

## LABORATORY MEDICINE/VIROLOGY

<b>Definition</b>	<p>Deals with the diagnosis of viral disease, virologists oversee laboratory testing of viruses including serology, tissue culture and molecular techniques. It also deals with the interpretation of test results, the authorisation of optimal antiviral treatments, and recommendations to clinicians about appropriate treatment.</p>
<b>Scope of Practice</b>	<p>A virologist is someone who studies and has a deep understanding of viruses. This might include how they reproduce, how they infect their hosts, how they spread and how to prevent or treat infections.</p> <p><b>A virologist might:</b></p> <ul style="list-style-type: none"> <li>• Work in a hospital laboratory, testing samples for viruses or making treatment recommendations.</li> <li>• Perform clinical research as a medical doctor. This might include specialising in diagnosing and treating infectious diseases or managing chronic viral infections, such as HIV or hepatitis.</li> <li>• Perform basic research studying how specific viruses reproduce, infect hosts (people) and spread. This might be at research or academic institution.</li> <li>• Perform translational or applied research (using basic research to solve a specific problem), like developing vaccines or antiviral medications. This might be at academic institutions or pharmaceutical companies.</li> <li>• Work for public health organisations. This might include doing research, identifying outbreaks and newly emerging viruses, and advising on how to manage the spread of viruses.</li> </ul> <p><b>Lab virologist can participate in:</b></p> <ul style="list-style-type: none"> <li>• Employing highly specialised serological and molecular techniques to study viruses and measure the viral load.</li> <li>• Identifying different viruses and their properties, through microscopic examination.</li> <li>• Observing the effect viruses have on organic matter by studying the impact of viral infection on living tissues of humans and animals.</li> <li>• Performing chemical analysis on substances released by viruses when they interact with organic matter, such as acids, enzymes, and secretions.</li> <li>• Determining how viral diseases like HIV, SARS, and hepatitis spread through populations.</li> <li>• Assisting in vaccine development.</li> <li>• Writing up technical reports and creating presentations for the communication of research results to interested parties.</li> <li>• Assisting institutions like the Centres for Disease Control and Prevention (CDC) in preventing and controlling outbreaks of viral infections.</li> <li>• Providing professional opinions and advice on treatment plans and the way to control outbreaks.</li> </ul>

<b>Privileges</b>	Lab Virologist is eligible to work in or to manage and direct the Virology section or unit of the clinical laboratory.  Lab Virologist is not eligible to lead a medical laboratory alone and must work together with a licensed clinical pathology doctor.
<b>References</b>	DHP Experts
<b>Publishing Date</b>	28/12/2025