PLEASE NOTE-REVISED CHART (July 2018)

Maryland Department of Health (MDH) Laboratories Administration
Guidelines and Instructions for Zika Testing

An infectious disease consultation with MDH is no longer required to authorize specimens for Zika virus testing at the MDH Laboratory. However, prior to submission of specimens, review of the current MDH Zika virus testing guidance at ***https://phpa.health.maryland.gov/pages/zika.aspx*** is highly recommended, as well as the CDC guidance found in the links below.

Specimen Collection and Handling

Testing Category	Specimen Type (see notes 1 & 2)	Volume/Amount	Collect in:	Storage and Shipping Conditions (see note 3 for storage > 5 days)
Symptomatic Adults and Children **Asymptomatic Pregnant Women** (for whom testing is indicated) ***Refer to http://www.cdc.gov/zika/hc-providers/types-of-tests.html***	Serum	3-5ml (6-10 ml blood draw)	Red top, tiger top, or gold top serum separator tube	Refrigeration (2-8°C)
	Whole Blood	4-5 ml	Purple top EDTA tube	Refrigeration (2-8°C)
	Urine	5-10 ml	Leak proof, sterile urine cup; label as urine	Refrigeration (2-8°C)
	Cerebral Spinal Fluid (CSF)	1-2 ml	Leak proof, sterile tube or vial; label as CSF	Refrigeration (2-8°C)
Infants (within 2 days of birth) ***Refer to CDC Guidelines on Collecting and Submitting Specimens at Time of Birth for Zika Virus Testing http:/www.cdc.gov/zika/hc-providers/test-specimens-at-time-of-birth.html***	Serum	≥2 ml serum (≥4 ml blood draw)	Red top, tiger top, or gold top serum separator tube	Refrigeration (2-8°C)
	Urine	5-10 ml	Leak proof, sterile urine cup; label as urine	Refrigeration (2-8°C)
	Fixed Placenta, Fetal membrane, Umbilical Cord	1 inch square of: - Umbilical cord - Fetal membranes - Placental disk edge - Placental disk midsection - Pathologic Lesions	Fix specimens in formalin; volume of formalin used should be as small as possible, but about 10x mass of tissue. (see note 4 for further instructions)	Room Temperature

Notes

1) A serum specimen must accompany all urine, CSF, or whole blood specimens, or testing will not be performed.
2) Plasma is not accepted for Zika testing at MDH.
3) If specimens (except whole blood and fixed tissue) are to be held for longer than 5 days after collection until delivery to the testing lab, it is recommended to freeze to ≤20° C and ship frozen (on dry ice). Avoid repeating freezing and thawing cycles. Whole blood EDTA should not be frozen but refrigerated and tested within one week of collection. Fixed tissue should be held and shipped at room temperature.
4) Place tissue collected according to the dimensions provided above in 10% buffered formalin for three days (72 hours). After fixation, if not paraffin-embedded, tissues SHOULD be transferred to 70% ethanol for long term storage and for shipping.

Must complete the test request authorization information (This is where reports will be sent). Include the name of Healthcare provider who can legally order the test(s) in "Test Request Authorized by"

Request Arbovirus Travel-Associated Panel. Provide specimen source:

Indicate **"S"** for serum – (SST or aliquot) or whole clotted blood (red top)

Accompanying specimens*:

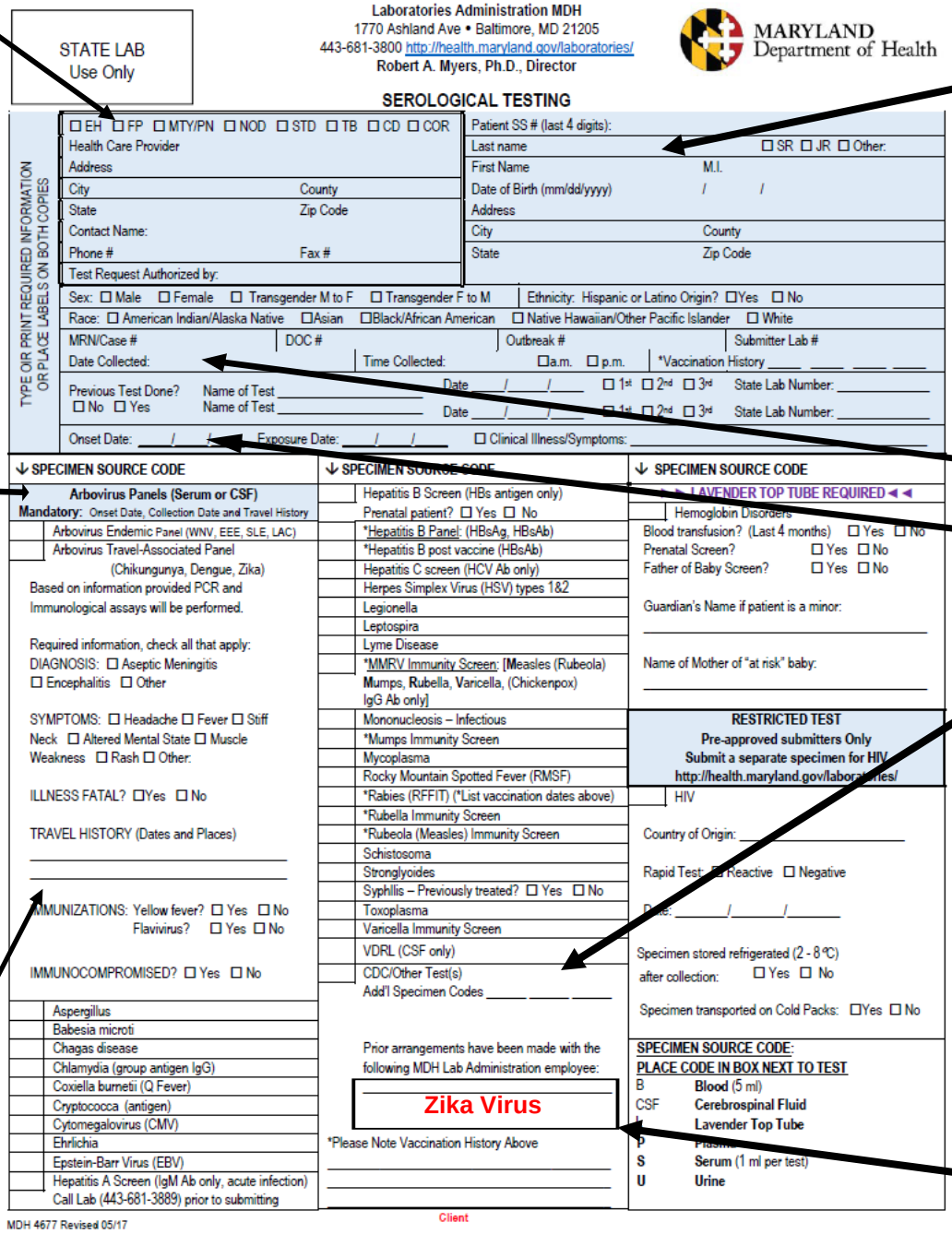
Indicate **"B"** for whole unclotted blood with EDTA (Purple top) **UNSPUN**

Indicate **"U"** for urine. (Leak-proof sterile urine cup)

Indicate **"CSF"** for Cerebrospinal fluid (Leak-proof sterile tube or vial)

***Urine, Whole blood, and CSF MUST be submitted with an accompanying serum specimen.**

Complete patient's Travel history (**location and dates**), symptoms (or asymptomatic), **pregnancy status (including weeks of gestation)** vaccination history, & immune status.



STATE LAB Use Only

Laboratories Administration MDH
1770 Ashland Ave • Baltimore, MD 21205
443-681-3800 http://health.maryland.gov/laboratories/
Robert A. Myers, Ph.D., Director

MARYLAND Department of Health

SEROLOGICAL TESTING

TYPE OR PRINT REQUIRED INFORMATION OR PLACE LABELS ON BOTH COPIES

☐ EH ☐ FP ☐ MTY/PN ☐ NOD ☐ STD ☐ TB ☐ CD ☐ COR
Health Care Provider
Address
City County
State Zip Code
Contact Name:
Phone # Fax #
Test Request Authorized by:

Patient SS # (last 4 digits):
Last name ☐ SR ☐ JR ☐ Other:
First Name M.I.
Date of Birth (mm/dd/yyyy) / /
Address
City County
State Zip Code

Sex: ☐ Male ☐ Female ☐ Transgender M to F ☐ Transgender F to M
Ethnicity: Hispanic or Latino Origin? ☐ Yes ☐ No
Race: ☐ American Indian/Alaska Native ☐ Asian ☐ Black/African American ☐ Native Hawaiian/Other Pacific Islander ☐ White
MRN/Case # DOC # Outbreak # Submitter Lab #
Date Collected: Time Collected: ☐ a.m. ☐ p.m. *Vaccination History ____ ____ ____ ____
Previous Test Done? ☐ No ☐ Yes Name of Test _____ Date ___/___/___ ☐ 1st ☐ 2nd ☐ 3rd State Lab Number: _____
Name of Test _____ Date ___/___/___ ☐ 1st ☐ 2nd ☐ 3rd State Lab Number: _____
Onset Date: ___/___/___ Exposure Date: ___/___/___ ☐ Clinical Illness/Symptoms: _____

↓ SPECIMEN SOURCE CODE

Arbovirus Panels (Serum or CSF)
Mandatory: Onset Date, Collection Date and Travel History

☐ Arbovirus Endemic Panel (WNV, EEE, SLE, LAC)
☐ Arbovirus Travel-Associated Panel (Chikungunya, Dengue, Zika)
Based on information provided PCR and Immunological assays will be performed.

Required information, check all that apply:
DIAGNOSIS: ☐ Aseptic Meningitis ☐ Encephalitis ☐ Other

SYMPTOMS: ☐ Headache ☐ Fever ☐ Stiff Neck ☐ Altered Mental State ☐ Muscle Weakness ☐ Rash ☐ Other:

ILLNESS FATAL? ☐ Yes ☐ No

TRAVEL HISTORY (Dates and Places)
_____
_____

IMMUNIZATIONS: Yellow fever? ☐ Yes ☐ No
Flavivirus? ☐ Yes ☐ No

IMMUNOCOMPROMISED? ☐ Yes ☐ No

☐ Aspergillus
☐ Babesia microti
☐ Chagas disease
☐ Chlamydia (group antigen IgG)
☐ Coxiella burnetii (Q Fever)
☐ Cryptococca (antigen)
☐ Cytomegalovirus (CMV)
☐ Ehrlichia
☐ Epstein-Barr Virus (EBV)
☐ Hepatitis A Screen (IgM Ab only, acute infection) Call Lab (443-681-3889) prior to submitting

↓ SPECIMEN SOURCE CODE

☐ Hepatitis B Screen (HBs antigen only)
Prenatal patient? ☐ Yes ☐ No
☐ *Hepatitis B Panel: (HBsAg, HBsAb)
☐ *Hepatitis B post vaccine (HBsAb)
☐ Hepatitis C screen (HCV Ab only)
☐ Herpes Simplex Virus (HSV) types 1&2
☐ Legionella
☐ Leptospira
☐ Lyme Disease
☐ *MMRV Immunity Screen: [Measles (Rubeola) Mumps, Rubella, Varicella, (Chickenpox) IgG Ab only]
☐ Mononucleosis – Infectious
☐ *Mumps Immunity Screen
☐ Mycoplasma
☐ Rocky Mountain Spotted Fever (RMSF)
☐ *Rabies (RFFIT) (*List vaccination dates above)
☐ *Rubella Immunity Screen
☐ *Rubeola (Measles) Immunity Screen
☐ Schistosoma
☐ Stronglyoides
☐ Syphilis – Previously treated? ☐ Yes ☐ No
☐ Toxoplasma
☐ Varicella Immunity Screen
☐ VDRL (CSF only)
☐ CDC/Other Test(s) Add'l Specimen Codes ____ ____ ____

Prior arrangements have been made with the following MDH Lab Administration employee:
Zika Virus
*Please Note Vaccination History Above
_____
_____
Client

↓ SPECIMEN SOURCE CODE

◄◄ LAVENDER TOP TUBE REQUIRED ►►
☐ Hemoglobin Disorders
Blood transfusion? (Last 4 months) ☐ Yes ☐ No
Prenatal Screen? ☐ Yes ☐ No
Father of Baby Screen? ☐ Yes ☐ No

Guardian's Name if patient is a minor:
_____

Name of Mother of "at risk" baby:
_____

RESTRICTED TEST
Pre-approved submitters Only
Submit a separate specimen for HIV
http://health.maryland.gov/laboratories/

☐ HIV
Country of Origin: _____
Rapid Test: ☐ Reactive ☐ Negative
Date: ___/___/___
Specimen stored refrigerated (2 - 8 ℃) after collection: ☐ Yes ☐ No
Specimen transported on Cold Packs: ☐ Yes ☐ No

SPECIMEN SOURCE CODE:
PLACE CODE IN BOX NEXT TO TEST
B **Blood** (5 ml)
CSF **Cerebrospinal Fluid**
L **Lavender Top Tube**
P Plasma
S **Serum** (1 ml per test)
U **Urine**

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Patient's first & last names must be on the specimen container and exactly match the lab slip

Collection Date and Onset of Symptoms Date **MUST** be completed

If specimens other than whole blood, urine, serum, or CSF are being requested, please note type of specimen here, e.g.:

Fresh or Fixed Tissue

You must write **"Zika Virus"** to request testing.

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TYPE OR PRINT REQUIRED INFORMATION OR PLACE LABELS ON BOTH COPIES

☐ EH ☐ FP ☐ MTY/PN ☐ NOD ☐ STD ☐ TB ☐ CD ☐ COR

Health Care Provider	
Address	
City	County
State	Zip Code
Contact Name:	
Phone #	Fax #
Test Request Authorized by:	

Patient SS # (last 4 digits):	
Last name	☐ SR ☐ JR ☐ Other:
First Name	M.I.
Date of Birth (mm/dd/yyyy)	/ /
Address	
City	County
State	Zip Code

Sex: ☐ Male ☐ Female ☐ Transgender M to F ☐ Transgender F to M

Ethnicity: Hispanic or Latino Origin? ☐ Yes ☐ No

Race: ☐ American Indian/Alaska Native ☐ Asian ☐ Black/African American ☐ Native Hawaiian/Other Pacific Islander ☐ White

MRN/Case #	DOC #	Outbreak #	Submitter Lab #
Date Collected:	Time Collected: ☐ a.m. ☐ p.m.	*Vaccination History ____ ____ ____ ____	

Previous Test Done? ☐ No ☐ Yes
Name of Test _____ Date ____/____/____ ☐ 1st ☐ 2nd ☐ 3rd State Lab Number: _____
Name of Test _____ Date ____/____/____ ☐ 1st ☐ 2nd ☐ 3rd State Lab Number: _____

Onset Date: ____/____/____ Exposure Date: ____/____/____ ☐ Clinical Illness/Symptoms: _____

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SYMPTOMS: ☐ Headache ☐ Fever ☐ Stiff Neck ☐ Altered Mental State ☐ Muscle Weakness ☐ Rash ☐ Other:

ILLNESS FATAL? ☐ Yes ☐ No

TRAVEL HISTORY (Dates and Places)

_____

_____

IMMUNIZATIONS: Yellow fever? ☐ Yes ☐ No
Flavivirus? ☐ Yes ☐ No

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☐ Schistosoma
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☐ Syphllis – Previously treated? ☐ Yes ☐ No
☐ Toxoplasma
☐ Varicella Immunity Screen
☐ VDRL (CSF only)
☐ CDC/Other Test(s)
Add'l Specimen Codes _____ _____ _____

Prior arrangements have been made with the following MDH Lab Administration employee:

_____

*Please Note Vaccination History Above

_____

_____

_____

↓ SPECIMEN SOURCE CODE

►► LAVENDER TOP TUBE REQUIRED ◄◄

☐ Hemoglobin Disorders
Blood transfusion? (Last 4 months) ☐ Yes ☐ No
Prenatal Screen? ☐ Yes ☐ No
Father of Baby Screen? ☐ Yes ☐ No

Guardian's Name if patient is a minor:

_____

Name of Mother of "at risk" baby:

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Pre-approved submitters Only
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http://health.maryland.gov/laboratories/

☐ HIV

Country of Origin: _____

Rapid Test: ☐ Reactive ☐ Negative

Date: _____/_____/_____

Specimen stored refrigerated (2 - 8℃) after collection: ☐ Yes ☐ No

Specimen transported on Cold Packs: ☐ Yes ☐ No

SPECIMEN SOURCE CODE:
PLACE CODE IN BOX NEXT TO TEST

B	Blood (5 ml)
CSF	Cerebrospinal Fluid
L	Lavender Top Tube
P	Plasma
S	Serum (1 ml per test)
U	Urine

Client

CLINIC CODES

EH – Employee Health
FP – Family Planning
MTY/PN – Maternity/Prenatal
NOD – Nurse of Day
STD/STI – Sexually Transmitted Disease/Infections
CD- Communicable Disease
COR – Correctional Facility
Do not mark a box if clinic type does not apply

COMPLETING FORM

Type or print legibly
Print labels are recommended
Please print labels on all copies of form
Write the person's name that is authorized to order test in the box provided
Press firmly – two part form
Collection date and time are required by Law.
WRITE SPECIMEN CODE in box next to test
***Specimen/samples cannot be processed without a requested test.**

VACCINATION HISTORY

List vaccination dates for all Rabies, Hepatitis B and MMRv (Mumps, Measles, Rubella and Varicella) test request.
Rabies Vaccination history is required for all RFFIT test requests.

HIV TESTING

Include previous HIV Test information in the top section under Previous Test done.
Submit a separate specimen for HIV testing when multiple tests are ordered on the one form.

Questions/comments on the use of the specimen bags/storage/shipping or completing the form contact:
Accessioning Unit 443-681-3842 or 443-681-3793

To order collection kits and/or specimen collection supplies, contact:
Outfit Unit 443-681-3777 or Fax 443-681-3850

For Specific Test Requirements Refer to:
"Guide to Public Health Laboratory Services"
Available online: mdh.maryland.gov/laboratories

LABELING SPECIMENS/SAMPLES

Printed labels with all required patient information are recommended.

Print patient name, date of birth.
Print date and time the specimen was collected.

DO NOT cover expiration date of collection container.

Write specimen source on the collection container(s).

PACKAGING SPECIMENS FOR TRANSPORT

Never place specimens with different temperature requirements in the same biobag.

Use one (1) biobag per temperature requirement.

Review test request form to ensure all test(s) have been marked.

Verify all specimens have been labeled.

Place folded request form(s) in outer pouch of biobag.

Multiple specimens from the same patient with the same temperature requirements must be packaged together in one (1) biobag.

URINE SPECIMENS – Refrigerate PACKAGING AND SHIPPING

Double bag all urine specimens.

Urine specimens require absorbent towel in biobag with specimen (express excess air before sealing).

Place bagged urine specimen in second biobag with all refrigerated specimens from the same patient.

Place folded test request form(s) in outer pouch of second bag.