

Zika Virus Disease

Disease Category: Arboviral/Zoonotic

Timeframe to follow-up: Same day

See the link to the [Disease Investigation Process document](#)

Signs and Symptoms^{6,7}

- Zika virus infection is often asymptomatic or mild and self-limited.
- Most common symptoms include: Fever, maculopapular rash, headache, joint pain, conjunctivitis (red eyes), muscle pain.
- Exanthema (widespread skin rash) with or without fever is the most common symptom.
- Other symptoms reported less frequently include retro-orbital pain, edema of the hands and feet, dysuria, and hematospermia (blood in the semen)

Incubation⁷

Usually 3–14 days; range not well defined due to mild symptoms

Case Classification

Clinical criteria Congenital Zika Virus Disease: Liveborn infant does not have an identified genetic or other cause for the findings and have brain or eye anomalies or neurological sequelae specific for congenital Zika virus disease identified in the neonatal period.

Confirmed Congenital Zika:

- Meets the clinical criteria for congenital Zika virus disease, AND
- Meets confirmatory laboratory criteria for congenital Zika virus disease, AND
- Whose gestational parent meets:
 - epidemiologic linkage criteria, OR
 - confirmatory laboratory criteria for non-congenital Zika virus disease during this pregnancy.

Probable Congenital Zika:

- Meets the clinical criteria for congenital Zika virus disease, AND
- Meets presumptive laboratory criteria for congenital Zika virus disease, AND
- Whose gestational parent meets:
 - epidemiologic linkage criteria, OR
 - confirmatory laboratory criteria for non-congenital Zika virus disease during this pregnancy.

Clinical Criteria Non-congenital Zika Virus Disease: Any of the following symptoms not explained by another etiology: acute onset of fever, generalized rash, arthralgia or non-purulent conjunctivitis, Guillain-Barré syndrome, loss of fetus at ≥ 20 weeks gestation.

Confirmed Non-congenital Zika:

- Detection of Zika virus, viral antigen, or viral RNA in a body fluid or tissue; OR
- Detection of anti-Zika virus IgM antibodies in blood or CSF, with positive Zika virus-specific neutralizing antibody titers and negative neutralizing antibody titers against dengue or other flaviviruses endemic to the region where exposure occurred

Probable Non-congenital Zika:

	- Detection of anti-Zika virus IgM antibodies in blood or CSF with a negative anti-dengue virus IgM antibody test in the same specimen with no neutralizing antibody testing performed; OR - Four-fold or greater rise in anti-Zika virus-specific neutralizing antibody titers in paired blood specimens; OR - In the setting of a Zika virus outbreak with minimal circulation of other endemic flaviviruses, detection of anti-Zika virus IgM antibodies in blood or CSF.
Differential Diagnosis ⁸	The main differential diagnoses for Zika virus disease include other arboviral diseases such as dengue, chikungunya, oropouche; bacterial infections including leptospirosis, rickettsial, and Group A streptococcal infections; and infections from parvovirus, rubella virus, malaria, and measles virus.
Treatment ⁷	The clinical management of patients with uncomplicated symptomatic Zika virus infection is supportive and includes the use of analgesics and antipyretics. Antihistamines are indicated for pruritic exanthema. There is no specific antiviral therapy at present. Management of neurological complications, such as Guillain-Barré syndrome, should follow standard guidelines and include close monitoring and appropriate interventions.
Duration ⁹	Symptoms usually persist for several days to 1 week.
Exposure ⁸	Exposure can occur through mosquito bites (predominantly by <i>Aedes aegypti</i>), intrauterine transmission from mother to fetus, sexual transmission, blood transfusion, organ transplantation, and laboratory exposure. The virus RNA has been detected in saliva, cerebrospinal fluid, breast milk, and other body fluids.
Laboratory Testing	Local Health Authority can arrange testing if an outbreak is suspected OR for contacts of cases: NSPHL Zika Virus Testing Clinical Testing and Diagnosis for Zika Virus Disease CDC
Control of Contacts ^{7,10,11}	Zika virus can be transmitted sexually. Men are advised to abstain from sex or use condoms for at least 3 months while women should abstain from sex or use condoms for at least 2 months after symptom onset or last possible Zika virus exposure. Couples considering pregnancy with possible exposure to Zika virus should postpone pregnancy for 3 months following potential exposure or diagnosis of Zika infection.
Key areas of focus during investigation	Recent mosquito bites, travel to an area with active Zika virus outbreak, sexual contact with anyone recently exposed or infected to Zika virus, pregnancy status, breastfeeding status, plans for pregnancy.
Public Health Actions	Reports of Zika virus cases must be made to the Local Health Authority during the regular business hours of the health authority on the first working day following the identification of the case. Local Health Authority to notify Office of State Epidemiology (dpbhepi@health.nv.gov) or call 775-400-0333 for individual cases or if outbreak suspected. For individual confirmed or probable cases:

	• Confirm diagnosis, if possible • Coordinate transport of specimens to NSPHL to confirm diagnosis if needed • Identify potential exposures • Prepare a case report and submit to the Chief Medical Officer (through OSE) within 7 days after completing the case investigation • Identify potential outbreaks from common sources • Provide education about how to prevent transmission • To the best of the local health authority's ability, each step of the investigation should be completed within the same day or in alignment with NAC 441A.
Key Partner Agencies	• Local health authorities • Laboratories including Nevada State Public Health Laboratory (NSPHL) • If related to large travel-related outbreaks may need to coordinate with federal partners like CDC

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ZIKA VIRUS

I. DISEASE REPORTING

A. Legal Reporting Requirements

A report to the health authority may be made by telephone; telecopy (in the form prescribed by the health authority); or any form of electronic communication identified by the health authority, following the specified format and procedure.¹

1. *Health Care Providers and Health Care Facilities*

Health providers and facilities must notify the health authority where provider is located within the first working day after identifying the case.¹⁻³

2. *Laboratories*

Laboratories must notify the health authority within the first working day after identifying the case.¹ If the lab is located outside of Nevada, notify the Nevada Chief Medical Officer through the Office of State Epidemiology (OSE) within the same timeframe.^{1,4}

3. *Local Health Authority (LHA)*

LHA's must notify the Office of State Epidemiology (OSE) within 7 days after completing the case investigation.⁵

II. THE DISEASE AND ITS EPIDEMIOLOGY

A. Background^{8,12}

Zika virus is an arthropod-borne flavivirus spread by infected mosquitoes. Illness is usually mild, but infection during pregnancy can cause serious birth defects and other pregnancy problems.

B. Etiologic Agent⁷

The Zika virus is a member of the Flaviviridae family, which includes other viruses such as dengue, yellow fever, and West Nile virus. It is a positive single-stranded RNA virus with a lipid membrane envelope. There are two main genotypes of Zika virus: African and Asian, with the Asian genotype being associated with congenital zika syndrome.

C. Description of Illness¹²

Most people infected with Zika will not have symptoms or will have only mild symptoms. Most common symptoms include: Fever, maculopapular rash, headache, joint pain, conjunctivitis (red eyes), muscle pain. Other symptoms reported less frequently include retro-orbital pain, edema of the hands and feet, dysuria, and hematospermia (blood in the semen)

D. Disease Burden in Nevada

Zika cases are reported to CDC through ArboNET (National Arbovirus Surveillance System). There is no current local transmission of Zika virus in the continental United States and no confirmed cases reported from US territories since 2019.¹³ There have been no reported cases of Zika virus disease in Nevada since 2020.

See the [Nevada Office of State Epidemiology Communicable Disease Dashboard](#) for Nevada specific data on Zika virus (zoonotic & vector-borne section).

E. Reservoirs

Natural virus reservoir is thought to be African and Asian monkeys.⁷ There is postulation that the virus may have changed before the 2007 outbreak on Yap Island, resulting in a virus highly adapted to human transmission in urban settings.⁷

F. Modes of Transmission

Zika virus is primarily transmitted through the bite of infected Aedes mosquitoes, particularly Aedes aegypti. Other modes of transmission include intrauterine transmission from mother to fetus, sexual transmission (including vaginal, anal, and oral sex), blood product transfusion, and laboratory exposure.⁸

G. Incubation Period

The incubation period for Zika virus is typically 3–14 days. It is challenging to determine the exact incubation period due to the often-mild nature of symptoms. Preliminary data suggest that the incubation period for sexual transmission could be longer than for mosquito-mediated transmission.⁷

H. Period of Communicability

Zika virus RNA can be detected in the blood for about 2 weeks.⁷ Risk of sexual transmission is longer, and it is advised for males and females to follow timeframes to prevent sexual transmission. The timeframe starts as soon as the individual returns from travel, even if they are asymptomatic, or from the start of their symptom or the date they were diagnosed. Males should use condoms or not have sex for at least 3 months while females should use condoms or not have sex for at least 2 months.¹⁰

I. Testing

Nucleic acid amplification tests (NAATs) are the preferred method for diagnosis. Immunoglobulin (Ig) M and neutralizing antibody testing can also be used to identify Zika virus infections.¹¹ Please refer to the [Clinical Testing and Diagnosis for Zika Virus Disease | CDC](#) for specimen collection and testing recommended by case scenario.

J. Treatment

There is no specific antiviral treatment currently available for Zika virus disease. Supportive care is usually indicated including rest, fluids, and symptomatic treatment (acetaminophen to relieve fever and antihistamines for pruritic). Aspirin and non-steroidal anti-inflammatory

drugs (NSAIDs) should be avoided until dengue is ruled out to reduce risk of hemorrhagic complications.¹¹ For infants with congenital Zika complications, early intervention and referral to specialists for evaluation are recommended.¹¹

III. EPIDEMIOLOGIC CASE INVESTIGATION

The public health authority should begin investigating the case of Zika virus disease, step by step, within the same day of notification or in alignment with [NAC 441A](#).

According to NRS 441A.160 (1), “A health authority who knows, suspects or is informed of the existence within the jurisdiction of the health authority of any communicable disease that poses a risk to the health of the public and is in an infectious state, at risk of developing into an infectious state or at risk of developing into a progressed state that endangers the health of the person with the communicable disease shall immediately investigate the matter and all circumstances connected with it, and shall take such measures for the prevention, suppression and control of the disease as are required by the regulations of the Board or a district board of health.”

A. Step 1: Review relevant information about the disease.

1. *Review scientific information in [Control of Communicable Diseases Manual](#), most current edition.*
2. *Review Zika Virus Disease most recent case definition ([Zika Virus Disease 2024 Case Definition | CDC](#)).*

B. Step 2: Begin investigating the case.

1. *Contact Reporting Source and/or Reported Case*

Upon receiving an initial case report, review lab test results and available clinical details and epidemiologic factors. Please make three attempts to contact the case (text and phone calls) on separate days, at different times of the day (morning, afternoon, late afternoon). Document all attempts to contact a reporting source and/or reported case, preferably in the “Encounters” tab of EpiTrax. Please use case report forms (CRF) to gather accurate information about the case. Focus on the key data elements listed above. Filling out an electronic version of the CRF in EpiTrax (called a Confidential Morbidity Report (CMR) in EpiTrax) is preferred. If used, the completed PDF version should be attached to the CMR in EpiTrax. The CRF should be completed within 7 days of completing the investigation of the case.⁵

C. Step 3: Identify potential sources of infection

The investigation should focus on exposures about 2 weeks before symptom onset. Ask about any risk factors for infection such as mosquito bites, travel to an area with Zika outbreak or travel health notice, pregnancy status, sexual contact with someone recently diagnosed or exposed to Zika virus, recent blood transfusion or organ transplantation.

D. Step 4: Initiate control measures for case and or/for contacts (see Section IV – Section VI below).

E. Step 5: Provide Education and Prevention messaging to the case and/or contacts (see Section VII below).

IV. CONTROL OF CASE

1. *Management/Exclusions for Specific Groups or Settings*

	Symptomatic	Asymptomatic
Sensitive Occupation*	N/A	N/A
Childcare/School Attendee	N/A	N/A
Case in a Medical Facility	Follow standard precautions	Follow standard precautions
General Population	Follow precautions to prevent sexual and congenital transmission	Follow precautions to prevent sexual and congenital transmission

2. *Exclusion Notifications*

Zika virus can be transmitted through sexual activity. All cases are asked to refrain from sex or use condoms. Recommended duration to prevent sexual transmission for males is at least 3 months and at least 2 months for females after symptom onset (if symptomatic) or last Zika virus exposure (if asymptomatic).^{8,10} Sperm should also not be donated for at least 3 months from infection or last exposure.¹¹ Following decrease of Zika incidence in the U.S. and its territories, the FDA removed the requirement of routine Zika virus NAAT screening of blood donations. However, individuals infected with Zika virus infection should defer blood donations for 120 days following symptom resolution or their last positive test, whichever is longer. Individuals with a Zika virus infection within the past 6 months should be ineligible to donate human cells, tissues, and cellular and tissue-based products.¹¹ Individuals suspected of having Zika virus infection at any point during pregnancy should not be eligible to donate umbilical cord blood, placenta tissue, or other gestational tissues.¹¹

V. CONTROL OF CONTACTS

Investigate symptomatic contacts in the same manner as a case. Men who have resided or traveled to areas of active Zika virus transmission and who have a pregnant partner should refrain from sex or consistently use condoms for the duration of the pregnancy.⁷

VI. CONTROL OF CARRIERS

Many Zika virus infections are asymptomatic. To prevent transmission it is important for individuals to follow guidelines to prevent sexual transmission. Couples with possible Zika

virus exposure planning on pregnancy should postpone pregnancy for 3 months following potential exposure or diagnosis of Zika infection.¹¹

VII. MANAGEMENT OF SPECIAL SITUATIONS/OUTBREAK CONTROL

Coordinate with senior epidemiology staff to determine if an outbreak is occurring. If so, notify DPBH Environmental Health, local health authorities, or infection control, as appropriate.

VIII. PREVENTION⁸

- Prevent mosquito bites by wearing long sleeve and pants and using EPA-registered insect repellent.
- Individuals with Zika virus infection can reduce spread by avoiding mosquito bites during the first week of illness.
- Asymptomatic individuals traveling to an area with Zika virus mosquito transmission and returning to an area with not Zika virus mosquito transmission should avoid mosquito bites for 3 weeks after return.
- Prevent sexual transmission by abstaining from sex or using condoms for the recommended timeframe.
- Pregnant patients should avoid or postpone travel to areas below 6,500 feet where transmission of Zika virus is ongoing. Regions above 6,500 feet are excluded from travel precautions since mosquitoes that transmit Zika virus are rare in these locations.

IX. REFERENCES

1. REPORTING OF COMMUNICABLE DISEASES. *NAC CHAPTER 441A - INFECTIOUS DISEASES; TOXIC AGENTS*. [Online] November 2021. [Cited: January 19, 2024.] <https://www.leg.state.nv.us/nac/nac-441a.html#NAC441ASec225>.
2. REPORTING OF COMMUNICABLE DISEASES. *NAC CHAPTER 441A - INFECTIOUS DISEASES; TOXIC AGENTS*. [Online] November 2021. [Cited: January 19, 2024.] <https://www.leg.state.nv.us/nac/nac-441a.html#NAC441ASec230>.
3. REPORTING OF COMMUNICABLE DISEASES. *NAC CHAPTER 441A - INFECTIOUS DISEASES; TOXIC AGENTS*. [Online] November 2021. [Cited: January 19, 2024.] <https://www.leg.state.nv.us/nac/nac-441a.html#NAC441ASec240>.
4. REPORTING OF COMMUNICABLE DISEASES. *NAC CHAPTER 441A - INFECTIOUS DISEASES; TOXIC AGENTS*. [Online] November 2021. [Cited: January 19, 2024.] <https://www.leg.state.nv.us/nac/nac-441a.html#NAC441ASec235>.
5. REPORTING OF COMMUNICABLE DISEASES. *NAC CHAPTER 441A - INFECTIOUS DISEASES; TOXIC AGENTS*. [Online] November 2021. [Cited: January 19, 2024.] <https://www.leg.state.nv.us/nac/nac-441a.html#NAC441ASec290>.

6. Centers for Disease Control and Prevention. (2025, January 30). Zika Symptoms and Complications. CDC. Retrieved September 2, 2026, from <https://www.cdc.gov/zika/signs-symptoms/index.html>
7. Heymann, D. L. (Ed.). (2022). Zika. In *Control of Communicable Diseases Manual* (21st ed., pp. 722-730). Retrieved September 2, 2026, from American Public Health Association.
8. LaBeaud, AD. (2025, November 12). Zika virus infection. An overview. UpToDate. Retrieved September 3, 2026, from https://www.uptodate.com/contents/zika-virus-infection-an-overview?search=zika&source=search_result&selectedTitle=1~111&usage_type=default&display_rank=1&searchCorrelationId=51756666-ee2c-4538-9cfa-230fc7269949&searchCorrelationTerm=zika
9. Centers for Disease Control and Prevention. (2025, January 30). Clinical Signs and Symptoms of Zika Virus Disease. CDC. Retrieved September 9, 2026, from <https://www.cdc.gov/zika/hcp/clinical-signs/index.html>
10. Centers for Disease Control and Prevention. (2025, January 30). Sexual Transmission of Zika Virus. CDC. Retrieved September 3, 2026, from <https://www.cdc.gov/zika/hcp/sexual-transmission/index.html>
11. 2024. "Zika", Red Book: 2024–2027 Report of the Committee on Infectious Diseases, Committee on Infectious Diseases, American Academy of Pediatrics, David W. Kimberlin, MD, FAAP, Ritu Banerjee, MD, PhD, FAAP, Elizabeth D. Barnett, MD, FAAP, Ruth Lynfield, MD, FAAP, Mark H. Sawyer, MD, FAAP
12. Centers for Disease Control and Prevention. (2026, July 21). About Zika Virus. CDC. Retrieved September 9, 2026, from <https://www.cdc.gov/zika/about/index.html>
13. Centers for Disease Control and Prevention. (2026, September 8). Zika Cases in the United States. CDC. Retrieved September 10, 2026, from <https://www.cdc.gov/zika/zika-cases-us/index.html>
14. Centers for Disease Control and Prevention. (2025, January 30). Preventing Zika. CDC. Retrieved September 11, 2026, from <https://www.cdc.gov/zika/prevention/index.html>

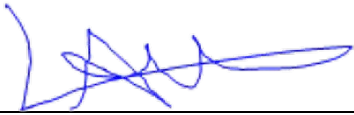
X. ACKNOWLEDGEMENTS

This document was developed based on the content and format of the disease investigation guidelines of several state and local health jurisdictions:

- Oregon Health Authority Investigative Guidelines
- Washington State Department of Health Reporting and Surveillance Guidelines
- Washoe County Health District Epidemiology and Communicable Disease Program Investigation of Communicable Disease Manual

The Nevada Office of State Epidemiology would like to acknowledge the work of these great partners.

XI. UPDATE LOG



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Chief Medical Officer Approval Date