

Pennsylvania Zika Virus Response Plan
Department of Health, Department of Environmental Protection, and
Other Stakeholders

Purpose:

This document describes actions that will be taken as the risk of locally acquired (transmitted by the bite of a local vector) cases of Zika virus disease increases in Pennsylvania. These actions are considered a phased response to Zika virus. The document is organized according to actions previously described in the Centers for Disease Control and Prevention's (CDC) "Public Health Response Plan for Areas at Risk for Local Zika Virus Transmission and High Volume of Travel Associated Cases." (See: www.cdc.gov/zap and www.cdc.gov/zika/public-health-partners/risk-based-prep.html.)

Facts:

- Zika virus is transmitted to humans mainly through the bite of an infected *Aedes*-species mosquito (*A. aegypti* and *A. albopictus*); other modes of transmission include sexual transmission, maternal-fetal transmission, and transfusion with infected blood.
- Zika virus infection in pregnant women is associated with birth defects and adverse pregnancy outcomes. Pregnant women represent a highly vulnerable population with special needs.
- Zika virus infection is associated with an increased risk of Guillain-Barré syndrome (GBS) and possibly with a newly identified neurological condition, Acute Disseminated Encephalomyelitis (ADEM).
- There is a risk of transmission through the blood supply.
- By April 29, 2016, 35 countries and territories in the Region of the Americas reported mosquito-borne transmission of the virus, and five countries and territories in the Region of the Americas have reported sexual transmission.
- As of May 2, 2016, Zika has not been reported to spread by mosquitoes in the continental United States.
- *Aedes aegypti* is the primary vector associated with mosquito-borne transmission in the Region of the Americas and is not established in Pennsylvania; however, the CDC estimates that the potential range of *Aedes aegypti* could reach into southeastern Pennsylvania (www.cdc.gov/zika/vector/range.html).
- Past mosquito surveillance suggests populations of *Aedes albopictus* mosquitoes are most common in southeastern Pennsylvania; however, mosquito surveillance for *Aedes albopictus* is not present or consistent in all Pennsylvania counties due to funding limitations. Current mosquito surveillance is based on West Nile virus (WNV) and mosquito species with different feeding preferences (time of day and host).
- A vaccine or treatment for Zika virus disease is not currently available.
- Guidance and recommendations will change as more is learned about Zika virus and Zika virus disease.
- Effective Zika control activities will require a combined effort primarily by the Department of Health (DOH) and Department of Environmental Protection (DEP), but other stakeholders may be included.

Assumptions:

- *Aedes albopictus* is regarded as a competent, but less efficient, vector of Zika virus based on differences in host feeding preferences compared with *Aedes aegypti*.
- *Aedes albopictus* may cause limited local transmission of Zika virus within Pennsylvania.

Phased Public Health Response to Zika Virus in Pennsylvania Summary

Communications:

- The goal is to develop a joint communication plan between the DOH and DEP regarding all mosquito- and Zika-related issues. This is necessary to ensure consistent media messaging.
- Key messages within a joint communication plan will include: mosquito bite prevention and mosquito control; Zika prevention when traveling to affected areas; information for pregnant women and women of childbearing age; education regarding the methods of transmission (including sexual).
 - Joint events with DEP can include: recorded PSA featuring both agency secretaries; press conferences in Philadelphia and Harrisburg; live TV/radio interactive shows; media calls; social media twitter chats and/or Facebook town halls.
 - The plan will include a variety of public educational materials produced in-house including: press releases/op-eds, etc.; flyers/posters (English and Spanish); images/memes for social media; banners for website/social media; messaging templates for partners to use; work with Epidemiology to create materials that can be provided to exposed/potentially exposed pregnant women.
- DOH and DEP must actively review all Zika Action Plan summit materials (print and online) and continue to monitor and review newly released CDC guidelines pertaining to mosquito- and Zika-related issues.
- When necessary, refer to CDC's Zika Communication Planning Guide for States – <http://www.cdc.gov/zika/pdfs/zika-communications-planning-guide-for-states.pdf>.

Surveillance for Human Cases:

- DOH must enhance surveillance for travel-associated Zika cases and possible sexually-transmitted cases.
- DOH must prepare for possible locally-transmitted mosquito-borne Zika virus infections.
- There must be enhanced surveillance efforts that focus on educating all returning travelers to prevent mosquito bites in the week following their return.

Laboratory Testing:

- As of April 27, 2016, all testing of Pennsylvania residents is performed at the CDC.
- Case statistics based on Zika testing are updated weekly, on Monday, on the DOH website.
- As of April 25, 2016, turnaround for test results is four to five weeks.
- Due to the anticipated increase in U.S. samples sent to the CDC, DOH must develop a plan for testing beyond current reliance on the CDC laboratory.
- This includes hiring staff to work at DOH Bureau of Laboratories.

Vector Surveillance and Control:

- There must be enhanced vector surveillance by DEP and grantees specifically targeting *Aedes albopictus* and *Aedes aegypti* using species-appropriate trapping methods to better understand geographic boundaries and population densities.
- Vector surveillance activities may need to include testing appropriate mosquito pools for the presence of Zika.
- Rapid communication by DOH to DEP is essential regarding each probable or confirmed Zika virus case residence locations (street address, regardless of infection origin [i.e., including travel-associated cases]) to target timely vector control efforts.
 - A mechanism for rapid sharing of case location information is already in place for West Nile and has been expanded to include Zika cases.

- These efforts should target both adult and larval forms of the mosquito within a 150-yard radius of probable and confirmed cases.
- Current CDC guidance regarding *Aedes* spp. mosquitoes (see www.cdc.gov/zika/pdfs/vectorcontrolaedesmosquitoes.pdf and www.cdc.gov/chikungunya/resources/vector-control.html) recommends mosquito control efforts be focused on a 100-200-yard radius of case residence for larval and adult control where applicable.
- It should be noted that asymptomatic infected persons (estimated to be about 80 percent of all infected persons) will likely not request or receive testing and, thus, will not be identified.
- Furthermore, as noted above, the likelihood of identifying an infected person while he/she is still viremic and capable of passing the infection to a local mosquito is extremely low.
- Control activities should also focus on educating all returning travelers to prevent mosquito bites in the week following their return.

Pregnant Woman Outreach:

- Zika virus can be passed from a pregnant woman to her fetus during pregnancy or around the time of birth.
- Zika virus infection in pregnant women is associated with birth defects and adverse pregnancy outcomes.
- The DOH/DEP Zika public information campaign will be targeting this at-risk population.
- Coordinated efforts with PA American College of Obstetrics and Gynecologists (ACOG), March of Dimes and PA Medical Society will be needed.
- The Bureau of Epidemiology already has a relationship with these groups and has communicated information through these channels. There will be additional partnership through other DOH bureaus for effective outreach to targeted providers.

Blood Safety:

- There is a risk of transmission through the blood supply.
- Coordinated efforts with American Red Cross and Food and Drug Administration (FDA) will be needed.
- The American Red Cross has added a specific question to its donor health history questionnaire concerning travel to or residence in areas with local Zika virus transmission.
- Donors are also asked to self-defer, or postpone their blood donation for four weeks, if they are at risk of Zika virus exposure.

Risk category	Definition	Activities and responses – Pennsylvania
0	<p>Travel-associated Zika virus infections occurring, but <i>Aedes species</i> adults are not yet actively biting humans (pre-mosquito season)</p>	<p><u>Response Actions</u></p> <ul style="list-style-type: none"> ● Review the CDC Webcast of the Zika Action Planning Summit from 4/1/16. ● Review and tailor the state arbovirus response plan as appropriate for Zika virus. ● Meet with primary stakeholders of DOH and DEP as needed to review state and local mosquito control programs and assess capacity and capability. ● Ensure coordination between DOH and DEP so vector control and human surveillance activities can be linked. ● Secure vector surveillance and control resources necessary to enable emergency response if needed. ● Review plans with relevant response partners, identify gaps in preparedness, and develop a plan for improvement. ● Appoint an Incident Manager and a contact roster of response partners should incident management structure be required. <p>Communications</p> <ul style="list-style-type: none"> ● DOH and DEP prepare a joint communication campaign for pregnant women, travelers, healthcare providers, and the public to raise awareness of Zika virus. ● Include messaging on the risk for sexual transmission, and steps persons can take to prevent it. ● Develop or update scripts for state call centers and public health agencies to include Zika virus messaging. ● Weekly review/update of DOH Zika virus website. ● Develop educational materials for returning travelers to prevent mosquito bites in the week following their return. ● Ensure appropriate messaging for Zika positive men (condom use or abstinence) and for Zika positive pregnant women is being delivered. <p>Surveillance for Human Cases</p> <ul style="list-style-type: none"> ● Enhance surveillance for travel-associated Zika virus infections and possible sexually-transmitted cases. ● Develop targeted Zika virus infection surveillance efforts for pregnant women through OB/GYN clinics [see Outreach for Pregnant Women and Obstetricians Annex]. ● Develop targeted Zika virus infection surveillance efforts for patients with suspected Guillain-Barré syndrome and ADEM [see Outreach to Neurologists Annex]. ● Reach out to clinicians in the state and provide guidance for management, testing and interpretation of test results for possible cases. ● Rapidly follow-up and investigate confirmed cases. Take a complete patient history including travel, transfusion or tissue transplantation, and sexual exposure to a traveler. ● Ensure appropriate messaging for Zika positive men (condom use or abstinence) and for Zika positive pregnant women is being delivered.

		<ul style="list-style-type: none"> ● If case involves Zika positive pregnant female, attempt to enroll the patient in CDC’s Zika pregnancy registry for monitoring and follow-up of birth outcomes. ● Report all confirmed or probable Zika virus disease cases to PANEDSS and ArboNET in a timely manner. <p>Laboratory Testing</p> <ul style="list-style-type: none"> ● Review state capacity to rapidly test specimens for Zika virus. [see Laboratory Annex] ● Develop plan for rapidly testing specimens beyond reliance on the CDC <p>Vector Surveillance and Control</p> <ul style="list-style-type: none"> ● On June 1, initiate statewide Zika vectoring mosquito distribution survey. Survey will involve 3,000 events and include all Pennsylvania counties. ● A baseline mosquito survey for <i>Aedes albopictus</i> and <i>Aedes aegypti</i> populations will occur in the following counties: Allegheny, Adams, Beaver, Berks, Blair, Bucks, Cambria, Centre, Chester, Cumberland, Dauphin, Delaware, Erie, Fayette, Franklin, Lackawanna, Lancaster, Lawrence, Lebanon, Lehigh, Luzerne, Montgomery, Northampton, Philadelphia and York on a weekly basis. ● The goal of this survey is to measure the average weekly abundance of host-seeking <i>Aedes albopictus/aegypti</i> at 167 sites in 25 counties during 15 weeks for a total of 2,505 trapping events. Survey sites will be residential and public areas, such as parks, zoos. ● The baseline survey can be used to measure vector abundance in relation to the importation of viremic Zika virus cases. ● Conduct statewide survey to determine distribution of <i>Aedes albopictus</i> and <i>Aedes aegypti</i> in the 42 remaining Pennsylvania counties. Survey will be conducted in these counties to determine presence/absence of <i>Aedes albopictus/aegypti</i>. A total of 495 trapping events will occur in these 42 counties. ● Initiate information sharing among counties with known <i>Aedes albopictus</i> populations. Information sharing will be through the use of a password protected intergovernmental website and designated county email distribution list. Weekly density levels from across the state surveillance network will be shared. ● Engage and educate community leadership on habitat reduction and strengthening standing water codes. Provide tools to homeowners to reduce Zika vectoring mosquitoes. ● Provide expertise, equipment and funding to county mosquito control programs to begin efforts to reduce Zika vectoring mosquitoes in public areas. ● Incorporate training on the surveillance and control of <i>Aedes albopictus</i> into the annual mosquito control academy attended by county and municipal personnel. <p>Pregnant Women Outreach</p> <ul style="list-style-type: none"> ● Develop enhanced Zika virus infection outreach to pregnant women through OB/GYN clinics and offer Zika virus testing for pregnant women with travel history. ● Advise pregnant women to follow current CDC recommendations and avoid travel to Zika-affected areas. ● Identify resources that could be used for interventions (products to develop Zika Prevention Kits for pregnant women, resources for communications campaigns, etc.).
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<p>1</p>	<p>Travel-associated Zika virus infections occurring and <i>Aedes species</i> adults are actively biting humans (mosquito season)</p>	<p><i>Response as in category 0, plus:</i></p> <p>Response Actions</p> <ul style="list-style-type: none"> Organize regular meetings between the pre-identified Incident Manager and state vector preparedness and response partners to discuss plans, progress and incorporate any changes as needed. <p>Communications</p> <ul style="list-style-type: none"> Initiate communications campaign for messaging around: <ul style="list-style-type: none"> Personal mosquito protection. Residential source reduction. Reducing risk of spread from travelers coming from areas experiencing Zika outbreaks (mosquito protection for three weeks upon return, safe sex to prevent sexual transmission). <p>Surveillance for Human Cases</p> <ul style="list-style-type: none"> Encourage laboratories and health care providers to immediately reports results for any positive or equivocal cases. If case(s) involve Zika positive pregnant female(s), attempt to enroll the patient in CDC's Zika pregnancy registry for monitoring and follow-up of birth outcomes. Report all confirmed or probable Zika virus disease cases to PA-NEDSS and ArboNET in a timely manner. Counsel patients with pending Zika virus lab results through Bureau of Laboratories (BOL) to take precautions to avoid exposure to local mosquito populations, especially during the first week of acute illness if symptomatic or three weeks after return from travel if asymptomatic. <ul style="list-style-type: none"> Stay indoors in screened, air-conditioned rooms, use of personal repellents, and consider mosquito reduction activities around home. Advise patients to practice safe sex to avoid potential sexual transmission to contacts and to defer blood donations. Rapid sharing by DOH to DEP of location of each probable or confirmed Zika case residence location to target timely vector control efforts. <p>Vector Surveillance and Control</p> <ul style="list-style-type: none"> Initiate surveillance on all mosquito life stages within 100 meters of the imported cluster of Zika virus cases. Adult surveillance will be through the use of BG sentinel traps. Immature surveillance will be through the use of dippers and ovitraps. Surveillance will be used to determine appropriateness and efficacy of control measures.

		<ul style="list-style-type: none"> ● Initiate immature mosquito control within 100 meters of the imported cluster of Zika virus cases. Immature control will focus on source reduction and the use of bio rational pesticides in areas that are not conducive to source reduction or elimination. Lethal ovitraps will also be deployed within this zone. ● Consider the use of adult mosquito control within 100 meters of the importation cluster. If BG sentinel traps indicates risk, adult mosquito control will be initiated. Methods include the use of barrier and spaces sprays, applied by licensed public health specialists at EPA label rates, using either backpack or vehicular mounted techniques.
<p>2</p>	<p>Suspected Single Case locally transmitted by mosquitoes</p>	<p><i>Response as in category 1 plus:</i></p> <p>Response Actions</p> <ul style="list-style-type: none"> ● Activate the state incident management structure and consult pre-identified Incident Commander on needs. <p>Surveillance for Human Cases</p> <ul style="list-style-type: none"> ● Rapidly follow up on suspected locally-acquired cases prior to case confirmation. Take a complete patient history; establish lack of travel, no transfusion or tissue transplantation, no sexual exposure to a traveler. Ask if other persons in the home or neighborhood are experiencing similar symptoms. Assess patient's geographic area of risk for exposure (i.e., Where were they likely exposed? Home? Other place?) ● If case(s) involve Zika positive pregnant female(s), attempt to enroll the patient in CDC's Zika pregnancy registry for monitoring and follow-up of birth outcomes. ● Report all confirmed or probable Zika virus disease cases to PANEDSS and ArboNET in a timely manner. ● Rapid sharing by DOH to DEP of location of each probable or confirmed Zika case residence location (or other relevant exposure location) to target timely vector control efforts. <p>Communications</p> <ul style="list-style-type: none"> ● Prepare for a possible communications need in the event patient is positive ● Talking points to alert the general public ● Identify and prepare local spokespeople <p>Vector Surveillance and Control</p> <ul style="list-style-type: none"> ● Initiate surveillance on all mosquito life stages within 300 meters of the suspected case of Zika. Adult surveillance will be through the use of BG sentinel traps. Immature surveillance will be through the use of dippers and ovitraps. Surveillance will be used to determine appropriateness and efficacy of control measures. ● Initiate immature mosquito control within 300 meters of the suspected case of Zika. Immature control will focus on source reduction and the use of bio rational pesticides in areas that are not conducive to source reduction or elimination. Lethal ovitraps will also be deployed in this zone. Immature mosquito control practices should continue for the remainder of the active <i>Aedes albopictus</i> season, unless this turns out to not be a case. ● Consider the use of intensified adult mosquito control within 300 meters of the suspected case. If BG sentinel traps indicate risk, adult mosquito control will be initiated. Methods include the use of barrier and

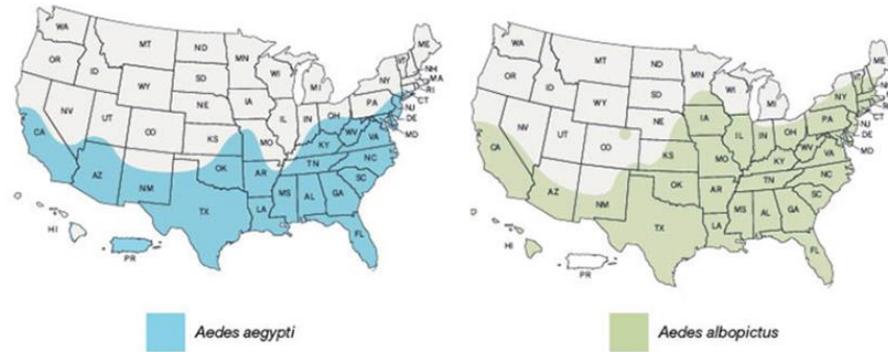
		<p>spaces sprays, applied by licensed public health specialists at EPA label rates, using either backpack or vehicular mounted techniques. Adult mosquito control efforts will continue until vector populations are reduced below risk thresholds.</p>
<p>3</p>	<p>Confirmed Single Case (or cases clustered in a single household) locally transmitted by mosquitoes</p>	<p><i>Response as in category 2 plus:</i></p> <p>Response Actions</p> <ul style="list-style-type: none"> ● Activate the state incident management structure and consult the pre-identified Incident Commander on needs. Determine if there is a need for assistance from a CDC field team (e.g., Epi Aid or rapid response team) to provide on the ground technical, risk communication, vector control and/ or logistical support. <p>Communications</p> <ul style="list-style-type: none"> ● As appropriate, issue press release/media statement (possibly joint effort with DOH/DEP) and intensify visible activities in the county to increase attention to Zika virus transmission risk and personal protection measures <ul style="list-style-type: none"> ○ Flyers, community leaders, and social media. ● Monitor local news stories and social media postings to determine if information is accurate, identify messaging gaps, and make adjustments to communications as needed. ● Develop guidance for families affected by GBS or other neurological conditions. <p>Surveillance for Human Cases</p> <ul style="list-style-type: none"> ● Intensify surveillance for human cases in a 150-yard radius (or other boundary, as deemed appropriate) around home or other likely sites of exposure). ● Consider conducting household and door-to-door surveillance for clinically compatible cases as feasible and necessary. Continue reporting cases as in prior levels. ● Enhance local surveillance for human cases (consider local clinician outreach, syndromic surveillance in nearby hospitals, etc.). ● Rapid sharing by DOH to DEP of location of each probable or confirmed Zika case residence location (or other relevant exposure location) to target timely vector control efforts. <p>Vector Surveillance and Control</p> <ul style="list-style-type: none"> ● Response as in 2, including: ● Initiate surveillance of mosquitoes in adjacent geographic areas to determine extent of possible viral spread. ● Initiate testing of mosquitoes for the presence of Zika virus. Virus testing will be used to build historic analytical data and define scope and nature of control efforts. <p>Pregnant Women Outreach</p> <ul style="list-style-type: none"> ● If case(s) involve Zika positive pregnant female(s), attempt to enroll the patient in CDC's Zika pregnancy registry for monitoring and follow-up of birth outcomes. ● Deploy targeted communications, surveillance, and monitoring programs for pregnant women in the county/jurisdiction.

		<ul style="list-style-type: none"> ○ Include guidance for women wanting to get pregnant and those breastfeeding ● Develop guidance for families affected by microcephaly. <p>Blood Safety</p> <ul style="list-style-type: none"> ● Notify local blood collection agencies for awareness ● Review CDC toolkit for investigation of transfusion-transmitted infection.
<p>4</p>	<p>Widespread* local transmission by mosquitoes (* multiple cases in >1 county) – PA is not considered to be at risk for level 4.</p>	<p><i>Response as in category 3 plus:</i></p> <p>Expand response activities regionally or statewide. Considerations include but are not limited to:</p> <p>Response Actions</p> <ul style="list-style-type: none"> ● Determine the geographic boundaries that will be used for aggressive response efforts (county/jurisdictional, health department coverage area, zip code, etc.). ● County/jurisdiction designated as an area of “active Zika transmission”. ● Notify CDC (770-488-7100). ● Incident Manager should provide regular situation updates to keep public and partners informed of evolving situation. <p>Communications</p> <ul style="list-style-type: none"> ● Intensify county-wide (or jurisdiction-wide) outreach (newspaper, radio, social media, and call centers). <p>Surveillance for Human Cases</p> <ul style="list-style-type: none"> ● Intensify county-wide (or jurisdiction-wide) surveillance for human cases (consider clinician outreach, syndromic surveillance in hospitals, etc.). <p>Vector Surveillance and Control</p> <ul style="list-style-type: none"> ● Initiate memorandum of understanding (MOU) with adjacent counties in affected active Zika transmission areas. This agreement will allow the coordination and sharing of resources for the remainder of the mosquito season. ● Initiate widespread larval control through backpack and vehicular application. Application methods will be determined by the scope and habitat of the Zika transmission zone. If the scope of outbreak is >1,000 acres, consider aerial control. <ul style="list-style-type: none"> ○ If necessary, initiate request for proposals (RFP) to conduct aerial (rotary aircraft) bio rational pesticide applications. ● Initiate widespread adult control through backpack and vehicular application, as deemed necessary by targeted species adult mosquito surveillance. If scope of the outbreak is >1,000 acres, consider aerial control. <ul style="list-style-type: none"> ○ If necessary, initiate RFP to conduct vehicular and aerial (fixed or rotor aircraft) adult mosquito control suppression in affected areas.

		<ul style="list-style-type: none">● Initiate surveillance and viral testing of known <i>Aedes albopictus</i> populations across the commonwealth to determine if other outbreaks are occurring <p>Pregnant Women Outreach</p> <ul style="list-style-type: none">● Advise pregnant women to consider postponing travel to the affected counties/jurisdictions.● Advise men in the counties/jurisdictions to use condoms or abstain from sexual contact with pregnant women.● Implement intervention plans for high risk populations (pregnant women).<ul style="list-style-type: none">○ Options to consider include mosquito-proofing homes through installation of screens and provision of air-conditioning if necessary, as well as household vector control, and distribution of Zika Prevention Kits (ZPKs).● Consider when to initiate testing of asymptomatic pregnant women.● Consider retrospective enhanced surveillance in health facilities to establish the earliest known date of local human infection for future counseling/ testing of asymptomatic pregnant women. <p>Blood Safety</p> <ul style="list-style-type: none">● Blood centers with collections in county/jurisdiction should follow FDA guidance for an area of active transmission, including outsourcing blood if laboratory screening or pathogen reduction is unavailable.● Blood centers in other areas and states should follow FDA guidance for deferring blood donations for people who have a recent travel history to this county/jurisdiction.
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Revised 05/12/2016

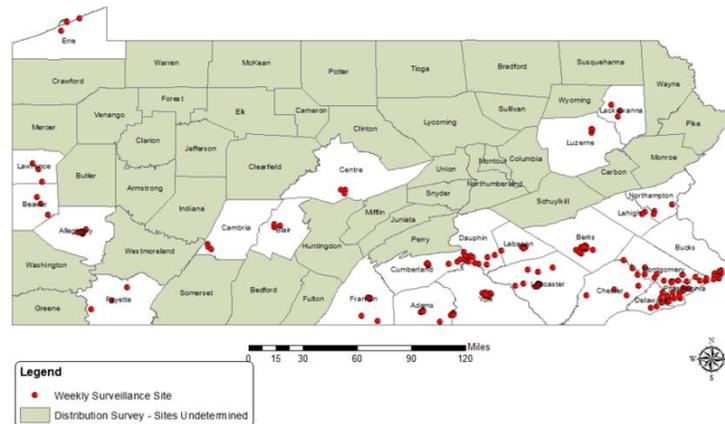
Shown below are maps produced by the CDC that show projections for the two mosquitos in question, *Aedes aegypti* and *Aedes albopictus* according to the 2016 CDC update. The map at the bottom shows the locations of DEP planned surveillance trapping sites for the 25 counties currently participating in the West Nile Virus Program. All other counties that are shown in tan will be surveyed, but will not have weekly collections.



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



Zika Mosquito Surveillance



Laboratory Annex

As of April 28, 2016 all Pennsylvania samples are shipped, through the Department of Health Bureau of Laboratories to the CDC for testing. Estimated turnaround time is 4-5 weeks. Currently, the average number of requests is 35-40 per week for Zika Virus testing. Results are reported to BOL.

As weather turns warmer and mosquitos become more prevalent across the United States and in Pennsylvania, DOH must develop a plan for Zika testing beyond reliance on CDC. This includes hiring staff to work at DOH Bureau of Laboratories to run tests on behalf of Pennsylvania.

At this time, Zika serology and PCR testing are not available at commercial laboratories, although this is likely to change during the next months. Even as assays become available from commercial sources, there will be a lag due to CLIA regulatory requirements for the implementation of these assays into the laboratories' workflow.

BOL has produced a new laboratory submission form to streamline the process of collection of required data for approval and processing. BOL maintains the laboratory specific documents such as submission form guidance and quick guide for interpreting Zika testing results on the BOL's website.

Blood Collection Center Annex

The American Red Cross has added a specific question to its donor health history questionnaire concerning travel to or residence in areas with local Zika virus transmission. Donors are also asked to self-defer, or postpone their blood donation for four weeks, if they are at risk of Zika virus exposure.

Those risk factors include: travel to or residence in countries on the Centers for Disease Control and Prevention (CDC) Zika Travel Information list within the last four weeks; diagnosis of Zika virus infection; existence of two or more Zika virus infection symptoms within two weeks of leaving an area with local transmission; or sexual contact within the last four weeks with a man who in the three months before sexual contact was diagnosed with Zika virus infection, or traveled to or resided in an area with local Zika virus transmission. Potential donors with any of these risk factors should schedule their blood donation for four weeks after the end of the defined risk periods noted above.

The Red Cross continues to use additional safety measures to protect the blood supply from Zika virus and other mosquito-borne viruses. As part of current health screening process, the Red Cross only collects blood from donors who are healthy and feeling well at the time of donation.

Communication between DOH and the relevant Blood Collection Centers will be anticipated once confirmed local transmission has occurred to assure a safe blood supply.

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Outreach to Neurologists Annex

Outreach to neurologists to increase surveillance for:

Suspected Guillain-Barré Syndrome (based on the CSTE Interim Position Statement: Zika Virus Disease and Congenital Zika Virus Infection Interim Case Definition and Addition to the Nationally Notifiable Diseases List, February 26, 2016).

Targeted outreach to neurologists and selected facilities which may manage these patients.

Share recent World Health Organization (WHO) guidance on identification and management of Guillain-Barré Syndrome with neurologists.

Outreach to Pregnant Women and Obstetricians Annex

Women diagnosed with Zika virus disease should wait at least 8 weeks after symptom onset to attempt pregnancy. Men diagnosed with Zika virus disease should wait at least 6 months after symptom onset to attempt pregnancy. Asymptomatic women and men with possible exposure to Zika virus should wait at least 8 weeks after exposure before attempting pregnancy. See www.cdc.gov/mmwr/volumes/65/wr/mm6512e2.htm.

Consideration of amniocentesis has been removed from the CDC recommended testing algorithm. A decision regarding amniocentesis should be individualized for each clinical scenario on a case by case basis as with other congenital infections. See www.cdc.gov/mmwr/volumes/65/wr/mm6512e2.htm.

Prevention of unintended pregnancies in the context of a Zika virus outbreak is especially important as an approach to reducing the likelihood of congenital infections. See www.cdc.gov/mmwr/volumes/65/wr/mm6512e2.htm.

Adherence to Standard Precautions is necessary to protect health care providers and patients in labor and delivery settings from transmission of Zika virus disease. The appropriate use of personal protective equipment is important for all health care providers to minimize the risk of transmission of infectious pathogens through exposure to blood and body fluids. There is no evidence that contact precautions or respiratory isolation of ZIKA virus disease infected patients is warranted. See www.cdc.gov/mmwr/volumes/65/wr/mm6511e3.htm.

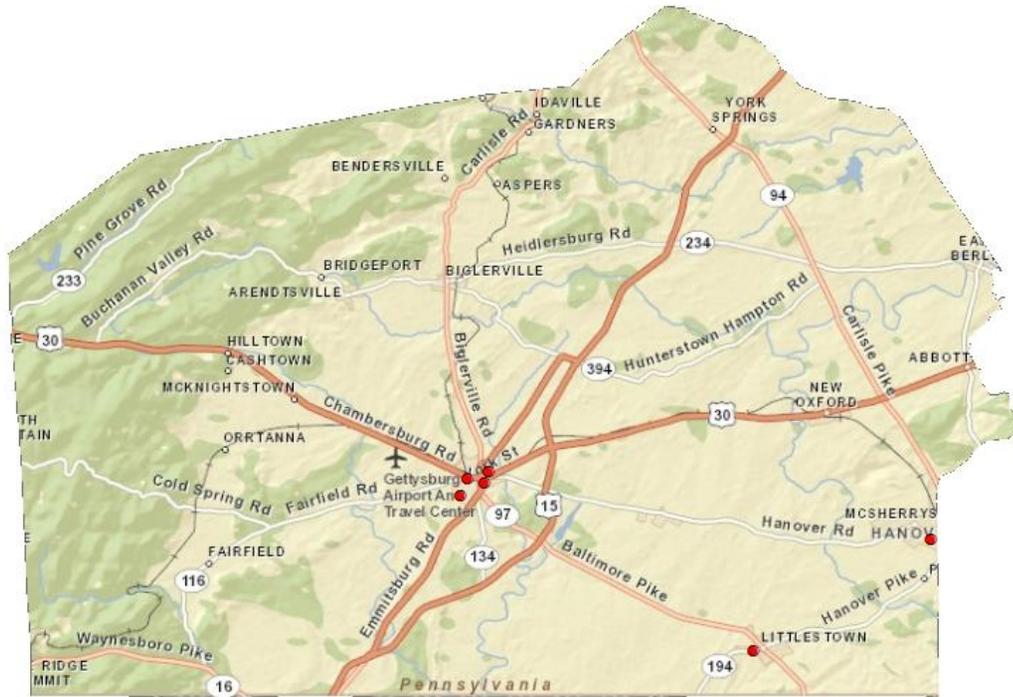
CDC has established the U.S. Zika Pregnancy Registry and is collaborating with state, tribal, local, and territorial health departments to collect information about Zika virus infection during pregnancy and congenital Zika virus infection. Obstetrician–gynecologists and other health care providers are asked to report laboratory-confirmed cases of Zika virus to their state, tribal, local, or territorial health department and should notify state, tribal, local, or territorial health department staff or CDC registry staff of adverse events. See www.cdc.gov/zika/hc-providers/registry.html.

CDC has developed detailed guidelines for testing, evaluation and care of infants with congenital Zika infections. See www.cdc.gov/mmwr/volumes/65/wr/mm6507e1.htm.

CDC maintains a 24/7 clinical consultation service for health care providers evaluating and caring for pregnant women and infants with possible ZIKV infection. Call CDC's Zika Pregnancy Hotline for Healthcare Providers at 770-488-7100 or e-mail zikamch@cdc.gov for any concerns related to clinical management.

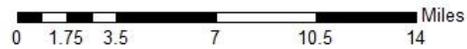


Weekly *Aedes albopictus* Surveillance Sites Adams County



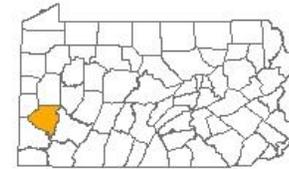
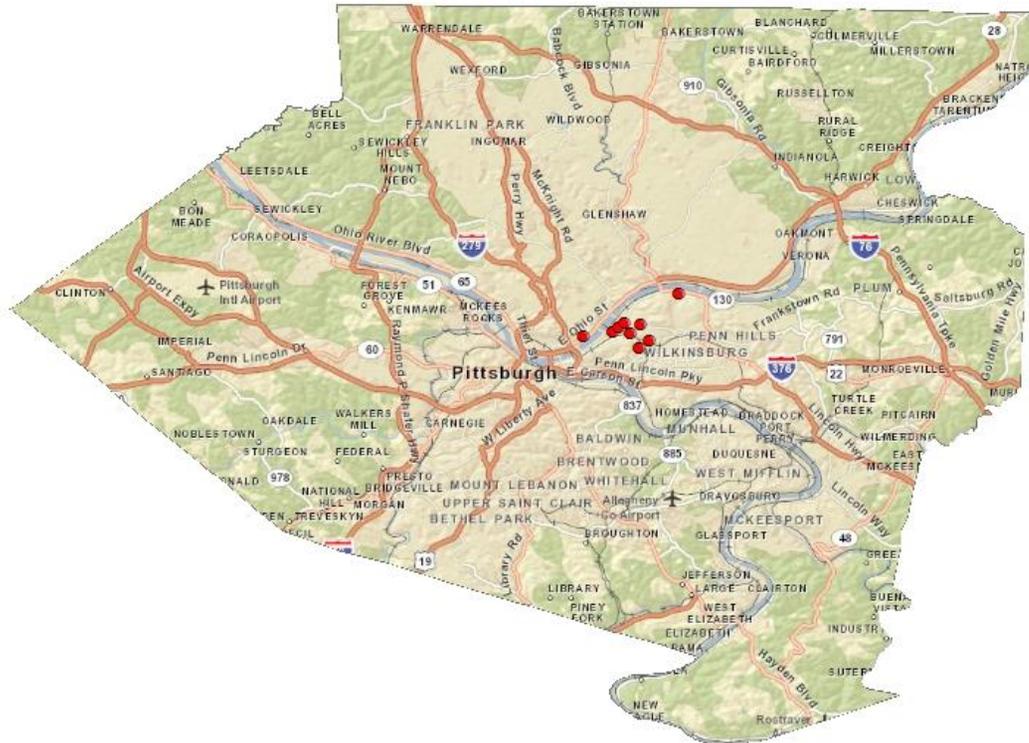
Legend

- Zika Surveillance Site



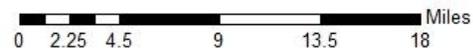


Weekly *Aedes albopictus* Surveillance Sites Allegheny County



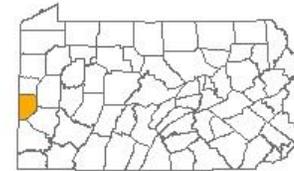
Legend

- Zika Surveillance Site



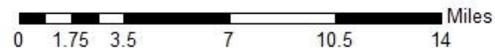


Weekly *Aedes albopictus* Surveillance Sites Beaver County



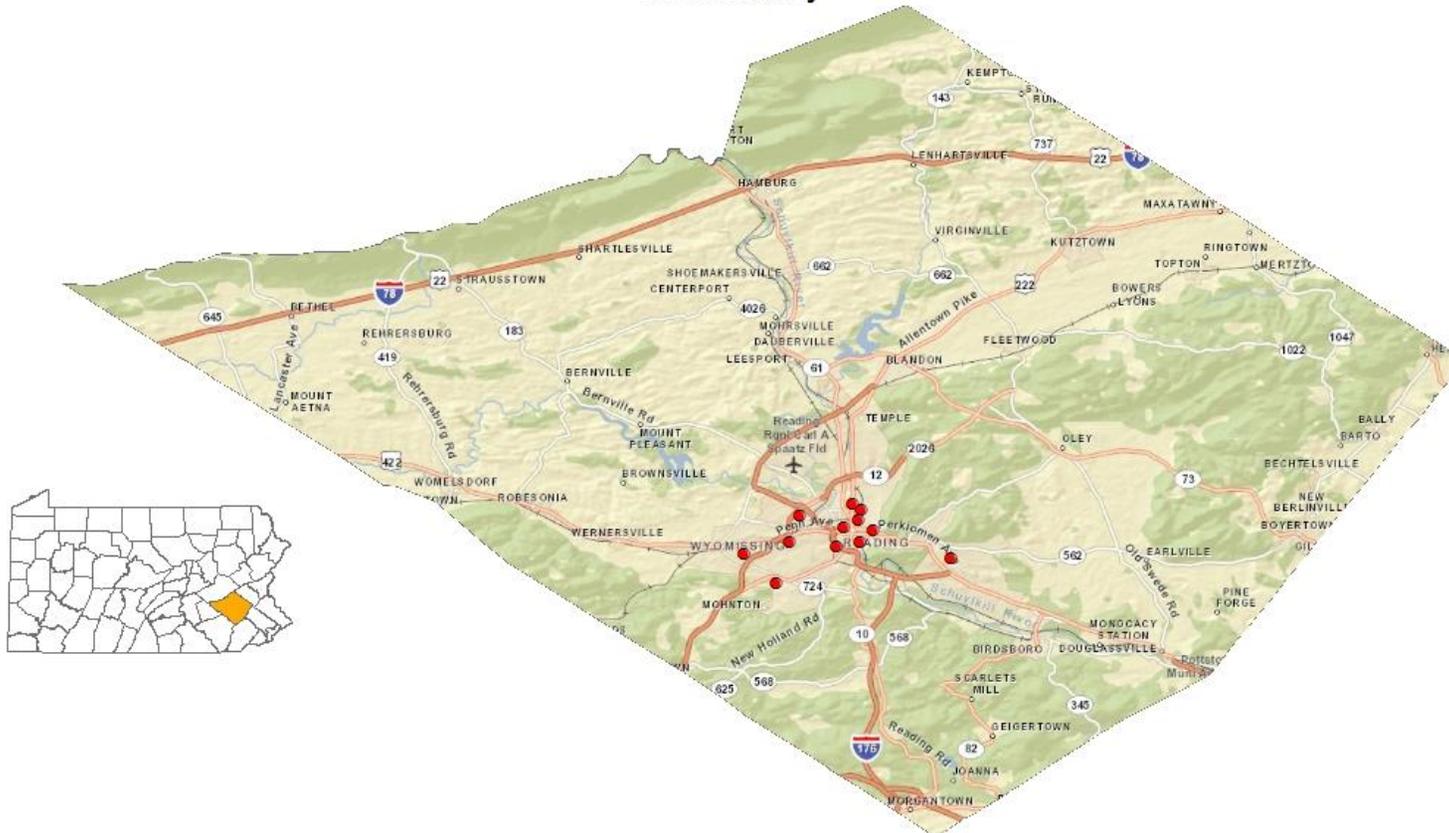
Legend

- Zika Surveillance Site





Weekly *Aedes albopictus* Surveillance Sites Berks County

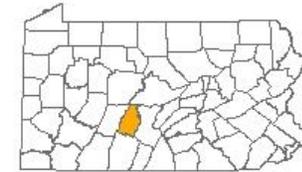


Legend

- Zika Surveillance Site

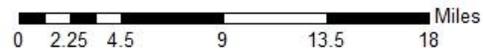


Weekly *Aedes albopictus* Surveillance Sites Blair County



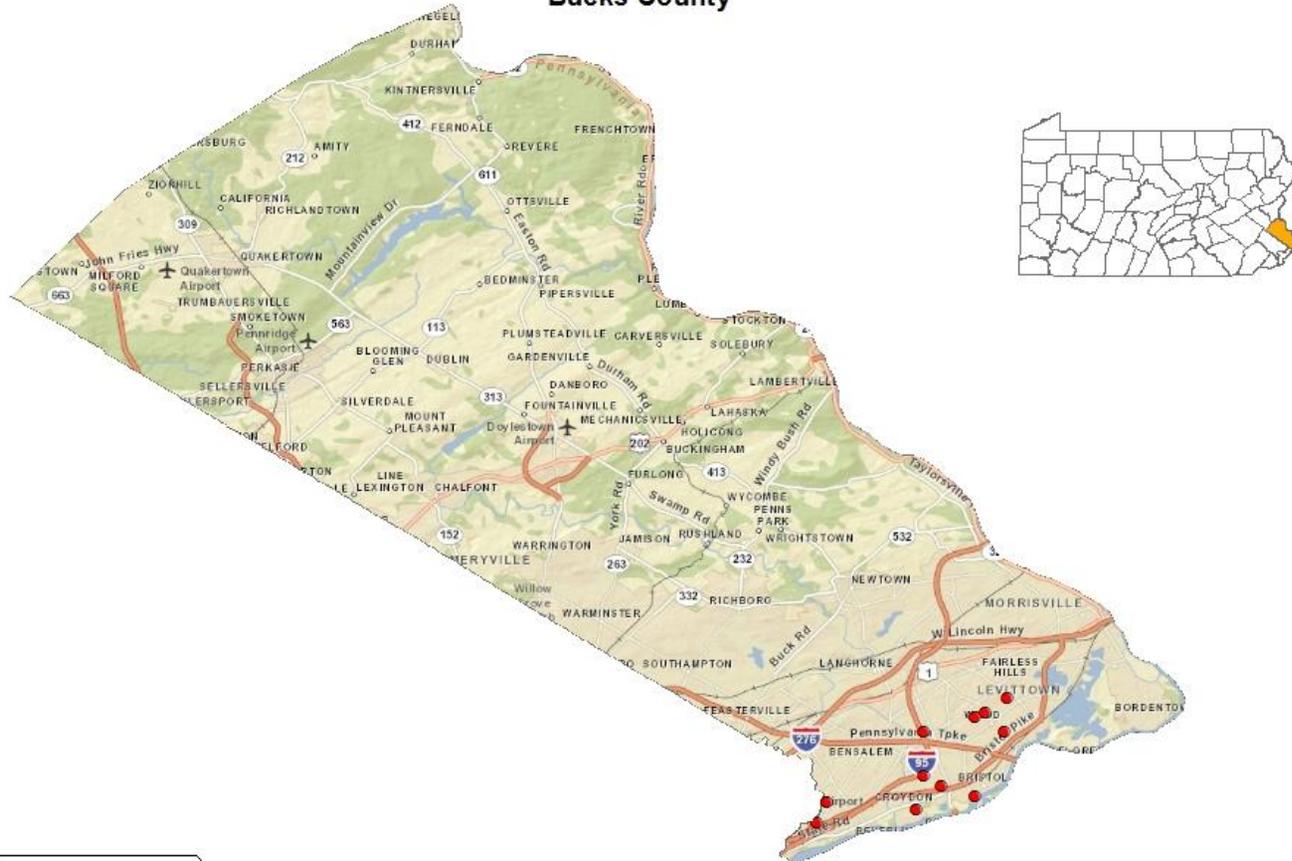
Legend

- Zika Surveillance Site



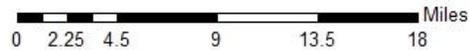


Weekly *Aedes albopictus* Surveillance Sites Bucks County



Legend

- Zika Surveillance Site



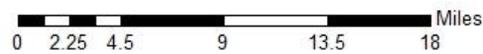


Weekly *Aedes albopictus* Surveillance Sites Cambria County



Legend

- Zika Surveillance Site



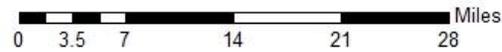


Weekly *Aedes albopictus* Surveillance Sites Centre County



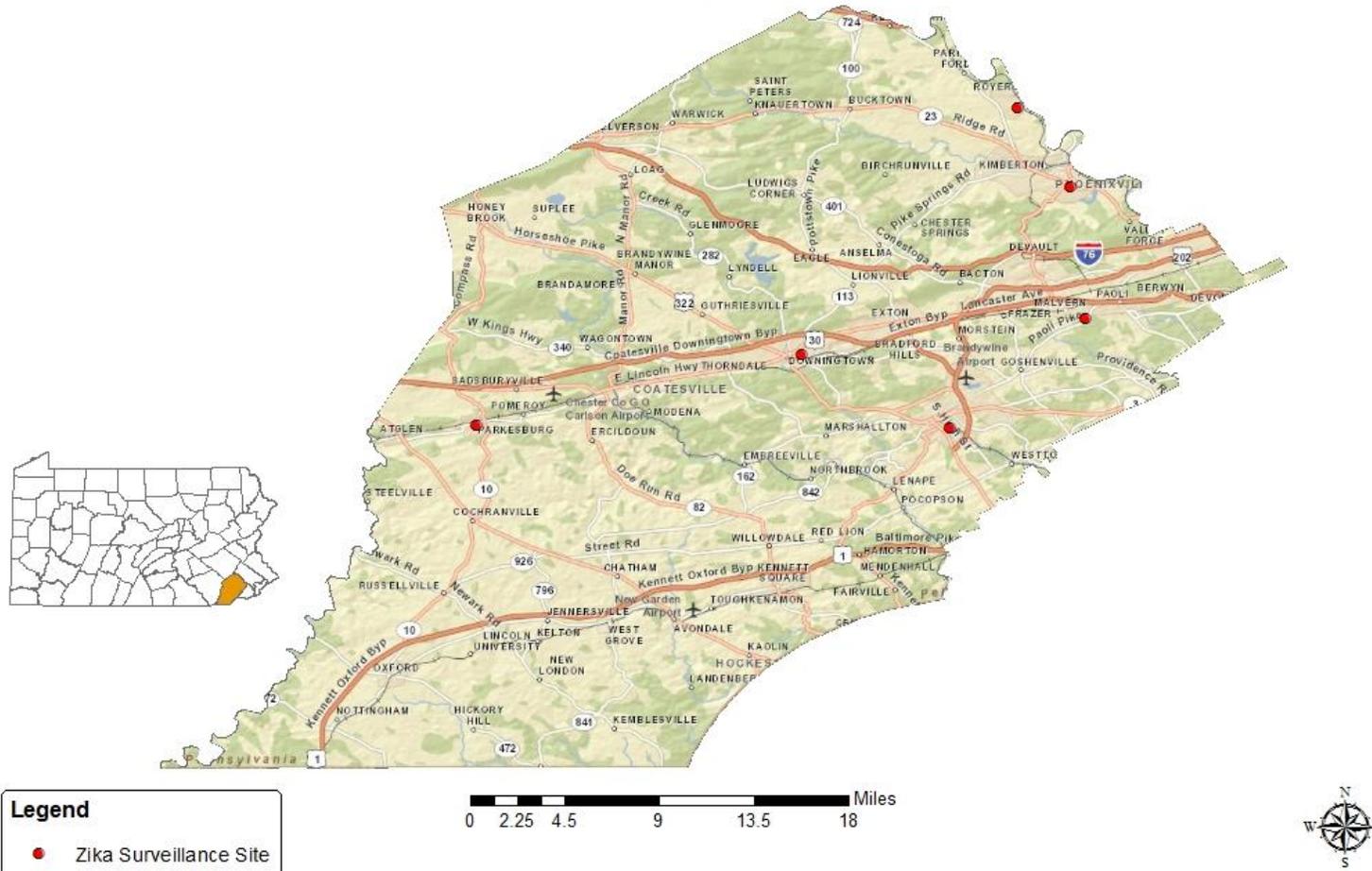
Legend

- Zika Surveillance Site



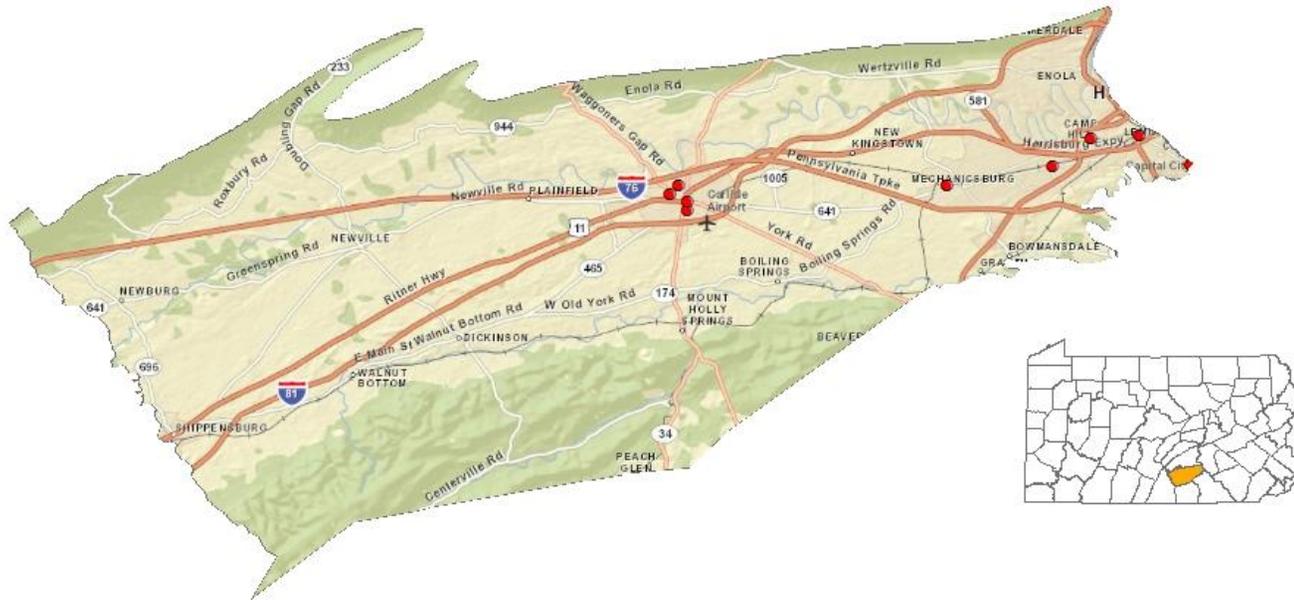


Weekly *Aedes albopictus* Surveillance Sites Chester County



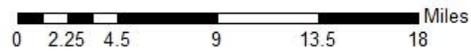


Weekly *Aedes albopictus* Surveillance Sites Cumberland County



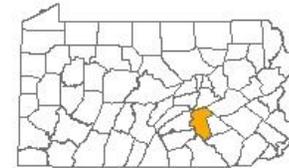
Legend

- Zika Surveillance Site



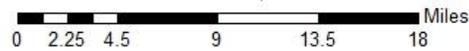


Weekly *Aedes albopictus* Surveillance Sites Dauphin County



Legend

- Zika Surveillance Site





Weekly *Aedes albopictus* Surveillance Sites Delaware County



Legend

- Zika Surveillance Site



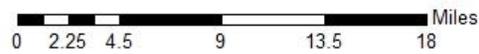


Weekly *Aedes albopictus* Surveillance Sites Erie County



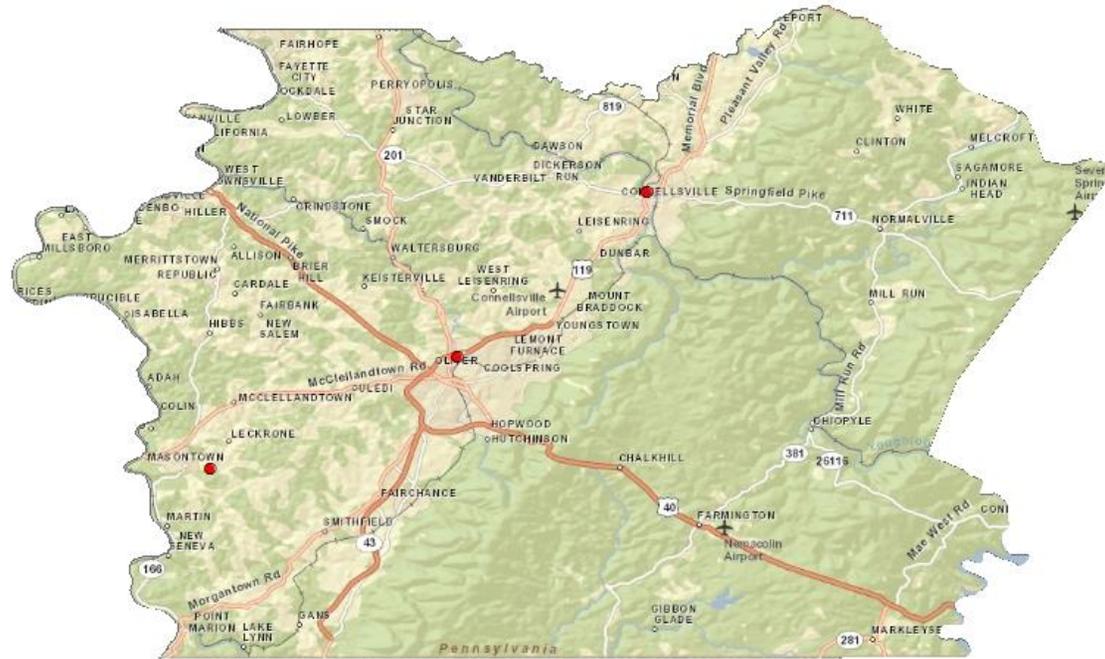
Legend

- Zika Surveillance Site



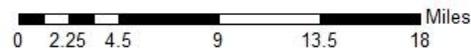


Weekly *Aedes albopictus* Surveillance Sites Fayette County



Legend

- Zika Surveillance Site



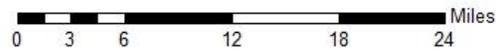


Weekly *Aedes albopictus* Surveillance Sites Franklin County



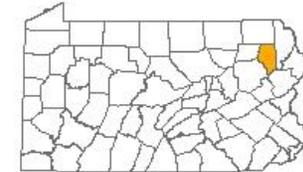
Legend

- Zika Surveillance Site



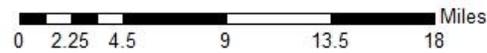


Weekly *Aedes albopictus* Surveillance Sites Lackawanna County



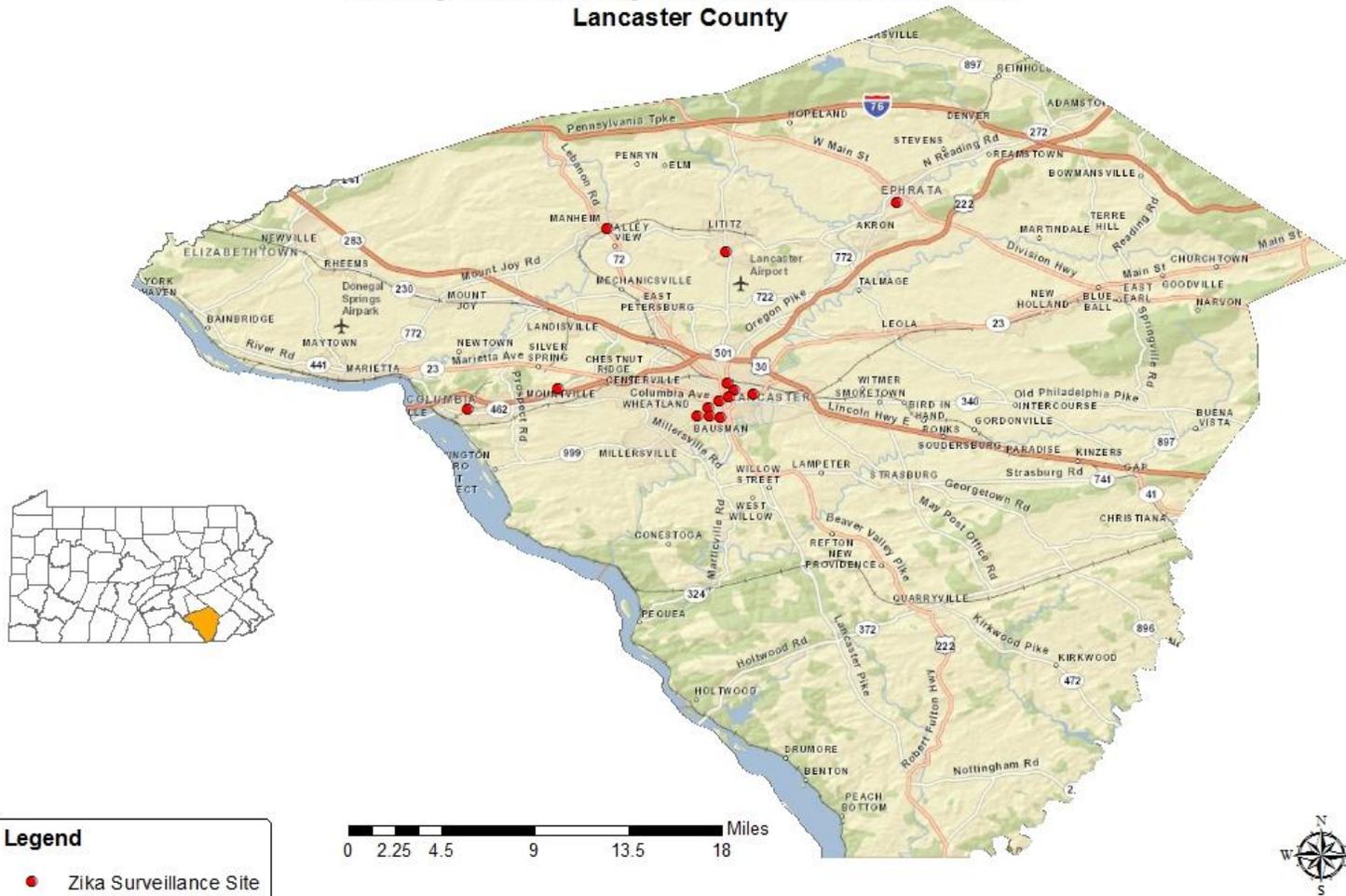
Legend

- Zika Surveillance Site



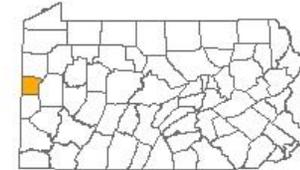
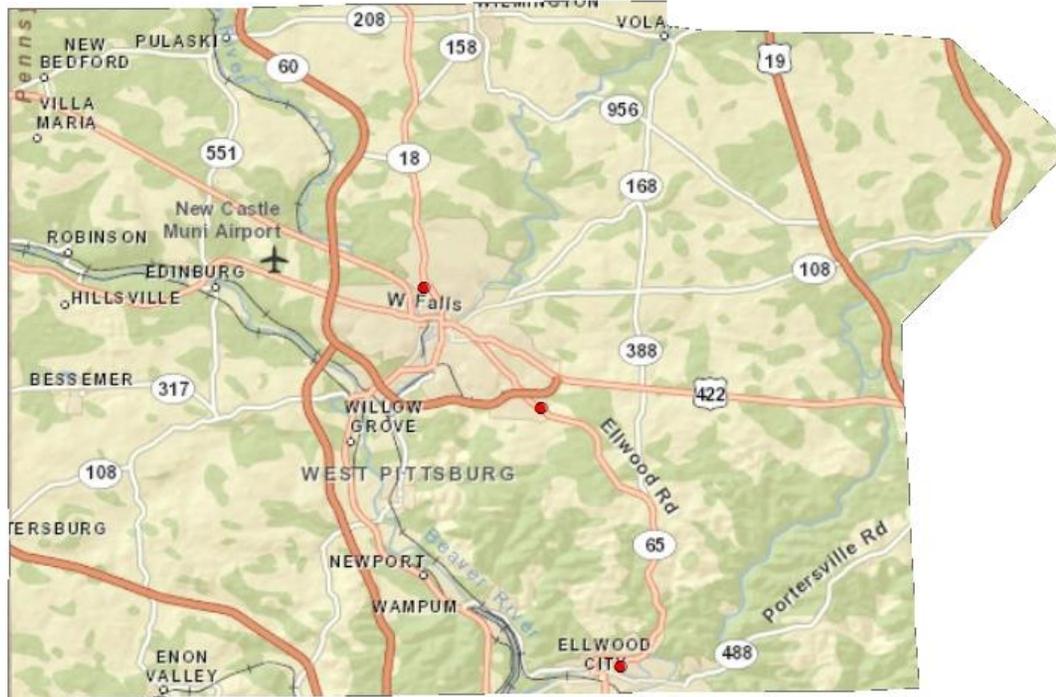


Weekly *Aedes albopictus* Surveillance Sites Lancaster County





Weekly *Aedes albopictus* Surveillance Sites Lawrence County



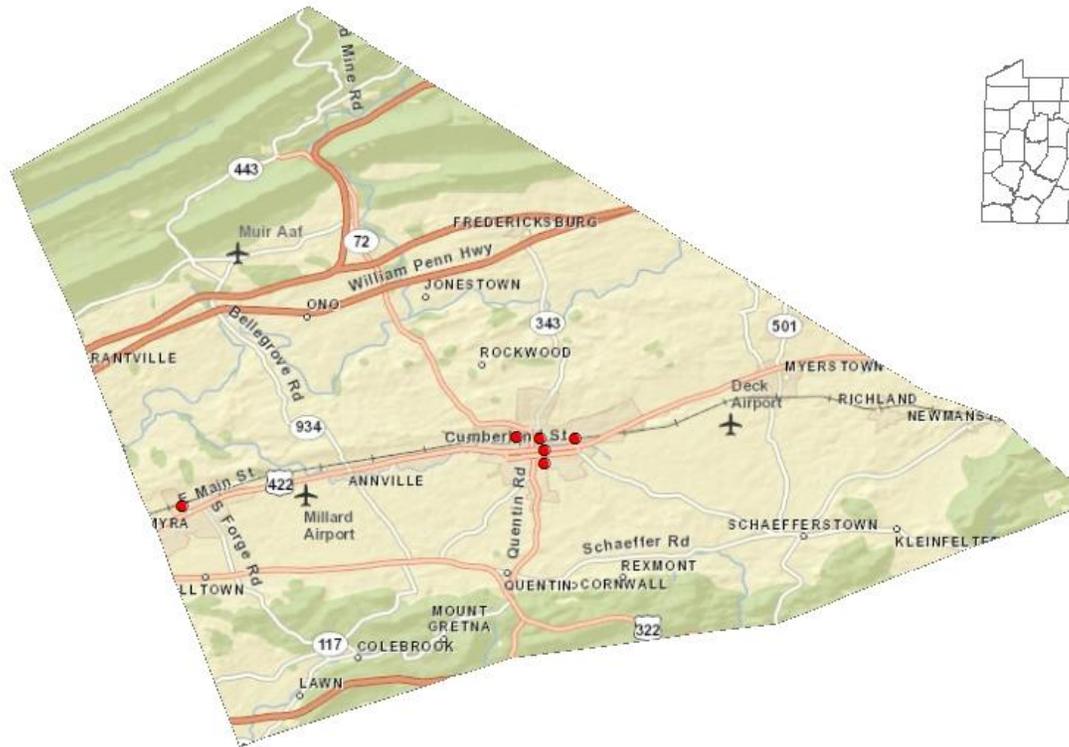
Legend

- Zika Surveillance Site



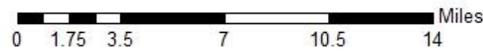


Weekly *Aedes albopictus* Surveillance Sites Lebanon County



Legend

- Zika Surveillance Site





Weekly *Aedes albopictus* Surveillance Sites Lehigh County



Legend

- Zika Surveillance Site



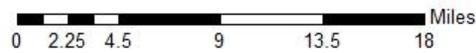


Weekly *Aedes albopictus* Surveillance Sites Luzerne County



Legend

- Zika Surveillance Site



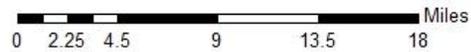


Weekly *Aedes albopictus* Surveillance Sites Montgomery County



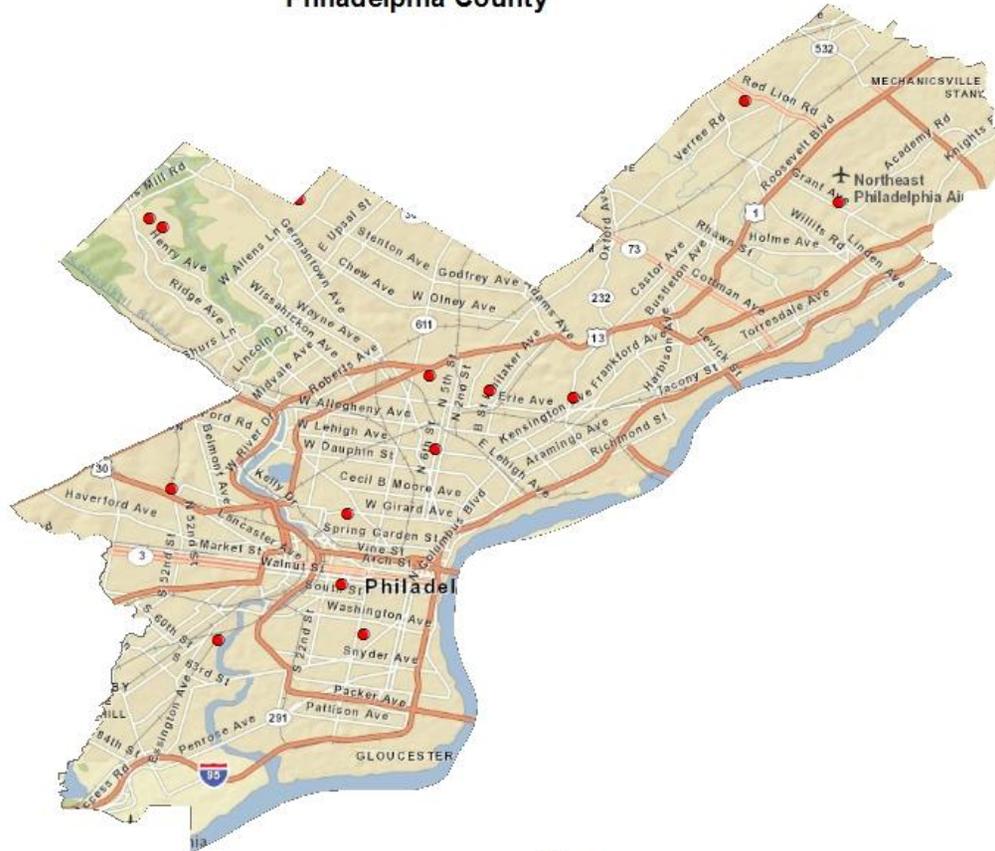
Legend

- Zika Surveillance Site



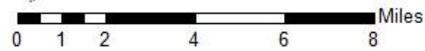


Weekly *Aedes albopictus* Surveillance Sites Philadelphia County



Legend

- Zika Surveillance Site





Weekly *Aedes albopictus* Surveillance Sites York County



Legend

- Zika Surveillance Site

