



Environmental Management and Personal Protection for the Protection of Zika

KIM BAUTISTA
VECTOR CONTROL CHIEF OF OPERATIONS

Zika is primarily spread through the bite of an infected *Aedes aegypti* or *Aedes albopictus* mosquito.

Both Mosquitoes are found throughout the country



Distribution of potential CHIK vectors in the Americas

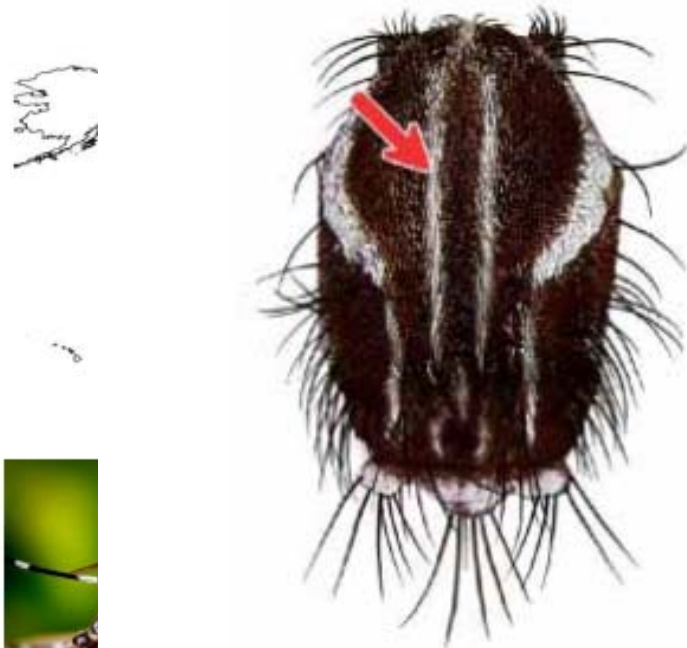


FIGURE 129. *Aedes (Stegomyia) aegypti*.



FIGURE 133. *Aedes (Stegomyia) albopictus*.

Aedes aegypti

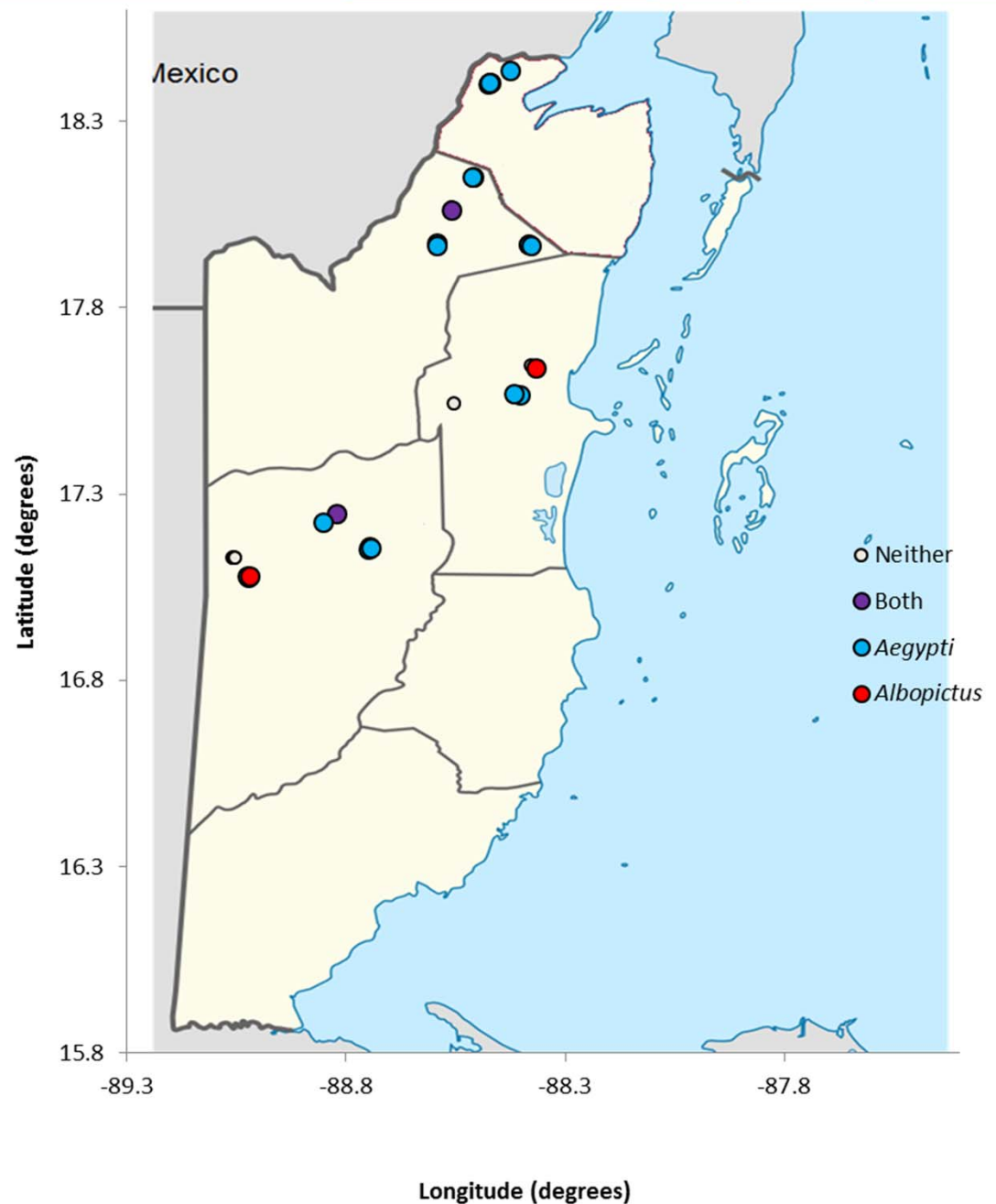
Aedes albopictus

2014 Aedes surveillance in Western, Central and Northern Belize

Aedes aegypti
dominant vector

Aedes albopictus found
in many rural
communities – mostly
outdoor biter and target
humans less

Aedes flight range can
range from 50 – 500
yards from its source but
tends to keep within a
short range of about 50
– 150 yards



The background is a dark teal color. It features several light blue circles of varying sizes. One large circle is in the bottom left, another large one is on the right side, and a smaller one is in the top right. A small red rectangle is located in the top right corner.

WHAT TO TELL PATIENTS ABOUT MOSQUITO BITE PROTECTION

Control mosquitoes outside

- ▶ Here's what you can do to help control mosquitoes outside your home
 - ▶ Once a week, empty and turn over containers which may hold water
 - ▶ If containers which hold water are not needed then throw them away
 - ▶ Cover drums and other water storage containers.
 - ▶ If you have a septic tank be sure to repair cracks or holes
 - ▶ You can throw old cooking oil into stagnant drains and water in or near your yard



...BUT WHAT ABOUT WHEN THOSE MESSAGES
AREN'T SO PRACTICAL?

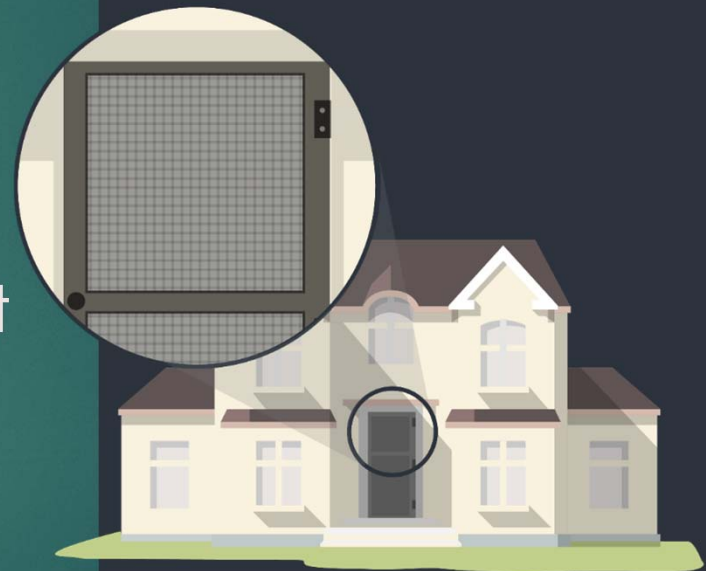






Mosquito bite protection

- Wear long-sleeved shirts and long pants.
- Keep windows and doors screened if possible
- Sleep under a mosquito bed net



Mosquito bite protection

- Use insect repellent with active ingredient DEET
- Insect repellent with 15% DEET will last about 3 – 5 hours per application
- Always follow the product label instructions.
- Do not spray repellent on the skin under clothing.
- If you are also using sunscreen, apply sunscreen before applying insect repellent.
- Do not use repellent on babies under 2 months old



KEEP DRUMS AND WATER HOLDING
CONTAINERS COVERED



GET RID OF UNWANTED THINGS AROUND
YOUR YARD WHICH HOLD WATER



For more information visit your nearest health
facility and converse with your health
professional.

Prepared by the Health Education and
Community Participation Bureau (HECOPAB)
Ministry of Health
East Block Building, Belmopan, Belize
Tel: 822-2325/2326
Fax: (501) 822-2055/2924
website www.health.gov.bz



<https://www.facebook.com/dhsbelize>

www.facebook.com/Ministry-of-Health-Belize

"NOH GET BITE"

HOW TO PREVENT:
DENGUE, CHIKUNGUNYA
&
ZIKA



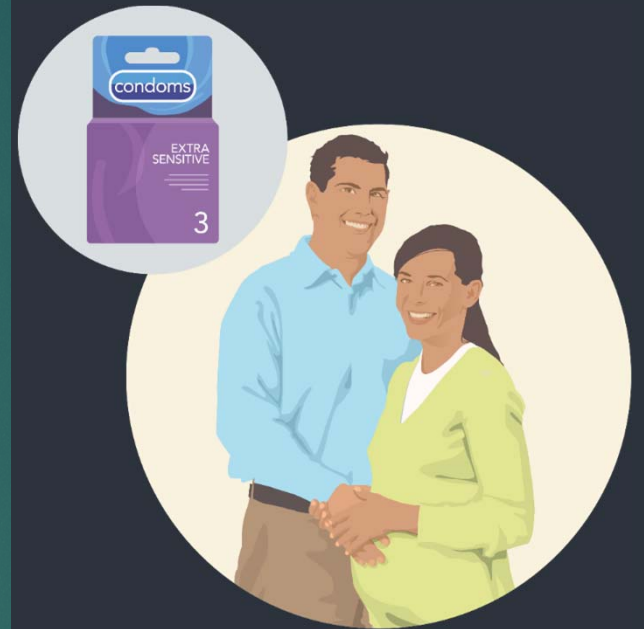
SEXUAL TRANSMISSION

An abstract graphic design featuring a dark teal background. A horizontal light blue bar spans the width of the image, positioned slightly below the center. Several light blue circles of varying sizes are scattered across the composition: one in the top right, one in the bottom right, and a large one in the bottom left. A small red rectangle is located in the top right corner, to the right of the top-right circle.

About sexual transmission

- Zika virus can be passed through sex, even if the infected person does not have symptoms at the time.
- Sex includes vaginal, anal, and oral sex, and the sharing of sex toys.
- Condoms and other barriers* can reduce the chance of getting Zika from sex.
- Not having sex can eliminate the risk of getting Zika from sex.

* Barriers include male and female condoms and dental dams.



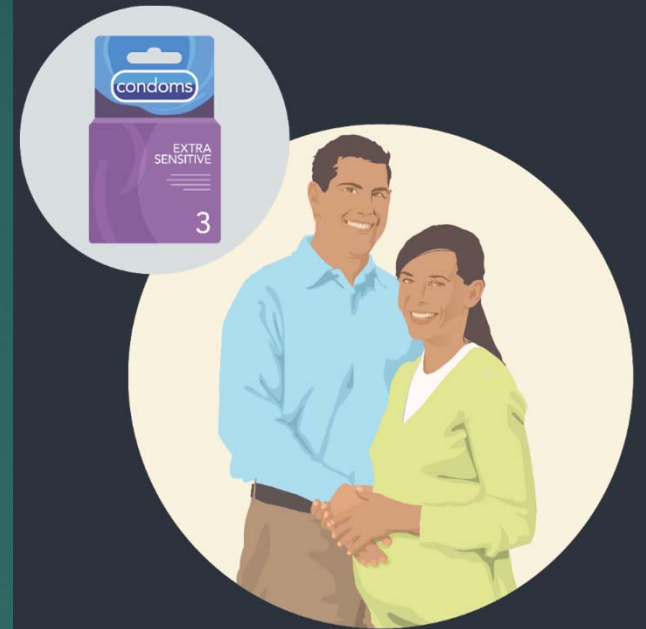
What we do not know about sexual transmission

- We do not know how often people with Zika who never develop symptoms pass Zika through sex.
- We do not know if sexual transmission of Zika virus poses a different risk of birth defects than mosquito-borne transmission.



Preventing or reducing the chance of sexual transmission for couples who are pregnant

- Not having sex can eliminate the risk of getting Zika from sex.
- Condoms can reduce the chance of getting Zika from sex.
- Pregnant couples with a partner who lives in or recently traveled to an area with Zika should use condoms every time they have sex or not have sex during pregnancy.



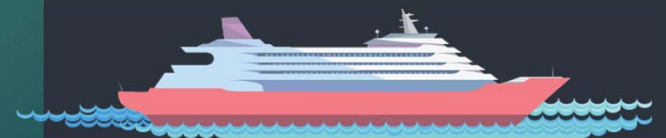
Non-pregnant couples with a partner who traveled to an area with Zika

- For non-pregnant couples with a partner who has recently traveled to an area with Zika
 - ▶ At least 8 weeks after a Zika diagnosis or start of symptoms if the traveling partner is female or if the traveling partner (male or female) has no symptoms.
 - ▶ At least 6 months after a Zika diagnosis or start of symptoms if the traveling partner is male. This long extended period is because Zika stays in semen longer than in other body fluids.



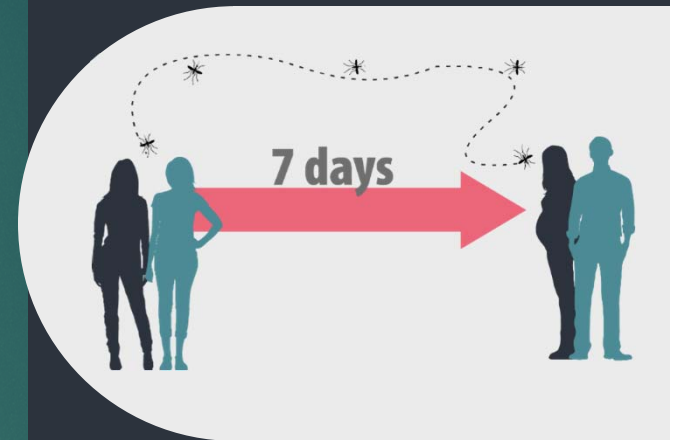
Travelling when Pregnant...

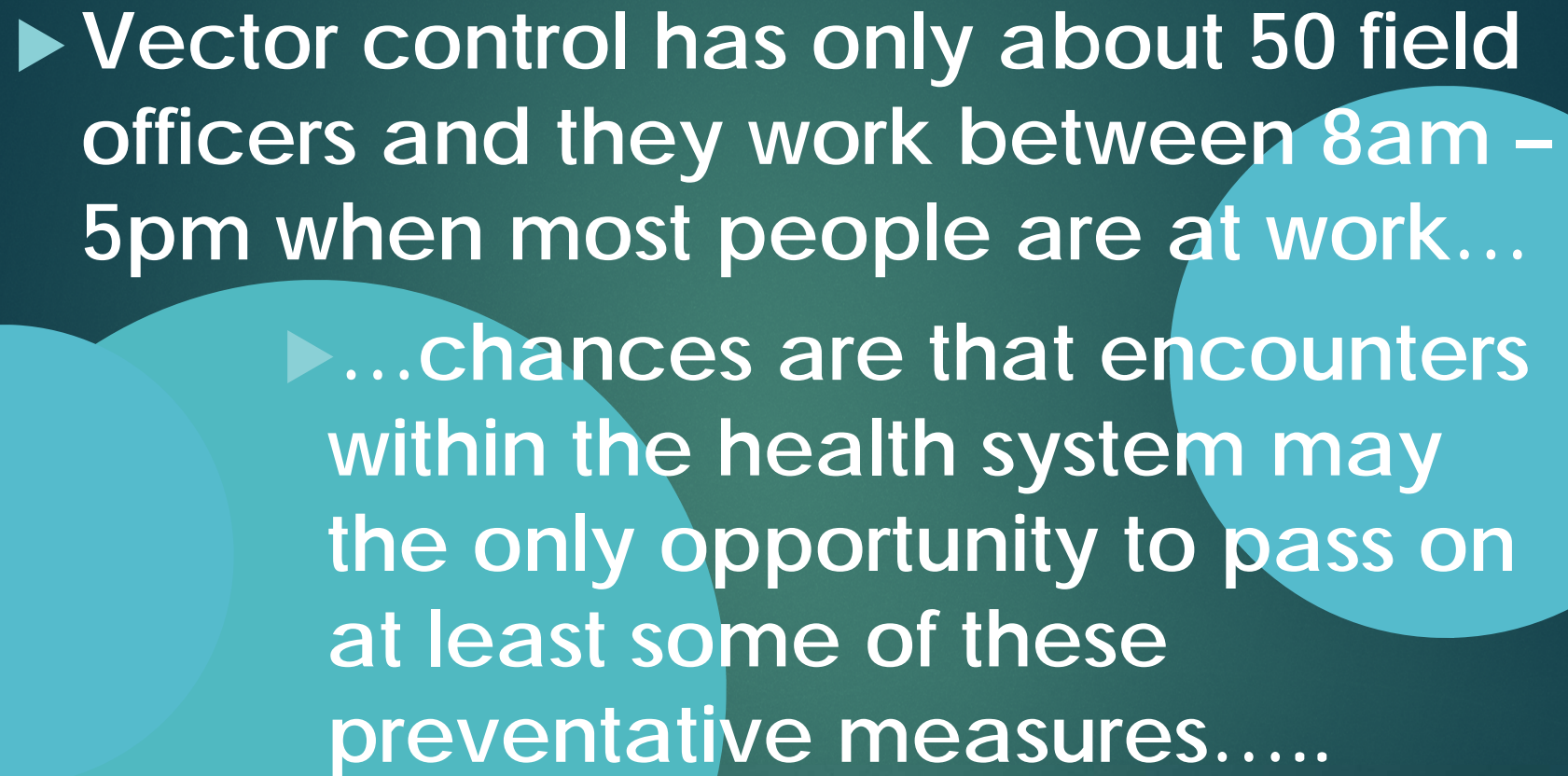
- Should not travel to areas with Zika (difficult in the region).
- If they must travel to areas with Zika, tell pregnant patients to protect themselves from mosquito bites and take steps to prevent sexual transmission during and after travel.



Patients who test positive

- Protect from mosquito bites during the first week of illness, when Zika virus can be found in blood.
- The virus can be passed from an infected person to a mosquito through bites.
- An infected mosquito can spread the virus to other people.



- 
- ▶ Vector control has only about 50 field officers and they work between 8am – 5pm when most people are at work...
 - ▶ ...chances are that encounters within the health system may be the only opportunity to pass on at least some of these preventative measures.....

...in the meantime we will
do the rest











Clean Up Campaigns w/ Support of Municipalities



Clean Up Campaigns through Community Engagement



Zika Awareness Campaigns



Conclusion

- The importance of fighting this vector collectively must be sold to citizens
- Dengue is still rampant in most areas of the country and remains potentially fatal – **this message must not be lost amidst the fears of Zika**
- **WE EITHER WORK TOGETHER OR CONTINUE TO FACE AN UPHILL STRUGGLE BEING FOUGHT BY JUST OVER 50 FIELD OFFICERS COUNTRYWIDE!**