

Provincial Laboratory for Public Health Zoonotic Testing Requisition



Edmonton Site 8440-112 St. NW T6G 2J2 Phone 780.407.7121 Fax 780.407.3864
 Calgary Site 3030 Hospital Dr NW T2N 4W4 Phone 403.944.1200 Fax 403.270.2216
Virologist/Microbiologist-on-call 780.407.8822
Virologist/Microbiologist-on-call 403.944.1200

Scanning Label or Accession # *(lab only)*

Patient	PHN _____ Expiry: _____		Date of Birth <i>(dd-Mon-yyyy)</i>		
	Legal Last Name		Legal First Name		Middle Name
	Alternate Identifier	Preferred Name	<input type="checkbox"/> Male <input type="checkbox"/> Non-binary	<input type="checkbox"/> Female <input type="checkbox"/> Prefer not to disclose	Phone
	Address		City/Town	Prov	Postal Code
Provider(s)	Authorizing Provider Name <i>(last, first, middle)</i>		Copy to Name <i>(last, first, middle)</i>		Copy to Name <i>(last, first, middle)</i>
	Address		Phone	Address	Address
	CC Provider ID	CC Submitter ID	Legacy ID	Phone	Phone
	Clinic Name		Clinic Name	Clinic Name	Clinic Name
Collection		Date <i>(dd-Mon-yyyy)</i>	Time <i>(24 hr)</i>	Location	Collector ID

Specimen Type Blood Urine Other: _____

Mandatory Clinical History *(testing will NOT be performed if left blank)*

<p>Check Primary Symptoms/Manifestations</p> <p><input type="checkbox"/> Rash <i>(specify)</i> _____</p> <p><input type="checkbox"/> Fever <i>(specify)</i> _____</p> <p><input type="checkbox"/> Neurologic <i>(specify)</i> _____</p> <p><input type="checkbox"/> Respiratory</p> <p><input type="checkbox"/> Polyarthritis</p> <p><input type="checkbox"/> Gastrointestinal</p> <p><input type="checkbox"/> Other <i>(specify)</i> _____</p>	<p>Countries/provinces/regions visited within past 3 months before onset of symptoms</p> <p>_____</p> <p>Date of return <i>(dd-Mon-yyyy)</i> _____</p> <p>Date of onset symptoms <i>(dd-Mon-yyyy)</i> _____</p> <p>Antibiotic treatment? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> N/A</p> <p>Pregnant? <input type="checkbox"/> No <input type="checkbox"/> Yes , Gestational age _____</p>
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Must contact Microbiologist/Virologist-on-Call before collecting and submitting samples for Viral haemorrhagic fevers, e.g., Ebola, Marburg, Lassa fever

<p>Mosquito Borne Diseases</p> <p><input type="checkbox"/> West Nile virus LAB1269</p> <p><input type="checkbox"/> Dengue virus LAB1388</p> <p><input type="checkbox"/> Chikungunya virus LAB1388</p> <p><input type="checkbox"/> Other <i>(specify)</i> _____</p>	<p>Tick Borne Diseases</p> <p><input type="checkbox"/> Lyme Disease LAB788</p> <p><input type="checkbox"/> Anaplasma phagocytophilium LAB9569</p> <p><input type="checkbox"/> Spotted fever rickettsiosis LAB1264</p> <p><input type="checkbox"/> Typhus group rickettsiosis LAB1265</p> <p><input type="checkbox"/> Scrub typhus (O.tsutsugamushi) LAB10057</p> <p><input type="checkbox"/> Other <i>(specify)</i> _____</p>
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<p>Other Infections</p> <p><input type="checkbox"/> Rabies immunity <u>ONLY</u> LAB9938</p> <p>Occupation/reason <i>(required)</i> _____</p> <p>Date of Vaccination <i>(dd-Mon-yyyy)</i> _____ <input type="checkbox"/> N/A</p> <p>For exposure to Rabies FIRST contact zone MOH for management</p> <p><input type="checkbox"/> Hantavirus LAB9515</p> <p>contact/source <i>(specify)</i> _____</p> <p><i>(e.g. mouse droppings/urine)</i></p> <p>Date of contact <i>(dd-Mon-yyyy)</i> _____ <input type="checkbox"/> Unknown</p>	<p><input type="checkbox"/> <i>Bartonella henselae/quintana</i> LAB785</p> <p>contact/source <i>(specify)</i> _____</p> <p>Date of contact <i>(dd-Mon-yyyy)</i> _____ <input type="checkbox"/> Unknown</p> <p><input type="checkbox"/> Brucella LAB6003</p> <p>contact/source <i>(specify)</i> _____</p> <p>Date of contact <i>(dd-Mon-yyyy)</i> _____ <input type="checkbox"/> Unknown</p> <p><input type="checkbox"/> Q fever (<i>Coxiella burnetii</i>) LAB1209</p> <p>contact/source <i>(specify)</i> _____</p> <p>Date of contact <i>(dd-Mon-yyyy)</i> _____ <input type="checkbox"/> Unknown</p> <p><input type="checkbox"/> Mpox <i>(formerly Monkeypox)</i> LAB5209</p> <p>Location of lesions <i>(specify)</i> _____</p> <p>Date of onset <i>(dd-Mon-yyyy)</i> _____</p> <p>Vaccinated: <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown</p>
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Other *(specify)* _____

Guidance Notes

A number of zoonotic infectious agents are classified as Risk group 4, common examples are the viral haemorrhagic agents (Ebola, Marburg, Lassa), Nipah, Tick-borne encephalitis and Herpes simian viruses.

Therefore, BEFORE samples are collected consult with the zone MOH and ProvLab Microbiologist-on-Call for patient management and specimen collection instructions. If unsure whether the agent is a Risk group 4, consult the Alberta Precision Laboratories Test Directory @ [Alberta Precision Laboratories | Lab Services \(albertahealthservices.ca\)](http://Alberta Precision Laboratories | Lab Services (albertahealthservices.ca)) for comprehensive information.

Rabies testing:

- Immunity status – only performed for occupations at risk for exposure and who have been vaccinated, e.g., veterinarians and parks and wildlife officers. Specify occupation and date of rabies vaccine if available.
For urgent requests, e.g., vaccinated person exposed to suspect rabid animal, contact the Microbiologist-on-Call to expedite testing once discussed with zone MOH.
- Exposure to rabies – First consult with the zone MOH for management of the case and direction for testing if so indicated

Many of the agents in the Table below are referred to the National Microbiology laboratory for testing and require clinical information to prevent rejection. As well the information provided will also help determine which test or algorithm would provide the laboratory diagnosis.

Molecular (NAT Testing)

In the acute symptomatic phase of mosquito borne infections there is often a viraemia, and occasionally viruria, when the infectious agent is detectable in the blood and urine by molecular (NAT/PCR) tests, and prior to the serologic detection of antibodies.

Therefore, collection of samples at the onset of symptoms, for both molecular and serologic testing is recommended, and after this phase, usually 7 to 10 days later, serologic tests alone should be adequate.

The laboratory algorithm to perform molecular (PCR) testing on blood & urine is based upon the dates of onset of symptoms and return to Alberta or Canada, if applicable. Providing this information is essential for the Laboratory to select the appropriate test combinations.

For rickettsial and scrub typhus infections, an eschar is frequently found at the tick/mite bite site. Send the whole of the scab plus a swab of the area below it in a small amount of Viral Transport medium (pink medium) as these samples are often likely to yield a positive result.

Infectious agent	Preferred Specimen(s)	Comments
West Nile virus	EDTA blood	Up to 7 days after onset of symptoms
Dengue virus	EDTA blood & urine	As above
Chikungunya virus	EDTA blood & urine	As above
Zika virus		Consult Microbiologist-on-Call. Pregnant women – collect urine, EDTA blood and serum
Anaplasma sp	EDTA blood	Up to 10 days after onset of symptoms
Spotted fever rickettsiosis	EDTA blood & eschar	Blood during febrile and rash phase; eschar at any time
Typhus group rickettsiosis	EDTA blood & eschar	As above
Scrub typhus	Eschar	At any time
Bartonella spp	Lesions, skin biopsies	At any time
Leptospira spp	EDTA blood & urine	Blood within 4 days and urine within 7 days after onset of symptoms
Hantavirus	EDTA blood	Within 5 days of onset of symptoms
Mpox (Monkeypox)	Lesion(s) swabs or biopsies	Send only swabs or biopsies, no serology available

Serologic Testing

The detection of antibody to the infectious agent generally occurs after the appearance of symptoms and manifestations following on from a viraemic or bacteraemic phase.

While most IgM antibodies, produced in response to an acute infection, tend to become undetectable after 6 mos, in some infections such as West Nile virus, they can persist for up to 2 yrs or more. In contrast IgG antibody persists for many years. Both IgG & IgM antibodies can be highly cross-reactive to other agents within the same antigenic group. A well known example is the Flavivirus genus where cross-reactive antibodies between dengue, zika and Japanese encephalitis viruses are common.

Antibodies to bacterial pathogens such as Lyme disease or Bartonella are often diminished by antibiotic treatment. Hence early treatment can essentially abort an immune response to the infecting agent, resulting in negative or indeterminate result and retesting at a later date will not be productive.

Serologic testing recommended times after onset of symptoms

Infectious agent	Collection time	Comments
Lyme disease	One week or later after EM rash onset	
Anaplasma sp	10 to 14 days after acute onset	Molecular testing available
Spotted fever rickettsiosis	As above	Molecular testing available
Typhus group rickettsiosis	As above	
Scrub typhus	As above	Molecular testing on eschar
Bartonella	10 to 14 days after acute onset	Molecular testing available
Coxiella burnetii (Q fever)	10 to 14 days after acute onset	

For all molecular testing listed in above table MUST notify the Microbiologist-on-Call first before sample collection