



## **Zika virus: advice for travellers**

This document provides information and precautionary advice from the UIAA (International Climbing and Mountaineering Federation) about the Zika virus, which is transmitted to people primarily through the bite of an infected *Aedes* species mosquito.

In the last few weeks the media has led with stories of the increasing awareness that infection with the Zika virus may be linked to an increase in children being born with birth defects such as microcephaly in some South American countries.

### **Disease background**

The Zika virus was first identified in Africa in 1947 and first confirmed in humans in 1952. It is transmitted by the bite of a mosquito a bit like Dengue fever and Malaria. Only about one in five people infected actually show any symptoms which are those of a vague self-limiting flu-like illness often with associated red eyes (conjunctivitis). In the last few months evidence has begun to appear that if a non-immune pregnant woman becomes infected it may lead to potentially very serious defects in foetal brain development. It is uncertain if it may cause other defects. It is likely that the risk is greatest if one is infected in the first third of pregnancy, possibly even before a woman may realise she is pregnant. Cases of resultant Guillain Barre Syndrome are also documented, although very rarely, in infected men and women.

This *Aedes* mosquito transmitted infection has been found in Africa and Asia but at the moment the, possibly linked, birth defects have been mainly been identified in a few countries in South and Central America but we can expect more cases to come to light with increased testing and awareness. It is very likely to spread to neighbouring countries where the *Aedes* mosquito vector is prevalent.

### **Relevance to climbers, mountaineers and trekkers**

Like the Malaria mosquito the *Aedes* mosquito cannot survive in the cold climates of altitude but any traveller must also take into account the risks of bites during transit to their objective. It is very unlikely that the mosquito can survive above 2,500m.

Two cases of sexual transmission from an infected man to his partner have been documented and the virus has been identified in semen samples. For this reason it is suggested that any male returning from a trip through a risk area avoids fathering a child for at least a month after return and any infected male uses condoms for six months.

Women over childbearing age, who have chosen sterilisation as a method of contraception or who are infertile are obviously not at risk from the pregnancy point of view.

For women of childbearing age the picture is still confused and research is on-going. Despite comments in the media the connection between birth defects and Zika infection has not yet been definitely proven. There are tests available for people at risk but it is such a “new” disease the

accuracy of the various tests is still not determined. Unlike German measles (Rubella) which is also a potential risk for the child of a pregnant women there is no vaccine available and one is not likely to be developed in the near future.

## **Current advice**

With no known treatment for the mild flu like illness of Zika infection the best policy is for both men and women to avoid mosquito bites. Any traveller will know that this is difficult and it is known that some people are not as aware of bites as other more sensitive people. For a woman at risk of pregnancy some authorities are suggesting avoiding all travel to risk areas. If travel is deemed essential we would recommend the following minimal precautions:

- Effective contraception.
- Covering up with long-sleeved shirts and socks.
- Frequent use of a 30% or 50% DEET based insecticide day, dawn and dusk.
- Use of a Permethrin-impregnated mosquito net for night sleep and daytime snoozes.
- Night use of a knock-down insecticide room spray.
- Keeping the bedroom as cool as possible to deter mosquitoes.

We would recommend being established on a reliable method of contraception for at least two months before departure to any affected country, whilst away, and for at least three months after return, especially if travelling below 2,500m. For advice on contraception at altitudes over 2,500m, see the UIAA Medical Advice sheet no.14: [Contraception and Period Control at Altitude](#)

## **Updated information sources**

With any evolving infection with international implications information is constantly evolving and being updated. We suggest the following reliable websites:

[World Health Organisation](#)

[Centers for Disease Control and Prevention](#)

[Robert Koch Institut](#)

## **Acknowledgements**

This advice has been compiled by Dr David Hillebrandt, President UIAA Medcom and BMC Medical Advisor, and is based on the current best advice from the UK's [National Travel Health Network and Centre](#) (NaTHNaC), [NHS Scotland](#), the [World Health Organisation](#) (WHO), the [Pan American Health Organisation](#) (PAHO) and the [Centers for Disease Control and Prevention](#) (CDC) in the USA, and the Robert Koch Institute in Germany.

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