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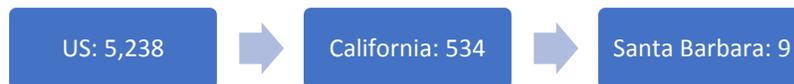
Paige Batson, MA, PHN, RN *Manager*

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Zika Virus – Provider Update

As summer approaches and mosquito season begins, the Santa Barbara County Public Health Department (SBCPHD) would like to provide an update about Zika virus infection.

Case Counts (2015-2017)



Almost all US cases and **all California infections have been travel-related**. Affected areas include Africa, Asia, the Pacific Islands, Central and South America, the Caribbean, and Mexico. [Maps of affected areas](#) are updated weekly by the Centers for Disease Control and Prevention.

Transmission

There are **3 routes** of Zika virus transmission. There have been **no** reported cases of infection via breastfeeding or blood transfusion in the US.

1. Bite from an infected mosquito (primary route)
 - The type of mosquito that carries Zika is **not** found in Santa Barbara County but is found in other parts of the US
2. Sex with an infected person
 - Sex includes vaginal, anal, or oral sex and the sharing of sex toys. Transmission can occur while the infected person is asymptomatic.
3. From mother to child
 - A pregnant woman infected with the virus can pass the it to her baby during pregnancy or around the time of birth

Symptoms

Illness is usually mild and lasts for several days to a week. Many patients are **asymptomatic**. Severe disease requiring hospitalization is uncommon and case fatality is low. Common symptoms include:

- Fever
- Rash
- Arthralgia
- Myalgia
- Conjunctivitis
- Headache

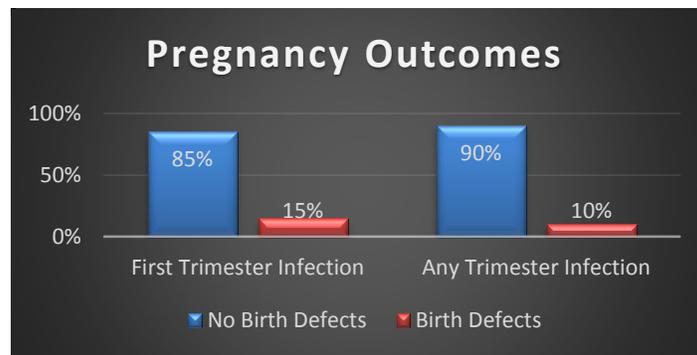


Pregnancy & Zika

The greatest concern is for unborn babies when the pregnant mother is infected with Zika. Infants may have **congenital Zika syndrome**, which includes:

- Severe microcephaly with partially collapsed skull
- Decreased brain tissue with specific pattern of calcium deposits indicating brain damage
- Damage to the back of the eye with specific pattern of scarring and increased pigment
- Joints with limited range of motion, such as clubfoot
- Increased muscle tone restricting body movement soon after birth

The CDC has established the [US Zika Pregnancy Registry](#) to study pregnancy outcomes. The table below shows the rate of fetus/baby birth defects among pregnant women with confirmed Zika infection in the US in 2016. There have been **no** reported cases of birth defects in babies born to infected mothers in Santa Barbara County to date.



Diagnosis & Testing

Based on the typical clinical features, the **differential diagnosis** for Zika virus infection is broad and includes dengue, malaria, rickettsia, group A streptococcus, rubella, measles, parvovirus, enterovirus, adenovirus, and chikungunya. **Preliminary diagnosis is based on the patient's clinical features, places and dates of travel, and activities.**

Pregnant women who traveled to an [area with a Zika travel notice](#) should be tested for Zika after their return from travel, whether or not they have symptoms. Pregnant women who traveled to an [area with risk of Zika but no CDC Zika travel notice](#) should be tested if they develop symptoms or if their fetus has abnormalities on an ultrasound that may be related to Zika infection.

The CDC has designed an [algorithm widget](#) to assist in clinical decision making about testing pregnant women for Zika virus infection. In addition, CDC's **Zika Pregnancy Hotline (770-488-7100)** is available 24/7 to health care providers for consultation regarding management of pregnant women and infants with possible Zika virus.

All infants born to mothers with laboratory evidence of Zika virus infection during pregnancy should receive the following:

Comprehensive Physical Exam	Head Ultrasound
Standard Newborn Hearing Assessment	Zika Lab Test

In addition, **infants who have abnormal clinical findings** suggestive of congenital Zika virus syndrome and a maternal epidemiologic link suggesting possible transmission should receive laboratory testing, regardless of maternal Zika virus test results.



All specimens must be processed through the SBCPHD laboratory. Whole blood, serum, or plasma can detect virus, viral nucleic acid, or virus-specific immunoglobulin M and neutralizing antibodies. A urine test may also be done. Please see [Zika virus laboratory testing information](#) for testing criteria, specimen collection instructions, and forms needed.



Treatment

No specific antiviral treatment is available for Zika virus disease. Treatment is supportive: rest, fluids, analgesics, antipyretics. People infected with Zika should be protected from further mosquito exposure during the first few days of illness to prevent local mosquitoes from becoming infected.

Prevention

There is currently **no vaccine for Zika**. Please advise patients to take the following steps to protect themselves and their families from Zika and other mosquito-borne infections:



If pregnant or planning a pregnancy, do not travel to affected countries. If travel cannot be avoided:

- Use mosquito repellent while abroad & for 3 weeks after returning
- Use condoms while abroad & for at least 8 weeks (women) or 6 months (men) after returning



Use EPA-registered insect repellents containing DEET, picaridin, oil of lemon eucalyptus, or other approved ingredient

- Do not apply to babies < 2 months old. Do not apply to a child's hands/eyes/ mouth.
- If also using sunscreen, apply sunscreen 1st and repellent 2nd



Wear long-sleeved shirts and long pants

- For additional protection, clothing can be treated with permethrin



Take steps to control mosquitoes in and around the home

- Use air conditioning & screens on windows & doors
- Empty standing water weekly from containers (flowerpots, buckets, birdbaths)

Resources

1. SBC Disease Control & Prevention **(805) 681-5280**
2. CDC Zika Pregnancy Hotline **(770-488-7100)**
3. [Zika Virus Information](#), SBC Public Health Department
4. [Zika: What Californians Need to Know](#), California Department of Public Health (CDPH)
5. [Zika Virus](#), Centers for Disease Control and Prevention (CDC)