

## Molecular Diagnostics

### PCR for Mammalian Pathogens

Anaplasma marginale .....	\$42.00
Bluetongue/EHD viruses .....	\$48.00
BVD (Pooled blood, up to 12 per pool).....	\$53.00
BVD from milk, tissue, or single blood .....	\$42.00

BVD-PI (Persistent Infection) Ear Notch Testing Program			
Number of Cattle Tested	PCR Pool Size	PCR Charge per Head	Ag-ELISA charge per Head
<12 samples	No Pooling	NA	\$6.00
12-35 samples	12	\$4.50	\$2.50 *
36-99 samples	up to 36	\$3.50	\$2.50 *
100 or more samples	up to 36	\$2.50	\$2.50 *

\* BVD Ag-ELISA testing on individual samples within a PCR positive pool

Canine Influenza Virus .....	\$52.00
Clostridium perfringens genotyping.....	\$44.00
Classical Swine Fever**.....	\$50.00
Contagious ecthyma (Orf) virus.....	\$54.00
Coronavirus (triplex PCR includes rota and Cryptosporidium).....	\$42.00
Cryptosporidium (triplex PCR includes rota and coronavirus).....	\$42.00
E. coli fimbriae and toxins (F5, STA, intimin, stx1, stx2, etc).....	\$42.00
Equine Herpesvirus-1 (EHV-1) neuropathogenic and wild type .....	\$57.00
Fungal identification by Universal primers and sequencing .....	\$130.00
Fungal PCR only (negative PCR with Universal primers) .....	\$65.00
Helicobacter spp. ....	\$42.00
Malignant Catarrhal Fever (MCF).....	\$44.00
<i>M. avium</i> spp. <i>paratuberculosis</i> (Johne's Disease) (less than 4).....	\$42.00
4 or more samples .....	\$32.00
<i>Mycobacterium</i> spp. Identification by universal primers.....	\$130.00
<i>Mycobacterium</i> PCR only (negative PCR with universal primers).....	\$65.00
<i>Mycoplasma bovis</i> speciation.....	\$42.00
<i>Mycoplasma haemolamae</i> .....	\$42.00
<i>Mycoplasma ovipneumoniae</i> (less than 4).....	\$42.00
4 or more samples .....	\$32.00
<i>Neospora caninum</i> .....	\$42.00
<i>Pasteurellaceae leukotoxin [lktA gene]</i> (less than 4).....	\$42.00
4 or more samples .....	\$32.00
<i>Rhodococcus equi</i> .....	\$46.00
<i>Salmonella</i> spp. ....	\$48.00
<i>Toxoplasma gondii</i> .....	\$42.00
<i>Tritrichomonas foetus</i> (less than 4) .....	\$42.00
4 or more samples .....	\$32.00
<i>Tritrichomonas foetus</i> pool of 2 to 5 samples.....	\$56.00
West Nile Virus.....	\$44.00

### PCR Tests for Fish Pathogens

<i>Flavobacterium psychrophilum</i> .....	\$42.00
Infectious pancreatic necrosis virus .....	\$42.00
Infectious salmon anemia virus .....	\$50.00
Salmon alphavirus.....	\$50.00
(call lab for discount if testing both ISAV and SAV)	
Koi herpesvirus .....	\$42.00
<i>Myxobolus cerebralis</i> .....	\$44.00
<i>Renibacterium salmoninarum</i> (BKD) .....	\$79.00
Spring viremia of carp virus (SVCV).....	\$44.00
<i>Mycobacterium</i> spp speciation by sequencing.....	\$130.00
<i>Yersinia ruckeri</i> .....	\$44.00
<i>Viral hemorrhagic septicemia virus</i> .....	\$53.00
Direct PCR/sequencing (fungi/bacteria/myxozoa/other) .....	\$130.00

### PCR Tests for Avian Pathogens

(see AHFSL price list for additional avian assays).

Avian influenza—Individual**.....	\$50.00
Avian paramyxovirus (Newcastle's Disease)**.....	\$50.00
Infectious Bursal Disease .....	\$58.00
**USDA-APHIS Program testing	

### Organism Identification and Sequencing

Direct PCR/sequencing incl PCR.....	\$130.00
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## Pathology

### Histopathology

Surgical Biopsy (antemortem samples).....	\$35.00
Field necropsy (postmortem samples).....	\$42.00
Histo on WADDL necropsy.....	\$42.00
STAT/frozen section .....	\$85.00
Duplicate slide .....	\$8.00

### Necropsy

Gross only.....	\$65.00
Cosmetic necropsy .....	\$300.00
Avian (see AHFSL fee schedule)	
Fish (see Aquatic Health fee section)	

## Parasitology

Parasite ID .....	\$14.50
Fecal float .....	\$8.50
Baermann .....	\$10.50
Sedimentation .....	\$14.50
See Molecular Diagnostics for triplex PCR including Coronavirus, Rotavirus, and Cryptosporidium	

## Toxicology

Additional analyses, including soil, water and plant testing, may be available through the Analytical Sciences Laboratory. Please call for assistance. See waddl.vetmed.wsu.edu for Out-of-State prices.

### Individual

Acetylcholinesterase.....	\$22.00
Aflatoxin.....	\$26.00
Ammonia.....	\$16.00
Arsenic (blood, urine).....	\$40.00
Arsenic (See Trace Mineral Screen)	
Barium (source material).....	\$40.00
Barium (See Trace Mineral Screen)	
Cadmium (blood, urine) .....	\$40.00
Cadmium (See Trace Mineral Screen)	
Calcium (See Trace Element Screen)	
Carbamate Pesticide Screen .....	\$90.00
Chlorinated Herbicide Screen.....	\$90.00
Chromium.....	\$40.00
Chromium (See Trace Mineral Screen)	
Cobalt (blood) .....	\$40.00
Cobalt (tissue—see Trace Mineral Screen)	
Copper (blood) .....	\$40.00
Copper (See Trace Element, Trace Mineral, Selenium & Copper Screens)	
Ethylene and Propylene glycol (by gas chromatography) .....	\$58.00
Fluoride.....	\$15.00
Fumonisin (feed).....	\$36.00
Glutathione Peroxidase.....	\$22.00
Iron (serum—see Trace Element screen)	
Iron (tissue—see Trace Mineral Screen)	
Lasalocid (See Ionophore Screen)	
Lead .....	\$30.00
Lead (tissue—see Trace Mineral Screen)	
Magnesium (serum—see Trace Element Screen)	
Manganese (blood, serum) .....	\$40.00
Manganese (tissue - see Trace Element Screen)	
Melamine Screen.....	\$140.00
Mercury (blood, tissue).....	\$40.00
Metdehyde .....	\$44.00
Molybdenum (plasma) .....	\$40.00
Molybdenum (tissue— Trace Mineral Screen)	
Monensin (See Ionophore Screen)	
Narasin (See Ionophore Screen)	
Nitrate (serum, plasma, ocular fluid/intact eye, soil, water, plant; add \$4.00 for drying/grinding).....	\$15.00
Organochlorine Pesticide Screen .....	\$90.00
Organophosphate Pesticide Screen .....	\$90.00
pH .....	\$9.00



Phosphorus (serum—see Trace Element Screen)	
Plant/Mushroom/Blue-Green algae (cyanobacteria) Identification .....	\$9.00
Salinomycin (see Ionophore Screen)	
Selenium .....	\$18.00
Selenium (See Trace Mineral & Selenium and Copper Screens)	
Strychnine .....	\$26.00
Urea .....	\$22.00
Vitamin E .....	\$21.00
Zinc (See Trace Element & Trace Mineral Screens)	
Zinc phosphide—phosphine gas.....	\$55.00

### Screens

<b>Ionophore screen</b> (monensin, lasalocid, salinomycin, narasin).....	\$44.00
<b>Selenium and Copper Screen (liver)</b> .....	\$40.00
<b>Trace Element Screen (serum):</b> (calcium, copper, iron, magnesium, phosphorus, zinc; sodium and potassium on request).....	\$18.00
<b>Trace Element Screen and Selenium (serum):</b> (calcium, copper, iron, magnesium, phosphorus, selenium, zinc; sodium and potassium on request).....	\$36.00
<b>Trace Mineral Screen (tissue):</b> (arsenic, barium, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, selenium, zinc) .....	\$67.50
Single element.....	\$40.00
Gas chromatography—mass spectrometry <b>organic screen (call lab before requesting)</b> .....	\$55.00

## Virology

Bovine Virus Diarrhea Virus - Persistent Infection (PI)—.....	\$6.00
Isolation in cell culture (includes up to 3 samples).....	\$50.00
See Molecular Diagnostics for triplex PCR including Coronavirus, Rotavirus, and Cryptosporidium	

# Washington Animal Disease Diagnostic Laboratory

Fee schedule effective January 1, 2017



155N Bustad Hall  
PO Box 647034  
Pullman, WA 99164-7034

509-335-9696, Fax 509-335-7424  
waddl@vetmed.wsu.edu



## General Policies

- All cases except those exclusively for toxicology will be assessed an accession fee of \$10.00. An accession is defined as specimen(s) of one animal species or miscellaneous substances belonging to one owner and submitted at one time.
- Non-Washington samples will be assessed a 50% surcharge except where indicated.
- Poultry and food safety testing is performed primarily at WADDL-Puyallup by the Avian Health and Food Safety Laboratory. Samples can be sent directly to: Avian Health and Food Safety Laboratory, Washington State University Puyallup, 2607 W Pioneer Way, Puyallup, WA 98371-4990, 253-445-4537, Fax 253-445-4544.
- A fax, mail, or online access is provided at no charge.
- Samples sent for analysis to outside labs are billed for any additional direct costs incurred. Handling fee (including postage) is \$20.00.
- Fees are subject to change without notice. Current fees are located on the WADDL website, waddl.vetmed.wsu.edu.
- STAT fee: please contact lab in advance to arrange scheduling and fees.
- To submit fresh brain tissue for rabies testing only, call the local health department. Rabies specimens are tested by the Washington State Department of Health: Washington Public Health Laboratories, Attn: Virology, 1610 NE 150th Street, Shoreline, WA 98155-9701, 206-418-5458. Samples for rabies testing as part of a complete neurological disease workup will be forwarded to the Washington Public Health Laboratories by WADDL.
- Specimens submitted for examination may undergo additional diagnostic testing for state or federal disease surveillance programs, particularly involving foreign animal diseases.

## Administration

Accession fee (No out-of-state surcharge) .....	\$10.00
Send outs .....	\$20.00 + outside lab charge
Fed Ex delivery charge (under 3 lbs. & in-state) .....	\$12.00
Fed Ex delivery charge (under 3 lbs. & out-of-state).....	\$20.00
Fed Ex delivery charge (over 3 lbs.).....	Actual rate
Testing for export .....	\$5.00

## Aquatic Health

### AFS-USFWS Blue Book/OIE Health Inspection Testing

Culture Identification of specific bacteria (per fish).....	\$3.50
Aerobic culture, contaminated plate surcharge (per tissue) .....	\$5.00
<i>Renibacterium salmoninarum</i> (BKD)	
Culture (per fish) .....	\$17.00
BKD FAT (per test) .....	\$4.50
BKD ELISA (per test).....	\$9.00

<i>Piscirickettsia salmonis</i> direct tissue touch exam	
Culture .....	\$23.00
Touch Exam.....	\$5.50
<i>M. cerebralis</i> digest, small to medium sized fish (per test).....	\$17.00
<i>M. cerebralis</i> digest, large fish (per test).....	\$27.50
<i>Ceratomyxa shasta</i> by intestinal smear (per test) .....	\$4.50
Amoebic Gill Disease.....	\$9.00
<i>Bothriocephalus acheilognathi</i> (Asian tapeworm) (per test) .....	\$5.00

Viral Culture (per test per cell line).....	\$16.00
Viral pathogens routinely tested for include: epizootic hematopoietic necrosis virus, infectious hematopoietic necrosis virus, infectious pancreatic necrosis virus, oncorhynchus masou virus, viral hemorrhagic septicemia virus, Infectious salmon anemia virus, spring viremia of carp, largemouth bass virus, salmonid alphavirus	

VHSV testing only (EPC cells only).....\$23.00

Cell lines in active culture include: Epithelioma Papulosum Cyprini (EPC), Chinook Salmon Embryo (CHSE-214), Salmon Head Kidney (SHK-1), Fat Head Minnow (FHM), Bluegill Fry (BF-2)

Contact lab for additional pathogens or cell lines.

### Aquatic Health Diagnostic Testing

<b>Bacteriology</b>	
Aerobic culture (per tissue) .....	\$17.00
Anerobic culture (per tissue) .....	\$20.00
Antimicrobial susceptibility .....	\$25.00
Fungal culture (genus)* .....	\$17.00
<i>Mycobacterium</i> (genus)* .....	\$22.00

#### Virology

Viral isolation in cell culture (up to 4 cell lines) CHSE-214, EPC, SHK, FHM, BF-2.....	\$83.00
Each additional cell line .....	\$15.00

### Parasitology

External parasite screen on fresh tissues (per fish) .....	\$5.00
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#### Pathology

Necropsy (includes gill wet prep/mucus-skin scrape)	
Fish 1–3.....	\$44.00
Each additional fish .....	\$16.00
Histopathology—tissues from up to 3 fish .....	\$44.00
Each additional fish .....	\$16.00
External parasite screen by histopathology (per slide).....	\$9.00
<i>Myxobolus cerebralis</i> histopathology (per slide) .....	\$9.00

#### Sample collection at WADDL

Mini sampling (per fish).....	\$2.50
Standard sampling (per fish).....	\$4.50
Sampling kit (plus freight).....	\$30.00

#### Molecular Diagnostics

Organism identification by PCR	
<i>Flavobacterium psychrophilum</i> .....	\$42.00
Infectious pancreaticnecrosis virus .....	\$42.00
Infectious salmon anemia virus .....	\$50.00
Salmon alphavirus.....	\$50.00
(call lab for discount if testing both ISAV and SAV)	
Infectious hematopoietic necrosis virus (IHNV) .....	\$50.00
Koi herpesvirus .....	\$44.00
<i>Myxobolus cerebralis</i> .....	\$44.00
<i>Renibacterium salmoninarum</i> (BKD).....	\$42.00
<i>Renibacterium salmoninarum</i> (BKD) Nested.....	\$79.00

Spring viremia of carp virus (SVCV) .....	\$44.00
<i>Mycobacterium</i> speciation by sequencing.....	\$130.00
<i>Yersinia ruckeri</i> .....	\$44.00
<i>Viral hemorrhagic septicemia virus</i> .....	\$53.00
Direct PCR/sequencing.....	\$130.00

## Bacteriology

Aerobic culture .....	\$17.00
Anaerobic culture .....	\$20.00
Antimicrobial susceptibility (aerobic/anaerobic) .....	\$25.00
Blood culture (aerobic and anaerobic) .....	\$25.00
<i>Campylobacter spp.</i> culture.....	\$17.00
<i>Clostridium difficile</i> culture .....	\$17.00
<i>Clostridium difficile</i> toxin assay by neutralization .....	\$24.50
<i>Clostridium perfringens</i> culture .....	\$17.00
<i>Clostridium perfringens</i> toxin genotyping (PCR) .....	(See Molecular Dx)
<i>Clostridium chauvoei, C.novyi, C.septicum, C.sordelli</i>	

Fluorescent antibody stain.....	\$13.00
Environmental cultures - Nonquantitative.....	\$33.50
Environmental cultures - Quantitative.....	\$44.00
<i>E. coli</i> virulence genotyping (PCR) .....	(See Molecular Dx)
Fecal aerobic culture, any species.....	\$20.00
Fecal <i>Salmonella spp.</i> only culture .....	\$17.00
Isolate Banking (per isolate).....	\$10.00
<i>Leptospira spp.</i> fluorescent antibody (FA).....	\$17.00
<i>Listeria spp.</i> culture.....	\$17.00
Milk mastitis .....	\$6.00
Milk bulk tank.....	\$17.00
<i>Mycobacterium spp.</i> culture (non-Johnes) .....	\$25.00
Mycology (fungal) culture .....	\$20.00
<i>Mycoplasma bovis</i> speciation (PCR) .....	(See Molecular Dx)
<i>Mycoplasma spp.</i> culture .....	\$17.00
<i>Rhodococcus equi</i> (TTW, fluid, PCR) .....	(See Molecular Dx)
<i>Salmonella</i> culture VCLASP.....	\$20.00
Stain slides (Grams, acid-fast, victoria blue, special stains).....	\$8.00
<i>Trichomonas foetus</i> culture - large animal .....	(See Molecular Dx)
<i>Trichomonas foetus</i> culture - small animal .....	\$16.00
<i>Ureaplasma spp.</i> culture .....	\$17.00

## Immunodiagnostics

#### Antibody Detection

Anaplasmosis (ELISA) .....	\$5.00
Bluetongue (ELISA) .....	\$5.00
Bovine Leukosis Virus (ELISA) .....	\$5.00
Bovine Parainfluenza-3 (VN).....	\$6.50
Bovine Respiratory Syncytial Virus (VN).....	\$6.50
Bovine Virus Diarrhea (VN) .....	\$6.50
<i>Brucella abortus</i> (BAPA)*** .....	\$5.00

<i>Brucella abortus</i> –Rose Bengal Test *** .....	\$5.00
<i>Brucella canis</i> (RSAT)*** .....	\$16.00
<i>Brucella ovis</i> (ELISA) .....	\$5.00
Canine Adenovirus (VN) .....	\$10.50
Canine Coronavirus (IFA) .....	\$11.50
Canine Distemper Virus (VN) .....	\$10.50
Canine Distemper Virus (IFA-IgG).....	\$11.50
Canine Distemper Virus (IFA-IgM) .....	\$11.50
Canine Herpesvirus (VN).....	\$10.50
Canine Parainfluenza Virus (VN).....	\$10.50
Canine Parvovirus (IFA-IgG) .....	\$11.50
Canine Parvovirus (IFA-IgM).....	\$11.50
Caprine Arthritis Encephalitis Virus (ELISA) .....	See Lentivirus
Caseous Lymphadenitis (SHI) .....	\$7.50
Caseous Lymphadenitis Equine (Pigeon Fever).....	\$10.50
Epizootic Hemorrhagic Disease (AGID) .....	\$10.50
Equine Herpesvirus Type 1 & 4 (VN).....	\$10.50
Equine Herpesvirus Type 3 (VN).....	\$10.50
Equine Infectious Anemia (EIA) (AGID/ELISA)*** .....	\$10.50
Equine Viral Arteritis (VN) .....	\$10.50
Feline Calicivirus (VN) .....	\$10.50
Feline Coronavirus/FIP (IFA) .....	\$11.50
Feline Herpesvirus (VN).....	\$10.50
Feline Immunodeficiency (ELISA) .....	\$10.50
Feline Panleukopenia (IFA) .....	\$11.50
Infectious Bovine Rhinotracheitis (VN) .....	\$6.50
Johne’s Disease (ELISA).....	\$5.00
Lentivirus, small ruminant (ELISA) .....	\$5.00

Leptospirosis (MAT, Canine).....	\$30.00
Leptospirosis (MAT).....	\$26.00
<i>Mycoplasma ovipneumoniae</i> (cELISA) .....	\$10.50
<i>Neospora caninum</i> (ELISA).....	\$5.50
<i>Neospora caninum</i> (IFA) Dog .....	\$11.50
Ovine Progressive Pneumonia Virus .....	See Lentivirus
Pregnancy Testing (ELISA).....	\$5.00
Pseudorabies Virus (ELISA) .....	\$5.00
Q-fever ( <i>Coxiella burnetii</i> ) (ELISA) .....	\$7.50
Toxoplasmosis (IFA) .....	\$11.50
Vesicular Stomatitis Virus (Ind/NJ-VN) for cattle .....	\$13.00
West Nile Virus-Equine (ELISA) .....	\$15.00

### Antigen (Agent) Detection

Bovine Spongiform Encephalopathy (BSE)* .....	\$20.50
Bovine Virus Diarrhea Virus-Persistent Infection (PI).....	\$6.00
Canine Distemper Virus Ag (Direct FA) .....	\$21.00
<i>Chlamydophila spp.</i> Ag. (ELISA) .....	\$21.00
Chronic Wasting Disease (CWD) Ag. (ELISA).....	\$28.50
Feline Leukemia Virus (FeLV) Ag. (ELISA).....	\$21.00

Respiratory Syncytial Virus Ag (ELISA).....	\$21.00
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\*\*USDA-APHIS Program testing only

\*\*\* Stat Charge of \$25.00 on selected tests. Other tests may be available on a stat basis.
**Contact lab before sending sample.**

## Immunohistochemistry

#### Infectious Agents—Viruses

Avian Influenza .....	\$33.50
Bovine Coronavirus.....	\$28.00
Bovine Herpesvirus-1 (IBR) .....	\$28.00
Bovine Respiratory Syncytial Virus .....	\$28.00
Bovine Virus Diarrhea Virus .....	\$28.00
Bovine Virus Diarrhea Virus Ear Notch.....	\$8.00
Canine Coronavirus .....	\$33.50
Canine Distemper Virus .....	\$33.50
Canine Parvovirus .....	\$33.50
Equine Herpesvirus-1 .....	\$33.50
Feline Coronavirus (FIP) .....	\$33.50
Feline Parvovirus (Panleukopenia) .....	\$33.50
Parainfluenza virus-3 .....	\$33.50
Prion (Chronic wasting disease) **.....	\$30.00
Prion (Scrapie) ** .....	\$30.00

\*\*USDA-APHIS Program testing only

### Infectious Agents—Bacteria and Protozoa

<i>Coxiella burnetii</i> .....	\$28.00
<i>Leptospira spp.</i> .....	\$33.50
<i>Listeria monocytogenes</i> .....	\$28.00

### Tumor Cell Markers

B-lymphocyte (CD20).....	\$33.50
Chromatogranin A .....	\$33.50
Cytokeratin.....	\$33.50
Desmin .....	\$33.50
Factor VIII .....	\$33.50
Glial fibrillary acidic protein (GFAP).....	\$33.50
Integrin beta 2 (CD18).....	\$33.50
Lamda light chain .....	\$33.50
Melan A .....	\$33.50
MUM-1/IRF-4 .....	\$33.50
Muscle Actin.....	\$33.50
Neurofilament .....	\$33.50
Synaptophysin .....	\$33.50
T-Lymphocyte (CD3) .....	\$33.50
Vimentin.....	\$33.50