***SOP for Preparation and Examination of Skin Smears***

* The smear is a means of estimating the number of acid-fast bacteria present, reported as the Bacterial Index (BI)
* It is important in determining the type and severity of disease as well as assessing the response to treatment.

***General***

* Initial skin smears are usually taken from 6 “routine sites” (both earlobes, elbows, and forehead) as well as several typical lesions from the patient.
* Repeat smears are obtained from 3 to 4 of the most active sites previously tested to evaluate progress.
* All microscopic slides on which skin smears are made should be pre-cleaned in 70% alcohol. The slides are wiped dry with a clean lint free tissue paper/cloth. Blades that are used in smear taking are likewise cleaned.
* Slides should be air-dried and **NEVER** heat fixed.
* They may be sent in protective mailers to:

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***Procedure for Obtaining Smears***

1. Universal precautions should be observed in obtaining skin smears.

2. The skin is cleansed with 70% alcohol and air-dried or wiped dry with cotton.

3. A fold of skin is made relatively avascular by pinching or mild clamping. If the skin cannot be grasped by pinching, it can be compressed. A surgeon's glove may aid in grasping.

4.Local anaesthesia is generally unnecessary. The compression of the skin by pinching aids in the anaesthesia.

5. An incision 3-5 mm long and 2-3 mm deep is made with a alcohol cleansed, single-edged razor blade. A scalpel with a #15 Bard-Parker blade may also be used. Mild pressure to maintain relative avascularity is continuously applied to the area until an adequate smear has been obtained.

6. A small amount of blood does not interfere with the reading, but large amounts should be avoided and can usually be controlled by the amount of pressure of the pinch. If excessive bleeding occurs, it can be wiped away with a cotton swab.

7. After the incision is made, and before the blade is withdrawn, the inner surface of the wound is scraped with the blade held at a right angle to the incision. Upon scraping, tissue fluid and dermal tissue are obtained.

8. The material is transferred to the cleaned microscope slide. A moderately thick smear, with a visible uniform opacity is made. The smear is made in a circular manner on the slide, no larger than 5-7 mm, beginning peripherally and ending in the centre, leaving a central “button” (2-4 mm) which can be easily focused upon with the microscope. Slides should be properly labelled as shown below in the sample diagram. Similar slides can be prepared for other sites.



9. A Band-Aid is generally sufficient to protect the smear site.

10.A single technician takes all smears to insure more uniform and consistent results.

11.The smears are then sent to the Stanley Browne Laboratory, TLM Community Hospital.