

Reason / Problem UpToDate Zika Virus Infection Emergency Department Order Set

- *The diagnosis of Zika virus infection should be suspected in individuals with typical clinical manifestations and relevant epidemiologic exposure (residence in or travel to an area where mosquito-borne transmission of Zika virus infection has been reported, or unprotected sexual contact with a person who meets these criteria). (UpToDate)*
- *The incubation period between mosquito bite and onset of clinical manifestations is typically 2 to 14 days. The illness is usually mild; clinical manifestations usually resolve within two to seven days. Asymptomatic infection is common; symptoms develop in 20 to 25 percent of individuals who become infected with Zika virus. Clinical manifestations of Zika virus infection include acute onset of low-grade fever with maculopapular pruritic rash, arthralgia (notably small joints of hands and feet), or conjunctivitis (nonpurulent); clinical illness is consistent with Zika virus disease if two or more of these symptoms are present. Zika virus infection has also been associated with congenital microcephaly, fetal loss, and Guillain-Barré syndrome. (UpToDate)*

Zika Virus Infection UpToDate UpToDate UpToDate

Code Status

Full code

Do not resuscitate

Diet

Nothing by mouth

Vital Signs

Check vital signs per protocol

IV

Crystalloid:

Normal saline intravenously and

5% dextrose in normal saline intravenously and

Crystalloid-Fluid Bolus:

Normal saline intravenous bolus

Lock IV:

Saline lock intravenous

Other Nursing

Assessments:

Obtain weight

Complete admission history

Complete adult pain assessment

Education: UpToDate

- *Women with Zika virus exposure may breastfeed. Transmission of Zika virus through breastfeeding has not been described, although the virus has been detected in breast milk. (UpToDate)*
- *Sexual transmission has been described; the duration of viral persistence in semen and in female genital tract secretions may be prolonged. In all areas, men or women with Zika virus infection or exposure (via travel to mosquito transmission areas or sexual contact) who have a pregnant partner should abstain from unprotected sex for the duration of the pregnancy. Within areas of Zika virus mosquito transmission, it is prudent for individuals to abstain from sexual activity (vaginal, anal, and oral sex) or use barrier protection while active transmission persists. Outside areas of Zika virus mosquito transmission, UpToDate agrees with guidance issued by the United States Centers for Disease Control and Prevention (CDC) for couples in which one or both partners have Zika virus infection or exposure, which include the following: Men with Zika virus exposure (whether symptomatic or not) should wait at least six months after exposure before unprotected sex. Women with Zika virus exposure (whether symptomatic or not) should wait at least eight weeks after exposure before unprotected sex. (UpToDate)*

Provide disease/medical condition education

Provide lifestyle modification education

Cardiac:

Continuous bedside cardiac monitoring

Circulatory:

Peripheral IV line care per protocol

Insert peripheral IV line

Respiratory:

Maintain oxygen saturation between _____ and _____

Monitor pulse oximetry

Therapies**Respiratory Therapy Service:**

oxygen

Medications

- *There is no specific treatment for Zika virus infection and there is no vaccine for prevention. Management consists of symptomatic treatment. Preventive measures include personal protective measures to prevent mosquito bites and institution of measures to eliminate and control mosquito breeding sites. (UpToDate)*

Acetaminophen 650 mg orally single dose

Acetaminophen 650 mg intravenously single dose

Laboratory

- *For individuals presenting 7 days or less after onset of symptoms, diagnostic testing for Zika virus infection should include reverse-transcription polymerase chain reaction (RT-PCR) of serum and urine for detection of Zika virus ribonucleic acid (RNA). RT-PCR testing for dengue virus and chikungunya virus should also be pursued. Serum RT-PCR is positive only for a brief window (three to seven days) when the infected person has viremia; therefore, negative results cannot exclude infection. Urine RT-PCR is positive for up to 14 days following onset of symptoms. (UpToDate)*
- *For individuals presenting four to seven days after onset of symptoms with negative Zika virus reverse-transcription polymerase chain reaction (RT-PCR), Zika virus serologic testing should be performed. If Zika virus immunoglobulin M (IgM) tests results are positive, equivocal, or inconclusive, testing for neutralization antibodies via plaque-reduction neutralization test (PRNT) should be performed to determine whether the Zika virus IgM reflects recent Zika virus infection or a false-positive result. A PRNT titer greater than 10 should be interpreted as evidence of infection with a specific flavivirus when the PRNT to the other viruses tested is less than 10. (UpToDate)*
- *For individuals presenting 8 to 14 days after the onset of symptoms, diagnostic testing for Zika virus infection should include urine reverse-transcription polymerase chain reaction (RT-PCR) of Zika virus ribonucleic acid (RNA), as well as Zika virus serologic testing (Zika virus immunoglobulin M [IgM] and plaque-reduction neutralization test [PRNT]). For individuals presenting 15 days to 12 weeks after onset of symptoms, diagnostic testing for Zika virus infection should consist of Zika virus serologic testing (Zika virus IgM and PRNT). (UpToDate)*
- *Testing for dengue virus infection and chikungunya virus infection should also be pursued. A single laboratory polymerase chain reaction (PCR) test is available through the United States Centers for Disease Control and Prevention (CDC) and other qualified laboratories to evaluate for presence of Zika, chikungunya, or dengue infection. (UpToDate)*

Microbiology:

Zika virus antibody IgM (serum)

Zika virus plaque reduction neutralization test (PRNT) (serum)

Zika virus RNA by RT-PCR (serum)

Zika virus RNA by RT-PCR (urine)

Chikungunya virus RNA by RT-PCR (serum)

Dengue fever virus RNA by RT-PCR (serum)

Chikungunya virus antibody IgM (serum)

Chikungunya virus plaque reduction neutralization test (PRNT) (serum)

Dengue fever virus antibody IgM (serum)

Dengue fever virus plaque reduction neutralization test (PRNT) (serum)

Dengue fever virus NS1 antigen (serum)

Routine culture and sensitivities 2 sets (blood)

Chemistry:

Basic metabolic panel (serum)

Comprehensive metabolic panel (serum)

Hematology:

CBC with platelets and differential (blood)

Inflammatory Markers:

C-reactive protein (plasma)

Erythrocyte sedimentation rate (plasma)

Urinalysis:

Urinalysis (urine)

Pregnancy:

Beta hCG qualitative (urine)

Beta hCG qualitative (blood)

Consultations

Infectious Disease consultation

Neurology consultation

Disposition

Admit inpatient

Place in observation

Discharge patient

Transfer

Physician's Signature _____ Date _____ Time _____