

**FREQUENTLY ASKED QUESTIONS ON ZIKA AND PREGNANCY**

**(A) FOR COUPLES PLANNING PREGNANCY**

- 1. If a woman who is not pregnant is bitten by a mosquito and infected with Zika virus, will her future pregnancies be at risk?**

Zika virus infection does not pose a risk of birth defects for future pregnancies.

- 2. If a couple is planning for pregnancy, what is MOH's advice if either one lives, works or studies in an affected area?**

If both the man and woman are well

They should take strict precautions against mosquito bites, and if they have further questions, consult their doctor.

If woman is symptomatic (with fever and rash and other symptoms such as red eyes or joint pain)

She should seek medical attention promptly, and if confirmed positive for Zika, she should practise safe sexual practices or abstain from sexual intercourse for at least 8 weeks after recovery, before trying to conceive.

If the man is symptomatic (with fever and rash and other symptoms such as red eyes or joint pain)

He should seek medical attention promptly, and if confirmed positive for Zika, he should practise safe sex through the correct and consistent use of condoms or abstain from sexual intercourse for at least 6 months after recovery.

**(B) FOR PREGNANT WOMEN AND THEIR PARTNERS**

**Testing and Prevention**

- 3. Are there any tests which can be done to determine if a pregnant woman is infected with Zika?**

Currently, the only reliable test available for Zika is the reverse transcriptase-polymerase chain reaction (RT-PCR) test which looks for genetic material of the virus in blood or urine. However, RT-PCR test is only able to detect Zika infection in blood within 5-7 days of onset of symptoms and in urine within 14 days of onset.

Therefore, the time window in which a pregnant woman can be tested using RT-PCR is very short.

At present, there is no reliable serological test (which looks for antibodies in the blood) for Zika.

**4. If I am pregnant and my male partner is tested positive for Zika, do I need to get tested if I do not have any symptoms?**

If you have had sexual intercourse with your partner, you should consult a doctor and inform him/her of possible exposure to Zika so that he/she can arrange for Zika testing.

**5. If I am pregnant and asymptomatic, but worried about possible exposure to Zika, where should I go to get tested?**

WHO's May 2016 guidelines and MOH's August 2016 clinical guidance on Zika Virus Infection and pregnancy do not recommend routine Zika testing for asymptomatic pregnant women. If you are concerned, you should discuss further with your doctor.

**6. Should a woman who is pregnant get regular blood/ urine tests for Zika, to make sure that she is not infected?**

No, unless she has symptoms of possible Zika Virus Infection (fever and rash and other symptoms such as red eyes or joint pain).

**7. Is it safe for pregnant women to use insect repellent?**

Yes, insect repellents sold in Singapore are safe for use by pregnant women.

You can also prevent mosquito bites by wearing long, covered clothing, and sleeping under mosquito nets or in rooms with wire-mesh screens or air-conditioned rooms to keep out mosquitoes.

**8. If I am pregnant and have recently visited a Zika affected area in Singapore, what should I do?**

There is no need to see your doctor, if you are well. You should continue to take strict precautions against mosquito bites. If you have symptoms of possible Zika Virus Infection (fever and rash and other symptoms such as red eyes or joint pain), you should seek medical attention immediately, and consult your Obstetrics and Gynecology (O&G) doctor.

**9. If I am pregnant and live, work or study in a Zika affected area in Singapore, what should I do?**

You should take steps to prevent mosquito bites and consult a doctor if you develop a fever and rash and other symptoms such as red eyes or joint pain after possible exposure to Zika. You should tell the doctor where you live, work or study.

**10.If my female partner is pregnant and I am tested positive for Zika, what should I do?**

You should practise safe sex through the correct and consistent use of condoms, or abstinence, for at least the whole duration of your female partner's pregnancy.

**11.If my female partner is pregnant and I live, work or study in a Zika affected area in Singapore, what should I do?**

You should practise safe sex through the correct and consistent use of condoms, or abstinence, for at least the whole duration of your female partner's pregnancy.

You should take steps to prevent mosquito bites by wearing long, covered clothing, applying insect-repellent, and sleeping under mosquito nets or in rooms with wire-mesh screens or air-conditioned rooms to keep out mosquitoes.

You should consult a doctor if you develop a fever and rash and other symptoms such as red eyes or joint pain after possible exposure to Zika. You should tell the doctor where you live, work or study.

**Pregnant women/ Mothers with Zika**

**12.What is being done in other countries to manage pregnant women with Zika? Is Singapore doing the same?**

In countries with community transmission of Zika Virus Infection and in line with WHO's guidelines, pregnant women with Zika are advised to follow-up closely with healthcare practitioners to detect any fetal abnormalities. Singapore has also adopted similar recommendations.

**13.If I am pregnant and my blood tests positive for Zika, will I need to be hospitalised?**

Like other patients tested positive for Zika, you should be referred to a hospital and managed by an O&G doctor.

**14.If I am pregnant and positive for Zika Virus Infection, will my baby have microcephaly?**

Currently, even if a pregnant woman is confirmed to be infected with Zika virus, there is no test that will predict the future occurrence of microcephaly. We advise that you follow-up closely with your doctor.

**15. If a pregnant woman is positive for Zika Virus Infection, should she consider termination of pregnancy?**

A pregnant patient with confirmed Zika infection will be arranged for admission to a public hospital with a referral to an O&G doctor for further management. Serial ultrasounds and amniotic fluid testing may be considered after the potential risks and limitations in interpretation of results are discussed. Termination of pregnancy is a personal choice which should be carefully made by the woman and her partner in consultation with their doctor.

**16. Can mothers with Zika infection breastfeed their baby?**

Zika virus has been detected in breast milk but there is currently no clear evidence that the virus is transmitted to babies through breastfeeding.

**(C) QUESTIONS ON ZIKA VIRUS AND MICROCEPHALY**

**17. What is Microcephaly?**

Microcephaly is a congenital condition in which the head size is very much smaller than usual for a baby of the same age, race, and sex.

Microcephaly can be caused by a variety of genetic and environmental factors, such as Down Syndrome, exposure to drugs, alcohol or other toxins in the womb; rubella and a few other infections during pregnancy.

There is no specific treatment for this condition. Infants with microcephaly showing developmental delay might benefit from early intervention programs or developmental, physical, and occupational therapy, as well as interdisciplinary programmes.

**18. Does Zika cause microcephaly?**

There is evidence that Zika can cause microcephaly.

**19. What is the impact of microcephaly on an infant?**

Microcephaly can be an isolated condition, meaning that it can occur with no other major birth defects, or it can occur in combination with other birth defects. Infants with microcephaly may have concurrent disabilities. Different symptoms and signals associated with microcephaly (very small head, difficulty feeding, high pitched crying, fits, stiffness of arms and legs, developmental delays and disabilities, among others) have been described.

Infants with suspected microcephaly should be evaluated by a healthcare professional. In addition to clinical evaluation, neuroimaging tests to evaluate possible structural deformities may be required.

**20. Can microcephaly be picked up through pre-natal screening? If so, what options are available to pregnant women if it is detected?**

Microcephaly may be picked up during pre-natal screening, such as through ultrasound of the fetus. However, not all cases may be picked up in the early stages of pregnancy (i.e. within the first trimester). Some may not be diagnosed until later in the pregnancy or after the birth of the child. This is similar to other congenital conditions, such as Down Syndrome. Similarly, a small head measured on ultrasound does not necessarily confirm the diagnosis of microcephaly. A significant proportion of fetuses with small heads on ultrasound turn out to be neuro-developmentally normal.

If this condition is picked up through pre-natal screening, the parents should consult with their healthcare professional on their options.

**21. Can amniocentesis tests be used to detect Zika Virus Infection in the fetus?**

If the woman is not known to be infected with Zika virus, amniocentesis is not recommended for detecting Zika virus infection in the fetus unless suggestive abnormalities are detected by ultrasound scan. If the woman is confirmed to be positive for Zika, the O&G doctor will assess and counsel her on the pros and cons of doing such a test.

**22. I think my child's head is smaller than usual. Does he have microcephaly?**

Having a seemingly smaller head may not mean that your child has microcephaly. Just as importantly, having a small head does not automatically mean that the child will have developmental concerns. The child should be evaluated by a healthcare professional. More tests may be needed to determine if there are any issues of concern.

**23. Can microcephaly be treated? What support can be provided to a child born with microcephaly?**

Treatment and support depend on whether the child has any disabilities and if so, the type and degree of disability. Treatment and support will include rehabilitative measures which may include environmental stimulation, physiotherapy, speech therapy and occupational therapy.