Department of Animal Science

Virology/Immunology Diagnostic Lab at UT College of Veterinary Medicine Now NPIP-Certified:

Great News for Tennessee Poultry

September 2026
***Tom Tabler**, Professor and Extension Poultry Specialist,*
Department of Animal Science
***Jacquline Risalvato**, Assistant Professor of Veterinary Virology,*
Department of Biomedical and Diagnostic Sciences,
University of Tennessee College of Veterinary Medicine

If you raise poultry in any capacity–commercial or backyard–you have likely at least heard the term NPIP. What exactly is NPIP and what is so important about it? NPIP is short for "National Poultry Improvement Plan," a voluntary certification program focused on poultry disease testing and prevention. NPIP was established in the 1930s to combat Pullorum Disease, a serious and deadly bacterial infection that once devastated the poultry industry. Since then, NPIP has expanded to include testing and monitoring for several poultry diseases, helping protect flocks and keep them disease-free. It is a federal program managed by USDA-APHIS (Animal and Plant Health Inspection Service) but with state-level guidance and administration. While a national program, individual states have their own regulations regarding participation and enforcement. The NPIP program establishes disease testing and flock classification standards so buyers, regulators and others can trust the health status of birds and hatching eggs moving throughout the poultry industry both across state lines and internationally. Today, NPIP remains one of the most important disease prevention systems in the U.S. poultry industry, covering everything from backyard flock keepers to large commercial poultry meat and egg operations.

NPIP Importance

The primary goal of NPIP is disease prevention and monitoring. Through standardized testing protocols, the program helps control or eliminate diseases such as:

- *Salmonella pullorum*
- *Mycoplasma gallisepticum* (MG), *Mycoplasma synoviae* (MS) and *Mycoplasma meleagridis* (MM)
- Fowl typhoid (*Salmonella enterica* subsp. *enterica*, serovar Galinarum, biovar Gallinarum (*S. gallinarum*))
- Avian influenza
- *Salmonella enteritidis* (primarily related to commercial egg production)

Participating flocks must follow specific testing procedures and protocols to qualify for classifications like U.S. Pullorum-Typhoid Clean. NPIP certification is critical to establishing buyer trust and reputation. If you plan to sell chicks, poults, ducklings, hatching eggs, or breeding birds, buyers often look for NPIP participation as a guarantee against the diseases NPIP monitors. In addition, many online hatcheries that sell to the public promote their NPIP classification because it demonstrates their awareness of disease monitoring, responsible breeding practices and adherence to national standards, significantly increasing buyer confidence.

When poultry or hatching eggs move across state lines, documentation is often required. Participation in the NPIP program can simplify these transactions. For example, certain shipments of chicks, poults or hatching eggs may be accompanied by a VS Form 9-3, an official NPIP movement document. Many states recognize NPIP Pullorum-Typhoid Clean status when evaluating incoming poultry shipments. However, individual state import rules still apply, and NPIP participation does not override individual state veterinarian requirements. In addition, many poultry shows, fairs, and exhibitions require birds to come from NPIP Pullorum-Typhoid Clean flocks or birds recently tested for pullorum-typhoid disease. Participation in NPIP can make it easier to meet show requirements, as enrollment shows a good-faith effort and compliance with national testing standards. The NPIP program also promotes strong biosecurity practices across the poultry industry. Some commercial producers must maintain biosecurity plans aligned with NPIP standards to qualify for certain surveillance or movement programs during disease outbreaks such as highly pathogenic avian influenza.

While NPIP is a voluntary program, it is often required for:

- Breeders or hatcheries that sell product (hatching eggs, chicks, live birds) across state lines
- Exhibitors and show bird owners because many poultry shows require NPIP documentation to participate
- Small farm and backyard poultry keepers who want to ship or sell birds legally across state lines

If you plan to ship live birds or hatching eggs, many states require NPIP certification to ensure disease-free poultry is crossing state lines. Regardless of your flock’s size, NPIP helps protect the poultry community by preventing disease outbreaks. Participation in the program benefits both buyers and sellers by:

- Ensuring healthier flocks through routine testing
- Facilitating interstate shipping by meeting legal requirements
- Boosting buyer confidence, as many prefer NPIP-certified stock
- Preventing economic losses by reducing disease risks

However, NPIP is not a vaccination program. It is strictly a testing and monitoring program. It DOES NOT 1) require or provide vaccinations, 2) guarantee birds are immune to disease or 3) cover all poultry diseases–just the ones specific under the program.

If you are interested in NPIP certification, contact your state’s NPIP coordinator (usually housed in the state department of agriculture) to learn about testing requirements and application processes. Because NPIP is state-administered, costs, testing frequency, and specific regulations

will vary depending on your location. For more information, visit the USDA-APHIS NPIP website (https://www.poultryimprovement.org) or contact your state department of agriculture.

Great News for Tennessee

The University of Tennessee College of Veterinary Medicine is excited to announce that the Virology/Immunology Diagnostic Laboratory (V/I DLS) is now officially National Poultry Improvement Plan (NPIP)-certified, expanding access to approved poultry diagnostic testing for producers, veterinarians, hatcheries, breeders, and other poultry stakeholders throughout Tennessee and beyond.

The NPIP is a cooperative federal-state-industry program established to help monitor and control important poultry diseases and establish standards for evaluating breeding flocks and poultry products. Diseases addressed through NPIP include avian influenza, *Salmonella pullorum*, *Mycoplasma gallisepticum* (MG), *Mycoplasma synoviae* (MS), and other important poultry pathogens.

For Tennessee poultry producers, the addition of an NPIP-certified diagnostic laboratory at UTCVM provides another resource for routine flock surveillance, disease investigation and testing associated with poultry movement and certification requirements.

Testing/Pathogen	Available testing	Primary application
Avian influenza (AI)	ELISA and RT-qPCR	NPIP surveillance and investigation of suspected influenza A infection
***Mycoplasma gallisepticum* (MG)**	ELISA and qPCR	NPIP flock surveillance and detection of MG
***Mycoplasma synoviae* (MS)**	ELISA and qPCR	NPIP flock surveillance and detection of MS
***Mycoplasma meleagridis* (MM) (turkeys)**	ELISA	NPIP flock surveillance and detection of MM
Salmonella pullorum	Pullorum plate agglutination testing (RPA)	Pullorum-Typhoid/NPIP surveillance
Additional poultry diagnostics*	A variety of molecular and serological assays (*Salmonella* qPCR, ILT qPCR, aMPV, Marek's, ALV, REV, LPDV, etc.)	Diagnostic investigation and research support; availability varies by test; **Not for NPIP use**

The laboratory's poultry diagnostic capabilities complement its broader virology, molecular diagnostic and serologic testing services. The UTCVM V/I Diagnostic Laboratory is particularly well positioned to support Tennessee producers because testing can be paired with veterinary diagnostic expertise and consultation when additional interpretation or testing is needed.

How to Submit Samples or Ask About Testing

Producers and veterinarians should contact the laboratory before submitting samples to confirm the appropriate test, specimen requirements, current availability and submission instructions.

Virology/Immunology Diagnostic Laboratory
University of Tennessee College of Veterinary Medicine
2407 River Drive, Room A-239
Knoxville, TN 37996-4543

Phone: 865-974-5880
Email: virologyimmunology@utk.edu
Hours: Monday–Friday, 8:00 a.m.–5:00 p.m. ET
Website: vetmed.tennessee.edu/vmc/dls/virology-immunology/

Submission forms, laboratory information and current testing resources are available through the UTCVM Virology/Immunology Diagnostic Laboratory website, and more information can be found in the Virology/Immunology Poultry Laboratory subsection.

For questions regarding test selection, sample collection, or submission, producers and veterinarians are encouraged to contact the laboratory before shipping samples. Diagnostic consultation and interpretation are also available through the laboratory.

This new NPIP certification represents an important expansion of poultry diagnostic capacity at UTCVM and provides Tennessee's poultry industry with an additional resource for surveillance, disease detection, and flock health management. This welcome news becomes even more valuable as we head into another fall waterfowl migration season that is currently creating numerous HPAI cases across the northern U.S. in the Dakotas, Minnesota, Montana, and Wisconsin. Additional HPAI cases will likely increase as fall migration continues spreading southward.

UTIA.TENNESSEE.EDU

D275 27-0049 Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.