



## **Canine Influenza Information**

### **Update on surveillance**

Dr Scott Weese from the Ontario Veterinary College is acting as the point person for the canine influenza information in Ontario. His website – Worms and Germs blog – is updated regularly with information about Canine Influenza

<https://www.wormsandgermsblog.com/>

### **Sample submission**

If you are interested in submitting samples to the AHL for testing, please have a look at our website for information on shipping and handling.

<https://www.uoguelph.ca/ahl/>

### **Submission forms:**

<https://www.uoguelph.ca/ahl/submissions/submission-forms>

### **Submission instructions**

<https://www.uoguelph.ca/ahl/submissions/ahl-labnote-27-submission-instructions>

### **Virus detection by PCR.**

The recommended sample is a swab put in virus transport medium (VTM). AHL has VTM and swabs for sale at cost. Alternatively, a dry sterile swab put in a red-top tube with a few drops of sterile saline can be used, see [AHL LabNote 36](#):

Note: Regular gel-based bacteriology swabs/transport media are not recommended for PCR testing!

### **Instructions for nasal swabs sampling:**

Gloves should be worn for this procedure. As dogs may be prone to sneeze during or after the procedure, face protection (mask and glasses or goggles) is also recommended to reduce the risk of exposure to respiratory secretions.

1) Unwrap the swab, ensuring not to let the white cotton end or stem come in contact with any other surfaces, or with your hands.

2) Have a handler hold the muzzle of the dog and the rest of the body. Sometimes an open-ended muzzle is helpful.

3) Insert the swab quickly up the nostril of the dog, twirling the swab. Depth: maximum 2" for an average dog or 1" for a very small breed or short-nosed dogs. It is important to get the swab into the nostril and not to just swab the outside of the nose. Remove the swab, and then with the same swab, swab the other nostril the same way. Speed is key for the dog's comfort here, as is good restraint, but it is normal (and okay) if there is a little bit of blood on the swab. If the swab drops on the ground, open another swab and start again.

If it is not possible to swab the nostrils due to the size or demeanor of the dog, a pharyngeal swab can be submitted instead. To collect the sample, insert the swab into the side of the mouth and direct it as far back into the throat as the dog will allow. As for nasal swabs, speed and good restraint are key.

<https://www.cliniciansbrief.com/article/nasal-swabs-detect-canine-influenza-virus>

4) Put the swab into the container provided, being careful not to let it touch any other surfaces or your hands. Label clearly with the dog's name, breed, and date (and owner if applicable).

5) Change gloves and wash your hands thoroughly before swabbing the next dog. Swab dogs that appear well before swabbing dogs that appear sick.

6) Put all swabs into a box, wrapped in paper towel, with 2-3 icepacks.

7) Seal the box, and ship to the lab by Purolator using the return shipping label provided (available from AHL)

### **Antibody testing**

AHL offers a generic influenza A virus ELISA that can detect antibodies against influenza A virus in serum samples from multiple animal species. The test will not offer "titers" but interpret result as positive or negative.

Virus neutralization testing (titer testing) is also available for H3N8 and H3N2 "canine" influenza A virus - this is a send out to Cornell University. Serum samples can be submitted from affected dogs. A 4-fold increase in titer between acute and convalescent (taken 3-4 weeks later) would indicate recent exposure. Please feel free to call if serologic sampling is required. Vaccination will interfere with field virus titer testing.

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