

# PUBLIC HEALTH PREPAREDNESS **UPDATE**



February 2016

Volume 12, Issue 2

Zachary Thompson, Director

[www.dallascounty.org/hhs](http://www.dallascounty.org/hhs)

## SPECIAL EDITION ZIKA VIRUS

# DCHHS reports first three Zika virus cases

## One case acquired through sexual transmission

DCHHS recently reported the first three cases of Zika virus in Dallas County. Two of the cases were reported after DCHHS received positive confirmation from the Centers for Disease Control and Prevention (CDC). One case was confirmed in the DCHHS laboratory.

Two patients imported the virus from from countries with active Zika transmission. One of the patients was infected as a result of sexual contact with one of the imported cases. All three patients have recovered.

In conjunction with the patient's clinical evaluation performed by a healthcare provider, which included travel history and mosquito exposure, DCHHS determined the mode of transmission to be sexual contact.

Additionally, DCHHS conducted mosquito surveillance in the area around the patients' residence and did not identify mosquito or vector activity.

"Now that we know Zika virus can be transmitted through sex, this increases our awareness campaign in educating the public about protecting themselves and others," said Zachary Thompson, DCHHS director. "Next to abstinence, condoms are the best prevention method against any sexually-transmitted infections."

While sexual transmission of Zika virus is possible, it is primarily transmitted to people by *Aedes* mosquitoes. The most common symptoms are fever, rash, joint pain, and conjunctivitis (red eyes). The illness is usually mild with symptoms lasting several days to a week.

DCHHS advises individuals with symptoms to see a healthcare provider if they visited an area where Zika virus is present or had sexual contact with a person who traveled to any of those areas. There is no specific medication available to treat Zika virus and no vaccine. The best way to avoid Zika virus is to avoid mosquito bites and sexual contact with a person with the virus.

"Education and awareness is crucial in preventing Zika virus," said Dr. Christopher Perkins, DCHHS medical director/health authority. "Patients are encouraged to follow prevention recommendations to avoid transmitting and spreading Zika virus."

DCHHS recommends the 4Ds to reduce the chance of being bitten by a mosquito.

- **DEET** All Day, Every Day: Whenever you're outside, use insect repellents that contain DEET or other EPA approved repellents and follow label instructions.
- **DRESS**: Wear long, loose, and light-colored clothing outside.

- **DRAIN**: Remove all standing water in and around your home.
- **DUSK & DAWN**: Limit outdoor activities during dusk and dawn hours when mosquitoes are most active.

Travelers can protect themselves further by doing the following:

- Choose a hotel or lodging with air conditioning or screens on windows or doors.
- Sleep under a mosquito bed net if you are outside or in a room that is not well-screened.

Sexual partners can protect each other by abstaining from sex or by using condoms consistently and correctly during sex.

Pregnant women and women trying to get pregnant can protect themselves further by taking the following precautions:

- Pregnant women in any trimester should consider postponing travel to areas where

Zika virus transmission is ongoing.

- Pregnant women who do travel to an area with active Zika virus transmission should talk to their doctor or other healthcare provider first and strictly follow steps to avoid mosquito bites during the trip.
- Pregnant women should discuss their male partner's potential exposures to mosquitoes and history of Zika-like illness.

Women trying to become pregnant or who are thinking about becoming pregnant should consult with their healthcare provider before traveling to areas with active Zika virus transmission, and strictly follow steps to avoid mosquito bites during the trip.

To see countries and territories with active Zika virus transmission, go to: <http://www.cdc.gov/zika/geo/>.



Left: Director Zachary Thompson speaks with Clarice Tinsley on FOX-4 about the first two confirmed cases of Zika virus.

# DCHHS starts Zika campaign, CHIKV and Dengue included

## All three viruses can be imported from other regions

DCHHS launched an ongoing public awareness campaign to inform the public at-large about Zika virus transmission, symptoms, treatment, protection and most importantly - prevention. DCHHS included Chikungunya (CHIKV) and Dengue in the campaign so citizens are aware of all three viruses.

"These viruses are similar," said DCHHS Director Zachary Thompson. "Now we are aware Zika virus can be transmitted by sexual contact as well as mosquitoes, so we have updated our campaign materials and will continue to make updates."

DCHHS is sharing information widely throughout Dallas County with all of the county's municipality environmental health departments, churches, schools, community organizations and response partners.

Additionally, DCHHS is sharing clinical guidance with the Dallas County medical community.

Health educators have also included Zika virus educational materials in presentations they make to the public at workshops, health fairs and other events.

"If someone has not been reached through our campaign, I urge them to go to our website where they can find recent information," Thompson said.

DCHHS is especially warning travelers to be aware of Chikungunya, Dengue and Zika viruses. There are currently no reports of either virus being locally-transmitted by mosquitoes in Dallas County. However, imported cases make local spread by mosquitoes possible because the mosquitoes that can transmit the viruses are found locally.

The mosquitoes that can carry Chikungunya, Dengue and Zika viruses are aggressive daytime biters, prefer to bite people, and live indoors and outdoors near people. Mosquitoes become infected when they feed on a

person already infected with one of the viruses. Infected mosquitoes can then spread it to other people.

Chikungunya, Dengue and Zika viruses are endemic to tropical regions such as Central and South America, and the Caribbean.

"Dallas County residents may be traveling to countries where these viruses are active and need to take precautions while traveling and when they return," said Thompson. "The last thing we want is for any of these viruses to begin spreading through our local mosquito population."

Although each virus has a unique set of symptoms, an infected person may experience fever, headache, rash, muscle or joint pain usually within a week of being bitten by a mosquito carrying one of the viruses.

There is no vaccine to prevent Chikungunya, Dengue or Zika. There is no specific treatment for either of the viruses. However, supportive therapy is helpful

with managing symptoms.

DCHHS advises recent travelers with symptoms to see a healthcare provider, and to protect themselves from further mosquito bites.

"It is very important that everyone understands how they can protect themselves and others," said Dr. Christopher Perkins, DCHHS medical director/health authority. "Travelers should always use mosquito prevention while they are in countries where these viruses are found, and if they happen to acquire a mosquito-borne virus, they should avoid being bitten again."

Protecting against further mosquito bites, Perkins said, will reduce the chance of the viruses spreading locally.

In 2015, there were eight imported cases of Chikungunya and two imported cases of Dengue. To date, there have been 3 reports of Zika virus in Dallas County.

## Countries and territories with active Zika virus transmission

### AMERICAS

- Barbados
- Bolivia
- Brazil
- Colombia
- Commonwealth of Puerto Rico, US territory
- Costa Rica
- Curacao
- Dominican Republic
- Ecuador
- El Salvador
- French Guiana
- Guadeloupe
- Guatemala
- Guyana
- Haiti
- Honduras
- Jamaica
- Martinique
- Mexico
- Nicaragua
- Panama
- Paraguay
- Saint Martin
- Suriname
- U.S. Virgin Islands
- Venezuela

### OCEANIA/PACIFIC ISLANDS

- American Samoa
- Samoa
- Tonga

### AFRICA

- Cape Verde



Left: Director Zachary Thompson interviews with WFAA-8 to update citizens on Zika virus in Dallas County.

Right: Dallas County Commissioner John Wiley Price discusses DCHHS Zika virus initiatives with James Rose from FOX-4.



Left: Dr. Christopher Perkins interviews with BBC World News to contribute to the global perspective on Zika virus.

# Help Protect Yourself and Dallas County from Mosquito Viruses from Other Areas

If you are diagnosed with Chikungunya, Dengue or Zika, protect yourself from further mosquito bites.

Getting bit by a mosquito makes local spread possible because the mosquitoes that transmit the viruses are found in Dallas County.

## Chikungunya

Chikungunya virus (CHIKV) is transmitted to people by *Aedes* species mosquitoes. CHIKV does not often result in death, but the symptoms can be disabling, and some people may get severe complications.

## Dengue

Dengue (pronounced den'gee) is a disease caused by any one of four closely related dengue viruses (DENV 1, DENV 2, DENV 3, or DENV 4). The viruses are transmitted to humans by the bite of an infected *Aedes* species mosquito.

## Zika

Zika virus is transmitted to people by *Aedes* species mosquitoes, and through sexual activity with a person infected with Zika virus. The illness is usually mild with symptoms lasting several days to a week. Severe disease requiring hospitalization is uncommon. Deaths are rare.

Chikungunya, Dengue and Zika viruses are found in tropical regions such as Central and South America, and the Caribbean.

Chikungunya and Dengue viruses are not spread directly from person to person. Zika virus can be spread through sexual contact. All three viruses are spread by the bite of an infected *Aedes* species mosquito. The mosquitoes are aggressive daytime biters, prefer to bite people, and live indoors and outdoors near people. Mosquitoes become infected when they feed on a person already infected with one of the viruses. Infected mosquitoes can then spread it to other people.

### Symptoms of Chikungunya

The symptoms of Chikungunya include sudden onset of high fever (>102°F), severe joint pain mainly in the arms and legs, headache, muscle pain, back pain, and rash.

### Symptoms of Dengue

The principal symptoms of dengue fever are high fever, severe headache, severe pain behind the eyes, joint pain, muscle and bone pain, rash, and mild bleeding (e.g., nose or gums bleed, easy bruising).

### Symptoms of Zika

The most common symptoms of Zika virus are fever, rash, joint pain, and conjunctivitis (red eyes). Other common symptoms include muscle pain and headache.

There is no vaccine to prevent Chikungunya, Dengue or Zika. There is no specific treatment for either of the viruses. However, supportive therapy is helpful with managing symptoms.

**DCHHS advises individuals with symptoms to see a healthcare provider if they have visited an area where the viruses are present, or had sexual contact with a person who traveled to an area where Zika virus is present, and tell the healthcare provider when and where you traveled.**

## Prevention

### DEET

Use DEET All Day, Every Day: Whenever you're outside, use insect repellents that contain DEET or other EPA approved repellents and follow instructions.

### Dress

Wear long, loose, and light-colored clothing outside.

### Drain

Drain or treat all standing water with EPA-approved larvicides in and around your home or workplace.

### Dusk & Dawn

Limit outdoor activities

during dusk and dawn when mosquitoes are most active.

### Travel Precautions

Choose a hotel or lodging with air conditioning or screens on windows or doors. Sleep under a mosquito bed net if you are outside or in a room that is not well-screened.

**Pregnant women and women trying to get pregnant can protect themselves further by taking the following precautions:** Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing. Pregnant women who do travel should talk to their doctor or other healthcare provider first and strictly follow steps to avoid mosquito bites during the trip. Pregnant women should discuss their male partner's potential exposures to mosquitoes and history of Zika-like illness. Women trying to become pregnant or who are thinking about becoming pregnant should consult with their healthcare provider before traveling and strictly follow steps to prevent mosquito bites during the trip.

**Sexual partners can protect each other from Zika virus by abstaining from sex or using condoms consistently and correctly during sex.**

Dallas County Health and Human Services  
Public Health Preparedness Division  
2377 North Stemmons Freeway  
Dallas, TX 75207  
214-819-2100  
www.dallascounty.org/hhs  
Zachary Thompson, Director  
Dr. Christopher Perkins, Medical Director/Health Authority

## Zika virus information available in 10 languages

As part of the mission to educate Dallas County citizens at-large on public health issues, DCHHS published Zika virus fact sheets in 10 languages. The materials are part of the comprehensive, ongoing DCHHS Zika virus campaign launched Jan. 27. In addition to English and Spanish, DCHHS has the following translations: Amharic, Arabic, Farsi, Hindi, Nepali, Swahili, Russian, and Urdu. The documents are available for download on the DCHHS website.

## Federal agency publishes DCHHS fact sheets

The National Institute of Health (NIH) National Library of Medicine (NLM), a division of the U.S. Department of Health and Human Services, published DCHHS Zika virus fact sheets on its website. NLM's Office of Outreach and Specialized Populations Branch reached out to DCHHS about the fact sheets translated in Amharic, Arabic, Farsi, Hindi, Nepali, Spanish, Swahili, Russian, and Urdu. NLM thanked DCHHS for its work and assistance.

DCHHS Zika fact sheet in Arabic

DCHHS Zika fact sheet in Swahili

Left: Screenshot from NIH NLM website citing DCHHS as the author of Zika virus fact sheets in nine languages.

## Zika Task Force created for seamless response

DCHHS Director Zachary Thompson, along with Dallas County Commissioner John Wiley Price, pioneered a Zika Virus Task Force to get a jump start to mosquito season, which runs from May to October in Dallas County. The group will meet weekly.

“While it is not mosquito season in Dallas County yet, Zika virus is new to the area and we want to make sure all of our municipalities have the information they need in order to respond appropriately,” said Price. “I commend DCHHS for remaining proactive, keeping up with the Zika virus outbreak in other regions, and communicating with local, state, and federal officials accordingly.”

The task force is an extension of the Public Health Advisory Committee (PHAC) already in place to communicate with cities during mosquito season. Price is the chair of PHAC.



Dallas County Commissioner John Wiley Price, right, addresses Dallas County municipalities during the inaugural Zika Task Force meeting.



Scott Sawlis, middle, ensures Dallas County municipalities that current mosquito management is effective for controlling mosquitoes that carry Zika virus.

## DCHHS lab on target to provide Zika testing

DCHHS is known for being on the cutting edge of public health best practices, such as securing the capability to test locally for highly-infectious and emerging viruses, such as Ebola and Zika virus.

“Local testing enhances our ability to provide faster results, sometimes within 24 hours,” said Zachary Thompson, DCHHS director. “This will better serve Dallas County residents and our neighboring counties.”

The DCHHS laboratory accepts specimens from residents in its service area in the counties of Collin, Dallas, Ellis, Fannin, Grayson, Henderson, Hunt, Kaufman, Navarro, Rains, Rockwall, and VanZant.

DCHHS expects to officially begin Zika virus testing in mid-February.



DCHHS lab staff Daniel Serinaldi, left, and Dr. Edward Bannister, right, meet with Director Zachary Thompson and Dr. Christopher Perkins to provide an update on testing for Zika virus.



# DCHHS

Safe families, healthy lives.

Dallas County Health and Human Services

Public Health Preparedness Division  
2377 North Stemmons Freeway  
Dallas, TX 75207  
214-819-2100  
[www.dallascounty.org/hhs](http://www.dallascounty.org/hhs)

Zachary Thompson, Director  
Dr. Christopher Perkins, Medical Director/Health Authority

### About this newsletter

Public Health Preparedness Update is published monthly by Dallas County Health and Human Services. For information about this newsletter, contact DCHHS Public Information Officer Erika D. Neroes at 214-819-6329 or [erikka.neroes@dallascounty.org](mailto:erikka.neroes@dallascounty.org).



Go to our website and click the red envelope icon to sign up for email or text updates.



[www.twitter.com/dchhs](http://www.twitter.com/dchhs)



[www.facebook.com/dchhs](http://www.facebook.com/dchhs)