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ZIKA VIRUS: CONTROLLING ITS SPREAD

Zika is a viral illness which causes mild symptoms resembling influenza in most individuals: fever, rash, joint and muscle aches, headaches, conjunctivitis (red eyes), etc. Hospitalization is very rarely needed, and there is no specific vaccine, or treatment other than rest, fluids, and medications to bring down the temperature and relieve pain. Acetaminophen should be used for this purpose, but **not** aspirin or NSAIDs (Motrin, Advil, etc.). The condition is self-limited and typically resolves within a week. As with many other viral infections, a very few patients can develop a neurologic complication known as Guillain-Barre Syndrome (GBS), which can persist for a long time. Zika can be definitively diagnosed by blood or urine testing of suspected cases.

However, Zika may have catastrophic complications for infants born to some Zika- affected pregnant women, the most concerning of which are various birth defects including microcephaly (small head circumference) which results in brain damage. Many cases of microcephaly have occurred in places where the Zika virus has been rampant.

At this time, there have been 1650 cases in the U.S., of which 380 were in Florida. All of these cases are described as **travel-related**, meaning that the infected individuals contracted the virus in Central or South America or the Caribbean, but then developed the illness in the U.S.

But now the first fourteen cases of **mosquito-borne transmission** have been documented within this country. The carrier, or "vector" of the Zika virus is the *Aedes aegypti* mosquito. This mosquito, which is also endemic to the southern U.S, carries the virus from one person to another. This same mosquito is responsible for the spread of the Dengue and Chikungunya viruses. It should be noted that sexual transmission from an infected person has also been documented. **Zika is not transmitted by casual contact, and there is no reason to be concerned about exposure in the workplace.**

These fourteen cases have all occurred in south Florida in Miami-Dade and Broward counties. It is believed that the epicenter of the virus at this time is a one square mile area just north of downtown Miami, in the Wynwood district, a formerly derelict industrial neighborhood now becoming gentrified as an arts district. Authorities are actively applying mosquito abatement strategies in this area to include removal of any standing water sources (where mosquitoes breed), insecticide spraying, and distribution of Zika "kits" which include mosquito repellent, tablets which kill larvae at breeding sites, and condoms.

The exceptionally hot and humid summer season, both in Florida and elsewhere, has the potential to exacerbate the mosquito risk as this presents optimal breeding conditions.

The FDA has recommended that blood donations should be temporarily halted in these two counties, because of a concern that blood transfusions can spread the illness.

Here are the CDC's current general recommendations concerning prevention of Zika infection:

Clothing

- Wear long-sleeved shirts and long pants.
- Treat your clothing and gear with permethrin or buy pre-treated items.



Insect repellent

- Use Environmental Protection Agency (EPA)-registered insect repellents with one of the following active ingredients: DEET, picaridin, IR3535, or oil of lemon eucalyptus or para-menthane-diol. Always follow the product label instructions.
- When used as directed, these insect repellents are proven safe and effective even for pregnant and breastfeeding women.
- Do not use insect repellents on babies younger than 2 months old.
- Do not use products containing oil of lemon eucalyptus or para-menthane-diol on children younger than 3 years old.



At Home

- Stay in places with air conditioning and window and door screens to keep mosquitoes outside.
- Take steps to control mosquitoes inside and outside your home.
- Mosquito netting can be used to cover babies younger than 2 months old in carriers, strollers, or cribs.
- Sleep under a mosquito bed net if air conditioned or screened rooms are not available or if sleeping outdoors.



Sexual transmission

- Prevent sexual transmission of Zika by using condoms or not having sex.

The CDC also has developed the following travel guidance which specifically applies to people living in, or travelling to, the Wynwood area of Miami. This guidance applies only to this part of the continental U.S at this time, and also to various US territories and other countries where exposure to Zika is likely. This is the first time that the CDC has ever issued a travel advisory within the continental U.S. The CDC website linked below can identify regions of concern to travelers, and should be consulted prior to planning foreign travel.

Pregnant women and their partners

- Pregnant women should not travel to this area.
- Pregnant women and their partners living in or traveling to this area should follow steps to [prevent mosquito bites](#).
- Women and men who live in or traveled to this area and who have a pregnant sex partner should [use condoms or other barriers to prevent infection](#) every time they have sex or not have sex during the pregnancy.
- Pregnant women who live in or frequently travel to this area should be tested in the first and second trimester of pregnancy.
- Pregnant women who traveled to or had unprotected sex with a partner that traveled to or lives in this area should talk to their healthcare provider and should be [tested](#) for Zika.
- Women and men who live in or frequently travel to this area should talk to their healthcare provider.
- Women and men who traveled to this area should wait at least 8 weeks before trying to get pregnant.

All women, regardless of location, who are or may be pregnant, should seek medical intervention if they develop symptoms which are compatible with Zika infection.

For additional information and ongoing updates on Zika, your best resource is the CDC website. Your local public health authorities can provide additional support in your communities.

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