

The Monkeypox Outbreak: Mitigation on a Global Scale

Session Resources:

- 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>
- HHS Region IV Emory University SCDP:
 - <https://med.emory.edu/departments/medicine/divisions/infectious-diseases/serious-communicable-diseases-program/covid-19-resources/index.html>
- NETEC:
 - <https://netec.org/>
 - Overview: <https://repository.netecweb.org/exhibits/show/monkeypox/monkeypox>
 - EMS: <https://netec.org/2022/05/19/ems-response-to-the-current-outbreak-of-monkeypox/>
 - Lab: <https://repository.netecweb.org/exhibits/show/monkeypox/item/1669>
 - Waste: <https://netec.org/2021/07/21/monkeypox-waste-management/>
- CDC Updates on current Monkeypox Cases
 - <https://www.cdc.gov/poxvirus/monkeypox/response/2022/us-map.html>
 - <https://www.cdc.gov/poxvirus/monkeypox/outbreak/current.html>
 - <https://www.cdc.gov/poxvirus/monkeypox/index.html>
- WHO
 - <https://www.who.int/health-topics/monkeypox>

Situation Report:

Situation Report 21 July 2022

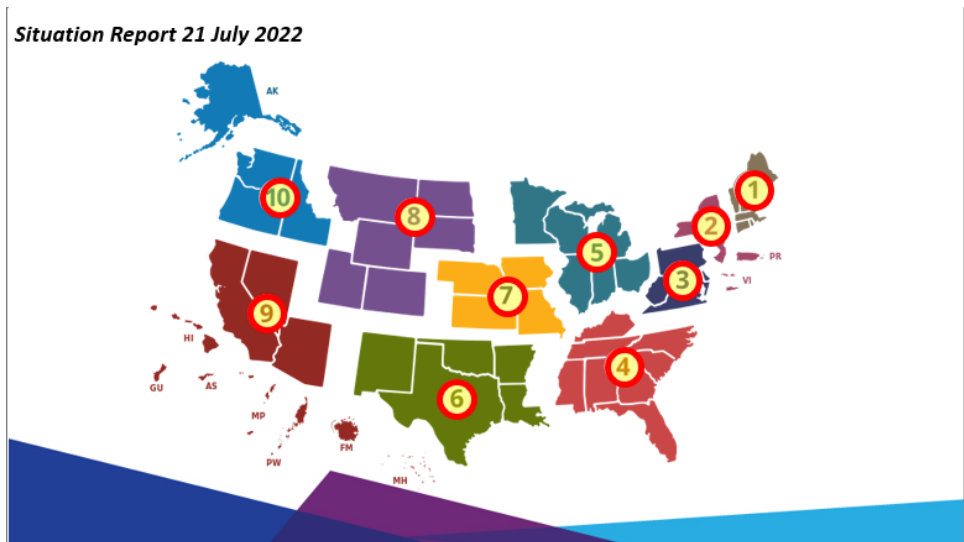


- On July 4th, the Democratic Republic of the Congo declared an end to the 14th Ebola virus disease outbreak in the country, after less than three months; there were 3 confirmed cases, all fatal.

- On July 17th, the WHO confirmed earlier results of the first ever Marburg virus outbreak in Ghana, in two patients with fatal disease. Marburg is a highly infectious viral hemorrhagic fever, an RNA filovirus and close cousin of Ebola. Believed to spillover from fruit bats, there are no specific therapeutics, and it is only the second time the virus has been isolated in West Africa.

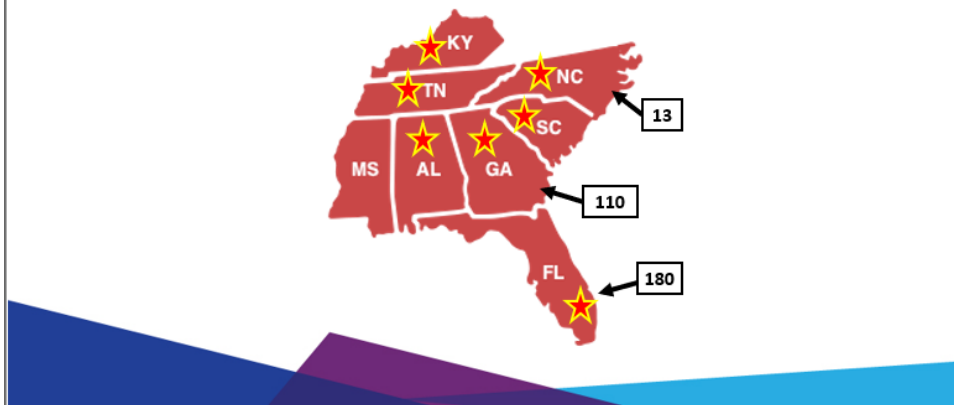


- There are now over 13,000 cases worldwide in almost 70 countries. Close interpersonal contact including sexual relations appear to be the most likely means of transmission and case counts are likely an undercount due to lagging testing capacity. As we speak the WHO is convening its emergency committee to determine whether to label the outbreak a public health emergency of international concern and we shall know more within the hour. This is a rapidly evolving situation.



- In the United States, there are now over 2,000 confirmed cases in every region. Again, as testing capacity continues to expand, we expect these numbers to increase as undocumented transmission has been occurring.

Situation Report 21 July 2022



- In region 4 there are now at least 320 confirmed cases in every state except Mississippi with the most in Florida, Georgia, and North Carolina. Healthcare workers are advised to be aware of atypical presentations, though the general risk to the public remains low.

Session Recap (view our website for full presentation slides – link can be found above):

Identifying Monkeypox:

- High index of suspicion in the following situations:
 - New disseminated or genital rash
 - Especially concerning if accompanied by new lymphadenopathy
- New/unexplained rash that includes vesicular or pustular lesions
- New/unexplained proctitis, especially if accompanied by rash
- Any of the above with an epidemiologic risk factor*:
 - Recent international travel
 - Recent attendance at raves or other large gatherings, especially in Europe or Canada
 - Recent unprotected sexual intercourse, particularly in MSM patients
 - Recent sexual intercourse with a partner who had skin lesions
 - Recent close contact with a patient diagnosed with MPX

*Absence of these risk factors does NOT exclude the diagnosis

Current Clinical Presentation:

- Prodrome often mild or absent
- Patient presentations can be confused with STIs with rash limited to anogenital region in some patients
- In other patients the rash is present in multiple stages at once and lesions are not as deep-seated as previously described
- Patients presenting with isolated proctitis

Monkeypox Transmission:

- Skin to Skin contact
- Skin contact with contaminated linens/towels
- Respiratory droplets via prolonged face-to-face contact
- Ensure that the patient:

- Is masked (surgical/procedure mask at minimum)
 - Is in a private exam room with the door closed
 - Has all skin lesions covered to the extent possible with clothing, a gown, and/or a sheet
- Ensure that any staff/providers entering the room wear appropriate PPE (N95, eye protection, gown, gloves)

Identifying the Infectious Period:

- WHO defines the infectious period from 5 days prior to the onset of the rash until the lesions have crusted and a fresh layer of skin has formed.
- The incubation period (interval from infection to onset of symptoms) of Monkeypox is usually from 6 to 13 days but can range from 5 to 21 days.

Monkeypox Prevention:

- Identify, Isolate, and Inform!
 - COVID-19 precautions such as masking and physical distancing are likely to reduce the risk of exposure and transmission.
 - Avoid contact with any materials, such as bedding, that has been in contact with a sick animal or person.
 - Isolate infected patients from others who could be at risk for infection.

Monkeypox Treatment:

- There are no specific licensed treatments available for monkeypox
 - There are known countermeasures that might be effective
- Tecovirimat (TPOXX; ST-246)
 - inhibits p37, a highly conserved protein in all orthopoxviruses
 - prevents the formation of viral envelope
 - FDA approved (2018) for smallpox; kept in US Strategic National Stockpile
- Brincidofovir (Tembexa)/Cidofovir
 - Brincidofovir was FDA approved (2021) for smallpox;
 - Unclear availability
- Vaccinia immune globulin (VIG)
 - Only available through CDC
- Medical Countermeasures can be requested from the
 - CDC EOC 770-488-7100
 - CDC Drug Service 404-639-3670; drugservice@cdc.gov
- Requests for vaccines for PEP, Tecovirimat, or VIGIV should come from State or Territorial Health Authorities
 - Vaccine for PrEP will be supplied by CDC Drug Service

Monkeypox Vaccines:

- JYNNEOS has been approved by FDA (2021) for the prevention of monkeypox and smallpox
 - Non-replicating MVA vaccine
 - Unclear number of doses in US Strategic National Stockpile
 - Prioritized for high-risk contacts of monkeypox cases
- ACAM2000 is approved by FDA for prevention of smallpox
 - Live Vaccinia vaccine
 - CDC held eIND for prevention of Monkeypox during outbreak setting

