

# District of Columbia Department of Health (DC DOH) Chikungunya Laboratory Testing Recommendations

Several laboratory tests are available for Chikungunya virus and the appropriate test is dependent on the amount of time since the patient first started experiencing symptoms

- **Virus isolation** will only produce a positive result **within three days** of symptom onset and when in this timeframe, can serve as the only test
- **Serology (IgM & IgG ELISA)** will produce a negative result within the first three days of symptom onset and as a result should be performed only **three days after** symptom onset
  - When performed alone, a **convalescent sample** is needed for comparison to achieve a final positive or negative result
- **Viral RNA RT-PCR** can be performed **within eight days** of symptom onset
- **Plaque reduction neutralization test (PRNT)** should only be performed **after eight days** of symptom onset and is not widely available

- Collect **acute samples within eight days** of symptom onset
- Collect **convalescent samples ten to fourteen days** after acute sample collection
- Chikungunya virus testing requires **serum**
  - Collect 4-5 ml of venous blood in a **tiger/speckled top tube** or **red top tube**



Symptom Onset										PRNT
	Viral RNA RT-PCR									
	Virus Isolation			IgM & IgG ELISA						
	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Beyond Day 8

Last Updated  
3/2/2015