



**New Mexico Department of Health
All-Hazard Emergency Operations Plan
Functional / Hazard-Specific Annex**

Zika Preparedness and Response Plan

December 1, 2016

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Introduction

Approval and Implementation

The New Mexico Department of Health (DOH) All-Hazard Emergency Operations Plan (EOP) Functional Annex: Zika Preparedness and Response Plan describes the management and coordination of DOH resources and personnel during periods of public health emergencies, disasters or events. Planning teams, comprised of subject matter experts, planners and representatives of stakeholder organizations contributed to this plan.

This plan incorporates guidance from the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Office of the Assistant Secretary for Preparedness and Response (ASPR), U.S. Department of Homeland Security (DHS) and Federal Emergency Management Agency (FEMA). It also builds on lessons learned from planned events, disasters, emergencies, trainings, and exercises.

This plan:

- Describes the approach to addressing Zika risk in New Mexico.
- Aligns the basic structures, processes, and protocols of the National Response Framework (NRF) guidelines into DOH response plans.
- Incorporates National Incident Management System (NIMS) concepts and guidelines utilizing integrated command and control guidelines for local, regional, and/or national response coordination in the event of a public health or medical emergency.
- Provides a basis for unified training and exercises.

Purpose, Scope, Situation and Assumptions

Purpose

Zika virus disease (Zika) is spread primarily through the bite of an infected *Aedes* species mosquito. Cases of sexual transmission and maternal-fetal transmission have also been reported. Though the illness is usually mild, and many people will show no signs or symptoms at all, Zika is known to be linked to microcephaly and investigators continue to research the link between Zika and Guillain-Barré syndrome. These are serious conditions that are contributing to significant public concern which could have adverse, long-term effects on individuals, health systems, and public health overall as the number of cases increases.

It is the purpose of this annex to define the actions and roles necessary to provide a coordinated response within the State of New Mexico. This annex provides guidance to agencies in New Mexico including potential assignments before, during, and following emergency situations. It also provides for the systematic integration of emergency resources when activated and does not replace county or local emergency operations plans or procedures.

Scope

This annex applies to all participating departments and agencies of the jurisdictions contained within the geographical boundary of the State of New Mexico.

Situation Overview

New Mexico is known for its cultural and geographic diversity. Many of the conditions within the state that make it unique also present challenges for planning purposes. These conditions include the following:

- New Mexico is the 5th largest state geographically and has a population of approximately 2 million people across 33 counties.
- Approximately 14.5% of the population lives below the poverty level of income.
- New Mexico ranks 32nd in the nation for access to healthcare.
- All but one of the 33 counties are partial or full health professional shortage areas.
- There are 23 American Tribes, Pueblos, or Nations with sovereign governments and varying healthcare systems.
- English is spoken by 64% of the population, Spanish 28%, and Navajo 8%

Hazard Profile

As of October 5, 2016, locally acquired (transmission by vector) Zika virus infections have been identified in at least 49 countries and territories in the Americas (including in the continental U.S. in Florida), 8 in Oceania/Pacific areas, one in Africa, one in Asia. As of November 9, 2016, there have been 31,198 Zika virus disease cases reported in US Territories and 4,175 in US States and DC. As of November 3, 2016, there have been 2,357 pregnant women reported with any laboratory evidence of Zika virus infection in US Territories and 1,057 in US States and DC. There are additional areas where only travel-associated cases have been reported, and other areas where Zika virus was transmitted in the past.

Areas of the United States and territories within the range of *Aedes aegypti* or *Aedes albopictus* are particularly at risk for local transmission of Zika virus. These theoretical ranges within New Mexico have not been confirmed; however, mosquito surveillance is currently being conducted and *Aedes aegypti* have been trapped and identified this summer in Doña Ana, Chaves, Eddy, Lea, and Sierra counties, and *Aedes albopictus* in Chaves, Eddy, and Roosevelt counties. In past years, *Aedes aegypti* and *Aedes albopictus* mosquitoes have also been reported from Otero County and *Aedes albopictus* from Curry County.

In December 2015, Puerto Rico reported its first confirmed case of Zika virus disease and is currently experiencing widespread local multiple municipality transmission. The Centers for Disease Control and Prevention (CDC) continues to evaluate cases of Zika virus transmission in the continental and U.S. territories, and is providing updated guidance as new information becomes available. For more information, visit CDC's Zika website: <http://www.cdc.gov/zika/>.

Planning Assumptions

- New Mexico is at risk for local transmission of Zika virus by the *Aedes aegypti* mosquito (Yellow Fever mosquito) and the *Aedes albopictus* (Asian tiger mosquito). *Aedes aegypti* mosquitoes are the predominant recognized vector for dengue, chikungunya, and Zika viruses. *Aedes albopictus* has not been documented to transmit dengue or chikungunya viruses in the continental United States (CONUS).
- In areas of active Zika virus circulation, there is a potential risk of transmission through the blood supply when donors are from a community where Zika virus transmission is being locally reported.
- Sexual transmission of Zika virus has been documented. Cases will likely continue to occur, and new information about this route of exposure is expected.
- U.S. borders and travel to and from areas at higher risk of Zika virus transmission are expected to remain open and travel-related cases will continue.
- *Aedes aegypti* and *Aedes albopictus* will not be vulnerable to broad area aerosol spraying; therefore, surveillance and public outreach will be the most effective tools for preventing or mitigating the spread of Zika.
- Prolonged widespread local transmission within CONUS is not expected.

- Neither vaccines nor clinical treatments are expected to be available to prevent or treat Zika virus infections before local transmission is seen within CONUS or Hawaii.
- Prevention and mitigation strategies should be part of an integrated mosquito management approach, including public education and outreach, mosquito habitat control, and use of environmentally-friendly larvicide when appropriate and resources permit.
- The efficacy of vector control in reducing mosquito-borne infection risks may be limited, as has been pointed out by CDC and as has been the case with similar mosquito-borne viruses such as dengue and chikungunya.
- The use of pesticides and other agents to control mosquito populations may cause concern about potential damage to the environment or harm to other species.
- There will be significant public interest and concern should one or more confirmed locally-transmitted cases of Zika appear in New Mexico.
- Scientific understanding of Zika virus continues to evolve; new characteristics of the virus, how it is spread to humans, and consequences of infection may arise and lead to additional modifications to Zika preparedness and response in New Mexico.
- Regardless of the presence or absence of Zika in New Mexico, there will be increased public interest in mosquitoes and mosquito control this year and next mosquito season.

Concept of Operations

Zika-related prevention, response, and mitigation actions addressed in this Annex will occur in four risk-based phases (0 to 3) corresponding to transmission phases that have been named by CDC as “preparedness,” “mosquito season,” “confirmed local transmission”, and “confirmed multiperson local transmission.” The risk-based phases included here are:

- Preparedness/mosquito season (0/1)
- Confirmed local transmission (2)
- Confirmed multiperson local transmission (3)

New Mexico will continue to prepare for one or more cases of confirmed locally-transmitted Zika in the State by coordinating statewide activities through the New Mexico Zika Planning Team or, if necessary, incident command.

Prevention, response, and mitigation activities will occur throughout each phase in the following areas:

- Communication
- Surveillance and investigation
- Laboratory testing
- Mosquito control
- Coordination with healthcare providers
- Outreach to pregnant women and women of reproductive age
- Blood safety

New Mexico’s response to one or more cases of confirmed locally-transmitted Zika in the State may include, but may not be limited to:

- Tracking and reporting to appropriate partners the number of confirmed cases of travel related or locally-transmitted Zika.
- Sharing information and making appropriate notifications.

- Confirming the presence of Zika through laboratory testing.
- Conducting enhanced surveillance for Zika.
- Conducting or supporting public education and outreach efforts.
- Providing timely and accurate information to the public through a virtual Joint Information Center (JIC), if necessary.
- Supporting localized or community property inspection or cleanup efforts, as appropriate.
- Engaging in behavioral health efforts to support families and communities affected by Zika.
- Enacting appropriate disease intervention measures, if necessary.

Key Objectives

Objective 1: Detect introduction of the virus in a timely manner and monitor the evolving epidemic including the detection of rare and severe outcomes associated with the virus.

Key activities

- Provide Zika virus infection guidance and surveillance updates
- Implementation of integrated arbovirus surveillance
- Disseminate information on the evolving epidemic and its consequences and sequelae in the State through Health Alert channels and dedicated NMDOH Zika virus webpage
- Enhance laboratory capacity, including novel serological methods for detection of non-acute infections

Objective 2: Reduce the risk posed by high vector density thus minimizing opportunities for transmission.

Key activities

- Expansion of integrated vector management strategies to improve effectiveness and efficiency of current vector control programs
- Continue to strengthen surveillance of insecticide resistance and vector infestation to guide evidence based vector control activities
- Communicate timely, accurate information on Zika virus, addressing public health concerns

Objective 3: Support the response to the event, providing tools and guidance for adequate response management, including the appropriate handling of cases, preparing facilities and healthcare workers for surges in demand of specialized care, resource mobilization, and building on existing capacity in risk communication.

Key activities

- Provide guidance to healthcare professionals on case management of Guillain-Barré syndrome, Zika virus infection among pregnant women, and cases of microcephaly or other neurological anomalies
- Develop tools for triage of suspected Zika, chikungunya and dengue cases;
- Provide guidance and coordination to support healthcare network and facilities to assist in the provision of specialized care
- In close collaboration with CDC, provide guidance on measures related to travelers, conveyances, points of entry, and trade
- Strengthen birth defects surveillance (focused on microcephaly) and to design and implement comprehensive health services for the affected infants
- Provide guidance to strengthen antenatal care services for ensuring adequate clinical management / support of suspected pregnant women
- Integration of vector control activities in the context of response to other emergencies, such as floods
- Capacity building on risk communication, developing tools and providing training

Phase 0/1: Mosquito Season Preparedness and Mosquito Season Vector Control

Coordination with local agencies

DOH will hold multi-partner meetings for southern New Mexico counties where the mosquito vectors are likely to be found. Meetings will include community health workers, health promoters, city and county emergency managers, city and county elected officials, vector control staff, and code enforcement officials. DOH will identify an Acute Disease Response Team (ADRT) in the Las Cruces and Roswell regional public health offices to work with identified local government staff from cities and counties in their regions. The ADRTs will work with local staff to respond to returned traveler cases (confirmed Zika cases that could be viremic while in an area with mosquitoes that can transmit Zika virus) or cases involving local transmission. During mosquito season there will be monthly communication with local city/county emergency managers as well as with local vector control agencies/personnel to provide up-to-date information on case counts and mosquito control efforts, and identified issues in local communities.

Education

An important aspect of vector control includes education of all partners on the mitigation efforts necessary to eliminate/reduce breeding habitat of mosquito species in NM that could transmit Zika virus. This will help local agencies in communities at risk of local Zika transmission to work in partnership with community members, including home owners, businesses and others, to eliminate breeding sites inside neighborhoods and make homes, buildings, and people safe by making sure that window and door screens are in good order and people know how to properly use insect repellents. Officials from counties and municipalities will be encouraged to have ordinances in place so that code enforcement staff are able to enforce compliance when homes

are found to be harboring mosquito habitat or breeding sites (e.g., overgrown vegetation, water collecting containers, unmaintained swimming pools).

Resource assessment

DOH will identify, develop a line list, and work with local vector control agencies in areas where the mosquito vectors are found to exist and catalog current resources and capabilities, and what is needed to respond to potential local Zika virus transmission.

Establish a communication chain for a positive laboratory test

DOH laboratory staff will notify the DOH epidemiologists of positive laboratory results in a standardized fashion. If the positive test is from a person who currently is in an area with Zika vector mosquitoes, the epidemiologist will determine if the person is potentially viremic; if they are, notifications will be made to the DOH Regional Office, Office of Border Health, and the local ADRT team. The ADRT team will notify the City/County emergency manager and the local vector control agency in the jurisdiction where the returned traveler resides that a local response is being planned and will coordinate the response with them.

Surveillance for mosquito vector range and distribution

DOH will work in partnership with New Mexico State University (NMSU) to conduct surveillance for both *Aedes aegypti* and *Aedes albopictus* to determine their range and distribution in New Mexico. Information from this project will be shared with local vector control programs as well as with the general public in order to encourage source reduction of mosquito breeding sites around homes and elsewhere in areas where these mosquito species are found.

Actions that will be taken if *Aedes aegypti* or *Aedes albopictus* is identified in a new area:

- A press release would be developed with input from key stakeholders.
- City/county officials in the affected area would be notified.
- A conference call would take place with the relevant partners and include:
 - Zika epidemiology and risk information
 - Vector information and breeding grounds
 - Next steps
- The press release would be distributed.

Preemptive source reduction campaigns

DOH will work together with local government agencies and local communities to encourage public campaigns focused on source reduction in and around homes and other sites in high risk areas. Activities such as tire pick up/amnesty days will be encouraged as well as door-to-door visits to homes by local community health workers or other identified personnel who would distribute brochures about Zika virus and provide information about how to reduce mosquito breeding sites and well as prevent mosquito bites, especially for pregnant women.

Response to a returned traveler/sexually transmitted case in an area with mosquito vectors with no evidence of local transmission

- Epidemiologic evaluation will be led by DOH, Epidemiology and Response Division (ERD) Infectious Disease Epidemiology Bureau (IDEB), with the communication of findings to local city/county emergency managers, regional and local DOH staff, and local vector control agency.
- Vector assessment would be performed in the vicinity of the case house.
- Implement immediate vector control actions:
 - Establish limits of affected area (at least 150 meters around each case area)
 - Determine vector distribution through the use of Ovitrap and immature surveys
 - Multimodal source reduction to affected area
 - Initiate treatments using larvicides and adulticides as needed

- As part of the Zika Response Team Activation, coordinate with regional and local Public Health Division (PHD) staff by activating the ADRT and sending e-mail notification to the following PHD staff:
 - Director
 - Medical Director
 - Chief Nurse
 - Deputy Director of Public Health Regions
 - Regional Director
 - Local government staff who will assist with the response
- The ADRT and local government response team will go door to door, in a 150-meter radius of the general location of the case, distributing written information about Zika to educate people about signs and symptoms, how to eliminate mosquito breeding habitat, and prevent mosquito bites (day and night), as well as on the proper use of insecticide and how to prevent indoor mosquitoes by ensuring that door and window screens are in proper repair.
- The local vector control team will circulate, around a 150-meter radius of the general location of the case, and perform an assessment of the mosquito population and implement vector control actions as stated in #2 above. After requesting permission, they will spray adulticide with handheld foggers in backyards (if deemed necessary) and apply larvicides into ponds and other water bodies.
- Local code enforcement may be necessary to issue citations to homes with container breeding sites that are rearing *Aedes* mosquitoes.

Surveillance and Investigation

DOH will support state partners to prepare for the onset of mosquito season. This support will focus on preparatory actions to enable healthcare providers to detect Zika virus infections. Activities will include support for case identification, improved surveillance, and increased epidemiologic investigations of travel-related or locally acquired cases, as well as the contribution of data to the national Zika Pregnancy Registry. Any cases identified through testing of symptomatic persons or pregnant women (symptomatic or asymptomatic), with travel or sexual exposure risk factors for Zika virus infection, should be reported to DOH.

DOH will identify and investigate potential cases in travelers and their sexual contacts. Increased healthcare provider awareness of Zika virus disease will take place through health alerts, press releases, medical society listservs, presentations, and outreach to prenatal care providers to ensure appropriate testing of potential cases.

Enhanced surveillance may take place in areas of New Mexico with *Aedes aegypti* mosquito vectors. The geographic scope and intensity of increased surveillance depends on local circumstances, such as; population density, anticipated mosquito vector abundance, locations of recent travel-associated cases, local travel patterns (e.g., areas known to have high number of travelers to affected areas, areas with previously identified cases, lack of air conditioning or screens).

DOH Office of Border Health (OBH), IDEB, and PHD will provide the following:

- Educational materials describing Zika virus infection, Zika signs and symptoms, information about preventing infection, and information about preventing mosquito breeding in and around the home.
- Coordination and planning of community stakeholder meetings.
- Training for community health workers (Promotoras), who will conduct outreach to community members.

- Outreach to local prenatal care providers and infant care providers, in coordination with the ERD Birth Defects Epidemiologist, the PHD community epidemiologists, and Children's Medical Services (CMS).
- Outreach to local blood banks and plasma centers to ensure that positive Zika tests are reported to DOH.
- Maps indicating the known range of the *Aedes aegypti* and *Aedes albopictus* mosquitoes in New Mexico.

The following information will be gathered when a potential case is identified. The data will be entered into the New Mexico Electronic Disease Surveillance System (NM-EDSS):

- Basic demographic information (e.g., age, sex, state, and county of residence).
- Clinical signs and symptoms (including fever, rash, conjunctivitis, arthralgia, or evidence of neurologic disorder such as Guillain-Barré syndrome).
- Illness onset date.
- Exposure history (country of travel, dates of travel, partner's clinical information if sexual transmission is suspected, receipt of any blood, organ or tissues in the previous 28 days).
- For each confirmed case, dates of symptom onset and exposure to areas affected by Zika or sexual contacts at risk for Zika virus infection should be closely evaluated to determine that local mosquito-borne transmission can be ruled out.
- Because of the potential for Zika virus transmission through blood products, organs or tissues, further detailed investigation should be conducted promptly for recipients who develop illness compatible with Zika virus disease within 28 days of receiving these products.
- Hospitalization, reason for hospitalization, and disposition.
- Pregnancy status and related information (e.g., estimated date of delivery, results of ultrasound and other testing, outcome - including fetal loss, stillbirth, or live delivery).
- Pregnant women with confirmed Zika virus infection and their infants, whether symptomatic or asymptomatic, should be reported to the US Zika Pregnancy Registry. Additional clinical information and pregnancy and infant outcomes information will be requested as part of the Registry process.

Symptomatic or asymptomatic pregnant women with confirmed Zika virus infection will be reported to the ERD Environmental Health Epidemiology Bureau (EHEB) Birth Defects Epidemiologist, who reports cases to the US Zika Pregnancy Registry.

If the patient is an infant, maternal history will be obtained as outlined above, including gestational age of pregnancy at the time of exposure. Infant diagnostic assessment information including microcephaly, intracranial calcifications, other neurologic abnormalities, or birth defects are included.

Important information for the patient and family include the necessary steps to avoid exposure and prevent transmission to local mosquito populations (e.g., stay indoors in screened or air-conditioned rooms during the first week of illness, use personal repellents, and perform mosquito reduction activities around the home).

For a confirmed case, dates of symptom onset and exposure to areas affected by Zika or sexual contacts at risk for Zika virus infection will be evaluated to determine if local mosquito-borne transmission occurred. Confirmed cases will be investigated by the ERD IDEB Zoonoses Team, unless the volume of cases exceeds Zoonotic Team capacity. Regional nurse epidemiologists and public health nurses will be enlisted to conduct interviews if there are multiple cases or evidence of local transmission.

DOH is aware of blood donation centers in the state conducting Zika virus nucleic acid amplification testing of blood donations, and how any positive results will be communicated promptly from the blood center to the health department, and the public health response such a positive result would require. It is possible that a first local transmission case or a travel-associated case could be identified through blood screening.

Due to potential Zika virus transmission through blood products, organs or tissues, further detailed investigation will be conducted for recipients who develop illness compatible with Zika virus disease within 28 days of receiving these products.

Communication

The Communications Office will seek to:

- Provide the public with the facts that are known about Zika virus; address all risks to the public; dispel rumors, misinformation, and misperceptions as quickly as possible.
- Identify and train credible spokespersons to address the outbreak response.
- Support news and social media channels with facts about Zika virus and its risk to the public.
- Coordinate communication with local, state, and federal officials and healthcare and industry partners.
- Assist with provision of educational materials to pregnant women and women of childbearing age on Zika virus and how they can protect themselves, including to partners of pregnant women and those attempting to conceive.
- Update scripts for state call centers to include Zika messaging.
- Initiate a communications campaign, with materials educating the public on preventing mosquito bites, controlling mosquito populations, preventing sexual transmission, accessing and using effective contraception.
- Address travelers returning from areas with Zika transmission and the precautions they need to take to reduce the spread to their local area.

Healthcare Coordination

Response Actions

- Establish a database of healthcare partners for Zika planning and response, through the use of the Health Alert Network (HAN) list and the Health System Innovation (HSI/SIM) database.
- Inform healthcare partners about Zika facts and about DOH preparedness and response to Zika.
- Gain the cooperation of healthcare partners to screen and detect possible travel-associated Zika cases and potential for sexual transmission from travel cases.
- Provide guidance to healthcare partners for the management and appropriate testing of possible cases.
- Plan enhanced surveillance for suspected Zika virus infections, including for pregnant women, through OB/GYN clinics.
- Reach out to local blood collection centers, and consult with them on blood safety contingency plans.
- Identify regional perinatal and pediatric expertise to help support pregnancy or pediatric cases.
- Ensure that healthcare partners are referring Zika cases for inclusion to the Pregnancy Registry, for monitoring during pregnancy and follow-up of birth outcomes.
- Organize regular meetings between DOH and healthcare partners to discuss plans and progress.

- Establish a DOH Zika page for healthcare partners that offers guidance on the use of CDC messages, encouraging travelers returning from areas with Zika transmission to take precautions upon return, (e.g., actively take steps to prevent mosquito bites for at least 3 weeks), in order to reduce the risk of spread to local mosquito populations.
- Ensure rapid follow up on suspected cases through laboratory testing.
- Ensure that healthcare partners take a complete patient history, to include: travel history, transfusion or tissue transplantation, and sexual exposure to a traveler. Include an assessment of the patient's geographic area of risk for exposure, to determine where they likely were exposed (at home or somewhere else?).
- Ensure that when a travel-associated case or case(s) among sexual contacts are identified, precautions are given to avoid exposure to local mosquito populations (e.g., stay indoors in screened, air-conditioned rooms, use of personal repellents, consider mosquito reduction activities around home).
- Encourage healthcare providers to immediately report laboratory results for any positive or equivocal cases to DOH.
- Identify the need for and provide or ensure provision of training and assistance for healthcare partners to perform the above activities

US Zika Pregnancy Registry

(For more information, please see Appendix 1)

Purpose:

To understand more about Zika virus infection during pregnancy and congenital Zika virus infections, CDC has established the US Zika Pregnancy Registry.

The data collected will be used to update guide recommendations for clinical care and testing, to plan for services for pregnant women and families affected by Zika virus, and to improve prevention of Zika virus infection during pregnancy.

For more information, refer to CDC's US Zika Pregnancy Registry website located at <http://www.cdc.gov/zika/hc-providers/registry.html>

At-risk Population Outreach

The population most at risk for Zika includes pregnant women and women who might become pregnant. The U.S.-Mexico border area and southern regions of the state are currently most at risk.

- Utilize DOH PHD Family Health Bureau (FHB) and DOH program resources and staff to provide prevention information to women of reproductive age, and their partners including barrier and other forms of contraception.
- Coordinate with DOH Communications Office to facilitate outreach specifically to medical community caring for pregnant women and women of reproductive age.
- Coordinate with the Communications Office on information campaigns, including those specifically directed toward pregnant women and women of childbearing age.
- Actively participate in distribution of materials (in English and Spanish) to pregnant women and women of childbearing age, through FHB/DOH programs and their staff including: Women Infants and Children (WIC), Family Planning, Families FIRST, Maternal Health, Children's Medical Services (CMS) program.
- Work with the DOH Communications Office, NM Medical Society, Association of Obstetrics and Gynecology, NM Academy of Family Physicians, and the NM Pediatric Society to ensure that training and educational materials have reached healthcare providers who have contact with pregnant women and women of childbearing age.

Blood Product Safety

Blood donation centers conducting Zika virus nucleic acid amplification testing of blood donations that had a positive result will communicate the results promptly to DOH, and the local public health response will be implemented. It is possible that a first local transmission case or a travel-associated case could be identified through blood screening. New Mexico is served by a single blood bank, United Blood Services (UBS). Mechanisms for reporting to DOH are in place for other infectious diseases that donors are screened for, such as West Nile virus, and if a donor tests positive for Zika virus this will be reported to DOH in the same manner. United Blood Services has the following precautions in place to protect the donated blood supply:

- Zika virus screening questions have been added to the medical questionnaire that is administered to each donor at the time of donation.
- Before screening tests were available for donated blood, UBS did not accept donations from people who in the previous four weeks had traveled to an area where Zika virus had been present or who had sex with a man who in the prior three months had traveled to an area affected by Zika virus.
- UBS began to apply U.S. Food and Drug Administration (FDA) recommendations to include testing of all blood donations for Zika virus on September 19, 2016.
- UBS will report any Zika virus-positive screening test results 24/7/365 to DOH by fax at 505.827.0013.
- Donors who have tested positive and/or been diagnosed by a medical provider with Zika virus infection or had sex with a person who meets those criteria will be deferred from donating blood until 120 days after diagnosis date or symptom resolution date.
- Donors who have traveled to a Zika virus endemic area are no longer deferred, as all blood will be tested for Zika virus. Symptomatic persons will be deferred under routine screening questions (“Are you feeling well and healthy today?”).
- UBS will rely on DOH to report what parts of the state should be considered areas of potential Zika virus transmission.

Organ Product Safety

Medical screening questions that apply to Zika virus are asked about each organ and/or tissue donor candidate. Donors who report a healthcare diagnosis of Zika virus infection are deferred. Donors with a history of travel to a Zika virus endemic area within the past six months are reviewed on a case-by-case basis and may be deferred. Currently there are no plans to begin testing donated organs or tissues for Zika virus.

Laboratory Testing

The DOH Scientific Laboratory Division (SLD) will test specimens approved for testing by the Epidemiology and Response Division (ERD). The laboratory has adopted serological and molecular assays that have received emergency use authorization (EUA) from the U.S. Food and Drug Administration (FDA). Serum specimens will be tested by rti RT-PCR (real-time reverse transcriptase polymerase chain reaction) at SLD. Data indicate that rti RT-PCR of serum may miss acute infections occurring more than 7 days following sign/symptom onset.

Recent data, included in a health alert from CDC, indicate that rti RT-PCR of urine can be positive for up to 14 days after symptom onset. Healthcare providers are encouraged to submit both serum and urine on patients meeting case definition. However, serum must always accompany any other specimen; urine or cerebrospinal fluid (CSF) specimens submitted alone will not be tested.

Serum: collect in a red-top or serum separator tube (transfer serum to separate tube after centrifugation); two patient identifiers are required on the sample (i.e., name, DOB). Collect enough blood to yield ~5 ml of serum. Whole blood will be rejected.

Urine: transfer ~5 ml of urine to a screw cap tube to avoid leakage during transport. If shipment will be received within 72 hours of collection, refrigerate at 4°C and place on cold packs. For delays exceeding 72 hours, freeze at -70C and ship on dry ice.

Ship specimens to DOH Scientific Laboratory Division (SLD) cold at 4°C or frozen at -70°C as directed above with enough cold packs or dry ice, respectively, to complete the trip. Include one SLD Clinical Test Request Form for each patient specimen.

Ship specimens to:

Virology/Serology Section
Scientific Laboratory Division
1101 Camino De Salud NE
Albuquerque NM 87102

If Distribution Management Corporation (DMC) transport is required, call (505) 217-3130 or 877-880-9082, option 3 to schedule a pickup.

Serum specimens will also be tested for IgM antibody at SLD. Serum must accompany any CSF specimen that is received for serology. IgM antibodies may be positive for up to 12 weeks following sign/symptom onset. Testing is also being offered for asymptomatic pregnant women from 2-12 weeks after they return from travel to areas with active Zika virus transmission. Specimens for IgM-positive patients that are polymerase chain reaction (PCR) negative at SLD will be forwarded to CDC for confirmation and will require a CDC form 50.34 to be filled out by the healthcare provider prior to being sent.

The laboratory will also monitor messages received from CDC and adjust to any changes to the EUA procedures for the tests that the laboratory performs. The laboratory will work with ERD to ensure that local laboratories and providers are aware of any changes to procedures for the submission of specimens to SLD. Guidance for healthcare providers is available at <https://nmhealth.org/about/erd/ideb/zdp/zika/>. The laboratory is also prepared to accept mosquito specimens as requested by ERD.

All Zika testing must be approved prior to specimen submission by a DOH epidemiologist. Healthcare providers considering Zika testing can reach an on-call epidemiologist 24/7/365 at 505-827-0006. Patients must meet specified criteria for testing to be approved. An SLD specimen submission form must be completed for each specimen submitted.

Phase 2: Confirmed Local Transmission

Vector Control

All activities in Phase 0/1 will continue, as well as the following:

- Develop a communication campaign to inform the public using established and locally refined materials regarding vector control in conjunction with CDC Communications Team.

- Epidemiologic evaluation will be led by IDEB, with communication of findings to local city/county emergency managers, local DOH staff, and local vector control agency(s).
- Vector assessment will be performed in the vicinity of the case house.
- Implement immediate vector control actions:
 - Establish limits of affected area (at least 150 meters around each case area)
 - Determine vector distribution through the use of Ovitrap and larval surveys
 - Conduct multimodal source reduction to affected area
 - Initiate treatments using larvicides and adulticides as needed
 - Insecticide selection must be based on resistance testing results
 - Area treatment with truck-mounted ultra-low volume (ULV) applicators or aerial delivery should be based on local assessment of spatial risk
 - Interior residual spraying of open houses (no screening or air conditioning) may be made available to those in the affected area
- A response team will go door to door, in a 150-meter radius of the general location of the case, distributing written information about Zika and educating neighbors on clinical signs and symptoms to look for, eliminating mosquito breeding habitat, preventing mosquito bites (day and night), proper use of insecticide and avoiding mosquitoes indoors by making sure door and window screens are in proper repair.
- A local vector control team will go around a 150-meter radius of the general location of the case, after requesting permission, to spray adulticide with handheld foggers in their backyards and applying larvicides into ponds and other water bodies.
- Local code enforcement may be necessary, in order to issue citations to homes with container breeding sites that are rearing *Aedes* mosquitoes.
- Duration of activities should be no less than 45 days after the date of onset of the last known case.
- If additional resources are needed for vector control activities, a designated mosquito control agency under contract with DOH may be utilized. Additional requests for a CDC Emergency Response Team (CERT) can also be discussed with CDC.

Surveillance and Investigation

Suspected clinical cases without travel-associated exposure or sexual contact with an infected person should be reported to DOH so that timely testing of clinical specimens can be facilitated and response activities can be readied. Autochthonous transmission by mosquitoes should be assumed whenever a case is confirmed and other routes of exposure (e.g., travel, sexual contact, transfusion) have been evaluated and eliminated. Under these circumstances, DOH will implement enhanced surveillance for Zika virus disease around the home of the confirmed, locally acquired case and any other likely sites of transmission identified through the case investigation. The principal objectives of this surveillance should be to define the frequency and geographic extent of local transmission.

IDEB will:

- Contact CDC to alert them of the situation. The DOH State Epidemiologist will decide to request deployment of a CDC Zika Rapid Response Team if indicated.
- Ensure diagnostic testing is available and maintain communication with healthcare providers to meet the objectives of testing for the current local situation.
- Identify suspect local mosquito-borne transmission cases in areas with confirmed travel-related cases and the potential for mosquito-borne transmission. This requires timely testing of patients with illnesses highly suggestive of Zika virus disease (e.g., people who have three of the four primary clinical signs/symptoms: rash, fever, arthralgia, or conjunctivitis), but who lack known travel-related exposure.

- Encourage healthcare providers to notify public health authorities, before test results are available, if Zika virus infection is suspected in a person who lacks travel-related exposures. The provider and DOH personnel will educate the patient about the necessary steps to take in order to reduce risk to the community.
- Reinforce messages to providers that rti RT-PCR testing is recommended for urine and serum samples are collected <14 days from illness onset. Zika IgM antibody testing should be performed for serum specimens collected 14 days to 12 weeks after symptom onset and for rti RT-PCR negative serum collected within 14 days of illness onset.
- Ensure timely specimen transport and testing for suspected local transmission cases and plan for test confirmation if there is a positive result.
- Ensure that any changes in guidance about laboratory testing or interpretation are promptly communicated to clinicians, through appropriate public health channels.
- Anticipate increased demand for diagnostic testing if local Zika virus transmission is identified, and develop a plan to provide laboratory surge capacity. DOH SLD has indicated the capacity to test >150 tests/week with the current staffing. If testing exceeds 150 tests/week, laboratory staff may be brought from other areas of SLD to provide surge capacity.
- IDEB will ensure that SLD is aware of any potential changes in local testing recommendations, based on transmission patterns.
- Increase surveillance for Zika virus disease in local areas with confirmed travel-associated cases and competent vector activity to identify possible local transmission cases by:
 - Interviewing household members of confirmed travel-associated cases, conducting testing of anyone with symptoms consistent with Zika virus infection, and informing household members to notify DOH if they develop symptoms
 - Following up with households that have had a travel-associated case (with onset of symptoms in the previous 14-21 days) to determine if any additional household members have developed symptoms that could indicate a local transmission, and facilitating testing for any individuals who are symptomatic
 - Delivering prevention and early detection messages to nearby households (within a 150-meter radius of the confirmed case)
 - Interviewing all residents of homes within 150 meters of the identified case, to identify anyone with symptoms consistent with Zika and who should be tested
 - Providing house-to-house information about mosquito breeding site reduction and control around the home, educational materials, and Zika prevention kits (mosquito repellent, condoms, mosquito discs, bed nets)
 - Identifying pregnant women within 150 meters of the confirmed case and providing targeted education and prevention messages to the women and their prenatal care providers
 - Contacting the prenatal care providers of any pregnant women within 150-meters of the identified case to alert them to the potential for exposure
- Call local healthcare providers to raise awareness among providers, request reporting of clinically compatible cases or suspect cases, including any suspect cases of Guillain-Barré syndrome, and encourage testing and appropriate evaluation.
- Contact local laboratories performing testing for Zika virus to ensure that laboratories are aware of the requirements for monitoring and reporting the number and geographic location of additional suspect cases and any preliminary positive results, and reconciling the findings with reports from DOH.
- Conduct syndromic surveillance at local healthcare facilities to detect early increases in illnesses that may be Zika virus disease.

- Implement event-based surveillance for clusters of rash illness.
- Educate and enlist healthcare providers to be vigilant for unexplained clusters of rash illness, to conduct further investigation and testing for Zika virus disease (particularly if a patient presents with acute fever, arthralgia, conjunctivitis, or if the cluster involves adults or other groups where rash illnesses are less common), and to report the finding(s) to DOH.
- Ensure coordination with vector control:
 - Ensure that vector control personnel are informed of any confirmed Zika virus infection in their jurisdiction
 - Mosquito monitoring for immature and adult mosquitoes may be intensified, to guide vector control efforts and assess risk for local transmission

Communication

Conduct a community outreach campaign and urge community action and support for vector control. Include media partners in dissemination of accurate information. Provide risk communication on Zika virus and personal measures to decrease the risk of infection. The focus is protection of pregnant women, women of child bearing age, partners of pregnant women, and vulnerable populations.

Healthcare Coordination

In addition to activities in the previous phases,

PHD will:

- Prepare healthcare partners (including from the public health system and volunteers, if needed) to assist in intensified evaluation of cases in a 150-yard radius (or other boundary, as deemed appropriate) around the home or other likely site(s) of exposure.
- Provide situation updates to healthcare partners (i.e., HAN, multi-media, inter-active conference calls).
- Assess the need for and provide (or ensure provision of) assistance in the healthcare partner community.
- Enlist staff to conduct household and door-to-door surveillance for clinically compatible cases.
- Ensure that healthcare partners encourage cases to stay in air-conditioned/screened accommodations and use personal precautions to reduce mosquito bites.
- Ensure enhanced surveillance for human cases through local clinician outreach and syndromic surveillance in nearby hospital(s).
- For pregnant women, ensure that targeted surveillance and monitoring take place within the county, jurisdiction, or American Indian sovereign area.
- Ensure that local blood collection agencies are aware of a local transmission and are using the CDC toolkit for investigation of any transfusion-transmitted infection.

NM Procedures for US Zika Pregnancy Registry

(For more information, please see Appendix 1)

Testing Approval:

1. Healthcare provider reports suspected case and requests Zika virus testing to IDEB.
2. IDEB:
 - approves testing
 - coordinates testing at SLD/CDC

Determining Eligibility for Registry and Enrollment:

1. SLD reports test results back to IDEB.
2. IDEB:
 - adds the case to the database shared with EHEB
 - notifies EHEB, if patient is eligible for registry enrollment
3. EHEB:
 - follows up with the provider to complete the Pregnancy Registry Case Report Form
 - uploads completed forms and updates the database based on new information collected and notifies the Registry Coordinator

Subsequent Data Collection:

1. The Registry Coordinator sends a reminder to EHEB about upcoming data collection.
2. EHEB:
 - coordinates with healthcare provider to collect additional data using standardized forms
 - if an adverse outcome is identified, the EHEB reports this to CMS and DDSD so services can be provided to affected families and infants
 - updates the database based on the new information collected
 - uploads completed forms in the shared drive and notifies IDEB

At-risk Population Outreach

In addition to on-going Phase 0/1 activities:

- Coordinate with the DOH Communications Office to facilitate outreach, specifically to the medical community caring for pregnant women and women of reproductive age, to encourage them to test and report suspect cases for the pregnancy registry.

- Utilize FHB/DOH program resources and staff to inform pregnant women of the presence of Zika virus in the local area and the precautions that they should take to prevent being bitten/infected.
- Ensure that all identified women are entered into the pregnancy registry for monitoring and follow up of birth outcomes.
- Coordinate registry information with CMS and FIT staff to ensure follow-up and services for infants and their families after birth.

Laboratory Testing

DOH SLD will continue to test specimens as indicated in Phase 0/1. The laboratory will also monitor messages received from CDC and adjust to any changes to the EUA procedures for the tests that the laboratory performs.

SLD is part of the national Laboratory Response Network (LRN) and has provided testing capacity information under current and surge conditions. The laboratory is prepared to assist other states to provide surge testing and, if needed, request assistance from other LRN members for surge testing if the laboratory's capacity is exceeded.

All Zika testing must be approved prior to specimen submission by a DOH epidemiologist. Healthcare providers considering Zika testing can reach an on-call epidemiologist 24/7/365 at 505-827-0006. Patients must meet specified criteria for testing to be approved. An SLD specimen submission form must be completed for each specimen submitted.

Phase 3: Confirmed, Multiperson Local Transmission Defining Geographic Areas for Zika Virus Intervention

A geographic area for Zika virus intervention is one in which multiperson (i.e., two or more cases) of local transmission has occurred in non-household members. It may be ongoing (e.g., occurring in a one-mile diameter over the course of a month), and not due to travel to an area of ongoing transmission or to sexual transmission. In many cases, it may not be possible to determine where transmission occurred for a single suspect or confirmed case of local transmission (e.g., if the person moved throughout a large area for work, daily activities, and home during the period they were likely exposed and no other cases are found that are linked in space and time). All suspect or confirmed cases will be investigated by DOH. Concurrent with implementation of enhanced surveillance to determine the extent of local transmission (i.e., a single isolated case versus multiple cases of local transmission), vector control, communications, outreach, and other response efforts will be initiated.

When multiperson (i.e., two or more confirmed cases in non-household members) local transmission is identified, DOH will consult with CDC to determine the geographic extent of possible Zika virus transmission based on available epidemiologic, entomologic, and environmental information in order to target interventions appropriately.

Many of these interventions will be similar to those taken for suspect and confirmed travel-associated cases (e.g., residential vector assessments, case investigation). DOH will determine the risk and extent of ongoing local transmission through enhanced surveillance and expanded vector assessment activities. Based on available epidemiologic, entomologic, and environmental information, DOH will define geographic areas for targeted interventions (see below: Considerations for Defining a Geographic Area for Intervention). These geographic areas of intervention may be defined differently for different interventions (e.g., vector surveillance and control, enhanced case surveillance, community outreach, and additional personal protection measures, including use of

insect repellent). Although it will likely not be possible to define precisely where the transmission event occurred for a single confirmed case of locally acquired infection, DOH will issue a media statement and initiate other communication activities, including communicating with the public about geographic areas for intervention.

Travel Guidance

Dengue and chikungunya viruses have similar transmission patterns as Zika virus. Hundreds or thousands of importations into the continental United States have resulted in a limited number of short transmission chains (usually one or two identified non-household cases) and typically less than two small outbreaks per year. This experience indicates that single identified cases or small clusters of Zika virus infections do not represent a broad community risk to pregnant women. Therefore, it is expected that additional personal protection measures and community vector control will provide sufficient protection of pregnant women who reside in, work in, or travel to the affected area.

In the event that Zika virus transmission occurs at an intensity that presents a significant ongoing risk to pregnant women in a particular area of New Mexico, domestic travel guidance will be issued by DOH in coordination with CDC, for pregnant women to avoid travel to the impacted area. For example, significant risks include ongoing transmission that extends for >2 weeks (the approximate lifetime of *Aedes aegypti* mosquitoes) despite aggressive vector control activities and other mitigation efforts described above. It can be expected that travel guidance may stigmatize residents of the area, create substantial societal and economic impact, and place additional strains on local resources.

Decisions on whether when, and where to issue travel guidance need to be individualized to the particular circumstances of the area. And, while continued transmission for longer than 2 weeks may be a trigger to consider issuance of travel guidance, DOH, working with CDC, will closely monitor transmission dynamics during the initial 2-week period. If there is an accelerating number of new infections during the initial 2-week period, travel guidance may need to be considered at an earlier time. Therefore, close, ongoing coordination and discussion with local, state, and federal partners will be necessary to collectively analyze the situation and determine the appropriate response.

For purposes of publicly communicating areas where Zika virus-related domestic travel guidance applies, DOH will use two types of geographic areas: Zika active transmission areas (designated as red on map) and Zika cautionary areas (designated as yellow on map). The designation of these areas can be revised or removed when public health assessment indicates a change in risk (e.g., a period of 45 days with no new cases).

- A **Zika active transmission area (red)** is a geographic area where DOH along with CDC officials have determined that the intensity of Zika virus transmission presents “a significant ongoing risk to pregnant women,” and therefore a combination of preventive interventions should be implemented, including travel guidance recommending pregnant women not travel to the area. When defining a red area, DOH, in consultation with CDC, will designate the smallest easily identifiable location that completely encompasses the geographic area for interventions delineated by epidemiologic and entomologic investigation. The boundaries of the red area will be communicated to the public using terminology and landmarks recognizable to residents and visitors, such as street-level borders, a neighborhood, a zip code area, a city, or a county depending on the geographic extent of transmission. The area should be clearly recognizable by residents and visitors so the population can take appropriate precautions.

- A **Zika cautionary area (yellow)** represents an additional safety buffer where active Zika virus transmission might be occurring, but evidence is lacking to support a determination of “a significant

ongoing risk to pregnant women” comparable to the risk for red areas. Travel advice for a yellow area is “pregnant women and partners of pregnant women who are concerned about potential Zika virus exposure may also consider postponing nonessential travel to the area,” which is less restrictive than the travel recommendation for a red area. Additional Zika-related interventions (e.g., enhanced diagnostic testing) similar to those used in a red area may be implemented depending on local circumstances. Designating a yellow area is an option DOH will consider using should there be local transmission in NM. A yellow area is defined as follows:

- The county encompassing the red area
- Counties within 1 mile of any direction of the borders of a red area
- In the absence of a red area, DOH may designate a yellow area if findings from a local investigation suggest that such action is prudent (e.g., 3 or more isolated cases of locally transmitted Zika virus infections [not linked epidemiologically] are confirmed within a 45-day period in a geographical area such as a county).
- If on-the-ground investigation determines that Zika virus transmission is minimal, the yellow area designation can be delayed or the borders adjusted pending further information. Conversely, if the local investigation determines increased caution is needed while results are pending, the yellow area can be implemented prior to meeting the above criteria and applied to a larger area.

CDC will indicate areas designated for travel guidance on a national map (see Figure 1 below) because this serves a national public health need. A separate map developed by DOH in coordination with CDC will indicate specific areas where pregnant women should avoid travel (red areas) and areas where pregnant women and their partners may consider postponing nonessential travel (yellow areas). See Figure 2 below.

Zika Cases Reported in the United States

Laboratory-confirmed Zika virus disease cases reported to ArboNET by state or territory (as of August 31, 2016)

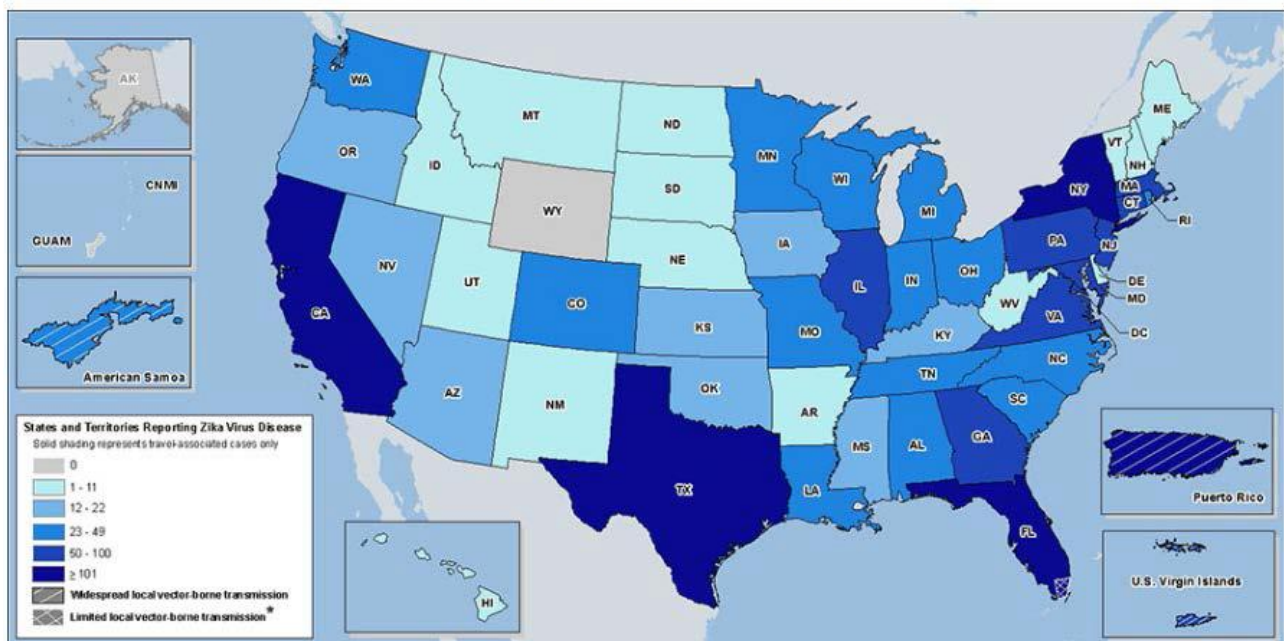


Figure 1. Example of a CDC Interactive Map of Counties with Travel Guidance for Zika
<http://www.cdc.gov/zika/intheus/maps-zika-us.html>

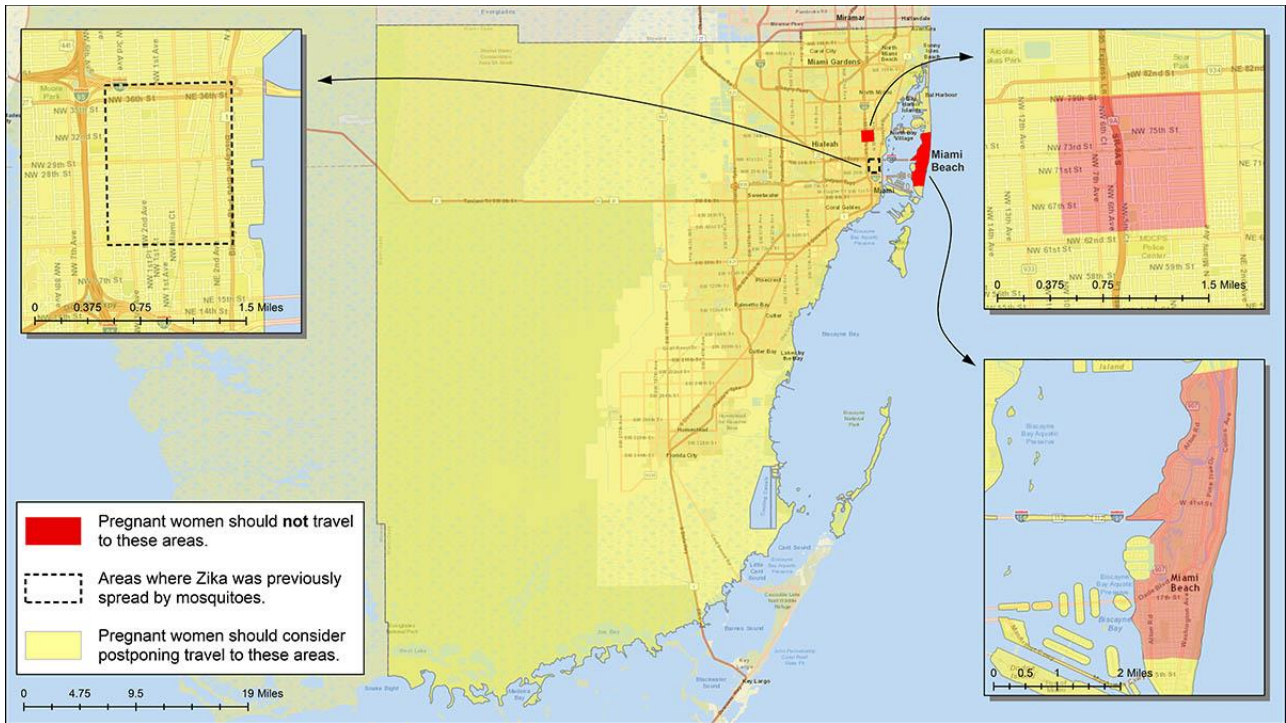


Figure 2. Miami-Dade County, Florida

Red shows areas where pregnant women should not travel. Yellow shows areas where pregnant women should consider postponing travel.

Considerations for Defining a Geographic Area for Intervention

Human factors

- Number of cases identified and whether the incidence of cases is increasing or decreasing
- Known or suspected links between cases (e.g., multiple infections in a household, which may reflect a single prior transmission episode, are of less concern than cases scattered in a neighborhood), including ruling out sexual transmission
- Geographic distribution of cases in an area (e.g., clustered cases in an area would suggest a higher intensity of transmission)
- Population density

Mosquito surveillance and control factors

- Current vector surveillance data
- History of *Ae. aegypti* or *Ae. albopictus* in the area
- Presence of *Ae. aegypti* (greater concern) or *Ae. albopictus* (less concern)
- Mosquito breeding season remaining
- Vector control interventions of sufficient intensity likely to eliminate infection incidence in areas where case exposure likely occurred

Environmental and ecologic factors

- History of local dengue or chikungunya virus transmission in the area
- Area is within estimated geographic range of *Ae. aegypti* or *Ae. albopictus*

- Area is below 2000 meters in elevation (elevation above which conditions are not conducive to transmission)
- Current or projected temperature supports vector activity
- Cases identified early (which are of more concern) or late (which are of less concern) in mosquito season

Infrastructure in the area

- Estimated proportion of homes, workplaces, and other settings with air conditioning
- Estimated proportion of homes, workplaces, and other settings with intact screens on windows and doors
- Estimated proportion of homes, workplaces, and other settings with non-secured water catchment systems

Communicating with the Public about Geographic Areas for Zika Virus Intervention

A local press conference or a joint press release with health department and local elected officials and emergency manager is important for unified response: release information confirming multiperson local transmission in the area and identify scope and magnitude of local transmission. Clearly communicate and describe the area of active Zika virus transmission (red) and the Zika cautionary area (yellow) including visual posters in hard copy and on the DOH website showing both the red and yellow areas. Communication with community partners will need to be intensified. The main target will be pregnant women living in the active Zika virus transmission area (red).

Provide education materials to news and social media outlets. Monitor news trends and track misinformation for corrections. Provide media with pre-release copies of press release and question and answer (Q & A) handouts prior to press conference/s.

Intensify public information on:

- Protection of pregnant women in the area/community and identify populations at high risk who need to be tested for Zika virus.
- Provide information to partners of pregnant women and those considering conception who need to take precautions.
- Community Alert and call to action to eliminate places mosquitoes can lay their eggs- both in and outside of the home. Educate residents on the use of mosquito repellent to prevent mosquitoes from spreading the virus to other areas. This will also include travelers in active Zika virus transmission area (red). Provide guidance for infants and the elderly.
- Provide guidance and education on the importance of vector control. In all press releases and at press conferences assess the extent of local transmission and provide the public with the location of online information (e.g., DOH, CDC, and local).
- Provide community and media with fact sheets, explain response and provide information on what is known about Zika and what research is ongoing.
- Inform the public of upcoming vector control activities and address concerns.

Discontinuing the designation of a Geographic Area for Intervention

DOH will coordinate with the CDC on at least a weekly basis, during mosquito season, to assess the likelihood of ongoing local transmission. The designation of an active Zika virus transmission area (red) and Zika cautionary area (yellow) for intervention will end (and the areas will be removed from the CDC interactive map) when no new cases of local Zika virus transmission are identified in or around the geographic area for intervention (GAFI) for a period of 45 days, or when environmental conditions are not conducive to mosquito transmission. This timeline allows for three mosquito

incubation periods (the time from when a mosquito acquires Zika virus from an infected human to the time it is capable of transmitting the virus to a new human host) and suggests that Zika virus transmission is no longer ongoing.

Vector Control

Continue activities outlined in the previous phases. Consult with CDC about expansion of vector control activities and revised/optimal strategies for local control. Work with CDC team to monitor effectiveness of current vector control strategies. Evaluate whether the defined red area or yellow area need to be expanded and expand all previous phase activities to include this wider area. If additional resources are needed for vector control activities, a designated mosquito control agency under contract with DOH may be utilized. Additionally, requests for a CDC Emergency Response Team (CERT) can also be discussed with CDC. Consult with CDC about expanded vector control strategies (e.g., aerial spraying). CDC will provide, as needed, expanded capacity through federal vector control contract.

Surveillance and Investigation

The boundaries of the geographic area to be targeted for enhanced surveillance should be determined based on risk assessments for further local transmission, including the factors described above such as population density, anticipated mosquito vector abundance, locations of recent travel-associated cases, local travel patterns (i.e., areas known to have high number of travelers to affected areas), and other risk factors (e.g., lack of air conditioning or intact screens). The ongoing activities in the previous phases will continue. Additional activities will include:

- Contact CDC to alert them of the change in transmission status.
- Surveillance and response activities should be scaled based on the intensity and geographic extent of transmission.
- Identify the physical location of the case's most likely place(s) of exposure (i.e., home, work, or other US location, if recent travel).
- Determine if additional identified suspect cases are likely to represent a single transmission chain or separate occurrences.
- Implement targeted activity around suspected area(s) of local transmission to identify if other recent cases are from same/nearby mosquito pool; these activities can help quickly confirm local transmission.
- DOH will enlist additional surge capacity from ERD and PHD as needed, including epidemiologists, southwest and southeast regional acute disease response teams, public health nurses and disease prevention specialists, as well as from the Medical Reserve Corps (MRC) if deemed necessary.
- Following just-in-time training, epidemiologists, public health nurses, and disease prevention specialists will conduct neighborhood assessments and case investigations.
- Routine work may be deferred, in order to have more people available to conduct investigations and response activities. Conduct syndromic surveillance at all regional healthcare facilities to detect early increases in illnesses that could be Zika virus disease. Intensify syndromic surveillance and surveillance for clusters of rash illness.
- Provide access, if needed, to the New Mexico Electronic Disease Surveillance System (NM-EDSS) for hospitals and clinics to facilitate direct electronic reporting of suspect cases when possible.
- To the extent possible, ensure that Zika electronic laboratory orders are transmitted to DOH through the health information exchange. Orders through commercial laboratories for Zika virus testing should initiate an investigation of suspect cases.

- Augment clinician outreach and communication activities to healthcare providers in the county or jurisdiction through existing local channels for urgent infectious disease alerts (e.g., messages through local medical societies, Health Alert Network messages [HANs], conference calls), including maintaining communication with healthcare providers about goals of laboratory testing for the current situation.
- In communities with multiple overlapping 150 meter areas, identify all pregnant women in the community (using Medicaid, WIC, or other data) and communicate with all prenatal care providers.
- Assure prompt sign/symptom assessment and urine and serum rti RT-PCR testing of household members.
- For close neighbors/neighborhood in suspected area: conduct house-to-house survey of any available people, or survey at local gathering place, to identify if recently symptomatic people (onset <14-21 days earlier) and, wherever possible, obtain urine and serum specimens for testing by rti RT-PCR.
- Further expand laboratory testing for symptomatic individuals as needed, and assess laboratory surge capacity for anticipated increased testing volume. There may be the need to implement additional diagnostic testing beyond SLD to include enlisting clinical laboratories in New Mexico to increase diagnostic testing. Work with CDC and SLD to provide additional training and resources to local clinical laboratories. Ensure that additional testing capacity needs are communicated.
- Implement community outreach efforts by using predeveloped messages to encourage care seeking (and testing for confirmation, when appropriate) of people with clinically compatible illnesses.
- Enhance surveillance activities in areas contiguous to the location where local transmission likely occurred, especially those with documented vector activity and high travel volume to the affected area.
- Develop standing communication channels with vector control officials to share vital information and coordinate surveillance and vector control efforts.
- Patients under investigation for Zika virus infection should also be evaluated and managed for possible dengue or chikungunya virus infection. It is important to rule out dengue virus infection because proper clinical management of dengue can improve patient outcome for patients with dengue infection.

Communication

Conduct a local press conference or a joint press release with health department and local elected officials and emergency manager for the release of information confirming multiperson local transmission in the area. Press conferences should be considered under circumstances of multiperson transmission in a residential neighborhood, workplace, near businesses, schools, hospitals, and the like.

Public education will be intensified to include:

- Protection of pregnant women in the area/community.
- Male partners of pregnant women and those considering conception need to take precautions.
- Eliminate places mosquitoes can lay their eggs, both in and outside of the home.
- Use mosquito repellent to prevent mosquitoes from spreading the virus to other areas.

Media and local public information officers (PIOs) will be utilized to educate the public with key messages. The primary message is the protection of pregnant women, as well as education about the importance of vector control, recognizing that not everyone will be in favor of vector control during transmission in a local area.

Intensify countywide (or jurisdiction-wide) outreach (e.g., newspaper, radio, social media, call centers). Key messages will include information for pregnant women and women of childbearing age and education regarding the methods of transmission (including sexual). Partners of pregnant women and women trying to conceive will also be provided information. Messages will identify high risk groups that need to be tested for Zika virus.

If a jurisdiction-wide outbreak occurs, CDC CERT presence in communication responses would likely be involved, and existing DOH protocols for information releases and media outreach would be followed:

- Fact sheets, press releases and other CDC materials will need to be coordinated.
- Agency notifications, community outreach, and media outreach will be handled by DOH and local partners.
- Activities by CDC will be approved by DOH and local personnel.
- Local spokespersons and DOH subject matter experts will increase providing public information on television, radio and at community events/meetings.
- The following public information activities may increase:
 - Fight the Bite campaign in local schools and daycare facilities.
 - A Call to Action from the community to assist in controlling the mosquito populations and preventing mosquito bites.
 - Increased public service announcements (PSAs) featuring the Governor, DOH Cabinet Secretary and DOH subject matter experts.
 - Increased press conferences with DOH subject matter experts and local elected officials and local emergency manager/responders.
 - Timely release of scope and magnitude of local transmission.
 - Providing pre-release copies of press release and Q & A sheets to media prior to press conferences.
 - Release of timely information to media and social media channels regarding response.
 - Monitoring of local news stories and social media postings for misinformation.
 - Increased distribution of materials educating the public on the risks of Zika virus and prevention.
 - Urge community action and support of vector control.
 - Use of hotlines for public inquiries.
 - Work in partnership with CDC in releasing information pertaining to mosquitoes and healthcare coordination.
 - Work with Incident Manager to assure regular situation updates to keep healthcare partners informed of evolving situation
 - Assure that major hospitals have a communications person connected/coordinating with DOH PIO
 - Assure that healthcare partners are assisting with county-wide, tribal (or jurisdiction-wide) surveillance for human cases through outreach, syndromic surveillance in hospital and ambulatory care settings
 - Assure that healthcare partners advise pregnant women to consider postponing travel to the county/jurisdiction
 - Assure that healthcare partners advise people in the county/jurisdiction or American Indian sovereign area to use condoms or abstain from sexual contact with pregnant women

Healthcare Coordination

In addition to the ongoing activities in the previous phases:

DOH will work with Hospital Preparedness Program (HPP) coalitions to conduct inventories of medical equipment and non-medical countermeasures that can be shared and reallocated within and across coalitions. DOH Bureau of Health Emergency Management (BHEM) will coordinate with CDC Strategic National Stockpile (SNS) if any medical and non-medical countermeasure surge requirements rise to that level.

Care for Babies Born with Complications of Zika Virus

Affected infants will be identified from various sources, including the pregnancy registry and referrals from medical providers. All identified babies will be referred to Children's Medical Services (CMS) utilizing the 1-800 statewide number, to ensure follow up after birth. CMS staff provide wrap-around care coordination services and will work with families to ensure that they have a medical home and insurance coverage, as well make referrals as appropriate (e.g., FIT, medically fragile, pediatric subspecialists).

At-risk Population Outreach

In addition to on-going activities in the previous phases:

- During cases where multiperson local transmission has been shown to occur, pregnant women living within a one-mile radius of the nearest case will be enrolled in the pregnancy registry.
- If a geographic area for transmission is defined, DOH ERD and PHD will work together to implement expanded intervention plans for populations at risk (e.g., pregnant women and potentially other vulnerable populations) in the GAFI.
- Work with the Communications Office on messaging including recommendations for pregnant women to avoid travel to a GAFI (or, if they must travel, to consult with their healthcare provider and strictly follow steps to avoid mosquito bites), and advising all persons who live in, work in, or must travel to a GAFI to use personal protective measures to reduce the risk of infection through mosquito bites and sexual contact.
- Initiate direct contact with pregnant women through collaboration with FHB/DOH program staff, Medicaid/managed care organizations (MCOs), NM Medical Society, Association of Obstetrics and Gynecology, NM Society of Pediatrics and NM Academy of Family Physicians.
- Advise women and their sexual partners who live or work in a GAFI to discuss pregnancy planning with their healthcare provider.

Laboratory Testing

SLD will continue to test specimens as indicated in the previous phases. SLD is part of the national Laboratory Response Network (LRN) and has provided testing capacity information under current and surge conditions. The laboratory is prepared to assist other states to provide surge testing and, if needed, request assistance from other LRN members for surge testing if the laboratory's capacity is exceeded. SLD will adapt to any changes to guidance provided the CDC and LRN.

All Zika testing must be approved prior to specimen submission by a DOH epidemiologist. Healthcare providers considering Zika testing can reach an on-call epidemiologist 24/7/365 at 505-827-0006. Patients must meet specified criteria for testing to be approved. An SLD specimen submission form must be completed for each specimen submitted.

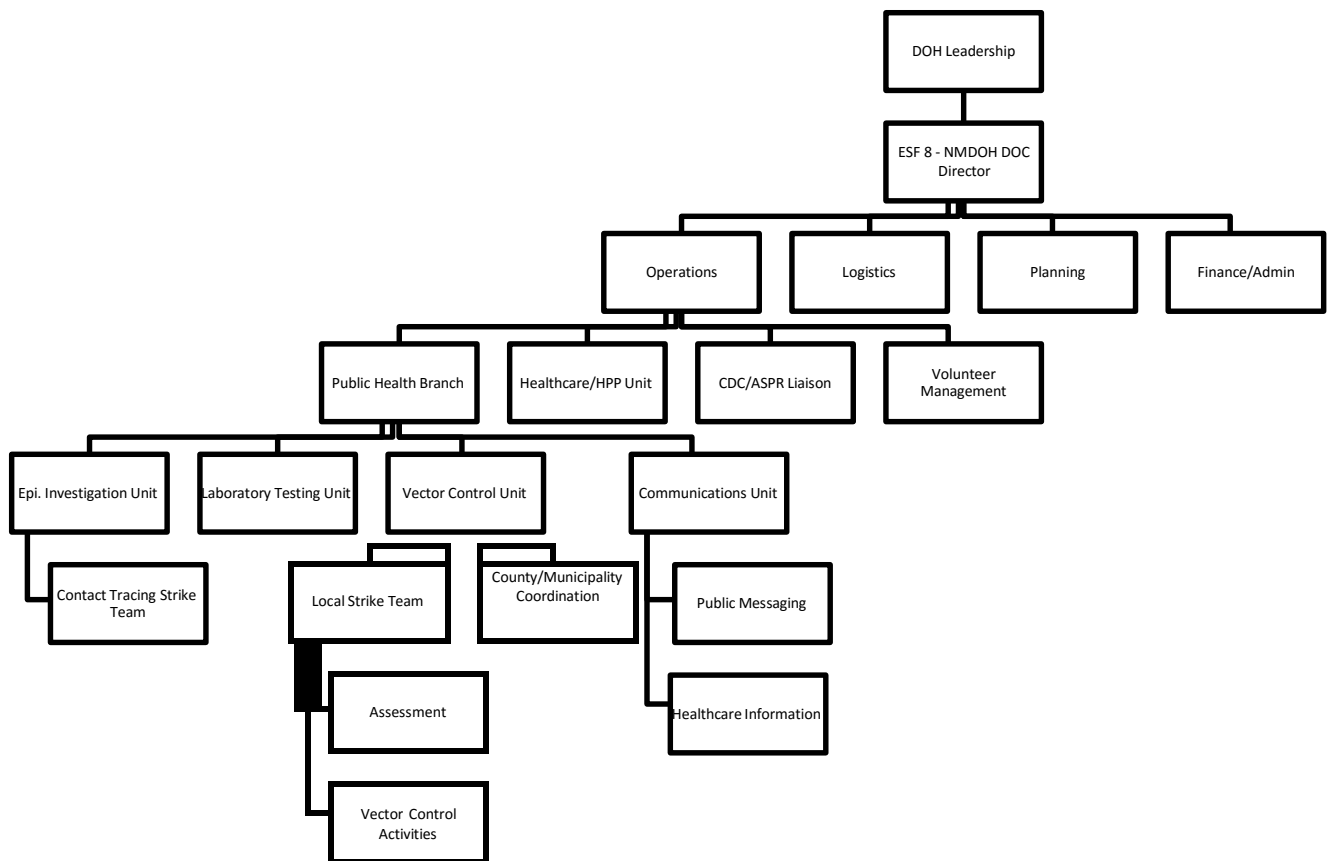
SLD will continue to test specimens as indicated. The laboratory will also monitor messages received from CDC and adjust to any changes to the EUA procedures for the tests that the laboratory performs.

SLD is part of the Laboratory Response Network (LRN) and has provided testing capacity information under current and surge conditions. The laboratory is prepared to assist other states to provide surge testing and if needed, request assistance from other LRN members for surge testing if the laboratory's capacity is exceeded. SLD will adapt to any changes the LRN requires.

All Zika testing must be approved prior to specimen submission by an NMDOH epidemiologist. Healthcare providers considering Zika testing can reach an on-call epidemiologist 24/7/365 at 505-827-0006. Patients must meet specified criteria for testing to be approved. An SLD specimen submission form must be completed for each specimen submitted.

Organization and Assignment of Responsibilities

The Secretary of Health determines and initiates the appropriate level of DOH response to a public health emergency and how such response is managed through designated division directors.



During a DOH response to a public health emergency, the DOH Emergency Operations Center Representative (EOCR) maintains communications between the New Mexico Department of Homeland Security and Emergency Management (DHSEM) Emergency Operations Center (EOC) and the DOH, and coordinates requests and information sharing between the NM DHSEM EOC and DOH.

All DOH personnel must operate in accordance with DOH policies and procedures. The DOH Department Operation Center (DOC) is a function of DOH and does not function independently of DOH leadership direction and policy.

Authorities and References

State Constitution

Article V. Executive Powers, Section 4. [Governor's executive power; commander of militia.] <http://sos.state.nm.us/pdf/2007nmconst.pdf>

State Statutes, Policy and Guidance

All Hazard Emergency Management Act, § 12-10-1, et seq., NMSA (1978)

Chapter 20 – Military Affairs, Article 1 – General Provisions, §§ 20-1-1 through 20-1-8, NMSA (1978); Article 2 – Militia, §§ 20-2-1 through 2-1-8, NMSA (1978); and Article 4 – National Guard, §§ 20-4-1 through 20-4-14, NMSA (1978)

Disaster Acts [Provisional Appropriation for Disasters or Emergencies], §§ 12-11-23 through 12-11-25, NMSA (1978)

Intrastate Mutual Aid Act, § 12-10B-1, et seq., NMSA (1978)

Public Health Emergency Response Act, § 12-10A-1, et seq., NMSA (1978)

Public Health Act, § 24-1-1, et seq., NMSA (1978)

State Executive Order 2005-0014: Designation of the National Incident Management System (NIMS) as the Basis for all Incident Management in the State.

DOH Administrative Services Division (ASD) Policy and Procedures:

1. ADM 02:114 (July 2010): All-Hazard Emergency Operations Plan
2. GMB 06:109 (July 2010): Program Compliance Responsibilities
3. ADM 02:146 (July 2010): Maintenance of Operations and Employee Health During Public Health Threats and Emergencies
4. ADM 02:145 (July 2009): Utilization of DOH Facilities During an Emergency

All-Hazard Emergency Operations Plan New Mexico Department of Health Basic Plan: Authorities & References 43 2014

DOH Outbreak Investigation Guidelines (December 2012)

Federal Statutes, Policy and Guidance

Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended (April 2013), 42 U.S.C. 5121 et seq. (Located in United States Code, Title 42. The

Public Health and Welfare, Chapter 68. Disaster Relief). <http://www.fema.gov/media-library/assets/documents/15271?id=3564>

Pandemic and All-Hazards Preparedness Reauthorization Act (PAHPRA), Public Law No.113-5 (March 2013). <http://www.gpo.gov/fdsys/pkg/PLAW-113publ5/pdf/PLAW-113publ5.pdf>

Pandemic and All-Hazards Preparedness Act (PAHPA), Public Law No. 109-417 (December 2006). http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_public_laws&docid=f:publ417.109.pdf

Homeland Security Presidential Directive (HSPD) 5 (February 2003).
<http://www.training.fema.gov/EMIWeb/IS/ICSResource/assets/HSPD-5.pdf>

Presidential Policy Directive (PPD) 8 (March 2011). <http://www.dhs.gov/presidential-policy-directive-8-national-preparedness>

National Incident Management System (NIMS) (December 2008). U.S. Department of Homeland Security (DHS). http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf
National Response Framework (NRF) (May 2013). U.S. Department of Homeland Security (DHS).
http://www.fema.gov/media-library-data/20130726-1914-25045-1246/final_national_response_framework_20130501.pdf

National Preparedness Goal (NPG) (September 2011). U.S. Department of Homeland Security (DHS).
http://www.fema.gov/media-library-data/20130726-1828-25045-9470/national_preparedness_goal_2011.pdf

Comprehensive Preparedness Guide (CPG) 101: Developing and Maintaining Emergency

Operations Plans, Version 2.0 (November 2010).
http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf

Healthcare Preparedness Capabilities: National Guidance for Healthcare System Preparedness (January 2012). Hospital Preparedness Program (HPP), Office of the Assistant Secretary for Preparedness and Response (ASPR), U.S. Department of Health and Human Services (HHS).
<http://www.phe.gov/Preparedness/planning/hpp/reports/Documents/capabilities.pdf>

Public Health Preparedness Capabilities: National Standards for State and Local Planning (March 2011). Office of Public Health Preparedness and Response (OPHPR), Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services (HHS).
<http://www.cdc.gov/phpr/capabilities/index.htm>

Plans and Other Documents

State of New Mexico All-Hazard Emergency Operations Plan (State EOP)

State EOP Annex: Emergency Support Function (ESF) #8: Public Health and Medical Services

Appendixes

Appendix 1: Pregnancy & Birth Defects Procedures

NM Procedures: US Zika Pregnancy Registry

Description of the US Zika Pregnancy Registry Purpose:

- To understand more about Zika virus infection during pregnancy and congenital Zika virus infections, CDC has established the US Zika Pregnancy Registry.
- The data collected will be used to guide recommendations for clinical care and testing, to plan for services for pregnant women and families affected by Zika virus, and to improve prevention of Zika virus infection during pregnancy.
- For more information, refer to CDC's US Zika Pregnancy Registry website located at <http://www.cdc.gov/zika/hc-providers/registry.html>

Data Collection

Health department staff will collect information using standardized forms.

Upon identification of a person eligible for enrollment, the CDC Zika Maternal History Form will be used for initial data collection. Subsequent data collection will be done using CDC forms. Standardized forms will include clinical information, testing during pregnancy, results from evaluation and testing conducted at birth, and clinical/developmental information from the infant through the first year of life.

Health department staff will collect information directly from the healthcare provider caring for the enrolled pregnant woman or infant.

Data collection will occur at the following points (as applicable)

- Upon initial identification
- Once during the second and third trimesters of pregnancy
- At the time of delivery
- For the infant: at 2, 6, 12 months of age

Inclusion Criteria

All women living in the US (except Puerto Rico) who have been infected with Zika virus during their pregnancy and their infants are eligible for enrollment. Specifically, eligible persons for enrollment include the following:

Pregnant women in the United States with laboratory evidence of Zika virus infection (positive or inconclusive test results, regardless of whether they have symptoms) and prenatally or perinatally exposed infants born to these women

Infants with laboratory evidence of congenital Zika virus infection (positive or inconclusive test results, regardless of whether they have symptoms) and their mothers

Where multiperson, local transmission has been shown to occur, pregnant women living within a one-mile radius of the nearest case will be enrolled in the Pregnancy Registry

Roles and Responsibilities related to US Zika Pregnancy Registry

Healthcare Provider:

- Report any suspected or confirmed cases of Zika virus disease to the NMDOH
- Coordinate with IDEB staff to test persons approved for testing
- Coordinate with IDEB and EHEB staff collecting information about persons enrolled in the registry
- Notify NMDOH staff if the person enrolled in the registry moves or changes healthcare provider

Infectious Disease Epidemiology Bureau (IDEB)

- Report cases to CDC that meet case definition via ArboNet
- Track persons approved for testing and test results
- Notify providers of test results and whether person is eligible for enrollment into the registry
- Notify EHEB when person eligible for enrollment has been identified

Scientific Lab Division (SLD)

Conducts testing for Zika virus infection and reports the test results to IDEB

Environmental Health Epidemiology Bureau (EHEB)

- Oversees New Mexico residents enrolled in the registry
- Collaborates with CDC Registry Coordinator to collect data at above-mentioned data collection points
- Submit collected information to CDC and coordinate with CDC as needed
- Tracks pregnancy for any adverse outcomes related to Zika virus infection
- Shares information with CMS to link affected families and infants to services

Children Medical Services (CMS) and Development Disabilities and Support Division (DDSD)

- Links affected families and infants to services
- Briefs Core Communication team consisting of members from IDEB, EHEB, CMS, on services being provided to the residents enrolled in the registry

Additional Points

Persons who are enrolled should be informed about the registry. However, the person's consent is not required for data collection because information will be collected directly from the healthcare provider by the LHD staff for public health surveillance.

For persons enrolled:

- Being in the registry will not cost any money
- No need for any extra paperwork, go to any extra appointments, or have any extra tests that would not be routinely recommended according to CDC's guidelines for women infected with Zika virus during pregnancy

CDC Fact sheets for healthcare providers and patients are available at <http://www.cdc.gov/zika/hc-providers/registry.html>.

Appendix 2: CDC Emergency Response Team (CERT)

Purpose

The CDC Emergency Response Team (CERT) is a highly-trained cadre of public health experts that can be mobilized and deployed upon the identification of confirmed local transmission of Zika virus.

CDC Zika CERT Deployments

CERT(s) will deploy, as appropriate, following the report of laboratory-confirmed local transmission of Zika virus in the United States. Upon receipt of each CERT request, the CDC Incident Manager (IM) will review and approve the CERT deployment.

All members of the CERT will not always deploy for each request. The IM, Field Team Lead and CDC Emergency Operations Center (EOC) CERT Team Lead will assemble the team membership from the current CERT monthly roster. The composition/make-up of the deploying team will be determined based on the circumstance of the incident, as well as specific requests for technical assistance by the state/local health authority. The remaining CERT members who do not deploy will remain at CDC in case another request for assistance is received.

Roles and Responsibilities

Field CERT Staff

- **CERT Field Team Lead:** Oversees and coordinates all aspects of the onsite investigation; provides guidance, instruction, direction, and leadership to the field CERT staff on immediate steps to accomplish goals and objectives of the mission; serves as CDC main point of contact with state and local health authorities and other jurisdictional partners.
- **Zika Virus Disease Subject Matter Expert (SME)/Epidemiology Team Lead:** Investigates all known cases to determine the timing and source of infection (e.g., travel-related, transfusion-, sexual, local mosquito-borne); performs rapid follow-up of suspected cases through laboratory testing; provides guidance to state and local authorities on enhanced surveillance for Zika infection in humans through enhanced testing of close contacts of cases, blood donors, and pregnant women.
- **Pregnancy Birth Defects SME:** Supports coordination of the investigation and reporting of pregnant women and infants with laboratory evidence of Zika virus in collaboration with state-based maternal-child experts, birth defects surveillance experts, and infectious disease experts; serves as pregnancy-birth SME to ensure that infants with congenital Zika virus infection and birth defects are captured in both the US Zika Pregnancy Registry and state-based birth defects surveillance systems; fills gaps in state/local jurisdiction's capacity to investigate Zika among pregnant women and infants and their outcomes; engages the medical community in testing and reporting suspect cases, providing prevention information to patients, including barrier and other forms of contraception for people at risk.

Emergency Operations Center (EOC) CERT Staff

CERT Team Lead manages the overall operations of the CERT program from the CDC EOC and is the liaison between the field team and IM leadership. The EOC CERT staff do not deploy, but provide consult and administrative support to those in the field.

Requesting the CERT Team

The first case of local transmission will draw a great deal of media and public attention and will likely necessitate the deployment of a CERT team. An invitation for CDC assistance in responding to the first case of local transmission is based on preliminary discussions between the state/local health authority, CDC Director, and the response Incident Manager (IM) regarding the type of assistance needed. The CERT members deployed will greatly depend on the needs of the jurisdiction. Some key considerations include:

- Triggers regarding how the first case was detected
- Prioritization of resources
- Location/population density
- Capacity/resources of local authority
- Timing/seasonality
- Acceptance by local authorities

Notification of a Locally Acquired Zika Case

CERT pre-deployment preparations are initiated once the initial assessment by the IM is performed. A formal written request and terms of reference (TOR) from the State Epidemiologist for the CERT team will be sent via email to the response IM. At that point, the CERT Lead will initiate the paperwork for the request (CERT TOR).

Pre-Deployment Preparations

Pre-deployment preparations begin once the IM approves CERT deployment. State and local health authorities lead the investigation and CDC is invited to assist with the response. State and local authorities and CDC must agree on investigation goals and activities before deploying the CERT. As the investigation develops, additional goals and objectives may be added to the agreement.

Team Activities on Arrival

On arrival, the CERT will meet and work closely with the state and local health authorities to assess the situation and launch the investigation, keeping in constant contact with the CDC EOC about unfolding developments. The teams will review and discuss in details the goals and plans for the first days on-site, identify roles/responsibilities of both CDC and local team members, and establish routes of communication with all relevant authorities.

Daily Reporting/Communication

The team will establish a regular meeting/reporting time in conjunction with the state and local health authorities. Daily field reports will be sent from the field teams to the CERT Lead in the EOC for internal response leadership reporting. The lead for media requests/interactions will be agreed on by state/local health authorities, the Field Team Lead, and CERT Communications SME.

Team Activities before Departure

When the investigation has been completed, CERT field staff will meet with state and local health authorities for an exit meeting to summarize response activities, status of events, and follow up, if necessary.

Post-Deployment Activities

Once the team returns to CDC, the Field Team Lead and CERT Team Lead will ensure that all post-deployment activities are completed. This will include a final report of the investigations as well as a summary of the final exit meeting with the local health authority. A copy of this report will be provided to the local health authority as well.