

SPECIAL PATHOGENS CASE STUDY: INCORPORATING TRAVEL SCREENING INTO THE POINT OF ENTRY SCREENING SECTION OF THE ELECTRONIC MEDICAL RECORD

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With globalization and the ease of travel, both domestically and internationally, individuals are increasingly exposed to infectious diseases that may not present until after they return home. These infections, which can be acquired unknowingly, can have serious implications for public health and healthcare systems. **Special Pathogens Travel Screening** involves obtaining a thorough patient travel and exposure history, in combination with screening for symptoms that may be consistent with high-consequence infectious diseases (HCIDs). This case study highlights the New York City Health + Hospitals (NYC H+H) System-Wide Special Pathogens Program Travel Screening List and provides guidance on how to implement travel screening at your own facility.

THE NEW YORK CITY H+H SYSTEM-WIDE SPECIAL PATHOGENS PROGRAM TRAVEL SCREENING LIST

To notify facilities across the NYC H+H System of current outbreaks, the System-wide Special Pathogens Program maintains a near real-time Travel Screening list. The travel screening list can serve as a resource to guide patient screening process, while including disease-specific fact sheets and appropriate Personal Protective Equipment (PPE) guidance. In addition, a special pathogens questionnaire is embedded into our travel screening process to help facilitate collecting important information including epidemiological risk factors.

This early identification allows healthcare workers to initiate appropriate isolation precautions, diagnostic testing, and reporting to public health department and appropriate internal personnel. Thus, preventing potential spread and reducing the risk of healthcare worker (HCW) exposure.

BENEFITS OF SPECIAL PATHOGEN TRAVEL SCREENING: A LOOK AT THE 2024 LASSA FEVER CASE

A [fatal Lassa Fever case](#) was identified in Iowa in 2024, the first U.S. case diagnosed in eight years and the ninth U.S. travel-associated case since 1969. The patient had returned to Iowa from Liberia, West Africa, an area where Lassa Fever is endemic. However, their travel history was not immediately taken during initial care. As a result, dozens of health care workers (HCWs) were unknowingly exposed prior to the confirmation of the diagnosis. This case highlights the importance of eliciting a travel history from symptomatic patients to mitigate the risk of delayed recognition and prevent potential healthcare-associated exposure.

Incorporating travel screening into EMR ensures standardized and up-to-date risk assessment. Routine screening guarantees that each individual's travel history is consistently taken note of and evaluated, minimizing the possibility of oversight and promoting the prompt implementation of appropriate infection control protocols. With the use of automated alerts, this system-level integration notifies providers when a patient's recent travel matches a region of concern, enhancing overall facility preparedness.

*"Preparedness isn't passive, **it's proactive**. By integrating near real-time global and domestic outbreak intelligence into frontline action, we can **identify, isolate, and inform quickly, often before biothreats spread**. We're proud to set the national bar for **early detection and rapid response to high-consequence infectious diseases**."*

- **Dr. Syra Madad**, Chief Biopreparedness Officer,
NYC Health + Hospitals

NYC H+H TRAVEL SCREENING PROCESS

The development of the NYC Health + Hospitals Travel Screening List is a multi-step process rooted in active surveillance and expert consultation. Initially, the System-wide Special Pathogens team reviews a wide range of sources for outbreak updates, including open-source information from global and national public health authorities such as the

World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), and disease surveillance platforms like ProMED, CIDRAP, BEACON, and the Brown Pandemic Center as well as closed-source information, not accessible to the public. This information is collected nearly daily and maintained in our "outbreak grid." The information collection in the outbreak grid is then translated into the Travel Screening List which is broken down into key details such as affected countries or regions, the specific diseases involved, recommended surveillance windows (max time from exposure to symptom onset), case definitions and clinical guidance, precautions, and recent health alerts or advisories.

To ensure timely response to emerging threats, the Travel Screening List is reviewed multiple times a week and updated near real-time. Finalized updates are posted on internal and external platforms and incorporated into the NYC H+H Epic electronic medical record (EMR) system, prompting patient screening at all entry points. Regular review allows for the timely removal of countries from the list, typically after two incubation periods have passed since the last reported case.

For facilities outside of the H+H system, the Travel Screening List can be found on www.r2resptc.org under "Tools & Resources."

GUIDE FOR IMPLEMENTING TRAVEL SCREENING INTO EMR

Travel screening is embedded directly into the NYC Health + Hospitals Epic EMR system to ensure a standardized and automated approach. Facilities aiming to implement Special Pathogen Travel Screening should work closely with their IT teams to ensure that screening questions, alerts, and workflows within the EMR system reflect current outbreak information. This system prompts the staff to ask patients about recent symptoms and travel exposures during registration and triage.

Figure 1. Travel Screening section in Epic

Travel Screening

Travel History

Have you had a fever, cough, rash or pink eye (conjunctivitis)?

☐ Fever
☐ Cough
☐ Rash
☐ Pink Eye (Conjunctivitis)
☐ None

Give patient a mask

Implemented

In the past 10 days, did you have ANY of the following?

Yes
No

1. Have close contact with wild or commercial birds or other animals (including pets such as a cat)?
2. Have direct contact with surfaces contaminated by wild or commercial birds or other animals?
3. Visit any markets with live animals?
4. Consume unpasteurized milk or dairy products?
5. Have direct contact with animal products such as poultry or raw meat-based pet food?
6. Have close contact with a person with suspected or confirmed bird flu (H5)?

Notify Triage RN to report symptoms. Place patient in an isolation room

Implemented

Have you traveled outside the country in the past 30 days?

Yes
No
Unknown

Have you been in contact with someone who has traveled outside the country in the past 30 days and is sick?

Yes
No
Unknown

Notify Triage RN to report travel/symptoms

Implemented

Go to Special Pathogens Website for more guidance: <https://nychhccloud.sharepoint.com/sites/System-WideSpecialPathogensProgram>

Enter a location
Add Travel

Accept
Cancel

If a patient screens positive, defined as having both symptoms consistent with an HCID and recent travel or exposure history to a country on the Travel Screening List, an OurPractice Advisory (OPA) is triggered. This advisory provides step-by-step guidance for both registration and clinical staff, including isolation precautions, notification protocols, and appropriate Personal Protective Equipment (PPE), in addition to linking staff to the System-wide Special Pathogens Intranet page. There are two levels of Special Pathogen OPAs, determined by the mode of transmission and the severity of the infectious disease.

Figure 2. Epic alerts for Special Pathogen Level 1

Travel/Symptom Screen Positive

Registration Staff must:

- Give patient a mask
- Inform charge nurse

Clinical Staff must:

- Isolate patient immediately.
- Inform charge nurse and department supervisor.
- Post Airborne + Contact + Eye precautions signage on door. [Click here for signage](#)
- Wear Special Pathogen Level 1 PPE if entering the room. [Click here to print donning and doffing checklist](#)

[Visit Special Pathogens Website for more guidance](#)

Acknowledge Reason _____

Isolation precautions and notification p...
Override
Defer

Accept

Figure 3. Epic alerts for Special Pathogen Level 2

Travel/Symptom Screen Positive

Registration Staff must:

- Give patient a mask
- Inform charge nurse

Clinical Staff must:

- Isolate patient immediately.
- Inform charge nurse and department supervisor
- Post Special Pathogen Level 2 signage on door. [Click here for signage](#)
- Wear Special Pathogen Level 2 PPE if entering the room. [Click here to print donning and doffing checklist](#)

[Visit Special Pathogens Website for more guidance](#)

Acknowledge Reason _____

Isolation precautions and notification p...
Override
Defer

Accept

When updates are needed, the System Special Pathogens team coordinates with the Epic ASAP team to implement changes and the OPA is updated, accordingly.

STRENGTHENING THE RESPONSE: NEXT STEPS AFTER A POSITIVE TRAVEL SCREEN

While implementing travel screening is a critical first step, additional measures should be taken to ensure readiness for special pathogen threats. Staff must be trained to interpret alerts, recognize concerning travel and exposure histories and symptom patterns, and escalate potential cases appropriately.

Equally important is the implementation of clear isolation and notification protocols. To support these efforts, facilities can make use of the **National Emerging Special Pathogens Training and Education Center (NETEC) [Identify, Isolate, Inform framework](#)**. NETEC offers comprehensive tools and checklists to help facilities build capacity for early recognition and response to special pathogens. HCWs should be trained on how to safely isolate a patient – including providing a mask, escorting them to an appropriate isolation space, and properly donning and doffing PPE when entering and exiting the room.

In addition to initiating isolation procedures, providers should alert the appropriate personnel within their facility in accordance with internal protocols. This typically includes notifying clinical leadership and the Infection Prevention and Control teams. For facilities in New York City, providers should also contact

the **NYC Provider Access Line** to report suspected cases and receive guidance. More information can be found here: [NYC DOH Reporting and Services](#). For Facilities outside of NYC, contact your local public health department by phone to report suspected cases and receive guidance.

*"In our increasingly interconnected world, **integrating a real-time, comprehensive travel country list of current high-consequence infectious disease outbreaks into our EMR should no longer be a mere suggestion** – it is a critical and indispensable tool. It empowers us to better identify those at risk and initiate appropriate isolation preventive measures which, essentially, **transforms 'an ounce of prevention' into a bulwark against widespread illness.**"*

- **Dr. Andrew Wallach**, Ambulatory Care Chief, NYC Health + Hospitals/Bellevue

CONCLUSION

Travel screening is a critical step in strengthening facility preparedness. Understanding a patient's travel and exposure history enables early identification of HCIDs, helps prevent the spread of infections within healthcare settings, and reduces the risk of outbreaks. As international travel increases, travel screening plays a key role in timely detection and response to emerging infectious threats.