

Introduction

Zika virus — which can be acquired from mosquitoes or from sex with a person (male or female) who has the virus — can be passed from a pregnant woman to her fetus and cause a serious birth defect called microcephaly, as well as other problems such as absent or poorly developed brain structures, defects of the eye, hearing deficits, and impaired growth. Zika virus is spreading rapidly, and local transmission (mosquitoes spreading Zika in the area) is already occurring in some parts of the United States, as well as several US territories and numerous other countries.

Providers of family planning services, including those in Title X clinics and in primary care sites such as Federally Qualified Health Centers, will play an important role in helping women and men make informed decisions about pregnancy and childbirth in the context of Zika. Most of these clients are not pregnant, so there is an opportunity to prevent the consequences of Zika by educating them about how it is transmitted and the risks that Zika poses to reproductive health, and helping them to consider how those risks may affect their plans for pregnancy and their use of contraception.

- Some women and couples seeking pregnancy may change their minds and decide to delay until more is known about Zika.
- Women who decide they want to prevent pregnancy may use contraception more consistently and correctly, or may choose to use more effective, less user-dependent methods, such as contraceptive implants and intrauterine devices.
- Women trying to become pregnant, or who are pregnant, may wish to take precautions to reduce the risk of Zika transmission.

- Women who are unsure about their feelings about pregnancy and childbearing may be more likely to develop a plan that optimizes their health, including use of contraception and/or taking precautions to reduce the risk of Zika transmission.
- Women and men may be more likely to use condoms consistently and correctly, or abstain from sex, to prevent sexual transmission of Zika.¹

This toolkit was developed to help providers of family planning services in a variety of settings educate their non-pregnant clients about the risk of Zika infection. As decisions about pregnancy and childbirth are profoundly personal, the goal of counseling about the risks associated with Zika is not to persuade clients to adopt certain behaviors or contraceptive methods but rather to enable them to make informed decisions that reflect their values and preferences.

The toolkit is based on current Centers for Disease Control and Prevention (CDC) guidance and is composed of the following components:

- Core information about Zika virus and its implications for women's and men's family planning needs
- Guidance for healthcare providers on counseling non-pregnant women about family planning in the context of Zika
- Guidance for healthcare providers on counseling men about family planning in the context of Zika
- Links to CDC's clinical recommendations about Zika and other relevant resources
- Links to job aids and client handouts in English and Spanish for those in areas **without** local mosquito-borne transmission of Zika, and for those in areas **with** local transmission
- Links to outreach materials in English and Spanish

¹ Sex is defined as vaginal sex (penis-to-vagina sex), anal sex (penis-to-anus sex), oral sex (mouth-to-penis sex or mouth-to-vagina sex), and the sharing of sex toys.

Condoms include the use of male or female condoms for vaginal or anal sex, male condoms for oral sex (mouth-to-penis), and male condoms cut to create a flat barrier or dental dams for oral sex (mouth-to-vagina).

This toolkit is focused on the Zika-related health needs of non-pregnant women and men of reproductive age. However, providers should be aware that CDC has also published recommendations for pregnant women (<http://www.cdc.gov/zika/hc-providers/pregnant-woman.html>).

The toolkit will be updated on an ongoing basis, as new research findings and updated CDC clinical recommendations are published. We encourage providers to check the Office of Population Affairs (www.hhs.gov/opa/) or the Family Planning National Training Center (www.fpntc.org) websites on a weekly basis so that they are using the most current version.

Core Information about Zika for Providers of Family Planning Services

1. What are the risks of Zika virus infection during pregnancy?

Zika virus infection during pregnancy can cause microcephaly (a condition where a baby's head is smaller than expected for age) and other severe fetal brain defects. Other problems have been detected in pregnancies and among fetuses and infants infected with Zika virus before birth, such as miscarriage, stillbirth, defects of the eye, hearing deficits, and impaired growth. The incidence of birth defects in pregnancies affected by Zika virus is unknown, with some data suggesting a risk up to 29% of infected pregnancies.

The full scope of health problems associated with Zika virus infection during pregnancy is not yet known. It is also unknown whether risk of Zika infection differs according to the trimester of pregnancy in which infection occurs, or what the risk is for a woman who is infected with Zika around the time of conception. However, from what we know about other viral infections, infections around the time of conception can potentially lead to infections in the fetus.

2. What parts of the US will be affected by Zika?

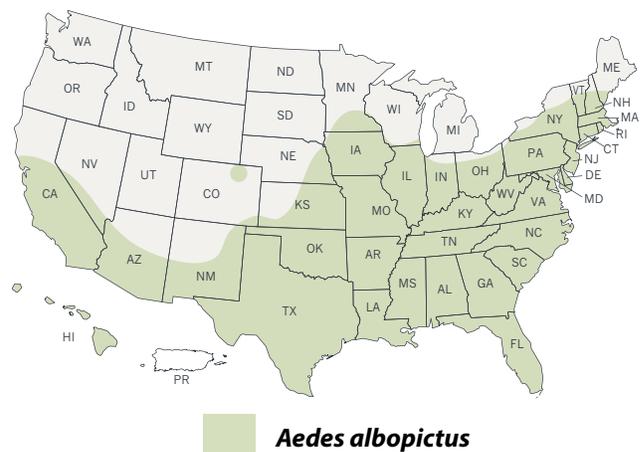
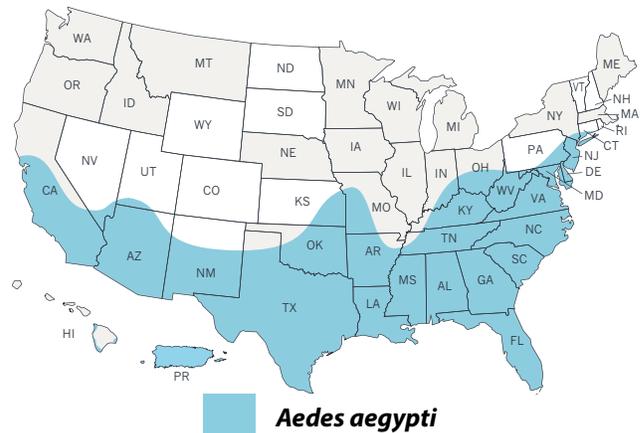
Zika virus is transmitted primarily through the bite of *Aedes aegypti* mosquitoes, although transmission via *Aedes albopictus* mosquitoes is also possible. Local transmission of the Zika virus by *Aedes aegypti* and *Aedes albopictus* mosquitoes has occurred in the following United States (US) territories: Commonwealth of Puerto Rico, the US Virgin Islands, and American Samoa. For the most current CDC update, see <http://www.cdc.gov/zika/geo/index.html>.

Local transmission has also been documented in the US since June, 2016. How widespread local transmission will be in the continental US, is unknown. Recent outbreaks in the continental United States of chikungunya and dengue, which are spread by the same types of mosquito, have been limited to a relatively small geographic area. These maps to the right show CDC's best estimate of the potential range of *A. aegypti* and *A.*

albopictus in the United States; specifically areas where these mosquitoes are or have been previously found.

Shaded areas on the map do not necessarily mean that there are infected mosquitoes in that area. More about the maps can be found at <http://www.cdc.gov/zika/vector/range.html>.

Estimated range of *Aedes aegypti* and *Aedes albopictus* in the United States, 2016*



Source: CDC at <http://www.cdc.gov/zika/vector/range.html>

*Maps have been updated from a variety of sources. These maps represent CDC's best estimate of the potential range of *Aedes aegypti* and *Aedes albopictus* in the United States. Maps are not meant to represent risk for spread of disease.

3. How is Zika spread?

Zika can be acquired from mosquitoes or from sex with a person (male or female) who has the virus. Anyone traveling to or living in regions in which there is local, mosquito-borne transmission of Zika virus has the potential to be infected. The CDC website <http://www.cdc.gov/zika/geo/index.html> maintains a current list of areas in which mosquito-borne transmission has occurred. In addition, men and women who travel to or live in areas with Zika transmission can transmit the Zika virus to their female and male sex partners through vaginal, anal, or oral sex or the sharing of sex toys.

At present, there is limited information about how long men and women exposed to Zika are at risk for spreading the virus. For men, it is known that the virus can persist in semen longer than in blood. CDC recommends that men with possible Zika exposure, regardless of symptoms, wait at least 3 months after symptom onset (if symptomatic) or last possible exposure (if asymptomatic) before attempting conception, or, if concerned about sexual transmission, before having sex without use of a condom (male or female) to protect against infection. Of note, men with asymptomatic Zika virus infection may sexually transmit Zika virus to their partners.

When considering risk of sexual transmission from an exposed female partner, it is most relevant to consider whether exposure occurred within the past 8 weeks. CDC recommends that women with possible Zika exposure, regardless of symptoms, wait at least 8 weeks after symptom onset (if symptomatic) or last possible exposure (if asymptomatic) before attempting conception, or, if concerned about sexual transmission, before having sex without use of a condom (male or female) to protect against infection.

A person's risk of mosquito-borne and sexually transmitted infection with Zika can be reduced, if they are willing and able to adopt prevention strategies, as described on page 5.

4. What steps can be taken by providers of family planning services who serve non-pregnant women and men of reproductive age?

How Zika-related care is integrated into family planning services will depend on the client's risk for disease, including whether the client or the client's partner(s) lives in, has traveled to, or intends to live in or travel to an area with local transmission of Zika (see Job Aid #3).

All non-pregnant female and male clients of reproductive age should be screened for exposure to Zika virus and educated about the risks of infection during pregnancy.

For clients with potential exposure to Zika, healthcare providers should integrate consideration of this exposure into their family planning services:

- Help clients to consider how information about Zika and their risk may affect their reproductive health goals and behaviors.
- Provide contraceptive services to those who wish to prevent or delay pregnancy, considering their Zika risk as one influence on their choice of a contraceptive method.
- Provide condoms to men and women who are at risk for sexual transmission of Zika.
- Counsel clients who are at risk of Zika infection and may become pregnant about how to reduce the risk of acquiring Zika before and during pregnancy.
- Offer testing to women and men who are exposed to Zika virus and develop symptoms.

All clients, whether or not they have a known risk for Zika, should also receive basic information about strategies to prevent Zika transmission, as individuals not currently at risk can develop new exposures over time.

This toolkit provides more detailed information about how to provide this care, as well as job aids (brief summaries of important content for providers to use during the course of clinical care) and client handouts.

5. What are symptoms of Zika infection?

Symptoms of Zika are typically mild, with the most common being acute onset of fever, macular or papular

rash, arthralgia (joint pain), and conjunctivitis (red eyes). Many people do not have symptoms and do not know they are infected. Neurologic and autoimmune complications are infrequent but have been described in outbreaks in Polynesia and, more recently, South America and Puerto Rico. The incubation period of the virus is not known with certainty, but may range from a few days to 2 weeks.

6. What strategies can help prevent Zika virus infection and its consequences?

The following strategies can be used by those at risk for Zika infection from exposure to either mosquitoes or sexual transmission of the virus.

Male and female condoms (and other barriers to protect against infection) can reduce the chance of getting Zika from sex if used correctly from start to finish, every time a couple has vaginal, anal, or oral sex or shares sex toys. Not having sex can eliminate the risk of sexual transmission of Zika infection (although there may still be risk of mosquito-borne transmission).

Using contraception consistently and correctly can prevent pregnancy and the risk of pregnancy complications associated with Zika. This should be considered in the context of women's feelings and plans about future pregnancy.

The following strategies can help prevent mosquito bites when living in or traveling to areas with local Zika virus transmission:

- Wearing long-sleeved shirts, long pants, and socks
- Staying and sleeping in places with air conditioning and window and door screens to keep mosquitoes outside
- Sleeping under a mosquito bed net if unable to close windows and doors
- Using Environmental Protection Agency (EPA)-registered insect repellents with one of the following active ingredients: DEET, picaridin, IR3535, oil of lemon eucalyptus, para-menthane-diol, or 2-undecanone. When used as directed, EPA-registered repellents are safe and effective for pregnant women
- Treating clothing and gear with permethrin or purchasing permethrin-treated items
- Eliminating standing water near one's home and workplace

7. What tests are available for Zika virus?

Viral RNA can be identified by using reverse transcription polymerase chain reaction. Serum and urine samples for RNA testing should be collected less than 14 days after onset of symptoms. IgM antibodies may be detectable by testing in serum from 4 to 5 days after the start of illness up to about 12 weeks. For IgM testing, confirmatory testing is necessary using neutralizing antibodies. There is currently no validated test for the Zika virus in semen.

8. Who should get tested, and how can I get them tested?

CDC currently recommends that any person with potential exposure to Zika and who develops symptoms compatible with Zika should be tested for the purpose of establishing a diagnosis.

- Persons possibly exposed to Zika are those who have either traveled to or live in an area with local Zika transmission, or who have had sex without use of a condom with a man or woman who has traveled to or lived in an area with local Zika transmission.
- Symptoms of Zika are defined as one or more of the following within 2 weeks of possible exposure: acute onset of fever, rash, arthralgia (joint pain) or conjunctivitis (red eyes).

CDC does not recommend testing of asymptomatic men or women for the purpose of establishing that they are not infected with Zika or at risk of sexually transmitting Zika. This is because a negative test result may be falsely reassuring. Whereas a positive Zika test result indicates the definitive need to delay pregnancy, a negative test result cannot be used to establish the absence of risk. Persons with negative test results should still follow recommended prevention measures.

The only circumstance under which testing is currently recommended for an asymptomatic person is for a pregnant woman living in or who has traveled to an area with local transmission of Zika, or a pregnant woman who has had sex without barrier protection with a partner who lives in or traveled to an area with Zika.

Providers wishing to obtain testing for a client should contact their state or local health department to

facilitate the process. Providers can refer to [CDC's Health Department Sites and Governance website](#) for links to state health departments. The “governance model” links for each state lead to information on local health departments. Zika virus is a nationally notifiable condition. State, local, and territorial health departments are encouraged to report laboratory-confirmed cases to CDC through ArboNET, the national surveillance system for arboviral diseases. Healthcare providers should report suspected Zika cases to their state, local, or territorial health department according to the laws or regulations for reportable diseases in their jurisdiction.

9. Are healthcare providers at risk of infection from their patients or clients?

CDC recommends healthcare providers use standard precautions during patient care regardless of suspected or confirmed Zika infection status. Although there is no evidence of Zika transmission through aerosol exposure, minimizing the aerosolization of blood or body fluids as much as possible during patient care or laboratory tasks may help prevent workers from being exposed to other pathogens. Standard precautions include, but are not limited to, hand hygiene and the use of personal protective equipment (PPE) to avoid direct contact with blood and other potentially infectious materials, including laboratory specimens/samples. PPE may include gloves, gowns, masks and eye protection.

10. How can you communicate with community organizations about the risk of Zika?

The following text can be used to let organizations know about Zika and about the services you can provide. The brochure and poster referenced are included in the outreach materials at the end of this toolkit.

Do your clients have accurate information about the Zika virus and how to protect their health?

Although Zika — and the fact that it can cause birth defects when pregnant women are infected — has gotten a lot of attention in the media, many people may not have the information they need about the virus and what

it means for their health. Your clients may want to know how they can prevent infection (both from mosquitoes and from sex with infected partners), whether to use a different method of birth control, or how to plan a healthy pregnancy considering the risk of Zika.

We at [Name of your family planning service delivery site] provide:

- *Education and counseling about Zika*
- *A complete range of contraceptive methods*
- *Counseling and services to optimize a healthy pregnancy*

Please share our brochure [attached or with link] with your clients and put up this poster [attached, and may be printed on your own printer, or taken to a print shop and printed in a larger, 22 by 29 inch size].

If you have any questions about these Zika materials or the services we provide, please let us know.

Where Can I Get More Information about Zika?

CDC Website

The CDC website is the primary reliable source of information about Zika <http://www.cdc.gov/zika/index.html>. Below are resources that may be of particular use to providers caring for non-pregnant women.

CDC clinical recommendations related to Zika

Petersen EE, Meaney-Delman D, Neblett-Fanfair R, et al. Update: Interim Guidance for Preconception Counseling and Prevention of Sexual Transmission of Zika Virus for Persons with Possible Zika Virus Exposure — United States, September 2016. MMWR Morb Mortal Wkly Rep 2016;65:1077-1081. Available at: <http://dx.doi.org/10.15585/mmwr.mm6539e1>

CDC updates and tools for healthcare providers about Zika

<http://www.cdc.gov/zika/pdfs/preconception-counseling.pdf>

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

<http://www.cdc.gov/zika/hc-providers/tools.html>

<http://www.cdc.gov/zika/hc-providers/qa-sexual-transmission.html>

Fact sheets and posters about Zika for use with clients (available in English, Spanish and other languages)

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

Clinical recommendations related to providing family planning services

CDC/OPA (2014). Providing Quality Family Planning Services (QFP): Recommendations of CDC and the US Office of Population Affairs, MMWR Recommendations and Reports, April 24, 2014. Available online at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6304a1.htm>

CDC (2010). US Medical Eligibility Criteria for Contraceptive Use, MMWR Recommendations and Reports, 59 (RR04):1–85. Available online at: <http://www.cdc.gov/reproductivehealth/UnintendedPregnancy/USMEC.htm>.”

CDC (2013). US Selected Practice Recommendations for Contraceptive Use, MMWR Recommendations and Reports, 62(No. RR-5):1-60. Available online at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6205a1.htm?s_cid=rr6205a1_w.

American College of Obstetricians and Gynecologists (ACOG), Committee on Gynecologic Practice. Increasing access to contraceptive implants and intrauterine devices to reduce unintended pregnancy. Committee Opinion Number 642; October 2015.

The American Academy of Pediatrics (AAP) (2014). Contraception for Adolescents. Pediatrics, 134:e1244–e1256.

Dehlendorf C, Krajewski C, Borrero S. Contraceptive counseling: best practices to ensure quality communication and enable effective contraceptive use. Clin Obstet Gynecol 2014; 57(4): 659-73.

ARHQ Literacy Toolkit: <http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/index.html>

You may also access Zika resources through the Title X Family Planning National Training Center website at fpntc.org. The [Zika Community of Practice](http://fpntc.org/cop/zika-virus) includes opportunities to share additional resources and participate in online discussions <http://fpntc.org/cop/zika-virus>. Contraceptive counseling resources are also available through the FPNTC website including [Providing Quality Contraceptive Counseling & Education: A Toolkit for Training Staff](#).