

Monkey Pox

Virus:

- Orthopox virus (smallpox, vacciniapox)
- Reservoir is small mammals (Gambian pouch rat, Prairie Dogs, etc)
- Transmitted from small mammals to humans, then to other humans
- First outbreak in US in 2003 of 47 patients related to prairie dog pets

Current epidemic

- Began May 2022
- Currently 61k reported cases worldwide and 23k in US
- 19 deaths total reported
- Case Numbers: >477 in DC, 600 MD, 400+ VA (DC highest per capita)
- 98% of cases in in DC are in men; particularly MSM.
- Initially majority infected were White patients; now majority is in AA and Hispanic pts -> suspect reason is inequity in pre-exposure vaccination!

Transmission:

- Skin or body fluid contact, resp droplets, and fomites (bed linens)
- Transmitted frequently by sex, but also by other contact

Incubation:

- Typically 7-14d
- Can be up to 21d (reason for 21 day duration of monitoring)

Infectivity:

- Infectivity begins with symptom onset
- lasts until all scabs have fallen off and skin has healed

Sx:

- Usually 1-3 days of prodrome with fever and malaise, myalgias, LAD
- SKIN lesions go from papules -> vesicles -> pustules -> crusted over scabs -> healing
- Other sx/presentations
 - proctitis
 - Pharyngitis
 - Penile lesions
 - Eye infection
 - Bacterial superinfection
 - Vaginal lesions (rare)
 - Encephalitis (rare)
 - Pneumonia (rare)
 - Corneal involvement -> rare, but can lead to vision loss

Severity:

- The strain involved in epidemic is less severe than the strains in some endemic countries (0.03% vs 1%) – could this be attributed to medical care?
 - risks for severe disease: immunosuppression, preg, children, and those with severe atopic dermatitis

Testing:

- two swabs at each site (one is orthopod only PCR, second goes to CDC for Monkey pox testing if first is positive.)
- No need to unroof; but should swab vigorously
- Swab all sites of lesions

Treatment:

- Tecovirimat
 - FDA approved for small pox
 - Inhibits orthopox protein which prevents viral egress out of infected cells
 - Requires three forms -> can get from DC Health department
 - Adverse effects: HA, nausea, abd pain, vomiting
- Trifluridiane eye drops for any eye surface or lesions on nearby structures

Vaccines:

- ACAM2000
- Jynneos