Prevention of potential sexual transmission of Zika virus

Interim guidance

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WHO/ZIKV/MOC/16.1

World Health Organization

1. Introduction

1.1 Background

This guidance has been developed to provide advice on the prevention of potential sexual transmission of Zika virus. The primary transmission route of Zika virus is via the *Aedes* mosquito. However, sexual transmission of Zika virus may also be possible, with limited evidence recorded in a few cases. This is of concern due to an association between Zika virus infection and potential complications, including microcephaly and Guillain-Barré syndrome.

The current evidence base on Zika virus remains extremely limited. This guidance will be reviewed and the recommendations updated as new evidence emerges.

1.2 Target audience

This document is intended to inform the general public, and to be used by health care workers and policy makers to provide guidance on appropriate sexual practices in the context of Zika virus.

2. Potential sexual transmission of Zika virus

2.1 Current evidence

Sexual transmission of Zika virus has been described in two cases, and the presence of the Zika virus in semen in one additional case.

Zika virus transmission by sexual intercourse has been suggested by Foy et al. [1], who described a male patient infected with Zika virus in south-eastern Senegal in 2008. Four days after the patient returned home to the United States of America, his wife began to display symptoms of Zika virus infection. Because she had not travelled out of the United States during the previous year, and had sexual intercourse with the patient one day after he returned, transmission by semen was suggested. In another case on 2 February 2016, the United States Centers for Disease Control and Prevention announced that a patient with Zika virus infection in Texas had acquired the virus through sexual contact, rather than via a mosquito vector – the primary route [2].

Zika virus has been isolated in semen in one documented case of a man in Tahiti who sought treatment for hematospermia during a Zika virus outbreak in French Polynesia in December 2013 [3]. He had previously experienced symptoms of Zika virus infection twice: two weeks and ten weeks before presentation with hematospermia. Zika virus was isolated from semen samples taken at presentation and also three days later. The observation of Zika virus in semen supports the possibility that the virus could be sexually transmitted.

2.2 Interim recommendations

Based on precautionary principles, WHO recommends that:

1. All patients (male and female) with Zika virus infection and their sexual partners (particularly pregnant women) should receive information about the potential risks of sexual transmission of Zika virus, contraceptive measures and safer sexual practices[1], and should be provided with condoms when feasible. Women who have had unprotected sex and do not wish to become pregnant because of concern with infection with Zika virus should also have ready access to emergency contraceptive services and counselling [4].
2. Sexual partners of pregnant women, living in or returning from areas where local transmission of Zika virus is known to occur, should use safer sexual practices or abstinence from sexual activity for the duration of the pregnancy.
3. As most Zika virus infections are asymptomatic[2]:
    a. Men and women living in areas where local transmission of Zika virus is known to occur should consider adopting safer sexual practices or abstaining from sexual activity.
    b. Men and women returning from where local transmission of Zika virus is known to occur should adopt safer sexual practices or consider abstinence for at least four weeks[3] after return.

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[1] Safer sexual practices include: postponing sexual debut; non-penetrative sex; correct and consistent use of male or female condoms; and reducing the number of sexual partners.

[2] All individuals should receive appropriate counselling to make informed choices on the sexually transmitted infection prevention method(s) they wish to use.

[3] Based on estimates of: one week for virus incubation; one week of clinical symptoms (if any); and two weeks for Zika virus to remain in semen after a clinical episode (based on evidence from Musso et al.)

4. Independently of considerations regarding Zika virus, WHO always recommends the use of safer sexual practices including correct and consistent use of condoms to prevent HIV, other sexually transmitted infections and unwanted pregnancies [5].

WHO does not recommend routine semen testing to detect Zika virus.

3. Guidance development

3.1 Acknowledgements

This document has been developed by a guideline development group composed of WHO staff from the Department of Reproductive Health and Research, WHO Geneva (Ian Askew, Nathalie Broutet, Bela Ganatra, Metin Gulmezoglu, Ronnie Johnson, Rajat Khosla and James Kiarie,), and the Department of Communicable Diseases and Health Analysis, WHO Regional Office for the Americas (Sylvain Aldighieri, Maeve Brito de Mello, Massimo Ghidinelli and Maria del Pilar Ramon Pardo).

3.2 Guidance development methods

This document was developed based on a review of relevant literature and guideline development group discussion and consensus. Relevant literature was sourced from MEDLINE using the following search terms: flavivirus; sexual transmission; transmission; and Zika. The guideline development group met face-to-face and via teleconferences from 5–9 February 2016 and reached consensus on the recommendations through group discussion.

3.3 Declaration of interests

Interests have been declared in-line with WHO policy and no conflicts of interest identified from any of the contributors.

3.4 Review date

These recommendations have been produced under emergency procedures and will remain valid until August 2016. The Department of Reproductive Health and Research at WHO Geneva will be responsible for reviewing this guideline at that time in light of new and available evidence, and updating it as appropriate.

4. References

1. Foy BD, Kobylinski KC, Chilson Foy JL, et al. 'Probable non-vector-borne transmission of Zika virus', Colorado, USA. *Emerg Infect Dis.* 2011;17(5):880–882.
2. Dallas County Health and Human Services, 'DCHHS reports first Zika virus case in Dallas County acquired through sexual transmission', 2016. Available online from http://www.dallascounty.org/department/hhs/press/documents/PR2-2-16DCHHSReportsFirstCaseofZikaVirusThroughSexualTransmission.pdf (accessed 7 February 2016).
3. Musso D, Roche C, Robin E, Nhan T, Teissier A, Cao-Lormeau VM. Potential sexual transmission of Zika virus; *Emerg Infect Dis.* 2015, Feb;21(2):359-61.
4. World Health Organization, 'Women in the context of microcephaly and Zika virus disease', 2016. Available online from http://www.who.int/features/qa/zika-pregnancy/en/ (accessed 12 February 2016).
5. UNFPA, WHO and UNAIDS, 'Position statement on condoms and the prevention of HIV, other sexually transmitted infections and unintended pregnancy', 2015. Available online from http://www.unaids.org/en/resources/presscentre/featurestories/2015/july/20150702_condoms_prevention (accessed 7 February 2016).