

MPOX**IMMEDIATE NOTIFICATION****EPIDEMIOLOGY PROGRAM**

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|-----------------------------------|---|--|
| Event Name: | MPOX | |
| Event Time Period: | 30 days | |
| Clinical Description (CSTE 2022): | <p>A person presenting with new onset of:</p> <ul style="list-style-type: none">• Clinically compatible rash lesions*; OR• Lymphadenopathy or fever** <p>*The presence of clinically compatible rash lesions should be combined with either a higher or lower epidemiologic linkage criterion for case classification.</p> <p>**A person presenting with lymphadenopathy or fever without any clinically compatible rash lesions must meet a higher risk epidemiologic risk criterion for case classification.</p> | |
| Event Classification (CSTE 2022): | <i>Confirmed</i> | <ul style="list-style-type: none">• Detection of MPOX virus nucleic acid by molecular testing in a clinical specimen; OR• Detection of MPOX virus by genomic sequencing in a clinical specimen. |
| | <i>Probable</i> | <ul style="list-style-type: none">• Detection of orthopoxvirus nucleic acid by molecular testing in a clinical specimen AND no laboratory evidence of infection with another non-variola orthopox virus; OR• Detection of presence of orthopoxvirus by immunohistochemistry in tissue; OR• Detection of orthopoxvirus by genomic sequencing in a clinical specimen; OR• Detection of anti-orthopoxvirus IgM antibody using a validated assay on a serum sample drawn 4-56 days after rash onset, with no recent history (last 60 days) of vaccination***. <p>***Recent administration of ACAM2000 and Jynneos needs to be considered when interpreting an antibody titer. RABORAL V-RG is an oral rabies vaccine product for wildlife, is a recombinant vaccinia virus, and could lead to an antibody response in an individual exposed to the liquid vaccine; this is expected to be an extremely rare occurrence.</p> |

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| | <i>Suspect</i> | <p>Meets clinical criteria AND epidemiologic criteria^ AND no evidence of a negative test for either non-variola orthopoxvirus or MPOX virus.</p> <p>^The presence of clinically compatible rash lesions should be combined with either a higher or lower epidemiologic linkage criterion for case classification. A person presenting with lymphadenopathy or fever without any clinically compatible rash lesions must meet a higher risk epidemiologic risk criterion for case classification.</p> <p>Epidemiologic Criteria Within 21 days of illness onset:</p> <ul style="list-style-type: none"> • Higher Risk Epidemiologic Linkages <ul style="list-style-type: none"> ○ Contact, without the use of appropriate PPE±, with a person or animal with known orthopoxvirus or MPOX virus infection; OR ○ Contact, without the use of appropriate PPE± or Biosafety Level protocols±, with laboratory specimens or other items that could serve as fomites that have been in contact with a person or animal with a known orthopoxvirus or MPOX virus infection; OR ○ Member of an exposed cohort as defined by public health authorities experiencing an outbreak (e.g., participated in activities associated with risk of transmission in a setting where multiple cases occurred). • Lower Risk Epidemiologic Linkages <ul style="list-style-type: none"> ○ Member of a cohort as defined by public health authorities experiencing mpox activity; OR ○ Contact with a dead or live wild or exotic pet animal or an African species, or used or consumed a product derived from such an animal (e.g., game meat, powders, etc.); OR ○ Residence in or travel to a country where mpox is endemic. <p>±The language “without the use of appropriate PPE or Biosafety Level protocols” includes breaches in the recommended PPE and deviations from appropriate BSL protocols.</p> |
| Massachusetts Event Classification (2022): | Follows CSTE case definition | |

MPOX (continued)

| Report Type | Test Type | Source | Result | New event or beyond report period? | Data Entry |
|------------------------|--|-------------------|--|------------------------------------|---------------------------|
| Laboratory report | PCR | Clinical specimen | Positive | Yes | New event CONFIRMED |
| | | | | No | Same event |
| Select: | Monkeypox virus DNA [Presence] in Specimen by NAA with probe detection | | | | |
| Laboratory report | PCR | Clinical specimen | Positive for Mpox virus | Yes | New event CONFIRMED |
| | | | | No | Same event |
| Select: | Orthopoxvirus DNA XXX QI PCR | | | | |
| Laboratory report | PCR | Clinical specimen | Positive for non-variola orthopoxvirus | Yes | New event PROBABLE |
| | | | | No | Same event |
| Select: | Orthopoxvirus DNA XXX QI PCR | | | | |
| Laboratory report | PCR | Clinical specimen | Negative, Inconclusive, Unsatisfactory, or Equivocal for Mpox virus or non-variola orthopoxvirus | Yes | New event UNCLASSIFIED |
| | | | | No | Same event |
| Select: | Orthopoxvirus DNA XXX QI PCR | | | | |
| Laboratory report | ELISA or EIA | Blood or serum | Positive | Yes | New event SUSPECT |
| | | | | No | Same event |
| Select (IgM specific): | Orthopoxvirus IgM ELISA | | | | |
| Select (IgG specific): | Orthopoxvirus IgG ELISA | | | | |
| Laboratory report | ELISA or EIA | Blood or serum | Equivocal or Negative | Yes | New event UNCLASSIFIED |
| | | | | No | Same event |
| Select (IgM specific): | Orthopoxvirus IgM ELISA | | | | |
| Select (IgG specific): | Orthopoxvirus IgG ELISA | | | | |
| Laboratory report | Immunohistochemistry | Clinical specimen | Positive for the presence of orthopoxvirus | Yes | New event PROBABLE |
| | | | | No | Same event |

| Report Type | Test Type | Source | Result | New event or beyond report period? | Data Entry |
|----------------|---|--------|--------|------------------------------------|------------|
| <i>Select:</i> | Microscopic observation : PrId : Pt : xxx : Nom : Microscopy.Electron | | | | |

Data entry note: Immunohistochemistry results should be reviewed by the Zoonotic Liaison prior to entry.