

Salmonella Enteritis Testing

Salmonella Enteritis (SE) is one cause of food-borne salmonellosis in humans. Contaminated eggs can be a vehicle for the infection; however, contamination can occur in other ways:

- Eggs can be contaminated on the outer shell surface and internally.
- Internal contamination can be the result of penetration through the eggshell.
- Direct contamination of egg contents before oviposition, originating from infection of the reproductive organs.

Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) offers testing of drag swabs to satisfy the Food and Drug Administration (FDA) requirements for SE testing of egg producers. TVMDL currently utilizes the RapidChek® SELECT™ Salmonella Enteritidis Test System to identify Salmonella Group D1 isolates (of which SE is one).

TEST: **Salmonella Enteritidis Rapid Test System**

SPECIMEN: Drag swabs, other environmental specimens

TURNAROUND: Performed Monday-Friday in Center and Gonzales, with results in 3-7 business days.

COST: \$29.00 with a \$6.00 accession fee.

Any suspect positive isolates are forwarded to the National Veterinary Services Laboratory (NVSL) in Ames, Iowa for SE confirmation.



Understanding drag swabs

Commercial operations can become contaminated with Salmonella Enteritidis via introduction of the organism into the environment or by placing carrier hens into the house. Drag swabs are used to monitor the SE status of a flock/premise.

- Utilization of drag swabs involves the exposure of gauze pads (or commercially available sponges designed for this purpose) to the surface of random, flock-representative floor litter areas.
- The sampler pads are sterile and slightly moist to promote adherence of particulate material, and impregnated with skim milk to protect salmonella viability during sample collection, batching, storage, and shipment.
- Floor litter surface drag swab sample results tend to reflect the salmonella carrier/shedder status of a flock.

For questions regarding TVMDL's testing of drag swabs, contact our poultry laboratories located in Center and Gonzales, Texas. The Poultry Programs Administrator is located at the College Station laboratory: 1.888.646.5623.

