Frequently-Asked Questions: Virology

What does the Virology Section do?

The function of the virology laboratory is to provide timely and accurate tests to detect viral pathogens or antibodies induced by viral infection or vaccination. Virus isolation, fluorescent antibody staining, antigen detection ELISA, and electron microscopy have been the standard methods used in our laboratory to detect viruses. Nucleic acid detection by PCR is now being used increasingly in viral disease diagnostics. PCR-based testing is less dependent upon specimen condition, provides excellent sensitivity, and decreases overall turnaround time. Our laboratory has recently introduced a significant number of real-time PCR assays.

A variety of methods, such as virus neutralization, ELISA, agar gel immunodiffusion, and hemagglutination inhibition, are available in our section to detect and quantitate antibodies induced by exposure to wild-type or vaccine viruses. Evaluation of the immune response induced by vaccination is becoming more common in dogs and cats. To accommodate this, we are offering canine and feline vaccination response panels. See the document, “Post-Vaccination Serology for Dogs and Cats” on the DCPAH CD or website.

Surveillance for viral disease is anticipated to become a more significant component of our overall testing. The laboratory is certified to conduct surveillance for avian influenza and Newcastle disease. We also are one of the nationally licensed laboratories to conduct genetic susceptibility testing for scrapie.

How do I contact the Virology Section?

During regular business hours, Monday through Friday 7:30 a.m. to 5:30 p.m., call 517-353-1683. Saturdays 9 a.m. to 11 a.m., please call 517-353-2296. For animal health emergencies outside of normal operating hours, please call 517-353-5275 for an automated answering system.