

International Federation of Fertility Societies

Zika Virus

Information for Member Societies and Practitioners

Updated October 2017

Introduction

Zika virus is a significant threat to reproductive health for significant areas of the globe. Zika is known to transmit through sexual intercourse and pregnant women who become infected with Zika virus are at significant risk of giving birth to a baby with a birth defect (Microcephaly). This risk is particularly high in the first trimester. Practitioners working in infertility and ART care must be particularly alert to the risks of Zika virus infection as they advise patients attempting to become pregnant and plan infertility and assisted conception treatment.

Zika Virus

Zika virus is transmitted by a bite from an infected mosquito *Aedes aegypti* or through sexual contact of an infected person. The infection is now present in many countries and occurs where the mosquito *Aedes aegypti* is prevalent. WHO has categorized countries according to the transmission risk and update this status regularly.

<http://apps.who.int/iris/bitstream/10665/258811/1/zika-classification-24Aug17-eng.pdf?ua=1>

Zika virus infection is generally mild and is characterized by muscle aches and pains, malaise, fever and a rash but a proportion of those infected are asymptomatic. Women who suffer a Zika virus infection are at risk of developing the complication Guillain-Barre syndrome.

Further details can be found at: <http://www.who.int/mediacentre/factsheets/zika/en/>

Diagnosis

Diagnosis is primarily based on suspicion arising from symptoms in an individual who is exposed to the risk of infection. Laboratory based diagnostic tests are based either on immunoassay to antigen / antibody or nucleic acid based molecular diagnostics but are subject to cross reactivity with other viruses with false positive results leading to interpretive challenges. Availability is

also variable, tests can be costly and an equipped laboratory is necessary. Low cost, point of care diagnostics are currently under evaluation.

Strategies for Prevention

Prevention is based on:

1. Avoidance of mosquito bite
2. Limitation of transmission through sexual contact

Advice for travelers

See following guidance from WHO:

<http://www.who.int/csr/disease/zika/information-for-travelers/en/>

Advice for men and women trying to become pregnant, undergoing fertility treatment and gamete donation.

Evidence to date has confirmed the presence of Zika virus in semen and that it may persist in semen after the acute infection has resolved. There have been recorded incidences of sexually transmitted infection. The Zika virus is likely to survive freeze/thaw.

For these reasons the following are recommended:

For men and women with a history suggestive of Zika infection:

1. Men should **not** attempt pregnancy or undergo fertility treatment or donate gametes for **6 (six) months**.
2. Women who have been infected with Zika should **not** attempt pregnancy or undergo fertility treatment or donate gametes for **6 (six) months**. Recent guidance from the CDC and ASRM has been issued that **women** need only wait 8 weeks before attempting pregnancy which is in contrast to WHO guidance of six months.
3. Couples undergoing infertility treatment should stop and await the quarantine period.

4. Sperm donors should be deferred from donation for **6 (six) months** unless the semen is tested negative for Zika virus using RNA by nucleic acid testing (NAT).

For men and women with no history of Zika infection:

1. A woman or her partner returning from or living in an area where local transmission of Zika virus occurs and who have had **no** symptoms suspicious of Zika should be offered testing for evidence of recent infection but advised of the limitations of these tests.
2. If serological tests are not available, couples **returning from an area** where local transmission of Zika virus occurs and who have had **no** symptoms, should be advised to wait **six months** before attempting pregnancy or undergoing infertility treatment - if no symptoms suggestive of Zika virus infection appear in this period.

In cases in which only the woman has been exposed to risk of Zika infection then guidance from CDC / ASRM and RCOG advise avoidance of pregnancy for 8 weeks which is contrast to current WHO advice.

3. If serological tests are not available, couples **living in an area** where local transmission of Zika virus occurs and who have had **no** symptoms, should be advised to attempt pregnancy in circumstances when the risk of Zika infection is reduced.
4. Prospective sperm donors returning from or living in an area where local transmission of Zika virus occurs and who have had **no** symptoms suspicious of Zika should not donate sperm for **six months** and only if no symptoms suggestive of Zika infection develop in this time period.

Useful information is available from ASRM at:

http://www.asrm.org/globalassets/asrm/asrm-content/news-and-publications/practice-guidelines/for-non-members/guidance_for_providers_zika_virus_exposure.pdf

<https://www.rcog.org.uk/globalassets/documents/news/zika-virus-rcog-july-2017.pdf>

Advice for women who are pregnant

1. Pregnant women should avoid travel to countries in WHO Category I & II. See the following link for details of these countries.

<http://apps.who.int/iris/bitstream/10665/258811/1/zika-classification-24Aug17-eng.pdf?ua=1>

2. Pregnant women living in a country where Zika virus is known to occur should take all reasonable precautions to avoid a bite by the known vector.
3. The sexual partners of pregnant women, living in or returning from areas where local transmission of Zika virus occurs should practice safer sex (including using condoms) or abstain from sexual activity throughout the pregnancy.
4. Pregnant women living in or returning from a country where local transmission of Zika virus is known to occur should, if possible, undergo serological tests and ultrasound surveillance for microcephaly in third trimester and/or their baby should have their head circumference measured at least 24 hours after birth and compared with WHO growth standards.

Further information

http://ecdc.europa.eu/en/healthtopics/zika_virus_infection/Pages/index.aspx

<http://www.cdc.gov/zika/index.html>

<https://www.rcog.org.uk/globalassets/documents/news/zika-virus-rcog-july-2017.pdf>