



**Department
of Health**

Using the NCBI Pathogen Detection Portal to Aid in Surveillance of Enteric Pathogens

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Agenda

- Demonstration of NCBI Pathogen Browser
- Examples of utilization of NCBI
 - Determining if cases are related
 - Reaching out to other states
 - Environmental/food samples

NCBI Demonstration

Introduction to NCBI

National Center for Biotechnology Information

Established in 1988

Many projects (including PubMed, GenBank, Pathogen Detection)

- NCBI Pathogen Portal
- Many contributors
- Real-time surveillance of pathogens and foodborne disease
 - Publicly available
 - Anyone can use
 - Search for WGS matches across agencies, states, even countries



Demonstration of NCBI Pathogen Detection

- Ways to browse the portal
 - ‘Find isolates now’
 - Organism name, food item, Biosample number
 - WGS ID
 - Obtained from SEDRIC or lab communication

Demonstration of NCBI Pathogen Detection

- How to search for one or more isolates using WGS IDs
 - Type by hand
 - Copy/paste (Word, Excel)
- Live demo: NYS workflow demo (*Listeria*, *Salmonella*, *E. coli*)
 1. Customizing and filtering
 2. Quick look for Min-same and Min-diff samples
 3. Investigating SNP distances and selecting samples
 4. Creating a Subtree
 5. Exporting a tree or subtree
 6. Downloading metadata as .csv file

Webinar

<https://nyfoodsafety.cals.cornell.edu/molecular-epidemiology/additional-resources/>

New York Integrated Food Safety Center of Excellence page
- Molecular Epidemiology, Additional Resources

Live Demo

<https://www.ncbi.nlm.nih.gov/pathogens>

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Questions?

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