Influenza A in Swine Testing Algorithm

Effective as of: 06/27/16

**Not funded by USDA**

- **Stop**
- **Matrix PCR**
  - Complete within 2 business days of receipt

  **Lung tissue, Nasal Swabs**

  **Oral Fluids**

  **Matrix PCR**
  - Complete within 2 business days of receipt

  Only one (1) sample may be subtyped at USDA expense. Choose lung/nasal swab sample over an oral fluid sample for this reimbursement if both have the lowest CT value. Remaining samples may be subtyped at submitter’s expense.

**Funded by USDA**

- **Stop**

- **Matrix PCR**
  - Complete within 2 business days of receipt

  **Lung tissue, Nasal Swabs**

  **Oral Fluids**

  **Matrix PCR**
  - Complete within 2 business days of receipt

  **Continue to Subtyping PCR**
  - Select 1 sample with lowest CT value (lung/nasal swab samples preferred) to Subtype
  - Complete within 1 business day of Matrix PCR results

  **CT < 25**

  - If subtyping was conducted on original material, attempt VI then repeat subtyping on the isolate.
  - Contact NVSL if unable to obtain virus or sequencing not successful

  **CT < 20**

  - No subtype identified

  - Subtype identified

  **Perform VI**
  - on sample. Complete VI within 3 weeks of sample receipt.
  - Send aliquot to NVSL. Ship to the repository on 1st and 3rd Tuesdays of month.

  **Sequence virus isolates for H and N gene.** Complete within 3 weeks of obtaining virus.

  **Deposit sequence in GeneBank within 1 week of completing sequencing.**
  - Use standardized naming convention:
    - GenBank Accession number and virus name.
    - Virus name = A/Swine/State/NAHNL Barcode/Year of collection

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