How to Request Isolates from the USDA IAV in Swine Repository

The repository contains over 12,000 viruses; these are not listed individually in the catalog. Customers will need to search for viruses of interest and provide a list to NVSL before submitting a reagent request. Please note that there have been recent changes to this virus repository:

- Viruses with a collection date of July 2022 or later require propagation prior to shipment. There will be an approximately two-week delay in shipping orders containing these viruses, barring propagation issues.
- **The cost of a characterized virus isolate has increased from $197 to $645**. In January 2025, USDA APHIS Veterinary Services (VS) implemented updates across all user fees. VS last adjusted its user fees in 2011 and 2012. VS based these adjustments on best available 2009 data. Revenue has not been sufficient to cover expenses collecting fees based on calculations and processes used 15 years ago.

Once you have selected your viruses:

1. Before submitting the reagent request, confirm isolate availability by emailing the list of your selected viruses to NVSL.DVL.Comm@USDA.gov. In this email, specify the number of vials requested for each virus.
2. After the finalizing the list of isolates which will be in your order, email NVSL_concerns@usda.gov and include the following documents as attachments:
    a. APHIS permit to receive these viruses
    b. Completed VS Form 4-9, *Request for Reagents of Supplies*
        - The *Reagent Code Number* for these repository isolates is SIV-REP
        - The *Reagent Name* is the barcode ID of the virus [starts with "A0"]).

The NVSL reagent request form and ordering instructions are at
https://www.aphis.usda.gov/labs/reagents

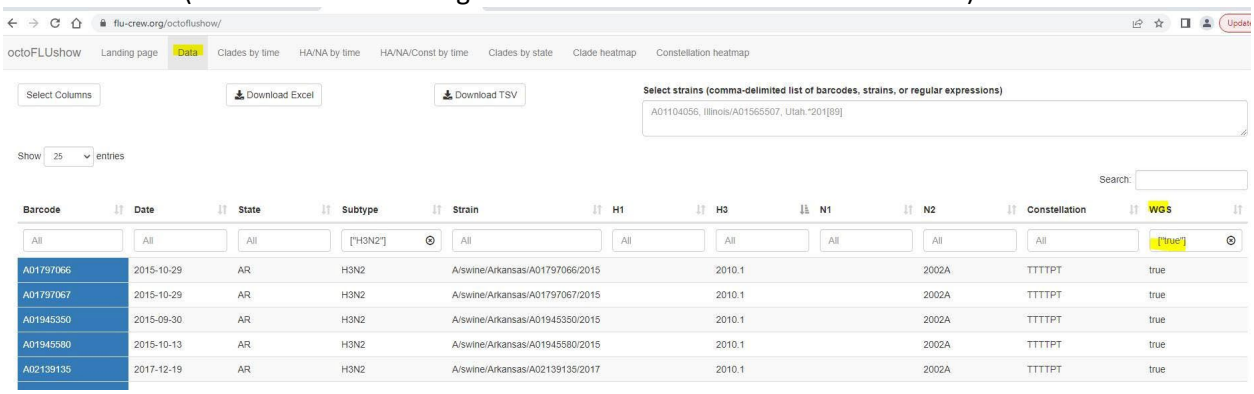
How to Request Isolates from the USDA IAV in Swine Repository

Options for identifying for repository viruses for your request:

1. Octoflu (https://flu-crew.org/octoflushow/)

Octoflu is a user-friendly platform for searching viruses in this repository/USDA surveillance program. The data available in Octoflu include the lineage of all internal genes, if sequenced.

Click on the Data tab and filter by preferred characteristics. There is an option to select viruses that have had WGS (select *true* in the far right *WGS* column as seen in this screenshot).



For a published manuscript providing examples, see https://pubmed.ncbi.nlm.nih.gov/34913720/

2. GenBank

USDA Swine Surveillance Influenza A virus sequences can be identified in GenBank by their nine-character barcode designations in the virus name, starting with “A0”, e.g. A/swine/North Carolina/A02431994/2019(H1N2). The information in GenBank will usually list USDA Swine Surveillance, or similar, in the Author, Journal or Consortium field. All viruses from October 2025 forward will include full genome data with fastq deposited in BioProject PRJNA1367166.

3. USDA IAV in Swine Surveillance Quarterly Reports

The quarterly reports for this surveillance program list representative strains. These reports are available to the public on the APHIS website linked below, under the Surveillance section https://www.aphis.usda.gov/livestock-poultry-disease/swine/influenza-a-virus