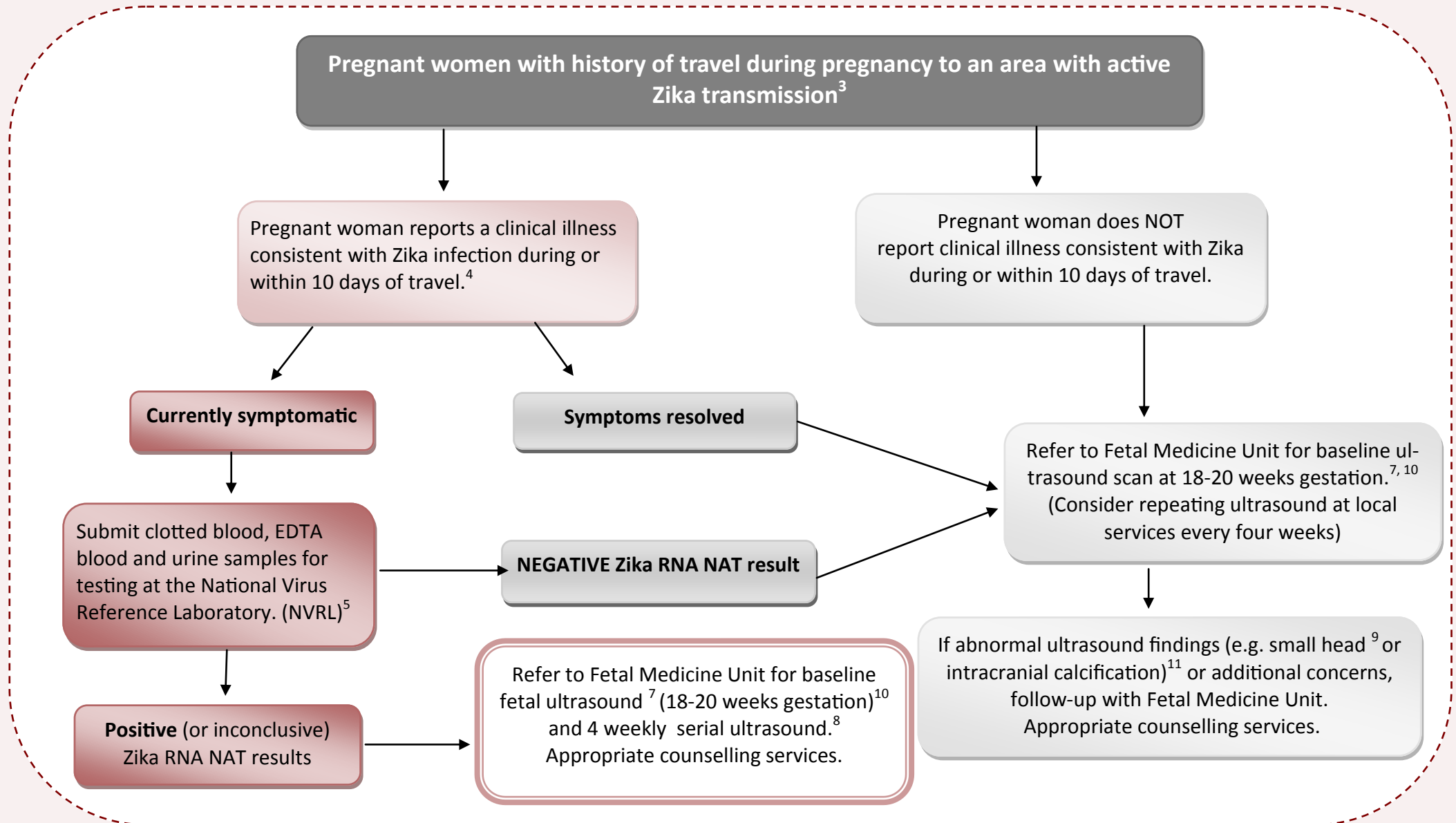


Interim algorithm¹ for assessing pregnant women with a history of travel during pregnancy to areas affected with active Zika virus transmission.²



Interim algorithm for assessing pregnant women with a history of travel during pregnancy for areas affected with active Zika virus transmission

ADDITIONAL NOTES

1. Interim guidance will be updated as more information becomes available. Currently this algorithm applies to women in all stages of pregnancy although based on information available from Brazil and experience from other congenital infections (such as CMV, rubella and toxoplasmosis), infection in early pregnancy is likely to be the greatest risk.
2. Laboratory testing is performed by the National Virus Reference Laboratory (NVRL). Zika virus testing will be performed using Zika virus RNA NAT testing or serology.
3. Assessment of pregnant women should be based on a history of travel to countries and territories reporting active ZIKV transmission in the last 9 months. See the most up to date list at www.hpsc.ie. This is in contrast to pre travel advice where countries or overseas territories are classified as having **current active** ZIKV transmission if confirmed autochthonous cases have been reported in the last 3 months.
4. Clinical illness is consistent with Zika virus disease if two or more symptoms (acute onset of fever, maculopapular rash, arthralgia, or conjunctivitis) are present. However, testing can also be considered for pregnant women with acute onset of symptoms within 10 days of travel to an area with Zika virus transmission that are not explained by other common infectious causes (e.g. URTI, UTI).
5. The samples required are a clotted blood (plain tube or serum separator tube) for serology, or EDTA blood and a small volume of urine without preservative for Zika virus RNA testing. The sample form must clearly state both the travel history (i.e. which countries visited and the dates of the outward and return journeys) and the clinical details (i.e. the patient's symptoms and the date of illness onset). This is so that the appropriate investigations can be performed and their results correctly interpreted.
6. If an alternative diagnosis is made there is no need for further Zika virus-specific follow up.
7. For women without current symptoms, taking and storing a clotted blood sample locally, without immediate testing, is recommended. In the event that there is a later concern about fetal development, this sample will be available for retrospective testing, including detection of Zika antibodies.
8. This evaluation and follow-up is likely to include repeat fetal ultrasound at four weekly intervals and consideration of fetal MRI. Abnormal fetal findings will prompt appropriate investigation including, for example, submission of booking and current serum samples for toxoplasma, rubella, parvovirus and CMV serology.
9. In this context, 'small fetal head' is defined as: Head Circumference more than 2 Standard Deviations below the mean for gestational age, i.e. below the 25th centile.
10. Time of first scan and subsequent ultrasound has been recommended because fetal ultrasound might not detect microcephaly or intracranial calcifications until the late second or early third trimester of pregnancy.
11. Apart from microcephaly and intracranial calcifications, other brain abnormalities that have been reported in association with Zika virus infection are ventriculomegaly, cell migration abnormalities (e.g. lissencephaly, pachygyria), arthrogryposis (congenital contractures) secondary to central or peripheral nervous system involvement.
12. This interim algorithm for assessing pregnant women with a history of travel during pregnancy for areas affected with active Zika virus transmission has been adapted from the Public Health England and UK Royal College of Obstetrics with due consideration given to the Irish context.