

## Laboratory Testing of Samples for Zika Virus

Testing for Zika virus includes serology and PCR (positive only in early infection).  
The recommended specimens are:

Test	Specimen Type	Timing of a positive result after onset of illness
Detection of Zika virus by PCR	Acute serum or plasma	Serum: day 1 to 5
	Urine	Urine: day 1 to 14
Zika virus serology	Acute serum (2ml)	IgM: rises from day 4 to 7
	Convalescent serum (2ml)	IgG: rises from day 12



The type of testing performed depends on the timing of symptoms and when the patient was last in a Zika virus endemic region. For example, consider testing:

Clinical Scenario	Exposure	Acute Sample	Convalescent Sample
Asymptomatic pregnant woman	≤ 2 weeks ago	Serum †	Serum ≥4 weeks after leaving endemic area
Pregnant woman with compatible illness *	≤ 2 weeks ago	Serum and urine	Serum ≥4 weeks after leaving endemic area
Pregnant woman +/- compatible illness	2-4 weeks ago	Serum +/- urine	Serum ≥4 weeks after leaving endemic area
Pregnant woman +/- compatible illness	>4 weeks ago	Not applicable	Serum
Person with compatible illness *	≤ 2 weeks ago	Serum and urine	Serum ≥2 weeks after acute sample

\* In those with a flavivirus-like illness it is important to consider causes other than Zika virus eg. Dengue, chikungunya and malaria.

† The acute serum sample for Zika serology will be stored. In line with the national guidelines, it will be tested in conjunction with the convalescent sample to exclude false positive test results due to cross reactivity.

Victorian and national recommendations on who to test for Zika virus, and more detailed information on testing algorithms, can be found at:

<https://www2.health.vic.gov.au/about/news-and-events/healthalerts/cho-advisory-on-zika-virus-infection>

<http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-zika.htm>

It is important to provide clinical details on the pathology request form to ensure that appropriate testing is performed. This includes:

- Clinical history including the date of onset of symptoms
- Overseas travel history including the date of exit from the endemic country
- Whether your patient is pregnant