



## Zika virus infection: guidance for primary care

### Introduction

Since 2007, Zika virus infections have been reported in Africa, Asia and Oceania. From 2015, spread of the infection to the Americas led to large outbreaks across the region. Based on a systematic review of the literature up to 30 May 2016, WHO has concluded that Zika virus infection during pregnancy is a cause of congenital brain abnormalities, including microcephaly; and that Zika virus is a trigger of Guillain-Barré syndrome.

Symptomatic Zika virus infection is typically mild and short-lived in most individuals, but particular attention is required for women who are pregnant or couples who are planning a pregnancy due to the risks of Zika virus to the developing fetus. Symptoms and signs of clinical illness include the following: rash; itching/pruritus; fever; headache; arthralgia/arthritis; myalgia; conjunctivitis; lower back pain; retro-orbital pain.

Countries with current or past Zika virus transmission have been given one of three risk ratings (high, moderate, or low) based on Zika virus epidemiology and risk to UK travellers. The greatest likelihood of acquiring Zika virus infection is in a country with high or moderate risk, however the individual risk of infection may be lower especially if mosquito bite avoidance measures are followed. <https://www.gov.uk/government/publications/mosquito-bite-avoidance-for-travellers>

A list of countries and their Zika virus risk can be found on the PHE website <https://www.gov.uk/guidance/zika-virus-country-specific-risk>

This guidance summarises key advice for those working in primary care, since they may be consulted by patients, including pregnant women, who are travelling to or returning from countries with risk of Zika transmission.

## Scope

This guidance is intended for primary care clinicians in England. It has been produced by PHE in conjunction with the Royal College of General Practitioners and the British Medical Association.

## Key messages

### 1. Travel advice for patients

Those working in primary care may be consulted by patients travelling to or returning from areas with a risk of Zika virus transmission. Pregnant women may also request letters to justify cancelling of travel to affected areas on medical grounds. Further information is available from the National Travel Health Network and Centre (NaTHNaC) (<http://travelhealthpro.org.uk/zika-virus-update-and-advice-for-travellers-including-pregnant-women/>).

- it is recommended that **pregnant women should postpone non-essential travel to areas with high risk** of Zika virus transmission until after pregnancy
- it is recommended that **pregnant women should consider postponing non-essential travel to areas with moderate risk** of Zika virus transmission until after pregnancy
- in addition, it is recommended that **couples planning pregnancy should check the Zika risk for their destination and consider any travel and/or sexual transmission advisories**
- **couples planning pregnancy should consistently use effective contraception and barrier methods during and after travel in an area with high or moderate risk** of Zika virus transmission to reduce the risk of conception and the developing fetus being exposed to Zika virus. These measures should be followed for **8 weeks** after return (or the last possible Zika virus exposure) if only the female partner travelled. If both partners, or just the male partner, travelled the measures should be followed for **6 months** after return or the last possible Zika virus exposure
- in the event that travel cannot be postponed, the pregnant traveller or those couples planning pregnancy must be informed by the healthcare provider of the risks which Zika virus infection may present and the importance of mosquito bite avoidance measures emphasised.

- **all pregnant women who have recently travelled** to a country with high or moderate risk of Zika virus transmission should notify their primary care clinician, obstetrician or midwife
- **all travellers** to areas with high or moderate risk of Zika virus transmission should practise mosquito bite avoidance measures, both during daytime and night time hours (but especially during mid-morning and late afternoon to dusk, when the mosquito that transmits Zika virus is most active). An information sheet can be provided: <https://www.gov.uk/government/publications/mosquito-bite-avoidance-for-travellers>
- an application of **insect repellent containing 50% DEET** (N,N-diethyl-m-toluamide) will repel mosquitoes for approximately 10 hours if used as per instructions. Repellents containing up to 50% DEET can be used by pregnant women, but higher concentrations should not be used. When both sunscreen and DEET are required, DEET should be applied *after* the sunscreen. Sunscreen with a 30 to 50 SPF rating should be applied to compensate for DEET-induced reduction in SPF. The use of DEET is not recommended for infants less than two months of age

## 2. Recommendations for couples planning pregnancy who have travelled to or arrived from an area with high or moderate risk of Zika virus transmission

If a couple is planning pregnancy, **consistent use of effective contraception is advised to prevent pregnancy AND barrier methods** (eg condom use) are advised during sex to reduce the risk of conception and the developing fetus being exposed to Zika virus. These measures should be followed while travelling and for:

- **six months** after return from an area with moderate or high risk of Zika virus transmission, or last possible Zika virus exposure, **if both partners travelled**
- **six months** after return from an area with moderate or high risk of Zika virus transmission, or last possible Zika virus exposure, **if just the male partner travelled**
- **eight weeks** after return from an area with moderate or high risk of Zika virus transmission, or last possible Zika virus exposure **if only the female partner travelled**

### 3. Recommendations for pregnant women who have travelled to or arrived from an area with high or moderate risk of Zika virus transmission

A pregnant woman with a history of travel during pregnancy to an area with high or moderate risk of Zika virus transmission who reports **current or previous clinical illness** that raises suspicion of Zika virus disease, should be **tested for Zika virus infection**, and have a **baseline fetal ultrasound** via referral to a local antenatal ultrasound service. Symptoms and signs of clinical illness in a pregnant woman include the following: rash; itching/pruritus; fever; headache; arthralgia/arthritis; myalgia; conjunctivitis; lower back pain; retro-orbital pain. Refer to sample testing advice <https://www.gov.uk/guidance/zika-virus-sample-testing-advice>

Clinicians should consider other travel-associated infections including dengue and chikungunya virus infections, malaria, common infections and non-infectious diseases in the differential diagnosis. Clinicians should consider other causes of rash in pregnancy in the differential diagnosis, as appropriate (further guidance is available from PHE: <http://www.gov.uk/government/publications/viral-rash-in-pregnancy>)

**All other pregnant women** who have travelled to an area with high or moderate risk of Zika virus transmission during pregnancy but who have not reported clinical illness should be offered a **baseline ultrasound scan**; consideration of storing a serum sample locally is also advised.

For further information, refer to the **algorithm**

<http://www.gov.uk/government/publications/zika-virus-interim-algorithm-for-assessing-pregnant-women-with-a-history-of-travel> **for assessing pregnant women with a history of travel during pregnancy to areas with high or moderate risk of Zika virus transmission**, produced in association with the Royal College of Obstetricians and Gynaecologists, the Royal College of Midwives and Health Protection Scotland and **Interim clinical guidelines** <https://www.rcog.org.uk/globalassets/documents/news/zika-virus-interim-guidelines.pdf> **on Zika Virus Infection and Pregnancy.**

A leaflet offering advice to pregnant women returning from areas with areas of Zika virus risks available: <https://www.gov.uk/government/publications/zika-virus-advice-for-women-returning-from-areas-with-active-zika-virus-transmission>

#### 4. Recommendations for all other (non-pregnant) patients who have travelled to or arrived from an area with high or moderate risk of Zika virus transmission

Symptomatic Zika virus infection is typically a mild and self-limiting illness. Clinicians should also consider other travel-associated infections including dengue and chikungunya virus infections, malaria, common infections and non-infectious diseases in any differential diagnosis.

For non-pregnant individuals who report current or previous symptoms suggestive of Zika virus infection, refer to sample testing advice <https://www.gov.uk/guidance/zika-virus-sample-testing-advice>

For a man with current or previous symptoms whose partner is pregnant, refer to sample testing advice <https://www.gov.uk/guidance/zika-virus-sample-testing-advice>. Additionally, these individuals should be advised on the use of barrier methods for the duration of the pregnancy <https://www.gov.uk/guidance/zika-virus-preventing-infection-by-sexual-transmission>

Non-pregnant patients who were diagnosed elsewhere and who have since recovered from their infection do not require further investigation and can be reassured that Zika virus infection is typically short-lived and self-resolving. For male travellers diagnosed elsewhere, refer to advice about preventing potential sexual transmission if their partner is pregnant or planning pregnancy and see sample testing advice. If there are concerns about persistent symptoms beyond the expected recovery time for Zika virus infection, then discussion with a local infection specialist is recommended.

#### Diagnostic laboratory testing

Diagnostic laboratory testing for appropriate patients is available from PHE's Rare and Imported Pathogens Laboratory (RIPL) <https://www.gov.uk/government/collections/rare-and-imported-pathogenslaboratory-ripl>. The recommended sample types for testing will depend on whether the patient has current symptoms or previous symptoms that have now resolved.

Clinicians should refer to PHE's sample testing advice webpage for information on sample types required and the tests available for different patient groups. Sample testing advice will be regularly reviewed and updated accordingly. <https://www.gov.uk/guidance/zika-virus-sample-testing-advice>

Zika virus testing is not available for individuals who do not have symptoms consistent with Zika virus infection.

### Immunocompromised patients

Advice on Zika virus infection in immunocompromised patients is available: <https://www.gov.uk/guidance/zika-virus-and-immunocompromised-patients>

### Queries about donating blood, tissues or semen

Donating blood or tissue: individuals who have been diagnosed with Zika virus infection, or who report having experienced symptoms consistent with Zika virus infection, should not donate blood or tissues for six months following resolution of symptoms. All other individuals arriving from an area with high or moderate risk of Zika virus transmission should not donate blood or tissues for 28 days.

Donating semen: any man who has travelled to an area of high or moderate risk of Zika transmission should not donate semen for 6 months after their return.

Further information is available from the Joint United Kingdom (UK) Blood Transfusion and Tissue Transplantation Services Professional Advisory Committee:

<http://www.transfusionguidelines.org/dsg/gdri/latest-updates>

## Minor procedures in the primary care setting

Individuals who have recently returned from an area with high or moderate risk of Zika virus transmission do not pose a risk to healthcare workers as long as universal precautions are followed. This includes procedures such as phlebotomy, minor procedures and dental work.

## Notifications and specialist advice

Zika virus infection is not a notifiable disease in England. Primary care clinicians do not need to inform Public Health England about suspected cases (unless seeking advice about diagnostic testing), or cases diagnosed overseas. Additional clinical advice and information about diagnostic testing should be sought in the first instance by contacting the local virologist, microbiologist or infectious disease consultant. The Rare and Imported Pathogens Laboratory (<https://www.gov.uk/government/collections/rare-and-imported-pathogens-laboratory-ripl>) can provide further specialist advice as required.

## Additional information

Additional information about Zika virus for health professionals is available on the PHE website: <https://www.gov.uk/government/collections/zika-virus-zikv-clinical-and-travel-guidance>

Advice for patients and members of the public is available on the NHS Choices website: <http://www.nhs.uk/Conditions/zika-virus/Pages/Introduction.aspx>

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