

MGIT culture

Module 4: Sample reception and accessioning

Date:

Venue:

Name:

Content outline

- Specimen collection
- Materials used in sample collection
- Specimen receipt and accessioning
- Specimen rejection criteria

Specimen handling

- To obtain accurate results from TB culture procedures specimens must be:

🌐 Kept cool (2-8°C) and promptly transported to the laboratory

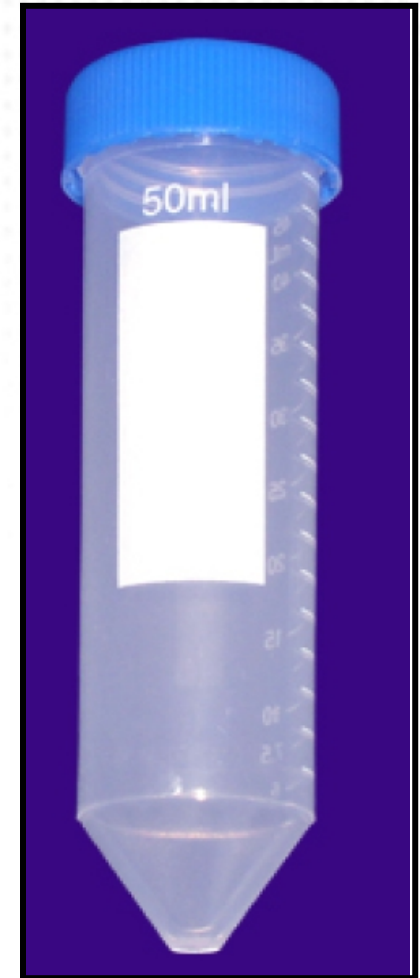
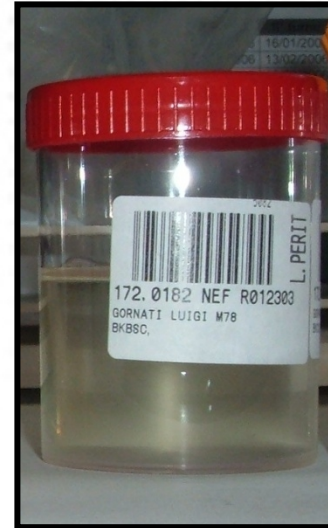
🌐 Analyzed for quality before testing

🌐 Processed as soon as possible upon arrival at the culture laboratory

Containers for sputum collection

- Sterile, strong & unbreakable
- Leak proof, screw-capped with a water-tight seal
- Translucent or clear material
- Single use
- Easily-labelled walls
- Up to 50 ml capacity

50 ml conical tubes ideal since they can be used for processing



role play (five minutes)

- Demonstrate proper sputum collection practices including all the precautions and instructions to follow

Requests form

Code: P010 F1 Version: 3.0 Effective date: 09-Aug-2017 Authorized by: Program Manager

National TB and Leprosy Programme FORM 03 CULTURE AND DST REQUEST FORM 03

TSRS
IDENTIFICATION
NUMBER
TC

DATE:

1.0 PATIENT IDENTIFICATION

Name: Sex: Age (years):
Patient NIN: Unit TB No: DR TB No:
Contact Tel No: LC1/Village: Parish/ward: Sub County:
District of Residence: Next of Kin name: Next of Kin Contact:

2.0 HEALTH FACILITY DETAILS:

Name of requesting facility: District: Health Region:
Treatment facility: District: Health Region:

3.0 CLINICAL INFORMATION PATIENT CATEGORY

☐ MDR contact ☐ New Patient ☐ Presumptive XDR TB ☐ Return after LTFU
☐ Relapse ☐ Failure (1st line Rx) ☐ Previously Treated for TB ☐ Rx History unknown
☐ Health worker ☐ Failure (2nd line Rx) ☐ Other (specify):

4.0 ANTI-TUBERCULOSIS DRUGS EVER USED

Isoniazid ☐ Rifampicin ☐ Streptomycin ☐ Ethambutol ☐ Pyrazinamide ☐
Kanamycin ☐ Amikacin ☐ Capreomycin ☐ Levofloxacin ☐ Other:

5.0 REASONS FOR EXAMINATION REQUESTED

☐ Diagnostic follow up (Specify month of treatment when sample was collected below)
☐ MDR -TB Patient monitoring / Follow up
☐ GeneXpert
☐ Other reason (specify):

6.0 SPECIMEN INFORMATION

Type of Specimen: Date collected: Time:

Tick Month of treatment when specimen was collected

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Other month (Specify)

Peripheral Results: Smear: HIV Status: ☐ CT1 ☐ CT2 ☐ Unknown

Sample collected by: Phone number: Signature:

Name of Hub rider: Phone number: Date picked:

7.0 EXAMINATION REQUESTED

☐ Microscopy ☐ Genexpert ☐ Culture
☐ First line LPA ☐ Second line LPA ☐ Full profile Drug Susceptibility Test

Requested by: Name: Sign: Phone number:

For National TB Reference Laboratory Use:

Date Received: Time:

Appearance: Volume: Received by (Name):

Laboratory Number:

FOR ANY INQUIRIES; CALL NTRL TOLL FREE LINE 0800111133



Critical collection and transport issues

- ✦ Containers should be clearly labeled on the side, not on the cap
- ✦ Identification number on each specimen container corresponds to the identification number on the specimen log
- ✦ Request forms must be separated from specimen container during packaging for transportation

Critical collection and transport issues cont'd

- ✦ Specimen transport log should include the requested data for each patient/sample
- ✦ Number of specimen containers in the shipment box should correspond to the number of names on the specimen log
- ✦ Date shipped and the name of the referring health center are included on the specimen log

Reagents and Materials

- Pens; black/ blue and red
- Fine tip Markers
- Barcode label and scanner
- Gloves
- Sample racks
- Laboratory Request Form file
- LIMS
- Disinfectant (5% lysol, 70% ethanol)
- Rejectioncriteria and forms
- Biosafety cabinet level 2
- Bioharzard bags.

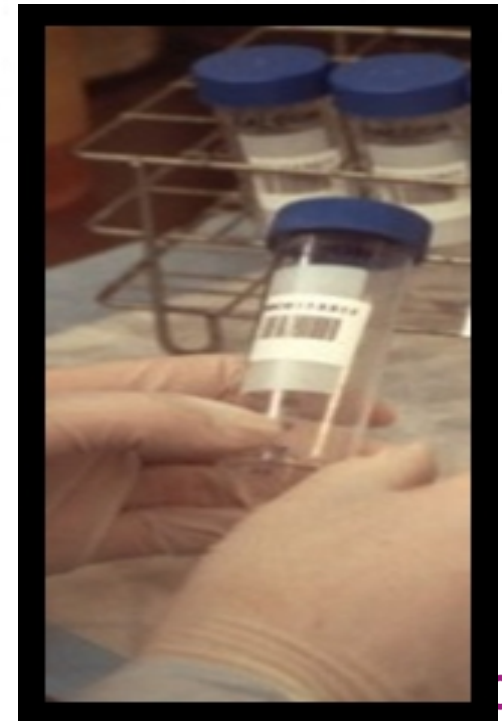
Receipt of incoming specimens

1. Inspect the courier box for signs of leakage
2. Open the courier box inside a biosafety cabinet
3. Open carefully and check for cracked or broken specimen containers.
4. Check specimen labels with individual identifications on request forms and correspondence on the specimen log
5. Disinfect the inside of the delivery box before sending it back to referring facility.

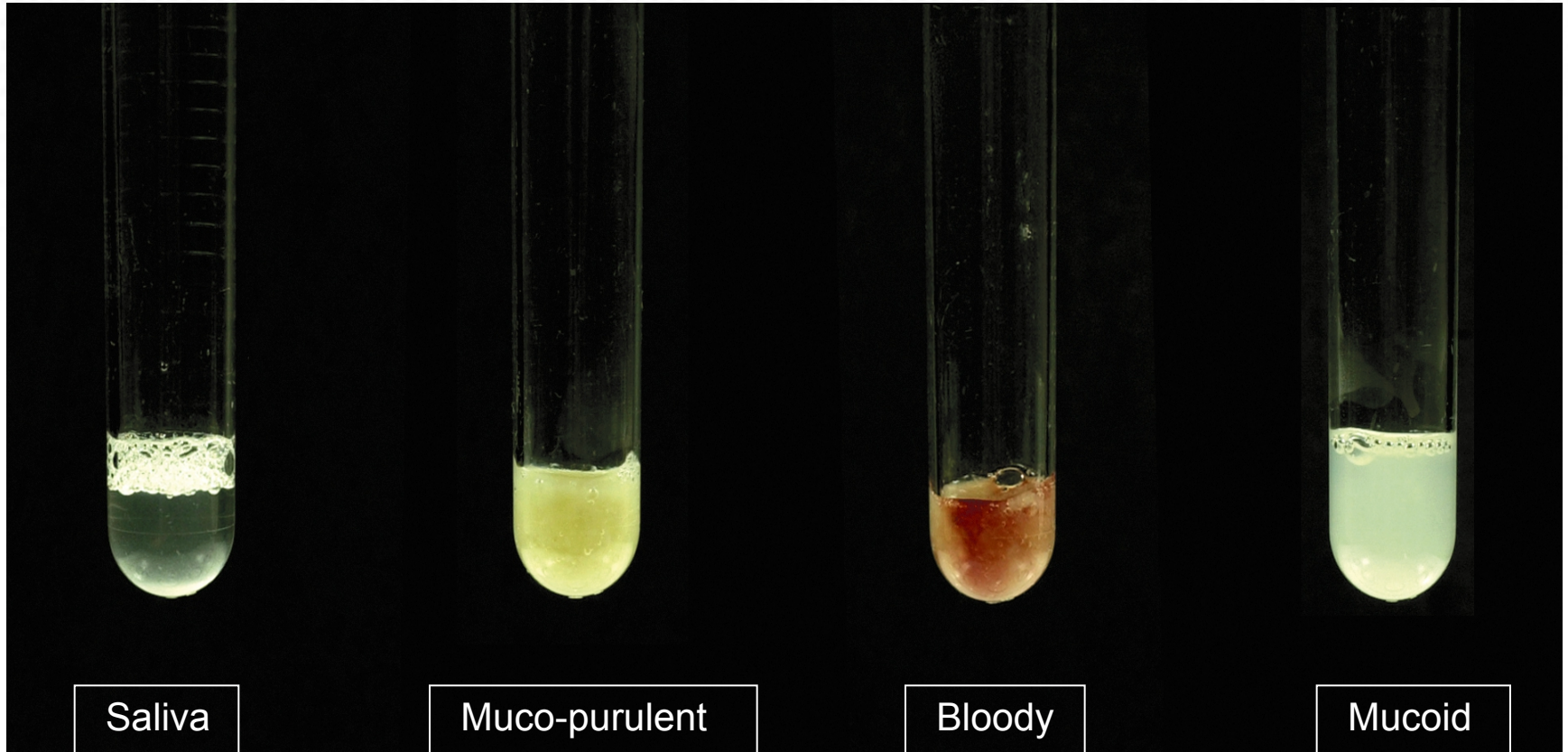


Quality assessment of sputum specimens

- Characteristics of a good sputum specimen
 - Muroid or mucopurulent appearance
 - Minimum amounts of saliva
 - Optimal volume: 3-5 ml



Assessing quality of sputum specimens



Reception procedure

- Check sample and make sure that the unique identifiers on the specimen containers matches those on the request form
- Record date & time received sample was received, initials of tech, sample appearance and sample volume on the requisition form

Sample accessioning

- Enter patient details into the laboratory's **LIMS** (electronic or paper based) and assign the sample a laboratory identification number

NOTE:

- Include a set of process controls whenever a new batch of samples are received

Sample Rejection Criteria (1)

1. Samples collected in an inappropriate container

2. Sample container is broken, damaged, or leaking.

3. Sample container is not labeled or there is not enough information on the container to



Sample Rejection Criteria (2)

4. Patient details on both request form and sample container not in agreement

5. Sample was not accompanied by a request form and cannot be traced to reconcile

6. Empty container

7. Wrong sample delivered for the test

Summary (1)

- Acceptable containers for sputum collection include those having up to 50ml capacity, are single use, sturdy, screw-cap and translucent
- At a minimum, specimens should be labeled with the patient name, identifier, and date collected

Summary (2)

- Good quality sputum specimens are those having a minimum volume of 3ml and purulent particles
- Specimens should be transported under cold-chain conditions
- Unpack specimens in a certified BSC

Assessment

1. Identify 2 safety precautions taken during sample reception
2. Identify 3 materials required for sample reception and accessioning
3. Identify 4 conditions/ situations under which a specimen may be rejected

Acknowledgments

