

# UNC Special Pathogen Response Center (SPARC)

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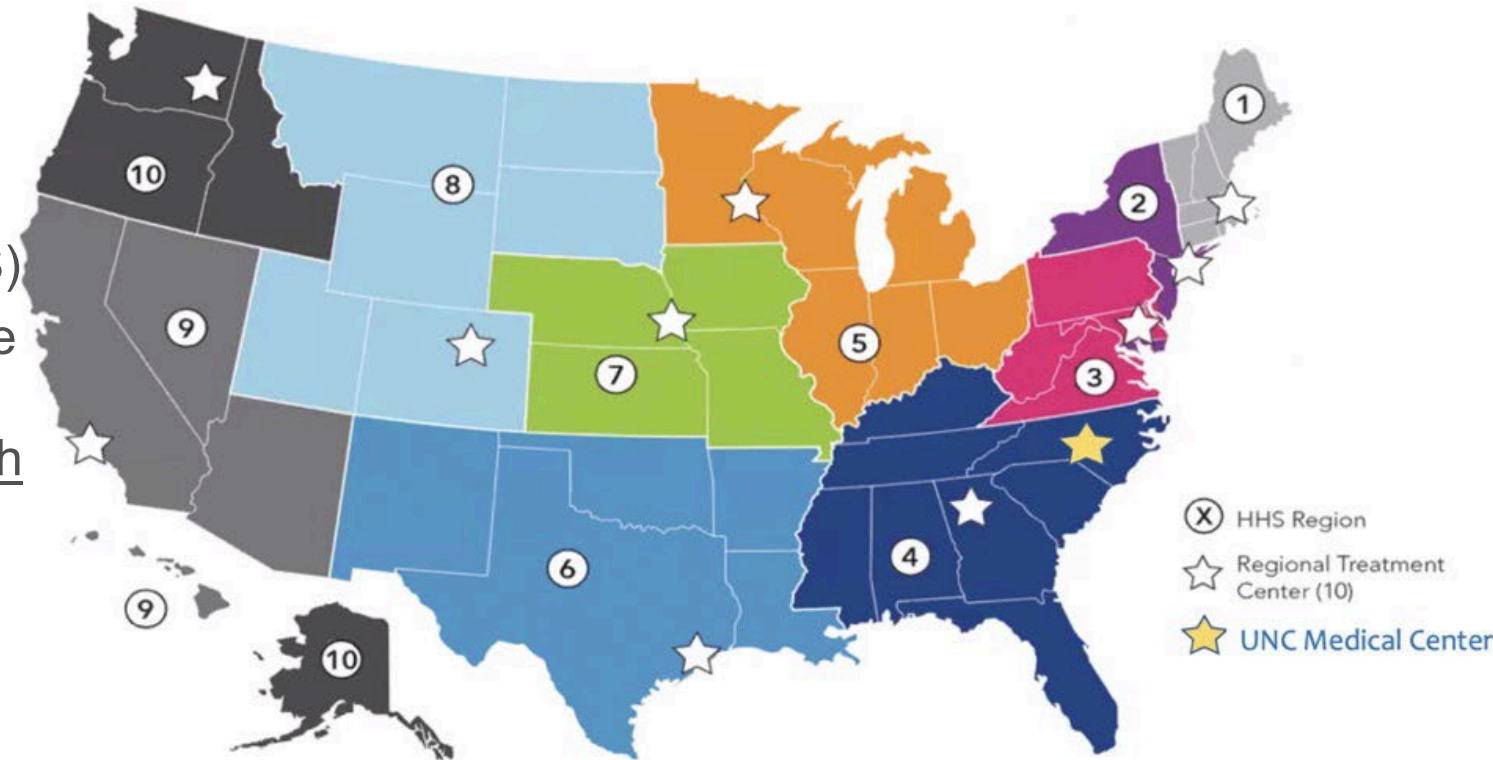
**UNC**  
HEALTH™

# UNC RESPTC

- Serve as leading providers of care to sustain and improve healthcare system preparedness for emerging special pathogens
- Hospitals with enhanced capability and capacity to care for highly infectious diseases
- Act as regional hubs for the National Special Pathogen System of Care (NSPS)
- Provide training and support to healthcare facilities within Region IV
- Build emerging special pathogen research capacity

## ASPR Awards \$21 Million to Health Facilities to Enhance Nation's Preparedness for Special Pathogens

13 regional healthcare facilities received funding to expand and enhance America's preparedness and response efforts against special pathogens such as COVID-19



# Special Pathogens Unit (SPU)

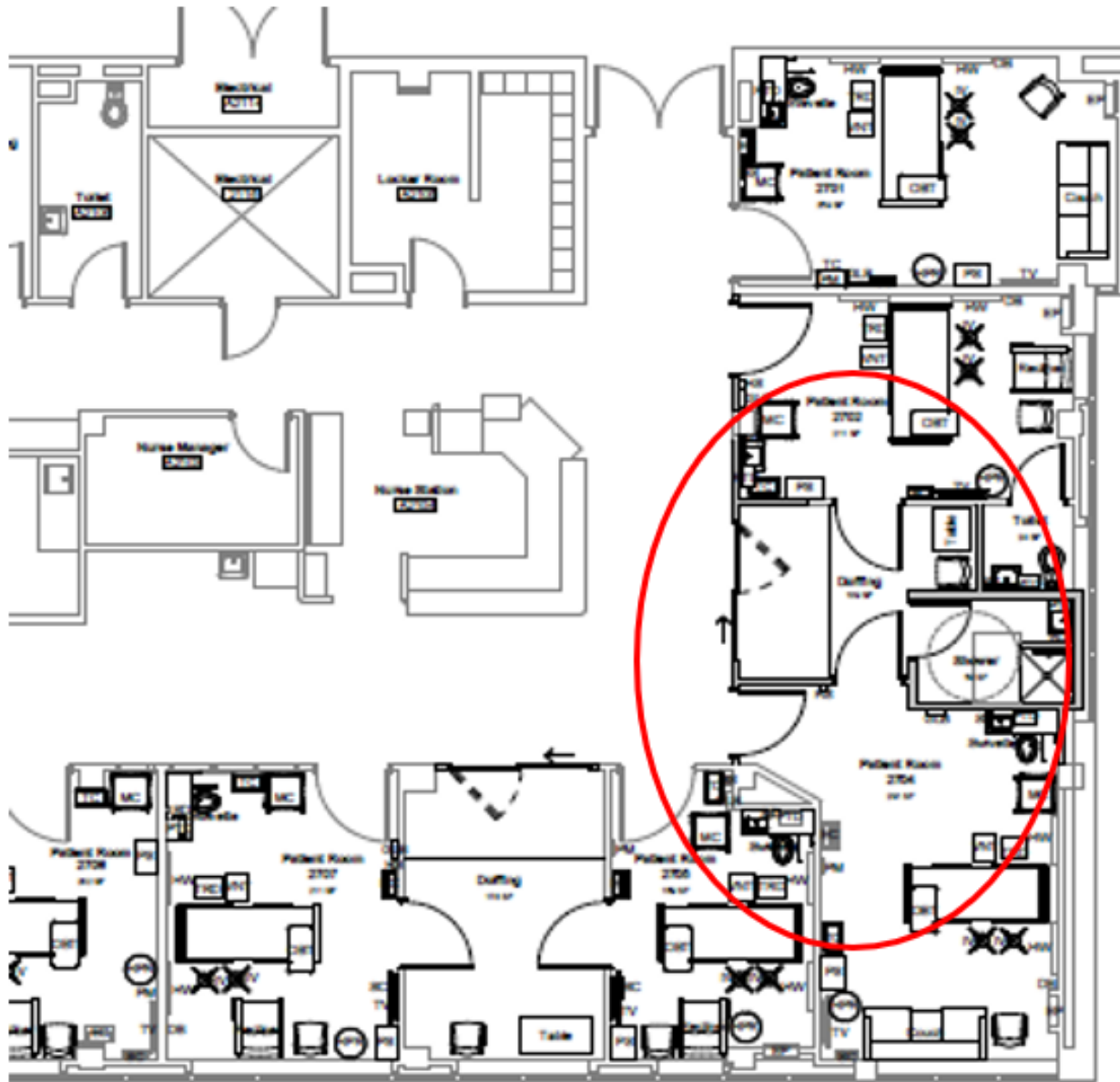
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## Current State:

- SPU activates in Medicine ICU (MICU)
- Mobile laboratory activates in MICU
- Waste Management
  - Store and ship Category A waste with a vendor to an offsite location for processing

## Future State:

- Renovations in former 2<sup>nd</sup> floor ICU space
  - Internal doffing areas
  - Negative air pressure in rooms + hallway
  - Solid ceilings
- SPARC Laboratory renovation completion May 19
- San-I-Pak Installation August 2025



## 2024 SPARC Response Team in Review

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- SPARC ended 2024 with approximately 70 dedicated team members across various specialties, including adult and pediatrics.
- Completed more than 117 hours of training!
- 42 Nurses
- 17 Physicians and APPs
- 5 Lab Professionals
- 3 Respiratory Therapists
- 2 Radiologic Technologists
- 2 Paramedics





SPARC team members perform a spill cleanup in the simulation center.



**Paula Hoyle, RN - SPARC** instructs team members before starting the patient simulation.



**Rebekah Marshall, RN - MICU**, prepares to change a central line dressing in the Roper Hall simulation center.



**Danny Willner, MD - Emergency Medicine**, prepares to insert a CVAD in a patient during a simulation at Roper Hall.



**Zach Fletcher, RN - 5CH** poses next to down provider **Ben Smith, MD - Emergency Medicine, Dir. - CAC**.



After exiting the patient room, **Erica Gales, RN - Joint Replacement**, finishes doffing her high-level PPE.



**Becky Straub, RN - IGHD & SPARC**, leads team members during PPE donning.



SPARC team members cut **Honey Jones, NP - Pulm. Critical Care, MICU APP Supervisor** out of her PPE during a provider down training.



**Herbert Whinna, MD, Dir. - MCL**, serves as a PPE doffing monitor for the SPARC laboratory team.



**Carolina Air Care's James Richmond, RN, and Michael Gardner, EMT-P** drape an ambulance during a simulation.



SPARC team members **Dawn Smith, MT, Lab Mgr. - MCL, Kim Johnson, MLS - MCL, Sonia Lopez, RN - MICU, Dylan Meyer, RN - PICU, Alex Burlij, RN, Jackie Center, RN - MICU, Benny Joyner, MD, Chief - Pediatric Critical Care, Stephanie Villalva, MLS - MCL, Julie Lester, RN, James Richmond, RN - CAC, Forrest Post, RN - BICU, and Chloe Winebarger, RN - 5CH** pose for a group picture after donning their high-level PPE.

# SPARC Outreach Training & Education

- In addition to training UNC Health staff, a SPARC goal is to train staff at other frontline facilities to safely receive and care for a patient with a suspect or known special pathogen
- UNC SPARC teamed up with Emory University's RESPTC program to provide training in Kentucky, South Carolina, Alabama, and North Carolina
- UNC SPARC is leading training events across North Carolina
  - UNC SPARC response team members help provide outreach training



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ORGANIZATIONS  
IN NC SENT STAFF  
TO A SPARC  
TRAINING EVENT



# 2024 SPARC Full-Scale Exercise

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- November 13, 2024 – UNC SPARC program teamed with Duke University Hospital to transport a patient from their Emergency Department to the Special Pathogen Unit (SPU) at UNC
- Objectives for the exercise:
  - Evaluate communication pathways with a transferring hospital, NC DHHS Epidemiology on-call, and UNC Hospitals
  - Evaluate Carolina Air Care's ability to safely and effectively transport a special pathogen patient
  - Evaluate the SPARC response team's ability to activate the SPU and safely receive and move a special pathogen patient throughout the hospital
  - Evaluate the SPARC Laboratory activation plan
  - Validate the capabilities and clinical resources required for performing patient care, phlebotomy, packaging and transporting a specimen to the SPARC lab

# READY TO RESPOND: An Inside Look Into UNC's SPARC Program



# June 2025 Full Scale Exercise

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- Partnering with HHS/ASPR to transport a patient via fixed wing air medical transport to North Carolina
- Carolina Air Care will transport a special pathogen patient from RDU to UNC Hospitals via critical care ground transport
- SPARC will activate the Special Pathogens Unit
- Patient Characteristics
  - Adult
  - Critically ill
  - Surgical consult



**Thank you**