

## Testing for H5N1 in Cattle by Veterinarians

This document serves to provide licensed and USDA Category II Accredited veterinarians in Minnesota guidance and instruction for sampling cattle for H5N1 virus. Sampling recommendations are based on instruction from USDA-APHIS-VS and the University of Minnesota Veterinary Diagnostic Lab (UMN VDL), which is part of the National Animal Health Laboratory Network (NAHLN). Recommendations are subject to change based on new information and regulatory requirements.

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**Approval:** Dr. Katie Cornille, Senior Veterinarian

### When to Test Cattle

#### Clinical Cases

Testing for Influenza A is recommended for dairy cattle experiencing clinical signs consistent with the current [case definition](#).

Clinical signs may include a decrease in feed consumption with a simultaneous decrease in rumination and rumen motility; respiratory signs including clear nasal discharge; and subsequent acute drop in milk production. Additional clinical signs may include abnormally tacky or loose feces, lethargy, dehydration, and fever. Severely affected cattle may have thicker, yellow, colostrum-like milk or produce no milk at all.

Moving lactating cows off the premises is not advised if any cattle on-site have the clinical signs described above until negative results are received.

#### Pre-Movement Testing

Lactating dairy cattle are required to receive a negative test for Influenza A from a NAHLN lab up to 7 days prior to interstate movement.

Testing is not required for other cattle classes or for lactating dairy cattle moving directly to slaughter.

# Sampling and Submission

## Sampling Procedure

Samples are to be collected by an accredited or licensed veterinarian or by a sample collector approved by BAH that is under the direction of a veterinarian.

Walk the barn(s) and get an estimate of the number of cattle with symptoms and total number of cattle on the site. Also note other animals located on site. Select animals for sampling based on how well they meet the clinical case profile.

Samples must be submitted to a [NAHLN laboratory](#).

### For Lactating Cows:

Collect milk/udder secretions from individual cows in conical tubes. Each quarter is to be sampled and combined into one tube for submission to the laboratory. Submissions must be between 3-10 ml of milk per animal.

Do NOT pool samples from multiple animals.

For pre-movement testing, test 30 animals. For groups/lots of 30 or fewer animals moving interstate, all animals being moved must be tested.

### For Non-Lactating Cattle:

Use a single, sterile swab to sample both nostrils, ensuring the mucosa in the nasal passage is brushed firmly with the swab.

Place the swab in a BHI or PrimeStore MTM media tube. Saline can be used but is least preferred. Vigorously swirl the swab in the media, express fluid by pressing the swab against the side of the tube and remove the swab. Do not retain the swab in the media.

Use one swab per tube and do NOT pool samples from multiple animals.

## Reimbursement

The costs of running the test will be covered for:

1. dairy cattle suspected of disease due to clinical signs,
2. required pre-movement testing,
3. producers interested in the disease status of their asymptomatic animals, and
4. samples taken from other animals on dairies associated with this disease event.

APHIS will provide reimbursement directly to the NAHLN labs, so owners and clinics do not need to submit for reimbursement.

The owner will be responsible for other associated costs such as supplies, shipping, and veterinary services.

## Negative Results

BAH will not pursue further diagnostics and additional testing will be at the discretion of the veterinarian and owner.

## Non-Negative Results

Laboratories and state veterinarians are required to report non-negative Influenza A results in livestock to USDA APHIS and samples will be sent to NVSL for confirmatory testing.

Lactating dairy cows that test positive for Influenza A should be provided supportive care and isolated on the premises without direct contact to other lactating cows until they test negative or until a raw milk sample test with a Ct value greater than 35.

Lactating dairy cattle from herds which have tested positive for Influenza A are not eligible for interstate movement for thirty (30) days from the most recent collection of any sample that tests positive from any individual animal in the herd. After the 30-day period, animals must be tested again for movement.

If there are specific circumstances for isolating test-positive cattle and moving to another premises across state lines, this would need to be discussed and agreed upon with the State Veterinarian and APHIS.

## Resources

[VDL Testing for HPAI in Livestock](#)

[USDA-APHIS HPAI Detections in Livestock](#)

[USDA/HHS Actions to Reduce Impact and Spread of H5N1](#)

## Contacts

[BAH and Field Staff Contacts](#)

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