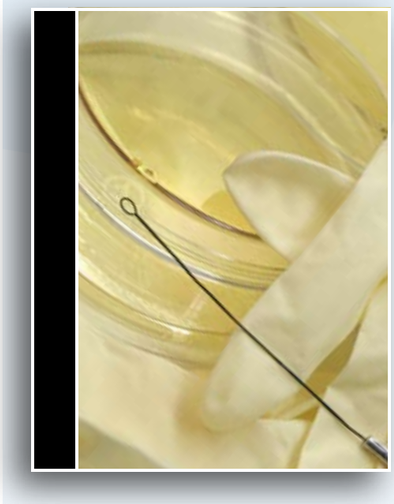
# Good Microbiological Practices

# Procedures to Minimize AEROSOL Hazards

## Opening Tubes

- Manipulate infectious materials within a biological safety cabinet.
- Upon opening, unscrew the cap slightly and wait a few seconds before removing it.

## Inoculating Loop



- Use a micro-incinerator or a disposable loop instead of a bunsen burner.
- Allow the inoculating loop to cool before any procedures.

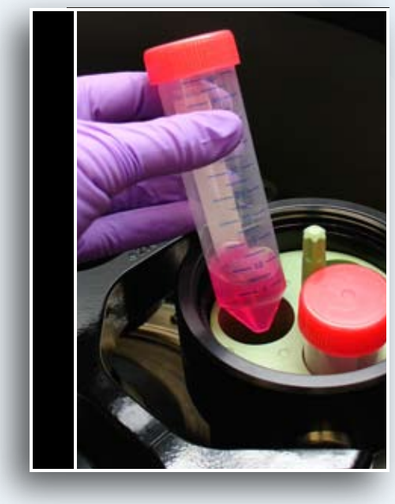
## Syringes/Needles

- Withdraw needles from bottles using disinfectant-soaked absorbent pads wrapped around the bottle cap.
- Use locking syringes.

## Pipetting

- Use "to deliver" pipettes calibrated to retain the last drop.
- Use pipettes with plugs.
- Discharge pipettes close to the fluid level and let the contents run down the wall of the container.
- Never forcefully expel infectious materials from the pipette.

## Centrifugation



- Centrifuge infectious material in closed containers, placed in sealed safety cups or rotors.
- Open cups in a biological safety cabinet.
- Maintain the centrifuge to ensure that it is clean and the gaskets and O-rings are not compromised.
- Wait 5 minutes before opening the centrifuge after each run to allow any aerosols to settle.

## Breakage

- Avoid the use of glassware where possible.
- Use plastic tubes, flasks and bottles.
- Use screw-capped tubes and bottles rather than plugs or snap caps.

## Mixing and Homogenizing

- Ensure the lab blender has a gasket lid and leak proof bearings.
- Wait a few seconds before opening a lid after mixing.
- Use a vortex, instead of inverting the cultures.

## Pouring Infectious Materials

- Perform your work over plastic-backed absorbent material.
- Wipe the rim of the tube with disinfectant-soaked absorbent paper to remove potential contamination on the outside of the tube.

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