



Total Coliform Analysis

Environmental water

Test Description

Water from public supplies, private wells, or bathing places is tested to determine if the water has been contaminated by fecal material. Addition of sodium thiosulfate to the sample neutralizes any residual chlorine to reduce the potential bactericidal activity during specimen transport. Coliform bacteria are grown on selective and differential M-Endo media. A typical coliform colony is pink to dark red with a metallic sheen. Coliforms are verified biochemically by analyzing lactose fermentation in lauryl tryptose broth and brilliant green bile broth. Coliform growth in EC-Mug medium at thermotolerant temperatures and bright blue long wave fluorescence confirms the presence of *Escherichia coli*. Testing is generally completed within 24-48 hours but may occasionally take longer.

Acceptable Specimens: collection guide and transport conditions

- Drinking water
 - Temperature: Refrigerated (2-8 °C)
 - Maximum Submission Delay: Specimen must be received as soon as possible after collection
 - Container: Sterile 125-ml Nalgene bottle with wide-mouth and screw-capped lid containing 3 drops of sterile 0.1 N sodium thiosulfate
- Pool, spa, whirlpool water
 - Temperature: Refrigerated (2-8 °C)
 - Maximum Submission Delay: Specimen must be received as soon as possible after collection
 - Container: Sterile 125-ml Nalgene bottle with wide-mouth and screw-capped lid containing 3 drops of sterile 0.1 N sodium thiosulfate



ALLEGHENY COUNTY PUBLIC HEALTH LABORATORY

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- Non-potable water
 - Temperature: Refrigerated (2-8 °C)
 - Maximum Submission Delay: Specimen must be received as soon as possible after collection
 - Container: Sterile 125-ml Nalgene bottle with wide-mouth and screw-capped lid containing 3 drops of sterile 0.1 N sodium thiosulfate

Laboratory Unit

Bacteriology

Methodology

Culture

Test Request

Coming Soon

Possible Results:

- Absent
- Present

Reference Range

Absent

Rejection Criteria

- Unreadable/missing/insufficient labeling
- Wrong specimen collection kit
- Expired specimen collection kit
- Storage/transportation requirements not met
- Leaking or contaminated specimen transport container
- Quantity not sufficient
- Specimen too old

- Collected it in acceptable kit but did not submit within appropriate time window
- Improperly collected specimen
- Specimen not inoculated/ no specimen submitted

Result Reported

24-48 hours

LOINC Code(s)

- Drinking water
 - 14081-4
- Pool, spa, whirlpool water
 - 14081-5
- Non-potable water
 - 14081-5