NSW Health

Appendix C: general advice for responding to an mpox case in a child who attends an early childhood education and care setting

Background and rationale

In high income countries mpox in children is exceptionally rare. A review of the few child and adolescent mpox cases in the United States identified that cases in younger children (aged 0-12 years) almost exclusively occurred following skin-to-skin contact with a household member with mpox during caregiving activities (1). One instance of presumed fomite transmission (via a shared towel) was reported. Only one instance of transmission outside the household was reported (an adult with mpox holding a child). No secondary transmission was reported to have occurred after children attended school or a childcare centre while symptomatic. This document provides an overview of principles that public health units may consider should an mpox case be notified in a child who has attended an early childhood education and care (ECEC) setting. Cases among childcare workers should be managed as per the control guidelines for cases who work in high-risk settings

Case management

The case should be excluded from childcare until they are cleared by the managing clinician or PHU. The managing clinician should be linked in with a paediatric infectious diseases physician or paediatrician to support case management.

Identifying and managing contacts

Upon notification of an mpox case in a child who attended an ECEC setting during their infectious period*, public health units should inform the Communicable Diseases Branch, who will convene an expert panel to provide recommendations on the most appropriate approach to contact management. The panel should include a paediatric infectious diseases physician and meet as soon as practicable (within 24 hours of notification).

Contact definitions

In determining the contact definition, the panel may consider:

- the age of the child (insofar as it provides an indication of their expected interactions with other children and adults at the service)
- the location of any lesions, noting that direct contact with lesions poses the highest risk of transmission

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* The NSW mpox control guideline states that cases may be infectious up to four days prior to symptom onset. This advice was based on observed instances of pre-symptomatic transmission through sex, as well as evidence of viable virus isolated from rectal samples of mpox cases prior to symptom onset. Pre-symptomatic mpox transmission outside of sexual encounters has not been demonstrated; accordingly, the panel may choose to consider the child to be infectious from the date of first symptom onset.

    - lesions covered by clothing at all times pose little risk to others in most circumstances
    - lesions ordinarily covered by clothing may pose some risk to staff providing personal care activities to the child (e.g. changing nappies, assisting with toileting). Two instances of suspected transmission in a household setting from a child to an adult who was involved in routine care activities (including changing nappies) have been reported overseas.(1)
- whether the case has symptoms that may be associated with production of potentially infectious secretions, droplets or aerosols (e.g. oral lesions, pharyngitis)
    - replication-competent virus has previously been isolated from saliva and the upper respiratory tract of mpox cases (2)
    - transmission between people with shared airspace but no direct contact or shared fomites has not been demonstrated (2)
- presence of shared equipment that may be associated with fomite transmission (e.g. towels, linen, bedding, blankets, soft furnishings)
- the likely clade of the virus; clade I appears to be more transmissible in household settings, though this evidence is difficult to generalise to non-household settings in Australia.†

Contact management

- **Providing information:** the panel may consider recommending that the public health unit provide a letter to some or all staff and parents advising that an mpox case attended the service on the specified date(s) and asking them to monitor for symptoms for 21 days from last exposure.
    - any letters should be carefully worded to avoid identifying the case
    - the public health unit should consider meeting directly with the ECEC service and, when required, parents/carers of the children who attend to provide an opportunity to address community questions and concerns.
- **Exclusion:** excluding well child contacts is unlikely to be proportionate in most circumstances however may be considered for selected contacts deemed to be at especially high risk. Staff and parents should be advised that if any contacts develop mpox symptoms they should not attend the childcare setting, seek medical care, and inform the PHU.
- **Post-exposure prophylaxis vaccination (PEPV)**: the NSW mpox control guideline recommends that people who have had direct contact with an mpox case or potentially contaminated materials be offered PEPV. In deciding how to apply this advice to child contacts of an mpox case, the panel may consider that:
    - the Australian Technical Advisory Group on Immunisation advises that MVA-BN (JYNNEOS) can be given to infants and children after a risk–benefit assessment
    - MVA-BN has not been specifically studied in a clinical trial in children, but no serious safety concerns have been observed in children using MVA-BN for PEPV (3,4)
    - In infants under 6 months, the United States Centers for Disease Control and Prevention advise that vaccinia immune globulin intravenous (VIGIV) be considered in lieu of vaccination (4).

  The parent(s)/guardian(s) of any child contacts whom the panel deems eligible for PEPV should be offered the opportunity to participate in a shared decision-making discussion with an

† Children account for a high proportion of mpox cases caused by clade I in the Democratic Republic of the Congo. Clade I has not been detected in Australia. Moreover, even if clade I were to be detected, transmission to children to the same extent is not expected in Australia due to differing household sizes, as well as improved access to testing and medical care.

appropriate clinician. Clinicians may contact the New South Wales Immunisation Specialist Service (NSWISS) physician on-call for further advice via The Children's Hospital at Westmead switchboard on 02 9845 0000.

References

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