ZIKA VIRUS TESTING AND REPORT FORM

FAILURE TO COMPLETE REQUIRED FIELDS WILL RESULT IN SPECIMEN REJECTION OR DELAYED TESTING

Acute Communicable Disease Control
313 N. Figueroa St., Rm. 212
Los Angeles, CA 90012
213-240-7941 (phone), 213-482-4856 (fax)
publichealth.lacounty.gov/acd/

REQUIRED SUBMITTER INFORMATION

Requesting Physician Name (Last, First)	Facility/Submitter Name and Address		Date of Request
Requesting Physician Pager or Phone No.	Facility Fax Number	Facility Phone Number	Contact Person for Specimen(s)
Requesting Physician Email			Contact Person Phone

REQUIRED EPIDEMIOLOGICAL INFORMATION

The patient:

1. **Resides in Los Angeles County** (click hyperlink to lookup address)**?** ☐ Yes ☐ No **If No, Call appropriate HEALTH DEPARTMENT.**
2. **Has a history of travel to a Zika affected country** (click hyperlink for list)**?** ☐ Yes ☐ No
   If Yes, Country? _____ Dates of travel: From _____ to _____
3. **Is what gender?** ☐ Male ☐ Female ☐ Other: _____
   If Female, Pregnant? ☐ Yes ☐ No If Yes, Estimated date of delivery: _____
   Ultrasound screening evidence of microcephaly &/or calcifications in a fetus? ☐ Yes ☐ No ☐ Not done
   Did the pregnant woman have unprotected sex with a male traveler who had symptoms w/in 14 days of his return? ☐ Yes ☐ No
   If Yes, Male Partner Name _____ **Complete another testing form for symptomatic male.**
4. **Has any of the following symptoms?** ☐ Yes ☐ No If Yes, Specify symptoms and Onset Date: _____
   ☐ Acute onset of fever (measured or reported) ☐ Maculopapular rash ☐ Arthralgia ☐ Conjunctivitis
5. **Is a postpartum mother who has an infant with evidence of microcephaly?** ☐ Yes ☐ No Delivery date: _____
6. **Has a Guillain-Barré Syndrome diagnosis?** ☐ Yes ☐ No If Yes, Specify Onset Date: _____

REQUIRED ELIGIBILITY SCREEN FOR TESTING

Using the Epidemiological Information section above, check ☑ which category the travelers fits in:

- ☐ **Symptomatic Pregnant Traveler** ☐ Onset of symptoms within 14 days of return OR ☐ Onset during travel
- ☐ **Asymptomatic Pregnant Traveler** - Within 12 weeks after return from travel
- ☐ **Pregnant Traveler** – regardless of symptoms
  - ☐ Ultrasound screening evidence of microcephaly and/or calcifications in a fetus OR ☐ Fetal loss
- ☐ **Infant of a Recently Pregnant Traveler** - Evidence of microcephaly in an infant
  Provide Mother's Name _____ and Mother's Date of Birth _____
- ☐ **Infant with no apparent defect AND the mother has laboratory evidence of Zika virus infection** (See instructions.)
- ☐ **Symptomatic pregnant woman with NO travel history AND had unprotected sex with a symptomatic male traveler**
- ☐ **Symptomatic Non-Pregnant Traveler (Male or Female)** - Onset of symptoms within 14 days of return
- ☐ **Traveler with a Guillain-Barré Syndrome diagnosis**
- ☐ **Patient does not fit into any of the above categories.**
  Contact Acute Communicable Disease Control at 213-240-7941 for consultation.

Patient Name (Last, First, Middle Initial)	Date of Birth (mm/dd/yyyy)

California Certified Public Health Laboratory #335637
CLIA #05D1066369

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC HEALTH
PUBLIC HEALTH LABORATORIES

12750 Erickson Avenue
Downey, CA 90242
Phone 562-658-1330/1300
Fax 562-401-5999

PUBLIC HEALTH LAB
USE ONLY

ZIKA TEST REQUISITION

THIS PART OF THE FORM MUST BE ACCOMPANIED BY PAGE 1
A SEPARATE TEST REQUEST MUST BE COMPLETED FOR EACH SPECIMEN TYPE

ALL FIELDS ON THIS PART OF THE FORM MUST BE COMPLETED
FAILURE TO COMPLETE ALL FIELDS WILL RESULT IN SPECIMEN REJECTION OR DELAY

REQUIRED PATIENT INFORMATION

Patient Name (Last, First, Middle Initial)	Date of Birth (mm/dd/yyyy)	Sex ☐ Male ☐ Female ☐ Other	
Patient Address- Number, Street, Apt #	City	State	ZIP Code
Patient Home Telephone Number	Patient Work Telephone Number	Patient Cell Number	
MRN/Patient ID	Requesting Physician (Last, First)		

Previous Vaccination? ☐ Tick-borne Encephalitis ☐ Yellow Fever ☐ Japanese Equine Encephalitis

Previous Testing? Chikungunya ☐ Pos ☐ Neg ☐ Pending ☐ Not done Dengue ☐ Pos ☐ Neg ☐ Pending ☐ Not done

REQUIRED – Test(s) Requested

☐ Arbovirus serology panel (serum, cord blood, or CSF)
Includes Zika, Chikungunya, and Dengue

☐ Arbovirus RT-PCR (serum, cord blood, urine, body fluids, and fresh/frozen/fixed tissue)
Includes Zika, Chikungunya, and Dengue

☐ Immunohistochemistry (fixed tissue or paraffin block)

☐ Histopathology (fixed tissue or paraffin block)

REQUIRED - Specimen Source
Each specimen type requires a separate test request form

☐ Serum
☐ Urine
☐ Cord Blood
☐ Amniotic Fluid
☐ Fetal tissue
(specify type): _____
☐ Placenta
☐ CSF (if collected for other purposes)

REQUIRED

Date specimen collected: _____
Time: _____

COUNTY OF LOS ANGELES
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INSTRUCTION FOR ZIKA TEST REQUESTS
Guidance Date: June 23, 2016

Recommendations may be frequently updated. Ensure that you check DPH website frequently for updated guidance and instructions.

1. If a provider suspects a case of Zika virus and requires testing, the provider should obtain relevant patient clinical history including previous Dengue/Chikungunya/West Nile Virus, patient travel history, Japanese encephalitis virus/Yellow Fever/Tickborne Encephalitis vaccination history, and results of other relevant diagnostic tests if performed (ex. ultrasound imaging, TORCH serology panel, West Nile virus serology, Dengue serology, Chikungunya serology, etc.).

   For an updated list of countries with Zika virus infection, visit the following websites:
   http://www.cdc.gov/zika/geo/active-countries.html

2. Appropriate samples types and available tests are described in the tables below. In general, suspect acute Zika patients, should receive both serology and PCR testing. **If ≤7 days from onset of symptoms, submit both urine and serum specimens**. Asymptomatic patients with suspect Zika exposure should receive serology testing. Note, requests for serology and PCR requires separate specimens.

3. Provider downloads and completes the "Zika Virus Testing and Report" form from the Los Angeles County Department of Public Health website. Separate testing forms (both pages 1 and 2) must accompany each specimen type. See http://publichealth.lacounty.gov/acd/docs/ZikaInfoTestReq.pdf.

4. The "Required Information for Zika Virus Testing" form indicates required information and must contain the following:
   (1) Facility/Submitter name, address, phone, and fax
   (2) Requesting provider name (Last, First) and contact information to enable reporting of results.
   (3) Patient name or unique patient identifier
   (4) Patient sex
   (5) Patient date of birth
   (6) Test(s) to be performed
   (7) Specimen source
   (8) Date and time of specimen collection

5. Provider collects samples and sends to the Los Angeles County Public Health Laboratories.

   If provider or patient is unable to obtain phlebotomy services, contact the Los Angeles Acute Communicable Disease Control Program for assistance, approval, and referral to a Los Angeles County Public Health Clinic.

6. Specimens must be labeled with the following information:
   - Patient name (Last, First)
   - Date of Birth
   - Collection Date and Collection Time

   Samples must be sent to the Los Angeles County Public Health Laboratories as soon as possible and within 24 hours of collection. Each specimen type must come with its own test request form and packaged using individual biohazard specimen transport bags. Leaking specimens will be rejected. Specimen transport

conditions must be followed or sample will be rejected. Proper storage and transport conditions preserve analyte integrity within the sample. Samples submitted with incomplete intake information, incomplete patient history, incomplete or discrepant patient sample identifiers and labelling information, or incomplete test request form will not be tested.

7. For consultation regarding appropriate testing, provider should contact the Los Angeles County Department of Public Health Acute Communicable Disease Control (ACDC). ACDC can be contacted by calling 213-240-7941 during business hours. After hours, weekends, or holidays contact the County Operator (option 8) and ask for the Public Health Physician on call at 213-974-1234.

8. For questions regarding specimen collection or laboratory interpretation, provider should contact the Los Angeles County Public Health Laboratories. The laboratory can be contacted at 562-658-1330 during business hours. After hours, weekends, or holidays contact the County Operator (option 8) and ask for the Public Health Laboratories Director at 213-974-1234.

9. Laboratory samples should be sent to:

   Los Angeles County Public Health Laboratories
   12750 Erickson Avenue
   Downey, CA 90242
   Phone 562-658-1330
   Fax 562-401-5999

   At this time, laboratory samples for Zika testing should not be sent directly to the California State Department of Public Health or Centers for Disease Control.

   If provider does not have access to courier services, the Public Health Laboratories will assist to arrange for sample pick up. Courier arrangements are made by calling Public Health Laboratories Central Accessioning Unit at 562-658-1460.

10. Provider may be required to complete additional forms for receiving results by fax if not currently a client of the Los Angeles County Public Health Laboratories. Note, convalescent serum or an additional serum sample may be requested depending on laboratory results.

COUNTY OF LOS ANGELES
Public Health

ZIKA TESTING AND NOTIFICATION

Indications for Zika testing	IgM serology[1] (serum, CSF)	RT-PCR[2] (serum, urine, or other sample types)	Call to Notify Public Health of these special cases 213-240-7941
Pregnancy-associated			
Symptomatic pregnant traveler (At least one of the following: acute onset of fever [measured or reported], maculopapular rash, arthralgia, conjunctivitis)	YES	YES	NO
Asymptomatic pregnant traveler	YES[3]	NO	NO
Pregnant traveler with ultrasound evidence of fetal microcephaly (occipitofrontal circumference <3rd percentile for age and gender) and/or calcifications[4] OR fetal loss[5]	YES	YES	YES
Infant with microcephaly and/or calcifications and evidence of maternal Zika virus infection[6]	YES	YES[7]	YES
Infant with no apparent defect and evidence of maternal Zika virus infection[6]	YES	YES	YES
Symptomatic pregnant woman without travel history who had unprotected sex with a symptomatic male traveler from Zika affected area	YES	YES	YES
In Non–Pregnant Patients			
Symptomatic non-pregnant traveler (male or female) (At least one of the following: acute onset of fever [measured or reported], maculopapular rash, arthralgia, conjunctivitis)	YES	YES	NO
Traveler with Guillain-Barré Syndrome diagnosis	YES	NO	YES

[1] For those symptomatic, collect serum for IgM ≥4 days post symptom onset
[2] If ≤7 days from onset of symptoms, **submit both urine and serum specimens;** urine should be collected within 14 days of symptom onset to improve sensitivity of diagnosis, however urine specimens collected within 30 days will continue to be accepted.
[3] Collect sample between 2-12 weeks of return
[4] Consider testing amniotic fluid
[5] Additional specimens will be requested: e.g. placenta, fetal tissues
[6] Positive or inconclusive Zika virus serology
[7] Additional specimens will be requested: e.g. cord blood, placenta/umbilical cord tissue, CSF

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SPECIMEN REQUIREMENTS FOR ZIKA TESTING

Clinics able to process specimens may centrifuge blood and transfer serum to a separate, sterile labeled tube. Note, requested sample volumes are for adults. Samples must be sent to the Los Angeles County Public Health Laboratories as soon as possible and within 24 hours of collection.

Test	Specimen Type	Specimen Requirements	Storage and Transport Conditions*
Zika IgM serology	Serum	(QTY 2) 5-7 mL plastic red top or gold top serum separator tube**	Store at 4-8°C and immediately ship on cold pack
	CSF (if collected for other purposes)	2 mL collected in sterile container	Store at 4-8°C and immediately ship on cold pack
Zika real-time RT-PCR Note: Serum is the primary specimen type for Zika PCR. Other samples may be requested depending on patient status and history. If <7 days from onset of symptoms, submit both urine and serum specimens; urine should be collected within 14 days of symptom onset to improve sensitivity of diagnosis, however urine specimens collected within 30 days will continue to be accepted.	Serum	(QTY 2) 5-7 mL plastic red top or gold top serum separator tube**	Store at 4-8°C and immediately ship on cold pack
	CSF (if collected for other purposes)	2 mL collected in sterile container	Store at 4-8°C and immediately ship on cold pack
	Urine, random	10-20 mL collected in sterile container	Store at 4-8°C and immediately ship on cold pack
	COLLECT THESE SPECIMEN TYPES ONLY UPON CONSULTATION AND INSTRUCTION FROM PUBLIC HEALTH		
	Amniotic Fluid	5-10 mL collected in sterile container	Store at 4-8°C and immediately ship on cold pack
	Cord Blood	(QTY 2) 5-7 mL red top or gold top serum separator tube**	Store at 4-8°C and immediately ship on cold pack
	Placenta	Intact if early gestation or extensive sampling of full thickness pieces including disk, membranes, umbilical cord, any pathologic lesions	Store fresh sample at 4-8°C and immediately ship on cold pack. If frozen, ship on dry ice. If fixed, ship at room temperature.
	***Fetal Tissue, fresh or frozen	At minimum, 1 cm^3 section from each organ collected in sterile container	Store fresh sample at 4-8°C and immediately ship on cold pack. If frozen, ship on dry ice.
	***Fetal Tissue, Formalin Fixed	At minimum, 1 cm^3 section	Store and ship at room temperature
	***Fetal Tissue, Paraffin Block	Paraffin embedded block	Store and ship at room temperature
Zika Histopathology and Immunohistochemistry	***Fetal Tissue, Fixed or Paraffin Block	As above	Store and ship at room temperature

* Specimens must be received within 24 hours of collection.
**Do not use glass vacutainer tube for blood collection. Do not use tubes that contain anti-coagulants.
***To optimize evaluation of possible Zika virus infection on fetal tissues, please provide both formalin fixed and unfixed tissues. If it is not possible to provide both types of tissues, prioritize formalin fixed tissues. For additional information regarding collection of fetal or infant tissues, please contact the Public Health Laboratories for guidance.