Government of the Republic of Trinidad and Tobago
Ministry of Health

TRINIDAD PUBLIC HEALTH LABORATORY

MINISTRY OF HEALTH CLIENT HANDBOOK

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1. List of Abbreviations

AFP	Acute Flaccid Paralysis
BAL	Bronchoalveolar lavage
CARPHA	Caribbean Public Health Agency
CSF	Cerebrospinal Fluid
DHF	Dengue Hemorrhagic Fever
DSS	Dengue Shock Syndrome
DTS	Dried Tube Specimen
EDTA	Ethylenediaminetetraacetic acid
ELISA	Enzymed Linked Immunosorbent Assay
EQA	External Quality Assessment
HIV	Human Immunodeficiency Virus
ID	Identification
ISO	International Organization of Standards
IQC	Internal Quality Control
MOH	Ministry of Health
PCR	Polymerase Chain Reaction
PPE	Personal Protective Equipment
QMS	Quality Management System
RT	Room Temperature
TB	Tuberculosis
TPHL	Trinidad Public Health Laboratory
TPPA	Treponema Pallidum Particle Agglutination
TTLIMS	Trinidad and Tobago Laboratory Information Management System
VDRL	Venereal Disease Research Laboratory Test

2. Welcome Message

Message from the Director
Trinidad Public Health Laboratory, Ministry of Health
Trinidad and Tobago

Dear Valued Clients,

It is with great pride that I welcome you to the Trinidad Public Health Laboratory, the National Reference Laboratory of Trinidad and Tobago. As a specialized unit under the Ministry of Health, our mission is to support the nation's public health system by providing high-quality, timely, and reliable diagnostic services that inform public health interventions, guide patient care, and enhance disease surveillance.

In a world where public health challenges are becoming increasingly complex and global in nature, the role of a strong, responsive laboratory system cannot be overstated. At the Trinidad Public Health Laboratory, we are committed to excellence, operating in accordance with internationally recognized standards (ISO 15189:2022 accredited) and constantly striving to improve our services through innovation and capacity building.

This Client Handbook is designed to provide clear guidance on our laboratory services, sample submission procedures, and how we can effectively support your needs.

Thank you for partnering with us as we continue to strengthen our national health system and safeguard the health of our population.

Sincerely
Director, Trinidad Public Health Laboratory

Nicole Gokool

3. About the Trinidad Public Health Laboratory

The TPHL serves as the National Reference Laboratory for Trinidad and Tobago and is a specialized arm of the Ministry of Health, with services including diagnostic testing, disease surveillance, reference testing, capacity building, outbreak investigations, research and External Quality Assessment (EQA).

We operate in alignment with national and international standards and collaborate with local, regional, and global partners to strengthen laboratory systems and ensure the highest level of quality.

4. Vision, Mission & Core Values

Vision: TPHL is in the business of providing diagnostic and supportive services and the surveillance of Communicable Diseases in a prompt and efficient manner in order to improve the health status of the people of Trinidad and Tobago.

Mission: To be the National Public Health laboratory service in an effort to increase the spectrum, coverage, and overall efficiency of laboratory testing nationally, while implementing international best practice.

Core Values:

- Accuracy
- Quality
- Confidentiality
- Integrity
- Accountability

5. Quality Policy

The TPHL is committed to providing the best quality laboratory services as well as ensuring that our laboratory follows stringent and internationally recognized standards of safety and quality. We will do this by:

- Implementing and maintaining a QMS.
- Implementing continual quality improvement processes.
- Providing appropriate, timely and comprehensive reference and referral services to the people of Trinidad and Tobago.
- Ensuring that all personnel are aware off and adhere to the QMS at all times.

6. Scope of Services

The TPHL plays a pivotal role in the public health infrastructure of Trinidad and Tobago. Our core responsibilities go beyond routine diagnostics and include the following:

- Confirmatory and Specialized testing
- Surveillance and Disease Outbreak Support
- Internal Quality Control (IQC) and External Quality Assessment (EQA) for HIV testing sites.
- Training, Capacity Building and Mentorship
- Coordination and Technical Support to MOH programs
- Collaboration with International Partners
- Policy Support and Technical Advice
- Research and Innovation
- Referral Services to the Regional Reference Laboratory (CARPHA)

7. Contact Information

Address: Trinidad Public Health Laboratory

16-18 Jamaica Boulevard, Federation Park, Port-of-Spain

Phone: 622-2877 (Administration), 622-5311 (Laboratory)

General Email (Queries and Complaints): tphl@health.gov.tt

Webpage: https://health.gov.tt/services/trinidad-public-health-laboratory

8. Client Rights & Responsibilities

Rights:

- Receive accurate and timely test results
- Be treated with respect and confidentiality
- Access up-to-date information on test procedures and requirements

Responsibilities:

- Provide complete and accurate patient information
- Follow proper sample collection and submission guidelines
- Notify the laboratory of urgent or special testing requirements

9. Hours of Operation

Routine hours:

- Monday - Thursday: 8:00 am to 4:15 pm.
- Fridays: 8:00 am to 4:00 pm.
- Weekends and public holidays: Closed.

Urgent Requests for after-hours coverage

Emergency services only by prior arrangement and approval from the Laboratory Director for expedited testing and reporting.

Outbreak Mode

During outbreak mode when there are cases above normal endemic levels, outbreak samples take priority for analysis. During this time, there may be delays in routine work depending on the severity of the outbreak.

For Viral Outbreaks – including Influenza, Dengue, Zika and Chikungunya, the following applies:

- Once it is recognized that there is an outbreak of one of these viruses, there is no need for submission of samples for testing for every diagnosed case. Only cases of doubtful diagnosis should be submitted.
- Samples of **ALL** clinically diagnosed Severe Dengue Hemorrhagic Fever (DHF) and Dengue Shock Syndrome (DSS) should be submitted.
- **ALL** suspected cases of Yellow Fever, Rubella, Measles, Acute Flaccid Paralysis (AFP) must be submitted.
- Samples from **ALL** pregnant women who have been exposed to congenital Rubella virus must be submitted.

10. Test Catalogue Overview

- HIV Confirmatory Testing (ELISA)
- Tuberculosis Testing (PCR)
- COVID-19 Testing (PCR)
- Dengue Virus Testing and Serotyping (PCR)
- Dengue IgM Testing (ELISA)
- Syphilis Testing (VDRL and TPPA)

11. Referral of Specimens to Regional Reference Laboratory

The Caribbean Public Health Agency (CARPHA) plays a significant role as the regional public health agency in the Caribbean. CARPHA is responsible for numerous public health functions

including the provision of regional reference laboratory services. Test requests, which are unavailable at TPHL, are forwarded to CARPHA for processing. CARPHA's laboratory services, turnaround time, specimen submission guidelines and rejection criteria can be accessed using the following link:

https://carpha.org/What-We-Do/Laboratory/General-Information

12. Provision of HIV Dried Tube Specimen (DTS) Controls and HIV DTS Panels:

HIV DTS Controls:

HIV DTS Controls are prepared three times a year and distributed to the HIV testing sites. These controls serve as standardized, non-infectious specimens used for routine internal quality control checks by the testing sites.

HIV DTS for EQA:

HIV DTS EQA panels are prepared and distributed to all HIV testing sites with the intention of comprehensive performance evaluation of these sites. The panels are used to verify test kit performance, staff competency and adherence to National HIV testing algorithms.

The coordinated preparation and systematic distribution of HIV DTS Controls and EQA Panels within Trinidad and Tobago plays a critical role in strengthening laboratory quality systems, ensuring result reliability and maintaining National diagnostic standards.

13. Laboratory Turnaround Time

The following table provides a list of tests and associated turnaround times. For urgent cases, the laboratory must be notified in advance.

TEST	SPECIMEN TYPE	TURNAROUND TIME

1. HIV (ELISA) Confirmatory Testing	Serum, Plasma	**14 days**
2. Tuberculosis (PCR) Testing	Sputum, CSF, BAL etc.	**7 days**
3. COVID-19 PCR Testing	Nasopharyngeal swab	**7 days**
4. Dengue PCR testing and Serotyping	Acute Serum (collected 1 - 4 days from onset of symptoms)	**7 days**
5. Dengue IgM Testing	Convalescent serum (collected 5 - 15 days from onset of symptoms)	**14 days**
6. Syphilis Testing (VDRL) Syphilis Testing (TPPA)	Serum, CSF Serum	**7 days**

14. Referral of Specimens to TPHL:

Proper sample collection is essential for accurate results. Refer to Collection of Specimen Guide in Appendix 1.

Key points:

- Label specimens legibly with patient details.
- Place specimens in tri-wall biohazard specimen bag. Alternatively, specimens can be placed in a tube rack, then the rack placed in a biohazard bag in an upright position in the cooler box with ice packs.
- Maintain cold chain where required - place specimen bag in a cooler box and ensure that ice packs are solid to maintain cold chain.
- Place request forms in the pocket of the tri-wall biohazard specimen bag separate from samples.
- Separate plasma and serum as required.
- Ensure that specimen caps are secure and tightly closed to prevent leakage.
- All specimens must have accompanying request forms to prevent rejection of the samples.
- Complete the Chain of Custody (Appendix 2) with the following information:
    - Date of referral

- Patient Identification Information (Full Name etc.)
- Specimen Unique Identification Number (from TTLIMS).
- Specimen Type
- Test(s) Requested

- This completed referral log must accompany the specimens and request forms when delivered by the courier to TPHL.

15. Specimen Registration:

TTLIMS access has been granted to the majority of healthcare facilities, enabling patient registration to be completed prior to sending specimens to TPHL.

Requests can be made to the Laboratory Director for TTLIMS training. Staff with TTLIMS registration access can utilize their access code (user name and password). Registration includes all the information listed in Test Request Form (Appendix 3). Subsequent to TTLIMS registration, the Specimen Unique Identifier Number must be inserted in the appropriate column on the TPHL request form.

15. Specimen Transportation and Delivery

Samples should be packaged and transported according to national and international biosafety guidelines.

The Laboratory accepts deliveries of samples during working hours only.

16. Test Requisition and Submission

Each sample must be accompanied by a fully completed requisition form. See completion guide in Appendix 4. Include:

- Patient demographics
- Requesting institution

- Clinical history
- Requested test(s)
- Collection date and time
- For Syphilis and HIV testing, complete the appropriate fields as indicated in the TPHL Test Request Form.

Note: Incomplete forms may delay testing or the test request may be rejected.

17. Reporting of Results

Results are issued in electronic format via our integrated laboratory information management system (TTLIMS) to allow healthcare providers to access their results. Hard copies are issued and delivered to clients without TTLIMS access.

Confidentiality is strictly maintained.

18. General Specimen Rejection Criteria:

TPHL has implemented defined acceptance and rejection criteria for all specimens submitted for analysis. These criteria are designed to ensure the integrity and suitability of specimens for testing, thereby optimizing analytical accuracy and ensuring the reliability and validity of laboratory results.

- Specimens submitted without accompanying request forms.
- Unlabelled or improperly labelled specimens.
- Mismatched information between specimen labels and request forms.
- Incomplete clinical or epidemiological data on the request form (e.g., missing date of symptom onset for viral illnesses).
- Specimens with evidence of leakage or compromised container integrity.
- Insufficient specimen volume or inappropriate sample collection.

- Incorrect specimen type submitted for the requested test.
- Specimens that are outdated or not stored/transported under required conditions.
- Test not offered by TPHL or CARPHA.

20. Service Interruption

In the event of a laboratory service interruption, specimens may be referred to the regional reference laboratory in which case, there may be potential delays in result reporting based on the turnaround time of the reference laboratory.

20. Billing and Payment Information

Clients do not incur any charges for the laboratory services, as all services are provided free of charge.

21. Confidentiality and Data Privacy

All client and patient information are handled with strict confidentiality in line with national regulations and data protection policies. All staff of TPHL are required to sign a confidentiality agreement ensuring proper handling and protection of sensitive patient data.

Access to patient information on computers, registers, worksheets and reports is restricted to authorized personnel only. Patient data and results are stored securely within the Trinidad and Tobago Laboratory Information Management System (TTLIMS).

23. Feedback and Complaints

TPHL is committed to promptly acknowledging and investigating all feedback and complaints. Clients are encouraged to provide feedback via email.

24. Appendices

- Appendix 1 - Collection of Specimens Guide
- Appendix 2 - Chain of Custody Form
- Appendix 3 – TPHL Laboratory Investigation Form
- Appendix 4: Laboratory Investigation Form Completion Guide

End of Handbook.

Appendix 1: Collection of Specimens Guide:

1. Serum Specimen:

- Wear PPE (gloves, laboratory coat/gown).
- Assemble blood collection device (needle and syringe).
- Label red top vacutainer tube (without anticoagulant) with patient name, date and time of collection.
- Put on tourniquet and identify the vein in the upper arm to be used for collecting blood.
- Clean the area with 70% alcohol swab. Let the alcohol dry.
- Collect blood and place in the red-top vacutainer tube.
- Let blood clot at room temperature – about 30 minutes.
- If separation is not possible, send specimen within 4 hours to TPHL.
- To separate, centrifuge tube, transfer serum to a new sterile tube and discard clot/original tube. Label tube as before.
- Store serum at 2-8ºC for up to 4 days if it cannot be transported to TPHL immediately. If there is further delay, store serum at -20ºC.

2. Plasma Specimen:

- Collect blood as above but place in a tube containing EDTA or other suitable anticoagulant.
- Separate plasma from blood by centrifugation as above.
- Store plasma at 2-8ºC for up to 4 days if it cannot be transported to TPHL immediately. If there is further delay, store plasma at -20ºC.

3. Respiratory Tract Specimens:

Nasopharyngeal Swabs:

- Wear appropriate PPE.
- Gather appropriate supplies (swab, viral or bacterial transport media).
- Sit the patient comfortably and tilt the head back.
- Insert the flexible swab into the nostril and move upward into the nasopharynx.
- Rotate the swab in the nasopharynx area, slowly withdraw in a rotating motion against the mucosal surface of the nostrils.
- Remove the swab carefully and insert into a container with transport medium.
- Label the container with the patient name, date and time of collection.
- Swabs for bacterial analysis can be kept at RT for up to 24hours. Keep swabs for viral analysis in transport media at 2-8ºC.

Sputum:

- Label specimen container (wide mouth screw capped container is recommended) with patient name, date and time of collection.

- Open container and hold the cup in one hand and the cover in the other hand.
- Instruct patient to take 2-3 deep breaths and cough up sputum.
- Spit out sputum directly into the container ensuring that the outside of the container is not contaminated.
- Continue this process until adequate sputum is obtained (minimum 2mls for TB PCR and 5-10mls for culture).
- Cover the container properly and keep specimen at RT for up to 2 hours. Refrigerate at 2-8ºC if there is delay in transporting to the laboratory for testing.

4. Cerebrospinal Fluid (CSF)

- CSF is normally collected by the physician.
- Place CSF in a container that can be sealed properly to prevent leakage. A plain tube without clot activator is recommended.

APPENDIX 2: Chain of Custody Form

TRINIDAD PUBLIC HEALTH LABOATORY
Chain of Custody Form

Institution: _____Transported by: _____Date and Time: _____

Sample Temperature or Condition: (Either write the temperature or Tick) _____ °C ☐ On Ice ☐ Cold ☐ Warm

S/N	TT LIMS #	Patient Name / Patient Code	Sample Type	Test Requested
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Comments:_____

_____

Received by: _____ Date and Time Received: _____

Reviewed by: _____Date Reviewed: _____

TPHL STAMP HERE

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Appendix 3: Laboratory Investigation Form

TRINIDAD PUBLIC HEALTH LABORATORY
16-18 Jamaica Boulevard, Federation Park, Port of Spain
Telephone Nos. (868) 622-2877, (868) 622-5311
LABORATORY INVESTIGATION FORM

TPHL Stamp here

PATIENT INFORMATION		**INSTITUTION INFORMATION**
First Name and Last Name:		Institution:
Address:		Ward/Clinic:
Telephone Contact:		Referring Physician:
Date of Birth DD/MM/YY	Age	Physician's Contact Number:
Gender: ☐ Male ☐ Female		**Date of Onset of Illness:**
Registration Number:		**Date of Onset of Rash::**

RISK FACTORS
☐ Immuno-compromised ☐ Heterosexual
☐ Diabetic ☐ Homosexual
☐ HIV Positive ☐ Bi Sexual
☐ IV/Drug Abuse ☐ Socially Displaced

PATIENT STATUS
☐ New ☐ Relapsed

CASE/SPECIMEN STATUS (Select all applicable)
☐ Hospitalized
☐ Post-Mortem - Date of Death: _____
☐Single Case ☐ Outbreak ☐ Surveillance

SIGNS AND SYMPTOMS PRESENT

☐ Anorexia	☐ Diarrhoea:	☐ Kernig Sign	☐ Rash
☐ Altered Mental State	☐ Acute	☐ Loss of Appetite	Nature: _____
☐ Cardiac Symptoms	☐ Chronic	☐ Lymphadenopathy	Location: _____
☐ Chills	☐ Fatigue & Weakness	Location: _____	☐ Renal Syndrome
☐ Conjunctivitis	☐ Failure to Thrive	☐ Nausea	☐ Respiratory: Lower
☐ Convulsions	☐ Fever - Max Temp:	☐ Neck Stiffness	☐ Respiratory: Upper
☐ Cough	☐ Haemoptysis	☐ Night Sweats	☐ Shortness of Breath
Duration: _____	☐ Hepatomegaly	☐ Pain	☐ Vomiting
☐ Dehydration	☐ Jaundice	Location_____	☐ Weakness of Limbs
		☐ Paralysis	☐ Weight Loss

SYPHILIS TESTING
Gestational Age: _____weeks
Last Menstrual Period:
Antenatal screening: ☐ First ☐ Second ☐ Third
☐ Stillbirth/Fetal death >20 weeks and/ or 500g

SYPHILIS TREATMENT
Previous VDRL Treatment:
_____
Previous Test Date: _____
Previous VDRL Titres: _____
Previous TPPA Results:

HIV HISTORY
HIV Results:
☐ Neg ☐ Pos ☐ Discordant
Testing: ☐ 1st time (children)
Parents tested: ☐Yes ☐ No
Parent's Results

ADDITIONAL NOTES e.g. HIV kit Information

TPHL NUMBER	**SPECIMEN TYPE**	**DATE & TIME COLLECTED**	**EXAMINATION REQUESTED**	**RESULTS FOR TPHL USE ONLY**

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Appendix 4: Laboratory Investigation Form Completion Guide

Section	Essential Information
Patient Information	Mandatory – Complete ALL fields including registration # if available.
Institution Information	Mandatory – Complete ALL fields
Date of Onset of Illness and Date of Onset of Rash	Mandatory for viral illness
Risk Factors	Complete as applicable
Patient Status	Complete ALL fields
Signs and Symptoms	Complete as applicable
Syphilis Testing and Treatment	Complete as applicable
HIV History	Complete to facilitate confirmatory testing
Additional Notes	Include clinical diagnosis, suspected disease/origin, travel history, treatment, patient immune status and any other clinical information to facilitate interpretation of results.
TPHL Number	Mandatory after data entry. Please place the unique ID number in the space provided and NOT elsewhere on the form.
Specimen Type	Mandatory
Date and Time Collected	Mandatory
Examination Requested	Mandatory – Indicate the name of the test(s) requested.