AFRICAN LABORATORY INFORMATION SYSTEM (ALIS)

USER MANUAL

Version 5.0

Ministry of Health – Uganda

Central Public Health Laboratories (CPHL)

Welcome to ALIS

Welcome to the African Laboratory Information System (ALIS).

ALIS is the Ministry of Health's national Laboratory Information System designed to support laboratory services across Uganda. The system enables healthcare workers to register patients, manage laboratory requests, process specimens, record and approve results, exchange information with other health systems, generate reports, manage blood bank services, support pathology services, and maintain laboratory quality processes.

This guide is written as a practical "How do I...?" reference. Instead of describing menus alone, it provides step-by-step instructions for completing common tasks in ALIS. Follow the instructions in the order presented to perform each activity successfully.

Throughout this guide, screenshots should be inserted where indicated and annotated with numbered callouts to help users identify buttons, menus, and fields.

Before You Begin

Before using ALIS, ensure that:

- You have been assigned a valid username and password.
- Your user account has the appropriate permissions for your role.
- You are connected to the laboratory network or approved internet connection.

- You are using a supported web browser such as Google Chrome or Microsoft Edge.

  Note: Access to menus and functions depends on your assigned role. Some options described in this manual may not be visible to all users.

Getting Started

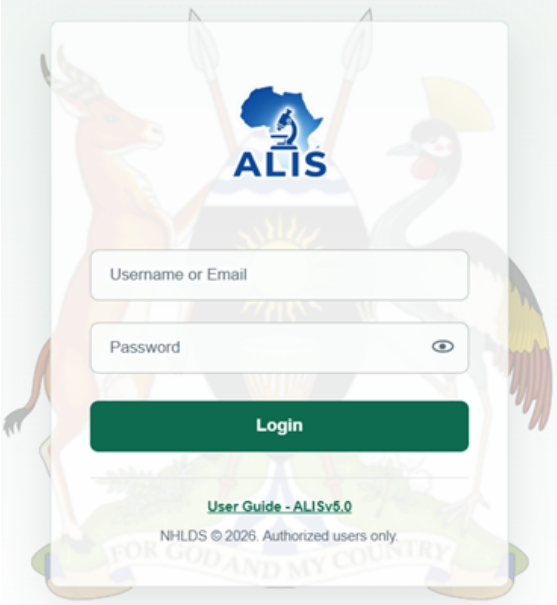
How do I log into ALIS?

Purpose

To securely access the African Laboratory Information System.

Steps

1. Open your web browser.
2. Enter the ALIS web address
3. The Login page will appear.



4. Enter your **Username**.
5. Enter your **Password**.
6. Click **Login**.

Expected Result

The ALIS Dashboard opens and displays the modules available for your user role.

If Login Fails

Problem	Possible Cause	Solution
Invalid Username or Password	Incorrect credentials	Verify your username and password or contact your System Administrator.
Account Locked	Too many failed login attempts	Contact the System Administrator.
Blank Screen	Browser issue	Refresh the page or clear browser cache.
Cannot Reach Website	Network problem	Verify internet/network connectivity and confirm the ALIS server is available.

Security Tip: Never share your password with another user.

How do I log out?

1. Click your user profile at the top-right corner of the screen.
2. Select **Logout**.

Expected Result

Your session is securely closed and you are returned to the Login page.

Using the Main Menu

The Main Menu provides access to all functions available in ALIS. Depending on your user role, you may see some or all of the following modules:

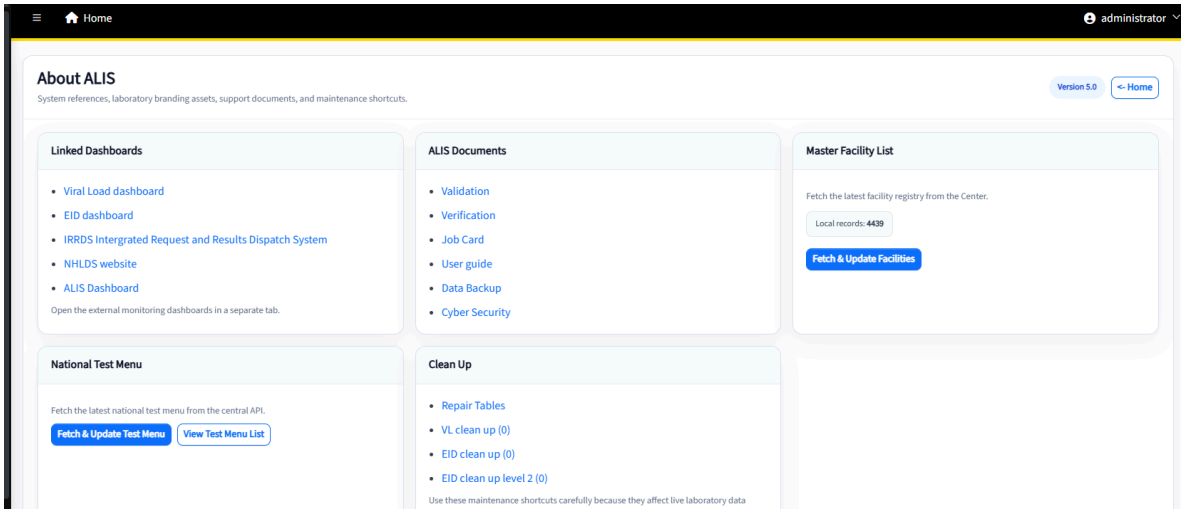
- DMS / Help
- Reports
- Patient Information
- Visits
- Tests
- Uploads

- HIE
- Micronutrients
- Laboratory Configuration
- Test Catalog
- Inventory & Equipment
- IQC & EQA
- Biosafety & Biosecurity
- Pathology
- Blood Bank
- Access Control
- Other Resources

Each module is explained in the following chapters.

DMS / Help

The **DMS / Help** section provides access to system documentation, reference materials, maintenance tools, linked dashboards, and system resources.



How do I check the ALIS version?

Steps

1. From the Main Menu, select **DMS / Help**.
2. Locate the **About ALIS** section.

The current system version is displayed.

Example:

Version 5.0

How do I open the Viral Load Dashboard?

Steps

1. Select **DMS / Help**.
2. Under **Linked Dashboards**, click **Viral Load Dashboard**.

A new browser tab opens displaying the Viral Load Dashboard.

How do I open the EID Dashboard?

1. Open **DMS / Help**.
2. Select **EID Dashboard**.

The dashboard opens in a separate browser window.

How do I access IRRDS?

1. Open **DMS / Help**.
2. Select **IRRDS – Integrated Request and Results Dispatch System**.

The system redirects you to IRRDS.

How do I open the National Health Laboratory Website?

1. Select **DMS / Help**.
2. Click **NHLDS Website**.

The official National Health Laboratory website opens.

How do I access ALIS user documents?

ALIS provides several reference documents that support laboratory operations.

Steps

1. Open **DMS / Help**.
2. Under **ALIS Documents**, select the required document.

Available documents include:

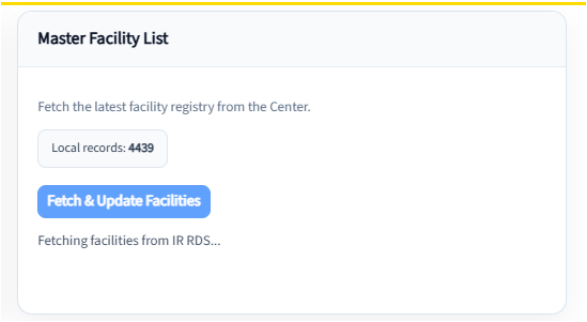
- Validation
- Verification
- Job Card
- User Guide
- Data Backup
- Cyber Security

How do I update the Master Facility List?

Steps

1. Open **DMS / Help**.
2. Click **Fetch the Latest Facility Registry**.

ALIS connects to the national registry and downloads the latest approved facility list.



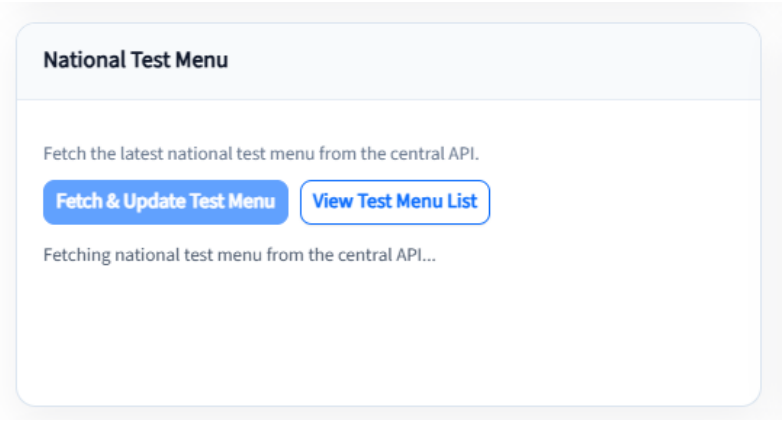
Expected Result

The local facility registry is updated successfully.

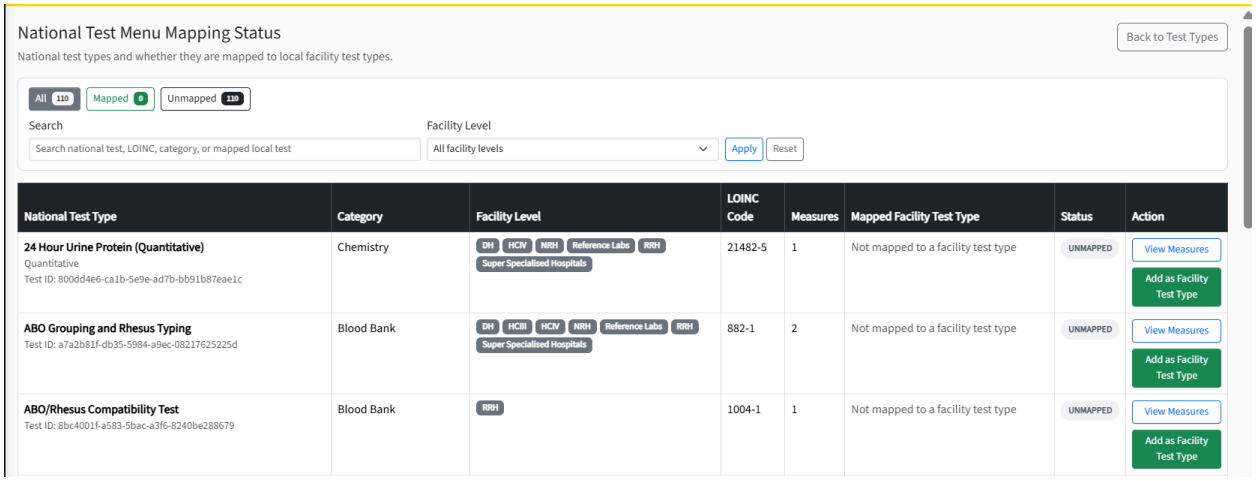
How do I update the National Test Menu?

Steps

1. Navigate to **DMS / Help**.
2. Under **National Test Menu** you can check out
    a) Fetch and update test menu



b) View test menu list



ALIS retrieves the latest approved national test catalogue through the Ministry of Health API.

Note: This function should only be performed by authorized users.

How do I repair database tables?

Steps

1. Navigate to **DMS / Help**.
2. Select **Repair Tables**.



Follow the prompts to complete the repair process.

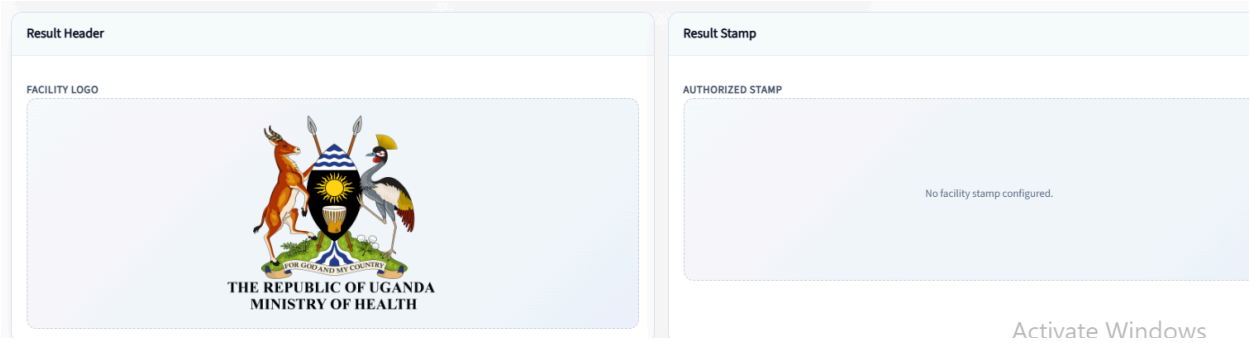
> **Warning:** This function affects system data and should only be performed under the guidance of the ICT Administrator.

How do I update the laboratory logo on printed reports?

Steps

1. Open **DMS / Help**.
2. Select **Facility Logo**.
3. Upload the approved facility logo.
4. Save the changes.

The new logo will appear on laboratory reports.



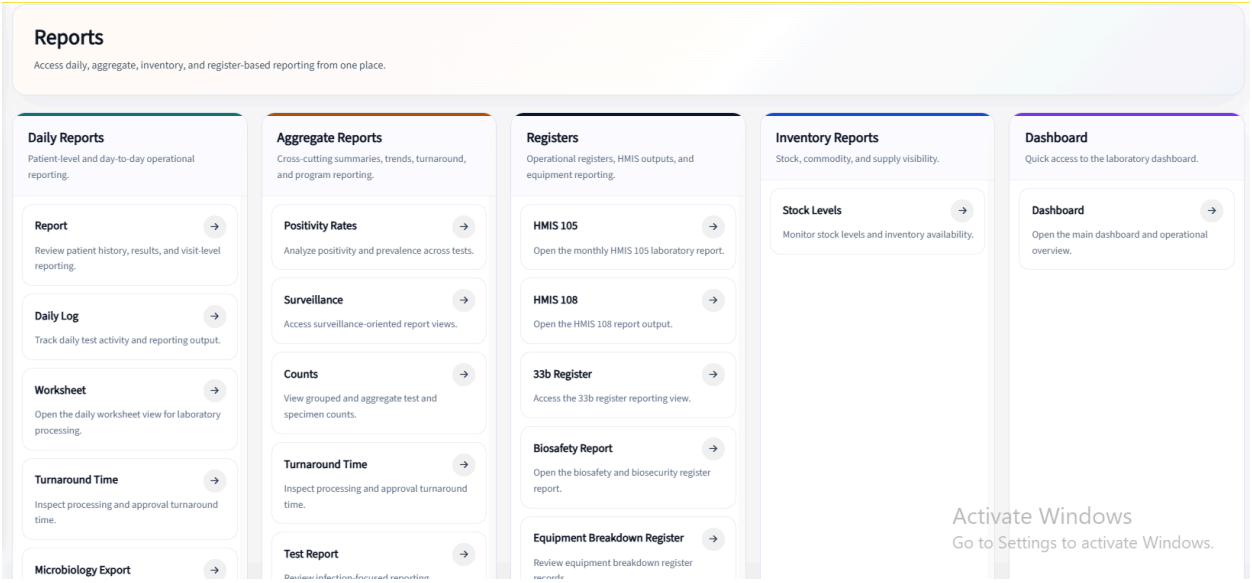
How do I update the laboratory result stamp?

1. Navigate to **DMS / Help**.
2. Select **Result Stamp**.
3. Upload the approved authorized stamp.
4. Save.

Future printed laboratory reports will include the updated stamp.

Reports

The Reports module provides operational, clinical, inventory, surveillance, and Ministry of Health reports.



How do I generate a Daily Report?

Steps

1. Select **Reports** from the Main Menu.
2. Click **Daily Reports**.
3. Choose the reporting date.
4. Apply any required filters.
5. Click **Generate Report**.

Expected Result

The report displays all patient and laboratory activity for the selected day.

How do I generate the Daily Log?

1. Navigate to **Reports**.
2. Select **Daily Log**.
3. Specify the reporting date.
4. Click **Generate**.

The Daily Log displays laboratory activities recorded during the selected period.

How do I view Turnaround Time?

Steps

1. Open **Reports**.
2. Select **Turnaround Time**.
3. Choose the reporting period.
4. Click **Search**.

The report displays specimen processing times, review times, and approval turnaround.

How do I generate HMIS 105?

Steps

1. Select **Reports**.
2. Open **HMIS 105**.
3. Select the reporting month.
4. Select the laboratory.
5. Click **Generate**.

Expected Result

The official HMIS 105 report is generated and may be printed or exported.

How do I monitor laboratory stock levels?

1. Navigate to **Reports**.
2. Select **Inventory Reports**.
3. Click **Stock Levels**.

The current inventory balance is displayed.

Patient Information

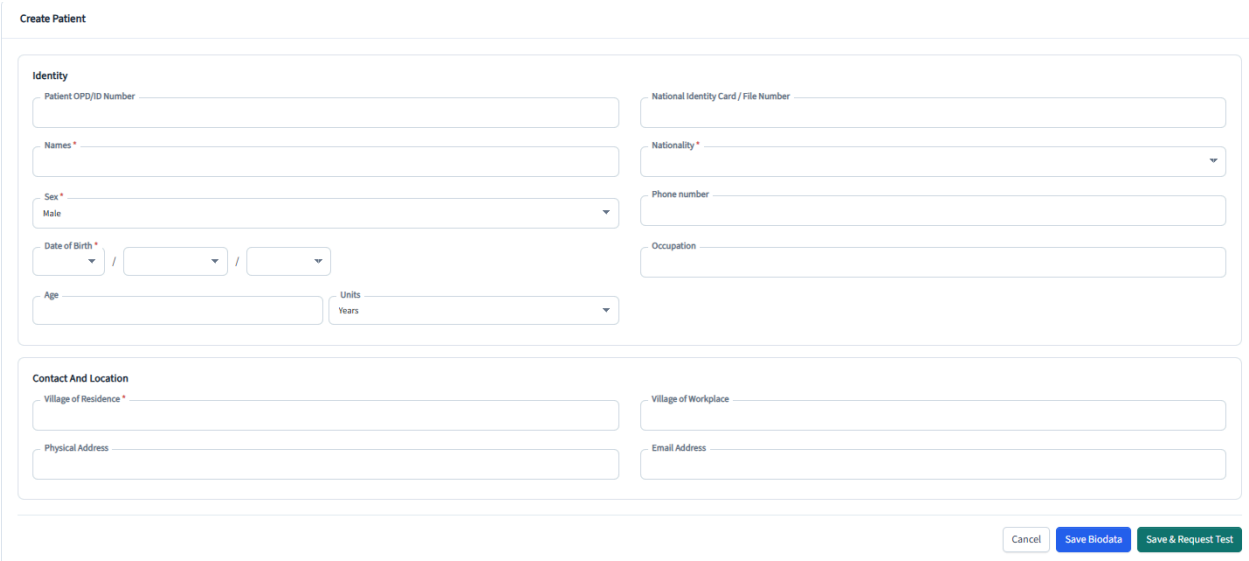
The Patient Information module is used to register and manage patient records.

How do I register a new patient?

Steps

1. From the Main Menu, select **Patient Information**.
2. Click **Register Patient**.

The patient registration form opens.



Complete the following information:

- Patient OPD/IPD Number
- National Identity Card or File Number
- First Name
- Middle Name (if applicable)
- Surname
- Nationality
- Sex
- Phone Number
- Date of Birth
- Occupation
- Village of Residence
- Village of Workplace
- Physical Address
- Email Address (if available)

After confirming that all required fields are complete, click **Save biodata**.

Alternatively, click the **save and request test** button to take you to the test request tab

Expected Result

A new patient record is successfully created and is available for laboratory requests.

> **Best Practice:** Always search for an existing patient before registering a new one to avoid duplicate records.

How do I register an Early Infant Diagnosis (EID) patient?

Steps

1. Open **Patient Information**.
2. Select **Register EID Patient**.
3. Complete all infant and caregiver details.
4. Record the required EID-specific information.
5. Click **Save**.

Expected Result

The infant is registered and becomes available for EID laboratory testing.

How do I register a Viral Load (VL) patient?

1. Open **Patient Information**.
2. Select **Register VL Patient**.
3. Complete the patient demographics and Viral Load-specific clinical information.
4. Save the record.

The patient is now available for Viral Load testing.

How do I register an Advanced HIV Disease (AHD) patient?

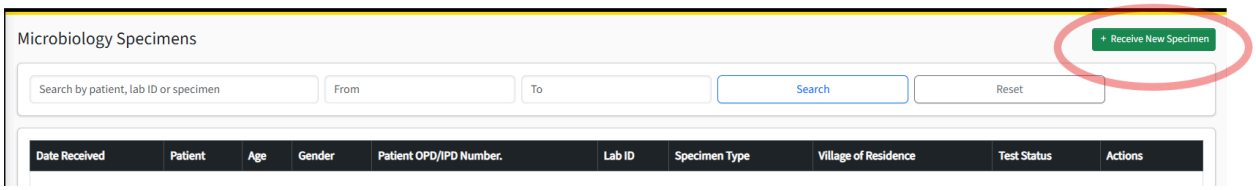
1. Navigate to **Patient Information**.
2. Select **Register AHD Patient**.
3. Complete the required patient and clinical details.
4. Save.

The patient is successfully registered for Advanced HIV Disease laboratory services.

How do I register Microbiology Specimens ?

1. Select **Patient Information**.
2. Navigate to **Microbiology Specimen**.
3. There you will see a table of all available specimens.
4. To search **Microbiology Specimen**.

5. Search using:
    a. Patient Name
    b. Laboratory ID
    c. Specimen Number
    d. Date Range
6. Click **Search**.
7. To register a specimen, select **Receive New Specimen**. This will be located in thetop left corner as a green button.



8. Complete the required patient and clinical details.
9. Save by clicking the button at the end **Save Test Request**.

The matching specimens are displayed with their current laboratory status.

How do I search for an existing patient?

Steps

1. Select **Patient Information**.
2. Click **View Patients**.
3. Enter any of the following search criteria:
    - Patient Number
    - Patient Name
    - ULIN
4. Click **Search**.

Matching patient records are displayed.

You can then open the patient record for review or further action.

Visits

The **Visits** module is used to record, search, and manage patient visits to the laboratory. Each laboratory request is associated with a patient visit, allowing the system to maintain a complete history of services provided during each encounter.

A visit may contain one or more laboratory test requests depending on the patient's clinical needs.

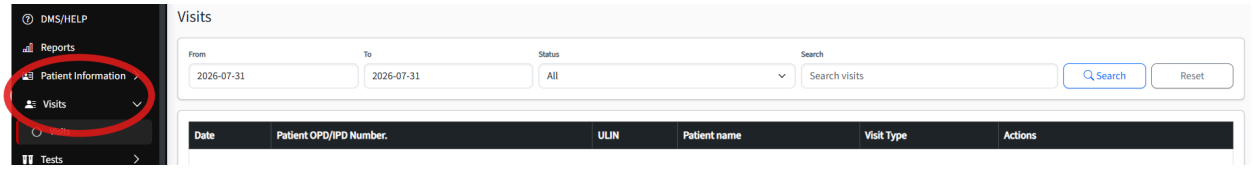
How do I view patient visits?

Purpose

To search for and review patient visits recorded in ALIS.

Navigation

Main Menu → Visits



Steps

1. Select **Visits** from the Main Menu.
2. Select the **From** and **To** dates to define the period you wish to review.
3. Select the required **Visit Status**, or leave **All** to display every visit.
4. Click **Search**.
5. Alternatively, enter a Patient Name, OPD/IPD Number, or ULIN in the search box to locate a specific visit.

Expected Result

The system displays all matching visits, including:

- Visit Date
- Patient OPD/IPD Number
- ULIN
- Patient Name
- Visit Type
- Available Actions

Tips

- Narrow your search by selecting an appropriate date range.
- Use the patient search box when looking for a specific patient rather than browsing the full list.

How do I open a patient's visit?

After locating the visit:

1. Click **Actions** beside the required visit.
2. Select the appropriate action (for example, View Visit or Open Visit).

The complete visit details are displayed together with any laboratory requests associated with that visit.

Tests

The **Tests** module is the operational centre of ALIS. It enables laboratory personnel to request laboratory investigations, receive specimens, perform testing, record results, review and approve results, monitor workflow status, and synchronize laboratory information with external systems.

How do I request a laboratory test?

Purpose

To create a laboratory request for a patient visit.

Steps

1. Open **Tests**.
2. Select **Visit Test Requests**.
3. Search for the patient using:
    - Patient Name
    - OPD/IPD Number
    - ULIN
    - Laboratory Number
4. Select the correct patient visit.
5. Click **Actions**.
6. Select **Request Test**.
7. Choose the required laboratory investigation(s).
8. Confirm the requesting unit and priority.
9. Click **Save**.

Expected Result

The requested laboratory investigation is added to the patient's visit and appears in the laboratory work queue.

> **Best Practice:** Ensure the correct patient visit has been selected before requesting a laboratory investigation.

How do I view all laboratory tests?

Navigation

Tests → List of All Tests

Purpose

Displays every laboratory request in the system regardless of its current processing stage.

Steps

1. Open **Tests**.
2. Select **List of All Tests**.
3. Choose the reporting period.
4. Select a Test Status if required.
5. Enter a Patient Name, Test Name, or Laboratory Number.
6. Click **Search**.

Expected Result

Matching laboratory requests are displayed showing:

- Date Ordered
- Patient Number
- Laboratory Number
- Patient Name
- Test ID
- Requested Test
- Visit Type
- Ordering Unit
- Current Test Status
- Available Actions

Understanding Test Statuses

Every laboratory request progresses through a defined workflow.

Status	Meaning

Pending	The test request has been received but laboratory processing has not yet started.
Started	Laboratory analysis has begun.
Completed	Laboratory testing has been completed.
Reviewed	Results have been reviewed by authorized laboratory personnel.
Approved	Results have been officially approved and are ready for reporting.
Rejected	The laboratory request or specimen has been rejected.
Referred	The specimen has been referred to another laboratory.
Revised	Previously reported results have been amended following review.
Emergency	The request has been marked as urgent and should receive priority processing.

How do I find completed laboratory tests?

Navigation

Tests → Completed Tests

Purpose

Displays all laboratory investigations whose analytical process has been completed.

Steps

1. Open **Completed Tests**.
2. Specify the reporting period.
3. Search using:
    - Patient Name
    - Laboratory Number
    - Test Name
4. Click **Search**.

Expected Result

Only completed laboratory investigations are displayed.

This screen is commonly used before result review and approval.

How do I identify specimens that have not been received?

Navigation

Tests → Samples Not Received

Purpose

Displays laboratory requests where a specimen has not yet been received by the laboratory.

Steps

1. Open **Samples Not Received**.
2. Select the reporting period.
3. Click **Search**.

Expected Result

The system displays all outstanding laboratory requests awaiting specimen reception.

Common Uses

- Monitoring missing specimens.
- Following up with requesting facilities.
- Identifying delayed specimen transportation.

How do I view pending laboratory tests?

Navigation

Tests → Pending Tests

Purpose

Displays laboratory requests waiting to begin analysis.

Steps

1. Open **Pending Tests**.
2. Apply the required filters.
3. Click **Search**.

Expected Result

The system displays all laboratory requests awaiting laboratory processing.

How do I view tests that are currently being processed?

Navigation

Tests → Tests Started

Purpose

Displays laboratory investigations where testing has already commenced.

Steps

1. Open **Tests Started**.
2. Apply any required filters.
3. Click **Search**.

Expected Result

The system lists all tests currently undergoing laboratory analysis.

How do I view reviewed laboratory results?

Navigation

Tests → Reviewed Tests

Purpose

Displays laboratory investigations whose results have been reviewed and are awaiting final approval.

Steps

1. Select **Reviewed Tests**.
2. Search for the required patient or laboratory number.
3. Review the displayed records.

Expected Result

Only reviewed laboratory investigations are displayed.

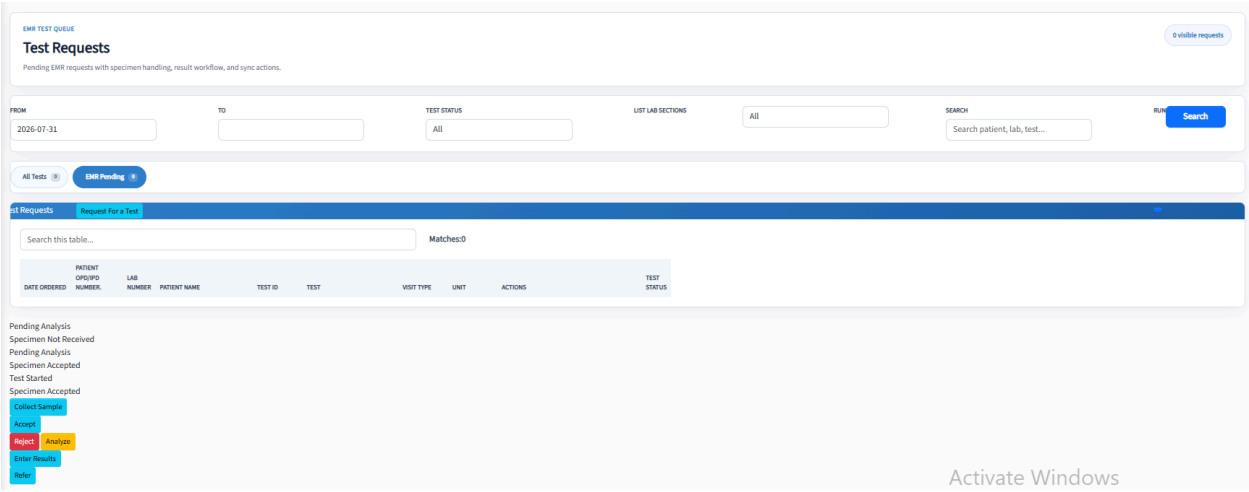
How do I manage EMR pending requests?

Navigation

Tests → EMR Pending Tests

Purpose

Displays laboratory requests received from integrated Electronic Medical Record (EMR) systems that require laboratory processing or synchronization.



Steps

1. Open **EMR Pending Tests**.
2. Select the reporting period.
3. Optionally filter by Laboratory Section.
4. Enter the patient name, laboratory number, or requested test.
5. Click **Run**.

Expected Result

The system displays pending EMR requests together with their workflow status.

Possible workflow stages include:

- Pending Analysis
- Specimen Not Received
- Specimen Accepted
- Test Started

Tip

This screen is particularly useful for monitoring requests originating from external clinical systems.

How do I search for Point-of-Care (POC) referred samples?

Navigation

Tests → Search POC Referred

Purpose

Searches for specimens referred from Point-of-Care (POC) testing programmes.

Steps

1. Open **Search POC Referred**.
2. Select the required programme.
3. Enter the specimen Tracking Code (Barcode).
4. Click **Search**.

Expected Result

The specimen tracking information is displayed together with its current referral status.

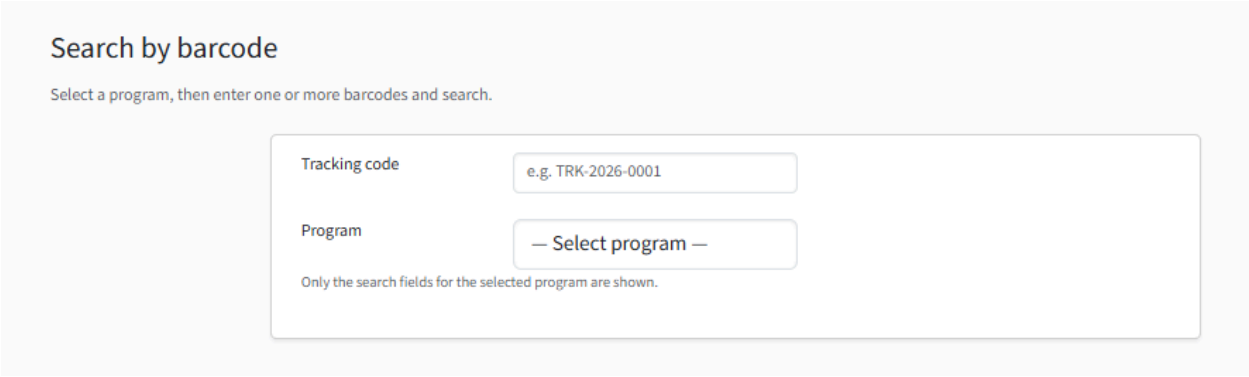
How do I fetch Point-of-Care requests?

Navigation

Tests → Fetch POC Requests

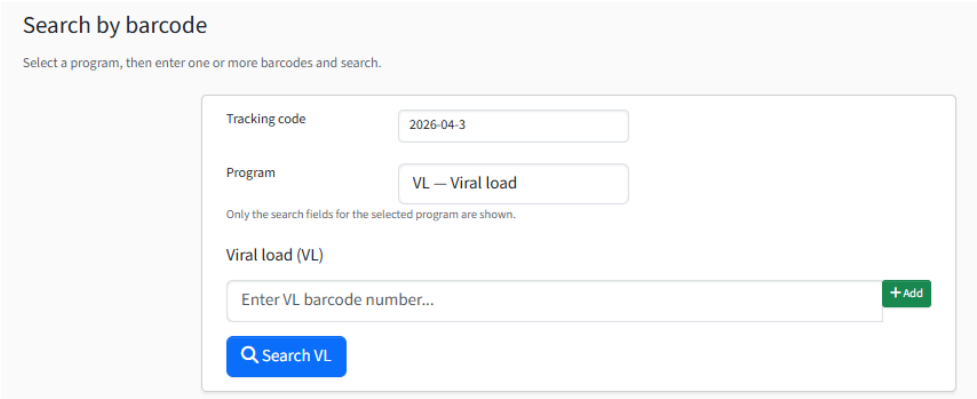
Purpose

Retrieves referred specimens from supported Point-of-Care programmes.



Steps

1. Open **Fetch POC Requests**.
2. Select the programme (for example, Viral Load).
3. Scan or enter the facility reference barcode.



4. Click **Fetch**.

Expected Result

The referred specimen request is downloaded into ALIS and becomes available for laboratory processing.

> **Note:** This feature requires connectivity with the external Point-of-Care referral service.

How do I fetch Facility Data?

Navigation

Tests → Fetch Facility Data

This feature is currently under development and will be available in a future system release.

How do I fetch EMR Data?

Navigation

Tests → Fetch EMR Data

This feature is currently under development and will be available in a future system release.

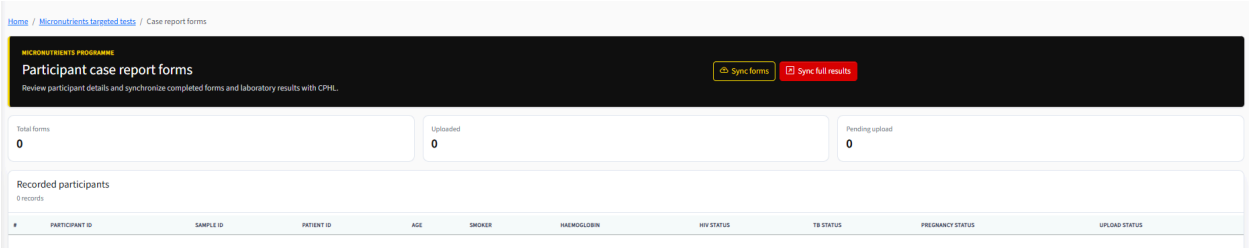
Micronutrients Programme

The **Micronutrients** module supports specialized nutrition and public health programmes by capturing participant case report forms and synchronizing laboratory information with the Central Public Health Laboratories (CPHL).

How do I view Micronutrient Case Report Forms?

Navigation

Main Menu → Micronutrients



Purpose

To review participant information, monitor uploads, and synchronize laboratory data collected under the Micronutrients Programme.

Steps

1. Select **Micronutrients** from the Main Menu.
2. Review the programme summary displayed at the top of the page, including:
    - Total Forms
    - Uploaded Forms
    - Pending Uploads
    - Recorded Participants
3. Scroll to the participant list to review submitted records.
4. Use the available actions to review or synchronize participant information where applicable.

Expected Result

The participant register is displayed, showing details such as:

- Participant ID
- Sample ID
- Patient ID

- Age
- Smoking Status
- Haemoglobin Level
- HIV Status
- TB Status
- Pregnancy Status
- Upload Status

Best Practice

Before synchronizing participant records, verify that all demographic information and laboratory results are complete and accurate to ensure successful submission to CPHL.

Uploads

The **Uploads** module enables authorized users to synchronize laboratory results with national systems and partner platforms. It provides a centralized workspace for monitoring pending upload queues, reviewing synchronization status, and uploading specialized laboratory datasets.

The Upload Workspace helps ensure that laboratory results generated in ALIS are successfully transmitted to external systems such as the National Data Repository, Point-of-Care programmes, surveillance platforms, and pathology services.

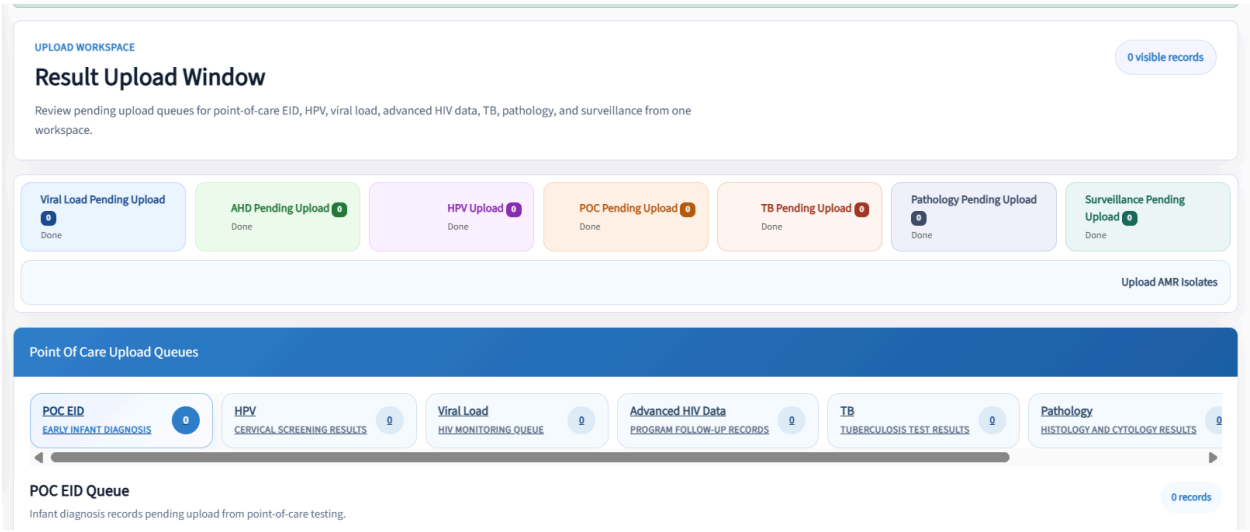
How do I view the Upload Workspace?

Purpose

To monitor all pending result uploads and synchronization activities from a single workspace.

Navigation

Main Menu → Uploads



Steps

1. Select **Uploads** from the Main Menu.
2. The **Result Upload Window** opens automatically.
3. Review the synchronization summary displayed at the top of the page.
4. Review each programme upload queue.

The workspace displays the following queues:

- Viral Load
- Advanced HIV Disease (AHD)
- HPV
- Point of Care (POC)
- Tuberculosis (TB)
- Pathology
- Surveillance

Expected Result

Each upload queue displays:

- Number of records awaiting upload.
- Upload status.
- Synchronization progress.

When no records are pending, the queue displays **Done**.

How do I check whether results have been uploaded successfully?

Steps

1. Open the **Upload Workspace**.
2. Review the synchronization status displayed beside each programme.

Possible statuses include:

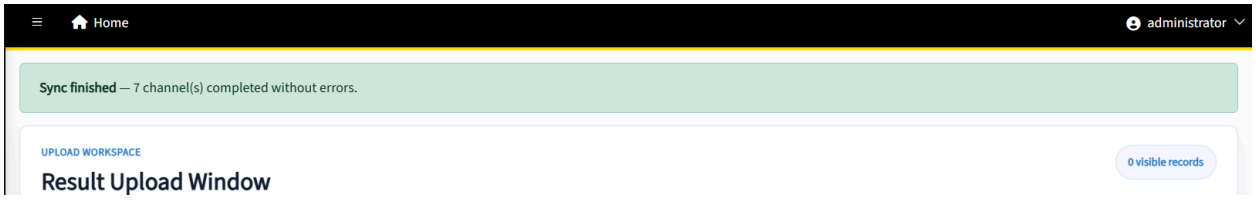
Status	Meaning
Done	All pending records have been uploaded successfully.
Pending	Records are awaiting synchronization.
Processing	Records are currently being transmitted.
Failed	One or more records failed to upload successfully.

Expected Result

The synchronization summary confirms whether uploads completed successfully.

Example:

> **Sync finished — 7 channel(s) completed without errors.**



How do I upload Point-of-Care (POC) EID results?

Navigation

Uploads → POC EID Queue

Purpose

To synchronize Early Infant Diagnosis (EID) results received from Point-of-Care testing devices.

Steps

1. Open the **Uploads** module.
2. Locate the **POC EID** queue.
3. Review the number of pending records.
4. Select the required upload action.
5. Wait for synchronization to complete.

Expected Result

The uploaded records are removed from the pending queue and become available in the receiving system.

> **Note:** New EID results automatically appear in this queue once they are ready for synchronization.

How do I upload Viral Load results?

Navigation

Uploads → Viral Load

Purpose

To synchronize Viral Load laboratory results with the national reporting systems.

Steps

1. Open the **Uploads** module.
2. Select **Viral Load**.
3. Confirm the number of pending records.
4. Start the upload process.

Expected Result

Pending Viral Load records are successfully synchronized.

How do I upload Advanced HIV Disease (AHD) results?

Navigation

Uploads → Advanced HIV Data

Steps

1. Select **Advanced HIV Data**.
2. Review pending upload records.
3. Initiate synchronization.

Expected Result

Advanced HIV programme data is uploaded successfully.

How do I upload HPV results?

Navigation

Uploads → HPV Upload

Purpose

To synchronize Cervical Cancer Screening and HPV laboratory results.

Steps

1. Select **HPV Upload**.
2. Review pending records.
3. Start synchronization.

Expected Result

HPV laboratory results are uploaded successfully.

How do I upload Tuberculosis (TB) results?

Navigation

Uploads → TB Pending Upload

Steps

1. Select **TB Pending Upload**.
2. Review the pending queue.
3. Start synchronization.

Expected Result

Tuberculosis laboratory results are transmitted successfully.

How do I upload Pathology results?

Navigation

Uploads → Pathology Pending Upload

Steps

1. Select **Pathology**.
2. Review pending pathology reports.
3. Upload the pending records.

Expected Result

Pathology reports are synchronized successfully.

How do I upload Surveillance records?

Navigation

Uploads → Surveillance Pending Upload

Purpose

To synchronize surveillance referrals and surveillance laboratory data.

Steps

1. Select **Surveillance**.
2. Review pending records.
3. Start synchronization.

Expected Result

Surveillance information is transmitted successfully.

How do I upload AMR Isolates?

Purpose

To upload Antimicrobial Resistance (AMR) isolate data for national surveillance and reporting.

Steps

1. Navigate to **Uploads**.
2. Select **Upload AMR Isolates**.
3. Choose the required dataset.
4. Start the upload.

Expected Result

AMR isolate information is successfully transmitted.

HIE (Health Information Exchange)

The **Health Information Exchange (HIE)** module supports interoperability between ALIS and external Electronic Medical Record (EMR) systems by managing laboratory requests, result exchanges, and transaction logs.

How do I view HIE Logs?

Navigation

Main Menu → HIE → HIE Logs

Purpose

To review system communication logs between ALIS and integrated systems.

Steps

1. Open **HIE**.
2. Select **HIE Logs**.
3. Review the communication history.
4. Investigate any failed transactions if required.

Expected Result

The system displays a chronological history of system communications and synchronization events.

> **Note:** HIE Logs are primarily intended for ICT personnel and System Administrators.

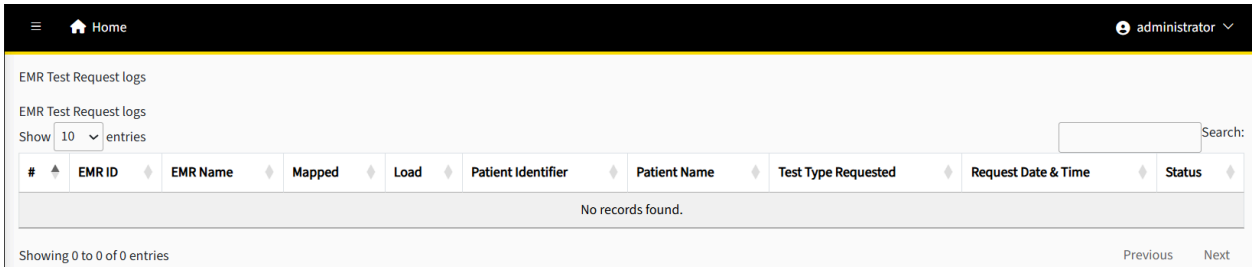
How do I view EMR Test Requests?

Navigation

HIE → HIE Requests

Purpose

To monitor laboratory requests received electronically from integrated Electronic Medical Record (EMR) systems.



Steps

1. Open **HIE**.
2. Select **HIE Requests**.
3. Use the search box to locate a specific request if required.

The system displays:

- EMR ID
- EMR Name
- Patient Identifier
- Patient Name
- Test Requested
- Request Date and Time
- Current Status

Expected Result

The requested laboratory orders are displayed together with their synchronization status.

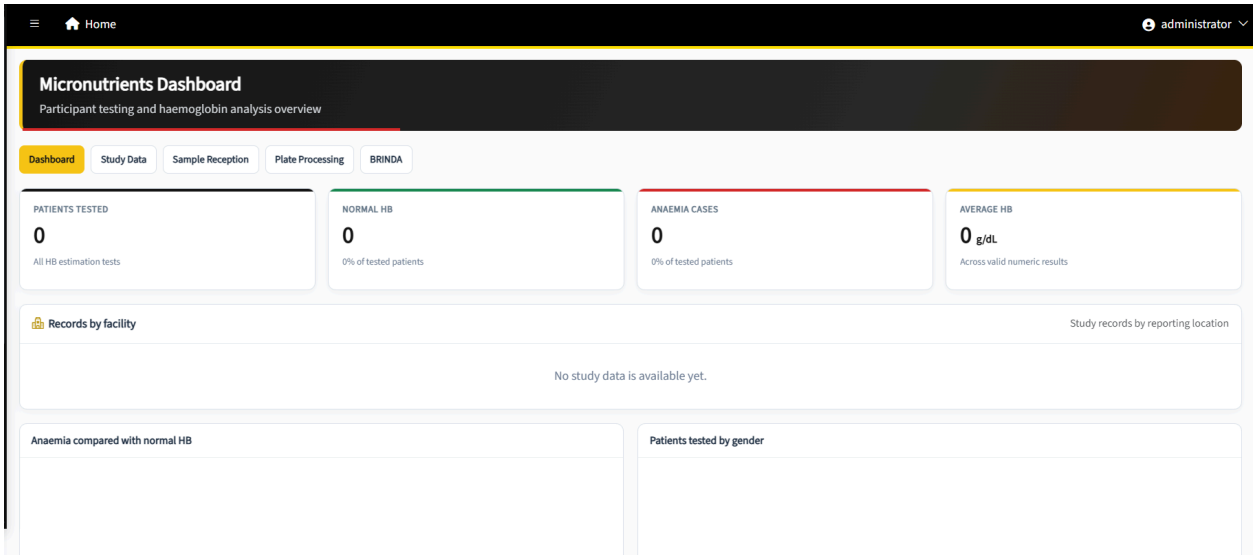
Micronutrients Programme

The **Micronutrients Programme** supports nutrition surveillance, haemoglobin testing, laboratory analysis, and research data management. The module provides tools for participant management, sample reception, laboratory processing, quality assurance, and BRINDA analysis.

How do I view the Micronutrients Dashboard?

Navigation

Main Menu → Micronutrients → Dashboard



Purpose

To monitor programme performance and participant testing activities.

Steps

1. Open **Micronutrients**.
2. Select **Dashboard**.

The dashboard displays programme indicators including:

- Patients Tested
- Normal Haemoglobin Results
- Anaemia Cases
- Average Haemoglobin
- Records by Facility
- Gender Distribution
- Age Group Analysis
- Monthly Testing Trends
- Anaemia Severity

Expected Result

The dashboard provides a real-time overview of programme performance.

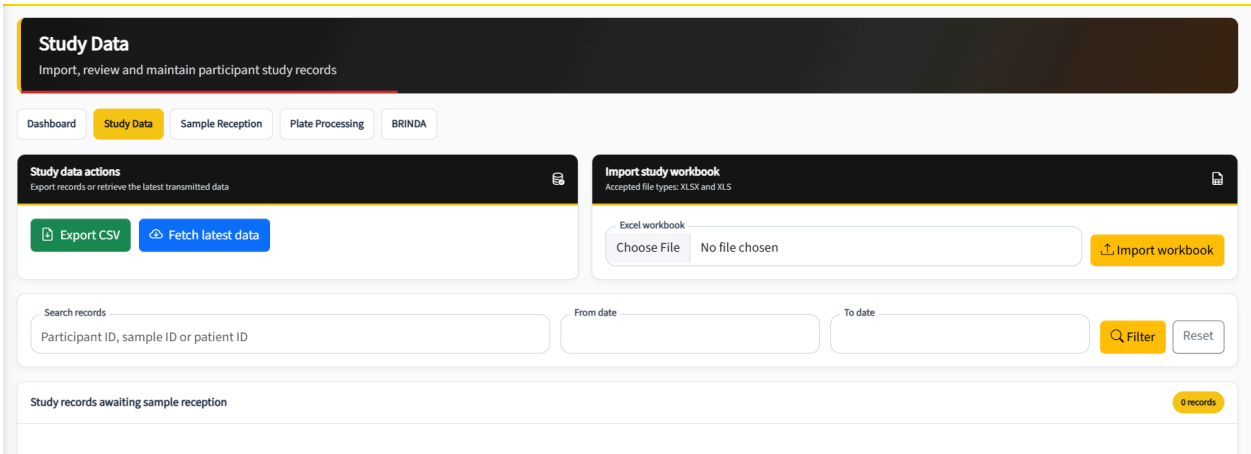
How do I import participant study data?

Navigation

Micronutrients → Study Data

Purpose

To import, review, and manage participant study records.



Steps

1. Open **Study Data**.
2. Click **Import Study Workbook**.
3. Browse and select the Excel workbook (.XLS or .XLSX).
4. Click **Upload**.
5. Review the imported participant records.

Expected Result

Participant study information is successfully imported into ALIS.

How do I search participant records?

Steps

1. Open **Study Data**.
2. Enter one or more of the following:
    - Participant ID
    - Sample ID
    - Patient ID
3. Select the reporting period.
4. Click **Search**.

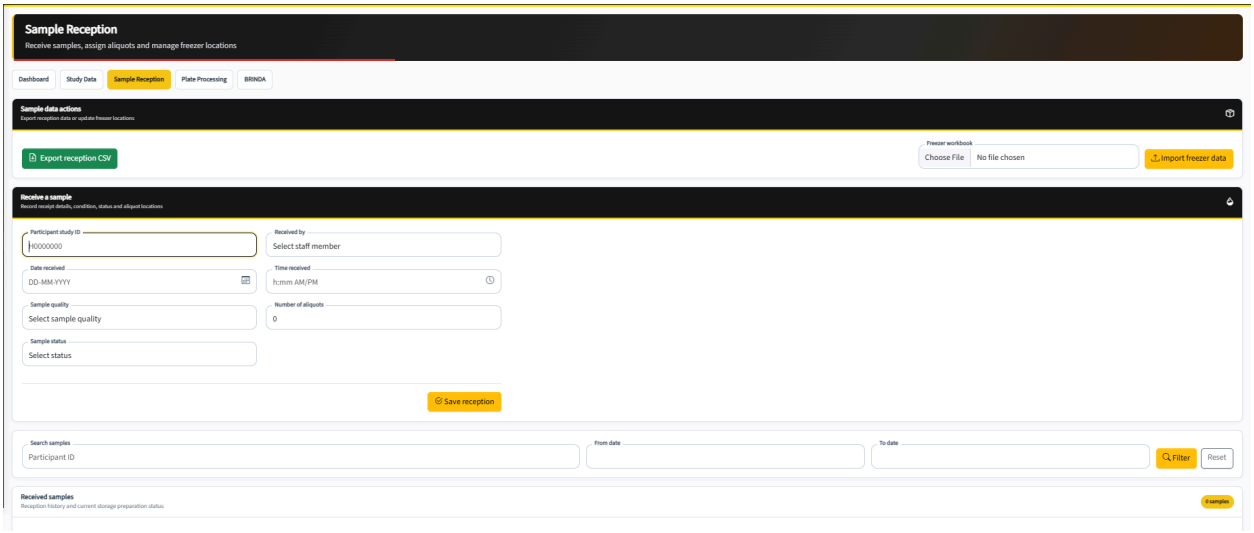
Expected Result

Matching participant study records are displayed.

How do I receive Micronutrient samples?

Navigation

Micronutrients → Sample Reception



Purpose

To record the receipt of participant specimens and assign storage locations.

Steps

1. Open **Sample Reception**.
2. Enter the Participant Study ID.
3. Select the receiving laboratory staff member.
4. Record:
    - Date Received
    - Time Received
    - Sample Quality
    - Number of Aliquots
    - Sample Status
5. Click **Save Reception**.

Expected Result

The specimen is successfully recorded and becomes available for laboratory processing.

> **Best Practice:** Verify sample integrity before accepting the specimen into the laboratory.

How do I search received samples?

Steps

1. Open **Sample Reception**.
2. Enter the Participant ID.
3. Select the reporting period.
4. Click **Search**.

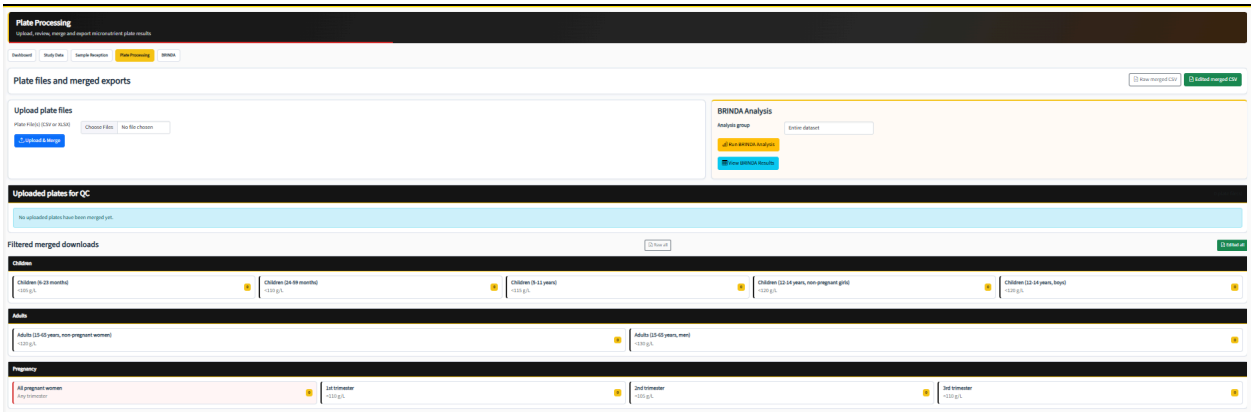
Expected Result

Previously received specimens are displayed together with their reception history.

How do I upload laboratory plate files?

Navigation

Micronutrients → Plate Processing



Purpose

To upload laboratory plate results and prepare them for BRINDA analysis.

Steps

1. Open **Plate Processing**.
2. Click **Upload Plate Files**.
3. Select one or more CSV or Excel files.
4. Click **Upload**.
5. Wait for processing to complete.

Expected Result

Uploaded plate files are stored and become available for quality control and BRINDA analysis.

How do I perform BRINDA analysis?

Navigation

Micronutrients → Plate Processing

Purpose

To analyse inflammation-adjusted micronutrient biomarkers using BRINDA methodology.

Steps

1. Open **Plate Processing**.
2. Select the required **Analysis Group**.
3. Choose the participant category.
4. Run the analysis.

The system supports analysis for:

- Children
- Adolescents
- Adults
- Pregnant Women

Expected Result

Inflammation-adjusted haemoglobin and micronutrient analysis results are generated.

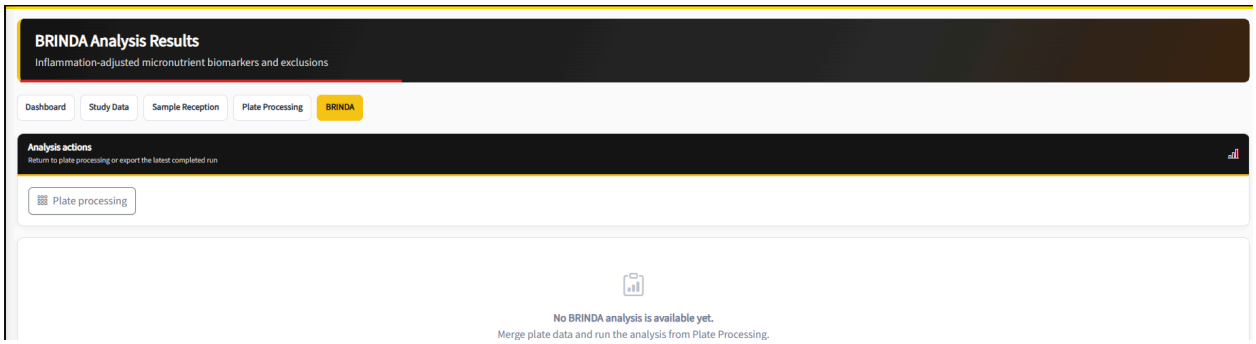
How do I view BRINDA Analysis Results?

Navigation

Micronutrients → BRINDA

Purpose

To review completed BRINDA analyses and export finalized results.



Steps

1. Open **BRINDA**.
2. Review the completed analysis.
3. Export the results if required.

Expected Result

The completed BRINDA analysis is displayed together with available export options.

> **Note:** BRINDA analysis adjusts micronutrient biomarker interpretation by accounting for inflammation, improving the accuracy of population-level nutrition assessments.

Laboratory Configuration

The **Laboratory Configuration** module enables authorized users to configure and maintain core laboratory settings within ALIS. These settings include clinicians, health units, laboratory equipment, instrument mappings, test name mappings, laboratory numbering, and system logs.

> **Important:** Most functions in this module are restricted to Laboratory Managers, System Administrators, and ICT personnel. Changes made within this module affect the operation of the laboratory and should only be performed by authorized users.

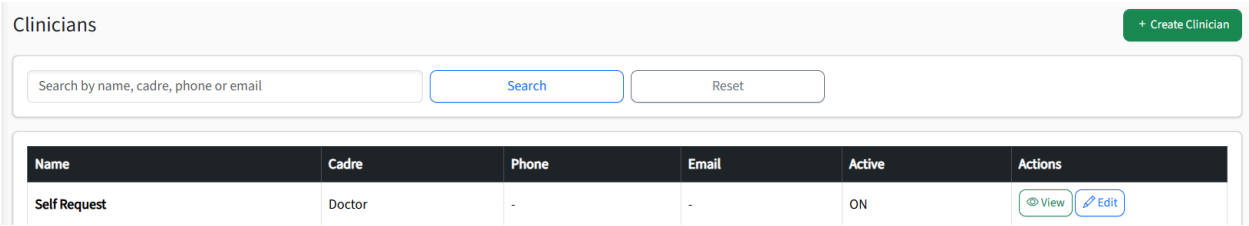
Clinicians

The Clinicians section maintains the list of clinicians who request laboratory investigations. Keeping clinician information up to date improves reporting and ensures laboratory requests are correctly attributed.

How do I view registered clinicians?

Navigation

Main Menu ⟶ Laboratory Configuration ⟶ Clinicians



Steps

1. Open **Laboratory Configuration**.
2. Select **Clinicians**.
3. Use the search box to search by:
    - Clinician Name
    - Cadre
    - Telephone Number
    - Email Address

Expected Result

The system displays all registered clinicians together with:

- Name
- Cadre
- Telephone Number
- Email Address
- Active Status

How do I register a new clinician?

Navigation

Laboratory Configuration ⟶ Clinicians ⟶ Add Clinician

Steps

1. Open **Clinicians**.
2. Click **Add Clinician**.

3. Complete the required information:
    - Name
    - Cadre
    - Phone Number
    - Email Address
4. Click **Save**.

Expected Result

The clinician is added to the system and becomes available for selection during laboratory request entry.

How do I update clinician information?

Steps

1. Locate the clinician.
2. Click **Actions**.
3. Select **Edit**.
4. Update the required information.
5. Click **Save**.

Expected Result

The clinician's information is updated immediately.

Health Units

Health Units represent departments or clinical units that submit laboratory requests.

How do I create a Health Unit?

Navigation

Laboratory Configuration → Health Units

Steps

1. Select **Health Units**.
2. Click **Create Health Unit**.
3. Enter:
    - Health Unit Name

- Description

4. Click **Save**.

Expected Result

The Health Unit is successfully created and becomes available throughout ALIS.

How do I search for a Health Unit?

1. Open **Health Units**.
2. Enter the Health Unit Name or Description.
3. Click **Search**.

The matching Health Units are displayed.

Laboratory Equipment

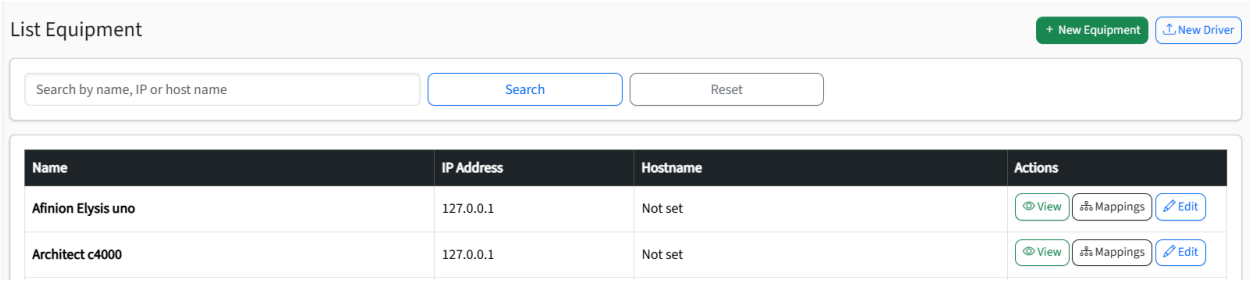
The Equipment section manages laboratory analyzers and instruments connected to ALIS.

Equipment configuration enables ALIS to communicate with laboratory analyzers and automatically interpret laboratory results.

How do I view laboratory equipment?

Navigation

Laboratory Configuration → Instruments



Steps

1. Open **Instruments**.
2. Use the search box to search by:
    - Equipment Name

- IP Address
- Hostname

Expected Result

The system displays all configured laboratory equipment.

How do I register new laboratory equipment?

Navigation

Laboratory Configuration → Add Equipment

Steps

1. Click **Add Equipment**.
2. Enter:
   - Equipment Name
   - IP Address
   - Hostname
   - Description
3. Click **Save**.

Expected Result

The equipment is successfully registered.

How do I configure tests performed by laboratory equipment?

Steps

1. Locate the equipment.
2. Select **Edit**.
3. Review the available laboratory tests.
4. Select the tests performed by that equipment.
5. Click **Save**.

Expected Result

The analyzer is linked to the selected laboratory tests.

> **Best Practice:** Configure only the tests that are physically supported by the analyzer.

How do I map equipment parameters?

Navigation

Equipment → Parameter Mapping

Purpose

Parameter Mapping translates analyzer-generated machine codes into the standardized laboratory measurements used by ALIS.

Steps

1. Open the required equipment.
2. Select **Parameter Mapping**.
3. Click **Add Parameter Mapping**.
4. Enter:
    - Machine Code
    - Machine Parameter Name
5. Select the corresponding ALIS Measure.
6. Click **Save Mapping**.

Expected Result

Incoming analyzer results are automatically matched to the correct ALIS laboratory measurement.

How do I test a parameter mapping?

Steps

1. Open **Preview Mapping**.
2. Enter:
    - Machine Code
    - Machine Parameter Name
3. Click **Preview**.

Expected Result

The system displays the ALIS measurement that will be used during live analyzer integration.

How do I install a new equipment driver?

Navigation

Laboratory Configuration → New Driver

Purpose

To install additional analyzer communication drivers.

Steps

1. Open **New Equipment Driver**.
2. Click **Browse**.
3. Select the approved driver file.
4. Click **Upload**.

Expected Result

The driver is installed and becomes available for analyzer communication.

> **Warning:** Only install equipment drivers obtained from trusted and approved sources. Installing unverified drivers may compromise system security and laboratory operations.

Test Name Mapping

Test Name Mapping ensures that laboratory tests received from external systems or analyzers are correctly matched to standardized ALIS test names.

How do I view Test Name Mappings?

Navigation

Laboratory Configuration → Test Name Mapping

Steps

1. Open **Test Name Mapping**.
2. Search using:
    - Standard Name
    - Test Type
    - System Name

Expected Result

The configured mappings are displayed.

How do I add a Test Name Mapping?

Steps

1. Click **Add Test Name Mapping**.
2. Enter:
    - Standard Name
    - Test Type
    - External System Name
3. Save the mapping.

Expected Result

Future imported laboratory requests will automatically map to the correct ALIS test.

How do I map laboratory measurements?

Navigation

Test Name Mapping → Measure Mapping

Steps

1. Open the required Test Mapping.
2. Click **Add Measure Name Mapping**.
3. Enter:
    - Laboratory Measure
    - Standard Name
    - External System Name
4. Save.

Expected Result

Incoming laboratory measurements are standardized within ALIS.

Laboratory Number (ULIN) Management

The **Reset ULIN** function controls the next Laboratory Identification Number generated by ALIS.

Administrator Function

How do I reset the next Laboratory Number?

Navigation

Laboratory Configuration → Reset ULIN

Steps

1. Open **Reset ULIN**.
2. Select one of the available options:
    - Set a Specific Laboratory Number.
    - Reset Laboratory Number to **1**.
3. Confirm the action.

Expected Result

The next laboratory identification number generated by ALIS follows the new sequence.

> **Warning:** Resetting laboratory numbering affects all future laboratory records. This action should only be performed following Ministry of Health numbering procedures.

Application Log Errors

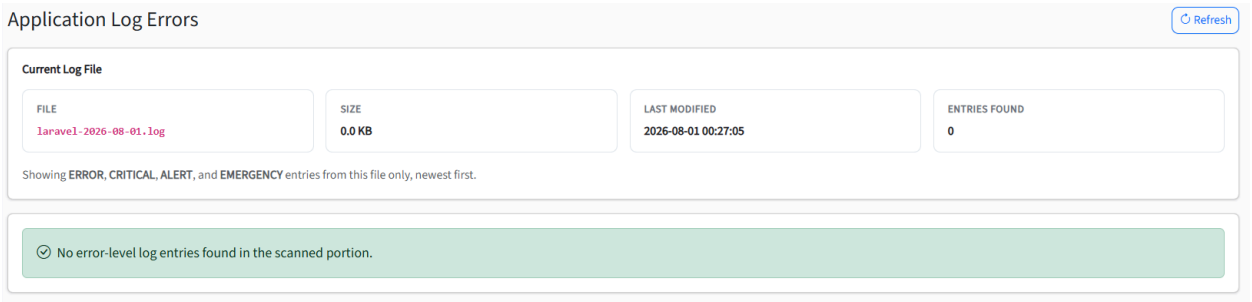
The Application Log records system errors and operational failures that occur while ALIS is running.

This information assists ICT staff in diagnosing and resolving technical issues.

How do I review system errors?

Navigation

Laboratory Configuration → Application Log Errors



Steps

1. Open **Application Log Errors**.
2. Review the current log file.
3. Examine:
    - Date and Time
    - Error Level
    - Error Message
4. Click **Refresh** to display the latest entries.

Expected Result

Recent application errors are displayed in chronological order.

Typical errors may include:

- Database connection failures
- Network communication failures
- External API errors
- File system errors
- Storage capacity issues

> **Note:** Application Logs are intended for ICT support personnel and should not be modified manually.

Audit Trail

The Audit Trail records significant actions performed within ALIS, providing accountability and supporting system governance.

Audit records assist with security monitoring, investigations, and compliance reviews.

How do I review the Audit Trail?

Navigation

Laboratory Configuration → Audit Trail

Steps

1. Open **Audit Trail**.
2. Review the recorded activities.
3. Use available filters to locate specific transactions.
4. Click **Refresh** to display the latest audit events.

Expected Result

The system displays user activities, including the date, time, user, action performed, and affected record.

> **Best Practice:** Audit Trail records should be reviewed periodically by System Administrators to monitor system usage and investigate unusual activities.

Test Catalogue

The **Test Catalogue** module is the central repository for laboratory reference data used throughout ALIS. It enables authorized users to configure laboratory sections, specimen types, test definitions, organism reference data, drug information, terminology mappings, and national standard mappings.

These configurations determine how laboratory requests are created, processed, reported, and exchanged with external systems.

> **Important:** Changes made within the Test Catalogue affect laboratory operations across the system. Only authorized Laboratory Managers or System Administrators should modify catalogue information.

Laboratory Sections

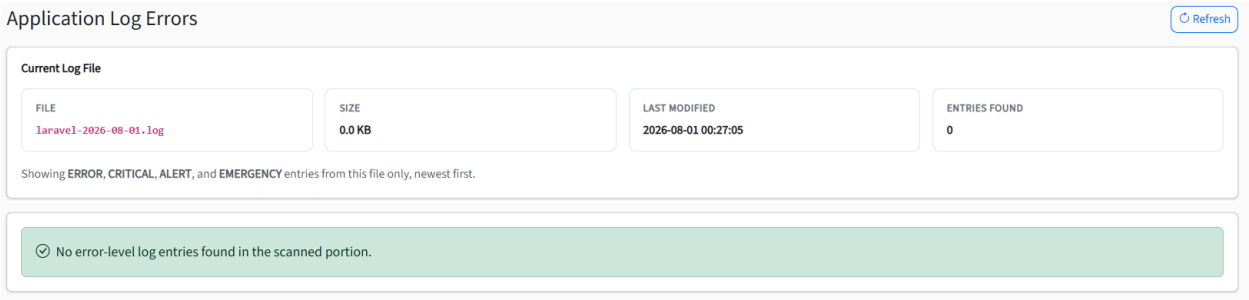
Laboratory Sections are used to organize laboratory services into functional departments such as Haematology, Microbiology, Clinical Chemistry, and Blood Transfusion.

Each laboratory test belongs to a Laboratory Section.

How do I view Laboratory Sections?

Navigation

Main Menu → Test Catalogue → Laboratory Sections



Steps

1. Open **Test Catalogue**.
2. Select **Laboratory Sections**.
3. Use the search box to search by:
    - Section Name
    - Standard Name
    - Description

Expected Result

The system displays all configured laboratory sections together with their standard mappings.

How do I create a new Laboratory Section?

Navigation

Test Catalogue → Laboratory Sections → Create Laboratory Section

Steps

1. Click **Create Laboratory Section**.
2. Enter:
    - Laboratory Section Name
    - Standard Name (where applicable)
3. Click **Save**.

Expected Result

The new laboratory section is added to the Test Catalogue and becomes available when configuring laboratory tests.

> **Best Practice:** Use nationally approved laboratory section names to maintain consistency across all facilities.

Specimen Types

Specimen Types define the different biological samples accepted by the laboratory for testing.

Examples include blood, cerebrospinal fluid (CSF), urine, sputum, swabs, and other body fluids.

How do I view available Specimen Types?

Navigation

Test Catalogue → Specimen Types

Steps

1. Select **Specimen Types**.
2. Search using:
    - Specimen Name
    - Scientific Name
    - Description

Expected Result

The system displays all specimen types configured in ALIS.

How do I add a new Specimen Type?

Steps

1. Click **Add Specimen Type**.
2. Enter the specimen details.
3. Save the record.

Expected Result

The specimen type becomes available during laboratory request entry.

> **Best Practice:** Use standard specimen names that align with Ministry of Health laboratory guidelines.

Specimen Rejection Reasons

Specimen Rejection Reasons define standardized reasons why laboratory specimens may be rejected before testing.

Examples include insufficient volume, leakage, incorrect labeling, haemolysis, or improper transport conditions.

How do I manage Specimen Rejection Reasons?

Navigation

Test Catalogue → Specimen Rejection

Steps

1. Open **Specimen Rejection**.
2. Search existing rejection reasons if required.
3. Click **Add Specimen Rejection Reason**.
4. Enter:
    - Rejection Reason
    - Rejection Code
5. Save.

Expected Result

The rejection reason becomes available when recording specimen rejection.

Test Types

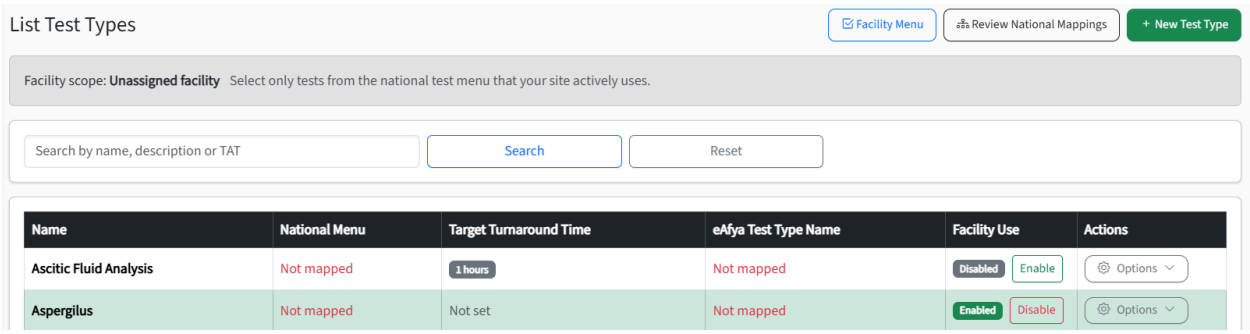
Test Types define every laboratory investigation that can be requested and performed within ALIS.

Each test may be linked to the National Test Menu and external systems such as eAfya.

How do I view available laboratory tests?

Navigation

Main Menu → Test Catalogue → Test Types



Steps

1. Open **Test Types**.
2. Search by:
    - Test Name
    - Description
    - Target Turnaround Time

Expected Result

The system displays all configured laboratory investigations together with:

- National Test Menu Mapping
- Target Turnaround Time
- eAfya Mapping
- Facility Status

How do I create a new laboratory test?

Steps

1. Click **New Test Type**.
2. Enter the required test information.
3. Assign the appropriate laboratory section.
4. Specify the target turnaround time.
5. Save.

Expected Result

The laboratory investigation becomes available for use.

How do I enable or disable a laboratory test?

Purpose

Allows facilities to activate only the laboratory tests they currently offer.

Steps

1. Open **Test Types**.
2. Locate the required test.
3. Select **Enable** or **Disable**.

Expected Result

The selected laboratory test is either activated or hidden from laboratory request entry.

How do I map a laboratory test to the National Test Menu?

Steps

1. Locate the required laboratory test.
2. Select **Map to National Menu**.
3. Choose the appropriate National Test.
4. Save.

Expected Result

The laboratory test is successfully linked to the National Test Menu.

How do I link a laboratory test with eAfya?

Steps

1. Locate the required laboratory test.
2. Select **Link with eAfya**.
3. Select the corresponding eAfya test.
4. Save.

Expected Result

Laboratory requests received from eAfya are correctly matched to ALIS laboratory tests.

Facility Test Menu

The Facility Test Menu allows each laboratory to select which tests from the National Test Menu are offered at that facility.

How do I configure the Facility Test Menu?

Navigation

Test Catalogue → Facility Test Menu

Steps

1. Open **Facility Test Menu**.
2. Search for the required laboratory tests.
3. Select all tests provided by your facility.
4. Click **Save**.

Expected Result

Only the selected tests become available for requesting within your laboratory.

Drugs

The Drugs catalogue maintains medicines and antimicrobial agents used throughout ALIS, particularly within microbiology and antimicrobial susceptibility testing.

How do I manage Drugs?

Navigation

Test Catalogue → Drugs

Steps

1. Search for an existing drug if required.
2. Select **View**, **Edit**, or **Delete** as appropriate.
3. Save any changes.

Expected Result

The drug catalogue is updated successfully.

Organisms

The Organisms catalogue stores microorganisms identified during laboratory testing.

Each organism may include its organism group, Gram classification, code, and description.

How do I add a new Organism?

Navigation

Test Catalogue → Organisms

Steps

1. Click **Create Organism**.
2. Enter:
    - Organism Name
    - Organism Group
    - Gram Classification
    - Organism Code
    - Description
3. Save.

Expected Result

The organism becomes available for microbiology reporting and antimicrobial susceptibility testing.

MIC Breakpoints

MIC Breakpoints define antimicrobial susceptibility thresholds used to interpret laboratory susceptibility testing in accordance with CLSI standards.

How do I add an MIC Breakpoint?

Navigation

Test Catalogue → MIC Breakpoints

Steps

1. Click **Add MIC Breakpoint**.

2. Enter:
    - Organism Group
    - Drug
    - CLSI Version
    - Susceptibility Values (S, I, R)
    - Measurement Unit
3. Save.

Expected Result

The breakpoint becomes available during susceptibility interpretation.

> **Note:** MIC Breakpoints should only be updated in accordance with the latest approved CLSI guidelines.

Test Purposes

Test Purposes define the clinical reason or programme under which a laboratory investigation is requested.

How do I add a Test Purpose?

Navigation

Test Catalogue → Testing Purpose

Steps

1. Click **Add Test Purpose**.
2. Enter:
    - Test Purpose Name
    - Description
3. Save.

Expected Result

The purpose becomes available during laboratory request entry.

Test Terminology

Test Terminology standardizes laboratory test names across ALIS and external health information systems.

This improves interoperability and ensures consistent reporting.

How do I manage Test Terminology?

Navigation

Test Catalogue → Test Terminology

Steps

1. Search for the required laboratory test.
2. Review:
    - Standard Name
    - Scientific Name
    - Code
    - Facility Name
    - Mapped Test
3. Update mappings where required.

Expected Result

The laboratory terminology remains synchronized with national and international standards.

Test Measure Mapping

Test Measure Mapping standardizes individual laboratory measurements and result components used by ALIS.

These mappings support analyzer integration, interoperability, and standardized reporting.

How do I view Test Measures?

Navigation

Test Catalogue → Test Measure Mapping

Steps

1. Open **Test Measure Mapping**.

2. Search for the required laboratory test.

The system displays:

- Test Type
- Test Components
- SNOMED Global Name
- SNOMED Code

Expected Result

The configured laboratory measurements are displayed.

How do I map a laboratory measurement?

Steps

1. Select the required laboratory test.
2. Click **Add Test Measure** or **Edit**.
3. Enter or select:
    - Test Component
    - Standard Measurement Name
    - SNOMED Global Name
    - SNOMED Code
4. Save.

Expected Result

Laboratory results are standardized and can be exchanged consistently with integrated systems.

> **Best Practice:** Where available, use internationally recognized terminologies such as **SNOMED CT** to improve interoperability with national and external health information systems.

Inventory & Equipment

The **Inventory & Equipment** module enables laboratories to manage commodities, suppliers, equipment, maintenance schedules, stock movements, and inventory reporting. It supports accurate inventory management, minimizes stock shortages, and ensures laboratory equipment remains functional and compliant with maintenance schedules.

Important: Inventory transactions should only be performed by authorized laboratory personnel. All stock movements should be supported by the appropriate documentation, including delivery notes, vouchers, issue forms, or approval records.

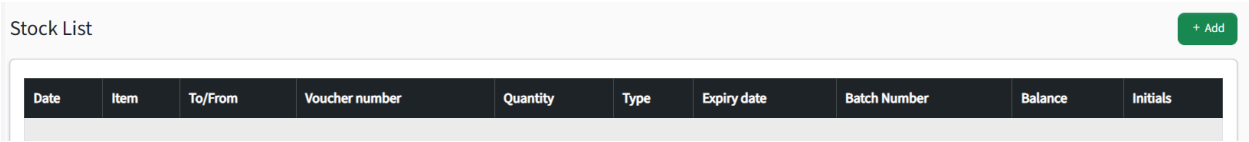
Stock Card

The Stock Card records every inventory movement for a specific commodity, providing a complete transaction history from receipt through issuance and current stock balance.

How do I view the Stock Card?

Navigation

Main Menu ⟶ Inventory & Equipment ⟶ Stock Card



Steps

1. Open **Inventory & Equipment**.
2. Select **Stock Card**.
3. Review the transaction history for the selected commodity.

The Stock Card displays:

- Transaction Date
- Commodity Name
- Issued To / Received From
- Voucher Number
- Quantity
- Transaction Type
- Expiry Date
- Batch Number
- Running Balance
- User Initials

Expected Result

The complete transaction history for the selected commodity is displayed.

How do I record a stock transaction?

Steps

1. Open **Stock Card**.
2. Click **Add**.
3. Enter the transaction details.
4. Verify the information.
5. Save the transaction.

Expected Result

The transaction is recorded and the stock balance is automatically updated.

> **Best Practice:** Always record stock transactions immediately after goods are received or issued to maintain accurate inventory balances.

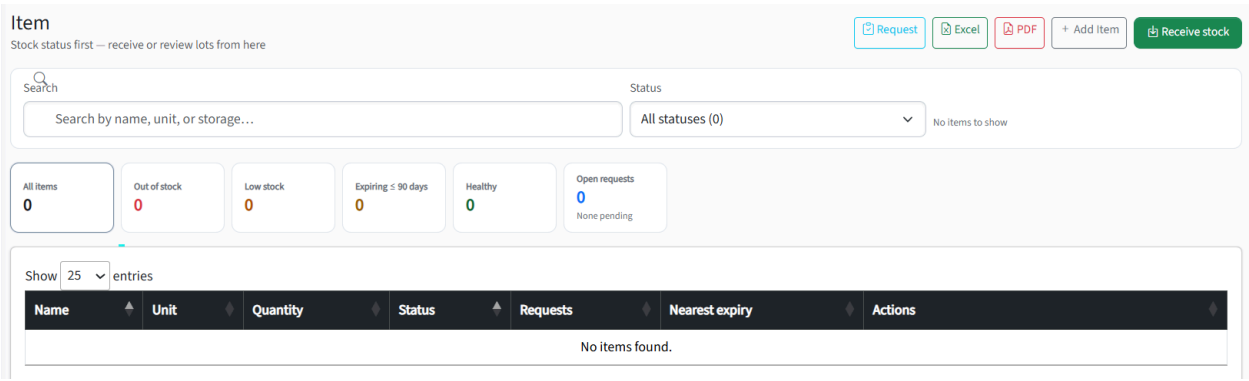
Commodity Requests

The Commodity Request function allows laboratory staff to request additional stock when inventory levels are low.

How do I request laboratory commodities?

Navigation

Inventory & Equipment ⟶ Request for Commodity



Steps

1. Open **Request for Commodity**.

2. Review the available stock information.
3. Locate the required commodity.
4. Click **Add Request**.
5. Enter:
    - Quantity Required
    - Remarks (if applicable)
6. Submit the request.

Expected Result

The request is recorded and awaits review by the responsible inventory manager.

How do I monitor commodity requests?

The request list displays:

- Commodity Name
- Quantity Remaining
- Laboratory Section
- Number of Tests Performed
- Quantity Requested
- Request Status
- Requested By
- Remarks

Expected Result

Users can monitor the progress of submitted requests until they are fulfilled.

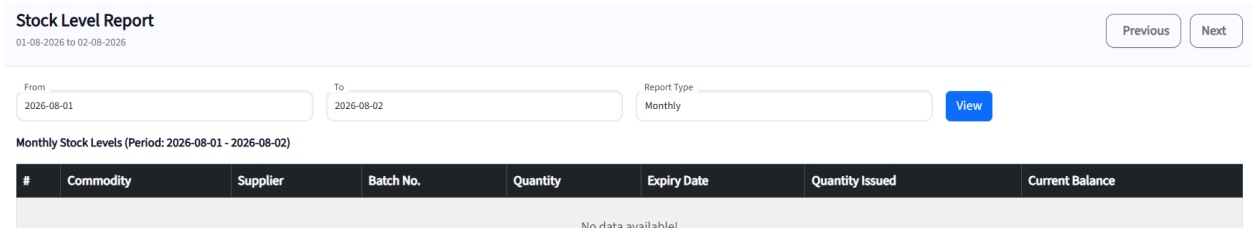
Stock Book

The Stock Book summarizes inventory balances and stock movements over a selected reporting period.

How do I generate the Stock Level Report?

Navigation

Inventory & Equipment → Stock Book



Steps

1. Open **Stock Book**.
2. Select:
    - Reporting Period
    - Report Type
3. Click **Generate Report**.

Expected Result

The report displays:

- Commodity
- Supplier
- Batch Number
- Quantity Received
- Expiry Date
- Quantity Issued
- Current Balance

> **Best Practice:** Generate stock reports regularly to support inventory planning and Ministry of Health reporting requirements.

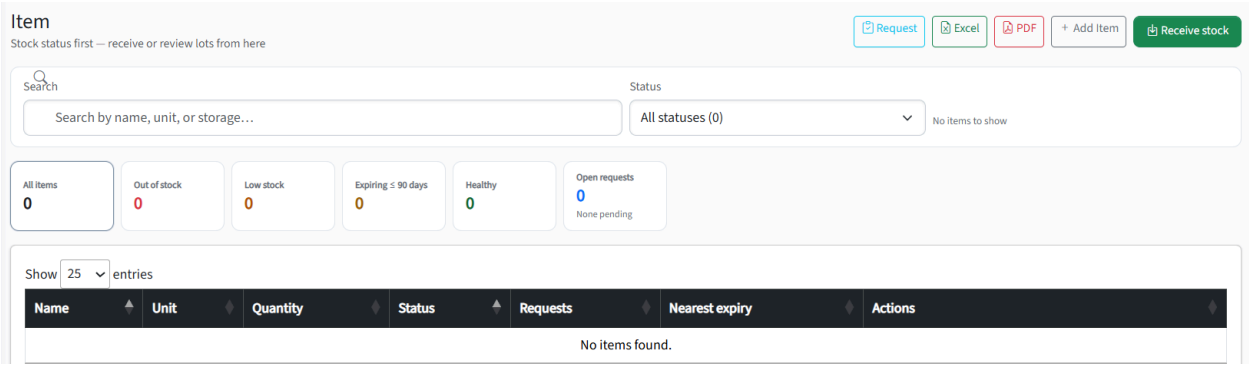
Commodities

The Commodities section contains the master inventory of laboratory consumables, reagents, and supplies managed by ALIS.

How do I view laboratory commodities?

Navigation

Main Menu → Inventory & Equipment → Commodities



Steps

1. Open **Commodities**.
2. Search by:
    - Commodity Name
    - Unit of Issue
    - Storage Location
3. Review the inventory status.

The dashboard categorizes commodities as:

- All Items
- Healthy Stock
- Low Stock
- Out of Stock
- Expiring within 90 Days
- Open Requests

Expected Result

The inventory status of all commodities is displayed.

How do I add a new commodity?

Steps

1. Click **Add Item**.
2. Enter the commodity details.
3. Save the record.

Expected Result

The commodity becomes available for inventory management.

How do I receive stock?

Steps

1. Select the required commodity.
2. Click **Receive Stock**.
3. Enter:
    - Quantity Received
    - Batch Number
    - Expiry Date
    - Supplier
4. Save.

Expected Result

The inventory balance is automatically updated.

How do I export the commodity list?

Users may export inventory information by selecting:

- **Excel**
- **PDF**

Expected Result

The selected report is downloaded for printing or further analysis.

Suppliers

The Suppliers module stores information about organizations supplying laboratory commodities.

How do I add a supplier?

Navigation

Inventory & Equipment → Suppliers

Steps

1. Click **Add Supplier**.

2. Enter:
    - Supplier Name
    - Telephone Number
    - Email Address
    - Physical Address
3. Save.

Expected Result

The supplier is added to the inventory system and becomes available during stock receipt.

Units of Issue (Metrics)

Units of Issue define how commodities are measured and issued within inventory management.

Examples include:

- Bottle
- Box
- Kit
- Pack
- Piece
- Millilitre
- Litre

How do I add a Unit of Issue?

Navigation

Inventory & Equipment → Metrics

Steps

1. Click **Add Metric**.
2. Enter:
    - Unit of Issue
    - Description
3. Save.

Expected Result

The new unit becomes available when creating commodities.

How do I view commodities using a Unit of Issue?

1. Select the required metric.
2. Click **Items**.

Expected Result

The system displays all commodities using that unit of issue.

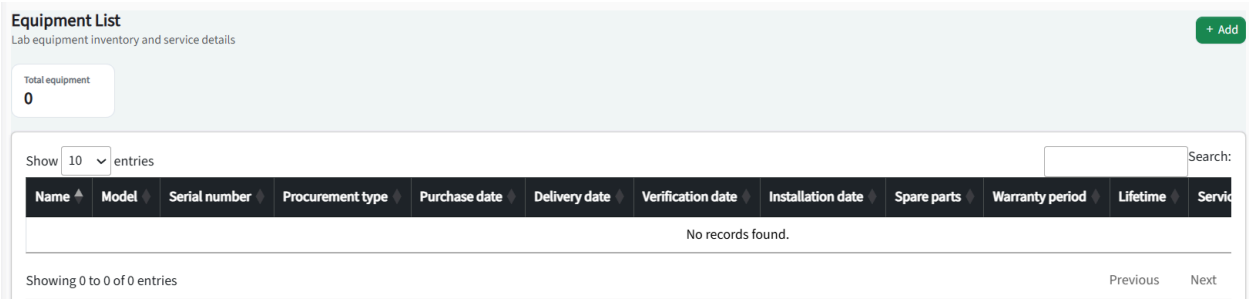
Equipment Inventory

The Equipment Inventory maintains a complete register of laboratory equipment together with procurement, installation, warranty, and lifecycle information.

How do I register laboratory equipment?

Navigation

Inventory & Equipment ⟶ Equipment Inventory



Steps

1. Click **Add Equipment**.
2. Enter the equipment information, including:
    - Equipment Name
    - Model
    - Serial Number
    - Procurement Type
    - Purchase Date
    - Delivery Date
    - Installation Date
    - Warranty Period
    - Expected Lifetime

    - Service Frequency
    - Service Contract Details
3. Save.

Expected Result

The equipment is added to the laboratory equipment register.

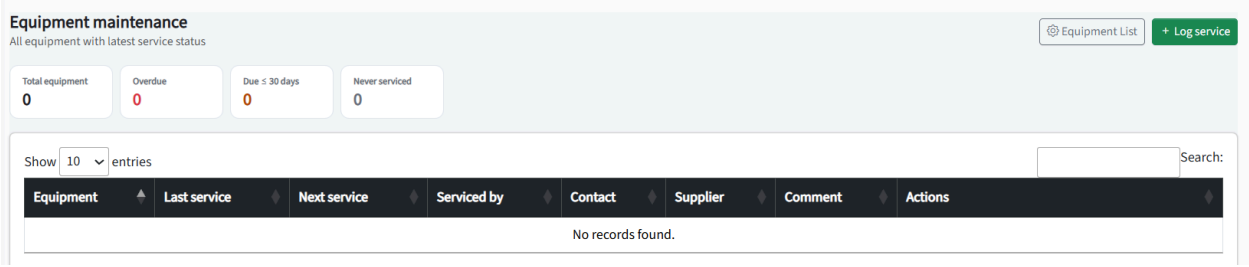
Equipment Maintenance

The Equipment Maintenance module tracks preventive maintenance activities to ensure laboratory equipment remains operational and compliant with maintenance schedules.

How do I review maintenance schedules?

Navigation

Inventory & Equipment → Maintenance Log



Steps

1. Open **Maintenance Log**.
2. Review:
    - Last Service Date
    - Next Service Date
    - Service Provider
    - Supplier
    - Maintenance Comments
3. Use the search function to locate equipment if required.

Expected Result

The maintenance status of all laboratory equipment is displayed.

The dashboard also highlights:

- Overdue Equipment
- Equipment Due for Service within 30 Days
- Equipment Never Serviced

Best Practice: Review the maintenance schedule regularly to minimize equipment downtime and ensure uninterrupted laboratory services.

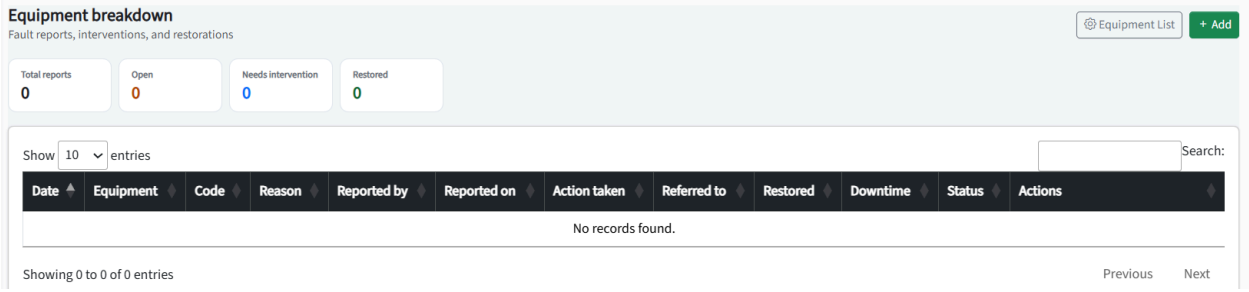
Equipment Breakdown

The Equipment Breakdown register records faults, repairs, and restoration activities for laboratory equipment.

How do I report equipment failure?

Navigation

Inventory & Equipment → Equipment Breakdown



Steps

1. Click **Add Breakdown Report**.
2. Record:
    - Date
    - Equipment
    - Fault Code
    - Reason for Failure
    - Reported By
    - Action Taken
    - Person or Organization Referred To
3. Update the restoration status when repairs are completed.

Expected Result

The equipment breakdown is recorded and tracked until resolution.

How do I monitor equipment downtime?

The breakdown register displays:

- Open Faults
- Equipment Awaiting Intervention
- Restored Equipment
- Total Downtime
- Repair Status

Expected Result

Laboratory managers can monitor equipment availability and maintenance performance.

Equipment Suppliers

Equipment Suppliers maintains information about organizations responsible for supplying and servicing laboratory equipment.

How do I add an equipment supplier?

Navigation

Inventory & Equipment → Equipment Suppliers

Steps

1. Click **Add Supplier**.
2. Enter:
    - Supplier Name
    - Telephone Number
    - Email Address
    - Physical Address
3. Save.

Expected Result

The supplier becomes available when recording equipment procurement, servicing, and maintenance activities.

> **Best Practice:** Maintain up-to-date supplier contact information to facilitate timely procurement, preventive maintenance, equipment repairs, and warranty support. Accurate supplier records contribute to reduced equipment downtime and improved continuity of laboratory services.

Internal Quality Control (IQC) & External Quality Assessment (EQA)

The **IQC & EQA** module supports laboratory quality assurance by enabling laboratories to monitor the accuracy, precision, and reliability of laboratory testing. It provides tools for managing internal quality control materials, recording control results, monitoring analytical performance, generating Levey-Jennings charts, and documenting participation in External Quality Assessment (EQA) programmes.

Routine use of this module helps laboratories identify analytical errors early, monitor instrument performance, comply with quality management standards, and support accreditation requirements such as **ISO 15189**.

> **Important:** Only authorized laboratory personnel responsible for quality management should modify IQC and EQA records. Quality control data should be entered immediately after control testing to ensure accurate monitoring of laboratory performance.

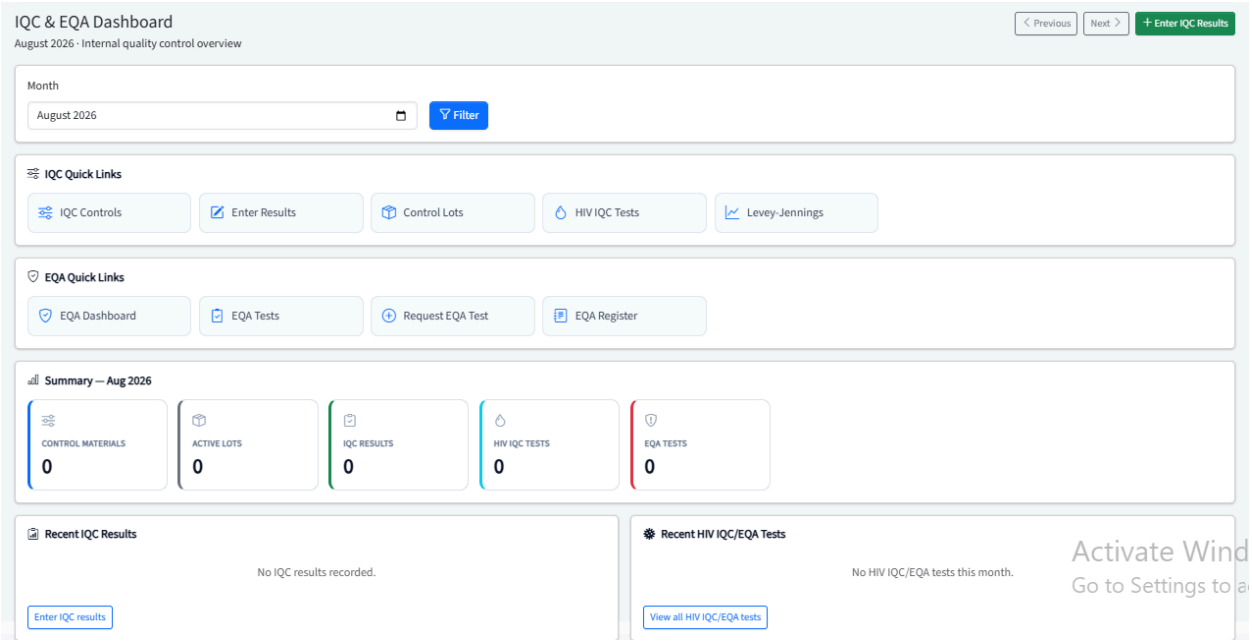
IQC & EQA Dashboard

The IQC & EQA Dashboard provides a consolidated overview of quality control activities performed within the laboratory during the selected reporting period.

How do I view the IQC & EQA Dashboard?

Navigation

Main Menu → IQC & EQA → Dashboard



Steps

1. Open **IQC & EQA**.
2. Select **Dashboard**.
3. Choose the required reporting month if necessary.

The dashboard summarizes:

- Total Control Materials
- Active Control Lots
- IQC Results Recorded
- HIV IQC Tests
- External Quality Assessment (EQA) Tests
- Recent IQC Results
- Recent HIV IQC Tests
- Recent EQA Activities

Expected Result

The dashboard displays a summary of current quality assurance activities, enabling laboratory managers to monitor overall quality performance at a glance.

> **Best Practice:** Review the dashboard daily to ensure quality controls are being performed consistently before releasing patient results.

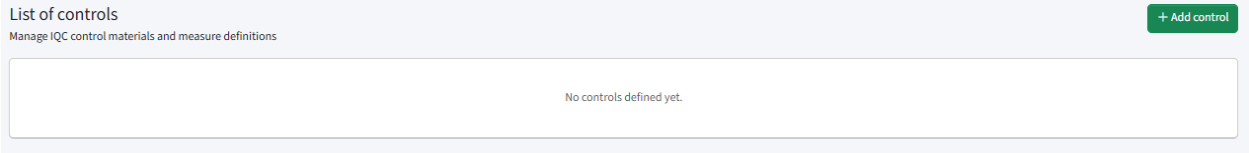
IQC Controls

IQC Controls are the reference materials used to verify the accuracy and precision of laboratory testing before patient samples are processed.

How do I view IQC Controls?

Navigation

Main Menu ⟶ IQC & EQA ⟶ Controls



Steps

1. Open **Controls**.
2. Review the list of available control materials.
3. Search for a control if required.

Expected Result

The system displays all registered quality control materials together with their associated laboratory measurements.

How do I register a new IQC Control?

Steps

1. Click **Add Control**.
2. Enter the required control information.
3. Save the record.

Expected Result

The control material becomes available for IQC testing.

> **Best Practice:** Clearly identify each control by manufacturer, level (Normal, High, Low), and intended laboratory test to simplify routine quality monitoring.

Enter IQC Results

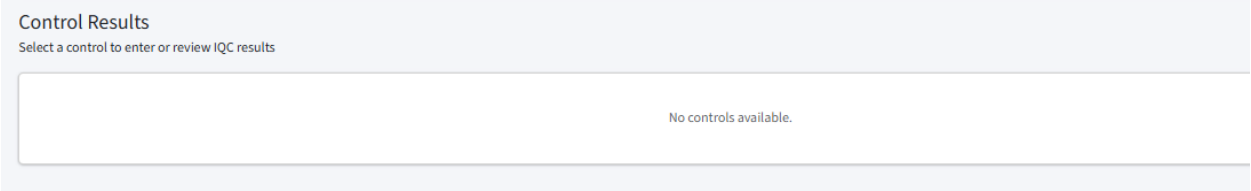
Control results are recorded after laboratory quality control materials have been tested.

Recording these results enables the laboratory to monitor instrument performance over time.

How do I enter IQC results?

Navigation

Main Menu → IQC & EQA → Enter Results



Steps

1. Open **Enter Results**.
2. Select the appropriate control material.
3. Enter the observed control result.
4. Review the information.
5. Save the record.

Expected Result

The IQC result is stored and becomes available for trend analysis and Levey-Jennings chart generation.

> **Best Practice:** Enter IQC results immediately after testing and before analysing patient specimens.

Control Lots

Control Lots manage the batches of quality control materials currently in use within the laboratory.

Each lot may be linked to one or more laboratory instruments.

How do I register a Control Lot?

Navigation

Main Menu ⟶ IQC & EQA ⟶ Lots

Steps

1. Open **Control Lots**.
2. Click **Add**.
3. Enter the control lot information.
4. Associate the lot with the appropriate laboratory instrument.
5. Save.

Expected Result

The control lot becomes available for routine IQC testing.

> **Best Practice:** Record manufacturer lot numbers and expiry dates accurately to ensure traceability during audits and accreditation assessments.

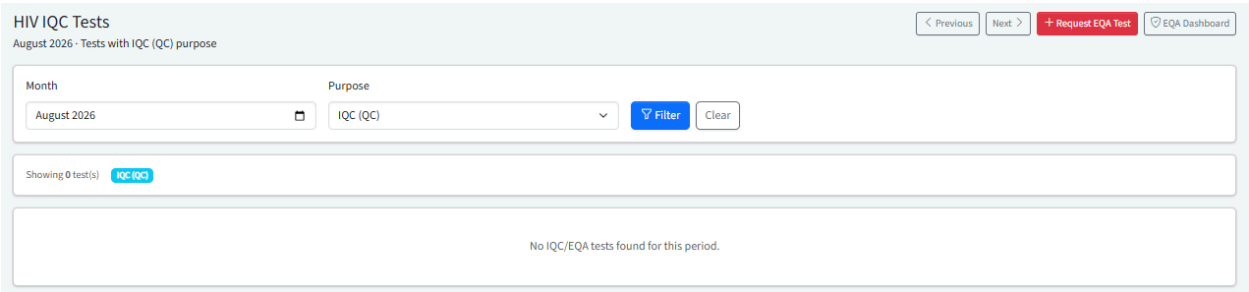
HIV IQC Tests

The HIV IQC Tests section provides a register of HIV laboratory tests performed specifically for Internal Quality Control purposes.

How do I view HIV IQC tests?

Navigation

Main Menu ⟶ IQC & EQA ⟶ HIV IQC



Steps

1. Open **HIV IQC**.
2. Select the required reporting month.

3. Review the available IQC tests.

Expected Result

The system displays all HIV quality control tests performed during the selected period.

How do I add an HIV IQC test?

Steps

1. Click **Add**.
2. Complete the required test information.
3. Save the record.

Expected Result

The HIV IQC test is recorded and included in laboratory quality monitoring reports.

Levey-Jennings Chart

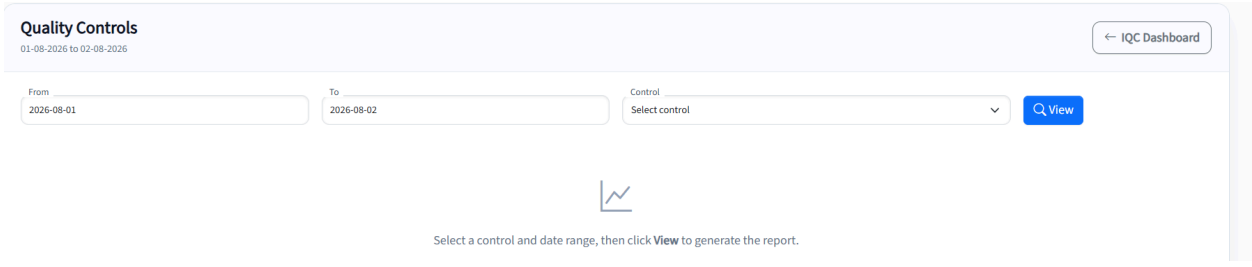
The Levey-Jennings Chart is a statistical quality control tool used to monitor analytical performance over time by plotting control results against expected limits.

It assists laboratories in detecting trends, shifts, random errors, and systematic errors before patient results are affected.

How do I generate a Levey-Jennings Chart?

Navigation

Main Menu ⟶ IQC & EQA ⟶ Levey-Jennings



Steps

1. Open **Levey-Jennings**.
2. Select:
    - Reporting Period
    - Quality Control Material
3. Generate the chart.

Expected Result

The chart displays quality control results plotted against the expected mean and acceptable control limits.

> **Best Practice:** Review Levey-Jennings charts routinely to identify trends or out-of-control conditions before releasing patient results.

External Quality Assessment (EQA)

External Quality Assessment (EQA) enables laboratories to compare their performance against other laboratories participating in national or international quality assessment programmes.

Participation in EQA helps verify laboratory accuracy, identify performance gaps, and demonstrate compliance with national quality standards.

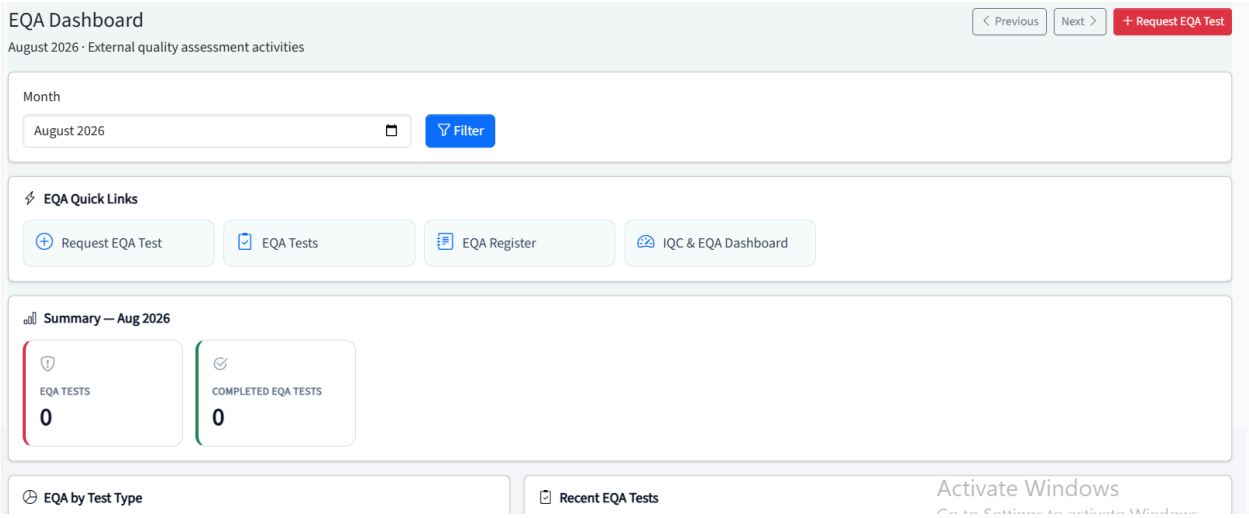
EQA Dashboard

The EQA Dashboard provides an overview of all External Quality Assessment activities performed during the selected reporting period.

How do I view the EQA Dashboard?

Navigation

Main Menu → IQC & EQA → EQA Dashboard



Steps

1. Open **EQA Dashboard**.
2. Select the reporting month.
3. Review the summary statistics.

The dashboard displays:

- Total EQA Tests
- Completed EQA Tests
- EQA by Test Type
- Recent EQA Activities

Expected Result

Laboratory managers can quickly assess current EQA participation and performance.

EQA Tests

The EQA Tests section lists all laboratory investigations configured for External Quality Assessment.

How do I view EQA Tests?

Navigation

Main Menu ⟶ IQC & EQA ⟶ EQA Tests

Steps

1. Open **EQA Tests**.
2. Select the reporting month.
3. Review the available tests.

Expected Result

The system displays all laboratory tests participating in the EQA programme.

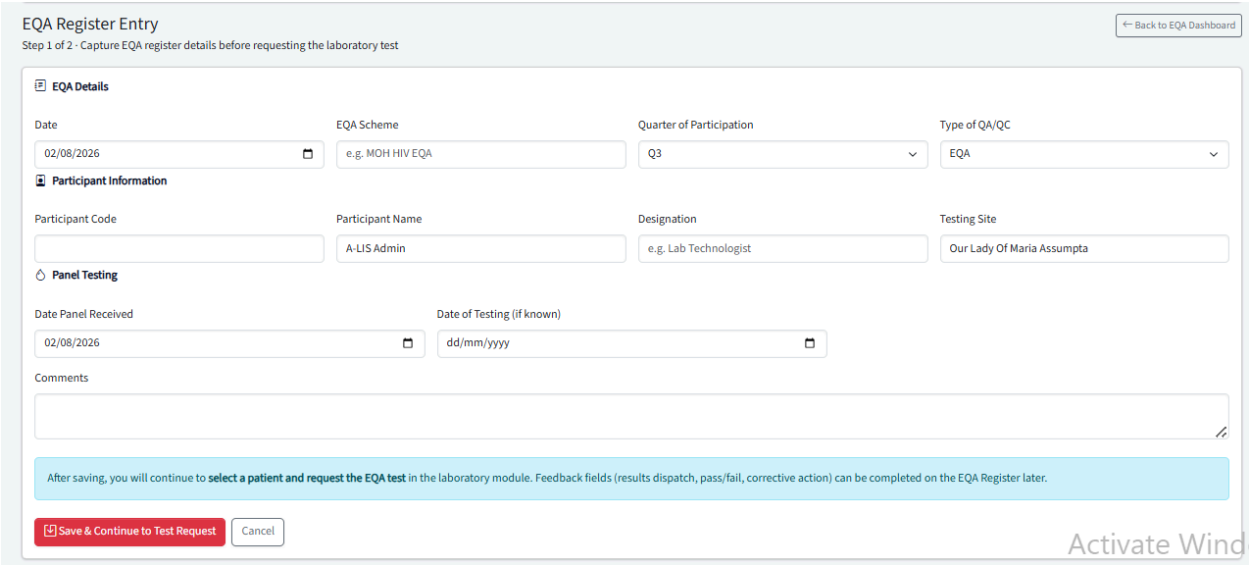
Request an EQA Test

Laboratories participating in EQA programmes may submit requests for External Quality Assessment testing through ALIS.

How do I request an EQA test?

Navigation

Main Menu ⟶ IQC & EQA ⟶ Request EQA Test



Steps

1. Open **Request EQA Test**.
2. Select the required EQA programme or test.
3. Complete the request details.
4. Submit the request.

Expected Result

The EQA request is successfully recorded for processing.

EQA Register

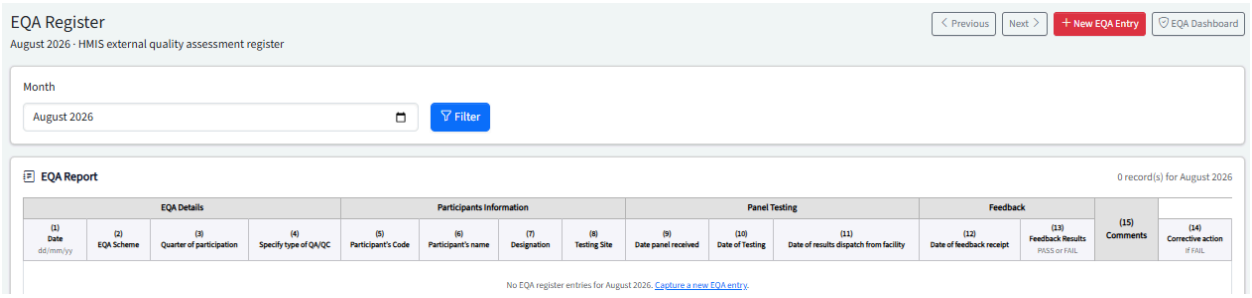
The EQA Register provides the official record of External Quality Assessment participation and outcomes.

The register captures all information required for quality reporting, including participant information, testing dates, feedback received, and corrective actions taken.

How do I complete the EQA Register?

Navigation

Main Menu ⟶ IQC & EQA ⟶ EQA Register



Steps

1. Open **EQA Register**.
2. Select the reporting month.
3. Enter the required programme information, including:
    - Date
    - EQA Scheme
    - Quarter of Participation
    - Type of Quality Assessment
    - Participant Code
    - Participant Name
    - Designation
    - Testing Site
    - Date Panel Received
    - Date of Testing
    - Date Results Dispatched

- Date Feedback Received
- Feedback Result (Pass or Fail)
- Corrective Action (if applicable)

4. Save the record.

Expected Result

The EQA participation record is stored and becomes available for reporting and quality audits.

> **Best Practice:** Where an EQA result is recorded as **Fail**, document the root cause analysis, corrective actions implemented, retraining activities, and verification of effectiveness. Maintaining complete and accurate EQA records supports continuous quality improvement and demonstrates compliance with laboratory quality management standards and accreditation requirements.

Biosafety & Biosecurity

The **Biosafety & Biosecurity** module enables laboratories to record, monitor, investigate, and report incidents that may threaten the safety of laboratory personnel, patients, visitors, laboratory assets, or the surrounding community. It provides standardized tools for documenting incidents, monitoring investigations, generating facility and national reports, and supporting compliance with laboratory safety regulations and quality management standards.

The module promotes a culture of safety by ensuring that incidents are reported promptly, investigated appropriately, and corrective actions are implemented to prevent recurrence.

> **Important:** All biosafety and biosecurity incidents should be reported immediately after they occur. Prompt reporting enables timely response, protects laboratory personnel, and supports continuous improvement of laboratory safety practices.

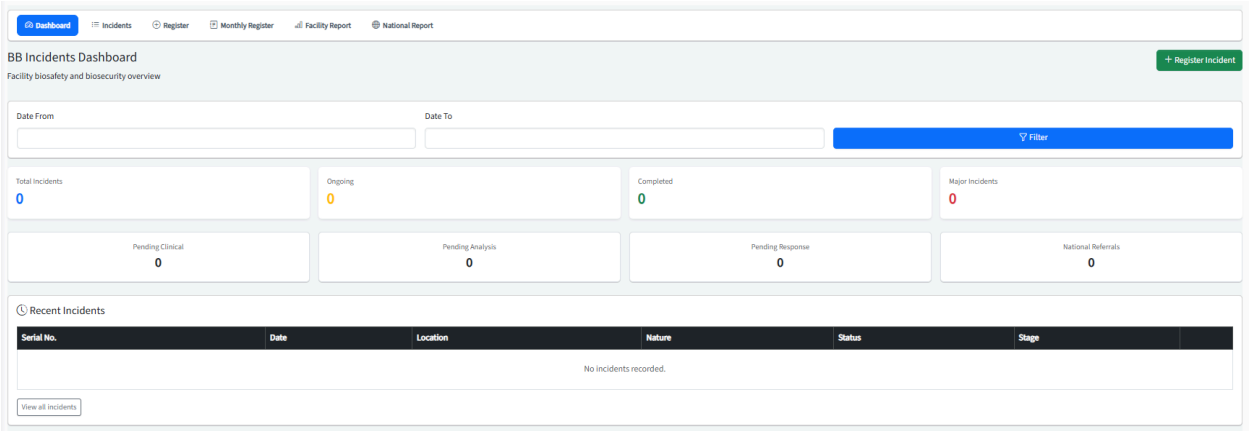
Biosafety & Biosecurity Dashboard

The Dashboard provides a real-time overview of all biosafety and biosecurity incidents reported within the selected reporting period.

How do I view the Biosafety & Biosecurity Dashboard?

Navigation

Main Menu → Biosafety & Biosecurity → Dashboard



Steps

1. Open **Biosafety & Biosecurity**.
2. Select **Dashboard**.
3. Specify the reporting period using the **Date From** and **Date To** filters.

The dashboard summarizes:

- Total Incidents Reported
- Ongoing Investigations
- Completed Investigations
- Major Incidents
- Pending Clinical Reviews
- Pending Incident Analysis
- Pending Management Response
- National Referrals
- Recent Incident Activity

Expected Result

The dashboard provides an overview of laboratory safety performance and highlights incidents requiring immediate attention.

> **Best Practice:** Laboratory Managers should review the dashboard regularly to monitor unresolved incidents and ensure timely follow-up.

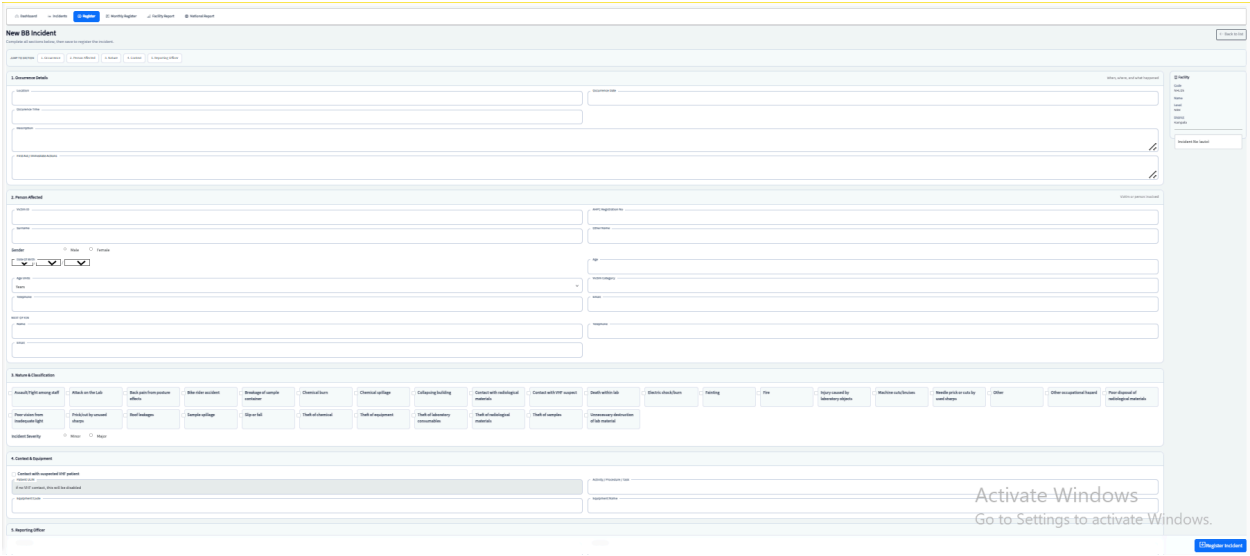
Incident Register

The Incident Register maintains the complete record of all biosafety and biosecurity incidents reported within the laboratory.

How do I view reported incidents?

Navigation

Main Menu ⟶ Biosafety & Biosecurity ⟶ Register



Steps

1. Open **Register**.
2. Search using:
    - Incident Number
    - Description
3. Filter by reporting dates if required.

The register displays:

- Incident Number
- Date and Time
- Location
- Description
- Nature of Incident
- Status

Expected Result

All incidents matching the selected search criteria are displayed.

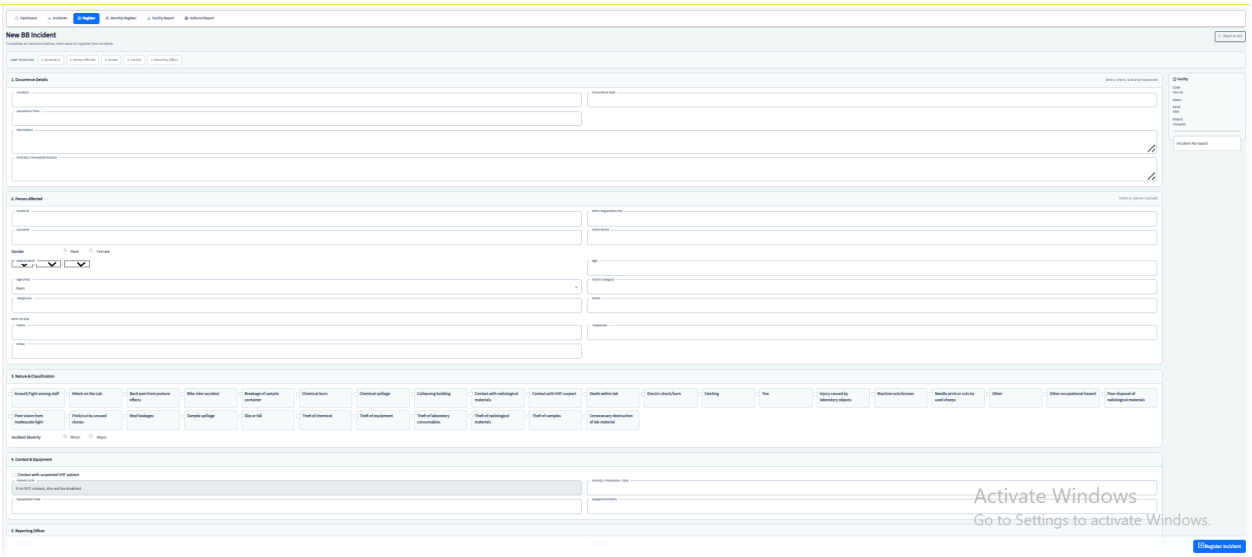
Reporting a Biosafety or Biosecurity Incident

Every laboratory accident, exposure, injury, spill, security breach, or other safety event should be documented through the Incident Reporting Form.

How do I report a new Biosafety or Biosecurity Incident?

Navigation

Main Menu ⟶ Biosafety & Biosecurity ⟶ Register Incident



Steps

Complete each section of the incident report carefully.

Step 1: Record the Occurrence Details

Provide information describing when and where the incident occurred.

Enter:

- Incident Location
- Date of Occurrence
- Time of Occurrence
- Description of the Incident
- Immediate Actions or First Aid Provided

Step 2: Record the Person Affected

Capture information about the individual involved.

Complete the following fields where applicable:

- Victim Identification Number
- AHPC Registration Number
- Name
- Gender
- Date of Birth
- Age
- Victim Category
- Telephone Number
- Email Address
- Next of Kin Details

Step 3: Classify the Incident

Select the incident category that best describes the event.

Examples include:

- Needle-stick Injury
- Sample Spillage
- Chemical Spill
- Chemical Burn
- Fire
- Electrical Shock
- Equipment Theft
- Laboratory Assault
- Machine Injury
- Contact with Viral Haemorrhagic Fever (VHF) Suspect
- Contact with Radiological Material
- Slip or Fall
- Building Damage
- Other Occupational Hazard

Indicate whether the incident is classified as:

- Minor
- Major

Step 4: Record Context Information

Provide additional information about the incident, including:

- Contact with suspected VHF patient (if applicable)
- Patient ULIN
- Activity being performed
- Equipment Code
- Equipment Name

Step 5: Record Reporting Officer Details

Enter the details of the individual reporting the incident.

This includes:

- First Name
- Last Name
- Designation
- Telephone Number

Facility information is automatically displayed where applicable.

The system automatically generates a unique Incident Number.

Expected Result

The incident is successfully recorded and becomes available for investigation, monitoring, and reporting.

> **Best Practice:** Record factual observations only. Avoid assumptions or assigning blame during initial incident reporting. Investigation findings should be documented separately after review.

Monthly Biosafety Register

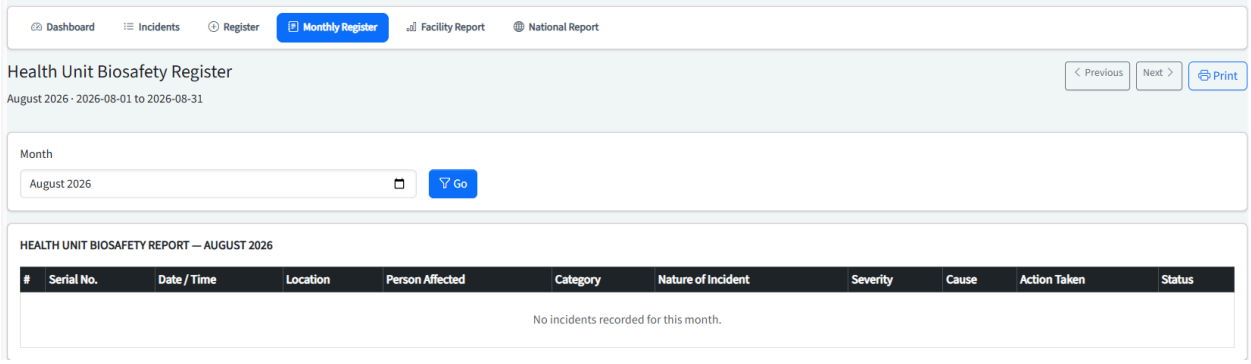
The Monthly Register provides a consolidated record of all incidents reported during a selected month.

This register supports routine monitoring and Ministry of Health reporting requirements.

How do I generate the Monthly Biosafety Register?

Navigation

Main Menu → Biosafety & Biosecurity → Monthly Register



Steps

1. Open **Monthly Register**.
2. Select the required reporting month.
3. Review the incident register.
4. Click **Print** if a hard copy is required.

The report includes:

- Serial Number
- Date and Time
- Incident Location
- Person Affected
- Incident Category
- Nature of Incident
- Severity
- Cause
- Action Taken
- Current Status

Expected Result

A complete monthly biosafety incident register is displayed and may be printed for record keeping.

Facility Biosafety Report

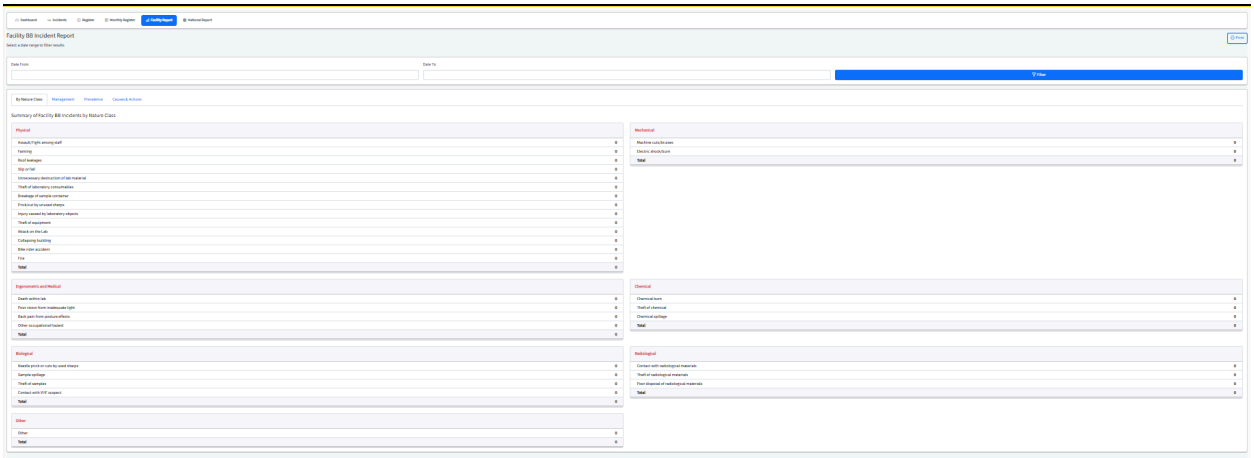
The Facility Report summarizes biosafety and biosecurity incidents occurring within a single laboratory or health facility.

The report supports trend analysis and assists management in identifying areas requiring corrective action.

How do I generate a Facility Biosafety Report?

Navigation

Main Menu ⟶ Biosafety & Biosecurity ⟶ Facility Report



Steps

1. Open **Facility Report**.
2. Select the reporting period.
3. Review the available report tabs.

The report includes several analytical views, including:

- Incident Classification by Nature
- Management Response
- Incident Prevalence
- Causes and Corrective Actions

The report summarizes incidents under categories such as:

- Physical Hazards
- Mechanical Hazards
- Ergonomic Hazards
- Chemical Hazards
- Biological Hazards
- Radiological Hazards
- Other Hazards

Expected Result

Management receives a comprehensive summary of biosafety performance for the selected reporting period.

> **Best Practice:** Review recurring incident types regularly to identify systemic risks and prioritize preventive interventions, staff training, or infrastructure improvements.

National Biosafety Report

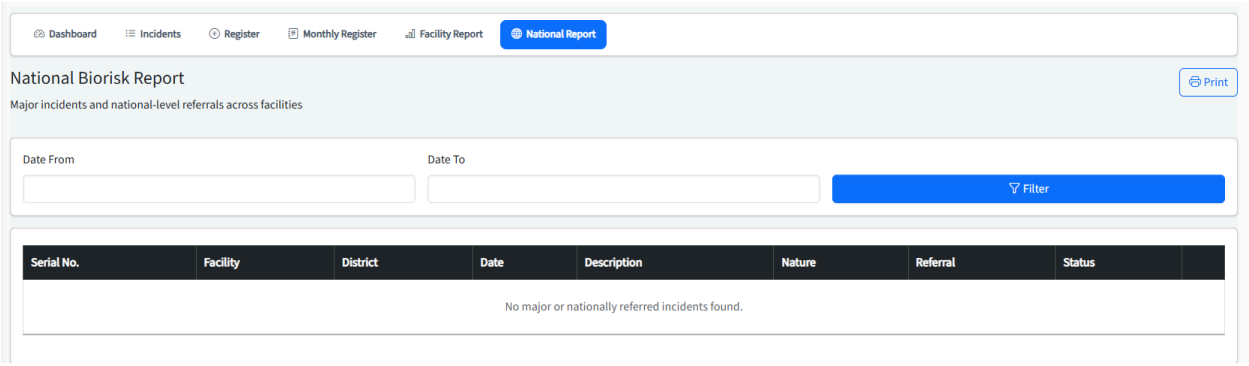
The National Report consolidates major biosafety and biosecurity incidents referred from multiple laboratories and health facilities.

The report supports oversight by the Ministry of Health and national laboratory programmes.

How do I generate the National Biosafety Report?

Navigation

Main Menu ⟶ Biosafety & Biosecurity ⟶ National Report



Steps

1. Open **National Report**.
2. Select the reporting period.
3. Review the list of nationally referred incidents.
4. Click **Print** to generate a hard copy if required.

The report displays:

- Incident Number
- Reporting Facility
- District
- Date of Incident

- Description
- Nature of Incident
- Referral Status
- Investigation Status

Expected Result

The report provides a consolidated view of major biosafety and biosecurity incidents reported nationally.

> **Best Practice:** National reports should be reviewed periodically by Ministry of Health programme managers and laboratory leadership to identify emerging risks, monitor compliance with biosafety standards, and guide policy, training, and resource allocation. Timely analysis of national incident trends strengthens preparedness and contributes to a safer laboratory network across all levels of the health system.

Pathology

The **Pathology** module supports the management of histopathology and cytology laboratory services within ALIS. It enables laboratory personnel to register pathology requests, receive and process specimens, monitor test progress, record pathology findings, generate reports, and analyze pathology service performance through interactive dashboards.

The module provides a structured workflow for specimen handling from receipt through diagnosis, ensuring traceability, quality assurance, and timely reporting of pathology investigations.

> **Important:** Pathology requests should only be created after patient details have been verified. All specimens must be properly labeled and accompanied by complete clinical information before processing.

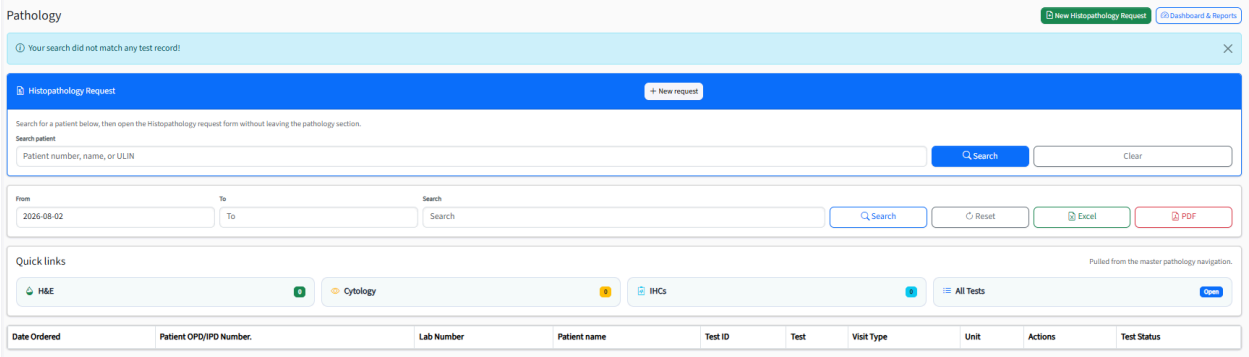
Pathology Test List

The **Test List** is the primary workspace for managing all pathology requests. It allows users to search for patients, create new histopathology requests, monitor specimen status, and access pathology dashboards and reports.

How do I view Pathology Test Requests?

Navigation

Main Menu → Pathology → Test List



Steps

1. Open **Pathology**.
2. Select **Test List**.
3. Search for a patient using:
    - Patient Number
    - Patient Name
    - ULIN (Unique Laboratory Identification Number)
4. Optionally filter records using the **From** and **To** dates.
5. Click **Search**.

The results display:

- Date Ordered
- Patient Number
- Laboratory Number
- Patient Name
- Test ID
- Requested Test
- Visit Type
- Ordering Unit
- Test Status
- Available Actions

Expected Result

Matching pathology requests are displayed and can be managed from the action menu.

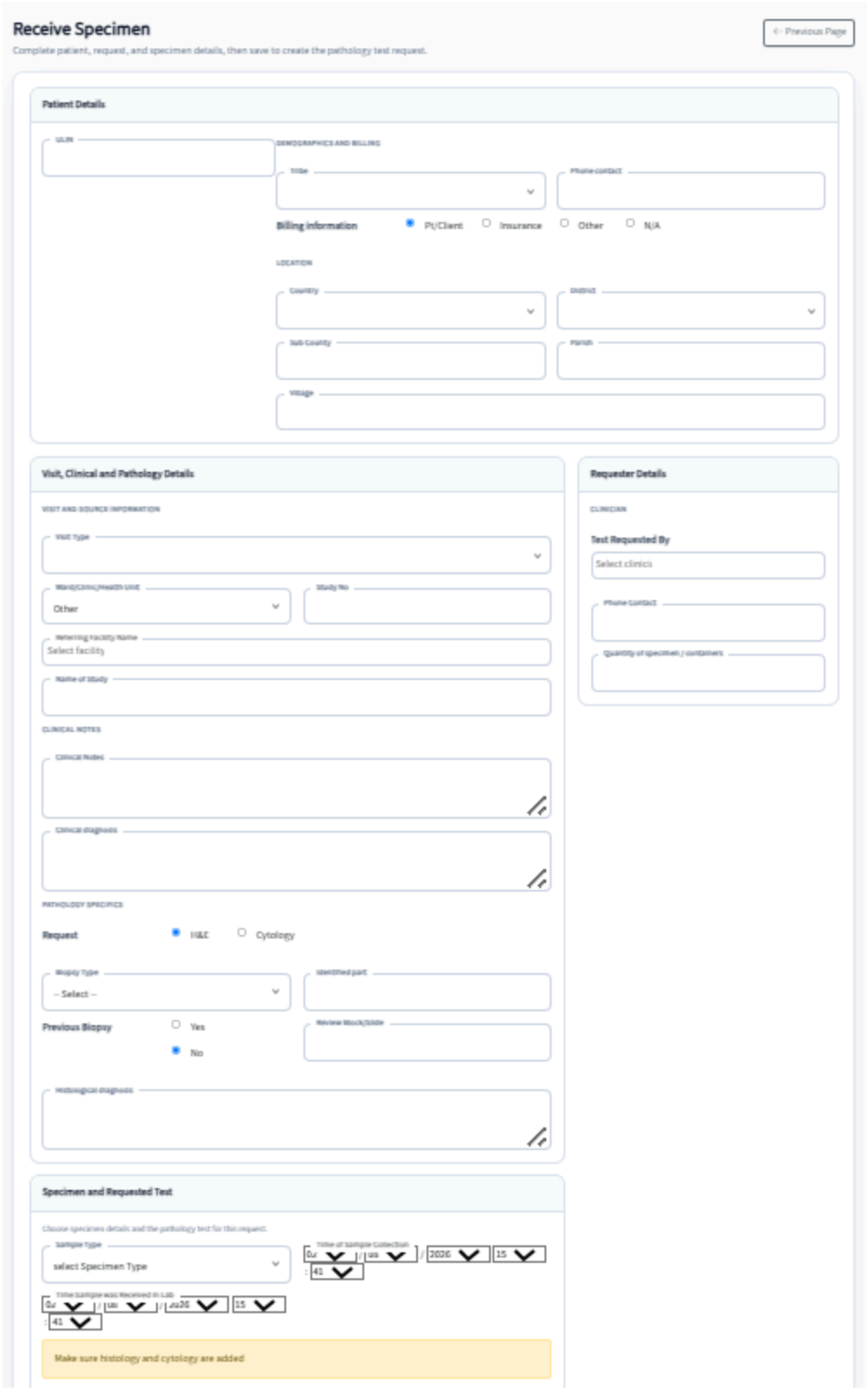
> **Best Practice:** Always verify the patient identity and specimen details before opening or modifying an existing pathology request.

How do I create a new Histopathology Request?

A histopathology request records the laboratory investigation required for tissue specimens submitted for pathological examination.

Navigation

Main Menu → Pathology → Test List → New Histopathology Request


Receive Specimen
Complete patient, request, and specimen details, then save to create the pathology test request.
← Previous Page
Patient Details
ULIN
DEMOGRAPHICS AND BILLING
Title
Phone contact
Billing information
Pt/Client
Insurance
Other
N/A
LOCATION
Country
District
Sub County
Parish
Village
Visit, Clinical and Pathology Details
VISIT AND SOURCE INFORMATION
Visit Type
Ward/Clinic/Health Unit
Other
Study No
Referring Facility Name
Select facility
Name of Study
CLINICAL NOTES
Clinical Notes
Clinical diagnosis
PATHOLOGY SPECIFICS
Request
H&E
Cytology
Biopsy Type
-- Select --
Identified part
Previous Biopsy
Yes
No
Review Block/Slide
Histological diagnosis
Requester Details
CLINICIAN
Test Requested By
Select clinicis
Phone contact
Quantity of specimen / containers
Specimen and Requested Test
Choose specimen details and the pathology test for this request.
Sample Type
select Specimen Type
Time of Sample Collection
2026
15
41
Time Sample was Received in Lab
2026
15
41
Make sure histology and cytology are added

Steps

1. Open **Pathology**.
2. Search for and select the patient.
3. Click **New Histopathology Request**.
4. Complete all required request information.
5. Record the specimen details.
6. Enter the clinical history or provisional diagnosis.
7. Save the request.

Expected Result

The histopathology request is successfully created and becomes available for specimen reception and laboratory processing.

> **Best Practice:** Include complete clinical history and provisional diagnosis to assist the pathologist in making an accurate interpretation.

How do I receive a Histopathology Specimen?

Once a pathology request has been created, the submitted specimen should be received and verified before laboratory processing begins.

Navigation

Main Menu → Pathology → Test List → Receive Specimen

Steps

1. Locate the pathology request.
2. Open the specimen reception form.
3. Verify:
    - Patient identity
    - Specimen container
    - Specimen label
    - Accompanying request form
4. Record the specimen receipt information.
5. Save the record.

Expected Result

The specimen is successfully received and marked as ready for laboratory processing.

Best Practice: Reject or quarantine specimens that are unlabeled, leaking, damaged, or inconsistent with the accompanying request documentation according to laboratory specimen acceptance policies.

Pathology Dashboard

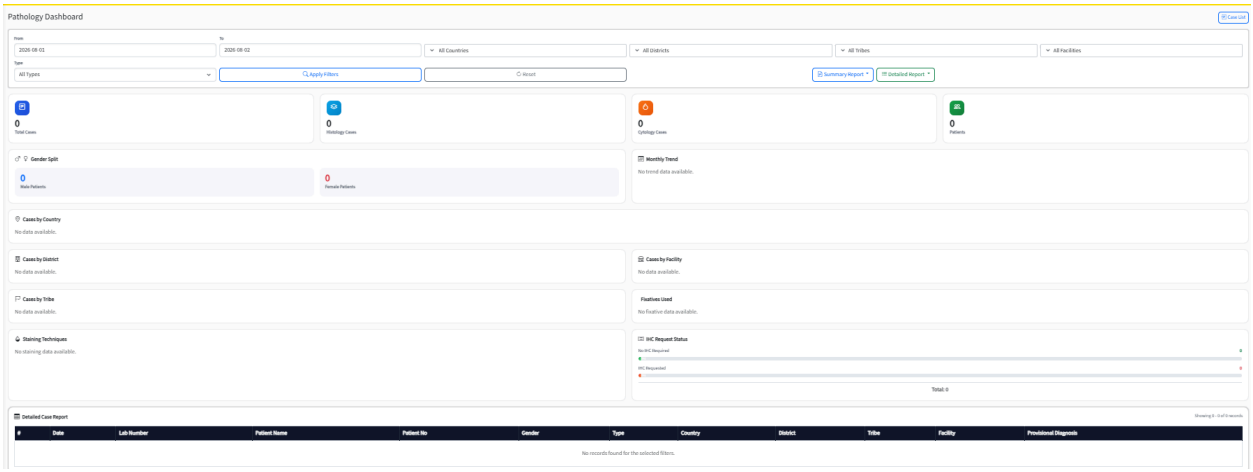
The Pathology Dashboard provides an overview of pathology workload, specimen trends, patient demographics, staining techniques, and Immunohistochemistry (IHC) requests.

The dashboard supports operational monitoring and management decision-making.

How do I view the Pathology Dashboard?

Navigation

Main Menu → Pathology → Dashboard & Reports



Steps

1. Open **Dashboard & Reports**.
2. Select the reporting period.
3. Apply filters where required, including:
    - Country
    - District
    - Tribe
    - Facility
    - Pathology Type

The dashboard displays:

- Total Cases
- Histology Cases
- Cytology Cases
- Male and Female Patients
- Monthly Case Trends
- Cases by Country
- Cases by District
- Cases by Facility
- Cases by Tribe
- Fixatives Used
- Staining Techniques
- Immunohistochemistry (IHC) Request Status
- Detailed Case Report

Expected Result

The dashboard provides a comprehensive overview of pathology service delivery and case distribution for the selected reporting period.

> **Best Practice:** Laboratory Managers should review pathology trends regularly to monitor workload, turnaround time, specimen quality, and service utilization.

Quick Links

The Quick Links section provides rapid access to commonly performed pathology investigations.

Available shortcuts include:

- H&E
- Cytology
- Immunohistochemistry (IHC)
- All Tests

These shortcuts allow users to quickly filter pathology requests by investigation type.

How do I use the Quick Links?

Steps

1. Open **Pathology Test List**.
2. Select one of the available Quick Links.
3. The system automatically filters pathology requests belonging to the selected category.

Expected Result

Only pathology requests matching the selected investigation type are displayed.

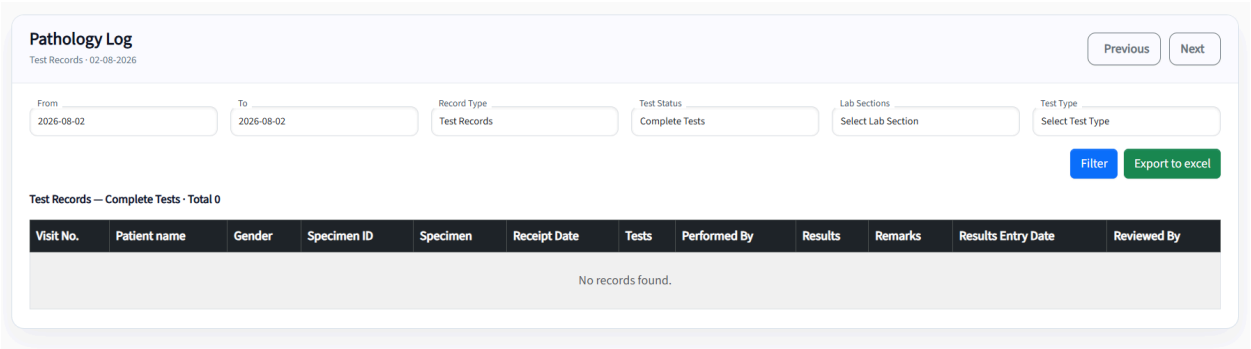
Pathology Log

The Pathology Log provides a detailed operational register of completed pathology investigations. It supports laboratory supervision, quality assurance, workload monitoring, and reporting.

How do I view the Pathology Log?

Navigation

Main Menu → Pathology → Pathology Log



Steps

1. Open **Pathology Log**.
2. Select the reporting period.
3. Choose the required filters:
    - Record Type
    - Test Status
    - Laboratory Section
    - Test Type
4. Review the displayed records.

The report includes:

- Visit Number
- Patient Name
- Gender
- Specimen ID

- Specimen Type
- Date Received
- Tests Performed
- Laboratory Personnel
- Results
- Remarks
- Date Results Entered
- Reviewed By

Expected Result

The system displays all pathology investigations matching the selected criteria.

How do I export the Pathology Log?

Steps

1. Generate the required report.
2. Click **Export to Excel**.
3. Save the exported report.

Expected Result

An Excel report containing the selected pathology records is generated and downloaded.

> **Best Practice:** The Pathology Log should be reviewed routinely to monitor turnaround times, verify result completeness, support quality audits, and identify opportunities for improving pathology service delivery. Regular review also assists laboratory managers in tracking workload distribution and maintaining accurate diagnostic records for clinical and regulatory reporting.

Blood Bank

The **Blood Bank** module supports the complete management of blood and blood products within the laboratory or health facility. It enables users to receive and register blood units, monitor inventory, manage blood transfusion requests, perform cross-matching, track blood usage, record returns and discards, and generate statutory blood bank reports.

The module promotes safe blood transfusion practices by ensuring complete traceability of every blood unit from receipt through storage, issue, transfusion, return, or disposal. It also supports compliance with Uganda Blood Transfusion Services (UBTS) reporting requirements and Ministry of Health standards.

Important: Every blood unit must be uniquely identifiable throughout its lifecycle. Users should always verify the unit number, blood group, Rh factor, expiry date, and patient identity before issuing blood for transfusion.

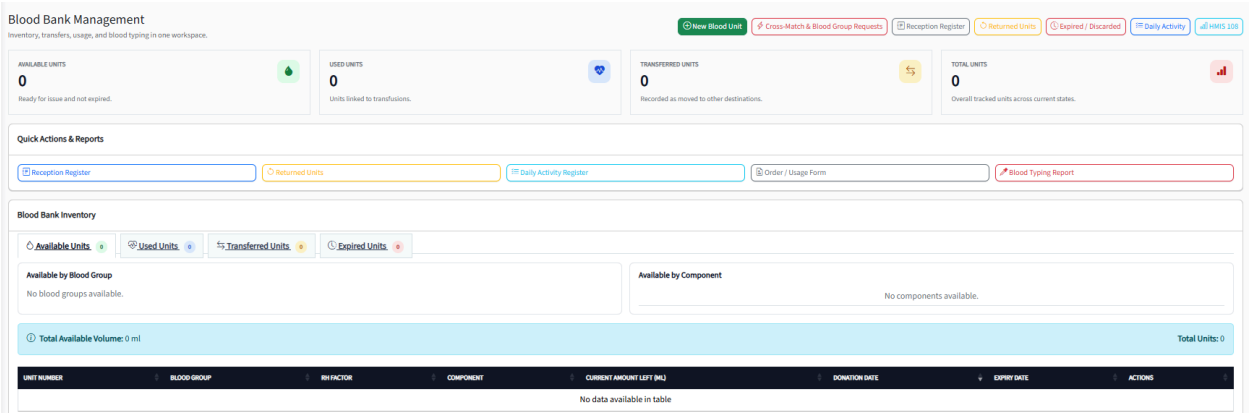
Blood Units (Blood Bank Inventory)

The **Blood Units** page serves as the primary inventory management workspace for the Blood Bank. It provides a real-time overview of available blood products and their current status.

How do I view Blood Bank Inventory?

Navigation

Main Menu ⟶ Blood Bank ⟶ Blood Units



Steps

1. Open **Blood Bank**.
2. Select **Blood Units**.
3. Review the inventory summary displayed at the top of the page.

The dashboard displays:

- Available Blood Units
- Used Units
- Transferred Units
- Total Blood Units
- Available Units by Blood Group
- Available Units by Blood Component
- Total Available Blood Volume

The inventory table displays:

- Unit Number
- Blood Group
- Rh Factor
- Blood Component
- Current Volume Remaining
- Donation Date
- Expiry Date
- Available Actions

Expected Result

The system displays the complete inventory of blood units currently available within the facility.

> **Best Practice:** Blood Bank personnel should review inventory daily to monitor stock levels, identify soon-to-expire units, and ensure adequate availability of critical blood groups.

Blood Bank Quick Actions

The Blood Units page provides quick access to commonly used Blood Bank functions.

Available shortcuts include:

- Reception Register
- Returned Units
- Daily Activity Register
- Order Usage Form
- Blood Typing Report

These shortcuts allow users to access operational reports without navigating through multiple menus.

Scan Blood Units

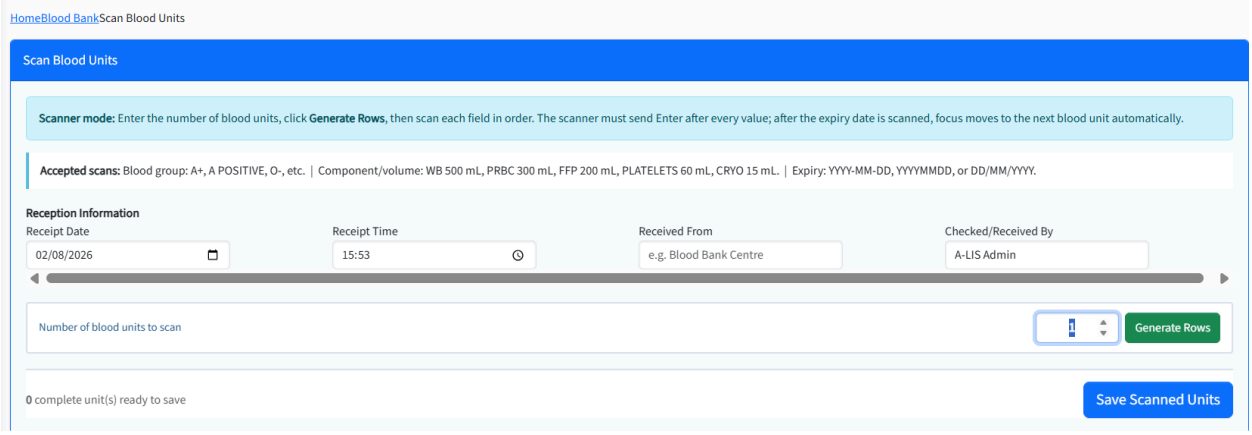
The Scan Blood Units function allows multiple blood units to be received rapidly using barcode scanners.

This significantly reduces manual data entry errors and improves blood unit traceability.

How do I scan newly received blood units?

Navigation

Main Menu → Blood Bank → Scan Blood Units



Steps

1. Open **Scan Blood Units**.
2. Enter:
    - Receipt Date
    - Receipt Time
    - Received From
    - Checked/Received By
3. Specify the number of blood units to receive.
4. Click **Generate Rows**.
5. Scan or enter each blood unit in sequence:
    - Unit Number
    - Blood Group
    - Blood Component
    - Volume
    - Expiry Date
6. Verify all captured information.
7. Save the reception.

Expected Result

All scanned blood units are successfully registered into the Blood Bank inventory.

> **Best Practice:** Ensure barcode scanners are configured to automatically send the Enter key after each scan to streamline the reception process.

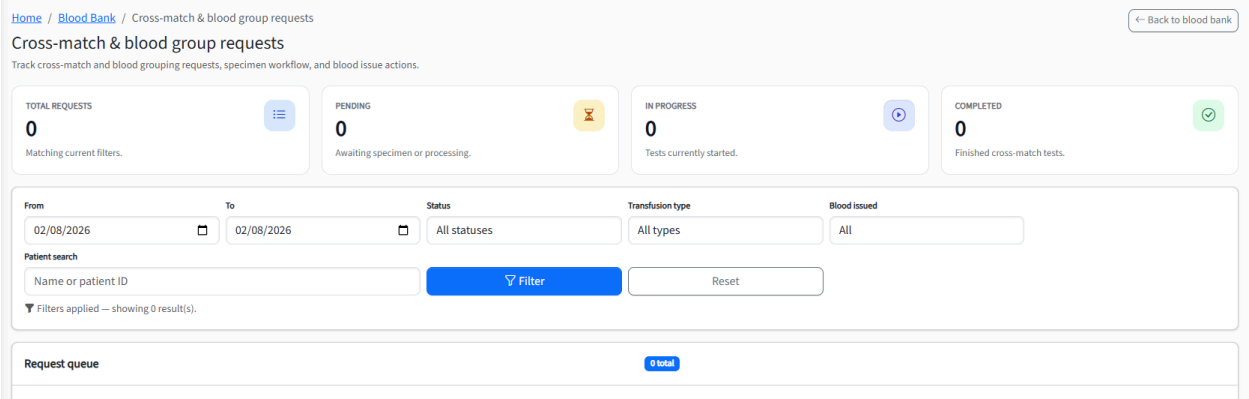
Cross-match & Blood Group Requests

This section manages all blood grouping and compatibility testing requests before blood is issued for transfusion.

How do I view Cross-match Requests?

Navigation

Main Menu ⟶ Blood Bank ⟶ Cross-match & Blood Group Requests



Steps

1. Open **Cross-match & Blood Group Requests**.
2. Apply filters such as:
    - Date Range
    - Status
    - Transfusion Type
    - Blood Issued
3. Search using the patient's name or identification number.

The page displays:

- Total Requests
- Pending Requests
- Requests in Progress
- Completed Requests

Expected Result

The system displays all blood grouping and compatibility requests matching the selected criteria.

> **Best Practice:** Blood should never be issued before compatibility testing has been completed and verified by authorized laboratory personnel.

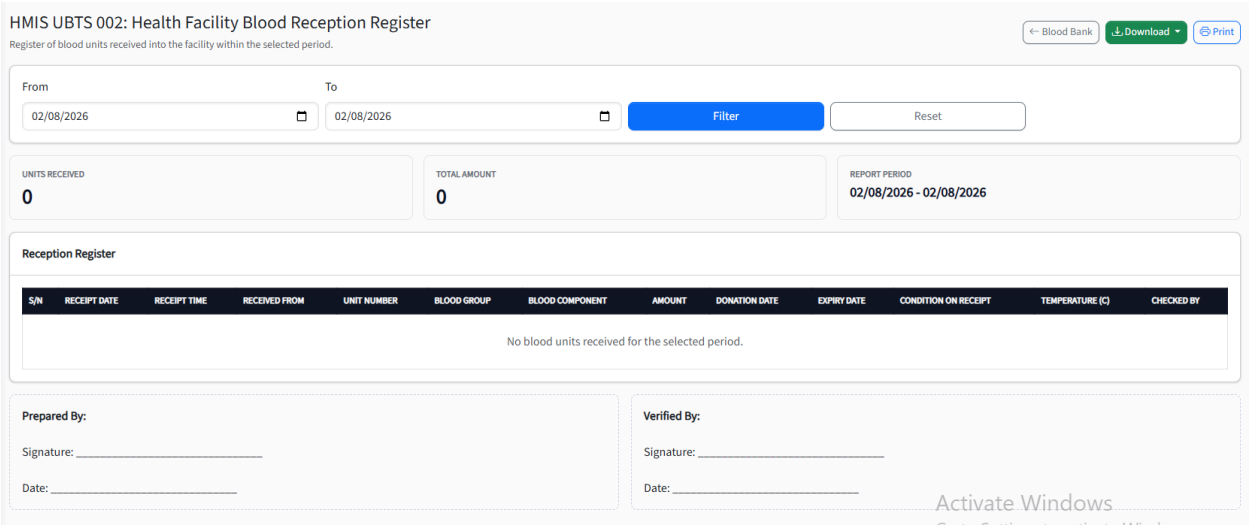
Blood Reception Register

The Blood Reception Register records all blood units received into the health facility.

How do I generate the Blood Reception Register?

Navigation

Main Menu → Blood Bank → Reception Register



Steps

1. Open **Reception Register**.
2. Select the reporting period.
3. Review the register.

The report includes:

- Receipt Date
- Receipt Time
- Source Facility
- Unit Number
- Blood Group
- Blood Component
- Volume
- Donation Date
- Expiry Date
- Condition on Receipt

- Storage Temperature
- Receiving Officer

Expected Result

The register displays all blood units received during the selected reporting period.

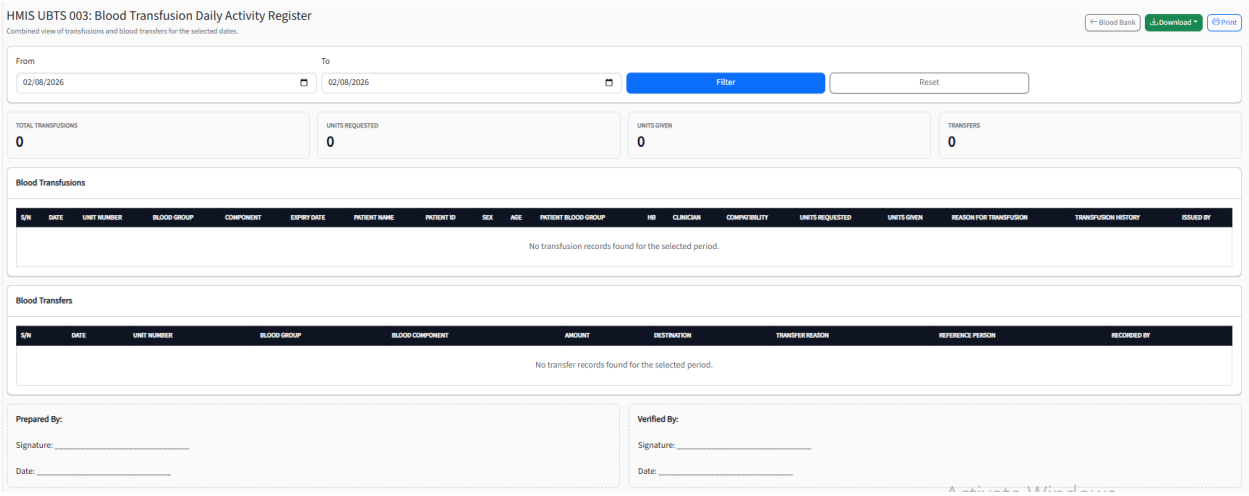
Daily Activity Register

The Daily Activity Register provides a complete record of blood transfusions and blood transfers performed within the facility.

How do I generate the Daily Activity Register?

Navigation

Main Menu → Blood Bank → Daily Activity Register



Steps

1. Select the reporting dates.
2. Review the Blood Transfusion section.
3. Review the Blood Transfer section.

The report includes:

- Blood Units Requested
- Units Issued

- Blood Units Transfused
- Blood Transfers
- Compatibility Status
- Clinician
- Reason for Transfusion
- Transfusion History

Expected Result

The report provides a complete summary of daily blood bank activities.

> **Best Practice:** Review the Daily Activity Register at the end of each working day to ensure all blood issues and transfusions have been accurately documented.

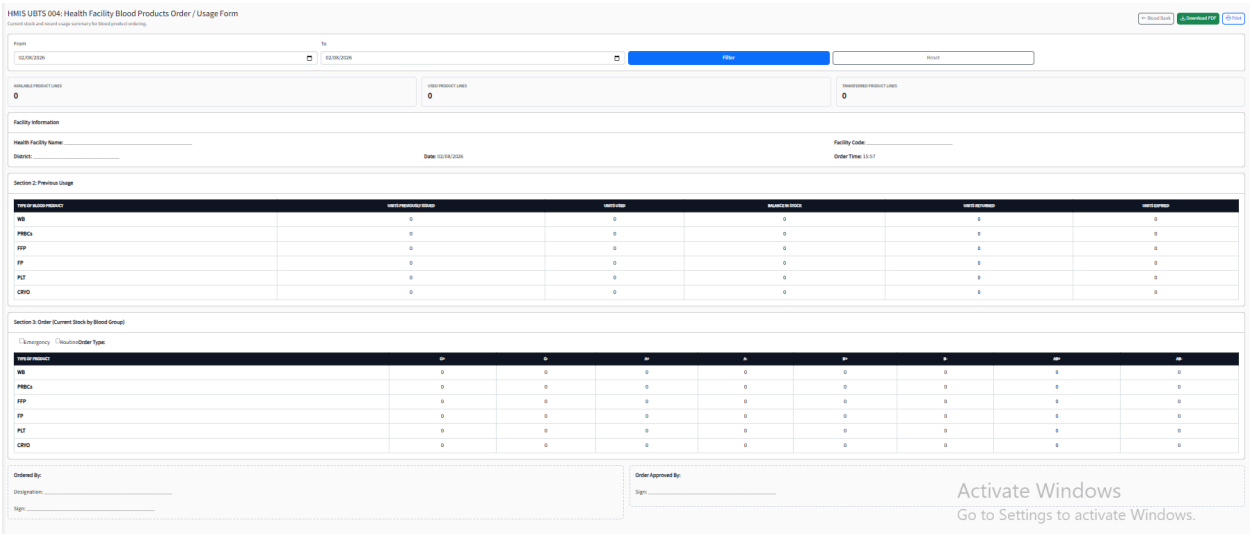
Blood Products Order / Usage Form

The Order / Usage Form assists health facilities in monitoring blood product consumption and requesting additional stock.

How do I prepare the Blood Products Order / Usage Form?

Navigation

Main Menu ⟶ Blood Bank ⟶ Order Usage Form



Steps

1. Select the reporting period.
2. Review previous blood usage.
3. Verify current stock levels.
4. Select the order type:
    - Emergency
    - Routine
5. Complete the required quantities for each blood component and blood group.
6. Submit the completed order for approval.

Expected Result

The system generates the Blood Products Order / Usage Form for stock replenishment.

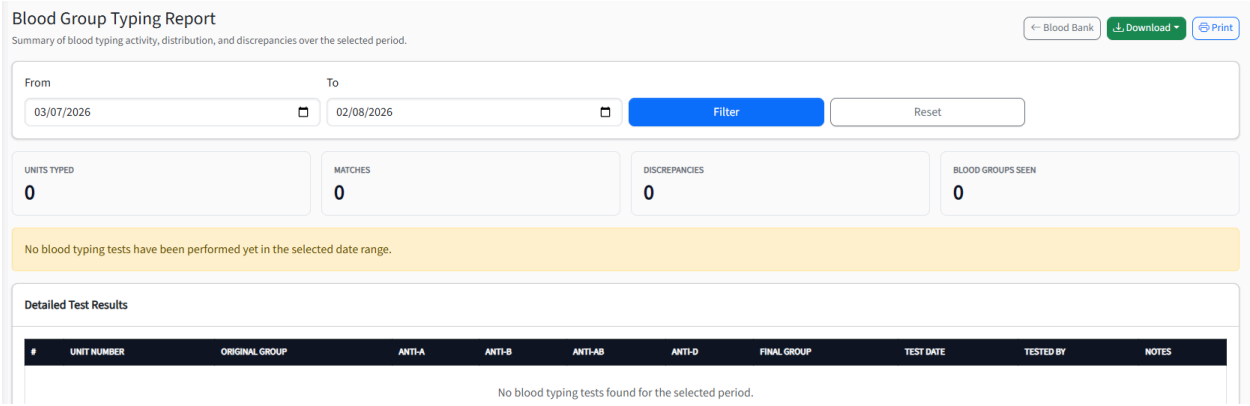
Blood Typing Report

The Blood Typing Report summarizes all blood grouping activities performed within the selected reporting period.

How do I generate the Blood Typing Report?

Navigation

Main Menu → Blood Bank → Blood Typing Report



Steps

1. Select the reporting dates.
2. Generate the report.

The report summarizes:

- Total Blood Units Typed
- Blood Group Matches
- Blood Group Discrepancies
- Blood Groups Identified
- Detailed Test Results

Expected Result

The report provides a summary of blood typing performance and detailed typing records.

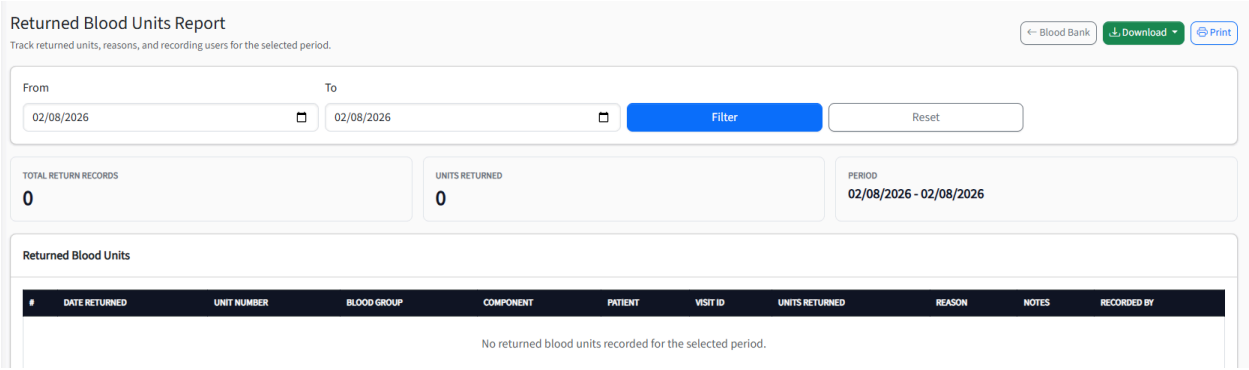
Returned Blood Units

The Returned Blood Units report records blood units that were returned after issue but before transfusion.

How do I view Returned Blood Units?

Navigation

Main Menu ⟶ Blood Bank ⟶ Returned Units



Steps

1. Select the reporting period.
2. Review the returned blood unit records.

The report includes:

- Return Date
- Unit Number
- Blood Group
- Component

- Patient
- Visit Number
- Quantity Returned
- Reason for Return
- Notes
- Recorded By

Expected Result

The report displays all returned blood units for the selected period.

> **Best Practice:** Returned blood units should only be returned to stock after confirming that storage conditions, transport temperature, and handling complied with applicable blood storage requirements.

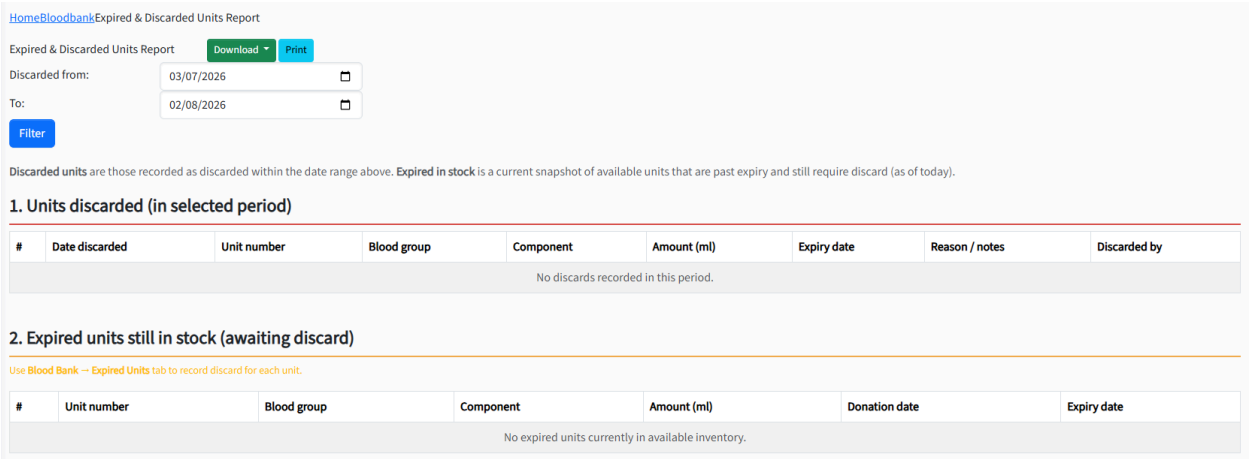
Expired & Discarded Blood Units

This report tracks blood units that have either expired or been formally discarded.

How do I monitor expired and discarded blood units?

Navigation

Main Menu ⟶ Blood Bank ⟶ Expired & Discarded



Steps

1. Select the reporting period.
2. Review:
    - Units Discarded
    - Expired Units Still in Stock

The report includes:

- Unit Number
- Blood Group
- Blood Component
- Volume
- Donation Date
- Expiry Date
- Disposal Reason
- Discarded By

Expected Result

The report identifies blood units requiring disposal and documents completed discard activities.

> **Best Practice:** Expired blood units should be removed from active inventory immediately and disposed of according to national blood safety and biomedical waste management guidelines.

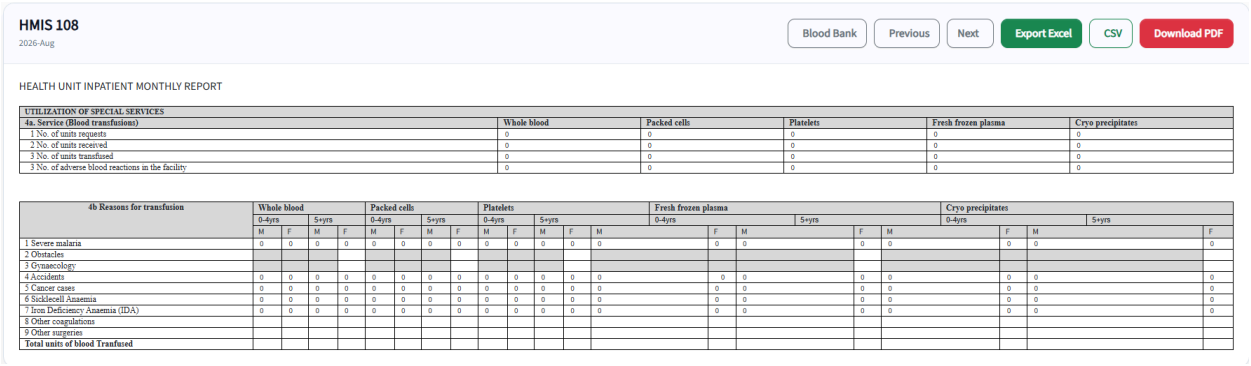
HMIS 108 Report

The HMIS 108 Report is the Ministry of Health monthly report for blood transfusion services. It summarizes blood product requests, receipts, transfusions, adverse reactions, and indications for transfusion.

How do I generate the HMIS 108 Report?

Navigation

Main Menu → Blood Bank → HMIS 108



HMIS 108

2026-Aug

Blood Bank | Previous | Next | Export Excel | CSV | Download PDF

HEALTH UNIT INPATIENT MONTHLY REPORT

UTILIZATION OF SPECIAL SERVICES					
4a. Service (Blood transfusions)	Whole blood	Packed cells	Platelets	Fresh frozen plasma	Cryo precipitates
1 No. of units requests	0	0	0	0	0
2 No. of units received	0	0	0	0	0
3 No. of units transfused	0	0	0	0	0
3 No. of adverse blood reactions in the facility	0	0	0	0	0

4b Reasons for transfusion	Whole blood				Packed cells				Platelets				Fresh frozen plasma				Cryo precipitates			
	0-4yrs		5+yrs		0-4yrs		5+yrs		0-4yrs		5+yrs		0-4yrs		5+yrs		0-4yrs		5+yrs	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1 Severe malaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 Obstacles																				
3 Gynaecology																				
4 Accidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Cancer cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Sicklecell Anaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 Iron Deficiency Anaemia (IDA)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Other coagulations																				
9 Other surgeries																				
Total units of blood Tranfused																				

Steps

1. Open **HMIS 108**.
2. Select the reporting month.
3. Review the automatically generated report.
4. Use the available export options to produce the report in:
    - Excel
    - CSV
    - PDF

The report summarizes:

- Blood Units Requested
- Blood Units Received
- Blood Units Transfused
- Adverse Blood Reactions
- Blood Product Utilization by Component
- Clinical Indications for Transfusion
- Total Blood Units Transfused

Expected Result

The HMIS 108 report is generated and is ready for submission to the Ministry of Health or Uganda Blood Transfusion Services.

> **Best Practice:** Before submitting the HMIS 108 report, verify that all blood transfusions, returns, discards, and adverse transfusion reactions have been entered into ALIS. Accurate and complete reporting supports national blood supply planning, strengthens patient safety, and ensures compliance with Ministry of Health reporting requirements.

Access Control

The **Access Control** module enables authorized system administrators to manage user accounts, assign roles, configure permissions, and maintain facility information. It ensures that every user accesses only the functions necessary for their responsibilities, thereby protecting sensitive patient and laboratory information while supporting accountability and compliance with Ministry of Health policies.

ALIS uses **Role-Based Access Control (RBAC)**, where permissions are assigned to roles rather than directly to individual users. Users inherit the permissions associated with their assigned role.

> **Important:** Access Control functions should only be performed by authorized System Administrators. Changes to user accounts, roles, or permissions affect system security and should be carefully reviewed before being applied.

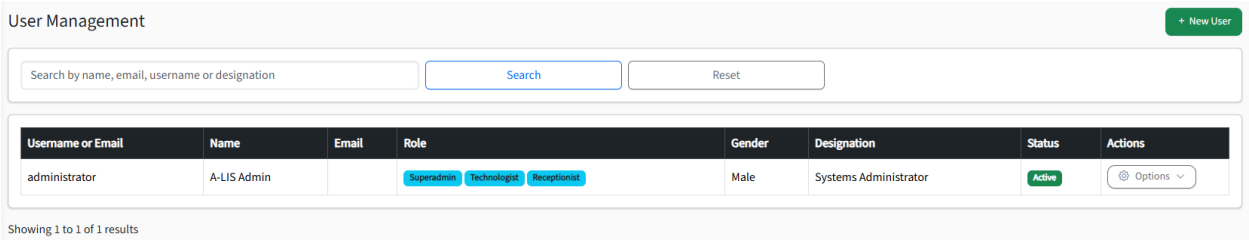
User Accounts

The **User Accounts** page allows administrators to create, manage, and maintain system users.

How do I view user accounts?

Navigation

Main Menu ⟶ Access Control ⟶ User Accounts



Steps

1. Open **Access Control**.
2. Select **User Accounts**.
3. Use the search box to locate users by:
    - Full Name
    - Username
    - Email Address
    - Designation

The user list displays:

- Username

- Full Name
- Email Address
- Assigned Role(s)
- Gender
- Designation
- Account Status
- Available Actions

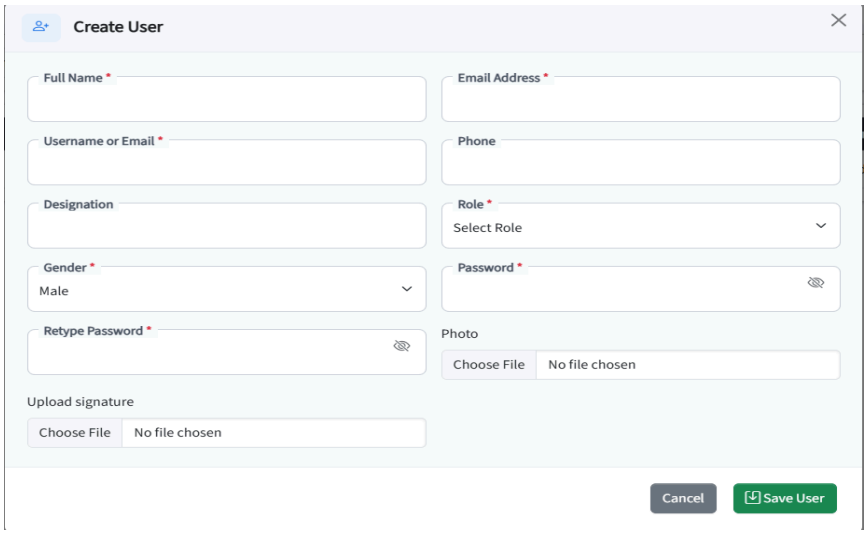
Expected Result

The system displays all registered users matching the selected search criteria.

How do I create a new user account?

Navigation

Main Menu ⟶ Access Control ⟶ User Accounts ⟶ New User



Steps

1. Click **New User**.
2. Complete the required information:

- Full Name
- Email Address
- Username
- Telephone Number
- Designation
- System Role
- Gender

- Password
- Confirm Password

3. Optionally upload:

- User Photograph
- Electronic Signature

4. Click **Save**.

Expected Result

A new user account is created and becomes available for system access.

> **Best Practice:** Assign the lowest level of access required for the user's responsibilities (Principle of Least Privilege). Avoid assigning administrative roles unless operationally necessary.

How do I manage an existing user account?

From the **Options** menu, administrators may:

- View user details
- Edit user information
- Delete user accounts (where appropriate)

Expected Result

The selected user account is updated or managed according to the action performed.

> **Best Practice:** Rather than deleting accounts of staff who leave the organization, consider disabling or deactivating them where organizational policy permits to preserve audit history.

Assign Roles

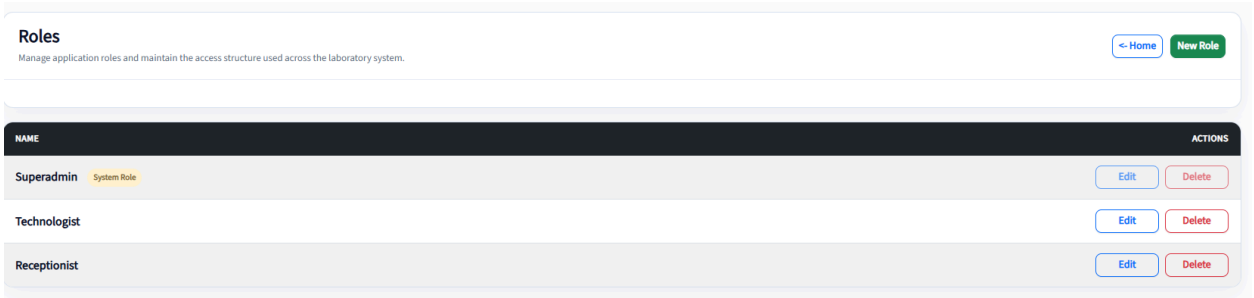
Roles determine what functions a user can access within ALIS.

The **Assign Roles** page enables administrators to assign or change roles for individual users.

How do I assign a role to a user?

Navigation

Main Menu → Access Control → Assign Roles



Steps

1. Open **Assign Roles**.
2. Locate the required user.
3. Select or deselect the appropriate role(s).
4. Save the changes.

Expected Result

The selected user immediately inherits the permissions associated with the assigned role.

> **Best Practice:** Assign only roles that correspond to the user's current responsibilities. Regularly review user roles to ensure access remains appropriate.

How do I create a new role?

Steps

1. Click **New Role**.
2. Enter:

- Role Name
- Description

3. Save the role.

Expected Result

The new role becomes available for permission assignment.

Permissions

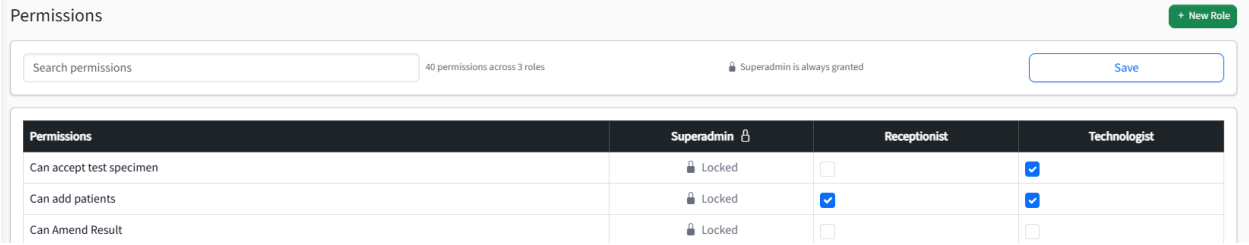
Permissions define the specific system functions available to each role.

Rather than assigning permissions directly to users, ALIS assigns permissions to roles, which are then inherited by users.

How do I manage role permissions?

Navigation

Main Menu ⟶ Access Control ⟶ Permissions



Steps

1. Open **Permissions**.
2. Review the available permissions.
3. Enable or disable permissions for the required role.
4. Save the changes.

Expected Result

The selected role is granted or denied access to the chosen system functions.

> **Important:** The **Superadmin** role automatically has unrestricted access to all system functions and permissions.

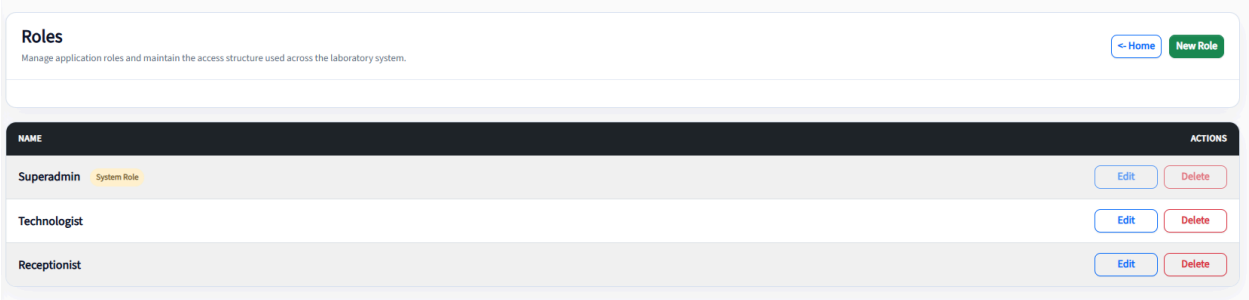
Roles

The Roles page provides an overview of all user roles configured within ALIS.

How do I manage roles?

Navigation

Main Menu ⟶ Access Control ⟶ Roles



Steps

1. Open **Roles**.
2. Review the available system roles.
3. Create new roles where necessary.
4. Modify role information as required.

Expected Result

The role structure reflects the organization's access control policy.

> **Best Practice:** Maintain a limited number of clearly defined roles to simplify user administration and reduce security risks.

Facility Settings

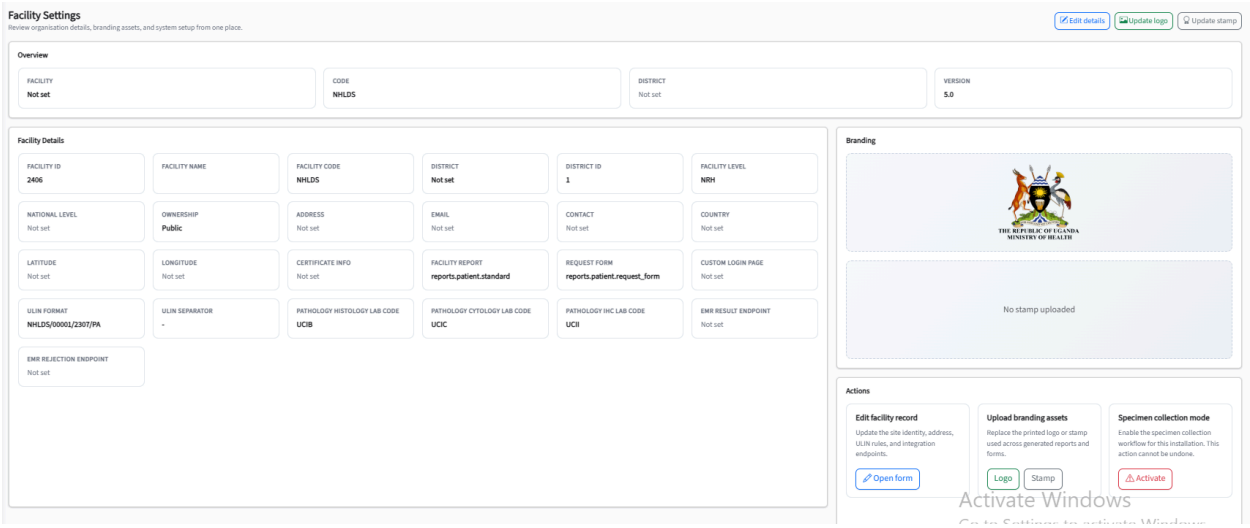
The **Facility Settings** page stores organization-specific information used throughout ALIS, including facility identity, branding, laboratory codes, integration settings, and reporting configuration.

Changes made on this page affect the entire system.

How do I view Facility Settings?

Navigation

Main Menu → Access Control → Set Up Facility Details



Steps

1. Open **Facility Settings**.
2. Review the current facility information.

The page displays:

- Facility Name
- Facility Code
- District
- Facility Level
- Ownership
- Address
- Email
- Telephone Contact
- Country
- Geographic Coordinates
- System Version
- ULIN Format
- Pathology Laboratory Codes
- EMR Integration Endpoints
- Facility Branding
- Reporting Templates

Expected Result

The complete facility configuration is displayed for review.

How do I update Facility Information?

Steps

1. Click **Edit Details**.
2. Update the required facility information.
3. Save the changes.

Expected Result

The updated facility information is applied throughout ALIS.

> **Best Practice:** Changes to the ULIN format, integration endpoints, and facility identity should only be performed by authorized system administrators, as these settings affect patient identification, interoperability, and report generation.

How do I update the Facility Logo or Official Stamp?

Steps

1. Open **Facility Settings**.
2. Select either:
    - **Update Logo**, or
    - **Update Stamp**
3. Choose the appropriate image file.
4. Save the changes.

Expected Result

The uploaded logo or official stamp will automatically appear on laboratory reports, request forms, certificates, and other generated documents.

How do I enable Specimen Collection Mode?

Specimen Collection Mode enables specimen collection workflows for the current ALIS installation.

Steps

1. Navigate to **Facility Settings**.
2. Review the warning message carefully.
3. Select **Enable Specimen Collection Mode**.
4. Confirm the action.

Expected Result

The specimen collection workflow is activated for the facility.

> **Important:** This action cannot be reversed. Enable Specimen Collection Mode only after confirming that the facility is ready to use specimen collection workflows.

> **Administration Best Practice:** Access Control should be reviewed periodically as part of routine system administration. Administrators should regularly audit user accounts, verify that inactive staff no longer have access, review role assignments, and ensure permissions remain aligned with current responsibilities. Maintaining accurate user access controls strengthens system security, protects patient confidentiality, and supports compliance with Ministry of Health information governance and data protection policies.

Other Resources

The **Other Resources** module provides convenient access to important Ministry of Health websites, national laboratory dashboards, and other external resources commonly used by laboratory personnel. These shortcuts eliminate the need to manually enter website addresses and provide a single point of access to related health information systems.

Selecting any resource opens the corresponding website or application in a new browser tab without interrupting the current ALIS session.

> **Important:** Access to some external resources may require separate user accounts and permissions. If you are unable to access a resource, contact your System Administrator or the system owner responsible for that application.

Early Infant Diagnosis (EID) Dashboard

The **EID Dashboard** provides national and facility-level monitoring of Early Infant Diagnosis services. It supports the monitoring of HIV testing among infants by presenting key performance indicators, testing trends, turnaround times, and programme performance.

How do I open the EID Dashboard?

Navigation

Main Menu → Other Resources → EID Dashboard

Steps

1. Open **Other Resources**.

2. Select **EID Dashboard**.

Expected Result

The EID Dashboard opens in a new browser tab, allowing users to review programme performance and laboratory indicators.

Viral Load Dashboard

The **Viral Load Dashboard** provides access to viral load testing statistics and programme performance indicators. It enables laboratory managers and programme teams to monitor testing volumes, viral suppression trends, turnaround times, and facility performance.

How do I open the Viral Load Dashboard?

Navigation

Main Menu → Other Resources → Viral Load Dashboard

Steps

1. Open **Other Resources**.
2. Select **Viral Load Dashboard**.

Expected Result

The Viral Load Dashboard opens in a new browser tab, displaying current viral load programme information.

CPHL / UNHLS Website

The **Central Public Health Laboratories (CPHL) / Uganda National Health Laboratory Services (UNHLS) Website** provides official information relating to national laboratory services, laboratory policies, announcements, publications, training materials, and other reference resources.

How do I open the CPHL / UNHLS Website?

Navigation

Main Menu → Other Resources → CPHL / UNHLS Website

Steps

1. Open **Other Resources**.
2. Select **CPHL / UNHLS Website**.

Expected Result

The official CPHL / UNHLS website opens in a new browser tab.

Ministry of Health Website

The **Ministry of Health Website** provides access to official health policies, clinical guidelines, strategic plans, public health information, national reports, and other Ministry publications relevant to health service delivery in Uganda.

How do I open the Ministry of Health Website?

Navigation

Main Menu → Other Resources → Ministry of Health Website

Steps

1. Open **Other Resources**.
2. Select **Ministry of Health Website**.

Expected Result

The official Ministry of Health website opens in a new browser tab.

Using External Resources

The resources available under this module are intended to support laboratory operations by providing quick access to national systems, reference information, and programme monitoring tools. Users should ensure they are working with the most current information available on these external platforms and comply with any access controls or data confidentiality requirements applicable to each system.

> **Best Practice:** Use the **Other Resources** module as the primary entry point for accessing Ministry of Health laboratory dashboards and websites. This helps ensure users are directed to the official and most up-to-date resources while reducing the risk of using outdated bookmarks or unofficial websites.