Hospital Name

Clinical Protocol for Suspected Zika Virus Infection (Date of the Protocol)
*(Additions to **(Date of Previous Version)** of Protocol are marked in **(color or font)***

This protocol may not address all the specific issues related to managing patients in a particular department or working patient up for all possible differential diagnosis. For specific department/service guidance to evaluate and manage patients please refer to the CDC Zika healthcare provider section at http://www.cdc.gov/zika/hc-providers/index.html. For Employee Health and Education Re: Zika Please see Hospital Policy# on Intranet.

This protocol is divided into six sections:

I. For Healthcare Screening/Triage Staff

1. At all points of entries for healthcare, ask all patients "In the **3** weeks prior to illness onset or presentation have you traveled to or lived or worked or had unprotected sex with someone who traveled to lived or worked in the areas or countries on the CDC's list of areas/countries with active Zika Virus transmission at this link (www.cdc.gov/zika/geo/index.html). This includes Wynwood area and/or Miami Beach area of Miami Dade County (see maps on page 40) and US territories (including Puerto Rico, US Virgin Island, America Samoa/Oceania/Pacific Islands), "As of August 31st, 2016 58 countries and territories worldwide including 48 countries/territories in the Americas are reporting active Zika virus transmission mentioned in the updated list of the countries/areas with Zika transmission (www.cdc.gov/zika/geo/index.html and http://wwwnc.cdc.gov/travel/page/zika-information)
   a. If "Yes" Record the name of the countries/areas and dates traveled along with Chief Complaint in the Chief Complaint Field.
   b. Ask all women of child bearing age if they are pregnant and record "pregnant" in the chief complaint field. Pregnant women history will also include Zika symptoms *(see #2 below)* onset following exposure to Zika Virus (see #1 above).
   c. If "Yes" (for exposure history and/or Pregnancy) and clinical symptoms of Zika Virus disease (see #2 below): continue with Zika Virus Disease protocol as outlined below.
   d. If "No" for exposure history and "No" for clinical symptoms of Zika Virus disease" (see #2 below) and not pregnant: continue with routine clinical management.
   e. If "Yes" for exposure history and no clinical symptoms of Zika Virus disease (see # 2 below) and pregnant: continue with routine clinical care: refer patient to outpatient lab for Zika Virus testing *(See "Pregnant Women" Part of this protocol on pages 14-29)*, regardless of the length of time since the travel occurred, but ideally within 2-12

weeks, after notification to **State Department of Health in County** ***after full discussion with the mother about the testing, impact and medical need***.

f. If not sure of pregnant status and exposure history is positive, then get a pregnancy test, and then follow appropriate part of the protocol.

2. At all points of entries healthcare, all patients will be asked if they have any of the following symptoms:
   a. Fever
   b. Maculopapular Rash
   c. Arthralgias and/or Myalgias
   d. Conjunctivitis
   e. Headache and/or Retro orbital Pain

3. If a patient has any 2 or more of these 5 symptoms then: **(Also see 3e & 3f)**
   a. Pregnant patients > 20 weeks will be taken to OB Triage and the nurse accepting the patient will be advised of Suspect **Zika** Virus Disease case
   b. All other patients will be taken to a clinical evaluation & treatment area
   c. If the patient has 2 of these 5 symptoms (look under #2 above) and no history of travel to an area with Zika transmission (see # 1 above), but who lives in the same household as a person who traveled to an area reporting Zika Virus Activity (Locally Acquired Mosquito Transmission) or had sexual contact (Vaginal Intercourse, Anal Intercourse or Fellatio or sharing of sex toys used in vaginal, oral or oral sex) with a confirmed Zika case or an ultrasound indicating microcephaly of the fetus in a pregnant woman who is asymptomatic and had sexual contact (Vaginal Intercourse, Anal Intercourse or Fellatio or sharing of sex toys used in vaginal, oral, or oral sex) with a partner that had travel history to an area with active Zika Transmission or if the sex partners has 2 of the 5 symptoms mentioned under #2 above should also be presented to Department of Health (DOH) to determine if patient qualifies for Zika Virus testing as a suspected locally acquired case ***(Phone # XXX XXX-XXXX)*** and if so follow the protocol below *(Please see Pages 9-10). Please also see *footnote on page 29*.
   d. Mothers of a fetus with microcephaly or intracranial calcifications or poor fetal outcome diagnosed after the first trimester who have history of possible exposure (see#1 above) to Zika Virus activity during pregnancy should also be tested for Zika after notification (for pregnant women) of the County Health Department Epidemiology ***(Phone# XXX XXX-XXXX).*** Both the mother of the infant and infant with microcephaly or intracranial calcification should also be tested for Zika after getting approval from County Health Department ***(Phone# XXX XXX-XXXX)***. *Please also see *footnote on page 29.*
   e. Notification County Health Department ***(Phone# XXX XXX-XXXX)*** for Zika testing should also be done for persons (men and women) who are attempting conception with possible exposure to Zika Virus with one or more of the signs or symptoms mentioned under 2 above during travel or within 3 weeks of possible exposure unless a definite alternate cause of patient's signs and symptoms is established.
   f. Notification to County Health Department ***(Phone # XXX XXX-XXXX)*** for Zika testing should also be done for pregnant women who have had sex without condom/barriers with a male or female partner with possible Zika Virus exposure if she develops at least one sign or symptom mentioned under 2 above; her male or female partner had

Zika Virus Disease or her male or female partner developed at least one sign or symptom of Zika Virus Disease mentioned under 2 above unless a definite alternate cause of patient's signs and symptoms is established.

g. Please check with, as needed, with County Health Department, at the time of the call to notify of them for the test, as to the appropriate specimens to send and tests to order for Zika based on clinical scenario of your patient. (Also see pregnant women section of protocol).

4. Person conducting screening will notify treating Healthcare Provider and the Nurse Manager, verbally, that patient has a suspected Zika virus infection and will also document it.

   STANDARD INFECTION CONTROL PRECAUTIONS WILL BE FOLLOWED for suspected or confirmed Zika infection cases. (Also see Page 19 for prevention of transmission in labor and delivery settings)

5. Pregnant Population/Patients (seen in OB Triage/OB Service/ACC /PCC) will also follow this part of protocol along with additional evaluation testing/follow-up of the pregnancy outlined in pregnant population/patients part of this protocol (Section III).

   7/25/2016 Updated Interim Guidance for Health Care Providers Caring for Pregnant Women with possible Zika Virus Exposure can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm)

   State Department of Health and CDC also recommend that pregnant women should avoid non-essential travel to the area of Active Zika Virus transmission identified by CDC (see page 1) and State DOH. (See attached map of Wynwood area and/or Miami Beach area of Miami Dade County on page 40). Pregnant women and their partners living or working in or traveling to the area with Active Zika Virus transmission or having unprotected sex with someone who traveled to, lives in or works in the Zika active transmission area identified by CDC (see page 1) and State DOH (see map of Wynwood area and/or Miami Beach area of Miami Dade County) on page 40 should follow steps to prevent mosquito bites for 3 weeks (http://www.cdc.gov/zika/prevention/prevent-mosquito-bites.html) and (http://www.cdc.gov/zika/prevention/index.html)

   Women and men who live in or who have traveled to the area with active Zika Virus Transmission identified by State DOH and who have a pregnant sex partner should consistently and correctly use condoms or other barriers to prevent infection during sex or not have sex for entire duration of pregnancy. Following updated recommendations pertain to pregnant women who live or work in area of concern (see the attached maps of Wynwood area *and/or Miami Beach area of Miami Dade County* on page 40):

   a. Asymptomatic pregnant women with ongoing risk for exposure to Zika virus (women who live in or frequently traveled to the area of Florida with active Zika virus transmission identified by FDOH in Wynwood area and/or Miami Beach area of Miami Dade County (see map on page 40) should receive Zika virus IgM antibody testing as part of routine obstetric care during the first and second trimester; immediate RT-PCR testing should be performed when IgM antibody test results are positive or equivocal.

b. Symptomatic pregnant women who are evaluated<2 weeks after symptom onset should receive serum and urine Zika virus RT-PCR testing. Symptomatic pregnant women who are evaluated 2-12 weeks after symptom onset should first receive a Zika virus immunoglobulin (IgM) antibody test; if the IgM antibody test result is positive or equivocal serum and urine RT-PCR testing should be performed.

Women and men with possible exposure to Zika virus (i.e. living in or travel to the area of active Zika virus transmission including the area identified by State DOH, *(please see attached map of Wynwood area and/or Miami Beach area of Miami Dade County on* page 40*)* or having sex without barrier protection with a partner who lives in or traveled to an area with active Zika virus transmission should wait at least 8 weeks for women after exposure to attempt conception; Men with symptomatic Zika virus disease should wait at least 6 months before attempting to conceive.

All pregnant women in the United States should be assessed for possible Zika virus exposure during each prenatal care visit through determining travel history, where women lives/work, sexual history, (e.g. sexual contact with someone who had Zika exposure or infection or traveled to work in or lives in the area with active Zika transmission in Wynwood area and/or Miami Beach area of Miami Dade County (see page 1 and also the maps on page 40). Women with ongoing risk of possible exposure include those who live in or frequently travel to the area with active Zika virus transmission identified by the State DOH. Women with limited risk include those who traveled to the area with active Zika virus transmission identified by the State DOH or had sex with a partner who lives in or traveled to the area with active Zika virus transmission without using condoms or other barrier methods to prevent infection. Each evaluation should include an assessment of signs and symptoms of Zika virus disease (See #2 above), their travel history as well as their sexual partner's potential exposure to Zika virus and history of any illness consistent with Zika virus disease to determine whether Zika virus testing is indicated.

Pregnant women with ongoing risk of possible Zika virus (see 5a above) exposure and who do not report symptoms of Zika virus disease should be tested in the first and second trimester of pregnancy in accordance with CDC guidance (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_e).

Pregnant women with limited risk (women who traveled to the area of Florida with active Zika virus transmission identified by State DOH (see map Wynwood area and Miami Beach area of Miami Dade County on page 40) or had sex with a partner who lives or traveled to the areas without using condoms or other barriers methods to prevent infection) and who do not report symptoms should consult with their healthcare providers to obtain testing for Zika virus infection based on the elapsed interval since their last possible exposure in accordance with CDC guidance (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_e).

Please see CDC Document "Advice for People living or Traveling to Wynwood and Miami Beach area of Miami (http://www.cdc.gov/zika/intheus/florida-update.html)

Please also see State DOH 8/23/2016 one page document "Zika fever: Information for clinicians, which can be found as file# 71 at this link

Please also see 8/19/2016 CDC Health Advisory# 00394 entitled "CDC Expands Guidance for Travel and Testing of Pregnant Women, Women of Reproductive Age, and Their Partners for Zika Virus Infection Related to Mosquito-borne Zika Virus Transmission in County, State (http://emergency.cdc.gov/han/han00394.asp)

On August 3rd, 2016 Florida Governor, Mr. Rick Scott directed Florida Department of Health to make Zika testing available to all pregnant women who would like to be tested at county health departments statewide at no cost and at Jackson Health System we will follow Florida Governor's directive to Florida Department of Health. If the Zika testing is ordered for Pregnant women in Florida, who are not symptomatic and have no Zika exposure history and have not traveled to a Zika impacted county or area and want Zika testing then please make sure they are advised of and understand the risks associated with testing outside of the CDC and FDOH guidelines including the possibility of False positive, False negatives and long waits for confirmatory results.

Women with Zika virus disease exposure and/or asymptomatic men with Zika virus exposure should wait at least eight weeks. Men with Symptomatic Zika virus disease should wait at least six months after symptom onset to attempt conception. CDC's Zika testing guidelines for pregnant women can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm)

6. Please also see the CDC Updated interim guidance: testing and interpretation recommendations for a pregnant woman with possible exposure to Zika virus** — United States (including U.S. territories) Algorithm on page 29.

   a. For all pregnant patients who have traveled to an area with ongoing Zika Virus disease (http://www.cdc.gov/zika/geo/index.html):
      i. Follow guidelines described at the link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm) and summarized above under "Pregnant Women" section. Order appropriate Zika lab tests after Notifying County Health Department Epi ***(Phone # XXX XXX-XXXX)*** *(Please see # 6 and 7, and foot note on page* 29*). Please fill out light green highlighted part of DH1847 form (sample on pages 42-43), Form can be downloaded from Hospital Intranet Zika folder file 51(see page 48)*
      ii. For Triage and inpatient, also notify the County Health Department, then order appropriate Zika lab tests the test and collect the specimens and submit *(see Pages 9 - 10 and foot note on page* 29*)*, to Hospital Micro Lab with DOH lab form DH1847 (as detailed on pages 9-10).
      iii. For outpatient ACC OB Triage, OB clinic/PCC/ will follow CDC's July 25th, 2016 Interim Guidance for Healthcare Providers Caring for Pregnant Woman with Possible Zika Virus exposure - United States July 2016. County Health Department ***(Phone # XXX XXX-XXXX)*** will need to be notified about the case and light green highlighted part of form DH 1847 will also need to be filled out as under i above. For all pregnant women seen in the ACC/OB

clinic with exposure history and/or symptom history appropriate Zika tests will be ordered as per guidelines at (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm). If any Questions as to which tests to order than ACC/OB clinic Healthcare Provider will discuss this with County Health Department Epidemiologist ***(Phone # XXX XXX-XXXX)*** at the time of the call to notify them of the case. Orders will be placed as noted on pages, after the healthcare provider notifies the County Epi ***(Phone # XXX XXX-XXXX)*** (*Please also see *footnote on page 29)* and healthcare provider will complete the light green highlighted part of DH1847 form (see i above). Hospital outpatient laboratory will come to the patient in ACC/OB clinic for collection of blood and/or urine and also collect the lab form DH 1847 to take back to lab. (Lab phone number to call for ACC outpatient blood draw is ***(Phone # XXX XXX-XXXX).*** PCC clinics will follow their protocol for collecting specimens and transporting them to Hospital Micro Lab.

iv. Tell patient to anticipate a phone call to schedule serial ultrasounds at 18 weeks (anatomy) as well as 22, 28, 36 to evaluate growth and fetal head.

v. CDC Travel Alert recommend that pregnant women in any trimester postpone travel to Zika affected areas. All Pregnant women who decide to travel to areas with Zika Virus activity should take appropriate precautions to avoid mosquito bites (see# 5a page 3).

vi. Potentially infected men with pregnant partners or pregnant women with female sex partners should follow guidance described in the guidelines on last 2 links on page 12 and first link on page 13)

vii. Symptomatic and Asymptomatic women who have Zika Virus Disease or exposure and Asymptomatic men with Zika Virus exposure should wait at least 8 weeks after symptoms onset to attempt conception.

viii. Symptomatic men with Zika Virus Disease should wait at least 6 months after symptoms onset to attempt conception.

ix. Men and women with possible exposure to, yet without clinical illness consistent with Zika Virus Disease should wait at least 8 weeks after exposure to attempt conceptions.

x. Healthcare Providers should ensure that women who want to delay or avoid Pregnancy have access to safe and effective contraceptive methods that best meet their needs.

II. For Healthcare Evaluation, Treatment and Laboratory Staff

1. At all points of entries for healthcare, ask all patients "In the **3** weeks prior to illness onset or presentation have you traveled to or lived or worked or had unprotected sex with someone who traveled to lived or worked in the areas or countries on the CDC's list of areas/countries with active Zika Virus transmission at this link(www.cdc.gov/zika/geo/index.html). This includes Wynwood area and/or Miami Beach area of Miami Dade County (see maps on page 40) and US territories (including Puerto Rico, US Virgin Island, America Samoa/Oceania/Pacific Islands), "As of August 31st, 2016 58 countries and territories worldwide including 48 countries/territories in the Americas are reporting active Zika virus transmission mentioned in the updated list of the countries/areas with Zika transmission (www.cdc.gov/zika/geo/index.html and http://wwwnc.cdc.gov/travel/page/zika-information). Please see CDC Document

"Advice for People living or Traveling to Wynwood and Miami Beach area of Miami (http://www.cdc.gov/zika/intheus/florida-update.html). Please also see State DOH 8/23/2016 one page document " Zika Fever Information for Clinicians", which can be found as file# 71 at this link

a. If "Yes" Record the name of the countries/areas and dates traveled along with Chief Complaint in the Chief Complaint Field.
b. Ask all women of child bearing age if they are pregnant and record "pregnant" in the chief complaint field. Pregnant women history will also include Zika symptoms *(see #2 below)* onset following exposure to Zika Virus (see #1 above).
c. If "Yes" (for exposure history and/or Pregnancy) and clinical symptoms of Zika Virus disease (see #2 below): continue with Zika Virus Disease protocol as outlined below.
d. If "No" for exposure history and "No" for clinical symptoms of Zika Virus disease" (see #2 below) and not pregnant: continue with routine clinical management.
e. If "Yes" for exposure history and no clinical symptoms of Zika Virus disease (see # 2 below) and pregnant: continue with routine clinical care: refer patient to outpatient lab for Zika Virus testing *(See "Pregnant Women" Part of this protocol on pages 14-29)*, regardless of the length of time since the travel occurred, but ideally within 2-12 weeks, after notification to State Department of Health in County ***after full discussion with the mother about the testing, impact and medical need***.
f. If not sure of pregnant status and exposure history is positive, then get a pregnancy test, and then follow appropriate part of the protocol.

2. At all points of entries healthcare, all patients will be asked if they have any of the following symptoms:
   a. Fever
   b. Maculopapular Rash
   c. Arthralgias and/or Myalgias
   d. Conjunctivitis
   e. Headache and/or Retro orbital Pain

3. If a patient has any 2 or more of these 5 symptoms then: **(Also see 3e & 3f)**
   a. Pregnant patients > 20 weeks will be taken to OB Triage and the nurse accepting the patient will be advised of Suspect **Zika** Virus Disease case
   b. All other patients will be taken to a clinical evaluation & treatment area
   c. If the patient has 2 of these 5 symptoms (look under #2 above) and no history of travel to an area with Zika transmission (see # 1 above), but who lives in the same household as a person who traveled to an area reporting Zika Virus Activity (Locally Acquired Mosquito Transmission) or had sexual contact (Vaginal Intercourse, Anal Intercourse or Fellatio or sharing of sex toys used in vaginal, oral or oral sex) with a confirmed Zika case or an ultrasound indicating microcephaly of the fetus in a pregnant woman who is asymptomatic and had sexual contact (Vaginal Intercourse, Anal Intercourse or Fellatio or sharing of sex toys used in vaginal, oral, or oral sex) with a partner that had travel history to an area with active Zika Transmission or if the sex partners has 2 of the 5 symptoms mentioned under #2 above should also be presented to Department of Health (DOH) to determine if patient qualifies for Zika Virus testing as a suspected locally acquired case ***(Phone# XXX XXX-XXXX)*** and if so follow the protocol below *(Please see Pages 9-10) Please also see *footnote on page 29*.

d. Mothers of a fetus with microcephaly or intracranial calcifications or poor fetal outcome diagnosed after the first trimester who have history of possible exposure (see#1 above) to Zika Virus activity during pregnancy should also be tested for Zika after notification (for pregnant women) of the County Health Department Epidemiology ***(Phone# XXX XXX-XXXX).*** Both the mother of the infant and infant with microcephaly or intracranial calcification should also be tested for Zika after getting approval from County Health Department ***(Phone# XXX XXX-XXXX)***. *Please also see *footnote on page 29.*
e. Notification to County Health Department ***(Phone# XXX XXX-XXXX)*** for Zika testing should also be done for persons (men and women) who are attempting conception with possible exposure to Zika Virus with one or more of the signs or symptoms mentioned under 2 above during travel or within 3 weeks of possible exposure unless a definite alternate cause of patient's signs and symptoms is established.
f. Notification to County Health Department ***(Phone# XXX XXX-XXXX)***for Zika testing should also be done for pregnant women who have had sex without condom/barriers with a male or female partner with possible Zika Virus exposure if she develops at least one sign or symptom mentioned under 2 above; her male or female partner had Zika Virus Disease or her male or female partner developed at least one sign or symptom of Zika Virus Disease mentioned under 2 above unless a definite alternate cause of patient's signs and symptoms is established.
g. Please check with, as needed, with County Health Department, at the time of the call to notify of them for the test, as to the appropriate specimens to send and tests to order for Zika based on clinical scenario of your patient. (Also see Pregnant women section of protocol)

STANDARD INFECTION CONTROL PRECAUTIONS WILL BE FOLLOWED for suspected or confirmed Zika infection cases. (Also see page 19 for prevention of transmission in labor and delivery settings).

Differential diagnoses for travelers to endemic areas also include **Dengue and Chikungunya** fevers.

4. The Healthcare Provider will order clinically appropriate diagnostic tests to rule out other causes of symptoms (i.e. CXR, UA, flu test and other tests as needed), and female patients of child-bearing age will receive a pregnancy test.

5. If diagnostic tests do not show an alternate cause of patient's signs and symptoms (See page 2), the healthcare provider will call the **State Department of Health (DOH)** to determine if patient qualifies for **Zika Virus testing** ***(Phone# XXX XXX-XXXX)*** *Please also see *footnote on page 29*.

6. If Non Pregnant Patient meets Zika Virus case definition, the DOH Epidemiologist will approve the testing and will fill out the DOH Lab Form (DH 1847) (DOH has these forms and a copy is attached on pages 42-43) and will determine the types of tests needed (PCR, IgM and/or other tests) in consultation with the Healthcare Provider requesting the test, at the time of the test request call, stamp the form with "***County Health Department Epidemiology***" and FAX that form to the FAX number provided by "test requesting Healthcare Provider" at the time of test request call. Once the "DOH Lab Form DH 1847

with stamped "***County Health Department Epidemiology***" (see sample on pages 41) is received by the Healthcare Provider then the Healthcare Provider will send that form, along with appropriate lab specimens (see below for specifics of the type and quantity of lab specimens and ordering of tests in "Miracle"), to Hospital micro lab ***(Phone# XXX XXX-XXXX)***.

7. Serum (Blood) PCR Test can be sent to Commercial Lab (protocol to be established by our lab) by our JMH Lab after the notification and/or approval of test is obtained, by the provider, from County Health Department ***(Phone# XXX XXX-XXXX)***. All other tests (Urine PCR, IgM, Placenta, CSF, Amniotic fluid, Semen) will be done at Department of Health Lab. Please realize that a negative RT-PCR result on a specimen collected 4 or more days after illness onset does not rule out Zika infection and if this is the case then talk to State Department of Health ***(Phone# XXX XXX-XXXX)*** and request additional Zika testing appropriate for clinical scenario. Please also note that a negative PCR and IgM on symptomatic or asymptomatic women, who present more than 12 weeks after Zika symptoms onset or exposure does not rule out recent Zika Virus Infection and in that setting serial fetal ultrasounds should be.

   In most patients Zika Virus RNA (PCR) is unlikely to be detected in serum after the first week of illness. Zika Virus RNA (PCR test) can be detected in urine for at least 2 weeks after onset of symptoms hence please submit a whole blood specimen (red or tiger top tube) AND a urine specimen for maximum Zika virus detection sensitivity. Virus specific IgM and neutralizing Antibodies typically develop towards the end of the first week of illness and decline over next 12 weeks and may not be detected after 12 weeks. Cross reaction with related flaviviruses (Dengue/yellow fever) is common and may be difficult to discern. Plaque reduction neutralization (PRNT) testing can be performed to measure virus specific neutralizing antibodies to discriminate between cross reacting antibodies in primary flavivirus infections.

   During evenings, weekends and holidays the DOH On-Call epidemiologist will ask the healthcare provider to send the test specimens on non-pregnant patients to the Hospital Micro lab ***(Phone# XXX XXX-XXXX)***and health department will then fax the completed DOH Lab form (DH1847) on the following business days.

   Before acquiring specimens, obtain appropriate consent to collect and test specimens for Zika Virus

   a. Page **JHS Infection Control** to notify that the patient has been approved for Zika testing *Please also see *footnote on page 29* and specimens on non-pregnant patients are being sent to Hospital Micro Lab along with DOH Lab Form DH 1847 ***(Phone# XXX XXX-XXXX)***
      i. For asymptomatic pregnant women only 5 cc of blood should be collected in Red top or Tiger top tubes.
      ii. Samples (Serum, Urine) should be collected within the first 21 days of illness. If beyond 21 days of illness then collect serum only. If asymptomatic pregnant women, with positive Zika exposure history (see#1 on page1), samples (serum only) can be collected 2 to 12 weeks (or even beyond) the date of travel.
      iii. For Zika PCR and IgM testing in serum, 5cc of blood should be collected in Red top or Tiger top tube.

iv. For Zika PCR testing in urine, collect 1-2cc (5cc max) urine in a sterile container with tight fitting screw cap.
v. For CSF, collect at least 1cc CSF in plastic tube with tight fitting screw cap
vi. For Amniotic Fluid, collect atleast 1cc of amniotic fluid in a steril container with a tight fitting screw cap
vii. If semen fluid is collected, then collect atleast 1cc of semen in a steril container with a tight fitting screw
viii. For submission of placental tissue and/or fetal tissue for Zika testing, please obtain the consent from the patient and call health department ***(305 470-5660)*** to get approval of test prior to collection and submission of the specimen to our pathology lab (please see #7 above). *Please also see *footnote on page 29*
ix. For submission placental and/or tissue to our pathology lab use the existing work flow to send placental and/or fetal issues to the Pathology Department. Call our Micro lab ***(Phone# XXX XXX-XXXX)*** 24/7 and let them know that placenta (from a Zika or Zika suspect patient) will be coming in and they can alert histopathology. Also call Pathology Resident on call ***(Phone# XXX XXX-XXXX)*** to let him/her know that placenta from Zika patient is being sent to lab.
x. For ordering Zika Testing in MIRACLE Please follow the Steps outlined below
    1. Open the Powerplan in Miracle titled "Zika".
    2. The Powerplan will include prechecked Zika Testing Panels, one for Blood testing and one for Urine testing. The prechecked blood panel will include PCR and IgM testing, while the urine panel will include PCR testing.
    3. These prechecked blood panels can be unchecked depending on the circumstances.
    4. Additional orders for CSF, Placenta, or Semen can be ordered in this Power plan if needed.
    5. If Amniotic fluid or any other unlisted samples are needed, they can be ordered as a miscellaneous lab order.
    6. A transcribed excerpt of these results will be found in the Laboratory section of Chart Review under the heading "Virology". The complete scanned report will also be available in the "Notes" Section.

    Please see the screen shot of these Zika testing panels in the Powerplan on page 45
    Please also see the screen shot of the "test results" in MIRACLE on page 45

b. Send all samples and DOH Form DH 1847 (Received by FAX from Health Department Epi with "***County Health Department Epidemiology Stamp"***) for non-pregnant patients and 2 copies of DH 1847 form (marked pregnant health priority) with completed light green highlighted section (see pages 40-41 for sample form) for pregnant women to the JHS Micro lab (if any questions, provider may call **micro lab at *(Phone# XXX XXX-XXXX)***.
c. For placenta Zika testing, place order in MIRACLE under "Miscellaneous Lab – Placenta" and "enter" ZIKA Testing in the blank field.
d. Specimen referral for Zika testing in commercial lab (VIRACOR), requires approval by pathology resident on service ***(Phone# XXX XXX-XXXX)*** when it says "please enter pager ID number" or the laboratory Medical Director or designee.

CDC guidance for collection and submission of body fluids for Zika Virus Testing can be found at http://www.cdc.gov/zika/hc-providers/body-fluids-collection-submission.html and http://www.floridahealth.gov/diseases-and-conditions/zika-virus/index.html

Per FDOH the Specimen Containers must be labeled with Patient Name, Date of Birth and Date of Collection, properly sealed and shipped as "Category B" Agents with completed BPHL DH 1847 Form (completed by State Department of Health at Count). Patients cannot transport their own specimens. State DOH guidance (August 5th 2016) for collection, packaging and shipping of Laboratory Specimens for Zika can be found as file# 52 at this link

8. Healthcare Provider will inform the patient that results may take up to 3 weeks or more and that Hospital will contact the patient with the results

9. Febrile patients including pregnant women should be managed with acetaminophen (if no allergy) and counseled to avoid NSAIDS or aspirin
10. The Healthcare Provider will also refer the patient to OB for outpatient ultrasound. Healthcare Provider can also email **Dr. (Name and email address of OB physician)** and ***(Name and email address of Director Patient Care Service for OB)*** if after reviewing protocol he/she has any questions about testing and follow-up of pregnant patient with Zika exposure or Zika virus disease. Pregnant women in any trimester should be advised to postpone travel to Zika affected areas **that are at elevations <2000 meters (6562 feet) above sea levels (**http://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6510e1er.pdf**).** All pregnant women who decide to travel to areas with Zika Virus Activity should take appropriate precautions to avoid mosquito bites. (http://www.cdc.gov/zika/prevention/index.html) and (http://www.cdc.gov/zika/prevention/prevent-mosquito-bites.html)

    CDC maintains a 24/7 consultation service for healthcare providers caring for pregnant women with possible ZIKA Virus infection. Zikapregnancy@cdc.gov phone (***770 488-7100).***

    For Zika questions regarding pediatric patients (including infants), please contact Pedi Infectious Disease on-call person through Hospital Page Operator ***(Phone# XXX XXX-XXXX)***

    For any delivery of viable Infant to a mother with suspected Zika Virus Disease and/or baby born with Microcephaly, the Nurse in charge of patient in labor/delivery will also notify Pedi Infectious Disease on-call person through Hospital Page Operator ***(Phone# XXX XXX-XXXX)***

    Please call State Department of Health in County ***(Phone# XXX XXX-XXXX)*** for approval of Zika testing of infants born to women potentially infected with Zika Virus during pregnancy and/or who were diagnosed with microcephaly at birth, intracranial calcification detected prenatally or at birth or other abnormalities consistent with congenital Zika virus infection or if mother's possible Zika exposure occurred within 2

weeks of delivery and the infant develops Zika Symptoms within 2 weeks of birth or when mother had positive inconclusive prenatal or perinatal Zika Virus test results.

CDC "information for parents about Zika Virus" document can be found at (http://www.cdc.gov/zika/parents/index.html**)**

CDC document "women and their partners who are thinking about pregnancy" can be found at: (http://www.cdc.gov/zika/pregnancy/thinking-about-pregnancy.html)

When a baby is born to a mother with Zika risk/Infection the Primary OB Nurse of the patient will also notify Infection Control Practitioner ***(Phone# XXX XXX-XXXX)*** about the birth of child.

CDC "Tools for Health Care Providers" can be found at (http://www.cdc.gov/zika/hc-providers/tools.html**)**
CDC guidance "Preventing Transmission Zika Virus in Labor and Delivery settings through implementation of Standard Precautious – United States 2016" can be found at (http://www.cdc.gov/mmwr/volumes/65/wr/mm6511e3.htm**)**

For CDC guidance on "Zika Virus" Collection and Submission of fetal tissues for Zika Virus testing", please see the document at the link: http://www.cdc.gov/Zika/hc-providers/tissue-collection-submission.html

NEJM article "Zika Virus and the Guillain–Barré Syndrome — Case Series from Seven Countries" can be found as file# 69 at this link

CDC document "**GUILLAIN-BARRÉ** Passive Surveillance System" can be found at this link http://www.cdc.gov/zika/pdfs/poster-gbs.pdf

CDC August 26th, 2016 MMWR "Guillain-Barré Syndrome During Ongoing Zika Virus Transmission — Puerto Rico, January 1–July 31, 2016" can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6534e1.htm)

11. Note: *The DOH State Lab will automatically test for **Dengue and Chikungunya on** all blood samples submitted from febrile patients that meet criteria for Zika testing. These additional testing will be performed by DOH State Lab until capacity permits and after that the Healthcare Provider will need to send the samples for Dengue and/or Chickungunya, if clinically suspected, to an outside lab through Hospital **micro lab (Phone# XXX XXX-XXXX).*** DOH will determine appropriate tests (RT-PCR, Antibody IgM, PRNT, Viral Isolation) based on the patient's travel history and clinical presentation).

12. Healthcare provider will discharge the patient home with outpatient follow up (unless clinical presentation requires further inpatient management) and instructions for prevention of sexual transmission (consistently and correctly use of condoms and other barriers during sex including vaginal intercourse, anal intercourse or fellatio or sharing of sex toys used in vaginal, oral or oral sex). For the men who live in or travel to area with Zika Virus Transmission who have pregnant partner should abstain from sex or consistently and correctly use condoms for the entire duration of pregnancy. CDC also

recommends that all pregnant women who have a sex partner who has traveled to or resides in an area with Zika use barrier methods every time they have sex or they should not have sex during pregnancy and this also applies to female sex partners of pregnant women. To protect pregnant women CDC recommends male or female condoms for vaginal or oral sex and other barriers for oral sex used consistently and correctly for duration of pregnancy or abstaining from sex for entire duration of pregnancy. This recommendation would not change if the men tested negative for Zika. Men who reside in or have traveled to an area of active Zika Virus transmission, who are concerned about sexual transmission of Zika Virus might consider abstaining from sexual activity or use condoms and other barriers consistently and correctly during sex (i.e. Vaginal Intercourse, anal intercourse or Fellatio or sharing of sex toys). CDC's Interim Guidance for prevention of sexual transmission of Zika Virus United States, July 2016 can be found at the link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e2.htm?s_cid=mm6529e2_w)
CDC's 8/26/2016 document "Likely Sexual Transmission of Zika Virus from a Man with No Symptoms of Infection — Maryland, 2016" can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6534e2.htm)

CDC's Guidance to LGBT Community "How to protect yourselves from Zika" can be found at this (https://www.cdc.gov/zika/pdfs/lgbt-zika-fact-sheet.pdf)

WHO now recommends that both women and men, who are returning from Zika affected areas abstain or practice safe sex for 6 months even if they are not trying to conceive and regardless of symptoms.

Patients will also be given instructions to take measures to prevent mosquito bites (http://www.cdc.gov/zika/prevention/ and (http://www.cdc.gov/zika/pregnancy/protect-yourself.html). For controlling Mosquitoes at home see the CDC link: (http://www.cdc.gov/zika/prevention/controlling-mosquitoes-at-home.html)

For patients being tested for Zika Virus Disease, DOH will send mosquito control to their home address to fumigate. (http://www.cdc.gov/chikungunya/resources/vector-control.html)

13. DOH will call the ordering healthcare provider on all positive results. All positive and negative test results and will also be faxed by DOH to hospital micro lab. Hospital Micro lab will also call the County Health Department Epi once a day to follow up on the results and then the Micro Lab will also call and email (secure email) to the Healthcare Provider with the results. If lab is unable to reach the Healthcare Provider, lab will notify Chief of Service and if unable to reach Chief of Service then notify facility Chief Medical Officer. In situations where DOH declines to do the test and the Healthcare Provider feels strongly that test should be done then Healthcare Provider should ask to speak to DOH local Chief Epidemiologist ***(Name of Chief Epidemiologist at County Department of Health and their contact phone number)*** at ***(Phone# XXX XXX-XXXX).***

If the test results are "Equivocal" then please discuss this with DOH ***(Phone# XXX XXX-XXXX)*** to see what follow-up tests are recommended by DOH to clarify further the "Equivocal" results.

Please also call and discuss with DOH ***(Phone# XXX XXX-XXXX)*** whenever a Plaque Reduction Neutralization Test (PRNT) is done on your patient, to discuss the interpretation of the results, because recent evidence suggests that a fourfold higher titer by PRNT might not discriminate between Zika Virus antibodies and cross reacting antibodies in all persons who have been previously infected with or vaccinated against a related Flavivirus (http://www.cdc.gov/mmwr/volumes/65/wr/mm6521e1.htm).

14. The healthcare provider will notify the patient with the test results and document it and arrange any follow-up that is needed **in a timely manner**.

15. Updated Zika information can be found on CDC Zika Virus Disease home page http://www.cdc.gov/zika/index.html and FDOH Zika website http://www.floridahealth.gov/diseases-and-conditions/zika-virus/

16. Transplant Clinic will follow the same protocol and because of the immunocompromised nature of their patients they should be referred to ID Transplant Clinic for follow-up and they can call **(Name and phone number of Infectious Disease Physician Providing Zika Support to Transplant Services)** for any questions or concerns about Transplant Clinic patients. **Infectious Disease Physician** and Transplant clinic have also drafted a policy for screening MTI Transplant patients with travel history and symptoms in our MTI clinics.

    FDA's recommendations to reduce the risk of Zika virus transmission by human cell and tissue products can be found at:
    http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm488612.htm

    For Zika Virus infection addenda and flow charts related to transplant, please click on the link below from the Association of Organ Procurement Organizations:
    (http://www.aopo.org/wikidonor/disease-transmission/zikavirus/)

    For "the Zika Epidemics and Transplantation" article in May 2016 copy of "The Journal of Heart and lung Transplant outlining the recommendations for prevention of Zika Virus Infection in transplant recipients and candidates and prevention of donor derived infection please see the article in our Zika folder (See **page 46 for details of how to access our Zika folder)**

    FDA's August 2016 Revised Recommendations for Reducing the Risk of Zika Virus Transmission by Blood and Blood Components can be found at this link (http://www.fda.gov/downloads/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/Guidances/Blood/UCM518213.pdf)

III. Pregnant Population/Patient: (seen in OB Triage/OB Service/ACC/PCC)

1. At all points of entries for healthcare, ask all patients "In the **3** weeks prior to illness onset or presentation have you traveled to or lived or worked or had unprotected sex with

someone who traveled to lived or worked in the areas or countries on the CDC's list of areas/countries with active Zika Virus transmission at this link (www.cdc.gov/zika/geo/index.html). This includes Wynwood area and/or Miami Beach area of Miami Dade County (see maps on page 40) and US territories (including Puerto Rico, US Virgin Island, America Samoa/Oceania/Pacific Islands), "As of August 31st, 2016 58 countries and territories worldwide including 48 countries/territories in the Americas are reporting active Zika virus transmission mentioned in the updated list of the countries/areas with Zika transmission (www.cdc.gov/zika/geo/index.html and http://wwwnc.cdc.gov/travel/page/zika-information)

a. If "Yes" Record the name of the countries/areas and dates traveled along with Chief Complaint in the Chief Complaint Field.
b. Ask all women of child bearing age if they are pregnant and record "pregnant" in the chief complaint field. Pregnant women history will also include Zika symptoms *(see #2 below)* onset following exposure to Zika Virus (see #1 above).
c. If "Yes" (for exposure history and/or Pregnancy) and clinical symptoms of Zika Virus disease (see #2 below): continue with Zika Virus Disease protocol as outlined below.
d. If "No" for exposure history and "No" for clinical symptoms of Zika Virus disease" (see #2 below) and not pregnant: continue with routine clinical management.
e. If "Yes" for exposure history and no clinical symptoms of Zika Virus disease (see # 2 below) and pregnant: continue with routine clinical care: refer patient to outpatient lab for Zika Virus testing *(See "Pregnant Women" Part of this protocol on pages 14-29)*, regardless of the length of time since the travel occurred, but ideally within 2-12 weeks, after notification to State Department of Health in County ***after full discussion with the mother about the testing, impact and medical need***.
f. If not sure of pregnant status and exposure history is positive, then get a pregnancy test, and then follow appropriate part of the protocol.

2. At all points of entries healthcare, all patients will be asked if they have any of the following symptoms:
   a. Fever
   b. Maculopapular Rash
   c. Arthralgias and/or Myalgias
   d. Conjunctivitis
   e. Headache and/or Retro orbital Pain

3. If a patient has any 2 or more of these 5 symptoms then: **(Also see 3e & 3f)**
   a. Pregnant patients > 20 weeks will be taken to OB Triage and the nurse accepting the patient will be advised of Suspect **Zika** Virus Disease case
   b. All other patients will be taken to a clinical evaluation & treatment area
   c. If the patient has 2 of these 5 symptoms (look under #2 above) and no history of travel to an area with Zika transmission (see # 1 above), but who lives in the same household as a person who traveled to an area reporting Zika Virus Activity (Locally Acquired Mosquito Transmission) or had sexual contact (Vaginal Intercourse, Anal Intercourse or Fellatio or sharing of sex toys used in vaginal, oral or oral sex) with a confirmed Zika case or an ultrasound indicating microcephaly of the fetus in a pregnant woman who is asymptomatic and had sexual contact (Vaginal Intercourse, Anal Intercourse or Fellatio or sharing of sex toys used in vaginal, oral, or oral sex) with a partner that had travel history to an area with active Zika Transmission or if the

sex partners has 2 of the 5 symptoms mentioned under #2 above should also be presented to Department of Health (DOH) to determine if patient qualifies for Zika Virus testing as a suspected locally acquired case ***(Phone# XXX XXX-XXXX)*** and if so follow the protocol below *(Please see Pages 9-10) Please also see *footnote on page 29.*

d. Mothers of a fetus with microcephaly or intracranial calcifications or poor fetal outcome diagnosed after the first trimester who have history of possible exposure (see#1 above) to Zika Virus activity during pregnancy should also be tested for Zika after notification (for pregnant women) of the County Health Department Epidemiology ***(Phone# XXX XXX-XXXX).*** Both the mother of the infant and infant with microcephaly or intracranial calcification should also be tested for Zika after getting approval from County Health Department ***(Phone# XXX XXX-XXXX)***. *Please also see *footnote on page 29.*
e. Notification to County Health Department ***(Phone# XXX XXX-XXXX)*** for Zika testing should also be done for persons (men and women) who are attempting conception with possible exposure to Zika Virus with one or more of the signs or symptoms mentioned under 2 above during travel or within 3 weeks of possible exposure unless a definite alternate cause of patient's signs and symptoms is established.
f. Notification to County Health Department ***(Phone# XXX XXX-XXXX)*** for Zika testing should also be done for pregnant women who have had sex without condom/barriers with a male or female partner with possible Zika Virus exposure if she develops at least one sign or symptom mentioned under 2 above; her male or female partner had Zika Virus Disease or her male or female partner developed at least one sign or symptom of Zika Virus Disease mentioned under 2 above unless a definite alternate cause of patient's signs and symptoms is established.
g. Please check with, as needed, with County Health Department, at the time of the call to notify of them for the test, as to the appropriate specimens to send and tests to order for Zika based on clinical scenario of your patient. (Also see pregnant women section of protocol)

STANDARD INFECTION CONTROL PRECAUTIONS WILL BE FOLLOWED for suspected or confirmed Zika infection cases. (Also see Page 19 for prevention of Transmission in labor and delivery setting).

Differential diagnoses for travelers to endemic areas also include **Dengue and Chikungunya** fevers.

h. The Healthcare Provider will order clinically appropriate diagnostic tests to rule out other causes of symptoms (i.e. CXR, UA, flu test and other tests as needed), and female patients of child-bearing age will receive a pregnancy test.
i. If diagnostic tests do not show an alternate cause of patient's signs and symptoms (See# 2 above), the healthcare provider will call the **State Department of Health (DOH)** to determine if patient qualifies for **Zika Virus testing** ***(Phone# XXX XXX-XXXX)*** *Please also see *footnote on page 29*.
j. For Zika testing in commercial lab, please see section i on page 10. Notification (all patients) and/or approval for (non-pregnant patients) of test is obtained, by the provider, from County Health Department ***(Phone# XXX XXX-XXXX)***. (Urine PCR, Placenta, CSF, Amniotic fluid, Semen testing) will be done at Department of Health

Lab. Please realize that a negative RT-PCR result on a specimen collected 4 or more days after illness onset does not rule out Zika infection and if this is the case then talk to Florida Department of Health ***(Phone# XXX XXX-XXXX)*** and request additional Zika testing appropriate for clinical scenario. Please also note that a negative PCR and IgM on symptomatic or asymptomatic women, who present more than 12 weeks after Zika symptoms onset or exposure does not rule out recent Zika Virus Infection and in that setting serial fetal ultrasounds should be.

In most patients Zika Virus RNA (PCR) is unlikely to be detected in serum after the first week of illness. Zika Virus RNA (PCR test) can be detected in urine for at least 2 weeks after onset of symptoms hence please submit a whole blood specimen (red or tiger top tube) AND a urine specimen for maximum Zika virus detection sensitivity. Virus specific IgM and neutralizing Antibodies typically develop towards the end of the first week of illness and decline over next 12 weeks and may not be detected after 12 weeks. Cross reaction with related flaviviruses (Dengue/yellow fever) is common and may be difficult to discern. Plaque reduction neutralization (PRNT) testing can be performed to measure virus specific neutralizing antibodies to discriminate between cross reacting antibodies in primary flavivirus infections.

During evenings, weekends and holidays the DOH On-Call epidemiologist will ask the healthcare provider to send the test specimens on non-pregnant patients to the Hospital Micro lab ***(Phone# XXX XXX-XXXX)*** and health department will then fax the completed DOH Lab form (DH1847) on the following business days.

4. **Before acquiring specimens, obtain appropriate consent to collect and test specimens for Zika Virus**
   a. Specimen Collection will be as follows:
      i. For asymptomatic pregnant women only 5 cc of blood should be collected in Red top or Tiger top tubes.
      ii. Samples (Serum, Urine) should be collected within the first 21 days of illness. If beyond 21 days of illness then collect serum only. If asymptomatic pregnant women, with positive Zika exposure history (see#1 on page1), samples (serum only) can be collected 2 to 12 weeks (or even beyond) the date of travel.
      iii. For Zika PCR and IgM testing in serum, 5cc of blood should be collected in Red top or Tiger top tube.
      iv. For Zika PCR testing in urine, collect 1-2cc (5cc max) urine in a sterile container with tight fitting screw cap.
      v. For CSF, collect at least 1cc CSF in plastic tube with tight fitting screw cap
      vi. For Amniotic Fluid, collect atleast 1cc of amniotic fluid in a steril container with a tight fitting screw cap
      vii. For submission of placental tissue and/or fetal tissue for Zika testing, please obtain the consent from the patient and call health department ***(Phone# XXX XXX-XXXX)*** to get approval of test prior to collection and submission of the specimen to our pathology lab (please see #7 above). *Please also see *footnote on page 29*
      viii. For submission placental and/or tissue to our pathology lab use the existing work flow to send placental and/or fetal issues to the Pathology Department. Call Hospital Micro lab ***(Phone# XXX XXX-XXXX)*** 24/7 and let them know that

placenta (from a Zika or Zika suspect patient) will be coming in and they can alert histopathology. Also call Pathology Resident on call ***(Phone# XXX XXX-XXXX)*** to let him/her know that placenta from Zika patient is being sent to lab.

ix. For ordering Zika Testing in MIRACLE Please follow the Steps outlined below
   1. Open the Powerplan in Miracle titled "Zika".
   2. The Powerplan will include prechecked Zika Testing Panels, one for Blood testing and one for Urine testing. The prechecked blood panel will include PCR and IgM testing, while the urine panel will include PCR testing.
   3. These prechecked blood panels can be unchecked depending on the circumstances.
   4. Additional orders for CSF, Placenta can be ordered in this Power plan if needed.
   5. If Amniotic fluid or any other unlisted samples are needed, they can be ordered as a miscellaneous lab order.
   6. A transcribed excerpt of these results will be found in the Laboratory section of Chart Review under the heading "Virology". The complete scanned report will also be available in the "Notes" Section.

   Please see the screen shot of these Zika testing panels in the Powerplan on page 45
   Please also see the screen shot of the "test results" in MIRACLE on page 45

b. Send all samples and DOH Form DH 1847 (Received by FAX from Health Department Epi with "***County Health Department Epidemiology Stamp"***) for non-pregnant patients and 2 copies of DH 1847 form (marked pregnant health priority) with completed light green highlighted section (see pages 42-43 for sample form) for pregnant women to the JHS Micro lab (if any questions, provider may call **micro lab at *(Phone# XXX XXX-XXXX)***.
c. For placenta Zika testing, place order in MIRACLE under "Miscellaneous Lab – Placenta" and "enter" ZIKA Testing in the blank field.
d. Specimen referral for Zika testing in commercial lab (VIRACOR), requires approval by pathology resident on service ***(Hospital Phone# XXX XXX-XXXX)*** when it says "please enter pager ID number" or the laboratory Medical Director or designee.

   CDC guidance for collection and submission of body fluids for Zika Virus Testing can be found at http://www.cdc.gov/zika/hc-providers/body-fluids-collection-submission.html and http://www.floridahealth.gov/diseases-and-conditions/zika-virus/index.html

   Per FDOH the Specimen Containers must be labeled with Patient Name, Date of Birth and Date of Collection, properly sealed and shipped as "Category B" Agents with completed BPHL DH 1847 Form (completed by Florida Department of Health at Miami-Dade). Patients cannot transport their own specimens. FDOH guidance (August 5th 2016) for collection, packaging and shipping of Laboratory Specimens for Zika can be found as file# 52 at this link

5. Healthcare Provider will inform the patient that results may take up to 3 weeks or more and that JHS will contact the patient with the results

6. Febrile patients including pregnant women should be managed with acetaminophen (if no allergy) and counseled to avoid NSAIDS or aspirin

7. The Healthcare Provider will also refer the patient to OB for outpatient ultrasound. Healthcare Provider can also email **Dr. (Name and email address of OB physician)** and ***(Name and email address of Director Patient Care Service for OB)*** if after reviewing protocol he/she has any questions about testing and follow-up of pregnant patient with Zika exposure or Zika virus disease. Pregnant women in any trimester should be advised to postpone travel to Zika affected areas **that are at elevations <2000 meters (6562 feet) above sea levels (**http://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6510e1er.pdf**).** All pregnant women who decide to travel to areas with Zika Virus Activity should take appropriate precautions to avoid mosquito bites and precautions to take to avoid sexual transmission (http://www.cdc.gov/zika/prevention/index.html)

   For submission of placental tissue and/or fetal tissue for Zika testing, please obtain the consent from the patient and call health department ***(Phone# XXX XXX-XXXX)*** to get approval of test prior to collection and submission of the specimen to our pathology lab (please Page 9-10). *Please also see *footnote on page 29.*

   For submission placental and/or tissue to our pathology lab use the existing work flow to send placental and/or fetal issues to the Pathology Department. Call our Micro lab ***(Phone# XXX XXX-XXXX)*** 24/7 and let them know that placenta (from a Zika or Zika suspect patient) will be coming in and they can alert histopathology. Also call Pathology Resident on call ***(Hospital Phone# XXX XXX-XXXX)*** to let him/her know that placenta from Zika patient is being sent to lab.

   For placenta Zika testing, place order in MIRACLE under “Miscellaneous Lab – Placenta” and “enter” ZIKA Testing in the blank field.

   CDC maintains a 24/7 consultation service for healthcare providers caring for pregnant women with possible ZIKA Virus infection. Zikapregnancy@cdc.gov phone (***770 488-7100).***

   For Zika questions regarding pediatric patients (including infants), please contact Pedi Infectious Disease on-call person through Hospital Page Operator ***(Phone# XXX XXX-XXXX)***

   For any delivery of viable Infant to a mother with suspected Zika Virus Disease and/or baby born with Microcephaly, the Nurse in charge of patient in labor/delivery will also notify Pedi Infectious Disease on-call person through Hospital Page Operator ***(Phone# XXX XXX-XXXX)*.**

   Please call State Department of Health in County ***(Phone# XXX XXX-XXXX)*** for approval of Zika testing of infants born to women potentially infected with Zika Virus during pregnancy and/or who were diagnosed with microcephaly at birth, intracranial calcification detected prenatally or at birth or other abnormalities consistent with

congenital Zika virus infection or if mother's possible Zika exposure occurred within 2 weeks of delivery and the infant develops Zika Symptoms within 2 weeks of birth or when mother had positive inconclusive prenatal or perinatal Zika Virus test results.

CDC document "women and their partners who are thinking about pregnancy" can be found at: (http://www.cdc.gov/zika/pregnancy/thinking-about-pregnancy.html)

When a baby is born to a mother with Zika risk/Infection the Primary OB Nurse of the patient will also notify Infection Control Practitioner ***(Phone# XXX XXX-XXXX)*** about the birth of child.

CDC "Tools for Health Care Providers" can be found at (http://www.cdc.gov/zika/hc-providers/tools.html)

CDC guidance "Preventing Transmission Zika Virus in Labor and Delivery settings through implementation of Standard Precautious – United States 2016" can be found at (http://www.cdc.gov/mmwr/volumes/65/wr/mm6511e3.htm)

For CDC guidance on "Zika Virus" Collection and Submission of fetal tissues for Zika Virus testing", please see the document at the link: http://www.cdc.gov/Zika/hc-providers/tissue-collection-submission.html

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8. Note: *The DOH State Lab will automatically test for **Dengue and Chikungunya on** all blood samples submitted from febrile patients that meet criteria for Zika testing. These additional testing will be performed by DOH State Lab until capacity permits and after that the Healthcare Provider will need to send the samples for Dengue and/or Chickungunya, if clinically suspected, to an outside lab through Hospital **micro lab (Phone# XXX XXX-XXXX).*** DOH will determine appropriate tests (RT-PCR, Antibody IgM, PRNT, Viral Isolation) based on the patient's travel history and clinical presentation).

9. Healthcare provider will discharge the patient home with outpatient follow up (unless clinical presentation requires further inpatient management) and instructions for prevention of sexual transmission (consistently and correctly use of condoms and other barriers during sex including vaginal intercourse, anal intercourse or fellatio or sharing of sex toys used in vaginal, oral or oral sex). For the men who live in or travel to area with Zika Virus Transmission who have pregnant partner should abstain from sex or consistently and correctly use condoms for the entire duration of pregnancy. CDC also recommends that all pregnant women who have a sex partner who has traveled to or resides in an area with Zika use barrier methods every time they have sex or they should not have sex during pregnancy and this also applies to female sex partners of pregnant women. To protect pregnant women CDC recommends male or female condoms for vaginal or oral sex and other barriers for oral sex used consistently and correctly for

duration of pregnancy or abstaining from sex for entire duration of pregnancy. This recommendation would not change if the men tested negative for Zika. Men who reside in or have traveled to an area of active Zika Virus transmission, who are concerned about sexual transmission of Zika Virus might consider abstaining from sexual activity or use condoms and other barriers consistently and correctly during sex (i.e. Vaginal Intercourse, anal intercourse or Fellatio or sharing of sex toys). CDC is Interim Guidance for prevention of sexual transmission of Zika Virus United States, July 2016 can be found at the link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e2.htm?s_cid=mm6529e2_w)

CDC's 8/26/2016 document "Likely Sexual Transmission of Zika Virus from a Man with No Symptoms of Infection — Maryland, 2016" can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6534e2.htm)

CDC's Guidance to LGBT Community "How to protect yourselves from Zika" can be found at this (https://www.cdc.gov/zika/pdfs/lgbt-zika-fact-sheet.pdf)

WHO now recommends that both women and men, who are returning from Zika affected areas abstain or practice safe sex for 6 months even if they are not trying to conceive and regardless of symptoms.

CDC Guidance for Travel and Testing of Pregnant Women and Women of Reproductive Age for Zika Virus Infection Related to the Investigation for Local Mosquito-borne Zika Virus Transmission in Miami-Dade and Broward Counties, Florida (http://emergency.cdc.gov/han/han00393.asp) CDC Expands Guidance for Travel and Testing of Pregnant Women, Women of Reproductive Age, and Their Partners for Zika Virus Infection Related to Mosquito-borne Zika Virus Transmission in Miami-Dade, Florida (http://emergency.cdc.gov/han/han00394.asp)

Patients will also be given instructions to take measures to prevent mosquito bites (http://www.cdc.gov/zika/prevention/ and http://www.cdc.gov/zika/pregnancy/protect-yourself.html). For controlling Mosquitoes at home see the CDC link: (http://www.cdc.gov/zika/prevention/controlling-mosquitoes-at-home.html)

For patients being tested for Zika Virus Disease, DOH will send mosquito control to their home address to fumigate. (http://www.cdc.gov/chikungunya/resources/vector-control.html)

10. DOH will call the ordering healthcare provider on all positive results. All positive and negative test results and will also be faxed by DOH to hospital micro lab. Hospital Micro lab will also call the County Health Department Epi once a day to follow up on the results and then the Micro Lab will also call and email (secure email) to the Healthcare Provider with the results. If lab is unable to reach the Healthcare Provider, lab will notify Chief of Service and if unable to reach Chief of Service then notify facility Chief Medical Officer. In situations where DOH declines to do the test and the Healthcare Provider feels strongly that test should be done then Healthcare Provider should ask to speak to DOH local Chief Epidemiologist ***(Name of Chief Epidemiologist at County Department of Health and their contact phone number)*** at ***(Phone# XXX XXX-XXXX).***

If the test results are "Equivocal" then please discuss this with DOH ***(Phone# XXX XXX-XXXX)*** to see what follow-up tests are recommended by DOH to clarify further the "Equivocal" results.

Please also call and discuss with DOH ***(Phone# XXX XXX-XXXX)*** whenever a Plaque Reduction Neutralization Test (PRNT) is done on your patient, to discuss the interpretation of the results, because recent evidence suggests that a fourfold higher titer by PRNT might not discriminate between Zika Virus antibodies and cross reacting antibodies in all persons who have been previously infected with or vaccinated against a related Flavivirus (http://www.cdc.gov/mmwr/volumes/65/wr/mm6521e1.htm).

11. The healthcare provider will notify the patient with the test results and document it and arrange any follow-up that is needed **in a timely manner**.

12. Updated Zika information can be found on CDC Zika Virus Disease home page http://www.cdc.gov/zika/index.html and FDOH Zika website http://www.floridahealth.gov/diseases-and-conditions/zika-virus/

13. Transplant Clinic will follow the same protocol and because of the immunocompromised nature of their patients they should be referred to ID Transplant Clinic for follow-up and they can call **(Name and phone number of Infectious Disease Physician Providing Zika Support to Transplant Services)** for any questions or concerns about Transplant Clinic patients. **Infectious Disease Physician** and Transplant clinic have also drafted a policy for screening MTI Transplant patients with travel history and symptoms in our MTI clinics.

    FDA's recommendations to reduce the risk of Zika virus transmission by human cell and tissue products can be found at:
    http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm488612.htm

    For Zika Virus infection addenda and flow charts related to transplant, please click on the link below from the Association of Organ Procurement Organizations:
    (http://www.aopo.org/wikidonor/disease-transmission/zikavirus/)

    For "the Zika Epidemics and Transplantation" article in May 2016 copy of "The Journal of Heart and lung Transplant outlining the recommendations for prevention of Zika Virus Infection in transplant recipients and candidates and prevention of donor derived infection please see the article in our Zika folder (See page 43 for details of how to access our Zika folder).

    FDA's August 2016 Revised Recommendations for Reducing the Risk of Zika Virus Transmission by Blood and Blood Components can be found at this link (http://www.fda.gov/downloads/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/Guidances/Blood/UCM518213.pdf).

14. OB Triage/OB service/ACC/PCC will also follow this protocol along with additional evaluation/follow-up of the pregnancy with serial ultrasound and if needed amniocentesis as

per CDC guidelines *http://www.cdc.gov/zika/hc-providers/index.html* and (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm)

7/25/2016 Updated Interim Guidance for Health Care Providers Caring for Pregnant Women with possible Zika Virus Exposure can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm)

State Department of Health and CDC also recommend that pregnant women should avoid non-essential travel to the area of Active Zika Virus transmission identified by CDC (see page 1) and State DOH. (See attached map of Wynwood area and/or Miami Beach area of Miami Dade County on page 40). Pregnant women and their partners living or working in or traveling to the area with Active Zika Virus transmission or having unprotected sex with someone who traveled to, lives in or works in the Zika active transmission area identified by CDC (see page 1) and State DOH (see map of Wynwood area and/or Miami Beach area of Miami Dade County on page 40) should follow steps to prevent mosquito bites for 3 weeks (http://www.cdc.gov/zika/prevention/prevent-mosquito-bites.html)

15. Women and men who live in or who have traveled to the area with active Zika Virus Transmission identified by State DOH and who have a pregnant sex partner should consistently and correctly use condoms or other barriers to prevent infection during sex or not have sex for entire duration of pregnancy. Following updated recommendations pertain to pregnant women who live or work in area of concern (see the attached map of Wynwood area and/or Miami Beach area of Miami Dade County on page 40):
    a. Asymptomatic pregnant women with ongoing risk for exposure to Zika virus should (women who live in or frequently traveled to the area of Florida with active Zika virus transmission identified by State DOH (see map of Wynwood area and/or Miami Beach area of Miami Dade County on page 40) receive Zika virus IgM antibody testing as part of routine obstetric care during the first and second trimester; immediate RT-PCR testing should be performed when IgM antibody test results are positive or equivocal.
    b. Symptomatic pregnant women who are evaluated<2 weeks after symptom onset should receive serum and urine Zika virus RT-PCR testing. Symptomatic pregnant women who are evaluated 2-12 weeks after symptom onset should first receive a Zika virus immunoglobulin (IgM) antibody test; if the IgM antibody test result is positive or equivocal serum and urine RT-PCR testing should be performed.

    Women and men with possible exposure to Zika virus (i.e. living in or travel to the area of active Zika virus transmission including the area identified by State DOH, *(please see attached map of Wynwood area* and/or Miami Beach area of Miami Dade County *on* page 38*)* or having sex without barrier protection with a partner who lives in or traveled to an area with active Zika virus transmission should wait at least 8 weeks for women after exposure to attempt conception; Men with symptomatic Zika virus disease should wait at least 6 months before attempting to conceive.

    All pregnant women in the United States should be assessed for possible Zika virus exposure during each prenatal care visit through determining travel history, where women lives/work, sexual history, (e.g. sexual contact with someone who had Zika exposure or infection or traveled to work in or lives in the area with active Zika transmission (see page 1 and also the map of Wynwood area and/or Miami Beach area

of Miami Dade County on page 38). Women with ongoing risk of possible exposure include those who live in or frequently travel to the area with active Zika virus transmission identified by the State DOH. Women with limited risk include those who traveled to the area with active Zika virus transmission identified by the State DOH or had sex with a partner who lives in or traveled to the area with active Zika virus transmission without using condoms or other barrier methods to prevent infection. Each evaluation should include an assessment of signs and symptoms of Zika virus disease (See #2 above), their travel history as well as their sexual partner's potential exposure to Zika virus and history of any illness consistent with Zika virus disease to determine whether Zika virus testing is indicated.

Pregnant women with ongoing risk of possible Zika virus exposure (see 15a above) and who do not report symptoms of Zika virus disease should be tested in the first and second trimester of pregnancy in accordance with CDC guidance (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_e).

Pregnant women with limited risk (see paragraph 4, page 4) and who do not report symptoms should consult with their healthcare providers to obtain testing for Zika virus infection based on the elapsed interval since their last possible exposure in accordance with CDC guidance (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_e).

On August 3rd, 2016 Florida Governor, Mr. Rick Scott directed Florida Department of Health to make Zika testing available to all pregnant women who would like to be tested at county health departments statewide at no cost and at Jackson Health System we will follow Florida Governor's directive to Florida Department of Health. If the Zika testing is ordered for Pregnant women in Florida, who are not symptomatic and have no Zika exposure history and have not traveled to a Zika impacted county or area and want Zika testing then please make sure they are advised of and understand the risks associated with testing outside of the CDC and FDOH guidelines including the possibility of False positive, False negatives and long waits for confirmatory results.

Women with Zika virus disease exposure and/or asymptomatic men with Zika virus exposure should wait at least eight weeks. Men with Symptomatic Zika virus disease should wait at least six months after symptom onset to attempt conception. CDC's Zika testing guidelines for pregnant women can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm)

Please also see State DOH 8/23/2016 one page document " Zika Fever Information for Clinicians", which can be found as file# 71 at this link

16. **Symptomatic Pregnant Women:** Pregnant women who report signs or symptoms consistent with Zika Virus Disease (see #2 above) should be tested for Zika Virus Infection regardless of the circumstances of possible exposure:

    a. Testing of serum and urine by rRT-PCR is recommended for pregnant women who seek care< 2 weeks after symptom onset. A positive rRT-PCR result confirms the diagnosis of recent maternal Zika Virus Infection. Symptomatic women with negative

rRT-PCR results should receive both Zika Virus IgM and Dengue Virus IgM antibody testing. It is recommended that labs store additional serum samples in symptomatic pregnant women for IgM Antibody testing (for Zika and Dengue) in case rRT-PCR results are negative. If either the Zika virus or Dengue virus IgM antibody test yields positive or equivocal results PRNT should be performed on the same sample to rule out false positive results.

b. Symptomatic women who seek care 2-12 weeks after symptom onset should first receive Zika Virus and Dengue Virus IgM Antibody testing. If the Zika Virus IgM Antibody testing is positive or equivocal, reflex rRT-PCR testing shold be automatically performed on the same serum sample to determine whether Zika Virus RNA (rRT-PCR) is present. A positive rRT-PCR result confirms the diagnosis of recent maternal Zika Virus Infection. However if rRT-PCR result is negative, a positive or equivocal Zika Virus IgM antibody test results should be followed by PRNT. Positive or equivocal dengue IgM test results with negative Zika Virus IgM Antibody test result should also be confirmed by PRNT.

17. **Asymptomatic Pregnant Women:** Testing recommendations for asymptomatic pregnant women with possible Zika Virus exposure after based on the circumstances of possible exposure (re ongoing vs limited exposure) and elapsed interval since the last possible Zika Virus exposure.

a. Asymptomatic pregnant women living in areas without active Zika virus transmission who are evaluated <2 weeks after possible Zika virus exposure should be offered serum and urine rRT-PCR testing. A positive rRT-PCR result confirms the diagnosis of recent maternal Zika virus infection. However, because viral RNA in serum and urine declines over time and depends on multiple factors, asymptomatic pregnant women with a negative rRT-PCR result require additional testing to exclude infection. These women should return 2–12 weeks after possible Zika virus exposure for Zika virus IgM antibody testing. A positive or equivocal IgM antibody test result should be confirmed by PRNT.
b. Asymptomatic pregnant women living in an area without active Zika virus transmission, who seek care 2–12 weeks after possible Zika virus exposure, should be offered Zika virus IgM antibody testing. If the Zika virus IgM antibody test yields positive or equivocal results, reflex rRTPCR testing should be performed on the same sample. If the rRT-PCR result is negative, PRNT should be performed.

As recommended in previous guidance, IgM antibody testing is recommended as part of routine obstetric care during the first and second trimesters for asymptomatic pregnant women who have an ongoing risk for Zika virus exposure (i.e., residence in or frequent travel to an area with active Zika virus transmission). Reflex rRT-PCR testing is recommended for women who have a positive or equivocal Zika virus IgM antibody test results because rRT-PCR testing provides the potential for a definitive diagnosis of Zika virus infection. Negative rRT-PCR results after a positive or equivocal Zika virus IgM antibody test result should be followed by PRNT. The decision to implement testing of asymptomatic pregnant women with ongoing risk for Zika virus exposure should be made by local health officials based on information about levels of Zika virus transmission and laboratory capacity.

18. **Symptomatic and asymptomatic pregnant women who seek care >12 weeks after symptom onset or possible Zika virus exposure.** For symptomatic and asymptomatic pregnant women with possible Zika virus exposure who seek care >12 weeks after symptom onset or possible exposure, IgM antibody testing might be considered. If fetal abnormalities are present, rRT-PCR testing should also be performed on maternal serum and urine. However, a negative IgM antibody test or rRT-PCR result >12 weeks after symptom onset or possible exposure does not rule out recent Zika virus infection because IgM antibody and viral RNA levels decline over time. Given the limitations of testing beyond 12 weeks after symptom onset or possible exposure, serial fetal ultrasounds should be considered.

19. **Updated Recommendations for Prenatal Management of Pregnant Women with Laboratory Evidence of Confirmed or Possible Zika Virus Infection:** Laboratory evidence of a confirmed recent Zika virus infection includes 1) detection of Zika virus or Zika virus RNA or antigen in any body fluid or tissue specimen or 2) positive or equivocal Zika virus or dengue virus IgM antibody test results on serum or cerebrospinal fluid with a positive (≥10) PRNT titer for Zika virus together with a negative (<10) PRNT titer for dengue virus. However, given that serology test results can be difficult to interpret, particularly in persons who were previously infected with or vaccinated against flaviviruses, and because the adverse outcomes caused by Zika virus infection during pregnancy are not fully described, pregnant women with laboratory evidence of recent flavivirus infection are considered to have possible Zika virus infection and should be monitored frequently.

    Pregnant women with confirmed or possible Zika virus infection should be managed in accordance with this updated CDC Interim Guidance. In addition, pregnant women with presumptive recent Zika virus or flavivirus infection (i.e., positive or equivocal Zika virus or dengue virus IgM antibody test result that needs to be confirmed by PRNT) should also be managed in accordance with this updated guidance until final results are available. Serial fetal ultrasounds (every 3 –4 weeks) should be considered to assess fetal anatomy, particularly neuroanatomy, and to monitor growth. Ultrasound findings that have been associated with congenital Zika virus syndrome include microcephaly, intracranial calcifications, ventriculomegaly, arthrogryposis, and abnormalities of the corpus callosum, cerebrum, cerebellum, and eyes. Consideration of amniocentesis should be individualized, because data about its usefulness in diagnosing congenital Zika virus infection are limited. The presence of Zika virus RNA in the amniotic fluid might indicate fetal infection; however, a negative result does not exclude congenital Zika virus infection. In addition, persistent detection of Zika virus RNA in serum has been reported during pregnancy. The clinical implications of prolonged detection of Zika virus RNA in serum are not known; however, repeat rRT-PCR testing has been performed in some cases.

20. **Updated Recommendations for Postnatal Management of Pregnant Women with Laboratory Evidence of Confirmed or Possible Zika Virus Infection:** Infants born to women with laboratory evidence of confirmed or possible Zika virus infection should be evaluated for congenital Zika virus infection in accordance with CDC interim guidance for health care providers caring for infants with possible Zika virus infection found on CDC

Zika website *http://www.cdc.gov/zika/hc-providers/index.html*. Zika virus testing is recommended for these infants regardless of the presence or absence of phenotypic abnormalities. Previous published guidance recommended that testing be performed on cord blood or infant serum; however, the use of cord blood to diagnose other congenital viral infections, such as HIV and syphilis, has sometimes yielded inaccurate results. Maternal blood can contaminate cord blood specimens leading to false-positive results, whereas Wharton's jelly in the umbilical cord can yield false-negative results. Cord blood samples can also become clotted, which does not allow for appropriate serologic testing. Therefore, although collection and testing of cord blood for Zika virus testing can be performed, these results should be interpreted in conjunction with infant serum results. Pathology evaluation of fetal tissue specimens (e.g., placenta and umbilical cord) is another important diagnostic tool to establish the presence of maternal Zika virus infection and can provide a definitive diagnosis for pregnant women with Zika virus infection whose serology results indicate recent unspecified flavivirus infection. In addition, pathology findings might also be helpful in evaluating pregnant women who seek care >12 weeks after symptom onset or possible exposure; Zika virus RNA has been reported to persist in tissue specimens including placenta and fetal brain. A positive rRT-PCR or immunohistochemical staining on the placenta indicates the presence of maternal infection.

Pregnant women with laboratory evidence of confirmed or possible Zika virus infection who experience a fetal loss or stillbirth should be offered pathology testing for Zika virus infection; testing includes rRT-PCR and immunohistochemical staining of fixed tissue. This testing might provide insight into the etiology of the fetal loss, which could inform a woman's future pregnancy planning. Additional information is available at http://www.cdc.gov/zika (http://www.cdc.gov/zika).
Please also see the CDC Updated interim guidance: testing and interpretation recommendations for a pregnant woman with possible exposure to Zika virus** — United States (including U.S. territories) Algorithm on page 29.

21. For all pregnant patients who have traveled to an area with ongoing Zika Virus disease (http://www.cdc.gov/zika/geo/index.html):
    a. Follow guidelines described at the link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm) and summarized above under "Pregnant Women" section. Order appropriate Zika lab tests after Notifying County Health Department Epi ***(Phone# XXX XXX-XXXX)*** (Please see #4 and foot note on page 27). Please fill out light green highlighted part of DH1847 form (sample on pages 42-43), Form can be downloaded from Jackson Intranet Zika folder file 51 (see pages 45 for how to access this folder)
    b. For Triage and inpatient, also notify the County Health Department, then order appropriate Zika lab tests the test and collect the specimens and submit (see pages 9-10 and foot note on page 29), to Hospital Micro Lab with DOH lab form DH1847.
    c. For outpatient ACC OB clinic will follow CDC's July 25th, 2016 Interim Guidance for Healthcare Providers Caring for Pregnant Woman with Possible Zika Virus exposure - United States July 2016. County Health Department ***(Phone# XXX XXX-XXXX)*** will need to be notified about the case and light green highlighted part of form DH 1847 will also need to be filled out as under b above. For all pregnant women seen in the

ACC/OB clinic with exposure history and/or symptom history appropriate Zika tests will be ordered as per guidelines at (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm). If any Questions as to which tests to order than ACC/OB clinic Healthcare Provider will discuss this with County Health Department Epidemiologist ***(Phone# XXX XXX-XXXX)*** at the time of the call to notify them of the case. Orders will be placed as noted on page 17 and 18, after the healthcare provider notifies the County Epi ***(Phone# XXX XXX-XXXX)*** (*Please also see *footnote on page 29*) and healthcare provider will complete the light green highlighted part of DH1847 form (see a above). Hospital outpatient laboratory will come to the patient in ACC/OB clinic for collection of blood and/or urine and also collect the lab form DH 1847 to take back to lab. (Lab phone number to call for ACC outpatient blood draw is ***(Phone# XXX XXX-XXXX).*** PCC clinics will follow their protocol for collecting specimens and transporting them to Hospital Micro Lab.

d. Tell patient to anticipate a phone call to schedule serial ultrasounds at 18 weeks (anatomy) as well as 22, 28, 36 to evaluate growth and fetal head.
e. CDC Travel Alert recommends that pregnant women in any trimester postpone travel to Zika affected areas. All Pregnant women who decide to travel to areas with Zika Virus activity should take appropriate precautions to avoid mosquito bites (see link on page 21).
f. Potentially infected men with pregnant partners or pregnant women with female sex partners should follow guidance described and at the link http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e2.htm?s_cid=mm6529e2_w
g. Symptomatic and Asymptomatic women who have Zika Virus Disease or exposure and Asymptomatic men with Zika Virus exposure should wait at least 8 weeks after symptoms onset to attempt conception.
h. Symptomatic men with Zika Virus Disease should wait at least 6 months after symptoms onset to attempt conception.
i. Men and women with possible exposure to, yet without clinical illness consistent with Zika Virus Disease should wait at least 8 weeks after exposure to attempt conceptions.
j. Healthcare Providers should ensure that women who want to delay or avoid Pregnancy have access to safe and effective contraceptive methods that best meet their needs.

NEJM article “Zika Virus and the Guillain–Barré Syndrome — Case Series from Seven Countries” can be found as file# 69 at this link

CDC August 26th, 2016 MMWR “Guillain-Barré Syndrome During Ongoing Zika Virus Transmission — Puerto Rico, January 1–July 31, 2016” can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6534e1.htm)

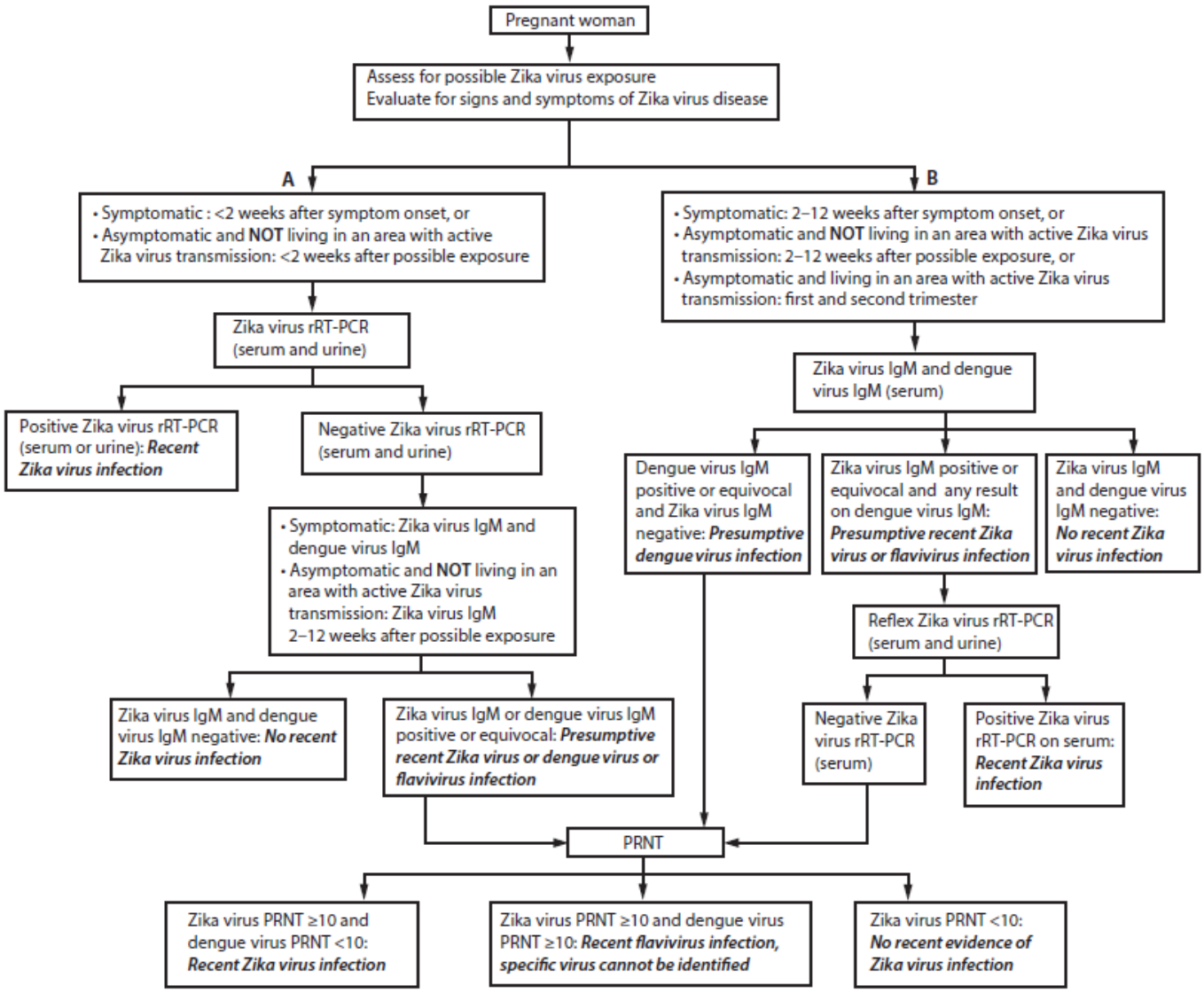
CDC updated Interim Guidance: “Testing and Interpretation Recommendations for a pregnant woman with possible Exposure to Zika Virus – United States (including US Territories) Algorithm.” This algorithm is taken from this document at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm).

Please also see CDC Health Network Advisory #393 (http://emergency.cdc.gov/han/han00393.asp) and

(http://emergency.cdc.gov/han/han00394.asp) for recommendations for travel and testing for pregnant woman and their partners living/working in Wynwood/Miami Beach area of Miami Dade County.

CDC guidance on contraception to prevent unintended pregnancy during Zika Virus outbreak can be found at this link (http://www.cdc.gov/zika/hc-providers/contraception.html).
CDC recommendation on timing of pregnancy after Zika exposure can be found at this link (http://www.cdc.gov/media/releases/2016/s0325-zika-virus-recommendations.html)

*As of August 5th, 2016, providers should use their clinical judgment informed by FDOH and CDC guidance to obtain Zika testing for their pregnant patients through commercial laboratories without approval by County Health Department (Please still continue to notify County Health Dept. ***(Phone# XXX XXX-XXXX)*** of any suspected cases of Zika virus infection especially if you suspect as case from local transmission). Pregnant women who do not meet State DOH and CDC criteria for testing, but desire testing nonetheless, should be counseled on risks and benefits of testing (e.g. false positives and false negatives) and be directed to County Health Department for testing. When referring patients to County Health Departments for testing, please ensure they bring with them completed laboratory requisition form DH1847 marked "Pregnancy Health Priority," attached and can also be found on Hospital Intranet Zika folder) and the State DOH Symptom and History form (attached on page 42 and can also be found on JMH Intranet Zika folder). For pregnant women no approval of test is required but approval is still required or all other specimens prior to submission to public health lab.



IV. Infants Population/Patients *(Please also see section on pages 17-18 for process of getting approval and ordering Zika testing).*

1. For "Interim Guidelines for Healthcare Providers caring for infants and children with possible Zika Virus Infection" and for "Interim guidelines for evaluation and testing of infants with possible congenital Zika Virus Infection" and "Zika Virus Collection and submission of Fetal tissues for Zika Virus Testing." , the Pediatrics and Obstetrics Healthcare Providers should follow latest versions of CDC guidelines found on the Healthcare Provider section of CDC Zika website (http://www.cdc.gov/zika/hc-providers/index.html)

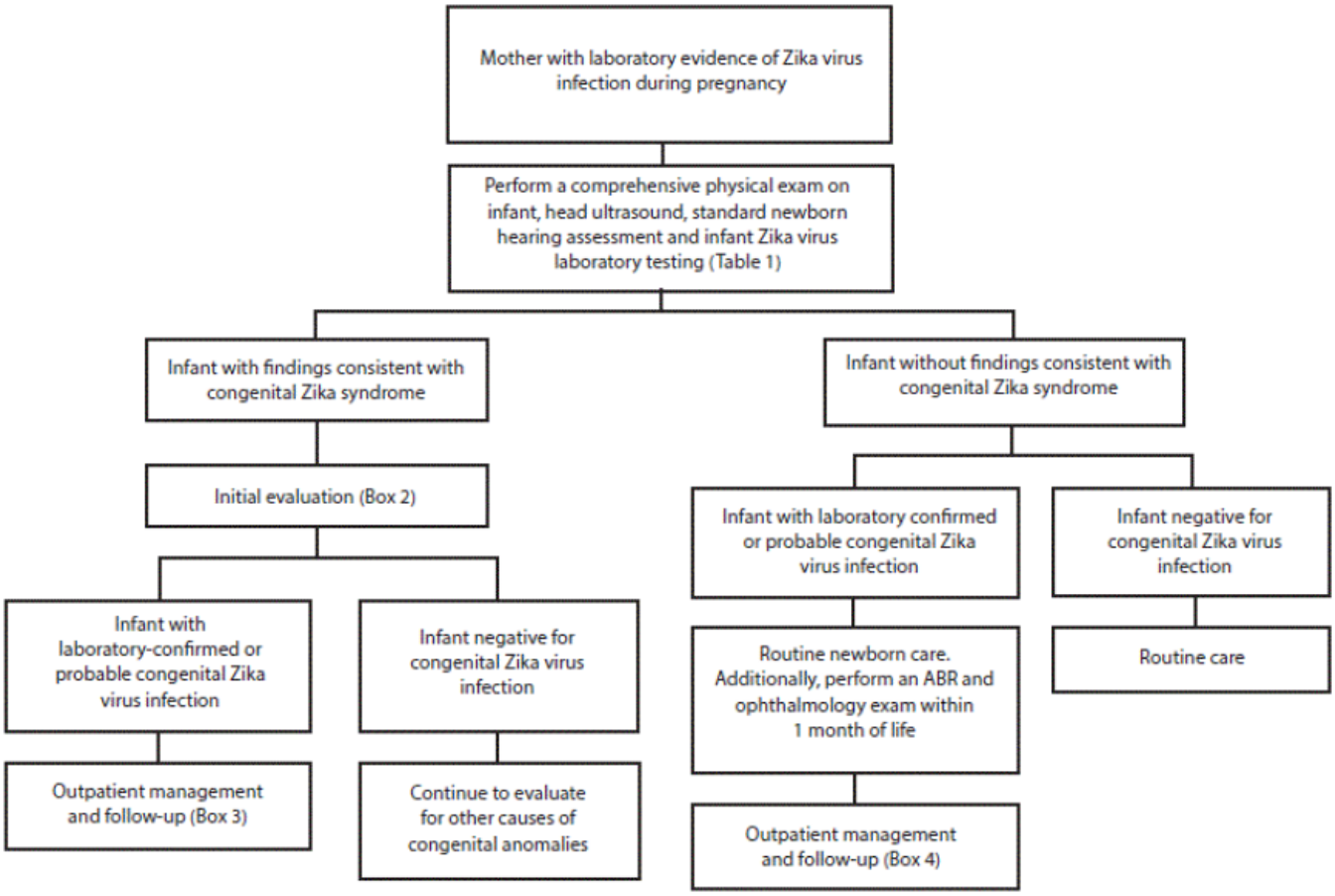
2. For Zika questions regarding pediatric patients (including infants), please contact Pedi Infectious Disease on-call person through Hospital Page Operator ***(Phone# XXX XXX-XXXX)***

3. For any delivery of viable Infant to a mother with suspected Zika Virus Disease and/or baby born with Microcephaly, the Nurse in charge of patient in labor/delivery will also notify Pedi Infectious Disease on-call person through Hospital Page Operator ***(Phone# XXX XXX-XXXX)*****.**

4. When a baby is born to a mother with Zika Risk/Infection, the Infection Control Personnel will also notify County Health Department 24/7 ***(Phone# XXX XXX-XXXX)*** about the birth of the child.

5. CDC August 19th, 2016 update Interim Guidance for evaluation and management of infants with possible Zika Virus Infection United States 2016 can be found at link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6533e2.htm?s_cid=mm6533e2_w

   FIGURE. Recommended Zika virus testing and evaluation of infants born to mothers with laboratory evidence of Zika virus infection during pregnancy



6. **CDC "information for parents about Zika Virus" document can be found at (**http://www.cdc.gov/zika/parents/index.html**)**

7. CDC August 18th, 2016 document Zika Virus "Collection and submission of specimen, for Zika Virus testing at time of Birth can be found at this link (http://www.cdc.gov/zika/pdfs/collection-submission-specimens-zika-testing-at-birth.pdf)

8. CDC August 5th 2016 document Zika Virus "Collection and Submission of fetal Tissue for Zika Viurs testing can be found at this link (http://www.cdc.gov/zika/pdfs/collection-submission-fetal-tissues-zika-testing.pdf)

9. CDC document "Families of Newborns affected by Zika can be found at this link (http://www.cdc.gov/zika/parents/families-of-newborns-affected-zika.html)

10. NEJM article "Zika Virus and the Guillain–Barré Syndrome — Case Series from Seven Countries" can be found as file# 69 at this link

11. CDC August 26th, 2016 MMWR "Guillain-Barré Syndrome During Ongoing Zika Virus Transmission — Puerto Rico, January 1–July 31, 2016" can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6534e1.htm)
12. Please call State Department of Health in County ***(Phone# XXX XXX-XXXX))*** for approval of Zika testing of infants born to women potentially infected with Zika Virus during pregnancy and/or who were diagnosed with microcephaly at birth, intracranial calcification detected prenatally or at birth or other abnormalities consistent with congenital Zika virus infection or if mother's possible Zika exposure occurred within 2 weeks of delivery and the infant develops Zika Symptoms within 2 weeks of birth or when mother had positive inconclusive prenatal or perinatal Zika Virus test results.

13. FDA's August 2016 "Revised Recommendations for Reducing the Risk of Zika Virus Transmission by Blood and Blood Components" can be found at this link (http://www.fda.gov/downloads/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/Guidances/Blood/UCM518213.pdf)

14. CDC's 8/26/2016 document "Likely Sexual Transmission of Zika Virus from a Man with No Symptoms of Infection — Maryland, 2016" can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6534e2.htm)

15. CDC's August 30th, 2016 document "Hearing Loss in Infants with Microcephaly and Evidence of Congenital Zika Virus Infection — Brazil, November 2015–May 2016" can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6534e3.htm)

V. All Non-Pregnant Females, All Males and Non-Infant Children Population/ Patients

1. At all points of entries for healthcare, ask all patients "In the **3** weeks prior to illness onset or presentation have you traveled to or lived or worked or had unprotected sex with someone who traveled to lived or worked in the areas or countries on the CDC's list of areas/countries with active Zika Virus transmission at this link (www.cdc.gov/zika/geo/index.html). This includes Wynwood area of Miami (see map on page 16) and US territories (including Puerto Rico, US Virgin Island, America Samoa/Oceania/Pacific Islands), "As of August 31st, 2016 58 countries and territories worldwide including 48 countries/territories in the Americas are reporting active Zika virus

transmission mentioned in the updated list of the countries/areas with Zika transmission www.cdc.gov/zika/geo/index.html and http://wwwnc.cdc.gov/travel/page/zika-information)

Please see CDC Document "Advice for People living or Traveling to Wynwood and Miami Beach area of Miami (http://www.cdc.gov/zika/intheus/florida-update.html). Please also see State DOH 8/23/2016 one page document "Zika Fever Information for Clinicians", which can be found as file# 71 at this link

a. If "Yes" Record the name of the countries/areas and dates traveled along with Chief Complaint in the Chief Complaint Field.
b. If "Yes" (for exposure history) and clinical symptoms of Zika Virus disease (see #2 below): continue with Zika Virus Disease protocol as outlined below.
c. If "No" for exposure history and "No" for clinical symptoms of Zika Virus disease" (see #2 below) and not pregnant: continue with routine clinical management.
d. If "Yes" for exposure history and no clinical symptoms of Zika Virus disease (see # 2 below) and not pregnant: continue with routine clinical care and check with Health Department ***(Phone# XXX XXX-XXXX)*** to see if testing is warranted:
e. If not sure of pregnant status and exposure history is positive, then get a pregnancy test, and then follow appropriate part of the protocol.

2. At all points of entries healthcare, all patients will be asked if they have any of the following symptoms:
   a. Fever
   b. Maculopapular Rash
   c. Arthralgias and/or Myalgias
   d. Conjunctivitis
   e. Headache and/or Retro orbital Pain

3. If a patient has any 2 or more of these 5 symptoms then: **(Also see 3e & 3f)**
   a. Patients will be taken to a clinical evaluation & treatment area
   b. If the patient has 2 of these 5 symptoms (look under #2 above) and no history of travel to an area with Zika transmission (see # 1 above), but who lives in the same household as a person who traveled to an area reporting Zika Virus Activity (Locally Acquired Mosquito Transmission) or had sexual contact (Vaginal Intercourse, Anal Intercourse or Fellatio or sharing of sex toys used in vaginal, oral or oral sex) with a confirmed Zika case or an ultrasound indicating microcephaly of the fetus in a pregnant woman who is asymptomatic and had sexual contact (Vaginal Intercourse, Anal Intercourse or Fellatio or sharing of sex toys used in vaginal, oral, or oral sex) with a partner that had travel history to an area with active Zika Transmission or if the sex partners has 2 of the 5 symptoms mentioned under #2 above should also be presented to Department of Health (DOH) to determine if patient qualifies for Zika Virus testing as a suspected locally acquired case ***(Phone# XXX XXX-XXXX)*** and if so follow the protocol below *(Please see #6 and 7) Please also see *footnote on page 27*.
   c. Mothers of a fetus with microcephaly or intracranial calcifications or poor fetal outcome diagnosed after the first trimester who have history of possible exposure (see#1 above) to Zika Virus activity during pregnancy should also be tested for Zika after notification (for pregnant women) of the County Health Department Epidemiology

(Phone# XXX XXX-XXXX). Both the mother of the infant and infant with microcephaly or intracranial calcification should also be tested for Zika after getting approval from County Health Department ***(Phone# XXX XXX-XXXX)*** (see pages 9-10) *Please also see *footnote on page 27.*

d. Notification to County Health Department ***(Phone# XXX XXX-XXXX)*** for Zika testing should also be done for persons (men and women) who are attempting conception with possible exposure to Zika Virus with one or more of the signs or symptoms mentioned under 2 above during travel or within 3 weeks of possible exposure unless a definite alternate cause of patient's signs and symptoms is established.
e. Please check with, as needed, with County Health Department, at the time of the call to notify of them for the test, as to the appropriate specimens to send and tests to order for Zika based on clinical scenario of your patient. (Also see Pregnant women section of protocol)

4. **STANDARD INFECTION CONTROL PRECAUTIONS WILL BE FOLLOWED for suspected or confirmed Zika infection cases. (Also see #10).**

5. Differential diagnoses for travelers to endemic areas also include **Dengue and Chikungunya** fevers.

6. The Healthcare Provider will order clinically appropriate diagnostic tests to rule out other causes of symptoms (i.e. CXR, UA, flu test and other tests as needed), and female patients of child-bearing age will receive a pregnancy test.

7. If diagnostic tests do not show an alternate cause of patient's signs and symptoms (See# 2 above), the healthcare provider will call the **State Department of Health (DOH)** to determine if patient qualifies for **Zika Virus testing** ***(Phone# XXX XXX-XXXX)*** *Please also see *footnote on page 27.*

8. If Non Pregnant Patient meets Zika Virus case definition, the DOH Epidemiologist will approve the testing and will fill out the DOH Lab Form (DH 1847) (DOH has these forms and a copy is attached) on page 39and will determine the types of tests needed (PCR, IgM and/or other tests) in consultation with the Healthcare Provider requesting the test, at the time of the test request call, stamp the form with "***County Health Department Epidemiology***" and FAX that form to the FAX number provided by "test requesting Healthcare Provider" at the time of test request call. Once the "DOH Lab Form DH 1847 with stamped "***County Health Department Epidemiology***" (see sample on Page 39) is received by the Healthcare Provider then the Healthcare Provider will send that form, along with appropriate lab specimens (see below for specifics of the type and quantity of lab specimens and ordering of tests in "Miracle"), to Hospital micro lab ***(Phone# XXX XXX-XXXX)***.

9. Serum (Blood) PCR Test can be sent to Commercial Lab (protocol to be established by our lab) by our Hospital Lab after the notification and/or approval of test is obtained, by the provider, from County Health Department ***(Phone# XXX XXX-XXXX)***. All other tests (Urine PCR, IgM, Placenta, CSF, Amniotic fluid, Semen) will be done at Department of Health Lab. Please realize that a negative RT-PCR result on a specimen collected 4 or more days after illness onset does not rule out Zika infection and if this is the case then

talk to State Department of Health ***(Phone# XXX XXX-XXXX)*** and request additional Zika testing appropriate for clinical scenario. Please also note that a negative PCR and IgM on symptomatic or asymptomatic women, who present more than 12 weeks after Zika symptoms onset or exposure does not rule out recent Zika Virus Infection and in that setting serial fetal ultrasounds should be.

In most patients Zika Virus RNA (PCR) is unlikely to be detected in serum after the first week of illness. Zika Virus RNA (PCR test) can be detected in urine for at least 2 weeks after onset of symptoms hence please submit a whole blood specimen (red or tiger top tube) AND a urine specimen for maximum Zika virus detection sensitivity. Virus specific IgM and neutralizing Antibodies typically develop towards the end of the first week of illness and decline over next 12 weeks and may not be detected after 12 weeks. Cross reaction with related flaviviruses (Dengue/yellow fever) is common and may be difficult to discern. Plaque reduction neutralization (PRNT) testing can be performed to measure virus specific neutralizing antibodies to discriminate between cross reacting antibodies in primary flavivirus infections.

During evenings, weekends and holidays the DOH On-Call epidemiologist will ask the healthcare provider to send the test specimens on non-pregnant patients to the Hospital Micro lab ***(Phone# XXX XXX-XXXX)*** and health department will then fax the completed DOH Lab form (DH1847) on the following business days.

10. **Before acquiring specimens, obtain appropriate consent to collect and test specimens for Zika Virus**
    a. Page **Hospital Infection Control** to notify that the patient has been approved for Zika testing *Please also see *footnote on page 29* and specimens on non-pregnant patients are being sent to Hospital Micro Lab along with DOH Lab Form DH 1847 ***(pager # (Phone# XXX XXX-XXXX)***
        i. For asymptomatic pregnant women only 5 cc of blood should be collected in Red top or Tiger top tubes.
        ii. Samples (Serum, Urine) should be collected within the first 21 days of illness. If beyond 21 days of illness then collect serum only. If asymptomatic pregnant women, with positive Zika exposure history (see#1 on page1), samples (serum only) can be collected 2 to 12 weeks (or even beyond) the date of travel.
        iii. For Zika PCR and IgM testing in serum, 5cc of blood should be collected in Red top or Tiger top tube.
        iv. For Zika PCR testing in urine, collect 1-2cc (5cc max) urine in a sterile container with tight fitting screw cap.
        v. For CSF, collect at least 1cc CSF in plastic tube with tight fitting screw cap
        vi. For Amniotic Fluid, collect atleast 1cc of amniotic fluid in a steril container with a tight fitting screw cap
        vii. If semen fluid is collected, then collect atleast 1cc of semen in a steril container with a tight fitting screw
        viii. For submission of placental tissue and/or fetal tissue for Zika testing, please obtain the consent from the patient and call health department ***(Phone# XXX XXX-XXXX)*** to get approval of test prior to collection and submission of the specimen to our pathology lab (please see #7 above). *Please also see *footnote on page 27*

ix. For submission placental and/or tissue to our pathology lab use the existing work flow to send placental and/or fetal issues to the Pathology Department. Call our Micro lab ***(305 585-6508)*** 24/7 and let them know that placenta (from a Zika or Zika suspect patient) will be coming in and they can alert histopathology. Also call Pathology Resident on call ***(Hospital (Phone# XXX XXX-XXXX)*** to let him/her know that placenta from Zika patient is being sent to lab.

x. For ordering Zika Testing in MIRACLE Please follow the Steps outlined below
   1. Open the Powerplan in Miracle titled "Zika".
   2. The Powerplan will include prechecked Zika Testing Panels, one for Blood testing and one for Urine testing. The prechecked blood panel will include PCR and IgM testing, while the urine panel will include PCR testing.
   3. These prechecked blood panels can be unchecked depending on the circumstances.
   4. Additional orders for CSF, Placenta, or Semen can be ordered in this Power plan if needed.
   5. If Amniotic fluid or any other unlisted samples are needed, they can be ordered as a miscellaneous lab order.
   6. A transcribed excerpt of these results will be found in the Laboratory section of Chart Review under the heading "Virology". The complete scanned report will also be available in the "Notes" Section.

   Please see the screen shot of these Zika testing panels in the Powerplan on page 45.
   Please also see the screen shot of the "test results" in MIRACLE on page 45

b. Send all samples and DOH Form DH 1847 (Received by FAX from Health Department Epi with "***County Health Department Epidemiology Stamp"***) for non-pregnant patients and 2 copies of DH 1847 form (marked pregnant health priority) with completed light green highlighted section (see pages 40-41 for sample form) for pregnant women to the JHS Micro lab (if any questions, provider may call **micro lab at *(Phone# XXX XXX-XXXX)***.
c. For placenta Zika testing, place order in MIRACLE under "Miscellaneous Lab – Placenta" and "enter" ZIKA Testing in the blank field.
d. Specimen referral for Zika testing in commercial lab (VIRACOR), requires approval by pathology resident on service (Hospital ***(Phone# XXX XXX-XXXX)*** when it says "please enter pager ID number" or the laboratory Medical Director or designee.

NEJM article "Zika Virus and the Guillain–Barré Syndrome — Case Series from Seven Countries" can be found as file# 69 at this link

CDC document "**GUILLAIN-BARRÉ** Passive Surveillance System" can be found at this link http://www.cdc.gov/zika/pdfs/poster-gbs.pdf

CDC guidance for collection and submission of body fluids for Zika Virus Testing can be found at http://www.cdc.gov/zika/hc-providers/body-fluids-collection-submission.html and http://www.floridahealth.gov/diseases-and-conditions/zika-virus/index.html

Per State DOH the Specimen Containers must be labeled with Patient Name, Date of Birth and Date of Collection, properly sealed and shipped as "Category B" Agents with completed BPHL DH 1847 Form (completed by Florida Department of Health at Miami-Dade). Patients cannot transport their own specimens. State DOH guidance (August 5th 2016) for collection, packaging and shipping of Laboratory Specimens for Zika can be found as file# 52 at this link

11. Healthcare Provider will inform the patient that results may take up to 3 weeks or more and that JHS will contact the patient with the results

12. Febrile patients should be managed with acetaminophen (if no allergy) and counseled to avoid NSAIDS or aspirin

13. For Zika questions regarding pediatric patients, please contact Pedi Infectious Disease on-call person through Hospital Page Operator ***(Phone# XXX XXX-XXXX)***

14. **CDC "Tools for Health Care Providers" can be found at (**http://www.cdc.gov/zika/hc-providers/tools.html**)**

15. Note: *The DOH State Lab will automatically test for* ***Dengue and Chikungunya on*** *all blood samples submitted from febrile patients that meet criteria for Zika testing. These additional testing will be performed by DOH State Lab until capacity permits and after that the Healthcare Provider will need to send the samples for Dengue and/or Chickungunya, if clinically suspected, to an outside lab through Hospital* ***micro lab (Phone# XXX XXX-XXXX).*** DOH will determine appropriate tests (RT-PCR, Antibody IgM, PRNT, Viral Isolation) based on the patient's travel history and clinical presentation).

16. Healthcare provider will discharge the patient home with outpatient follow up (unless clinical presentation requires further inpatient management) and instructions for prevention of sexual transmission (consistently and correctly use of condoms and other barriers during sex including vaginal intercourse, anal intercourse or fellatio or sharing of sex toys used in vaginal, oral or oral sex). For the men who live in or travel to area with Zika Virus Transmission who have pregnant partner should abstain from sex or consistently and correctly use condoms for the entire duration of pregnancy. Men who reside in or have traveled to an area of active Zika Virus transmission, who are concerned about sexual transmission of Zika Virus might consider abstaining from sexual activity or use condoms and other barriers consistently and correctly during sex (i.e. Vaginal Intercourse, anal intercourse or Fellatio or sharing of sex toys). CDC is Interim Guidance for prevention of sexual transmission of Zika Virus United States, July 2016 can be found at the link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e2.htm?s_cid=mm6529e2_w)

    CDC's Guidance to LGBT Community "How to protect yourselves from Zika" can be found at this (https://www.cdc.gov/zika/pdfs/lgbt-zika-fact-sheet.pdf)

    WHO now recommends that both women and men, who are returning from Zika affected areas abstain or practice safe sex for 6 months even if they are not trying to conceive and regardless of symptoms.

CDC August 26th, 2016 MMWR "Guillain-Barré Syndrome During Ongoing Zika Virus Transmission — Puerto Rico, January 1–July 31, 2016" can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6534e1.htm)

CDC's 8/26/2016 document "Likely Sexual Transmission of Zika Virus from a Man with No Symptoms of Infection — Maryland, 2016" can be found at this link (http://www.cdc.gov/mmwr/volumes/65/wr/mm6534e2.htm). Patients will also be given instructions to take measures to prevent mosquito bites (http://www.cdc.gov/zika/prevention/ and http://www.cdc.gov/zika/pregnancy/protect-yourself.html). For controlling Mosquitoes at home see the CDC link: (http://www.cdc.gov/zika/prevention/controlling-mosquitoes-at-home.html). Persons who traveled to a country/area with active Zika virus transmission, should take precaution to prevent mosquito bites for 3 weeks after return from these areas.

For adult non-pregnant patients seen in emergency department and being discharged the emergency department attending physicians will call ID Fellow/Attending to present case for follow-up in Infectious Disease Clinic, which meets once a week on Monday morning. For pediatric patients being discharged, pediatric Infectious Disease should be called to arrange outpatient follow-up.

For patients being tested for Zika Virus Disease, DOH will send mosquito control to their home address to fumigate. (http://www.cdc.gov/chikungunya/resources/vector-control.html)

17. DOH will call the ordering healthcare provider on all positive results. All positive and negative test results and will also be faxed by DOH to hospital micro lab. Our Micro lab will also call the County Health Department Epi once a day to follow up on the results and then the Micro Lab will also call and email (secure email) to the Healthcare Provider with the results. If lab is unable to reach the Healthcare Provider, lab will notify Chief of Service and if unable to reach Chief of Service then notify facility Chief Medical Officer. In situations where DOH declines to do the test and the Healthcare Provider feels strongly that test should be done then Healthcare Provider should ask to speak to DOH local Chief Epidemiologist ***(Name of Chief Epidemiologist at County Department of Health and their contact phone number)*** at ***(Phone# XXX XXX-XXXX).***

    If the test results are "Equivocal" then please discuss this with DOH ***(Phone# XXX XXX-XXXX)*** to see what follow-up tests are recommended by DOH to clarify further the "Equivocal" results.

    Please also call and discuss with DOH ***(Phone# XXX XXX-XXXX)*** whenever a Plaque Reduction Neutralization Test (PRNT) is done on your patient, to discuss the interpretation of the results, because recent evidence suggests that a fourfold higher titer by PRNT might not discriminate between Zika Virus antibodies and cross reacting antibodies in all persons who have been previously infected with or vaccinated against a related Flavivirus (http://www.cdc.gov/mmwr/volumes/65/wr/mm6521e1.htm).

18. The healthcare provider will notify the patient with the test results and document it and arrange any follow-up that is needed **in a timely manner**.

19. Updated Zika information can be found on CDC Zika Virus Disease home page http://www.cdc.gov/zika/index.html and FDOH Zika website http://www.floridahealth.gov/diseases-and-conditions/zika-virus/

20. Transplant Clinic will follow the same protocol and because of the immunocompromised nature of their patients they should be referred to ID Transplant Clinic for follow-up and they can call **(Name and phone number of Infectious Disease Physician Providing Zika Support to Transplant Services)** for any questions or concerns about Transplant Clinic patients. **Infectious Disease Physician** and Transplant clinic have also drafted a policy for screening MTI Transplant patients with travel history and symptoms in our MTI clinics.

    FDA's recommendations to reduce the risk of Zika virus transmission by human cell and tissue products can be found at:
    http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm488612.htm
    For Zika Virus infection addenda and flow charts related to transplant, please click on the link below from the Association of Organ Procurement Organizations:
    (http://www.aopo.org/wikidonor/disease-transmission/zikavirus/)

    For "the Zika Epidemics and Transplantation" article in May 2016 copy of "The Journal of Heart and lung Transplant outlining the recommendations for prevention of Zika Virus Infection in transplant recipients and candidates and prevention of donor derived infection please see the article in our Zika folder (See page 46 for details of how to access our Zika folder)

    FDA's August 2016 "Revised Recommendations for Reducing the Risk of Zika Virus Transmission by Blood and Blood Components" can be found at this link
    (http://www.fda.gov/downloads/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/Guidances/Blood/UCM518213.pdf)

    NEJM article "Zika Virus and the Guillain–Barré Syndrome — Case Series from Seven Countries" can be found as file# 69 at this link

    CDC August 26th, 2016 MMWR "Guillain-Barré Syndrome During Ongoing Zika Virus Transmission — Puerto Rico, January 1–July 31, 2016" can be found at this link
    (http://www.cdc.gov/mmwr/volumes/65/wr/mm6534e1.htm)

VI. For Infection Control Staff

1. Providers, hospitals and laboratories are required to contact the State DOH 24/7, as soon as a suspected or confirmed case of Zika is found. This notification is different from the DOH call to determine if the patient qualifies for Zika virus testing. Hospitals with suspected or confirmed hospitalized cases of the Zika virus must provide case status reports every 24 hours, until Zika Virus infection is ruled out or patient is discharged, to the County Health Department ***(Phone# XXX XXX-XXXX)***. Providers with suspected or confirmed non-hospitalized cases of the Zika virus shall provide case status reports every

72 hours to the County Health Department ***(Phone# XXX XXX-XXXX)*** until Zika Virus Infection is ruled out or resolution of symptoms and this includes weekends and holidays. Zika fever is now reportable upon immediate suspicion and the expanded criteria for reporting now also include: Mother of an infant or fetus with poor fetal outcome diagnosed after the first trimester and the mother has a history of travel to an area with Zika virus activity during pregnancy.

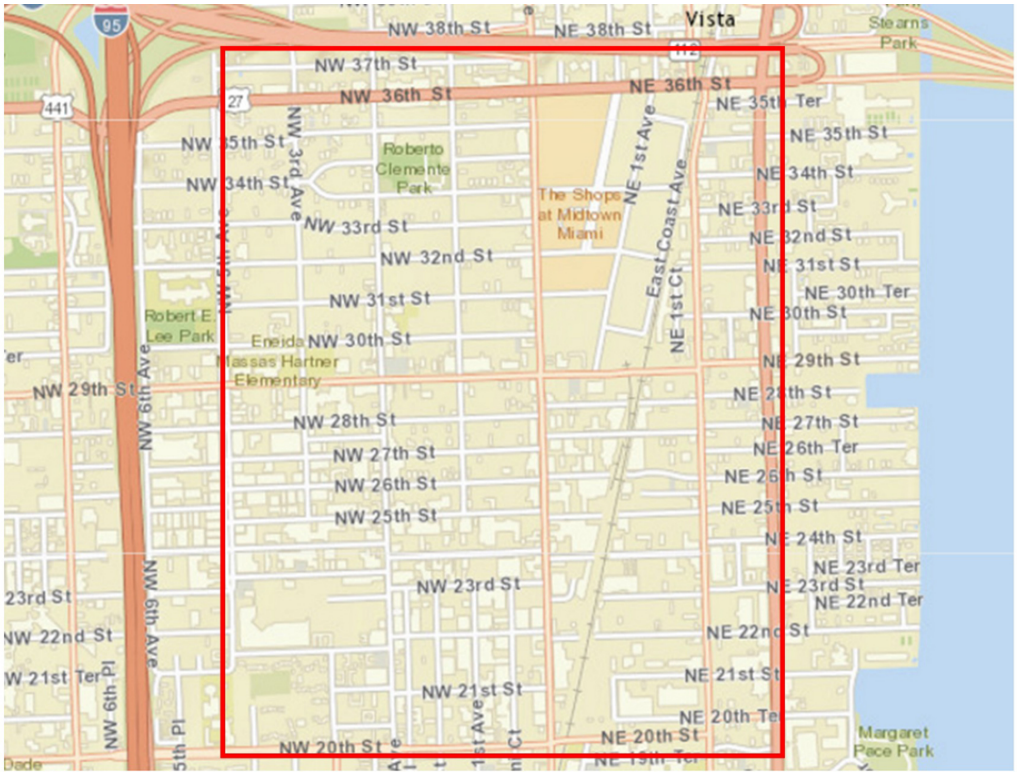
Infection Control personnel will provide these notifications to the County Health Department at the required intervals.

When a baby is born to a mother with Zika Risk/Infection, the Infection Control Personnel will also notify County Health Department 24/7 ***(Phone# XXX XXX-XXXX)*** about the birth of the child.

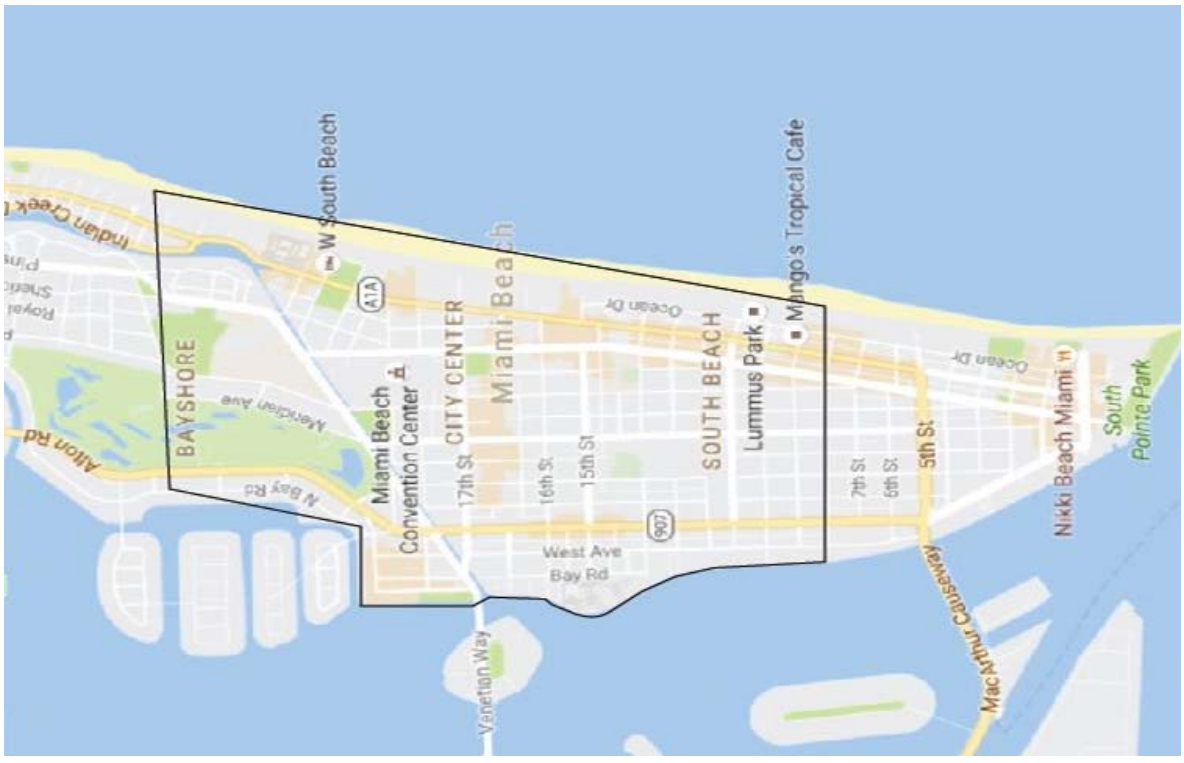
2. Hospital Disaster and Emergency Preparedness Department's Zika Folder can be accessed through Hospital JetPortal Screen by clicking on "Content Directory", then clicking on "Disaster and Emergency Preparedness" and then click again on "Disaster and Emergency Preparedness" and then clicking on the Zika folder (Please see attached screen shots).

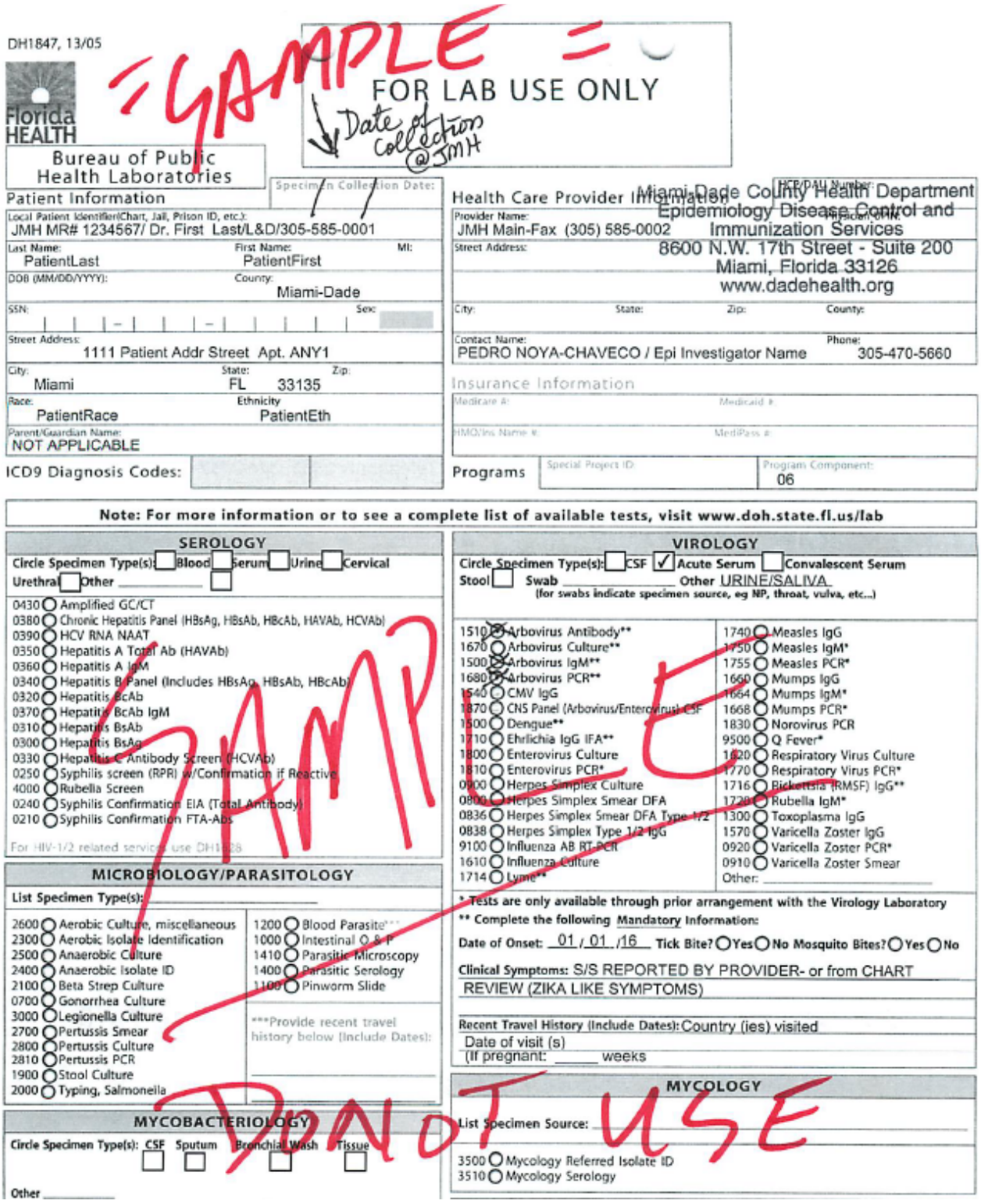
   Attached also is a list of files found on this Zika Folder.

Map of Wynwood area of Miami declared by FDOH as area of Active Zika Virus Transmission



Map of Section of Miami Beach area declared by FDOH as area of Active Zika Virus Transmission





DH1847, 13/05

SAMPLE = SAMPLE

Florida HEALTH

Bureau of Public Health Laboratories

FOR LAB USE ONLY

Date of collection @JMH

Patient Information

Specimen Collection Date:

Local Patient Identifier/Chart, Jail, Prison ID, etc.): JMH MR# 1234567/ Dr. First Last/L&D/305-585-0001

Last Name: PatientLast | First Name: PatientFirst | MI:

DOB (MM/DD/YYYY): | County: Miami-Dade

SSN: | Sex:

Street Address: 1111 Patient Addr Street Apt. ANY1

City: Miami | State: FL | Zip: 33135

Race: PatientRace | Ethnicity: PatientEth

Parent/Guardian Name: NOT APPLICABLE

ICD9 Diagnosis Codes:

Health Care Provider Information

Miami-Dade County Health Department
Epidemiology Disease Control and Immunization Services
8600 N.W. 17th Street - Suite 200
Miami, Florida 33126
www.dadehealth.org

HCP/DAI Number:

Provider Name: JMH Main-Fax (305) 585-0002

Street Address:

City: State: Zip: County:

Contact Name: PEDRO NOYA-CHAVECO / Epi Investigator Name | Phone: 305-470-5660

Insurance Information

Medicare #: Medicaid #:

HMO/Ins Name #: MediPass #:

Programs | Special Project ID: | Program Component: 06

Note: For more information or to see a complete list of available tests, visit www.doh.state.fl.us/lab

SEROLOGY

Circle Specimen Type(s): Blood Serum Urine Cervical Urethral Other

0430 Amplified GC/CT
0380 Chronic Hepatitis Panel (HBsAg, HBsAb, HBcAb, HAVAb, HCVAb)
0390 HCV RNA NAAT
0350 Hepatitis A Total Ab (HAVAb)
0360 Hepatitis A IgM
0340 Hepatitis B Panel (Includes HBsAg, HBsAb, HBcAb)
0320 Hepatitis BcAb
0370 Hepatitis BcAb IgM
0310 Hepatitis BsAb
0300 Hepatitis BsAg
0330 Hepatitis C Antibody Screen (HCVAb)
0250 Syphilis screen (RPR) w/Confirmation if Reactive
4000 Rubella Screen
0240 Syphilis Confirmation EIA (Total Antibody)
0210 Syphilis Confirmation FTA-Abs

For HIV-1/2 related services use DH1328

VIROLOGY

Circle Specimen Type(s): CSF ✓ Acute Serum Convalescent Serum Stool Swab Other URINE/SALIVA
(for swabs indicate specimen source, eg NP, throat, vulva, etc...)

1510 Arbovirus Antibody**
1670 Arbovirus Culture**
1500 Arbovirus IgM**
1680 Arbovirus PCR**
1540 CMV IgG
1870 CNS Panel (Arbovirus/Enterovirus) CSF
1500 Dengue**
1710 Ehrlichia IgG IFA**
1800 Enterovirus Culture
1810 Enterovirus PCR*
0900 Herpes Simplex Culture
0800 Herpes Simplex Smear DFA
0836 Herpes Simplex Smear DFA Type 1/2
0838 Herpes Simplex Type 1/2 IgG
9100 Influenza AB RT-PCR
1610 Influenza Culture
1714 Lyme**

1740 Measles IgG
1750 Measles IgM*
1755 Measles PCR*
1660 Mumps IgG
1664 Mumps IgM*
1668 Mumps PCR*
1830 Norovirus PCR
9500 Q Fever*
1620 Respiratory Virus Culture
1770 Respiratory Virus PCR*
1716 Rickettsia (RMSF) IgG**
1720 Rubella IgM*
1300 Toxoplasma IgG
1570 Varicella Zoster IgG
0920 Varicella Zoster PCR*
0910 Varicella Zoster Smear
Other:

* Tests are only available through prior arrangement with the Virology Laboratory
** Complete the following Mandatory Information:
Date of Onset: 01 / 01 /16 Tick Bite? Yes No Mosquito Bites? Yes No
Clinical Symptoms: S/S REPORTED BY PROVIDER- or from CHART REVIEW (ZIKA LIKE SYMPTOMS)
Recent Travel History (Include Dates): Country (ies) visited
Date of visit (s)
(If pregnant: _____ weeks

MICROBIOLOGY/PARASITOLOGY

List Specimen Type(s):

2600 Aerobic Culture, miscellaneous
2300 Aerobic Isolate Identification
2500 Anaerobic Culture
2400 Anaerobic Isolate ID
2100 Beta Strep Culture
0700 Gonorrhea Culture
3000 Legionella Culture
2700 Pertussis Smear
2800 Pertussis Culture
2810 Pertussis PCR
1900 Stool Culture
2000 Typing, Salmonella

1200 Blood Parasite***
1000 Intestinal O & P
1410 Parasitic Microscopy
1400 Parasitic Serology
1100 Pinworm Slide

***Provide recent travel history below (Include Dates):

MYCOBACTERIOLOGY

Circle Specimen Type(s): CSF Sputum Bronchial Wash Tissue

Other

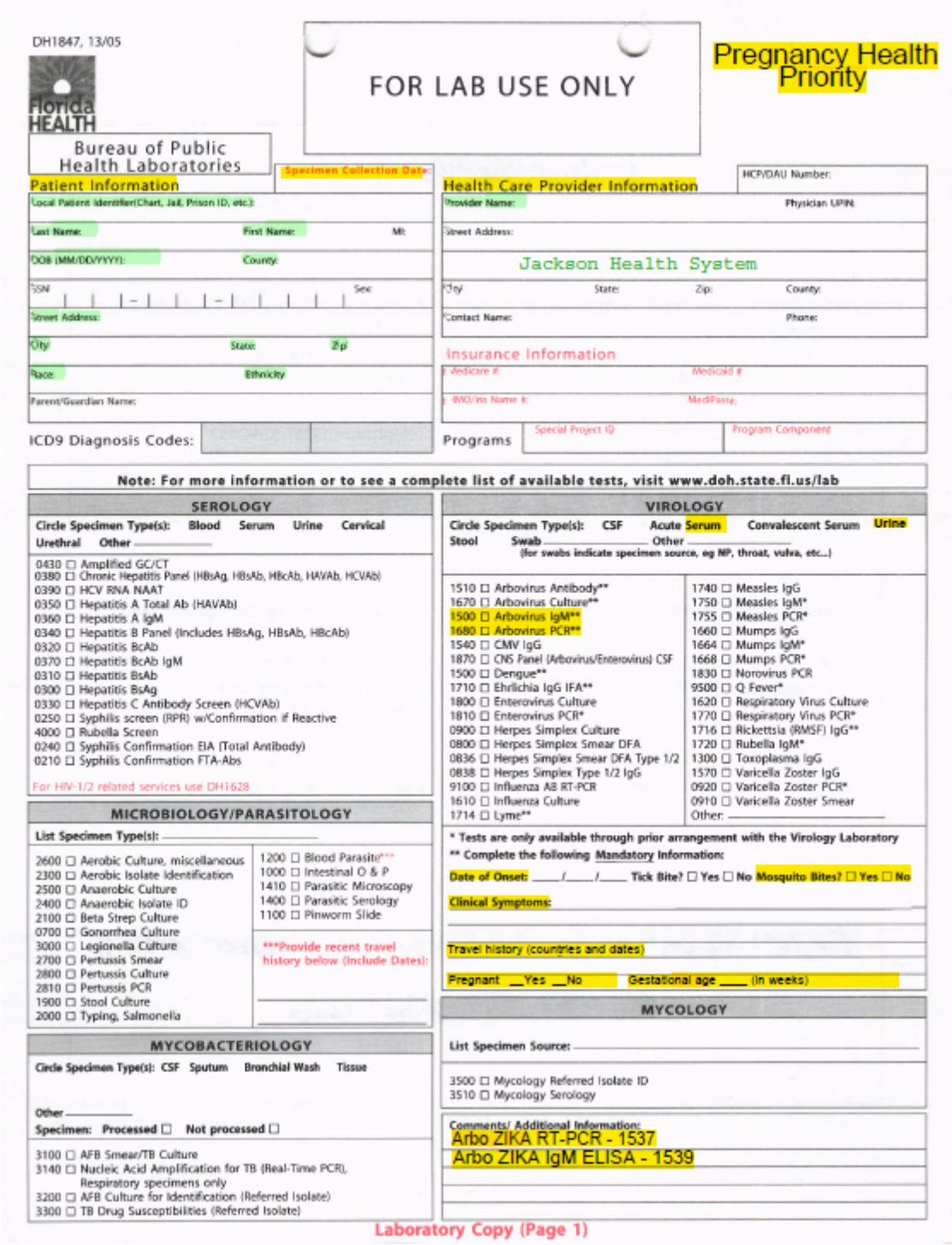
MYCOLOGY

List Specimen Source:

3500 Mycology Referred Isolate ID
3510 Mycology Serology

SAMPLE DO NOT USE

This form will be filled out by County Health Department, on all non-pregnant patient samples (based on information given by healthcare provider at time of approval of test) and faxed to the provider with approval stamp. This form should accompany the specimens going to Hospital lab.



DH1847, 13/05

Florida HEALTH

Bureau of Public Health Laboratories

FOR LAB USE ONLY

Pregnancy Health Priority

Specimen Collection Date:

Patient Information

Local Patient Identifier(Chart, Jail, Prison ID, etc.):
Last Name: First Name: MI:
DOB (MM/DD/YYYY): County:
SSN Sex:
Street Address:
City State: Zip
Race: Ethnicity
Parent/Guardian Name:

Health Care Provider Information

HCP/DAU Number:
Provider Name: Physician UPIN:
Street Address:
Jackson Health System
City State: Zip: County:
Contact Name: Phone:

Insurance Information

Medicare #: Medicaid #:
WIC/Ins Name #: MediPass:

ICD9 Diagnosis Codes:

Programs: Special Project ID: Program Component:

Note: For more information or to see a complete list of available tests, visit www.doh.state.fl.us/lab

SEROLOGY

Circle Specimen Type(s): Blood Serum Urine Cervical Urethral Other

0430 ☐ Amplified GC/CT
0380 ☐ Chronic Hepatitis Panel (HBsAg, HBsAb, HBcAb, HAVAb, HCVAb)
0390 ☐ HCV RNA NAAT
0350 ☐ Hepatitis A Total Ab (HAVAb)
0360 ☐ Hepatitis A IgM
0340 ☐ Hepatitis B Panel (Includes HBsAg, HBsAb, HBcAb)
0320 ☐ Hepatitis BcAb
0370 ☐ Hepatitis BcAb IgM
0310 ☐ Hepatitis BsAb
0300 ☐ Hepatitis BsAg
0330 ☐ Hepatitis C Antibody Screen (HCVAb)
0250 ☐ Syphilis screen (RPR) w/Confirmation if Reactive
4000 ☐ Rubella Screen
0240 ☐ Syphilis Confirmation EIA (Total Antibody)
0210 ☐ Syphilis Confirmation FTA-Abs

For HIV-1/2 related services use DH1628

MICROBIOLOGY/PARASITOLOGY

List Specimen Type(s):

2600 ☐ Aerobic Culture, miscellaneous
2300 ☐ Aerobic Isolate Identification
2500 ☐ Anaerobic Culture
2400 ☐ Anaerobic Isolate ID
2100 ☐ Beta Strep Culture
0700 ☐ Gonorrhea Culture
3000 ☐ Legionella Culture
2700 ☐ Pertussis Smear
2800 ☐ Pertussis Culture
2810 ☐ Pertussis PCR
1900 ☐ Stool Culture
2000 ☐ Typing, Salmonella

1200 ☐ Blood Parasite***
1000 ☐ Intestinal O & P
1410 ☐ Parasitic Microscopy
1400 ☐ Parasitic Serology
1100 ☐ Pinworm Slide

***Provide recent travel history below (Include Dates):

MYCOBACTERIOLOGY

Circle Specimen Type(s): CSF Sputum Bronchial Wash Tissue

Other
Specimen: Processed ☐ Not processed ☐

3100 ☐ AFB Smear/TB Culture
3140 ☐ Nucleic Acid Amplification for TB (Real-Time PCR), Respiratory specimens only
3200 ☐ AFB Culture for Identification (Referred Isolate)
3300 ☐ TB Drug Susceptibilities (Referred Isolate)

VIROLOGY

Circle Specimen Type(s): CSF Acute Serum Convalescent Serum Urine Stool Swab Other
(for swabs indicate specimen source, eg NP, throat, vulva, etc...)

1510 ☐ Arbovirus Antibody**
1670 ☐ Arbovirus Culture**
1500 ☐ Arbovirus IgM**
1680 ☐ Arbovirus PCR**
1540 ☐ CMV IgG
1870 ☐ CNS Panel (Arbovirus/Enterovirus) CSF
1500 ☐ Dengue**
1710 ☐ Ehrlichia IgG IFA**
1800 ☐ Enterovirus Culture
1810 ☐ Enterovirus PCR*
0900 ☐ Herpes Simplex Culture
0800 ☐ Herpes Simplex Smear DFA
0836 ☐ Herpes Simplex Smear DFA Type 1/2
0838 ☐ Herpes Simplex Type 1/2 IgG
9100 ☐ Influenza A/B RT-PCR
1610 ☐ Influenza Culture
1714 ☐ Lyme**

1740 ☐ Measles IgG
1750 ☐ Measles IgM*
1755 ☐ Measles PCR*
1660 ☐ Mumps IgG
1664 ☐ Mumps IgM*
1668 ☐ Mumps PCR*
1830 ☐ Norovirus PCR
9500 ☐ Q Fever*
1620 ☐ Respiratory Virus Culture
1770 ☐ Respiratory Virus PCR*
1716 ☐ Rickettsia (RMSF) IgG**
1720 ☐ Rubella IgM*
1300 ☐ Toxoplasma IgG
1570 ☐ Varicella Zoster IgG
0920 ☐ Varicella Zoster PCR*
0910 ☐ Varicella Zoster Smear
Other:

* Tests are only available through prior arrangement with the Virology Laboratory
** Complete the following Mandatory Information:
Date of Onset: ___/___/___ Tick Bite? ☐ Yes ☐ No Mosquito Bites? ☐ Yes ☐ No
Clinical Symptoms:
Travel history (countries and dates)
Pregnant Yes No Gestational age ____ (in weeks)

MYCOLOGY

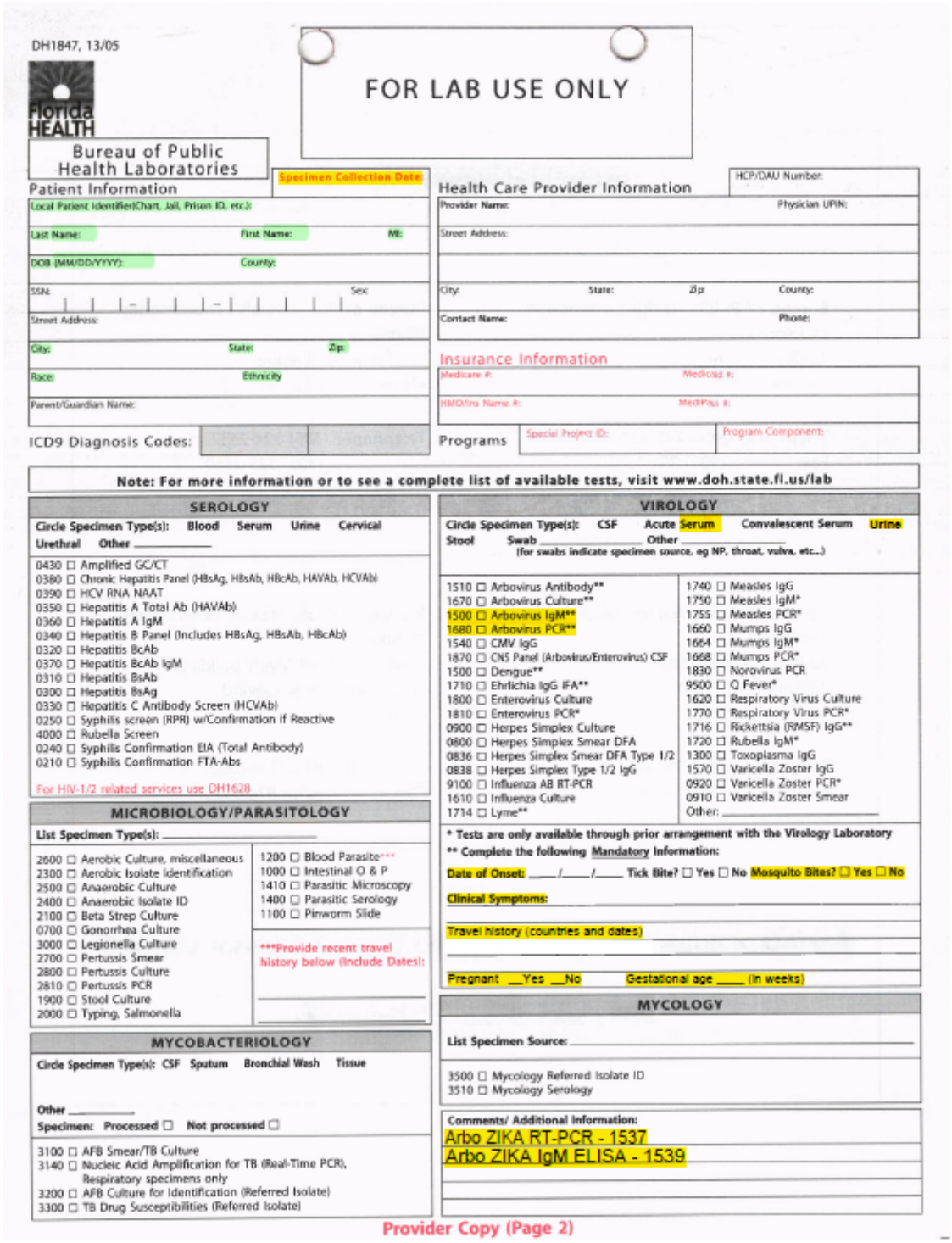
List Specimen Source:

3500 ☐ Mycology Referred Isolate ID
3510 ☐ Mycology Serology

Comments/ Additional Information:
Arbo ZIKA RT-PCR - 1537
Arbo ZIKA IgM ELISA - 1539

Laboratory Copy (Page 1)

The light Green highlighted area of this form (2 copies, one for lab and one for provider file) will be filled out by Healthcare Provider ordering the Zika tests on pregnant women after notification of Health Department ***(Phone# XXX XXX-XXXX)*** and will be sent to Hospital lab along with specimens. This form is file #51 on our Hospital Intranet Zika Folder (please see page 46 for "how to access this folder").



DH1847, 13/05

FOR LAB USE ONLY

Florida HEALTH

Bureau of Public Health Laboratories

Patient Information

Specimen Collection Date:

Local Patient Identifier(Chart, Jail, Prison ID, etc.):

Last Name: First Name: MI:

DOB (MM/DD/YYYY): County:

SSN: Sex:

Street Address:

City: State: Zip:

Race: Ethnicity

Parent/Guardian Name:

Health Care Provider Information

HCP/DAU Number:

Provider Name: Physician UPIN:

Street Address:

City: State: Zip: County:

Contact Name: Phone:

Insurance Information

Medicare #: Medicaid #:

HMO/Ins Name #: MediPass #:

ICD9 Diagnosis Codes:

Programs

Special Project ID: Program Component:

Note: For more information or to see a complete list of available tests, visit www.doh.state.fl.us/lab

SEROLOGY

Circle Specimen Type(s): Blood Serum Urine Cervical Urethral Other

0430 ☐ Amplified GC/CT
0380 ☐ Chronic Hepatitis Panel (HBsAg, HBsAb, HBcAb, HAVAb, HCVAb)
0390 ☐ HCV RNA NAAT
0350 ☐ Hepatitis A Total Ab (HAVAb)
0360 ☐ Hepatitis A IgM
0340 ☐ Hepatitis B Panel (Includes HBsAg, HBsAb, HBcAb)
0320 ☐ Hepatitis BcAb
0370 ☐ Hepatitis BcAb IgM
0310 ☐ Hepatitis BsAb
0300 ☐ Hepatitis BsAg
0330 ☐ Hepatitis C Antibody Screen (HCVAb)
0250 ☐ Syphilis screen (RPR) w/Confirmation if Reactive
4000 ☐ Rubella Screen
0240 ☐ Syphilis Confirmation EIA (Total Antibody)
0210 ☐ Syphilis Confirmation FTA-Abs

For HIV-1/2 related services use DH1628

MICROBIOLOGY/PARASITOLOGY

List Specimen Type(s):

2600 ☐ Aerobic Culture, miscellaneous
2300 ☐ Aerobic Isolate Identification
2500 ☐ Anaerobic Culture
2400 ☐ Anaerobic Isolate ID
2100 ☐ Beta Strep Culture
0700 ☐ Gonorrhea Culture
3000 ☐ Legionella Culture
2700 ☐ Pertussis Smear
2800 ☐ Pertussis Culture
2810 ☐ Pertussis PCR
1900 ☐ Stool Culture
2000 ☐ Typing, Salmonella

1200 ☐ Blood Parasite***
1000 ☐ Intestinal O & P
1410 ☐ Parasitic Microscopy
1400 ☐ Parasitic Serology
1100 ☐ Pinworm Slide

***Provide recent travel history below (Include Dates):

MYCOBACTERIOLOGY

Circle Specimen Type(s): CSF Sputum Bronchial Wash Tissue

Other

Specimen: Processed ☐ Not processed ☐

3100 ☐ AFB Smear/TB Culture
3140 ☐ Nucleic Acid Amplification for TB (Real-Time PCR), Respiratory specimens only
3200 ☐ AFB Culture for Identification (Referred Isolate)
3300 ☐ TB Drug Susceptibilities (Referred Isolate)

VIROLOGY

Circle Specimen Type(s): CSF Acute Serum Convalescent Serum Urine Stool Swab Other
(for swabs indicate specimen source, eg NP, throat, vulva, etc...)

1510 ☐ Arbovirus Antibody**
1670 ☐ Arbovirus Culture**
1500 ☐ Arbovirus IgM**
1680 ☐ Arbovirus PCR**
1540 ☐ CMV IgG
1870 ☐ CNS Panel (Arbovirus/Enterovirus) CSF
1500 ☐ Dengue**
1710 ☐ Ehrlichia IgG IFA**
1800 ☐ Enterovirus Culture
1810 ☐ Enterovirus PCR*
0900 ☐ Herpes Simplex Culture
0800 ☐ Herpes Simplex Smear DFA
0836 ☐ Herpes Simplex Smear DFA Type 1/2
0838 ☐ Herpes Simplex Type 1/2 IgG
9100 ☐ Influenza AB RT-PCR
1610 ☐ Influenza Culture
1714 ☐ Lyme**

1740 ☐ Measles IgG
1750 ☐ Measles IgM*
1755 ☐ Measles PCR*
1660 ☐ Mumps IgG
1664 ☐ Mumps IgM*
1668 ☐ Mumps PCR*
1830 ☐ Norovirus PCR
9500 ☐ Q Fever*
1620 ☐ Respiratory Virus Culture
1770 ☐ Respiratory Virus PCR*
1716 ☐ Rickettsia (RMSF) IgG**
1720 ☐ Rubella IgM*
1300 ☐ Toxoplasma IgG
1570 ☐ Varicella Zoster IgG
0920 ☐ Varicella Zoster PCR*
0910 ☐ Varicella Zoster Smear
Other:

* Tests are only available through prior arrangement with the Virology Laboratory
** Complete the following Mandatory Information:

Date of Onset: ___/___/___ Tick Bite? ☐ Yes ☐ No Mosquito Bites? ☐ Yes ☐ No

Clinical Symptoms:

Travel history (countries and dates)

Pregnant __Yes __No Gestational age ____ (in weeks)

MYCOLOGY

List Specimen Source:

3500 ☐ Mycology Referred Isolate ID
3510 ☐ Mycology Serology

Comments/ Additional Information:
Arbo ZIKA RT-PCR - 1537
Arbo ZIKA IgM ELISA - 1539

Provider Copy (Page 2)

The light Green highlighted area of this form (2 copies, one for lab and one for provider file) will be filled out by Healthcare Provider ordering the Zika tests on pregnant women after notification of Health Department ***(Phone# XXX XXX-XXXX)*** and will be sent to Hospital lab along with specimens. This form is file #51 on our JHS Intranet Zika Folder (please see page 46 for "how to access this folder").

Date: _____

Health Care Provider Information
Name (First, Last): _____ Practice Phone #: _____
Practice Address: _____

Patient Information
Name (First, Last): _____ Age: _____ Gender _____ Race _____
Pregnant _____ Gestational age (in weeks) _____
Address: Phone #:

Travel and Potential Flavivirus Exposure

I would like to ask you about if you might have been exposed to Zika virus or related viruses before.

Did you travel outside the United States (or to a US territory: Puerto Rico, USVI, Am Samoa) in the last two weeks?
☐ Yes ☐ No **or in the last six months?** ☐ Yes ☐ No

If yes: Name of country(s): _____
Dates of travel: Start date: ___/___/_____ End date: ___/___/_____

Name of country(s): _____
Dates of travel: Start date: ___/___/_____ End date: ___/___/_____

Name of country(s): _____
Dates of travel: Start date: ___/___/_____ End date: ___/___/_____

Medical Information

[In the past month], have you had any of these symptoms? New for you, not long standing problems.

Fever ☐ Yes ☐ No If yes, first date with this ___/___/_____ How many days did it last? _____
(report of subjective fever is acceptable)

Rash ☐ Yes ☐ No If yes, first date with this ___/___/_____ How many days did it last? _____
Was the rash itchy? ☐ Yes ☐ No
(NOT asking about localized rash or secondary to topical exposures)

Conjunctivitis *(not allergic type)* ☐ Yes ☐ No
If yes, first date with this ___/___/_____ How many days did it last? _____

Joint Pain ☐ Yes ☐ No If yes, first date with this ___/___/_____ How many days did it last? _____
(NOT chronic or post-trauma pain)

For this illness, did you go to a clinic/hospital to be checked? ☐ Yes ☐ No
If yes, what did the doctor/nurse decide that you had? _____

Other exposures

In the last month, have you had sex with someone who had recently returned from a country where Zika has been spreading? (By recently returned, we mean your partner had returned sometime during the 2 months *before* the time you had sex)

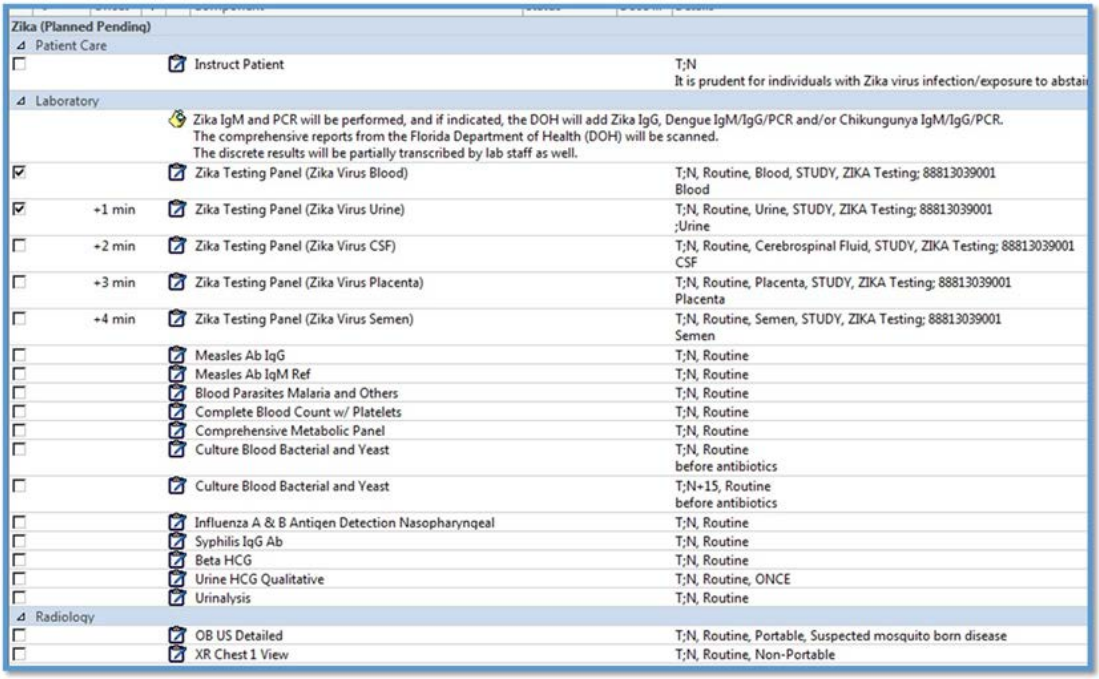
Your Answer ☐ Yes ☐ No ☐ Unknown If yes, gestational age (in weeks)

For females: Are you pregnant or think you might be pregnant?
☐ Yes ☐ No ☐ Unknown

Version 1.0 8/2016

This form is for Healthcare Provider to fill out and keep and will not be sent to Health Department. After our IT Department creates capture of this information in System, then this form will not be needed. This form is file #54 on our Hospital Intranet Zika Folder (please see page 46 for "how to access this folder").

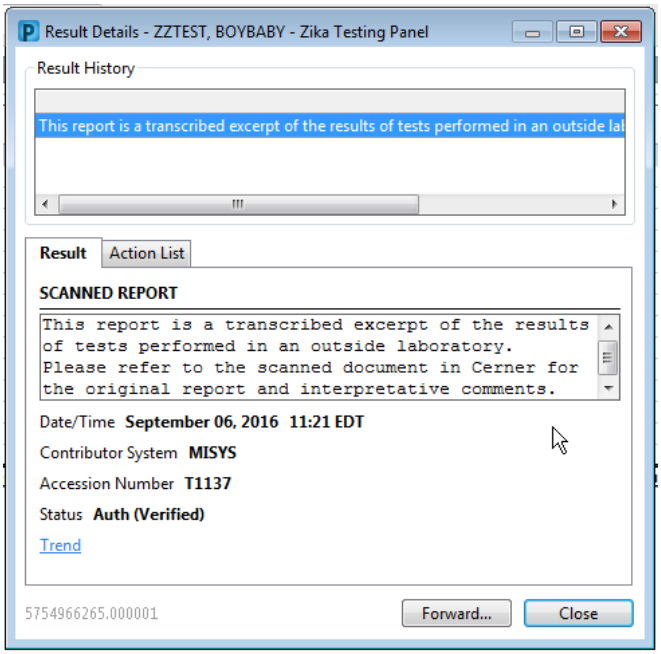
The powerplan for entering orders

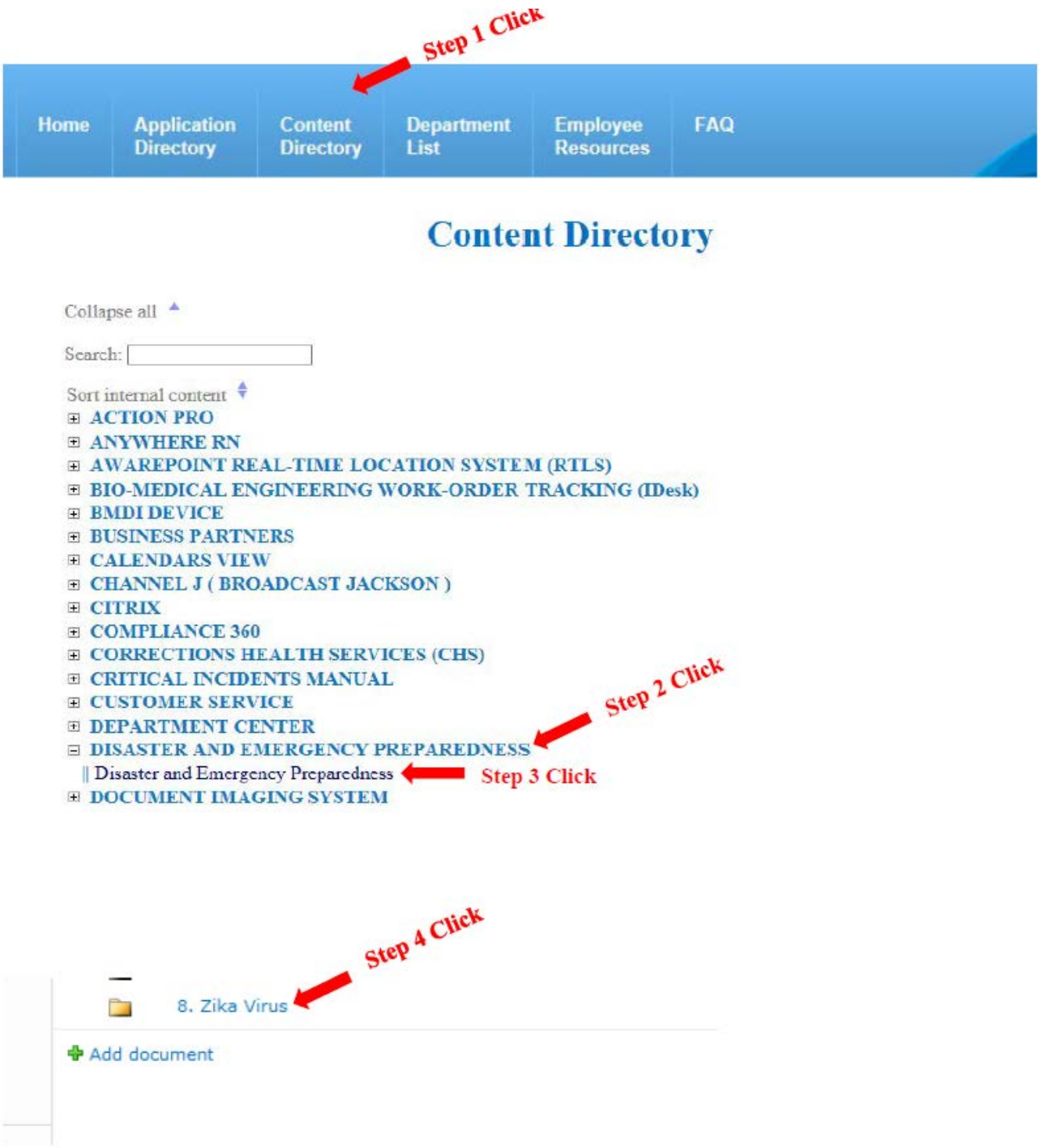


Zika (Planned Pending)			
Patient Care			
☐		Instruct Patient	T;N It is prudent for individuals with Zika virus infection/exposure to abstai
Laboratory			
		Zika IgM and PCR will be performed, and if indicated, the DOH will add Zika IgG, Dengue IgM/IgG/PCR and/or Chikungunya IgM/IgG/PCR. The comprehensive reports from the Florida Department of Health (DOH) will be scanned. The discrete results will be partially transcribed by lab staff as well.	
☑		Zika Testing Panel (Zika Virus Blood)	T;N, Routine, Blood, STUDY, ZIKA Testing; 88813039001 Blood
☑	+1 min	Zika Testing Panel (Zika Virus Urine)	T;N, Routine, Urine, STUDY, ZIKA Testing; 88813039001 ;Urine
☐	+2 min	Zika Testing Panel (Zika Virus CSF)	T;N, Routine, Cerebrospinal Fluid, STUDY, ZIKA Testing; 88813039001 CSF
☐	+3 min	Zika Testing Panel (Zika Virus Placenta)	T;N, Routine, Placenta, STUDY, ZIKA Testing; 88813039001 Placenta
☐	+4 min	Zika Testing Panel (Zika Virus Semen)	T;N, Routine, Semen, STUDY, ZIKA Testing; 88813039001 Semen
☐		Measles Ab IgG	T;N, Routine
☐		Measles Ab IgM Ref	T;N, Routine
☐		Blood Parasites Malaria and Others	T;N, Routine
☐		Complete Blood Count w/ Platelets	T;N, Routine
☐		Comprehensive Metabolic Panel	T;N, Routine
☐		Culture Blood Bacterial and Yeast	T;N, Routine before antibiotics
☐		Culture Blood Bacterial and Yeast	T;N+15, Routine before antibiotics
☐		Influenza A & B Antigen Detection Nasopharyngeal	T;N, Routine
☐		Syphilis IgG Ab	T;N, Routine
☐		Beta HCG	T;N, Routine
☐		Urine HCG Qualitative	T;N, Routine, ONCE
☐		Urinalysis	T;N, Routine
Radiology			
☐		OB US Detailed	T;N, Routine, Portable, Suspected mosquito born disease
☐		XR Chest 1 View	T;N, Routine, Non-Portable

Result for both Urine and Blood Zika testing, as well as the comment explaining that the complete report will be scanned as well.

Lab View	08/26/16 16:23 EDT	08/26/16 12:13 EDT
Virology		
Source.	BLOOD	URINE
ZIKA IgM ELISA	POSITIVE (A)	
ZIKA RT-PCR	DETECTED (A)	NOT DETECTED
SCANNED REPORT	This report is a tr	This report is a tr




Step 1 Click
Home
Application Directory
Content Directory
Department List
Employee Resources
FAQ
Content Directory
Collapse all
Search:
Sort internal content
ACTION PRO
ANYWHERE RN
AWAREPOINT REAL-TIME LOCATION SYSTEM (RTLS)
BIO-MEDICAL ENGINEERING WORK-ORDER TRACKING (IDesk)
BMDI DEVICE
BUSINESS PARTNERS
CALENDARS VIEW
CHANNEL J (BROADCAST JACKSON)
CITRIX
COMPLIANCE 360
CORRECTIONS HEALTH SERVICES (CHS)
CRITICAL INCIDENTS MANUAL
CUSTOMER SERVICE
DEPARTMENT CENTER
DISASTER AND EMERGENCY PREPAREDNESS
Step 2 Click
Disaster and Emergency Preparedness
Step 3 Click
DOCUMENT IMAGING SYSTEM
Step 4 Click
8. Zika Virus
Add document

Disaster and Emergency Preparedness
Zika Folder Content

Type	Name
	01 DOH Lab 1847 JMH Zika Sample NEW
	02 CDC Zika Home Page Link NEW
	03 CDC Areas with Zika NEW
	04 MMWR Zika Travel Notice Revision NEW
	05 JHS Clinical Protocol for Suspected Zika Virus Infection September 2nd 2016 NEW
	06 s_cid=mm6529e1 Pregnant Women NEW
	07 CDC Zika Virus Infection Among U.S. Pregnant Travelers Aug2015 to Feb2016 NEW
	08 NEJM Zika Virus Infection in Pregnant Women in Rio de Janeiro March 4th 2016 NEW
	09 s_cid=mm6529e2 prevention of sexual transmission NEW
	10 CDC Male to Male Sexual Transmission of Zika Virus mm6514a3 NEW
	11 NEJM Zika Virus and Birth Defects relation of microcephaly to zika NEJMsr1604338 NEW
	12 CDC body-fluids-collection-sub NEW
	13 CDC Increase in Reported Prevalence of Microcephaly in Infants NEW
	14 CDC microcephaly NEW
	15 CDC safe travel mos qxp_01-16 (003) NEW
	16 CDC Zika Transmission and Risk RePlace26 NEW
	17 CDC coca-call-april12-zika-virus-clinical-guidelines_508 NEW
	18 FDOH zika-testing-faq-0418 NEW
	19 Zika urine test data from FL May 13th 2016 NEW
	20 CDC Erratum mm6518a10 NEW
	21 Zika urine test may 10th 2016 NEW
	22 Zika Diagnostic Testing NEW
	23 FDOH zika lab-packaging-and-shipping-ver2.0 NEW
	24 CDC Zika Prevention Kit for Pregnant Women NEW
	25 CDC Travel Associated Zika Virus Disease Cases Among US Resident NEW
	26 CDC Protect-yourself NEW
	27 CDC Prevention NEW
	28 CDC controlling-mosquitoes-at-ho NEW
	29 CDC Ongoing Zia Virus Transmittion-Puerto Rico Nov 1 2015 to 4 14 2016 mm6517e2 NEW
	30 CDC Information for Parents about Zika Virus NEW

- 31 CDC zika-activity-book children NEW
- 32 CDC Preventing Transmission of Zika Virus NEW
- 33 WHO zikasitrep1Sept16-eng NEW
- 34 CDC Estimating Contraceptive Needs and Increasing Access NEW
- 35 ZIKA patterns in testing USA Jan 3rd to March 5th 2016 NEW
- 36 OSHA Zika osha-niosh_fs-3855_zika_virus_04-2016 NEW
- 37 NEJM Zika 1st Trimester pregnancy risk NEW
- 38 FDOH Zika Quest Ltr(Final) NEW
- 39 CDC Zika draft response plan June 14th 2016 NEW
- 40 NEJM Zika Colombia Pregnancy study NEW
- 41 CDC Interpretation of Zika Virus Antibody Test Results mm6521e1 NEW
- 42 MMWR Screening of Blood Donations for Zika Virus Infection Apr 3 to June 11 2016 NEW
- 43 Zika HAN+392+CDC+Recommendations+for+Subsequent+Zika+IgM+Antibody+Testi NEW
- 44 Zika congenital syndrome lancet june 2016 NEW
- 45 Zika pathology of zika congenital syndrome Lancet June 2016 NEW
- 46 s0715-zika-female-to-mal NEW
- 47 Zika science.aaf8160.full NEW
- 48 country-classification NEW
- 49 mm6521e1 NEW
- 50 Clinician Letter Zika 080516 2 NEW
- 51 DH1847--rev-8-2016GG NEW
- 52 Florida Department of Health Packaging and Shipping 8-6-16 NEW
- 53 Jackson Memorial Hospital Department of Pathology Zika workflow v1 NEW
- 54 Provider Questionnaire 8-4-2016 NEW
- 55 Zika blood JMH Zika virus blood product screening update Aug 3 NEW
- 56 Zika Testing UPDATE 8-4-16 V14 NEW
- 57 CDC HAN Health Advisory han00393 NEW
- 58 CDC HAN Health Advisory 394 Expands+Guidance for Travel and Testing of Pregnant Women 2 NEW
- 59 Zika Virus_ Collection and Submission of Fetal Tissues for Zika Virus Testing NEW
- 60 Zika Virus_ Collection and Submission of Specimens for Zika Virus Testing at Time of Birth NEW
- 61 CDC Infants and Children Resources
- 62 CDC webcast-clinicalevalution and Management Infants
- 63 CDC Zika families-of-newborns-affected-z
- 64 CDC Areas at Risk
- 65 CDC MMWR Guillain Barre Syndrome 6534e1
- 66 CDC MMWR Likely Sexual Transmission of Zika Virus from Man mm6534
- 67 Revised Recommendations for Reducing the Risk of Zika Virus Transmission by Blood and Blood Components
- 68 CIDRAP zika-linked to hearing loss in infants
- 69 NEJM Zika and Guillain Barre seven countries
- 70 FDOH ZikaFever_ObstetriciansV3_Aug23Final0 (1) NEW
- 71 FDOH ZikaFever_CliniciansV3_Aug23Final0 (2) NEW
- 72 LGBT Community_ How to Protect Yourself from Zika NEW