**Lab supervision check list**

## 1.BASIC FACILITIES

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | | | **Questions** | | | **Yes/No** | | | **Comment** | | | |
| **1** | | | **Is the laboratory space adequate?**  **(Minimum 5mx4m)** | | |  | | |  | | | |
| **2** | | | **Is the laboratory tidy (table clean, lab swept)** | | |  | | |  | | | |
| **3** | | | **Is there a waste paper bucket?** | | |  | | |  | | | |
| **4** | | | **Is the furniture adequate? (Tables, stools, tables etc)** | | |  | | |  | | | |
| **5** | | | **Does the general set up of the laboratory meet standard laboratory setting (*storage space, shelves on the wall 0.6m above the bench, working bench with lockable cupboard underneath, benches 0.9m high and 0.5m wide, stools 0.6m high with white Formica tops)?*** | | |  | | |  | | | |
| **6** | | | **Is there adequate ventilation? (Open windows, safety cabinet)** | | |  | | |  | | | |
| **7** | | | **Is there adequate supply of running water?** | | |  | | |  | | | |
| **8** | | | **Is there good power supply or is the laboratory exposed to enough sunlight? (Making use of mirror possible)** | | |  | | |  | | | |
| **9** | | | **Is there a waste water outlet (sink/bucket) available?** | | |  | | |  | | | |
| **10** | | | **Is there a proper waste disposal facility? (Burning facility or incinerator)** | | |  | | |  | | | |
| **11** | | | **Is the bench made of material that can easily be cleaned?** | | |  | | |  | | | |
| **12** | | | **Is there a separate area for TB work?** | | |  | | |  | | | |
| **13** | | | **Is there a separate table for specimen reception?** | | |  | | |  | | | |
| **14** | | | **Is there a tray for specimen reception?** | | |  | | |  | | | |
|  | | | 2. REGISTRATION AND TRANSMISSION OF DATA | | |  | | |  | | | |
| **1** | | | **Are there correct labels (including patient number, date and sample number and health facility) on the sample containers awaiting examination?** | | |  | | |  | | | |
| **2** | | | **Are the samples accompanied by a request form?** | | |  | | |  | | | |
| **3** | | | **Are the request forms correctly and completely filled?** | | |  | | |  | | | |
| **4** | | | **Are the samples that arrived in the laboratory during the supervision entered into the register?** | | |  | | |  | | | |
| **5** | | | **Is the register updated up to the time of supervision?** | | |  | | |  | | | |
| **6** | | | **Is the laboratory registration book complete (all the columns completed for each patient)?** | | |  | | |  | | | |
| **7** | | | **Does the lab register tally with the patient register?** | | |  | | |  | | | |
| **8** | | | **Are the laboratory records legible?** | | |  | | |  | | | |
| **9** | | | **Does the registration start with No.1 at the beginning of January?** | | |  | | |  | | | |
| **10** | | | **What are the average days between lab register date and beginning of treatment?** | | |  | | |  | | | |
| 3. SMEARS PREPARATION AND STAINING | | | | | |
| No | | | | **Questions** | | | **Yes/no** | | | **Comments** | | |
| **1** | | | **Is the numbering of stained and unstained?**  **slides appropriate (legible, sequential, non-duplicative)?** | | | |  | | |  | | |
| **2** | | | **Are the smears of standard thickness (able to read printed letters through)?** | | | |  | | |  | | |
| **3** | | | **Are the smears of correct length? (1.5-2cm) and width (1-1.5 cm)?** | | | |  | | |  | | |
| **4** | | | **Are the correct timings during staining followed? (Carbolfuchsin 5 min, decolourizer 3 min and counter stain 1 min)** | | | |  | | |  | | |
| **5** | | | **Is the color of the stained smear light blue or light green**  **depending on the counter stain?** | | | |  | | |  | | |
| **6** | | | **Is the heating of the carbolfuchsin stain sufficient (steaming, but not boiling)?** | | | |  | | |  | | |
|  | | | 4. PROCEDURAL QUALITY ASSURANCE | | |  | | | | |  | |
| **No** | | | **Questions** | | | | **Yes/No** | | **Comments** | | | |
| **1** | | | **Are the stains properly labelled? (Name of stain, expiry and preparation dates and name of the person who prepared)** | | | |  | |  | | | |
| **2** | | | **Are the stains filtered after preparation?** | | | |  | |  | | | |
| **3** | | | **Are the batch tested with controls?** | | | |  | |  | | | |
| **4** | | | **Are records on the controls available?** | | | |  | |  | | | |
| **5** | | | **Are all the smear slides prepared kept and properly stored in slide boxes?** | | | |  | |  | | | |
| **6** | | | **Are the slides used new and not scratched?** | | | |  | |  | | | |
| **7** | | | **Is there xylene to clean the slides of oil immersion?** | | | |  | |  | | | |
| **8** | | | **Is a copy of current SOP available?** | | | |  | |  | | | |
| **9** | | | **Does the laboratory adopt the spot-morning sequence of sample collection?** | | | |  | |  | | | |
| **10** | | | **Does the laboratory adopt the 2-morning sample collection sequence?** | | | |  | |  | | | |
| **11** | | | **Is the spot sample collected in the outdoors or in well ventilated room? (if applicable)** | | | |  | |  | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 5. SAFETY PRECAUTION | |  | |
| **1** | **Is protective clothing worn? (Lab coats, gloves, mask*)*** |  | |  |
| **2** | **Do the staffs wash their hands after working in the lab?** |  | |  |
| **3** | **Is there eating/drinking/smoking in the lab?** |  | |  |
| **4** | **Is there cleaning of the bench before and after work?** |  | |  |
| **5** | **Is the suitable disinfectant used for cleaning the bench?** |  | |  |
| **6** | **Is the staff observing basic precautions to avoid infection?**  **with aerosols when preparing the slide (flame between the sample and the face, closing of the sputum container immediately after scooping of the specimen)?** |  | |  |
|  |  | | | |

## 8. PERSONNEL EVALUATION

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| OBSERVE AND TALK TO AT LEAST TWO LABOARATORY TECHNICIANS | | | | | | |
| **No** | **QUESTIONS PART 1 (OBSEVATION)** | **TECHNICIAN 1** | |  | | **COMMENTS** |
| **YES** | **NO** |  |  |
| **1** | **Is the technician trained on AFB microscopy?** |  |  |  |  |  |
| **2** | **Is the correct smear preparation followed?** |  |  |  |  |  |
| **3** | **Is the staining procedure according to protocol?** |  |  |  |  |  |
| **4** | **Does the technician know the correct use of the microscope and oil immersion objective?** |  |  |  |  |  |
| **5** | **Does the technician select the appropriate particles of the sample for smear preparation (thick and purulent parts)?** |  |  |  |  |  |
| **6** | **Is there correct reading sequence of the films?** |  |  |  |  |  |
| **7** | **Do the results correspond well with supervisor’s results?** |  |  |  |  |  |
| **8** | **Does the grading correspond to the supervisor’s reading?** |  |  |  |  |  |
| **9** | **Does the technician show the patient how to open and close the container?** |  |  |  |  |  |
| **10** | **Does the technician explain and demonstrate, fully and slowly, the steps to collect sputum?** |  |  |  |  |  |
| **11** | **Does the technician explain when to collect the morning sample?** |  |  |  |  |  |
| **12** | **Does the technician give the patient a container to take home for the morning sample?** |  |  |  |  |  |
| **13** | **Does the technician observe basic safety rules?** |  |  |  |  |  |
| **14** | **Does the technician understand the standard format of reporting results?** |  |  |  |  |  |
| **15** | **Does the technician know the correct recording of data in the lab register?** |  |  |  |  |  |
| **16** | **Does the technician relate well to the patient?** |  |  |  |  |  |
| **17** | **Does the technician check all the sputum samples upon reception (for visual appearance i.e saliva, blood stained, purulent and quantity)** |  |  |  |  |  |
| **18** | **Does the technician report on the appearance of the sample (saliva, blood stained, purulent)** |  |  |  |  |  |
| **19** | **Does the technician tell the patient when to return for results after the 2rd sample?** |  |  |  |  |  |
| **20** | **Does the technician wipe the objective with lens tissue after examining positive samples?** |  |  |  |  |  |
|  | **PART 2 (TALK TO THE TECHNICIANS)** |  |  |  |  |  |
| **21** | **Does the technician understand basic maintenance and repair of microscope?** |  |  |  |  |  |
| **22** | **Does the technician know basic problems occurring during staining?** |  |  |  |  |  |
| **23** | **Does the technician understand the consequences of false results?** |  |  |  |  |  |
| **24** | **Can the technician correctly explain what to expect in a positive slide?** |  |  |  |  |  |
| **25** | **Does the technician understand the need for keeping all smear slides?** |  |  |  |  |  |
| **26** | **Does the technician know the number of fields to observe in every quantification category? (Neg=100fields,scanty=100fields, 1+=100fields, 2+=50fields, 3+=20fields)** |  |  |  |  |  |
| **27** | **Does the technician theoretically know stain Preparation protocol?** |  |  |  |  |  |

**One-year microscopy data for laboratory**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Total patients | **Q1** | **Q2** | **Q3** | **Q4** |
| NO. pos |  |  |  |  |
| No. low pos |  |  |  |  |
| Low series |  |  |  |  |
| High pos |  |  |  |  |
| High series |  |  |  |  |
| Total follow up |  |  |  |  |
| Follow up pos |  |  |  |  |
| Total HIV |  |  |  |  |
| HIV pos |  |  |  |  |

**GENE EXPERT LAST QUARTER REPORT**

|  |  |
| --- | --- |
| **ITEMS** | **TBMUs NAME**………………………………………….. |
| MTB not detected |  |
| MTB detected, RIF not detected |  |
| MTB detected, RIF detected |  |
| MTB detected, RIF indeterminate |  |
| Error |  |
| Invalid |  |
| No result |  |
| Trace |  |
| Total |  |

**Reagents and solutions for lab**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ITEMS** | **UNIT ( pcs/lts** | **Existing stock** | **Expiry date** | **needs** |
| Sputum containers |  |  |  |  |
| Slides |  |  |  |  |
| Applicator wooden |  |  |  |  |
| sulphuric acid |  |  |  |  |
| Carbolfuchsin |  |  |  |  |
| Methylene blue |  |  |  |  |
| Methylated spirit |  |  |  |  |
| Xylene or toluene |  |  |  |  |
| Methanol |  |  |  |  |
| Phenol |  |  |  |  |
| Sputum containers |  |  |  |  |
| Cartridge |  |  |  |  |
| Oil immersion |  |  |  |  |
| HCL |  |  |  |  |
| Auramin o |  |  |  |  |
| Ethanol |  |  |  |  |
| Others |  |  |  |  |