

Breakout Discussion and Decisions: Microbiology

Filter QC

Quality control that is to be done on membrane filters to meet the requirement to check hydrophobicity can include:

- Wetting test (dye)
- Charcoal test
- Bacterial Lawn
- Recovery Test

Passages

There is no limit on the number of passages, as long as the “stock” culture is verified annually using a recognized system (e.g., API, BBL Crystal, etc...). This was decided because environmental microbiology is primarily concerned with phenotypic reactions.

Frequency of Selective vs Non-Selective

Lot number of powdered media

Lot number of prepared plates

Batch of prepared media = shipment of prepared plates supplied by a manufacturer

Comparison of target organisms on selective and non-selective plates must be done on each BATCH of prepared media, and each shipment of prepared plates supplied by a manufacturer (even if several shipments are the same lot number).

Duplicates/Inter-technician analysis etc...

If limited by volume, lab is to use an environmental sample spike (e.g., sewage, river water, etc...) in order to obtain counts to demonstrate precision.

Testing Sterility

If the glassware has been autoclaved, there is no need to test for sterility.

Incubation Temperature for Coliforms

36 +/- 1 degree Celsius is acceptable

Stereomicroscopes

Stereomicroscopes must be used for counting total coliforms on mEndo, but is not a must when counting on chromogenic substrates.