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To: s.79
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Subject: Mink Sampling Inst 2017 (2)
Attachments: Mink Sampling Inst 2017 (2).docx

For your information, the Ministry of Agriculture Animal Health Centre has discontinued AD testing. Farms can do the test that is attached on farm and get immediate results.

Iodine and Quantitative Elisa test kits can be obtained through Dave MacHattie dave@middletonvets.ca

Or lateral flow test kits through Hugh Hildebrant HHHDVM@tds.net

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ADV ANTIBODY DIPSTICK TEST BLOOD SAMPLING INSTRUCTIONS

MATERIALS NEEDED: CONICAL PLASTIC TUBES WITH CAPS
STERILE SWABS
SCISSORS
DISINFECTANT

PROCEDURE:

1. REMOVE A SWAB FROM THE PACKAGE.
2. CLIP A TOENAIL AND HOLD THE SWAB TO THE WOUND. MAKE SURE THE ENTIRE HEAD OF THE SWAB IS COMPLETELY SOAKED WITH BLOOD.
3. WHILE HOLDING THE SWAB ABOVE AN EMPTY PLASTIC TUBE, USE A SCISSORS TO CUT THE SOAKED SWAB APPROXIMATELY $\frac{1}{4}$ INCH ABOVE THE COTTON TIP SO THAT THE CUT PORTION DROPS INTO THE TUBE. (NOTE: CUT THE SWAB AS CLOSE TO $\frac{1}{4}$ INCH ABOVE THE TIP AS POSSIBLE – A LARGER SIZE MAY AFFECT SAMPLE MIXING).
4. ATTACH A CAP TO THE TUBE, MAKING SURE THE CAP IS SECURELY SNAPPED INTO PLACE.
5. LABEL THE TUBE WITH THE MINK NUMBER OR OTHER IDENTIFICATION.
6. DISINFECT THE SCISSORS BEFORE COLLECTING THE NEXT BLOOD SAMPLE.
7. RUN THE ADV ANTIBODY DIPSTICK TEST ACCORDING TO THE INSTRUCTIONS.

NOTES:

- A. IF NOT PERFORMING THE ADV ANTIBODY DIPSTICK TEST IMMEDIATELY FOLLOWING COLLECTION, THE SAMPLES CAN BE STORED AT REFRIGERATED TEMPERATURES (2-8 DEGREES CENTIGRADE) FOR UP TO 48 HOURS.
- B. SAMPLES MAY ALSO BE STORED FROZEN AT -20 DEGREES CENTIGRADE FOR UP TO ONE MONTH.
- C. SAMPLES MUST BE THAWED BEFORE TESTING, AND MAY BE THAWED AND FROZEN FOR UP TO TWO FREEZE/THAW CYCLES.
- D. DISINFECTANT CAN BE USED TO CLEAN THE SCISSORS BETWEEN SAMPLE COLLECTIONS. ALL DISINFECTANT MUST BE RINSED OR WIPED FROM SCISSORS PRIOR TO USE.
- E. REMEMBER TO THOROUGHLY SOAK THE SWAB WITH BLOOD SPECIMEN!

SAMPLING DEAD MINK FOR TESTING

1. USE CARCASSES IN GOOD CONDITION (DECOMPOSED MINK WILL NOT WORK)
2. OPEN CHEST CAVITY AND MAKE A SLIT IN THE HEART
3. PLACE SWAB IN THE HEART
4. LEAVE SWAB IN THE HEART FOR 1 – 2 MINUTES (RAPID REMOVAL WILL COAT SWAB WITH FIBRIN AND TEST WILL NOT WORK)
5. RUN TEST AS INSTRUCTED FOR SOAKED SWAB
6. FROZEN MINK CAN BE THAWED AND TESTED

ADV ANTIBODY DIPSTICK TEST PROCEDURE

MATERIALS NEEDED: CAPPED/LABELED TUBES CONTAINING BLOOD SAMPLE FROM SWAB
TEST TUBES RACKS
ADV ANTIBODY DIPSTICK TESTS
ADV ANTIBODY DIPSTICK TEST DILUENT (SUPPLIED IN DROPPER BOTTLES)
DISINFECTANT

PROCEDURE:

1. PLACE CAPPED TUBES WITH SAMPLES INTO A TEST TUBE RACK. IF THE TUBES WERE STORED AT REFRIGERATED TEMPS OR FROZEN, ALLOW THE SAMPLES TO REACH ROOM TEMPERATURE.

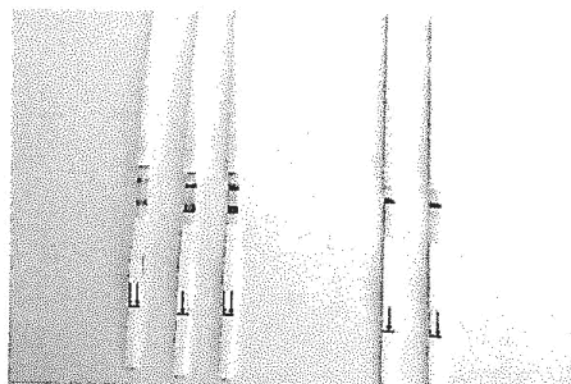
NOTE: CHECK ONCE AGAIN FOR ADEQUATE SAMPLE. IF THE SWAB IS NOT COMPLETELY SOAKED, THE TEST RESULTS WILL BE AFFECTED.

2. REMOVE THE CAPS FROM THE TUBES.
3. ADD FOUR (4) DROPS OF ADV ANTIBODY DIPSTICK TEST DILUENT TO EACH TUBE.
4. AGITATE THE TEST TUBE RACK TO MIX THE SAMPLES.
5. ALLOW THE RACKED TUBES WITH DILUENT TO SIT FOR 10 MINUTES.
6. PLACE AN ADV ANTIBODY DIPSTICK TEST INTO EACH TUBE WITH THE BLUE ARROW FACING THE SAMPLE. MAKE SURE THE DIPSTICK IS ALL THE WAY DOWN INTO THE TUBE AND IN CONTACT WITH THE SAMPLE/DILUENT. DO NOT TOUCH THE MIDDLE (MEMBRANE) OR BOTTOM (SAMPLE PAD) AREAS OF THE DIPSTICK.
7. CHECK THAT SAMPLES ARE WICKING UP THE TEST STRIPS:
 - A. START WITH A FEW SAMPLES INSTEAD OF THE ENTIRE RACK TO PRACTICE.
 - B. IF SAMPLE DOES NOT FLOW, MAKE SURE THE DIPSTICK IS IN CONTACT WITH THE SAMPLE/DILUENT.
 - C. REMEMBER – INADEQUATE SAMPLES WILL NOT FLOW!
8. READ THE RESULTS BETWEEN 15 AND 30 MINUTES. DO NOT READ RESULTS AFTER 30 MIN.
9. RECORD POSITIVES AND DISPOSE OF SAMPLES. REMEMBER THAT POSITIVE SAMPLES ARE INFECTIOUS AND DISINFECTANT MUST BE ADDED TO THE TUBES PRIOR TO DISPOSAL.

RESULTS INTERPRETATION: THE ADV ANTIBODY DIPSTICK TEST HAS A BUILT IN CONTROL LINE THAT WILL APPEAR WHETHER THE TEST RESULT IS NEGATIVE OR POSITIVE FOR ADV ANTIBODIES. THIS ENSURES THAT THE TEST RESULT IS VALID, AND THE SAMPLE HAS FLOWED PROPERLY THROUGH THE TEST STRIP.

ONE BLUE/BLACK LINE (UPPER AREA OF THE DIPSTICK) = NEGATIVE FOR ADV ANTIBODIES
TWO BLUE/BLACK LINES (UPPER AND LOWER AREAS OF THE DIPSTICK) = POSITIVE FOR ADV ANTIBODIES

POSITIVE →



← NEGATIVE

Test Information

Handling Instructions

- Store ADV antibody dipstick test at room temperature. Protect from light and moisture.
- Store ADV antibody dipstick test diluents at room temperature or refrigerated temperature. If stored at refrigerated temperature, allow the diluents to equilibrate to room temperature for 15 minutes prior to use. DO NOT FREEZE.

General Test Info

1. The Aleutian Disease Virus (ADV) antibody test is a lateral flow immunoassay for the detection of ADV antibodies in mink blood using traditional CIEP antigen.
2. Appropriate sample collection is essential for optimal test performance. When collecting the blood sample, the collection swab must be thoroughly soaked with the blood specimen. Inadequate sampling may affect test results.
3. ADV testing may be conducted before or after inoculation with distemper and/or Mink Enteritis Virus (MEV) vaccines. Recently conducted studies indicate no interference from vaccine cellular components.
4. Lateral flow testing **prior** to feeding, will assure better test flow on the strip. In some mink, blood triglyceride levels post-feeding, may affect blood characteristics, and cause slow wicking on the strip.
5. In the occurrence of a positive ADV antibody result, it is recommended that the mink be treated according to ranch guidelines. Presently, we are observing a false positive rate of .12% - .3% on historically ADV negative ranches, when compared to CIEP results.
6. **Faint positive:** In rare cases a faint line or shadow in the lower (test) region of the dipstick may develop and the results should be designated inconclusive. Retesting the mink can resolve false positive and sample flow problems if they occur. On AD positive ranches faint positives generally indicate low antibody levels.
7. Positive ADV antibody screening results can be confirmed by a similar lateral flow immunoassay test that uses recombinant ADV viral capsid proteins (VP1/VP2) or by PCR.
8. **Positive:** With specimens containing extremely high concentrations of ADV antibodies the upper (control) line may not be visible. This is caused by the colored conjugate material being entirely bound up by the large quantity of ADV antibodies in the sample and therefore are unavailable for subsequent binding to the control line area on the membrane. This is observed by a very dark black test line development in the lower (test) area of the membrane and no upper (control) line. This is an ADV-Positive result. If desired you may draw a second sample and serially dilute the sample with diluent until the control line develops.

Contact Info

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