Laboratory Guidebook
Notice of Change

Chapter new, revised, or archived: MLG 41 Appendix 2.04

Title: FSIS Laboratory Specific Flow Chart for Campylobacter jejuni/coli/lari Enrichment Analysis

Effective Date: 03/07/22

Description and purpose of change(s):

This flow chart was revised in association with the revisions made in MLG 41 to reduce sample turn-around time.

- The double strength blood-free Bolton enrichment Broth plus supplements was replaced with Hunt Broth plus supplements, antibiotics and blood components.

- The 48 ± 2h enrichment media incubation time was reduced to 24 ± 2 h.

- Screened negative results can now be reported in 2 days and confirmed positive results can now be reported in 4 days.
FSIS Laboratory Specific Flow Chart for Campylobacter jejuni/coli/lari Enrichment Analysis

**Effective: 03/07/22**

**CONFIRMATORY ANALYSIS**

**SELECTIVE ISOLATION MEDIA**

**READING RESULTS**

**PRIMARY ENRICHMENT**

Day 1

Poultry Rinse or Sponge or Raw Poultry Product Samples + Enrichment Broth

*Sample receipt temperature of 0 – 15°C is required*

Transfer 30 mL of poultry rinse + 30 mL of Hunt Broth 1 to a vented culture flask or Whirl-Pak® bag and mix well.

Transfer 30 mL of raw poultry product diluted 1:6 in BPW2 + 30 mL of Hunt Broth to a vented culture flask or Whirl-Pak® bag and mix well.

Add 25 mL of Hunt Broth to carcass sponge sample containing 25 mL of transport media and mix well.

Incubate for 24 ± 2 hrs @ 42 ± 1 °C in a sealed container applying appropriate microaerobic conditions.

Day 2

Perform Campylobacter screen using 3M™ Molecular Detection System

(-)

Report as Negative

(+) Streak sample to sufficiently dried Campy-Cefex plate for isolation.

Place plate into a sealed container applying the appropriate microaerobic conditions.

Incubate for 48 ± 2 hrs @ 42 ± 1°C.

Day 4

When typical Campylobacter colonies are found, pick at least one typical colony from the plate in preparation for isolate confirmation.

Perform Bruker® MALDI Biotyper analysis.

**CONFIRMED NEGATIVE**

**CONFIRMED POSITIVE**

**INCONCLUSIVE**

**CONFIRMED POSITIVE ISOLATES**

Whole Genome Sequencing (WGS) is performed on confirmed positive and inconclusive isolates at each FSIS FSL 3 and results are reported.

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1 Hunt Broth = Hunt Broth plus supplements, antibiotics, and blood
2 BPW = Buffered peptone water
3 FSIS FSL = Food Safety and Inspection Service Field Service Laboratories