

Exploring Infectious Diseases Assessments

The following set of assessments includes questions that can be given for homework or as quizzes depending upon how much and in what depth the material in the four modules your students have been given the opportunity to learn. Answers provided are in *italics*.

Module 4

Assessments in Module 4 include one open response item and one formative assessment.

You have been infected by a virus. Describe the two possible sequences of events your body would undertake to destroy the virus.

Cell-mediated response

- *Macrophages engulf a virus and display antigens on its surface*
- *Helper T cells recognize these antigens and are stimulated to produce interleukin 1*
- *Interleukin 1 causes helper T cells to divide and produce interleukin-2*
- *Interleukin-2 stimulates killer T cells to divide*
- *Killer T cells attack infected cells and destroy them*
- *Macrophages clean up the mess*

Humoral response

- *Virus antigen binds to receptors on the surface of a B cell*
- *This causes the secretion of antibodies specific to these antigens*
- *Interleukin 2 stimulates B cells to divide and differentiate into memory B cells and more anti-producing B cells*
- *Antibodies bind to viruses and viral infected cells*
- *Macrophages clean up the mess*

Formative assessment

Students select a disease on the Timeline of Infectious Diseases. They prepare a diagram, drawing, animation, cartoon or other means of displaying how the immune system mobilizes to ward off infection for their chosen pathogen.