



ALGORITHM FOR THE TESTING AND MANAGEMENT OF PREGNANT WOMEN (< 22 WEEKS GESTATION) WHO ARE CONTACTS EXPOSED TO PARVOVIRUS B19 (B19): HEALTHCARE SETTING V1.0 02/09/2024

CONTACT WITH B19 CONFIRMED OR HIGHLY SUSPECTED CASE/OUTBREAK IN ANY HEALTHCARE SETTING

CLINICAL REVIEW IN ACUTE OR COMMUNITY SETTING.
Recommend testing for B19 antibodies (current bloods +/- booking bloods) - undertake risk assessment (including medical & obstetric history) for exposures in healthcare setting +/- linking with Clinical Microbiology.

B19 Contact: contact in the same room (e.g. in home, congregate accommodation, healthcare setting, school or workplace) for 15 minutes or more, or face-to-face contact with a laboratory-confirmed or highly suspect case of B19V infection during the period of maximum infectivity, for 7 days before the appearance of a rash to the date of appearance of the rash, in the absence of respiratory isolation precautions.

B19 Infectious Period: 7 days before the appearance of the rash. In asymptomatic cases, the infectious period lasts one week and is likely to be over by 15 days from the date of exposure, but exceptionally it can end 21 days from the date of exposure.

B19 Outbreak*: 2 or more cases of B19 occurring with an incubation period that are epidemiologically-linked in time, place, and person.

B19 Incubation Period: is variable from 4 to 14 days after exposure, but can last up to 3 weeks.

B19 IgM AND IgG not detected (i.e. suggestive of no B19V immunity). Woman is not immune and susceptible to infection, refer for specialist advice. Repeat sampling in 4 weeks from last exposure. If exposure is ongoing, serology may be repeated every 4 weeks under specialist advice.

B19 IgG detected and B19 IgM not detected (i.e. suggestive of B19 immunity). No requirement for exclusion, but clinical review depending on other presenting features. Reassure that they have had B19 infection at sometime in the past but not recently.

B19 IgM detected, regardless of IgG result (i.e. suggestive of acute B19 infection). Risk assessment for exclusion required, as contact has been confirmed as acute/new case, and refer for specialist advice. Refer sample for confirmatory B19 DNA, and consider repeat sampling in 4 weeks. Exposure setting should be alerted, to allow for appropriate PPE use for all clinical interactions in line with national guidance, and point of care risk assessment.

SINGLE CASE SETTING EXPOSURE. REVIEW RISK. Exposure risk assessment (i.e. B19 case is deemed no longer infectious from appearance of rash or at least 15 days from serological confirmation in asymptomatic B19 cases). In healthcare setting: risk assessment recommended as exclusion is not mandatory. Non-immune pregnant H&CWs < 22 weeks gestation should not be allocated to work with confirmed or highly suspected cases of B19. For all other work advise appropriate PPE use for all clinical interactions in line with national guidance, and point of care risk assessment.

OUTBREAK* SETTING EXPOSURE. REVIEW RISK. Undertake risk assessment with Obstetrics, Occupational Health, GP, and Public Health. **Exposure risk assessment (i.e. remain away until outbreak is declared over as setting is no longer an infectious source OR until gestation period is greater than 22 weeks - unless required following specialist advice).** In healthcare setting: risk assessment is recommended. Non-immune pregnant H&CWs < 22 weeks gestation should not provide clinical care in outbreak setting. Following risk assessment conducted by management, these H&CWs may need to be allocated to alternative duties away from the outbreak setting. For this reallocated work, advise appropriate PPE use for all clinical interactions in line with national guidance, and point of care risk assessment.

INDICATIONS FOR B19 TESTING IN PREGNANT WOMEN:

- Women with suspected acute B19 infection, especially if attending hospital with symptoms of fever and significant anaemia (Hb < 9.0g/dL) without another explanation.
- Women with foetal anomalies, stillbirth, late miscarriage or hydrops detected on ultrasound scan.
- Women with definitive contact/exposure to B19 case/outbreak in any setting:
 - Given the major transmission pathway for B19 in this scenario is via infected respiratory droplets – infection prevention and control advice in line with national guidance should be recommended.