Illinois Flowchart: Choosing Appropriate Zika Virus Tests for Authorized Patients

Start

Time since possible Zika Virus exposure*

<2 Weeks

Is patient pregnant?

No

Is patient symptomatic?†

No

Urine & serum RT-PCR

Positive Test

Negative Test

No testing indicated

Confirmed Zika Virus

Zika virus IgM & Dengue virus IgM

No

Positive Test

Negative Test

Reflex Zika virus IgM and Dengue virus IgM

Follow up Zika IgM 2-12 weeks after possible exposure*

Is patient pregnant?

Yes

Positive Test

Negative Test

Urine & serum RT-PCR

Zika virus IgM or Dengue virus IgM

Zika virus IgM positive or equivocal

Needs confirmatory PRNT

Is patient symptomatic?†

No

Urine & serum RT-PCR

No testing indicated

Confirmed Zika Virus

Zika virus serum IgM

No

Positive Test

Negative Test

Zika virus IgM or Dengue virus IgM

Zika virus IgM or Dengue virus IgM positive or equivocal

Needs confirmatory PRNT†

Yes

Dengue virus IgM positive or equivocal

Zika virus IgM negative

Serum & urine Zika RT-PCR

Positive Test

Negative Test

Confirmed Zika Virus

Zika virus IgM & Dengue virus IgM

No

No testing indicated

Check Zika Virus IgM

Yes

Positive or equivocal

Negative Test

Zika IgM performed > 12 weeks after exposure* may be falsely negative.

*Recent or ongoing travel to area of Zika virus transmission or sexual contact with a person who traveled to area of Zika virus transmission

†One or more of the following: Fever, Rash, Arthralgia, Conjunctivitis, or Guillain-Barre Syndrome

‡IgM Positive/Equivocal specimens tested at IDPH lab, that are also rt-PCR Negative will be sent to the CDC for PRNT. If rt-PCR Positive, no further testing is indicated. Specimens that test IgM Positive/Equivocal at commercial labs should be sent to the IDPH Chicago lab, who will forward to CDC for PRNT.

As of November 16, 2016, whole blood may be submitted for Zika testing. A serum must be submitted with other specimen types for all diagnostic testing.

NOTE: Serum is the preferred specimen because rt-PCR testing can be performed for Zika, Dengue, and Chikungunya viruses.

Samples for Zika rt-PCR performed at IDPH lab will also be run for Dengue and Chikungunya rt-PCR