

Survey on laboratory capacity



Survey complexity

Select the laboratory complexity

- Simple
- Average
- Complex

Laboratory profile

» General Information

Date

yyyy-mm-dd

Country

- | | | |
|--|--|---|
| <input type="radio"/> Angola | <input type="radio"/> Benin | <input type="radio"/> Botswana |
| <input type="radio"/> Burkina Faso | <input type="radio"/> Burundi | <input type="radio"/> Cabo Verde |
| <input type="radio"/> Cameroon | <input type="radio"/> Central African Republic (CAR) | |
| <input type="radio"/> Chad | <input type="radio"/> Comoros | <input type="radio"/> Congo |
| <input type="radio"/> Democratic Republic of the Congo | <input type="radio"/> Côte d'Ivoire (Ivory Coast) | |
| <input type="radio"/> Djibouti | <input type="radio"/> Egypt | <input type="radio"/> Equatorial Guinea |
| <input type="radio"/> Eritrea | <input type="radio"/> Ethiopia | <input type="radio"/> Gabonese Republic |
| <input type="radio"/> Gambia | <input type="radio"/> Ghana | <input type="radio"/> Guinea-Bissau |
| <input type="radio"/> Guinea | <input type="radio"/> Kenya | <input type="radio"/> Lesotho |
| <input type="radio"/> Liberia | <input type="radio"/> Libya | <input type="radio"/> Madagascar |
| <input type="radio"/> Malawi | <input type="radio"/> Mali | <input type="radio"/> Mauritania |
| <input type="radio"/> Mauritius | <input type="radio"/> Morocco | <input type="radio"/> Mozambique |
| <input type="radio"/> Namibia | <input type="radio"/> Niger | <input type="radio"/> Nigeria |
| <input type="radio"/> Rwanda | <input type="radio"/> São Tomé and Príncipe | |
| <input type="radio"/> Senegal | <input type="radio"/> Seychelles | <input type="radio"/> Sierra Leone |
| <input type="radio"/> Somalia | <input type="radio"/> South Africa | <input type="radio"/> South Sudan |
| <input type="radio"/> Sudan | <input type="radio"/> Swaziland | <input type="radio"/> Tanzania |
| <input type="radio"/> Togolese Republic (Togo) | <input type="radio"/> Tunisia | |
| <input type="radio"/> Uganda | <input type="radio"/> Zambia | <input type="radio"/> Zimbabwe |

Laboratory Name

City /District

Other

Facility Name/ Address

Laboratory address

GPS coordinates

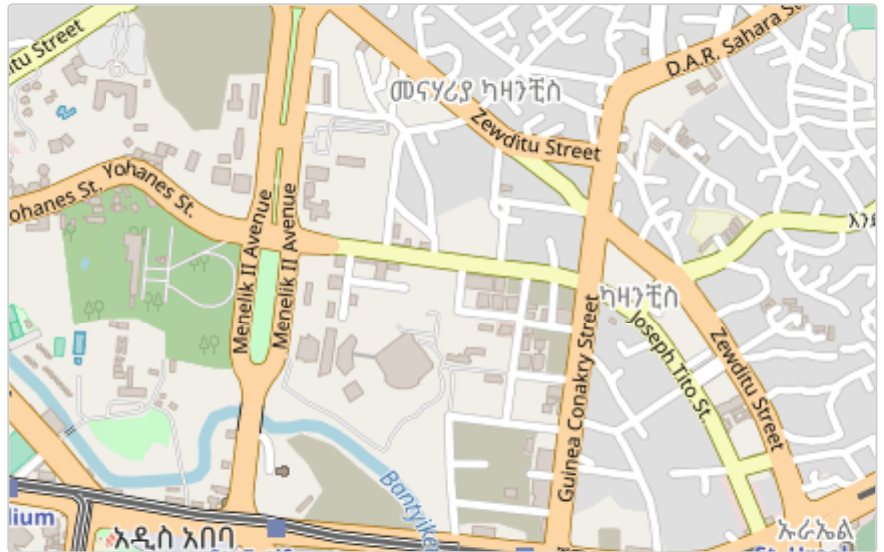
GPS: The Global Positioning System

latitude (x.y °)

longitude (x.y °)

altitude (m)

accuracy (m)



Laboratory Contact Name

Title of contact person

Qualification of contact person

Telephone work

Telephone personal

Contact email address

Blood bank

- Yes
- No

Center of HIV voluntary and testing

- Yes
- No

Laboratory Affiliation

- Public
- Private
- Academic
- NGO/Religious

Registration number

a registration is the identification of the facility in the national registry

- Yes
- No

Not applicable



Specify Registration number

Registration number issued by the MOH

Licence Number

The license is the authorization to practice

- Yes
- No
- Not applicable

Specify Licence Number

Licence Number issued by the MOH for operation

Valid Until

yyyy-mm-dd

Laboratory days of service

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday

Laboratory usual opening time (Monday)

hh:mm

Laboratory usual closing time (Monday)

hh:mm

Laboratory usual opening time (Tuesday)

hh:mm

Laboratory usual closing time (Tuesday)

hh:mm

Laboratory usual opening time (Wednesday)

hh:mm

Laboratory usual closing time (Wednesday)

hh:mm

Laboratory usual opening time (Thursday)

hh:mm

Laboratory usual closing time (Thursday)

hh:mm

Laboratory usual opening time (Friday)

hh:mm

Laboratory usual closing time (Friday)

hh:mm

Laboratory usual opening time (Saturday)

hh:mm

Laboratory usual closing time (Saturday)

hh:mm

Laboratory usual opening time (Sunday)

hh:mm

Laboratory usual closing time (Sunday)hh:mm

On-call Services Yes No**Child Care** Yes No**Laboratory Staffing Information****» Category of laboratory staff****How many pathologists work in the lab?***Pathologist: A physician who identifies diseases and conditions by studying abnormal cells and tissues.*

How many microbiologists work in the lab?*Microbiologist: a scientist who studies microscopic life forms and processes.*

How many lab technologists/scientists work in the lab?*Laboratory technologist: is a healthcare professional who works in all areas of the clinical laboratory (BSc level)*

How many lab technicians work in the lab?*Laboratory technicians: is a healthcare professional who works in the clinical laboratory and performs technical or diagnostic tests in medical or scientific laboratories (Diploma level).*

How many lab assistants /microscopists work in the lab?*Laboratory assistance: is a healthcare professional who works directly with other health care providers and patients and in the exciting laboratory setting. Microscopist: works in medical laboratory setting and identifies infections and species of parasites by microscopic examination.*

How many phlebotomists work in the lab?*Phlebotomist: is medical professional who draws blood from patients for various lab tests and procedures*

How many healthcare staff work in the lab?

e.g. : Nurse, health assistance, etc.

Infrastructure**» Physical Structure and Space****Laboratory in a dedicated area**

Dedicated area: Assigned to laboratory only

Yes

No

Energy source

Public Network

Generator

Solar energy

Public Network & Generator Group

Public & Solar Network

Public Network & Generator & Solar Group

Generator & Solar Group

Gas

Ventilation

Only for sputum microscopy laboratory

Working Windows

Functional air conditioning

Functional humidifier

Fan (Floor / Ceiling) functional

Functional air extractors

Staff toilet

Yes

No

Patient's toilet

Yes

No

Adequate storage area for:

Yes

No

Lab reagents and consumables

- Yes
 No

Biological materials

Biological materials: Items such as pathogen, host, and vector specimens; molecular reagents; and disease models belong in the public domain.

- Yes
 No

Dangerous chemicals

e.g Acid: hydrochloric acid, nitric acid, sulfuric acid, acetic acid, phosphoric acid. Bases—sodium hydroxide, potassium hydroxide, ammonia, etc

- Yes
 No

Water supply

- Public network
 Traditional well
 Drilling / Chateau
 Well Cemented

Hand wash basin

- Yes
 No

Fire extinguisher

- Yes
 No

Safety cabinet or a dead-end safety box for handling highly infectious samples

- Yes
 No

Waiting area for suspected Tuberculosis patients

- Yes
 No

Assessment of the general condition of the buildings

- Roof
 Ground
 furniture
 walls
 Doors
 Cleanliness of the premises
 benching
 Windows

How would you rank the roof quality?

————— ————— —————

Good Fair Bad Not Present

How would you rank the walls quality?

————— ————— —————

Good Fair Bad Not Present

How would you rank the benching quality?

————— ————— —————

Good Fair Bad Not Present

How would you rank the ground quality?

————— ————— —————

Good Fair Bad Not Present

How would you rank the doors quality?

————— ————— —————

Good Fair Bad Not Present

How would you rank the windows quality?

————— ————— —————

Good Fair Bad Not Present

How would you rank the furniture quality?

————— ————— —————

Good Fair Bad Not Present

How would you rank the Cleanliness of the premises quality?

————— ————— —————

Good Fair Bad Not Present

Laboratory departments and testing menu

» **Laboratory tests (serology & molecular assays)**

» » **HIV diagnostics**

Rapid HIV antibody tests

Yes

No

Number of test /year

HIV serology (enzyme-linked immunosorbent assay (ELISA) linked immunosorbent assay,(LIA) / western blot (WB) Yes No**Number of test /year**

Line immunoassay (LIA) / western blot (WB) Yes No**Number of test /year**

Early Infant diagnosis (EID); preparation of dried blood spot (DBS) for Early infant diagnostic testing Yes No**Number of test /year**

Human Immunodeficiency Virus (HIV) Polymerase chain reaction(PCR) for Early Infant diagnosis (EID) Yes No**Number of test /year**

Viral load Yes No**Number of test /year**

Genotypic ARV resistance testing Yes No

Number of test /year

» » Diagnostic of hepatitis viruses**Diagnosis of Hepatitis B**

- | | | |
|-------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> serology | <input type="checkbox"/> quick test | <input type="checkbox"/> viral load |
| <input type="checkbox"/> genotyping | <input type="checkbox"/> not available | |

Diagnosis of Hepatitis C

- | | | |
|-------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> serology | <input type="checkbox"/> quick test | <input type="checkbox"/> viral load |
| <input type="checkbox"/> genotyping | <input type="checkbox"/> not available | |

Diagnosis of Hepatitis E

- | | | |
|-------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> serology | <input type="checkbox"/> quick test | <input type="checkbox"/> viral load |
| <input type="checkbox"/> genotyping | <input type="checkbox"/> not available | |

» » » Viral Hemorrhagic Fevers (VHF)**Diagnosis of the Ebola virus**

- | | | |
|-------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> serology | <input type="checkbox"/> quick test | <input type="checkbox"/> viral load |
| <input type="checkbox"/> genotyping | <input type="checkbox"/> not available | |

Diagnosis of Rift Valley fever virus

- | | | |
|-------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> serology | <input type="checkbox"/> quick test | <input type="checkbox"/> viral load |
| <input type="checkbox"/> genotyping | <input type="checkbox"/> not available | |

Diagnosis of Congo Crimean Hemorrhagic Fever

- | | | |
|-------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> serology | <input type="checkbox"/> quick test | <input type="checkbox"/> viral load |
| <input type="checkbox"/> genotyping | <input type="checkbox"/> not available | |

Diagnosis of Lassa fever serology quick test viral load genotyping not available**Diagnosis of the Dengue virus** serology quick test viral load genotyping not available**Diagnosis of the Zika virus** serology quick test viral load genotyping not available**Diagnosis of the Chikungunya virus** serology quick test viral load genotyping not available**Diagnosis of yellow fever virus** serology quick test viral load genotyping not available**» » » Other viral infections****Diagnosis of rabies virus** serology quick test viral load genotyping not available**Diagnosis of influenza virus** serology quick test viral load genotyping not available

Diagnosis of swine flu virus (H1N1)*Rapid Influenza Antigen Test for Diagnosis of Pandemic (H1N1)* serology quick test viral load genotyping not available**Diagnosis of the SARS-CoV virus***Polymerase chain reaction (PCR); Antibody tests: IgM and IgG* serology quick test viral load genotyping not available**Diagnosis of the Nile Valley virus** serology quick test viral load genotyping not available**Diagnosis of Avian Flu (H5N1)** serology quick test viral load genotyping not available**Diagnosis of the polio virus** serology quick test viral load genotyping not available**Diagnosis of cytomegalovirus (CMV)** serology quick test viral load genotyping not available**Diagnosis of rotavirus** serology quick test viral load genotyping not available

Diagnosis of measles virus serology genotyping quick test not available viral load**Diagnosis of mumps virus** serology genotyping quick test not available viral load**Diagnosis of the rubella virus** serology genotyping quick test not available viral load**» » » Diagnostic of other infectious bacterial diseases****Diagnosis of brucellosis (BMAT)** PCR Microscopy not available serology Culture quick test antibiogramme**Diagnosis of leptospirosis** PCR Microscopy not available serology Culture quick test antibiogramme**Bacterial Meningitis** PCR Microscopy not available serology Culture quick test antibiogramme

Diagnosis of hemolytic beta streptococcus group A

- | | | |
|--|-----------------------------------|--|
| <input type="checkbox"/> PCR | <input type="checkbox"/> serology | <input type="checkbox"/> quick test |
| <input type="checkbox"/> Microscopy | <input type="checkbox"/> Culture | <input type="checkbox"/> antibiogramme |
| <input type="checkbox"/> not available | | |

Diagnosis of cholera

- | | | |
|--|-----------------------------------|--|
| <input type="checkbox"/> PCR | <input type="checkbox"/> serology | <input type="checkbox"/> quick test |
| <input type="checkbox"/> Microscopy | <input type="checkbox"/> Culture | <input type="checkbox"/> antibiogramme |
| <input type="checkbox"/> not available | | |

Diagnosis of salmonellosis

- | | | |
|--|-----------------------------------|--|
| <input type="checkbox"/> PCR | <input type="checkbox"/> serology | <input type="checkbox"/> quick test |
| <input type="checkbox"/> Microscopy | <input type="checkbox"/> Culture | <input type="checkbox"/> antibiogramme |
| <input type="checkbox"/> not available | | |

Diagnosis of shigellosis

- | | | |
|--|-----------------------------------|--|
| <input type="checkbox"/> PCR | <input type="checkbox"/> serology | <input type="checkbox"/> quick test |
| <input type="checkbox"/> Microscopy | <input type="checkbox"/> Culture | <input type="checkbox"/> antibiogramme |
| <input type="checkbox"/> not available | | |

Diagnosis of diphtheria

- | | | |
|--|-----------------------------------|--|
| <input type="checkbox"/> PCR | <input type="checkbox"/> serology | <input type="checkbox"/> quick test |
| <input type="checkbox"/> Microscopy | <input type="checkbox"/> Culture | <input type="checkbox"/> antibiogramme |
| <input type="checkbox"/> not available | | |

Diagnosis of anthrax

- | | | |
|--|-----------------------------------|--|
| <input type="checkbox"/> PCR | <input type="checkbox"/> serology | <input type="checkbox"/> quick test |
| <input type="checkbox"/> Microscopy | <input type="checkbox"/> Culture | <input type="checkbox"/> antibiogramme |
| <input type="checkbox"/> not available | | |

Diagnosis of the plague

- PCR

 serology

 quick test
 Microscopy

 Culture

 antibiogramme
 not available

» » TB diagnostics**Screening**

- Rapid blood test

 Tuberculin skin test
 not available

Identification

- Acid Fast Bacilli (AFB) smear- Ziehl Neelsen
 Light Emitting Diode (LED) Fluorescent Microscopy
 Rapid speciation for M tuberculosis

 Tuberculosis (TB)-Lamp
 lateral flow urine lipoarabinomannan assay (LF-LAM)

 Culture –Solid media
 Culture-Liquid media

 Tuberculosis Polymerase chain reaction (TB PCR)
 GeneXpert Mycobacterium tuberculosis (MTB)

 MTBDRplus line probe assay (LPA)
 not available

Resistance testing

- Drug Susceptibility Testing (DST)-First Line
 Drug Susceptibility Testing (DST) –Second Line

 not available

» » Parasitology**Malaria diagnostics**

- thin smear and / or thick blood

 dropRapid Tests of Malaria-Ag (RDT)
 not available

Surveillance of antimalarial resistance

- Yes
 No

Number of test /year

Diagnosis of trypanosomes Yes No**Number of test /year**

Diagnosis of intestinal parasites Direct examination Scotch Test Belenger Ritchie KATO -Katz not available**» » Diagnosis of other parasitic infections****Cryptococcosis** Latex test Microscopy serology quick test Culture PCR TPHA Filamentation test Agglutination test IDR at the leishmanine not available**Trichomoniasis** Latex test Microscopy serology quick test Culture PCR TPHA Filamentation test Agglutination test IDR at the leishmanine not available**Toxoplasmosis** Latex test Microscopy serology quick test Culture PCR TPHA Filamentation test Agglutination test IDR at the leishmanine not available

Urinary schistosomiasis

- | | | |
|---|---|---|
| <input type="checkbox"/> Latex test | <input type="checkbox"/> Microscopy | <input type="checkbox"/> serology |
| <input type="checkbox"/> quick test | <input type="checkbox"/> Culture | <input type="checkbox"/> PCR |
| <input type="checkbox"/> TPHA | <input type="checkbox"/> Filamentation test | <input type="checkbox"/> Agglutination test |
| <input type="checkbox"/> IDR at the leishmanine | <input type="checkbox"/> not available | |

Candidiasis

- | | | |
|---|---|---|
| <input type="checkbox"/> Latex test | <input type="checkbox"/> Microscopy | <input type="checkbox"/> serology |
| <input type="checkbox"/> quick test | <input type="checkbox"/> Culture | <input type="checkbox"/> PCR |
| <input type="checkbox"/> TPHA | <input type="checkbox"/> Filamentation test | <input type="checkbox"/> Agglutination test |
| <input type="checkbox"/> IDR at the leishmanine | <input type="checkbox"/> not available | |

Syphilis

- | | | |
|---|---|---|
| <input type="checkbox"/> Latex test | <input type="checkbox"/> Microscopy | <input type="checkbox"/> serology |
| <input type="checkbox"/> quick test | <input type="checkbox"/> Culture | <input type="checkbox"/> PCR |
| <input type="checkbox"/> TPHA | <input type="checkbox"/> Filamentation test | <input type="checkbox"/> Agglutination test |
| <input type="checkbox"/> IDR at the leishmanine | <input type="checkbox"/> not available | |

Chlamydia

- | | | |
|---|---|---|
| <input type="checkbox"/> Latex test | <input type="checkbox"/> Microscopy | <input type="checkbox"/> serology |
| <input type="checkbox"/> quick test | <input type="checkbox"/> Culture | <input type="checkbox"/> PCR |
| <input type="checkbox"/> TPHA | <input type="checkbox"/> Filamentation test | <input type="checkbox"/> Agglutination test |
| <input type="checkbox"/> IDR at the leishmanine | <input type="checkbox"/> not available | |

Leishmaniasis

- | | | |
|---|---|---|
| <input type="checkbox"/> Latex test | <input type="checkbox"/> Microscopy | <input type="checkbox"/> serology |
| <input type="checkbox"/> quick test | <input type="checkbox"/> Culture | <input type="checkbox"/> PCR |
| <input type="checkbox"/> TPHA | <input type="checkbox"/> Filamentation test | <input type="checkbox"/> Agglutination test |
| <input type="checkbox"/> IDR at the leishmanine | <input type="checkbox"/> not available | |

Filariasis Latex test quick test TPHA IDR at the leishmanine Microscopy Culture Filamentation test not available serology PCR Agglutination test**» » Immuno-Hematology and blood banking****Blood group and rhesus factor determination** Yes No**Phenotype Rhesus (RH)-KEL** Yes No**Irregular Agglutinin test** Yes No**Hemoglobin electrophoresis** Yes No**Hemoglobin concentration** Yes No**Cluster of Differentiation 4 (CD4) absolute count / percentage** Yes No**Full blood count with differentials** Yes No**Erythrocytes Sedimentation Rate(ESR)** Yes No

Prothrombin Time (PT) and INR

- Yes
- No

Partial Thromboplastin (PTT)

- Yes
- No

Coombs test

- Yes
- No

Reticulocyte count

- Yes
- No

Bleeding and clotting time

- Yes
- No

Lupus Erythematosus test

- Yes
- No

Myelogram test

- Yes
- No

» » Serology diagnostic

C-reactive protein (CRP)

- Yes
- No

Procalcitonin (PCT)

- Yes
- No

Anti-Nuclear Antibodies (ANA)

- Yes
- No

Prostate Specific Antigen (PSA)

- Yes
- No

Beta- Human chorionic gonadotropin (HCG)*test de grossesse*

- Yes
- No

Cytomegalovirus (CMV)

- Yes
- No

Rheumatoid Factor (RF)

- Yes
- No

Anti-Streptolysin-O (ASLO)

- Yes
- No

Serology of infectious mononucleosis

- Yes
- No

» » Biochemistry**Glycemia***Glucose test*

- Yes
- No

Glycosuria and albuminuria

- Yes
- No

Microalbumin

- Yes
- No

Urine dipstick for glycosuria and proteinuria

- Yes
- No

Alanine Aminotransferase(ALT) test

- Yes
- No

Aspartate Aminotransferase (AST) test

- Yes
- No

Alkaline Phosphatase(ALP)

- Yes
- No

Bilirubin (Total)

- Yes
- No

Bilirubin (Direct)

- Yes
- No

Gamma-Glutamyl Transferase(γ -GT)

- Yes
- No

Serum creatinine

- Yes
- No

Urine creatine

- Yes
- No

Creatine Kinase(CK)

- Yes
- No

Creatine Clearance

- Yes
- No

Lipase

- Yes
- No

Protein - total

- Yes
- No

Albumin

- Yes
- No

Amylase

- Yes
- No

Lactic acid

- Yes
- No

Blood urea nitrogen

- Yes
- No

Azotemia

- Yes
- No

Uric Acid

- Yes
- No

Total Cholesterol

- Yes
- No

High-density lipoprotein (HDL)- Cholesterol

- Yes
- No

Low-density lipoprotein (LDL)- Cholesterol

- Yes
 No

Triglycerides

- Yes
 No

D-Dimer

- Yes
 No

Thyroid function

Triiodothyronine (T3) Thyroxine (T4) and Thyroid Stimulating Hormone (TSH)

- Yes
 No

Hormonal tests (fertility)

Follicle Stimulating Hormone (FSH) Luteinizing Hormone (LH) Estradiol (E2) prolactin Testosterone (T) Progesterone (P4) 17-Hydroxyprogesterone (17-OHP)

- Yes
 No

Cortisol

- Yes
 No

Calcium (total and free)

- Yes
 No

Electrolytes -Sodium (Na⁺) , Potassium (K⁺) , Chloride (Cl⁻)

- Yes
 No

Cerebrospinal fluid (CSF)

- Yes
 No

Other (s) to be specified)

» » **Mycology/ Bacteriology**

Fungal culture conventional other Bact Alert not available Vitek (biomérieux)**Basal identification techniques for fungi** Dying other Microscopic examination not available**Blood culture** conventional other Bact Alert not available Vitek (biomérieux)**Routine bacterial culture** conventional other Bact Alert not available Vitek (biomérieux)**Identification of bacterial strains** conventional other Bact Alert not available Vitek (biomérieux)**Antibiotic sensitivity test** Antibigram (Kirby-Bauer) other Minimal inhibitory concentration (MIC) not available**» » Pathology / Histological tests****Human papillomavirus (HPV)** Yes No**Skin snips biopsy -Onchocerciasis** Yes No

Tumour Marker test

- Yes
 No

Alpha-Feto protein (AFP)

- Yes
 No

B-cell immunoglobulin

- Yes
 No

Beta-2 microglobulin(B2M)

- Yes
 No

Cancer antigen 15-3(CA 15-3)

- Yes
 No

Cancer antigen 19-9 (CA 19-9)

- Yes
 No

Cancer antigen 125(CA-125)

- Yes
 No

Calcitonin

- Yes
 No

Des-gamma-carboxy prothrombin(DCP)

- Yes
 No

Estrogen and Progesterone receptors

- Yes
 No

Monoclonal Immunoglobulins

- Yes
- No

Cyto-puncture

- Yes
- No

Fine Needle Aspiration Cytology (FNAC)

- Yes
- No

Laboratory Quality Management System**» Quality Management****Is there a Quality Management System (QMS) in place?**

QMS: The application of the principles of QMS in the laboratory setting.

- Good Laboratory Practice(GLP) ISO 15189
- ISO 17025 ISO 9001 other
- not available

Is the laboratory using a laboratory quality management tool?

QMS tools for process improvement

- SLIPTA SLMTA LQMS
- LQSI other not available

Score SLIPTA

- 0 star 1 star 2 stars
- 3 stars 4 stars 5 stars
- non applicable

Is the laboratory certified?

- Yes
- No

Is the laboratory accredited? EGAG ENAO SANAS SADCAS KENAS NiNAS TUNAC JCI CAP ISO Other not available**Designated focal point for quality?** Yes No**Quality manual available?** Yes No**Is the laboratory enrolled in External quality assessment (EQA) programs?***EQA :A system for objectively checking the laboratory's performance using an external agency or facility.* Yes No**Which ones?****Internal quality controls** Slides Hematology Biochemistry Serology Bacteriology Other not available**Periodic and up-to-date temperature readings** Yes No**Laboratory connectivity****» Types of connection****Telephone** Yes No

Fax

- Yes
 No

computer

- Yes
 No

Number of computer(number of desk tops/ number of lap tops)

Internet

- cable internet wifi bundle
 others not available

Laboratory Information System (LIS)

- Yes
 No

which one?

Type of equipment connected with Laboratory Information System (LIS)

- Chemistry Hematology CD4
 Other not available

Information and data backup System / Data repository

A data backup: copying or archiving files and folders

- Yes
 No

which one?

Linkages to laboratory networks**» Laboratory network**

» » Surveillance network**Pediatric Meningitis**

- Yes
 No

Trypanosomiasis

- Yes
 No

Flu

- swine flu
 SARS

- avian flu
 not available

- human flu

Leprosy

- Yes
 No

Hemorrhagic fevers

- Rift Valley Fever
 Lassa fever
 Fever of the Nile Valley
 none

- Ebola
 Zika
 Congo Crimean Fever

- Dengue
 Chikungunya

Filariasis

- Yes
 No

Cholera or other Gastro enteritis

- Yes
 No

Animal diseases

- Yes
 No

Please specify

Antibiotic resistance of common bacterial infections

- Yes
 No

Antibiotic resistance of M tuberculosis

- Yes
 No

Resistance of Plasmodium to anti malaria drugs

- Yes
 No

Quality control of pharmaceutical products

- Yes
 No

» » Sample Referral network for disease diagnostic**Type of sample referral system**

- | | |
|--|---|
| <input type="checkbox"/> postal services | <input type="checkbox"/> professional courier |
| <input type="checkbox"/> road network | <input type="checkbox"/> train |
| <input type="checkbox"/> air (drones and planes) | <input type="checkbox"/> Other |
| <input type="checkbox"/> not available | |

Tuberculosis diagnostic

- Yes
 No

Human Immunodeficiency Virus (HIV) viral load (plasma or Dried blood spot testing (DBS)

- Yes
 No

Human Immunodeficiency Virus (HIV) drug resistance (Plasma or Dried blood spot testing (DBS)

- Yes
 No

Identification of bacteria and antibiotic susceptibility testing

- Yes
 No

Pathology testing services

- Yes
 No

» » Collaboration with national, regional and international networks**National tiered Laboratory network**

- Yes
 No

Network of public health laboratories (national)

- Yes
 No

Regional (African regions) laboratory network

- Yes
 No

Which ones?

International laboratory network

- Yes
 No

Which ones?

Clinical research network

- Yes
 No

Which ones?

Training and education

- public health clinical diagnostic clinical research
 quality management biosafety/ biosecurity Other
 not available

» » Integrated tiered network**Laboratory is supervised in the last 12 months**

- Yes
- No

By which unit?

Laboratory supervises lower level of laboratories in the last 12 months

- Yes
- No

Communication

- Institutional, structured communication established with the national public health laboratory
- Institutional, structured communication established with the Directorate of laboratory or equivalent
- Institutional, structured communication established with regional lab

The laboratory sends the specimens to other laboratories

- Yes
- No

List the number of labs sending the specimens

The laboratory receives specimens from other laboratories

- Yes
- No

List the number of labs receiving specimens

Reporting testing result to a higher level

- Yes
- No

List the number of labs reporting testing result

Laboratory receives testing results from higher laboratories

- Yes
- No

List the number of labs receiving testing result

Biosafety and Biosecurity**Biosafety (BS) Level**

BS: The safe handling and containment of infectious microorganisms and hazardous biological materials

- BSL 1
- BSL 2
- BSL 3
- BSL 4
- Not applicable

Class of Biosafety Cabinet in use

- Class I
- Class II
- Class III

Are all Biological Safety Cabinets (BSCs) certified?:

- Yes
- No

Is there a focal point for biosafety and biosecurity?

- Yes
- No

Adequate access control system in place?

- Yes
- No

Is there a biosafety training programme with regular training?

- Yes
- No

Date of last biosafety / biosecurity training?

yyyy-mm-dd

Is biosafety training regularly provided?

- Yes
 No

Is Spill kit available ?

- Yes
 No

Disinfectants and Antiseptics available?

- Yes
 No

Phlebotomy kit and the appropriate specimen containers (stool, urine, blood)

- Yes
 No

Eyewash station in place?

- Yes
 No

Is triple packaging system available and in use?

- Yes
 No

SOP in place for sterilization

- Yes
 No

Access to an autoclave

- Yes
 No

SOP in place for waste management

- liquid waste
 elimination of solid waste
 separation of solid waste
 Other

Method for of solid waste elimination

- access to a burner access to a locally made incinerator
- access to a modern incinerator sending waste to centralized location

Is a doctor available for accidental harmful exposure?

- Yes
- No

Is there a standardized clinical management for harmful accidental exposure?

- Yes
- No

Are all staff manipulating biological material vaccinated against hepatitis B?

- Yes
- No

Functional and up to date fire extinguishers in place in all desirable areas?

- Yes
- No

Training for the utilization of fire extinguisher provided

- Yes
- No

» Major equipment**» » Microscopy****Microscopy**

- Binocular stereoscopic microscope Fluorescent microscope
- Electron Microscope Polarizing Microscope
- camera microscope

» » Material characterization and testing**GeneXpert**

- Yes
- No

Number

Number that function

Thermocycler and accessories

Yes

No

Number

Number that function

Sequencer

Yes

No

Number

Number that function

Flow cytometry (FACScan, FAcSCalibur, other)

Yes

No

Number

Number that function

Enzyme-linked immunosorbent assay (ELISA) chain

- Yes
- No

Number

Number that function

Electrophoresis

- Yes
- No

Biochemistry Analyser

- Yes
- No

Number

Number that function

Hematology analyzer

- Yes
- No

Number

Number that function

Glucometer

- Yes
- No

Automatic Identifier (Vitek II or Biolog)

Yes

No

Number

Number that function

Coagulometer

Yes

No

Number

Number that function

Colorimeter

Yes

No

Number

Number that function

Fluorometer

Yes

No

Number

Number that function

Microtome with accessories

- Yes
- No

Number

Number that function

» » Cold Storage

Freezer -20C

- Yes
- No

Number

Number that function

Deep freezer -80C

- Yes
- No

Number

Number that function

Refrigerator - 4C

- Yes
- No

Number

Number that function

Liquid nitrogen storage

- Yes
- No

Production of liquid nitrogen

- Yes
- No

Ice machine

- Yes
- No

Production of dry ice

- Yes
- No

» » Hoods

Fume Hoods

- Yes
- No

Number

Number that function

Laminar flow

- Yes
- No

Number

Number that function

Biosafety cabinet

- Yes
- No

Number

Number that function

Tissue culture room

- Yes
- No

» » Liquid handling

Water Distiller

- Yes
- No

Water baths and chillers

- Yes
- No

Shaker

- Yes
- No

Roller mixer

- Yes
- No

Vortex

- Yes
- No

Automatic pipettes

- Micropipette 1-5 µl
- Micropipette 5- 50µl
- Micropipette 200- 1000µl

- Micropipette 2-20 µl
- Micropipette 50- 200µl

Turbidimeter

- Yes
- No

» » Incubators and other heating equipment

Autoclave

- Yes
- No

Number

Number that function

Carbon dioxide (CO2) Incubator

- Yes
- No

Number

Number that function

Hot air oven

- Yes
- No

Number

Number that function

Dry heat blocks

- Yes
- No

Number

Number that function

Water bath

- Yes
- No

Number

Number that function

» » Centrifugation

Bench top centrifuge

- Yes
- No

Number

Number that function

(refrigerated) High speed centrifuge (15 000-20 000rpm)

- Yes
- No

Number

Number that function

(refrigerated) Ultra centrifuge (up to 65 000)

Yes

No

Number

Number that function

Microtome with accessories

Microtome accessories: Blades, holders, and supplies

Yes

No

Number

Number that function

» » Others

Analytical Balance

Yes

No

Thermometer

Yes

No

» Equipment maintenance

System for the regular maintenance of at least one major equipment in place

- | | |
|--|--|
| <input type="checkbox"/> maintenance contract | <input type="checkbox"/> life sheets |
| <input type="checkbox"/> maintenance log books | <input type="checkbox"/> SOP for preventive and curative maintenance books |

All essential equipment are regularly maintained

- Yes
- No

System for the routine calibration of pipetts in place

- Yes
- No

Replacement parts or important components for functional equipment available?

- Yes
- No

Supply chain management**System to track laboratory consumption and stock data**

- Yes
- No

Mechanism for laboratory reagents and supplies quantification

- Yes
- No

Inventory management system in this laboratory

- Yes
- No

Inspector / Field Data Representative Name

Date

yyyy-mm-dd
