

## Personal Protective Equipment and Just-in-Time Training

### Additional Resources

The following resources were shared during the live session:

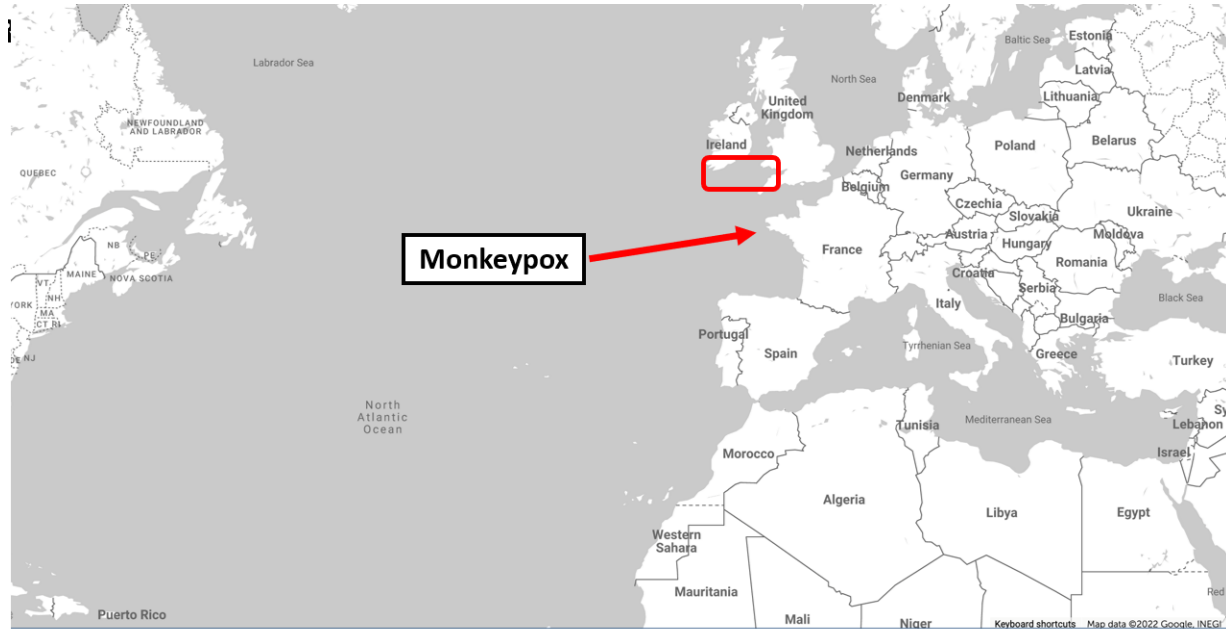
- Post session resources (podcast of webinar, presentation slides, responses to unanswered questions) can be found on our website next week:
  - <https://med.emory.edu/departments/medicine/divisions/infectious-diseases/serious-communicable-diseases-program/covid-19-resources/access-past-echo-recordings.html>
- Register for upcoming sessions on our website:
  - <https://med.emory.edu/departments/medicine/divisions/infectious-diseases/serious-communicable-diseases-program/covid-19-resources/echo-upcoming-session.html>
- National Emerging Special Pathogens Training and Education Center:
  - <https://netec.org/>

Session Recap:

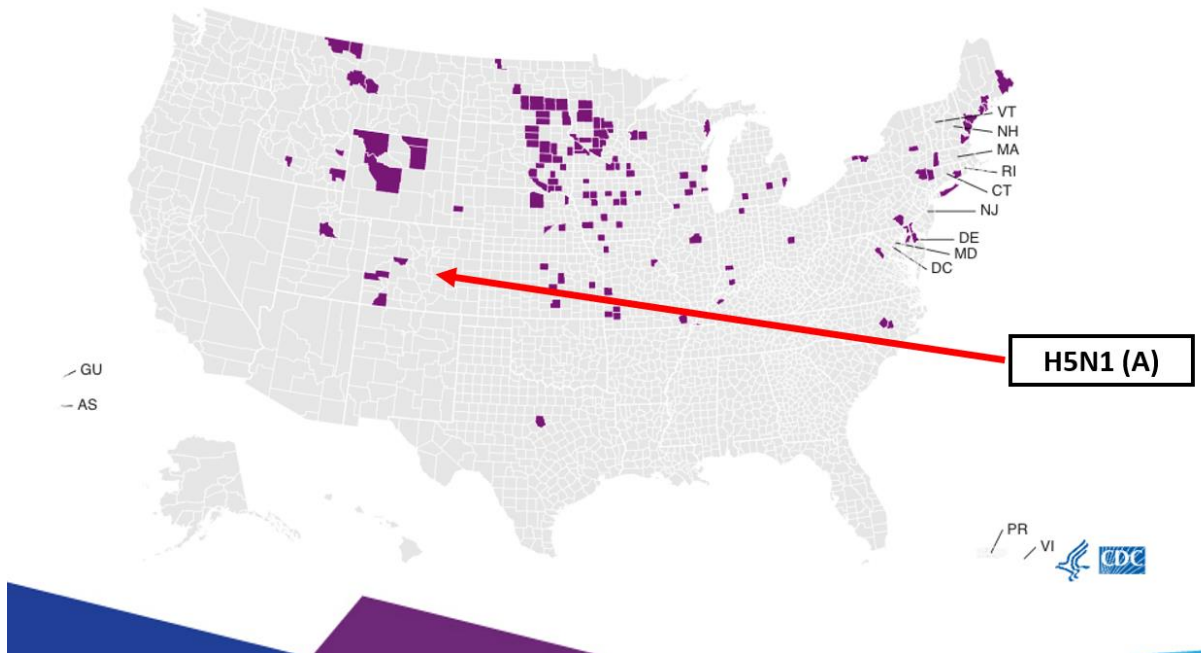
- **Situational Report**



- First Pathogen of Concern – Lassa Fever
  - This week, the Nigerian Centers for Disease control noted 140 deaths from confirmed Lassa Fever in country thus far, this year.
  - April 29, 2022 – Second Lassa Fever case was reported in Guinea, with no known epidemiological link to the first case identified on April 20<sup>th</sup>.
  - There have been no new cases reported in Europe or the United States.
- Second Pathogen of Concern – Ebola (EVD)
  - April 23, 2022 - The Democratic Republic of the Congo declared a new EVD outbreak in the Mbandaka region.
  - 3 EVD cases confirmed thus far - all 3 fatal.



- Third Pathogen of Concern – Monkey Pox
  - May 7, 2022 - The UK Health Security Agency confirmed a case of monkeypox in a recent traveler to Nigeria.
  - The patient is currently receiving care in London and the risk to the general public remains low.



- Fourth Pathogen of Concern – H5N1 otherwise known as highly pathogenic avian influenza, a Type A bird flu virus.

- April 28, 2022 - The first US human case of highly pathogenic avian influenza was reported in CO in a person with direct contact with infected poultry - patient has since recovered.
- The public health risk assessment remains low.



- Region 4 Update
  - April 27, 2022 - Emory's Serious Communicable Diseases Unit's laboratory was activated for an Ebola PUI, a patient from the DRC.
  - Test returned negative and the SCDU treatment team was not activated.
- **PPE Reminders:**
  - Why is PPE Necessary?
    - PPE is necessary due to the invisibility of danger, such as contamination, aerosolization, and re-aerosolization.
    - Unconscious behaviors of what we touch, and frequency of face contact highlights the need for PPE to minimize spread of disease - a high cost to all.
    - Utilizing PPE can minimize transport of disease to our home (COVID, RSV, MRSA) which would impact our families.
  - PPE Selection for special pathogens:

- Enhanced contact with Viral Hemorrhagic Fevers (which can be spread by airborne or droplet nature) highlights the need for total body coverage PPE, as it is impervious to body fluids.
    - Respiratory protection by N95 or better should be used, along with eye protection, and double gloves.
    - What is the rationale behind this?
      - There are high viral loads in body fluids
      - Patients frequently or suddenly WET
      - Very small infectious doses can cause infection by many entry points, including un-intact skin and mucous membranes.
    - Contact with novel or high consequence respiratory pathogens (which can be spread by airborne or droplet nature) highlights the importance of using an isolation gown.
    - Respiratory protection by N95 or better should also be utilized, along with eye protection, and gloves.
    - What is the rationale behind this?
      - The mode of transmission, infectious dose, and viral load information may not be known.
      - Aerosols are not limited to traditional AGPs, and there is no data to support 6 feet safe distance.
      - Known similar pathogens have ocular transmission, but fomite risk is unknown and may depend on staff behavior.
  - Considerations for PPE Selection:
    - Physical infrastructure
    - Order of donning and doffing
    - Physical demands
    - Risks encountered while performing tasks
    - Risk of doffing
  - Safe Behavior in PPE
    - Awareness
      - Limits of protection, altered proprioception, inherent risks, HANDS
    - Mitigation
      - Hygiene opportunities, breach, additional barriers
    - Skill
      - Meticulous doffing in the correct sequence in a safe space
- **PPE and Pediatrics:**
  - What challenges are associated with Pediatric PPE?
    - Cumbersome process, especially for children with special needs.
    - Anxiety and fear for both the parent(s) and child(ren).
    - Caregiver's ability to cope.

- What considerations should be taken?
  - Avoiding family separation.
  - Providing emotional support to both the parent(s) and child(ren).
    - Can explore social workers and psychiatry.
  - Adjustments for children with special needs.
- Adjuncts to PPE for Pediatric Decontamination can aid in reducing challenges. These items consist of the following:
  - Baby bathtub
  - Shopping cart
  - Laundry baskets
- **Podcast of Webinar and Q&A**
  - <https://scdp-echo-podcasts.simplecast.com/>
  - For a complete review of our webinar, please listen to Episode 14.
  - Questions from our audience are addressed in Episode 15 of our podcast.