Appendix A – Sample Messaging

For the most current messaging, log onto the CDC Zika Virus homepage http://www.cdc.gov/zika/index.html for Information for Specific Groups.

Targeted Messaging

- General Public
- Pregnant Women
- Travelers
- Health Care Providers

Supplemental Messaging

- Guillain-Barré Syndrome
- Sexual Transmission

For General Public

Transmission:

Zika virus is spread to people primarily through the bite of an infected *Aedes aegypti* species mosquito, which is very rarely found in Illinois (Aedes aegypti cannot survive freezing temperatures). Another possible Zika virus carrier mosquito species is *Aedes albopictus,* which is found primarily in the southern two-thirds of Illinois (*Aedes albopictus* can survive freezing temperatures). However, *Aedes albopictus* is less effective as a vector of Zika virus than *Aedes aegypti.* Both *Aedes aegypti* and *Aedes albopictus* breed in water-filled "artificial containers" like buckets, old tires, plant drip pans and uncovered rain barrels that are often found around buildings. They do not breed in ditches or flooded areas like many other species of mosquitoes.

Zika virus is NOT spread through coughing or sneezing.

Zika virus has not been spread by mosquitoes in the continental United States as of the date of this publication. However, travel-associated cases and cases of sexual transmission have been reported in travelers returning to the United States.

Although mosquito bites are the main way that Zika virus is spread, Zika virus can be passed from a pregnant woman to her fetus during pregnancy or at delivery. Zika virus can also spread when an infected man has sex with his partner(s).

Symptoms:

The most common symptoms of Zika virus are:

- Fever
- Rash
- Joint pain
- Conjunctivitis (red eyes)

The illness is usually mild with symptoms lasting for several days to a week after being bitten by an infected mosquito. People usually do not get sick enough to go to the hospital and they very rarely die of Zika virus. Most people infected with Zika virus won't even know they have the disease because they won't have symptoms.

Prevention:

Mosquito Exposure Prevention

The best way to prevent diseases spread by mosquitoes is to protect yourself and your family from mosquito bites.

- Wear long-sleeved shirts and long pants.
- Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.
- Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.
- Use Environmental Protection Agency (EPA)-registered insect repellents. When used as directed, EPA-registered insect repellents are proven safe and effective, even for

pregnant and breast-feeding women.
  - Always follow the product label instructions.
  - Reapply insect repellent as directed.
  - Do not spray repellent on the skin under clothing.
  - If you are also using sunscreen, apply sunscreen before applying insect repellent.
- If you have a baby or child:
  - Do not use insect repellent on babies younger than two months of age.
  - Dress your child in clothing that covers arms and legs.
  - Cover crib, stroller, and baby carrier with mosquito netting.
  - Do not apply insect repellent onto a child's hands, eyes, mouth, and cut or irritated skin.
  - Adults: Spray insect repellent onto your hands and then apply to a child's face.
- Treat clothing and gear with permethrin or purchase permethrin-treated items.
  - Treated clothing remains protective after multiple washings. See product information to learn how long the protection will last.
  - If treating items yourself, follow the product instructions carefully.
  - Do NOT use permethrin products directly on skin. They are intended to treat clothing.

Sexual Transmission Prevention

Sexual partners should either abstain from having vaginal, anal, and oral (mouth-to-penis) sex for couples with a male partner who might have Zika virus or use condoms the right way every time they have vaginal, anal, and oral sex.

A person with Zika virus can pass it to his sex partners if he has sex (vaginal, anal, or oral) without a condom. We do not know how long Zika can persist in semen. A person who lives in or travels to an area with Zika virus should either not have sex or use condoms or other barrier methods (female and male condoms, dental dams) the right way every time he/she has vaginal, anal, and oral sex (mouth-to-penis), especially with a woman who is pregnant.

There is one documented case of female-to-male sexual transmission of Zika virus infection. All previously reported cases of sexually transmitted Zika virus infection have been spread from men to their sex partners. CDC recommends that all pregnant women who have a sex partner who has traveled to or resides in an area with Zika virus use barrier methods every time they have sex or they should not have sex during the pregnancy. Although no cases of woman-to-woman Zika virus transmission have been reported, these recommendations now also apply to female sex partners of pregnant women.

CDC is currently updating recommendations for sexually active people in which the couple is not pregnant or concerned about pregnancy and for people who want to reduce personal risk of Zika infection through sex.

Treatment:

There is no vaccine or specific medicine for Zika virus.

See your doctor if you develop symptoms (fever, rash, joint pain, red eyes) and you live in or have recently traveled to an area with Zika virus and let them know where you have traveled.

A blood test is the only way to confirm a Zika virus infection. Your doctor may order blood tests to look for Zika virus or other similar viral diseases like dengue or chikungunya.

Some travelers become infected while traveling abroad but do not get sick until they return

home. Be aware of any illness or symptoms during your trip or after you return home. Tell your health care provider where you have traveled and when you were there.

When returning to Illinois or coming from an area with ongoing Zika virus transmission, take the following steps:

- Watch for symptoms and call your health care provider if you develop fever, rash, joint pain, red eyes.
- To help prevent others from getting sick, avoid mosquito bites and use insect repellent for three weeks after travel.
- Use condoms when you have sex.

For Pregnant Women

Zika virus can pass from a pregnant woman to her fetus during pregnancy or during birth, although we do not yet know how often this occurs.

Zika virus has been linked to birth defects, including microcephaly, a severe birth defect that is a sign of incomplete brain development. Microcephaly is a condition where a baby's head is

much smaller than expected. The CDC continues to study the link between Zika virus and microcephaly. Microcephaly Fact Sheet

Adverse consequences could occur at any time during the pregnancy so it is important that women take precautions during all trimesters.

To date, there are no reports of babies getting Zika virus through breastfeeding. Because of the benefits of breastfeeding, mothers are encouraged to breastfeed even in areas where Zika virus is found.

There is no evidence to suggest that pregnant women are more susceptible to Zika virus or experience more severe symptoms of the disease during pregnancy compared to the general population.

How to Protect Yourself:

1. Avoid travel to an areas with ongoing Zika virus transmission
   - If you are pregnant, CDC currently recommends you delay travel to any area where Zika virus is spreading.
   - If you must travel to one of these areas, talk to your health care provider first and strictly follow steps to prevent mosquito bites during your trip.

2. Take steps to prevent mosquito bites.
   - Wear long-sleeved shirts and long pants.
   - Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.
   - Use Environmental Protection Agency (EPA)-registered insect repellents. When used as directed, these insect repellents are proven safe and effective even for pregnant and breastfeeding women.
   - Remove or stay away from mosquito breeding sites, like containers with standing water. Dump any small standing water sources near residences and treat larger standing water bodies with appropriate larvicides.

3. Take steps to prevent getting Zika through sex
   - Until more is known, pregnant women with male sex partners who have lived in or traveled to an area with Zika virus should either use condoms the right way, every time, for vaginal, anal, or oral (mouth-to-penis) sex or not have sex during the pregnancy.
   - If a pregnant woman is concerned her male partner may have or had Zika virus infection, she should talk to her health care provider. She should tell her health care provider about her male partner's travel history, including how long he stayed, whether or not he took steps to prevent getting mosquito bites, and if she had sex with him without a condom since his return.
   - Women trying to get pregnant and their male partners should talk to their health care provider before traveling to areas with Zika virus. Because sexual transmission is possible, both men and women should strictly follow steps to prevent mosquito bites during the trip.

4. See a health care provider

- Pregnant women who have recently traveled to an area with Zika virus should talk to a health care provider about their travel even if they don't feel sick.
- It is especially important that pregnant women see a doctor if they develop a fever, rash, joint pain, or red eyes during their trip or within two weeks after traveling to an area where Zika virus has been reported. They should tell the doctor where they traveled.
- CDC has guidance to help doctors decide what tests are needed for pregnant women who may have been exposed to Zika virus.

For Travelers

Areas where Zika virus transmission is ongoing often change overtime. Travelers should visit CDC's Zika Travel Information page for the most up-to-date information about travel recommendations.

When traveling to countries where Zika virus or other viruses spread by mosquitoes are found, take the following steps:

- Wear long-sleeved shirts and long pants.
- Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.
- Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.
- Use Environmental Protection Agency (EPA)-registered insect repellents. When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breast-feeding women.
    - Always follow the product label instructions.
    - Reapply insect repellent as directed.
    - Do not spray repellent on the skin under clothing.
    - If you are also using sunscreen, apply sunscreen before applying insect repellent.
- If you have a baby or child:
    - Do not use insect repellent on babies younger than two months of age.
    - Dress your child in clothing that covers arms and legs.
    - Cover crib, stroller, and baby carrier with mosquito netting.
    - Do not apply insect repellent onto a child's hands, eyes, mouth, and cut or irritated skin.
    - Adults: Spray insect repellent onto your hands and then apply to a child's face.
- Treat clothing and gear with permethrin or purchase permethrin-treated items.
    - Treated clothing remains protective after multiple washings. See product information to learn how long the protection will last.
    - If treating items yourself, follow the product instructions carefully.
    - Do NOT use permethrin products directly on skin. They are intended to treat clothing.

Some travelers become infected while traveling abroad but do not get sick until they return home. Be aware of any illness or symptoms during your trip or after you return home. Tell your health care provider where you have traveled and when you were there.

When returning to Illinois or coming from an area with ongoing Zika virus transmission, take the following steps:

- Watch for symptoms and call your health care provider if you develop fever, rash, joint pain, red eyes.
- To help prevent others from getting sick, avoid mosquito bites and use insect repellent for three weeks after travel.
- Use condoms when you have sex.

For Health Care Providers

About 1 in 5 people infected with Zika virus become symptomatic. Characteristic clinical findings are acute onset of fever with maculopapular rash, arthralgia, or conjunctivitis. Other commonly reported symptoms include myalgia and headache. Clinical illness is usually mild with symptoms lasting for several days to a week. Severe disease requiring hospitalization is uncommon and case fatality is low. However, there have been cases of Guillain-Barre syndrome reported in patients following suspected Zika virus infection.

Based on the typical clinical features, the differential diagnosis for Zika virus infection is broad. In addition to dengue, other considerations include leptospirosis, malaria, rickettsia, group A streptococcus, rubella, measles, and parvovirus, enterovirus, adenovirus, and alphavirus infections (e.g., Chikungunya, Mayaro, Ross River, Barmah Forest, O'nyong-nyong, and Sindbis viruses).

Preliminary diagnosis is based on the patient's clinical features, places and dates of travel, and activities. Laboratory diagnosis is generally accomplished by testing serum or plasma to detect virus, viral nucleic acid, or virus-specific immunoglobulin M and neutralizing antibodies.

The Illinois Department of Public Health (IDPH) Division of Laboratories has implemented both a Zika Virus Real-Time – Polymerase Chain Reaction (RT-PCR) CDC Assay to detect viral RNA in acute specimens and a Zika MAC ELISA serology test to detect IgM in serum collected ≥4 days after illness onset.

Zika virus is a national notifiable condition. Hospitals and health care providers in Illinois should contact their local health department (LHD) to discuss testing. LHDs will provide authorization for appropriate testing. Specimens that are not authorized will not be sent to CDC for testing.

Test results from specimens sent to CDC have been very delayed recently due to the large number of requests for testing. Currently, it takes around 6-8 weeks to receive results from CDC after they receive the specimen.

There is no specific antiviral treatment for Zika virus disease. Treatment is generally supportive and can include rest, fluids, and use of analgesics and antipyretics. Because of similar geographic distribution and symptoms, patients with suspected Zika virus infections also should be evaluated and managed for possible dengue and chikungunya virus infection. Aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided until dengue can be ruled out to reduce the risk of hemorrhage. People infected with Zika, chikungunya, or dengue virus should take precautions to prevent further mosquito exposure during the first few days of illness to prevent other mosquitoes from becoming infected and infecting other people locally.

Additional information for health care providers can be found on the CDC website at http://www.cdc.gov/zika/hc-providers/index.html.
Instructions for the Collection and Submission of Fetal Tissues for Zika Virus Testing
Collection and Submission of Body Fluids for Zika Virus Testing

Guillain-Barré Syndrome

The Brazil Ministry of Health has reported an increased number of people who have been infected with Zika virus who also have Guillain-Barré syndrome (GBS). CDC is working with Brazil to study the possibility of a link between Zika virus and GBS.

GBS is an uncommon sickness of the nervous system in which a person's own immune system damages the nerve cells, causing muscle weakness, and sometimes, paralysis.