



2023

# USER'S GUIDE

## SWINE - POULTRY

---



1-888-8BIOVET  
(824-6838)



NOW **COMPATIBLE WITH  
MOBILE DEVICES**



## BIONET customer portal now even more accessible!

To access our new portal, visit [www.biovet.ca/en/bionet](http://www.biovet.ca/en/bionet) and:

- A. If you **already have access** → Click on the **Log in button**
- B. If you **do NOT have access** → Download, complete, sign and return the **authorization form** to receive your ID and password

For further information, feel free to contact us at [bionet@biovet-inc.com](mailto:bionet@biovet-inc.com).



# TABLE OF CONTENT

<b>TABLE OF CONTENT .....</b>	<b>3</b>
<b>TO REACH US.....</b>	<b>4</b>
<b>OPENING HOURS.....</b>	<b>4</b>
<b>ABOUT BIOVET .....</b>	<b>5</b>
<b>LEGEND .....</b>	<b>6</b>
SAMPLES.....	6
TURNAROUND TIME .....	6
ABBREVIATIONS.....	6
<b>GUIDE FOR TUBES AND OTHER SAMPLING MATERIAL.....</b>	<b>7</b>
<b>SWINE .....</b>	<b>9</b>
ACTINOBACILLUS PLEUROPNEUMONIAE.....	9
E. COLI .....	9
GLAESSERELLA (HAEMOPHILUS) PARASUIS .....	9
HISTOPATHOLOGY .....	9
INFLUENZA.....	9
LAWSONIA .....	9
MICROBIOLOGY .....	10
MYCOPLASMAS.....	10
PARASITOLOGY .....	10
PCV2 - PCV3.....	10
PRRSV .....	10
qPCR PROFILES .....	11
ROTAVIRUS .....	11
SALMONELLA .....	11
SENECA VALLEY VIRUS (SVA) .....	11
SEROLOGY MULTIPLEX.....	11
SEROTYPING & GENOTYPING .....	11
TGEV-PRCV- PEDV- PoDCV .....	12
MISCELLANEOUS VIRUSES .....	12
OTHER BACTERIA .....	12
OTHER SERVICES, FEES AND DISCOUNTS .....	12
<b>POULTRY .....</b>	<b>13</b>
MICROBIOLOGY .....	15
PARASITOLOGY .....	15
PCR.....	15
SEROLOGY .....	15
OTHER SERVICES, FEES AND DISCOUNTS .....	15
<b>APPENDIX A - GUIDELINES FOR STORING AND SHIPPING SAMPLES TO THE LABORATORY .....</b>	<b>16</b>
<b>APPENDIX B - AEROBIC OR ANAEROBIC CULTURE: HOW TO CHOOSE? .....</b>	<b>17</b>
<b>APPENDIX C: LIST OF ANTIBIOTICS (SENSITIVITY) .....</b>	<b>18</b>

## TO REACH US


### Biovet has 2 laboratories in Quebec

Saint-Hyacinthe and Quebec City





We have the largest customized pickup network providing the transport of samples in Quebec, even in rural areas.

Ask for a pick up or contact Customer Service:

 **450 771-7291 or 1-888-824-6838 (Toll free)**

 [sac@biovet-inc.com](mailto:sac@biovet-inc.com)

 450 771-4158

 437, Beaudry, Saint-Hyacinthe QC J2S 8W2

## OPENING HOURS

<b>Monday to Friday</b>	<b>8:00 AM to 21:00 PM</b>
<b>Saturday</b>	<b>8:30 AM to 14:00 PM</b>
<b>Sunday</b>	<b>CLOSED</b>



## ABOUT BIOVET

In October 2019, Antech Diagnostics, part of Mars Petcare, acquired Biovet. Joining with Antech is a natural blend of two like-minded organizations with a shared commitment to delivering innovation and quality to veterinarians, allowing them to deliver excellent, compassionate care to pets.

Biovet offers a full range of veterinary diagnostic services including hematology, biochemistry, microbiology, serology, molecular biology, endocrinology, coagulation and cytology. The analyses are performed on site by qualified technical personnel under the supervision of microbiologists and clinical pathologists certified by the American College of Veterinary Pathologists.

Our primary goal is to provide reliable analysis results in the shortest possible time. To this end, Biovet has set up an efficient and personalized sample collection system that makes it possible to reach a large number of veterinary clinics in Quebec. Your samples are analyzed upon receipt, and the results are transmitted to you by the method of your choice through the implementation of a computerized analysis management system. The Biovet laboratory also runs several internal and external quality controls, which ensure the accuracy of the results.

Biovet is proud to provide you with online access to your results. With Bionet, you can have fast, free and real-time access to your result reports, anytime, anywhere with an internet connection. For more information on the Bionet service, you can contact us at [bionet@biovet-inc.com](mailto:bionet@biovet-inc.com) or call us at 1-888-824-6838. You can also visit us online at [www.biovet.ca/bionet](http://www.biovet.ca/bionet).












Animal health is important to us, which is why Biovet specialists (clinical pathologists and microbiologists) are available to answer your questions. Whether it's determining the best test to diagnose a given condition or interpreting the results, our team is here to assist you.

This User's Guidel contains information that is useful when dealing with Biovet. We are proud to be associated with your practice and we work continually on improving our services so that we may always better meet your needs.



The Team at Biovet

## LEGEND


### Samples

	Citrated plasma (blue top tube)
	Citrated plasma (blue top tube + transferred to another plastic tube)
	Whole blood EDTA (lavender top tube)
	Plasma EDTA (lavender top tube + transferred to another plastic or glass tube)
	Plasma EDTA (lavender top tube + transferred to another plastic tube)
	Plasma EDTA (lavender top tube + transferred to another plastic or glass tube)
	Heparinized whole blood (green top tube)
	Heparinized Plasma (green top tube + transferred to another plastic or glass tube)
	Serum (red top tube + transferred to another plastic or glass tube)
	Variety of samples that will be detailed in the test description.
	When this symbol appears, see <a href="#">Appendix A - Guidelines for storing and shipping samples to the laboratory</a>
	Note: for an adequate anticoagulant: blood ratio, the tube should be filled at least up to the label.

### Turnaround Time

	Result on the day of receipt
h	Hour
D	Day
W	Week
	For analyzes done externally, it is best to contact us prior to submitting the sample to ensure availability of the test.

### Abbreviations

Ag	Antigen
Ab	Antibody
ELISA	Enzyme-linked immunosorbent assay
HI	Haemagglutination inhibition
IFA	Immunofluorescent Assay
MFIA	Multiplexed Fluorometric Immunoassay
	New
PCR	Polymerase Chain Reaction
qPCR	Quantitative Polymerase Chain Reaction

## GUIDE FOR TUBES AND OTHER SAMPLING MATERIAL



### Shipping bags for samples

**Description:** Ziploc Shipping bags for samples, with pocket for request form

**Usage:** IMPORTANT, USE ONLY ONE BAG OF SAMPLES PER REQUEST FORM



### Blue citrated Tube (1.3 ml)

**Description:** plastic sampling tube with blue twist cap containing sodium citrate, supplied with plastic transfer tube.

**Usage:** for tests requiring citrated plasma or citrated whole blood. See special procedure for Coagulation (PT, PTT, platelets) in the Hematology section.



### Lavander Tube (10 ml or 3 ml)

**Description:** collection tube with lavender cap containing EDTA.

**Usage:** for tests requiring EDTA plasma or EDTA whole blood - full hematology and some biochemistry tests. For cytology of body fluids including thoracic, abdominal, synovial fluids, cystic or cavity fluids (except for urine cytology which must be submitted in a red cap tube or sterile jar).



### Red top Tube (8 ml or 3 ml)

**Description:** anticoagulant-free or additive-free sampling tube.

**Usage:** for tests requiring serum.



### Green Tube (3 ml)

**Description:** sampling tube with green cap containing heparin.

**Usage:** for tests requiring heparinated plasma or whole heparinated blood.



### SST Tube (8.5 ml or 3.5 ml)

**Description:** SST sampling tube (Tube with Serum Separator) containing a gel separating red blood cells from the serum after centrifugation

**Usage:** for tests requiring serum.



### Sterile container (100 ml)

**Description:** plastic Sterile container

**Usage:** for urine tests, parasitologies of small exotic animals or animals, urine cultures for urine tests, parasitologies of small exotic animals or animals, urine cultures, feces or biopsies, feces tests by PCR.

**Comment:** Store urine and stool samples between 4°C and 8°C for culture and PCR testing.



### Container pre-filled with formaldehyde for specimens for histopathology (40 ml, 60 ml, 90 ml or 120 ml)

**Description:** The amount of formaldehyde in the specimen container is about half the volume of the container

**Usage:** for histopathological analyses

**Comment:** The volume of formaldehyde should be 10 times that of the tissue.

## GUIDE FOR TUBES AND OTHER SAMPLING MATERIAL

---



### Swab with transport medium

**Description:** Swab and tube with Amies transport medium with or without charcoal

**Usage:** for aerobic or anaerobic culture

**Comment:** Keep the swab between 2 and 8 °C. Punch biopsy biopsies can be submitted on a swab in contact with the transport environment for a culture.



### Sterile swab without transport medium

**Description:** Sterile swab without a transport medium for PCR tests (e.g. ocular swab, pharyngeal or conjunctival)

**Usage:** for PCR testing

**Comment:** Keep the swab between 2 and 8°C.



### Sampling Kit for collection of oral fluids

**Description:** Sampling Kit for collection of oral fluids.

**Usage:** for the detection of Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) type 1 and 2, Porcine Epidemic Diarrhea Virus (PEDV), Swine Influenza Virus (SIV) and Porcine Circovirus type 2 (PCV2)

**Comment:** Information available on our Website: [www.biovet.ca/en/product/5759](http://www.biovet.ca/en/product/5759). To order: [order@biovet-inc.com](mailto:order@biovet-inc.com)



### Bio-Tubes®

**Description:** Blood sample test kit of 100 Bio-Tubes® with screw cap.

**Usage:** for Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) type 1 and 2

**Comment:** Information available on our Website: [www.biovet.ca/produit/bio-tubes](http://www.biovet.ca/produit/bio-tubes). To order: [order@biovet-inc.com](mailto:order@biovet-inc.com)



## SWINE

### ACTINOBACILLUS PLEUROPNEUMONIAE

Sample • Volume • Turnaround Time

#### APP - Serotypes 1-9-11 - Ab ELISA (GREMIP)

This test is done externally.  • 0.5 mL • 2-5 D

#### APP - Serotype 2 - Ab ELISA (GREMIP)

This test is done externally.  • 0.5 mL • 2-5 D

#### APP - Serotype 2. 3. 7 - Ab ELISA

(GREMIP)  • 0.5 mL • 2-5 D

This test is done externally.

#### APP - Serotypes 3-6-8-15 - Ab ELISA

(GREMIP)  • 0.5 mL • 2-5 D

This test is done externally.

#### APP - Serotypes 4-7 - Ab ELISA (GREMIP)

This test is done externally.  • 0.5 mL • 2-5 D

#### APP - Serotype 5 - Ab ELISA (GREMIP)

This test is done externally.  • 0.5 mL • 2-5 D

#### APP - Serotype 10 - Ab ELISA (GREMIP)

This test is done externally.  • 0.5 mL • 2-5 D

#### APP - Serotype 12 - Ab ELISA (GREMIP)

This test is done externally.  • 0.5 mL • 2-5 D

#### Multi APP Ab ELISA (GREMIP)


This test is done externally.  • 0.5 mL • 2-5 D

### E. COLI

Sample • Volume • Turnaround Time


#### E. coli F4, F5, F6, STa, STb, LT (neonatal)

qPCR   • 1 g • 2-5 D

 feces, intestinal contents. Pool of 5 max. This test is for the neonatal period and a culture will be done previously.

#### E. coli F4, F18, STa, STb, LT, STx2e

(post-weaning) qPCR   • 1 g • 2-5 D


 feces, intestinal contents. Pool of 5 max. This test is for the post-weaning period and a culture will be done previously.

Other profiles with E. coli available, see [qPCR PROFILES](#) section

### GLAESSERELLA (HAEMOPHILUS) PARASUIS

Sample • Volume • Turnaround Time

#### Glaesserella (Haemophilus) parasuis - Ab – ELISA

 • 0.5 mL • 2-3 D

### GLAESSERELLA (HAEMOPHILUS) PARASUIS

Sample • Volume • Turnaround Time

#### Glaesserella (Haemophilus) parasuis qPCR

tissue, swab • 1-2 D

Also available in profile, see [qPCR PROFILES](#) section

### HISTOPATHOLOGY

Sample • Volume • Turnaround Time

#### Histopathology (1 tissue)

Place the sample in 10% formalin. The formalin volume should be at least 10 times that of the tissue. Use containers with a wide mouth. Hollow organs (e.g., intestines) should be open lengthwise before being placed in formalin to ensure good fixation of the mucosa.

Also available additional tissue


#### Immunohistochemistry

This test is done externally. tissues • 1 W


### INFLUENZA

Sample • Volume • Turnaround Time


#### Influenza H3N2 Ab - ELISA

 • 0.5 mL • 2-3 D


#### Influenza H1 Ab - blocking ELISA

 • 1.0 mL • 2-3 D




#### Influenza H1 and H3N2 Ab - ELISA

 • 1.0 mL • 2-3 D

#### Influenza type A Ab - ELISA

 • 1.0 mL • 2-3 D

#### Influenza Type A qPCR

 lung, nasal swab, oral fluids.   • 1-2 D

Also available in profile, see [qPCR PROFILES](#) section

#### Influenza typage H1, H3, N1, N2 qPCR

After positive Influenza Type A qPCR test. 1-2 D


#### Influenza HA Sequencing-Genotyping

After positive PCR. • 10 D

This test is done externally.

#### Porcine Parainfluenza Virus-1 (PPIV-1) qPCR



  • 2-3 D

 nasal swab, lung, trachea, oral fluids

### LAWSONIA

Sample • Volume • Turnaround Time

#### Lawsonia intracellularis Ab – ELISA



  • 1.0 mL • 2-3 D

## SWINE

### LAWSONIA

Sample • Volume • Turnaround Time

#### Lawsonia intracellularis – qPCR

  • 1 g • 2-3 D



 Feces, intestines. Also available in profile, see [qPCR](#)

[PROFILES](#) section



### MICROBIOLOGY

Sample • Volume • Turnaround Time

#### Aerobic culture (routine)

 Tissue, swab, urine, liquid, other  • 500 ul • 2-5 D  
Refrigerate, sterile container or swab with solid transport medium. Refer to [Appendix B](#), if you are hesitating between aerobic or anaerobic culture.

#### Anaerobic culture

 Tissue, swab, urine, liquid, other  • 500 ul • 2-5 D  
sterile container as small as possible for the sample so that there is as little air as possible in the container, or swab with solid transport medium. DO NOT refrigerate; it is preferable that the sample be sent to the lab the same day. Anaerobic organisms are sensitive to cold, should be stored at room temperature and not in the fridge. Refer to [Appendix B](#), if you are hesitating between aerobic or anaerobic culture.

#### Antibiotic sensitivity

Isolate • 2 D

Culture must have been done previously.

See [Appendix C: List of antibiotics \(swine\)](#)

#### Clostridium perfringens (culture)



intestinal contents • 10 g • 2-3 D


#### Clostridium perfringens (toxin profile)

Isolate • 2-3 D

Clostridium perfringens culture must have been done previously.

#### Salmonella spp. (culture)

  • 10 g • 2-4 D


 tissues, feces. Also available :  
Isolation if positive PCR

### MYCOPLASMAS


Sample • Volume • Turnaround Time

Note: The M. hyopneumoniae Ac ELISA kit (Dako/Oxoid) has been discontinued by the manufacturer. Instead, you may choose one of the following three tests.

#### M. hyopneumoniae MFIA

 • 0.5 mL • 2 D


#### PRRSV Type 1 & 2, M. hyopneumoniae MFIA

 • 0.5 mL • 2 D


### MYCOPLASMAS

Sample • Volume • Turnaround Time



#### M. hyopneumoniae Ab ELISA (Idexx)


 • 0.5 mL • 1-2 D

#### M. hyopneumoniae Ab ELISA – Titration



 • 1.0 mL • 2-3 D


#### M. hyopneumoniae qPCR

  • 2-3 D

 nasal or tracheal swabs, lung, oral fluids. Also available in profile, see [qPCR PROFILES](#) section

#### M. hyopneumoniae et M. hyorhinis qPCR

  • 2-3 D

 nasal or tracheal swabs, lung, oral fluids. Also available in profile, see [qPCR PROFILES](#) section

#### M. hyosynoviae qPCR

 joint swab, oral fluids.   • 1-2 D

### PARASITOLOGY

Sample • Volume • Turnaround Time

#### Skin scraping / KOH (ectoparasites)

 Crusts  • 7-10 D

This test is done externally.


#### Parasitology

This test is done externally. Feces • 30 g • 2-5 D





### PCV2 - PCV3

Sample • Volume • Turnaround Time

#### PCV2 Ac IgG ELISA

 • 0.5 mL • 2-3 D

#### PCV2 (2a/2b/2d) & PCV3 qPCR


 serum, tissues. Refrigerate    • 1.0 mL • 1-2 D

#### PEDV and PoDCV see TGEV-PRCV- PEDV- PoDCV

### PRRSV

Sample • Volume • Turnaround Time


#### PRRSV Ab ELISA X 3

 • 0.5 mL • 1-2 D


#### PRRSV Ab ELISA X 3

oral fluids • 0.5 mL • 1-2 D

#### PRRSV 1 & 2 Ab MFIA <sup>†</sup>

 • 0.5 mL • 2 D

#### PRRSV Type 1 & 2, M. hyopneumoniae MFIA <sup>†</sup>

 • 0.5 mL • 2 D



 When this symbol appears, see [Appendix A - Guidelines for storing and shipping samples to the laboratory](#)


## SWINE

### PRRSV

Sample • Volume • Turnaround Time

#### PRRSV Type 1 & 2 qPCR <sup>†</sup>


  • 12-24 h

 lung, serum, oral fluids, processing fluids.

#### PRRSV MLV-ATP-Fostera qPCR

 lung, serum, oral fluids    • 12-24 h

#### PRRSV - Sequencing - Genotyping (Basic, regular or shared)

 • 14 D\*


\* Result in up to 14 days.

<sup>†</sup> Type 1 (EU) and Type 2 (NA)

### qPCR PROFILES

Sample • Volume • Turnaround Time

#### Diarrhea in finisher pigs Profile qPCR

 Feces • 2-3 j\*

Inclut Salmonella spp, Lawsonia intracellularis, Brachyspira hyodysenteriae and Brachyspira hampsonii.

\* Except for salmonella spp.: results available 3 to 5 days after receipt.

#### E. coli F4, F18, Lawsonia, Salmonella qPCR


 intestinal contents, fecal samples   • 5 g • 2-3 D

#### M. hyosynoviae, M. hyorhinis, G. parasuis qPCR




  • 1-2 D

#### PRRSV Type 1 & 2, Influenza A, M. hyopneumoniae qPCR

  • 1-2 D


 lung, oral fluids

#### Rotavirus A & C, E. coli F4, F5, F6 qPCR

 intestinal contents, fecal samples   • 5 g • 2-3 D

#### “Suis-cides” and swine erysipelas (PCR)

  • 1-2 D


 vary depending on conditions:

- Septicemia (S. suis, A. suis, E. rhusiopathiae): filter organs such as the liver, kidney, spleen;
- E. rhusiopathiae (swine erysipelas): can also be skin biopsies;
- Pneumonia (A. suis): the spleen;
- Meningitis (S. suis, G. suis): meningeal swabs;
- Polyserositis (S. suis, G. suis): serous swabs and fluids from serous cavities.

### ROTAVIRUS


Sample • Volume • Turnaround Time

#### Rotavirus A-C qPCR

 Feces • 5 gr • 2-3 D

Also available in profile, see [qPCR PROFILES](#) section


#### Rotavirus A-B-C qPCR

 Feces • 5 gr • 2-3 D

### SALMONELLA

Sample • Volume • Turnaround Time

#### Salmonella – Ab ELISA

 • 1 mL • 1-3 D

#### Salmonella spp. qPCR

 tissues, feces   • 10g • 2-3 D

Also available in profile, see [qPCR PROFILES](#) section

#### Salmonella spp. + S. Typhimurium qPCR

 tissues, feces   • 10gr • 2-3 D

#### Salmonella serotyping (100 serotypes)


Isolate • 5-10 D

Salmonella spp. culture must have been done previously.

### SENECA VALLEY VIRUS (SVA)

Sample • Volume • Turnaround Time

#### Seneca Valley Virus (SVA) bELISA

 • 0.5 mL • 2-3 D


#### Seneca Valley Virus (SVA) qPCR

 Oral fluids, wipes   • 1-2 D


### SEROLOGY MULTIPLEX

Sample • Volume • Turnaround Time


#### PRRSV Type 1 & 2 Ab MFIA <sup>†</sup>

 • 0.5 mL • 2 D


#### PRRSV Type 1 & 2, M. hyopneumoniae MFIA <sup>†</sup>

 • 0.5 mL • 2 D

#### PRRSV - PCV2 - SIV MFIA

 • 1,0 mL • 1-2 j

#### PRRSV - PCV2 - SIV MFIA and M. hyopneumoniae ELISA

 • 1,0 mL • 1-2 j

<sup>†</sup> Type 1 (EU) and Type 2 (NA)

### SEROTYPING & GENOTYPING

Volume • Turnaround Time

#### APP Serotyping (18 serotypes)

Culture must have been done previously. Isolate • 5-10 D

These tests are done externally.

 When this symbol appears, see [Appendix A - Guidelines for storing and shipping samples to the laboratory](#)

## SWINE

### SEROTYPING & GENOTYPING

Volume • Turnaround Time

#### APP Genotyping

Culture must have been done previously. Isolate • 2-3 D  
[These tests are done externally.](#)

#### G. parasuis Serotyping (15 serotypes)

Culture must have been done previously. Isolate • 5-10 D  
[These tests are done externally.](#)

#### G. parasuis Genotyping

Culture must have been done previously. Isolate • 1-2 W  
[These tests are done externally.](#)

#### S. suis Serotyping (35 serotypes)

Culture must have been done previously. Isolate • 5-10 D  
[These tests are done externally.](#)


### TGEV-PRCV- PEDV- PoDCV

Sample • Volume • Turnaround Time




#### PEDV - Ab ELISA

 • 0.5 mL • 1-2 D

#### TGEV - PRCV Ab ELISA

 • 1.0 mL • 1-2 D

#### TGEV - PEDV - PoDCV qPCR

  • 12-24 h  
 Feces, intestinal contents, swiffers, oral fluids


#### TGEV - PRCV PCR

 nasal swab, lung  • 2-3 D




### MISCELLANEOUS VIRUSES

Sample • Volume • Turnaround Time

#### Parvovirus Ab– HI

[These tests are done externally.](#)  • 1,0 mL • 1 W




#### Porcine Sapelovirus (PSV) qPCR

  • 1-2 D  
 fecal samples, nervous tissues.

### OTHER BACTERIA

Sample • Volume • Turnaround Time

#### Brachyspira spp (culture)

  • 10-15 D  
 feces, intestinal contents (Tightly closed container), tissue.  
Refrigerate. [This test is done externally.](#)




### OTHER BACTERIA



Sample • Volume • Turnaround Time

#### Brachyspira hyodysenteriae and B. hampsonii qPCR


 fèces • 3 D

#### Brachyspira hyodysenteriae and B. pilosicoli qPCR

  • 1 g • 24-28 h  
 feces, intestinal contents (Tightly closed container), tissue.



**Clostridium multiplex qPCR : C. chauvoei,  
C. septicum, C. novyi and C. sordelii**  • 1-2 D  
 pieces of affected tissues (minimum 5 cm x 5 cm x 5 cm,  
wrapped in absorbent paper towels and placed in a tightly  
closed container). Swab cultures of affected tissues (swabs  
without transport medium or with 0.5 mL sterile saline to  
preserve moisture). Refrigerate.

#### Erysipelothrix rhusiopathiae MFIA ac

 • 1,0 mL • 2-3 j

[These tests are done externally.](#)

#### Erysipelothrix rhusiopathiae qPCR

 • 1-2 j  
 liver, kidney, spleen, skin biopsy

#### Leptospira (6 serovars) Ab – MAT

[These tests are done externally.](#)  • 1.0 mL • 5-10 D



#### Leptospira spp. qPCR

kidney, urine  • 2.0 mL • 1-2 D

#### Pasteurella multocida toxA qPCR

 nasal swab. Refrigerate  • 1-2 D

#### Serratia spp qPCR

 • 10 mL • 1-2 D  
 fresh or extended semen, environmental samples

### OTHER SERVICES, FEES AND DISCOUNTS

#### Pooling fees

#### Emergency fees (RUSH)

#### Cancellation fees

#### Intermediate fees

#### Cooler upon request

**Shipping fees NOT included:**  Quebec,  elsewhere in  
Canada,  United States

 When this symbol appears, see [Appendix A - Guidelines for storing and shipping samples to the laboratory](#)



## POULTRY





## MICROBIOLOGY

Sample • Volume • Turnaround Time

### Aerobic culture

• 2-5 D

Tissue, swab, liquid, environmental sample  
Refrigerate, sterile container or swab with transport medium (not dry swab).

### Salmonella spp. (culture)

tissu, écouvillon, fèces, etc • 4-7 D

### Salmonella spp. (hatchery)

• 4-7 D

Fluff, sponge, swab, shoe-cover  
Use CFIA mandatory form available on our Website (Hatchery Sampling Report)

## PARASITOLOGY

Sample • Volume • Turnaround Time

### Parasitology (Wisconsin)

This test is done externally. Feces • 5 g • 2-5 D

## PCR

Sample • Volume • Turnaround Time

### Avian Astovirus (CAstV) qPCR

Feces, environmental sample • 2-3 j

### Mycoplasma synoviae et M. gallisepticum qPCR (MS-MG)

Tissue, environmental sample • 2-3 D

### Salmonella spp qPCR

Feces, environmental sample • 2-3 D

### Salmonella serotyping

Culture must have been done previously. Isolat • 5-10 D

### Salmonella Typhimurium qPCR

Feces, environmental sample • 4-7 D

## SEROLOGY

Sample • Volume • Turnaround Time

### AEV (encephalomyelitis) ELISA

This test is done externally. • 1.0 mL • 10 D

## SEROLOGY

Sample • Volume • Turnaround Time

### CAV (Infectious Anemia) ELISA

This test is done externally. • 1.0 mL • 10 D

### IBV (Infectious bronchitis Virus) ELISA

This test is done externally. • 0.5 mL • 2-5 D

### IBDV (Infectious Bursal Disease Virus) ELISA

This test is done externally. • 0.5 mL • 2-5 D

### Inclusion body hepatitis ELISA

(Adenovirus) • 1.0 mL • 10 D

This test is done externally.

### MS (Mycoplasma synoviae) ELISA

This test is done externally. • 0.5 mL • 2-5 D

### MG (Mycoplasma gallisepticum) ELISA

This test is done externally. • 0.5 mL • 2-5 D

### NDV+ (Newcastle Disease Virus) ELISA

This test is done externally. • 0.5 mL • 2-5 D

### Reo virus Aviaire Elisa

This test is done externally. • 0.5 mL • 2-5 D

## OTHER SERVICES, FEES AND DISCOUNTS

### Cancellation fees

### Frais d'urgence (RUSH)

### Intermediate fees

### Pooling fees

### Cooler upon request

### Shipping fees not included



## APPENDIX A - GUIDELINES FOR STORING AND SHIPPING SAMPLES TO THE LABORATORY

The way samples are stored between collection and arrival at the laboratory is very important both to facilitate their processing and to ensure the validity of the analyses.

Below you will find guidelines for some of the most common samples that are submitted to the laboratory for bacteriological or PCR testing.

Do not hesitate to contact us for more information.

### Feces for bacteriological or PCR testing

- Samples must be placed in tightly sealed containers (jars or flasks with screw caps available at the laboratory if required).
- **"Containers" such as plastic bags, examination gloves, Vacutainer tubes or others must never be used.**
- If the samples were obtained using swabs, it is recommended that they be placed in a solid (agar) or liquid transport medium (e.g. solid or liquid Amies medium).
- However, for samples intended for PCR testing, it is important that the transport medium be liquid (no agar transport media!)
- Samples must be stored between 2 and 8 ° C.
- They must arrive at the laboratory within 72 hours after collection.

### Oral fluids for PCR testing

- Samples must be placed in tightly sealed containers (jars or flasks with screw caps available at the laboratory if required).
- **"Containers" such as plastic bags, examination gloves, Vacutainer tubes or must never be used.**
- Samples must be refrigerated as quickly as possible and stored at 2-8 ° C.
- They must arrive at the laboratory as soon as possible (ideally within 72 hours after collection).
- If this is not possible, it is recommended to freeze them.

### Processing fluids for PCR testing

- **Fluids must be first separated from testicles and tails.**
- Samples must be placed in tightly sealed containers (jars or flasks with screw caps available at the laboratory if required).
- **"Containers" such as plastic bags, examination gloves, Vacutainer tubes or others must never be used.**
- Samples must be refrigerated as quickly as possible and stored at 2-8 ° C.
- They must arrive at the laboratory as soon as possible (ideally within 72 hours after collection).

### Wipes for PCR testing

- The wipes must be soaked with 10 mL of saline before taking the samples
- They must be placed in tightly sealed containers.
- Ideally, it is recommended to use Ziploc plastic bags; if possible, two bags per sample.
- **"Containers" such as plastic bags, examination gloves or others must NEVER be used.**
- Samples must be refrigerated as quickly as possible and stored at 2-8 ° C.
- They must arrive at the laboratory as soon as possible (ideally within 72 hours after collection).

### Nasal or tracheobronchial swabs for PCR testing

- The ends of swabs or catheters must be placed in sterile containers with 1 mL of buffered saline (PBS) and sealed.
- It is recommended to use tubes with screw caps (available at the laboratory if required).
- Samples must be refrigerated as quickly as possible and stored at 2-8 ° C.
- They must arrive at the laboratory as soon as possible (ideally within 72 hours after collection\*).
- **Note that these swabs or catheters cannot be used for bacteriological testing.**



## APPENDIX B - AEROBIC OR ANAEROBIC CULTURE: HOW TO CHOOSE?

We regularly receive questions about what type of culture to choose (aerobic or anaerobic?) and the samples to be submitted. The appropriate selection of samples and the type of culture is crucial for the culture to obtain a significant result.

Anaerobic germs, by definition, come from oxygen-poor, moisture-rich sites. To successfully grow these germs in the laboratory, it is important that samples are not exposed to air and retain moisture.

The conditions in which anaerobic germs are likely to be involved must include:

- Tissue necrosis
- Deep abscesses
- Bite wounds
- Wet pleurisy
- Aspiration pneumonia
- Metritis and pyometers
- Oral diseases
- Joint diseases

Appropriate samples for researching anaerobic germs include:

- Fluids (pleural, peritoneal, joint or cerebrospinal)
- Deep tissues (muscles, liver, etc.)
- Intestinal content

On the other hand, samples that are inappropriate for this type of research include, among others:

- Vaginal swabs
- Airway swabs and aspirations
- Skin swabs or superficial wounds
- Urine (unless taken by bladder puncture)



The following rules must apply for the collection and retention of samples for anaerobic germ research:

- Fluids: If they are taken by aspiration with a syringe, the air must be removed from the barrel of the syringe beforehand. The fluids must be placed in sterile tubes without additives and the tubes must be completely filled so as not to leave any air. The tubes must be tightly sealed. The syringe may also be sent to the laboratory after removing the needle.
- Swabs: Swabs must be placed in an appropriate anaerobic transport medium, such as those available at Biovet.
- In all cases, the samples must be stored between 4°C and 8°C and reach the laboratory within 48 hours.

### Reference

Purvis T. et Burklund A. Do I choose aerobic or anaerobic culture.

[www.ksvdl.org/resources/news/diagnostic\\_insights/january2019/aerobic-anaerobic-culture.html](http://www.ksvdl.org/resources/news/diagnostic_insights/january2019/aerobic-anaerobic-culture.html)

## APPENDIX C: LIST OF ANTIBIOTICS (SENSITIVITY)

Antibiotics	Avian	Swine	Respiratory *
Amoxicillin	•	•	
Ampicillin	•		•
Apramycin		•	
Ceftiofur	•	•	•
Enrofloxacin	•		•
Erythromycin	•		•
Florfenicol	•	•	•
Gentamicin	•		
Lincomycin	•	•	
Neomycin	•	•	
Penicillin G (Gram+ only)	•	•	
Spectinomycin	•	•	•
Sulbactam / Ampicillin		•	
Sulfamethoxazole	•		
Sulphamethoxazole/Trimethoprim	•	•	•
Tetracycline	•	•	•
Tilmicosin		•	•

\* Respiratoire : porcin seulement

## OTHER ANTIBIOTICS AVAILABLE

- Amikacin
- Amoxicillin / clavulanic acid
- Azithromycin
- Bacitracin
- Cefalotin
- Cefovecin
- Cefoxitin
- Cefpodoxime
- Ceftazidime
- Cephalexin
- Cephazolin
- Chloramphenicol
- Ciprofloxacin
- Clindamycin
- Cloxacillin
- Doxycycline
- Fusidic acid
- Gamithromycin
- Imipenem
- Kanamycin
- Marbofloxacin
- Meropenem
- Metronidazole
- Moxifloxacin
- Mupirocin
- Nitrofurantoin
- Norfloxacin
- Novobiocin
- Ofloxacin
- Oxacillin (Staph only)
- Penicillin / Novobiocin
- Piperacillin
- Pirlimycin
- Polymyxin B
- Pradofloxacin
- Rifampicin
- Streptomycin
- Sulphafurazole / Sulfisoxazole
- Ticarcillin (Gram- only)
- Tildipirosin
- Tobramycin
- Tulatromycin

## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

