphere season ends in April or May) and bacterial pneumonia and manage accordingly.

Criteria for Person Under Investigation (PUI)

GENERAL PRECAUTIONS TO BE OBSERVED



Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer.



Avoid touching your eyes, nose, and mouth with unwashed hands.



Avoid close contact with people who are sick
Stay home when you are sick
Try to keep distance from others at home or in the workplace, including in the tearoom or at your work station.



Cover your cough or sneeze with a flexed elbow or a tissue, then throw the tissue in the bin.

GENERAL PRECAUTIONS TO BE OBSERVED



Clean and disinfect frequently touched objects and surfaces. E.g. office desks, door handles, telephones etc.



NHLS has recommended international business travel be prohibited in line with governments pronouncements. All local business travel must be limited. Where possible, use technology to further business requirements.



All NHLS staff on medical aid are encouraged to get the flu vaccine. Those employees not on a medical aid should also get the flu vaccine (NHLS will make provision through the refund process).



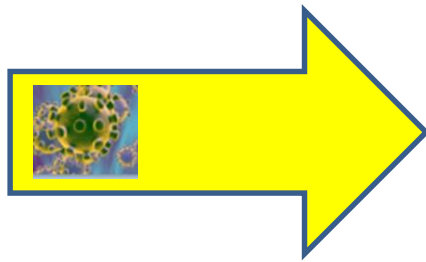
Ensure your general health is maintained. Chronic disease are well controlled.

Some of the occupations in the NHLS!

- Laboratory workers
 - Medical technologist
 - Medical technician
 - Medical scientist
 - Pathologist
 - Laboratory assistants ... etc.
- Non-laboratory workers
 - Drivers
 - Security officials
 - Cleaning staff
 - Gardeners
 - Administration and office workers
 - Animal handlers ... etc.

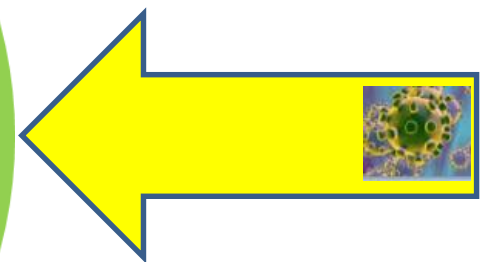
POTENTIAL SOURCES OF EXPOSURE IN THE WORKPLACE

**Community
acquired**



Workplace

**Workplace
acquired**



OCCUPATIONAL SAFETY

MICHELLE MORGAN
DEPUTY SHE MANAGER, NHLS SHE DEPARTMENT
CONTACT – michellem@nioh.ac.za



RISK ASSESSMENT

NHLS policy and legislation require that a risk assessment is conducted in the workplace.

Has your risk assessment considered COVID-19?

RISK ASSESSMENT

- Every NHLS workplace (laboratories, offices, workshops, etc.) must ensure that their risk assessment is reviewed to include risk of exposure to COVID-19.
- It is recommended that a local risk assessment for each laboratory procedure from sample collection, sample reception, clinical testing, polymerase chain reaction (PCR) to virus isolation (if relevant), be performed and recorded.
- Certain laboratory hazards will then be considered for each process e.g. Leaking sample in receiving, aerosol exposure during sample processing, eye splash during sample processing, infectious material spillage, etc.
- Non-laboratory workspaces e.g. offices, security stations etc. are also work places and thus need to have an updated documented risk assessment to include risk of exposure to COVID-19.

RISK ASSESSMENT

- For each identified risk, appropriate risk control measures should be selected and implemented in order to mitigate the residual risk to an acceptable level.
- The approved risk assessment must be recorded and communicated to all staff in the workplace.
- Staff must read and familiarise themselves with the contents of the risk assessment.
- The NHLS Risk assessment SOP is available on Q-pulse as GPS0039 and provides step by step guidelines on how to conduct a risk assessment of your workplace together with the tools for recording.
- A Risk Assessment training presentation is available on the NHLS Intranet and a presentation is included as Module 4 in the online HSR training.

OCCUPATION SPECIFIC INFORMATION ON COVID-19

- Cleaners
- Security officials
- Reception, front line office workers and office staff
- Phlebotomists
- Laboratory workers



Cleaners

PRECAUTIONS AND ACTIVITIES FOR CLEANERS

- Increased cleaning frequency using appropriate cleaning materials
- Together with your manager identify high traffic areas and locations where people frequent in order to plan an appropriate cleaning schedule
- Wipe down surfaces and objects that are touched often and by many people like door handles, desk surfaces, telephones, kitchens, toilets, etc.
- Soap and water and common household detergents (alcohol or ammonium based detergents, bleach etc.) are effective against COVID-19



PRECAUTIONS AND ACTIVITIES FOR CLEANERS

- Ensure that hand washing stations are equipped with soap and paper towels
- Wear impermeable disposable gloves when cleaning
- Wash your hand immediately on removing the gloves with soap and water for at least 20 seconds
- Masks and respirators are not indicated for general cleaning
- Cleaners should not clean laboratory work surfaces or hazardous spills



Security Officials

PRECAUTIONS AND ACTIVITIES FOR SECURITY OFFICIALS

- Ensure you keep your environment clean. Where necessary engage with cleaning staff to assist (take note of frequently touched surfaces and objects like doors, door handles, desk surfaces, etc.)
- Be sure that you wash your hands with soap and water for at least 20 seconds on a regular basis. If that is not possible use a hand sanitizer
- Soap and water and common household detergents (alcohol or ammonium based detergents, bleach etc.) are effective against COVID-19
- Maintain a distance of at least 1 meter from visitors where possible
- Security officials searching visitors cars or vehicles transporting specimens are not at risk of close contact and do not require PPE
- Minimize physical contact with people where not essential



Reception, front line office workers and office staff



PRECAUTIONS AND ACTIVITIES FOR RECEPTION OFFICIALS

- Ensure you keep your environment clean. Where necessary engage with cleaning staff to assist (take note of frequently touched surfaces and objects like doors, door handles, desk surfaces, etc.)
- Soap, water and common household detergents (alcohol or ammonium based detergents, bleach etc.) are effective against COVID-19
- Reception, front of office and office staff should maintain a distance of at least 1 meter from visitors and thus do not require PPE
- Be sure that you wash your hands with soap and water for at least 20 seconds on a regular basis. If that is not possible use a hand sanitizer



Phlebotomist

PRECAUTIONS AND ACTIVITIES FOR PHLEBOTOMISTS

- If you have a resident consulting room/blood taking station, ensure you keep your environment clean. Cleaning staff should be made aware to clean frequently touched surfaces / furniture (e.g. doors, door handles, desk surfaces, chairs etc.)
- If you have a mobile box with blood drawing supplies etc. (especially if shared amongst staff), make sure the handle and compartment lids are cleaned regularly
- Try and perform procedures in an adequately ventilated room where possible
- Triage sick patients – deal with those coughing or sneezing first

PRECAUTIONS AND ACTIVITIES FOR PHLEBOTOMISTS

- Make sure you plan the procedure well – aim is to limit the overall time spent with the patient
 - Ensure you have all the supplies you need for the procedure (vacutainers, needles, alcohol swab, forms, etc.)
 - Obtain patient clinical information prior to patient contact
 - Try and position patient when taking blood in a way that the patients' face (mouth and nose) is not in your direction
 - Limit the number of people accompanying/surrounding the patient during blood taking (e.g. if the patient is a child allow only one parent /guardian present if necessary)
 - Apply good clinical practice and standard precautions by washing your hands after doffing of PPE and after finishing with the patient

PRECAUTIONS AND ACTIVITIES FOR PHLEBOTOMISTS

- PPE required
 - Eye protection
 - Surgical mask (phlebotomy does not generate aerosols)
 - Gloves
 - Lab coat (ensure long sleeves)
- Specimens once taken,
 - Are sealed properly (not leaking)
 - Packaged correctly (to minimize re-packaging and further exposure down the line)
- Soap, water and common household detergents (alcohol or ammonium based detergents, bleach etc.) are effective against COVID-19



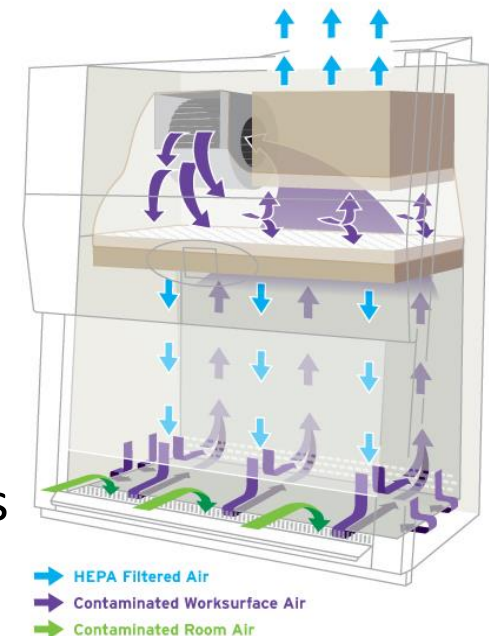
Laboratory workers

CONTROL MEASURES - ENGINEERING CONTROLS

- Initial processing of all specimens from patients who are suspected or confirmed to be infected with SARS-CoV-2 should be carried out in a validated biological safety cabinet (BSC)
- Non-propagative diagnostic laboratory work should take place in a Biosafety Level 2 (BSL-2) laboratory (most NHLS labs)
- Propagative work (virus isolation and culture) should take place in a Biosafety Level 3 (BSL-3) laboratory.
- Appropriate disinfectants with proven activity against enveloped viruses (COVID-19) must be used to decontaminate work surfaces and clean up spills. These include Hypochlorite (bleach/Jik), Alcohol (70%), Hydrogen peroxide, Quaternary Ammonium compounds and Phenolic compounds.
- Disinfectants must be used for the recommended contact time, at the correct dilution and within the expiry date of the prepared working solution.
- All technical procedures should be performed in such a way that the generation of aerosols and droplets is minimised.

BIOLOGICAL SAFETY CABINETS

- A biosafety cabinet (BSC) is an enclosed, ventilated laboratory workspace that uses directional airflow to protect the user from the pathogens being handled
- A BSC should be validated by the contracted service provider every 6 months and smoke tested weekly
- It is vitally important for the user to work correctly in such a cabinet to ensure that he\she is being protected.
- The Biosafety Cabinet video is available for training use on the NHLS Intranet under OHS Programme
- The Smoke Test for Biological Safety cabinet video is available for training use on the NHLS Intranet



PROPER BSC SET-UP

1. Allow cabinet to run 15 minutes prior to use
2. Adjust Sash
3. Perform a SMOKE TEST(@ least weekly) (GPL0138)
4. Read the gauges
5. Record the gauge readings and smoke test results on log sheets (FML0021)
6. Disinfect work surfaces and record
7. Wipe off each item you place into the BSC to minimize potential contamination
8. Arrange materials in the BSC to segregate contaminated and clean items.



CONTROL MEASURES - ADMINISTRATIVE CONTROLS

- There must be standard operating procedures (SOP) for all tasks and tests performed in the workplace.
- All SOPs must include specific safety precautions and control measures that must be implemented and adhered to when performing work.
- Staff must be trained and deemed competent for carrying out their duties.
- Any testing for the presence of SARS-CoV-2 or testing of clinical specimens from patients meeting the suspected case definition must be performed by properly trained staff, competent in the relevant technical and safety procedures.
- The handling and processing of specimens from cases with suspected or confirmed COVID-19 infection, intended for additional laboratory tests such as haematology or blood gas analysis, should follow local guidelines for processing potentially infectious material.

CONTROL MEASURES - ADMINISTRATIVE CONTROLS

- The NHLS Safety manual (POLS0001 to POLS0014) and other relevant SOPs must be available, accessible and read by all staff.
- Laboratory Managers (Section 16.2 appointee) have a responsibility to provide information, instructions and training and ensure that laboratory staff are supervised and are wearing the required PPE where necessary.
- The Manager safety video is available for training use on the NHLS Intranet under OHS Program “Health and Safety Training”
- The Staff safety video is available for training use on the NHLS Intranet under OHS Program “Health and Safety Training”
- Good clinical laboratory practice (GCLP) and universal precautions must be applied at all times when working in a laboratory.

CONTROL MEASURES – PERSONAL PROTECTIVE EQUIPMENT (PPE)


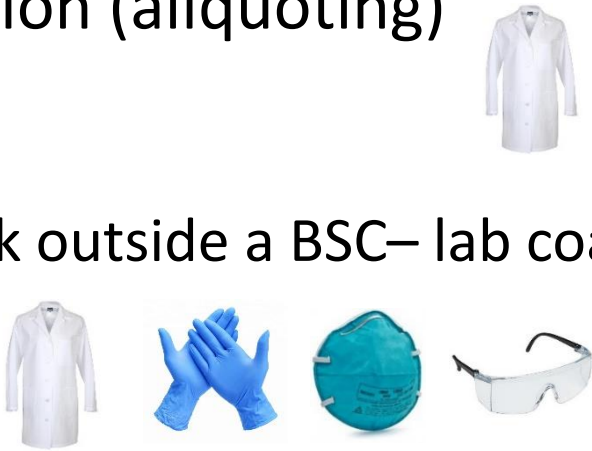

- Laboratory coats must be used in laboratories to prevent personal clothing from getting splashed or contaminated by biological agents. Lab coats must have long sleeves, preferably with elasticated or fitted cuffs and must be worn closed and only in designated areas.
- Appropriate disposable gloves must be worn for all procedures that may involve contact with blood or body fluids or other potentially infectious materials.
- Gloves should never be reused and must be visually inspected before use to ensure that they are intact.

CONTROL MEASURES – PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Safety glasses, safety goggles, face shields (visors) must be worn whenever necessary to protect the eyes and face from splashes.
- Footwear must be worn in a laboratory and must be of a design that minimizes slips and trips and can reduce the likelihood of exposure to biological agents. Open-toed shoes and high heels are not permitted in a laboratory.
- Respiratory protection is generally not part of the core requirements. However it is recommended that a local risk assessment be conducted to determine whether the use of respiratory equipment is needed, especially when procedures that may create aerosols and droplets are performed outside the BSC or when a BSC has not been validated.
- Working in a validated BSC is always recommended

Minimum PPE required for handling a respiratory sample

Process as per normal BSL2 (suspected influenza sample)

- Closed specimen tube (transporting / receiving)
 - Lab coat and gloves
- Open specimen tube before inactivation (aliquoting)
 - If BSC available – lab coat and gloves
 - If BSC not available or performing work outside a BSC – lab coat, gloves, N95 mask and eye protection
- Inactivated specimen/extracted nucleic acids (PCR)
 - Lab coat and gloves

PROPER HAND WASHING TECHNIQUE

Wash hands for at least 20 seconds with antibacterial soap and water

The Hand Washing video is available on the NHLS Intranet under OHS Programme



1
Palm to palm



2
Between fingers



3
Back of hands



4
Base of thumbs



5
Back of fingers



6
Fingernails



7
Wrists



8
Rinse and wipe dry

HEALTH AND SAFETY TRAINING AVAILABLE ON THE NHL'S INTRANET



NATIONAL HEALTH LABORATORY SERVICE

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National Occupational Health And Safety Programme



The NHL's National Occupational Health and Safety Programme is designed to build a healthy and safe environment for you and your family, both at the workplace and at home. The programme reflects the wider scope of the NHL's responsibility across all the disciplines in which it is engaged. The NHL is committed to creating a strong employee-centred environment in which our people have peace of mind and security.



National Occupational Health and Safety Programme is available to all NHL employees, regardless of whether you are a contract worker or a student, have existing medical aid cover or not.

All NHL employees automatically qualify for the unique benefits of the NHL National Occupational Health and Safety Programme.

These are the primary benefits:

- HIV / AIDS Prevention Programme - HIV preventative treatment and benefits in the event of a NHL workplace exposure to HIV
- Trauma Assistance - Assistance in the event of a Trauma incident such as armed robbery, rape, emotional trauma, domestic violence, hijacking, mugging, witnessing murder or suicide, natural disaster, bereavement and physical trauma.

To access any of the above benefits, all you need to do is call the Care Centre number **0860 10 29 93 (old numbers replaced)** and provide your name and ID number.

HIV Workplace Exposure Care Centre or Trauma Support number - 0860 10 29 93 (old numbers replaced) (24 hours, 365 days a year).

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SAFETY VIDEOS AVAILABLE ON THE INTRANET


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Training Health And Safety

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Training Health And Safety



Introduction

Section 8 of the Occupational Health and Safety (OHS) Act 85 of 1993 refers:
"Every employer shall provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of his employees."

The NHL5 SHE Programme has therefore embarked on an online training programme for NHL5 staff in order to meet this need.

The following online training programmes are available:

HEALTH AND SAFETY REPRESENTATIVE TRAINING – Consists of Modules 1 to 6 and is targeted at all NHL5 health and safety representatives (HSR) appointed as per Section 17 of the OHS Act. Lab managers and other NHL5 staff are also encouraged to participate.

HEALTHCARE RISK WASTE TRAINING – Consists of a presentation on Health Care Risk Waste (HCRW), a HCRW training manual and a HCRW assessment and is targeted at all staff involved in/responsible for the day to day management of HCRW in NHL5 laboratories including appointed health care waste officers. Lab managers and other NHL5 staff are also encouraged to participate.

EBOLA TRAINING – Targeted at the 11 NHL5 laboratories designated as sites for Ebola testing. Consists of: National Guidelines for Recognition and Management of Viral Haemorrhagic Fevers (VHF) 2014, Department of Health

NHL5 Safety Videos

LIST OF SAFETY VIDEOS AVAILABLE ON THE INTRANET

1. Visitors
2. Management
3. Hand Washing Sequence New
4. Biosafety Cabinet
5. Enhanced PPE
6. Staff
7. Smoke Test for Biological Safety Cabinet
8. Security Afrikaans
9. Security English
10. Security Sotho
11. Security Xhosa
12. Security Zulu
13. Doffing gloves

PACKING AND TRANSPORTING A SPECIMEN FOR CORONAVIRUS TESTING?

Send as per Category B substance, UN3373 (as per suspected influenza specimen)

- Locally or nationally:
 - Specimen in sealed, leak-proof ziplock bag, placed in sealed cooler box with cooled ice blocks
 - Sent through the normal overnight regional courier service
1. Ensure the cooler box and ice packs stay at 2-8 degrees
 2. Transport to CRDM, NICD urgently (on same day as collection).
 3. Mark: **Suspected Novel coronavirus/COVID-19, CRDM NHLS/NICD, Centre for Respiratory Disease and Meningitis (CRDM) Lower North Wing, SAVP building 1 Modderfontein Rd, Sandringham, Johannesburg, 2131.**
 4. NHLS laboratories use usual overnight regional courier service.
Do not delay sending specimens.

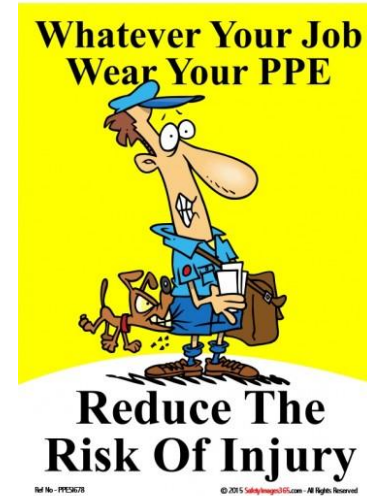
INCIDENTS AND ACCIDENTS

- Report all accidents, incidents and near-misses on OHASIS
- Definitions:

Accidents: Undesirable harm resulting in injury and indicative of a failure in a system e.g. Laboratory exposure to a disease that resulted in the person becoming ill, needle-stick injury.

Incident: An undesirable event resulting in harm, that could have resulted in a more serious outcome or injury e.g. shelving falling but not injuring anyone, sample splashing in a BSC

Near-miss: a foreseen risk that prevented a serious consequence, e.g. a cable about to snap, a step about to break.



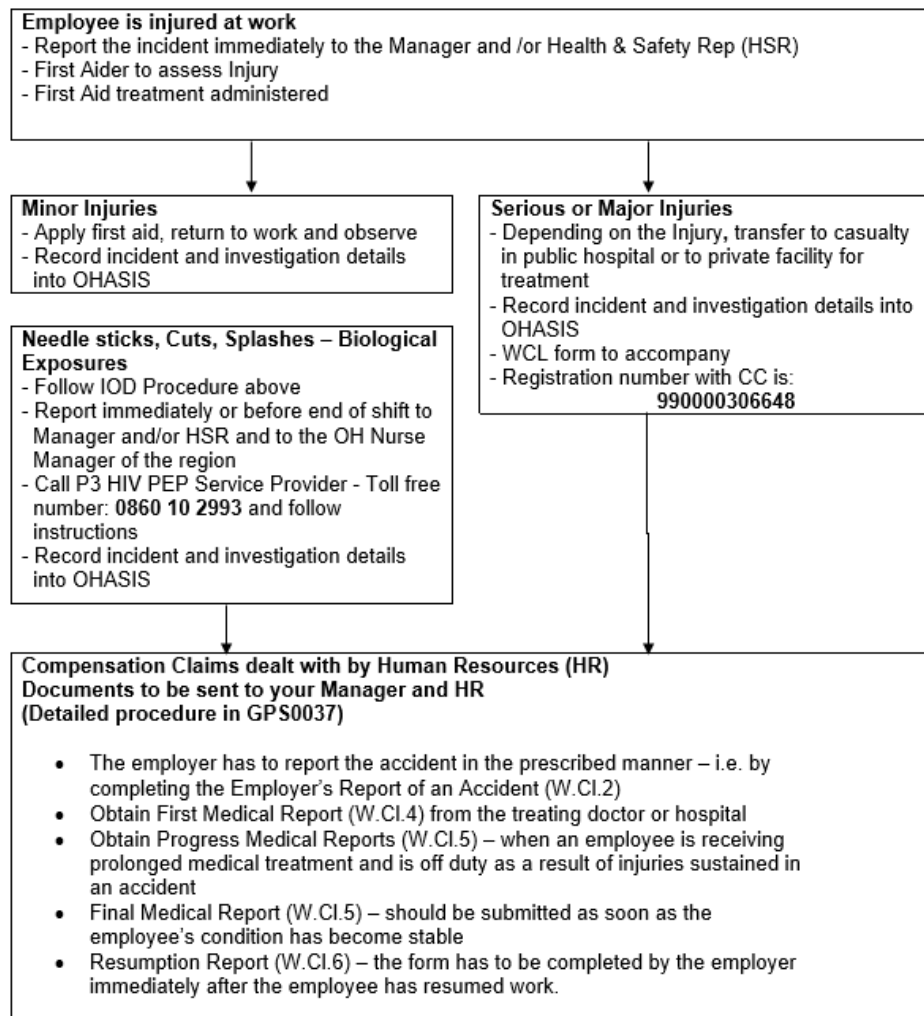
INCIDENTS AND ACCIDENTS



FORM 35 - INJURY ON DUTY (IOD) REPORTING & INVESTIGATION PROCEDURE (Detailed procedure in POLS0004)

PROMINENTLY DISPLAY IN ALL NHLS WORKPLACES

Process to follow in the event of any potential work related exposure to SARS-CoV-2 (Refer to POLS0004 and POLS0009 Form 35)



REMEMBER TO REPORT IN OHASIS

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Welcome Guest
Homepage | **Quick Links** | Contact Us

Content Search...
Staff Directory Search...

Home | About Us | Vacancies | Policies And Forms | Corporate Departments | OHS Programme | Gallery | Publications | NSCC | Trakcare Project

Quick Links

Homepage > Quick Links

Quick Links

- BioRad QA
- CDW Microstrategy
- CDW Portal
- Ebscohost Resources
- Email - Outlook Web Access
- Enterprise Content Management(ECM)
- NICD
- NIOH
- **OHASIS - Occupational Health and Safety Information System**
- Oracle E-Business Suite
- Proficiency Testing Schemes Online

INCIDENTS AND ACCIDENTS



OHASIS



Welcome to OHASIS

The Occupational Health and Safety Information System (OHASIS) is an easy to use web-based information system to allow health and safety professionals to enter and track essential occupational health indicators.

Please select an instance below or select Help to access training manuals and demonstrations.



Live Application Instance



Practice Application



Self-Report an Incident



Give Consent



Tuberculosis Screening



SHE Videos



Help & Support

WASTE MANAGEMENT

MMASHELA KGOLE
WASTE ASSURANCE MANAGER
NHLS SHE DEPARTMENT
Email: mmashelak@nioh.ac.za

WASTE MANAGEMENT

Health care waste

- General waste e.g. packaging material, office paper, flowers, etc.
- Hazardous waste e.g. sharps waste, infectious waste, anatomical waste, chemical waste, etc.

PPE

- Use appropriate personal protective equipment when handling waste

Waste management steps:

1. Identify and classify your waste
2. Segregate into red, yellow, green, clear or black colour coded containers as per category of waste



3. Close and seal the liner with a cable tie and then the container with biohazard tape.

WASTE MANAGEMENT


4. Labelling of the waste container:

- Write on the container the date you started using it
- After waste container is full and sealed:
 - Apply the NHLS sticker completing all the necessary fields
 - In addition, for COVID-19 waste, ensure you clearly write “COVID-19”

Opened : 24 March 2020
HCRW COVID-19

NATIONAL HEALTH LABORATORY SERVICE
SAWIS REGISTRATION NUMBER: GPG-00-298

MAJOR WASTE GENERATOR

Laboratory:	Braamfontein	Room:	10
Department:	TB		
Date:	Closed	25 March 2020	
Signature:			

WASTE MANAGEMENT

5. Wipe down the sealed container with 0.5% hypochlorite solution
6. Temporarily store waste in designated areas before removal by the contractor
7. Keep records of waste removed from the laboratory and removed by the contractor

More information on waste management is available in The NHLS Waste Management Policy and Procedures (POLS0014)

Special instructions for handling COVID-19 waste as per National Department of Health and National Department of Environment, Forestry and Fisheries.

Further guidelines are in development and will be communicated when finalized.



THIS SITUATION IS RAPIDLY EVOLVING

CHECK FOR UPDATES ON THE NHLS, NIOH, NICD AND NDOH

WEBSITES

www.nhls.ac.za ; www.nioh.ac.za ; www.nicd.ac.za ; www.ndoh.gov.za

WHO & CDC WEBSITES

WHO TO CONTACT FOR ADVICE

NHLS Staff Hotline – 011 386 6132

NICD Public Hotline - 0800 029 999
0800 111 132



Hotline

Some extra useful numbers:


Sample collection – Sibongile Walaza – 011 386 6410

Sample transport – Linda de Gouveia – 011 555 0327

Amelia Buys – 011 386 6373

Cardia Fourie – 011 386 6373

WHO TO CONTACT FOR ADVICE NHLS SHE DEPARTMENT

**NATIONAL HEALTH
LABORATORY SERVICE**

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[Homepage](#) | [Quick Links](#) | [Contact Us](#)

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Staff Directory Search...

[Home](#) | [About Us](#) | [Vacancies](#) | [Policies And Forms](#) | [Corporate Departments](#) | [OHS Programme](#) | [Gallery](#) | [Publications](#) | [NSCC](#) | [Trakcare Project](#)

OHS Programme

- HIV / AIDS Programme
- Trauma Assistance
- SHE Programme Contact Details**
- Training Health and Safety

[Homepage](#) > OHS Programme

National Occupational Health And Safety Programme

The NHLS National Occupational Health and Safety Programme is designed to build a healthy and safe environment for you and your family, both at the workplace and at home. The programme reflects the wider scope of the NHLS' responsibility across all the disciplines in which it is engaged. The NHLS is committed to creating a strong employee-centred environment in which our people have peace of mind and security.

National Occupational Health and Safety Programme is available to all NHLS employees, regardless of whether you are a contract worker or a student, have existing medical aid cover or not.


All NHLS employees automatically qualify for the unique benefits of the NHLS National Occupational Health and Safety Programme.

These are the primary benefits:

- HIV / AIDS Prevention Programme - HIV preventative treatment and benefits in the event of a NHLS workplace exposure to HIV
- Trauma Assistance - Assistance in the event of a Trauma incident such as armed robbery, rape, emotional trauma, domestic violence, hi-jacking, mugging, witnessing murder or suicide, natural disaster, bereavement and physical trauma.

To access any of the above benefits, all you need to do is call the Care Centre number **0860 10 29 93 (old numbers replaced)** and provide your name and ID number.

HIV Workplace Exposure Care Centre or Trauma Support number - 0860 10 29 93 (old numbers replaced) (24 hours, 365 days a year).



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