

## *Simple Staining*

**Principle :** In simple staining the bacterial smear is stained with a single reagent which produces a distinctive contrast between the organisms and its background. Basic stains with a positively charged chromogen are preferred because bacterial nucleus acids and certain cell wall components carry a negative charge that strongly attracts and binds to the cationic chromogen. The purpose of simple staining is to elucidate the morphology and arrangement of bacterial cells. The most commonly used basic stains are **methylene blue, crystal violet and carbol fuchsin**

**Suitable organism :** *Bacillus cereus*, *E.coli*, *Staph aureus*,

**Procedure:**

1. Prepare a heat-fixed smear of the suspended organism using the edge of a slide.
2. Flood the smear with one of the indicated stains using the appropriate exposure time for each. CF: 15-30 sec, CV: 20-60 sec, MB 1-2 min
3. Gently wash the smear with tap water to remove the excess stain. During this step hold the slide parallel to the stream of water. This prevents loss of organism from the smear.
5. Air dry and examine under microscope.