

2024 ANNUAL REPORT

JANUARY - DECEMBER 2024

NATIONAL SPECIAL PATHOGEN SYSTEM (NSPS)
REGION 2 REGIONAL EMERGING SPECIAL
PATHOGEN TREATMENT CENTER (RESPTC)
NEW YORK CITY HEALTH + HOSPITALS | BELLEVUE



2024 ANNUAL REPORT

OVERVIEW

The U.S. Department of Health and Human Services (HHS) Region 2 Regional Emerging Special Pathogen Treatment Center (RESPTC) at NYC Health + Hospital (NYC H+H)| Bellevue serves as a Level 1 National Special Pathogen System (NSPS) regional hub for New York, New Jersey, Puerto Rico, and the U.S. Virgin Islands and one of three institutions leading the National Emerging Special Pathogens Training and Education Center (NETEC).

2024 HIGHLIGHTS

- Celebrated the 10-year anniversary of successfully treating an Ebola patient in New York City
- Trained 250+ health care workers in special pathogen skills
- Piloted a new communication technology for the Special Pathogen Unit (SPU)
- **Led four exercises** and drills to test our preparedness
- Shared critical resources with over 700 external partners
- Updated the Concept of Operations (CONOPs) for Region 2 High-Consequence Infectious Disease Patient Transport
- Launched a Special Pathogen Response Team to rapidly deploy specialized staffing across the system
- Managed 22 research projects to expand critical knowledge

As the HHS Region 2 RESPTC, NYC H+H | Bellevue plays a vital role in advancing high-consequence infectious disease preparedness through collaboration with public health, EMS, and hospitals in the region. As a founding member of NETEC, Bellevue also contributes to national standards and training. Bellevue leads both local and national efforts to foster resilience and enhance special pathogen readiness.

-- Dr. Vikramjit Mukherjee, Special Pathogens Program Medical Director and NETEC Co-Principal Investigator



A DECADE OF RESILIENCE

To commemorate the 10-year anniversary of successfully treating an Ebola patient, NYC H+H | Bellevue hosted a reunion in October with Dr. Craig Spencer and the medical team who cared for him. The event brought together key

experts from the White House, CDC, HHS Administration for Strategic Preparedness and Response (ASPR), NYC Department of Health and Mental Hygiene, New York State Health Department, and NETEC to discuss the evolution of special pathogen preparedness strategies.



Spencer.

BY THE NUMBERS



SPECIAL PATHOGENS READIED FOR

(LASSA FEVER, MARBURG VIRUS DISEASE, AVIAN INFLUENZA, AND MPOX)



PARTNERS ENGAGED



250+

HEALTH CARE WORKERS TRAINED



EXPERTS ON THE CORE ADVISORY GROUP



22 RESEARCH PROJECTS



EXERCISES AND DRILLS



The 2014 nursing team with Dr.

PREPARING THE SPECIAL PATHOGEN UNIT

In the face of active Marburg virus disease and avian influenza threats, the team launched into action to build on existing capabilities and ensure New York City Health + Hospital | Bellevue's Special Pathogen Unit (SPU) was prepared.

BUILDING THE TEAM



The SPU increased staff capabilities by hiring a lead trainer, onboarding a critical care cardiologist, developing an on unit Just-in-Time-Training room, and implementing in-room Job Action Sheets. In addition, the lab trained their staff and developed new processes. Training focused on Personal Protective Equipment (PPE) and the skills needed to work in a SPU. In addition to training, the team onboarded new SPU staff, including:

- 15 Intensive Care Unit Registered Nurses
- 3 Physicians
- 12 Pediatric Registered Nurses
- 4 Advanced Practice Providers (APPs)



H5N1 patient transfer exercise

INNOVATING COMMUNICATION

SPECIAL PATHOGEN UNIT COMMUNICATION Since the start of the program, the team has worked to improve their SPU communication system – changing from white boards to baby monitors to headsets. The SPU's 2024 communication innovation – using Bluetooth headphones that comfortably remain in place in PPE - solves decades of communication challenges. The technology is familiar to staff, improves sound quality, and promotes staff comfort.



"In keeping with Bellevue's mission of never turning anyone away, our doors are open to any patient with any disease at any time."

- Trish Tennill, RN, Director of Nursing for the Special Pathogens Program



TESTING SCENARIOS



The Region 2 RESPTC hosted quarterly drills and exercises to prepare the unit for a potential response. Exercises included:



Ouarter 1: Pediatric Call Down Drill

Quarter 2: Intubation Exercise

Quarter 3: H5N1 Tabletop

Quarter 4: H5N1 Patient Transfer Exercise

BOLSTERING CAPABILITIES

QUARANTINE AND BIOCONTAINMENT UNIT Bellevue's SPU maintained and strengthened biocontainment capabilities this year, including:

- · Enhancing surge capacity for novel respiratory pathogens, and
- Improving critical care capabilities in the SPU, such as ECMO, ACLS, and diagnostics.

LABORATORY

The RESPTC implemented the Global Fever Special Pathogen Panel 2.0 in the Bellevue laboratory. Bellevue is now the only facility in New York City with this capability.





STRENGTHENING REGIONAL RESILIENCE

The RESPTC shared critical resources with 700+ partners, trained the health care workforce, launched a response team, and bolstered research to create a more resilient Region 2.



SHARING RESOURCES

The RESPTC reached 700+ partners in 2024 to ensure the region had the resources needed to prepare for special pathogen threats. Partners included healthcare, public health, and EMS representatives from every jurisdiction in Region 2. The team shared resources through R2RESPTC.org, the monthly newsletter, and external presentations, including hosting a webinar on the new Joint Commission Standards for 150+ attendees.

REGION 2 HIGH CONSEQUENCE INFECTIOUS DISEASE (HCID) PATIENT TRANSPORT CONCEPT OF OPERATIONS (CONOPS)

The Region 2 RESPTC accepted final feedback from signatories to ensure all regional jurisdictions are aligned on a HCID patient transport plan.



() TRAINING THE WORKFORCE

EXTERNAL TRAININGS

PLANNING WITH PARTNERS

To gain a better understanding of regional training needs, the Region 2 RESPTC hosted a focus group with each jurisdiction. The team then visited multiple NSPS facilities to provide technical assistance and in-person training, including PPE donning and doffing and special pathogen skills.



RESPTC team presenting research

SHARING KNOWLEDGE

PREPAREDNESS RESEARCH

In 2024, the RESPTC led 22 ongoing research projects and manuscripts, including:

- six retrospective chart review studies on mpox, COVID-19, and highly pathogenic avian influenzas,
- five surveys on special pathogen preparedness efforts.
- two multi-center expanded access protocols for medical countermeasures,
- two non-interventional biorepository studies,
- one observational protocol to study patients with any HCID, and
- six commentary manuscripts on an array of special pathogen preparedness topics.

The team presented seven abstracts across five different conferences, with our Mpox Hospitalization Study winning the most impactful and best presentation at the 2024 NETEC Summit. Two manuscripts were accepted for publication in Public Health Reports and Health Security in 2025.



CONSULTING EXPERTS CORE ADVISORY GROUP

The RESPTC maintained a core advisory group (CAG) of 24+ experts who advised on regional engagement. The CAG launched three subcommittees - Regional EMS, Exercise & Planning, and Engagement & Training.

BOLSTERING SYSTEM-WIDE SUPPORT

SPECIAL PATHOGEN RESPONSE TEAM (SPRT) In 2024, the RESPTC launched the SPRT to provide rapidly deployable specialized staffing support across the NYC H+H system for future responses. Operating under the System-wide Special Pathogens Program and in collaboration with NYC H+H | Bellevue's Special Pathogens Unit (SPU), the SPRT is composed of four SPU Advanced Practice Providers (APPs). In the event of a suspected or confirmed special pathogens case, the SPRT can be deployed to any of the 11 NYC H+H facilities. Their mission is to ensure the safe management of patients, proper handling procedures, and seamless coordination for transfer to Bellevue's SPU.

LOOKING AHEAD

The Region 2 RESPTC has exciting plans for 2025! The team is looking forward to:

- Readying the region for Avian Influenza,
- Training healthcare workers in the U.S. Virgin Islands,
- Participating in the NSPS World Cup tabletop exercise and the ASPR Tranquil Passport full-scale exercise,
- Launching a survey to gauge the preparedness of laboratories in the region,
- And more!

ACKNOWLEDGEMENTS

The accomplishments detailed in this report were made possible by the dedication of countless individuals and organizations. The Region 2 RESPTC extends its heartfelt gratitude to NYC Health + Hospitals leadership, U.S. Congress, the U.S. Department of Health and Human Services (HHS) Administration for Strategic Preparedness and Response (ASPR), and NETEC for their leadership and support. The Region 2 RESPTC is grateful for the close partnership with the NYC Department of Health and Mental Hygiene and all Departments of Health in the Region. Finally, the RESPTC is grateful for the dedication of countless health care, public health, and EMS partners for strengthening the resilience of HHS Region 2.

MEET THE REGION 2 TEAM

STEERING COMMITTEE

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