

2025 PADLS Fee Schedule



New Bolton Center
University of Pennsylvania
382 West Street Road
Kennett Square, PA 19348-1692
(610)925-6725

Pennsylvania Veterinary Laboratory
Pennsylvania Department of Agriculture
2305 North Cameron Street
Harrisburg, PA 17110-9405
(717) 787-8808

Animal Diagnostic Laboratory
Pennsylvania State University
131 Pastureview Rd
University Park, PA 16802-6720
(814) 863-0837

Accredited by the American Association of Veterinary Laboratory Diagnosticians



PADLS is dedicated to supporting Pennsylvania agriculture through the diagnosis and prevention of animal disease. Further information is available at:

www.padls.org

Follow the link to the **User guide** for collection of specimens, shipping guidelines, test set-up days, turn-around times, content of serology panels, submission forms, field sampling kits, available media, etc.

January 1, 2025

Fees are subject to change

General Policies

- Standard FAX reports are provided at no additional charge.
- A minimum fee of \$30 is charged for referral of specimens to non-PADLS laboratories (excluding rabies testing).
- Specimens for rabies virus detection, non-human exposure or for human exposures should be sent to the PADLS laboratory in Harrisburg. Testing is free for PA clients. Out-of-state clients may be charged \$150.00.
- A fee of \$25 is charged for shipping specimens for rabies testing using Quick Courier.
- A credit card or check is the acceptable method of payment.
- If a submitter contacts the laboratory to cancel a test already in progress but not finalized and reported, the associated accession fee will still be billed as a **"cancellation fee"**. This fee may be waived at the discretion of the case coordinator on a case-by-case basis.

Accessioning

An accession fee is charged based on the total bill, as follows:

for fees up to \$19.99	\$5.00
for fees \$20.00 to \$39.99	\$12.00
for fees over \$40.00	\$18.00

No accession fee is levied for regulatory testing, including the following tests: AI, MG, MS, S. pullorum, EIA, or tests marked with the symbol "†".

Out-of State Fees

A 30% surcharge is applied for out-of-state submissions with the exception of contracts, or as specified. Up to 30% charge is also levied on exotics (excluding pet, farmed, wild-life, and

zoological park submissions. Please contact the laboratory if you need more information.

Aquaculture

Hobbyist/pet fish autopsy/necropsy (1-5 fish)	\$40.00
Commercial fish autopsy/necropsy (1-5 fish)	\$60.00
Diagnostic virus isolation salmonid (3 pools, 5 fish per pool) for IPNV, IHNV and VHSV	\$160.00
Diagnostic virus isolation For VHSV, only	\$90.00
Diagnostic virus isolation non-salmonid samples (3 pools, 5 fish per pool) for LMBV KHV, SVCV or VHSV	\$120.00
Gill Lice Certificate Fee (Each)	\$30.00
Gill Lice Inspection Fee (Each)	\$66.00
Viral monitoring (salmonid samples, 12 pools, 5 fish per pool) for IPNV, IHNV, & VHSV	\$240.00
Viral monitoring (non-salmonid samples, 12 pools, 5 fish per pool) for LMBV, KHV, SVCV or VHSV	\$240.00
Whirling disease (60 fish)	\$300.00

*Bacteriology/Mycology

Aerobic culture	\$28.50
Anaerobic culture	\$45.50
Antibiotic susceptibility Disk diffusion (each)	\$16.50
Antibiotic susceptibility, MIC	\$24.00
Blackleg assay (FA, 4 antibodies)	\$17.50

Blood culture	\$47.50
<i>Brucella canis</i> culture	\$19.50
<i>Campylobacter spp.</i> culture (including Vibriosis)	\$23.50
Contagious equine metritis (CEM)	\$22.00
<i>Clostridium perfringens</i> culture	\$21.00
<i>Cl. difficile/perfringens</i> toxin ELISA	\$45.00
Darkfield microscope exam	\$8.50
Fungal culture	\$29.50
Gram stain	\$8.50
Isolate ID from plates & slants/isolate	\$4.50

Johne's disease testing

Fecal culture	\$27.50
Pooled fecal culture (max. pool size 5)	\$27.50
Culture/sample from positive pool	\$27.50
Environmental culture	\$27.50

***also see Molecular Diagnostics (p 3)**

†Johne's program testing

(for information call: 717-787-4172)

Fecal culture	\$20.00
Pooled fecal culture (max. pool size 5)	\$27.50
Culture/sample from positive pool	\$12.00
Environmental culture	\$20.00

Leptospira FA \$16.50

Mastitis culture

Quarter/composite aerobic sample	\$6.00
----------------------------------	--------

Herd survey (>8 cows, all 4 quarters per cow)	\$13.00
<i>Mycoplasma</i>	\$10.00
Mycoplasma 10 samples/pool	\$13.00
Bulk tank milk analysis (quant. culture, 3 dilutions)	\$38.50
Bulk tank milk analysis & <i>Mycoplasma</i>	\$46.00
<i>Mycoplasma spp.</i> culture	\$20.50
Quantitative bacterial culture	\$33.00
<u><i>Salmonella</i> culture</u> Fecal, env., feed, tissue sample, etc.	\$25.50
Herd screening (for >5 specimens)	\$17.50
NPPI culture procedure	\$26.50
†Environmental – in-state PEQAP	\$24.00
†FDA SE - in-state PEQAP	\$25.00
†FDA SE – in-state non-PEQAP	\$43.00
†FDA SE – out-of-state	\$60.50
ISO culture procedure	\$71.50
†RapidChek (Gp D1) SE test	\$20.00
RapidChek (Gp D1) SE test (out-of-state, non-regulatory)	\$34.00
†RapidChek SE confirmation culture	\$23.50
RapidChek SE confirmation culture (out-of-state, non-regulatory)	\$44.00
<i>Salmonella</i> serotyping	\$44.00
<i>Salmonella</i> serotyping (STAT) (billed through NBC)	\$66.00

<i>Salmonella</i> serogrouping	\$13.50
Special stains	\$10.00
<i>Tritrichomonas</i> culture	\$27.50
Water analysis for coliforms	\$28.50
<i>Yersinia spp.</i> culture	\$28.50

Field Investigation

Avian/Aquatic site visit	\$150.00
Mammalian site visit (plus diagnostic testing costs if required)	\$150.00

Molecular Diagnostics

<i>Actinobacillus pleuropneumoniae</i> PCR	\$35.00
African Swine Fever Virus (ASF) Call the lab RRT-PCR	
<i>Anaplasma marginale</i> PCR	\$35.00
<i>Anaplasma phagocytophilum</i> (Granulocytic Anaplasmosis & <i>Borrelia burgdorferi</i> (Lyme disease) Duplex PCR)	\$35.00
†Avian influenza PCR (and H5/H7 strain typing)	\$35.00
†Avian influenza PCR (State shows/exhibition/LBM)	\$15.00
Avian Metapneumovirus (aMPV) PCR	\$40.00
Avian paramyxovirus-1 (and vNDV) PCR	\$35.00
<i>Avibacterium paragallinarum</i> PCR	\$35.00
Bluetongue virus (BTV) PCR	\$35.00
<i>Bordetella avium</i> PCR	\$35.00
Bovine coronavirus (BCoV) PCR	\$35.00

Bovine herpesvirus (BHV1) or Infectious bovine rhinotracheitis (IBR) virus PCR	\$35.00
--	---------

Bovine Leukemia Virus (BLV) PCR	\$35.00
---------------------------------	---------

Bovine Parainfluenza – 3 PCR	\$35.00
------------------------------	---------

Bovine respiratory syncytial virus (BRSV) PCR	\$35.00
--	---------

Bovine viral diarrhea virus (BVDV) PCR (tissue/milk/serum)	\$35.00
---	---------

☆**Contact lab for details and scheduling**

☆BVDV (type 1 & 2) pooled PCR for serum or blood – cattle (max. pool size 30) or camelids (max. pool size 10)	\$60.00
--	---------

☆BVDV pooled PCR for serum (exports, only-applicable for ≥ 100 cattle; max. pool size 10)	\$30.00
---	---------

BVDV pooled ear notch PCR (max. pool size 20)	\$30.00
--	---------

<i>Campylobacter jejuni</i> PCR	\$35.00
---------------------------------	---------

Canine Distemper Virus (CDV) PCR	\$35.00
----------------------------------	---------

Canine Distemper Virus (CDV) typing	\$50.00
--	---------

<i>Chlamydophila</i> spp. PCR	\$35.00
-------------------------------	---------

<i>Chlamydophila psittaci</i> PCR	\$35.00
-----------------------------------	---------

Classical swine fever PCR	Call the Lab
---------------------------	--------------

<i>Clostridium perfringens</i> toxin typing PCR	\$35.00
--	---------

CWD Prion Protein (PRNP) Genotyping	\$35.00
--	---------

Duck Atadenovirus A (Egg Drop Syndrome 1976) real-time PCR	\$35.00
---	---------

Eastern equine encephalitis (EEE) PCR	\$35.00
--	---------

Epizootic hemorrhagic disease (EHD) PCR	\$35.00
--	---------

Equine Coronavirus (ECoV) PCR	\$35.00
-------------------------------	---------

Equine herpesvirus-1 (EHV-1) PCR (Abortigenic & neuropathogenic strain differentiation upon request)	\$35.00
--	---------

Foot and mouth disease PCR	Call the Lab
----------------------------	--------------

Infectious bronchitis virus PCR	\$50.00
---------------------------------	---------

Infectious bronchitis – PCR	\$65.00
--------------------------------	---------

Infectious Pancreatic Necrosis Virus Types 1-5 (IPNV) PCR	\$50.00
Influenza A PCR (avian,bovine, canine, equine, swine)	\$35.00

Influenza A H5/H7 PCR	\$35.00 each
-----------------------	--------------

Influenza D PCR	\$35.00
-----------------	---------

Koi carp herpesvirus PCR	\$35.00
--------------------------	---------

<i>Lawsonia intracellularis</i> PCR	\$35.00
-------------------------------------	---------

<i>Leptospira</i> spp. PCR	\$35.00
----------------------------	---------

<i>Listeria monocytogenes</i> PCR	\$50.00
-----------------------------------	---------

Malignant Catarrhal Fever (MCF)/Ovine Herpesvirus 2 PCR	\$35.00
--	---------

Microbial Sequencing for Bacterial (16S) or fungal (28S) ID	\$50.00
Microbial sequencing viral ID	\$80.00

†**Johne's program testing**

(for information call: 717-787-4172)

<i>Mycobacterium paratuberculosis</i> (Johne's) individual PCR	\$27.50
---	---------

<i>Mycobacterium paratuberculosis</i> (Johne's) pooled PCR (max. pool size 5)	\$35.00
--	---------

<i>Mycoplasma bovis</i> PCR	\$35.00
-----------------------------	---------

<i>Mycoplasma gallisepticum</i> (MG)	\$20.00
<i>Mycoplasma synoviae</i> (MS)	\$20.00
MG/MS duplex [NPIP] PCR	\$40.00
<i>Mycoplasma hyopneumoniae</i> PCR	\$35.00
<i>Mycoplasma spp.</i> PCR	\$35.00
<i>Neospora caninum</i> PCR	\$35.00
<i>Ornithobacterium rhinotracheale</i> (ORT) PCR	\$35.00
Porcine circovirus type 2 (PCV-2) PCR	\$35.00
Porcine parvovirus (PPV) PCR	\$35.00
Porcine epidemic diarrhea virus (PEDV) – Swine delta corona-Virus (SDCoV) – Transmissible Gastroenteritis virus (TGEV) Multiplex PCR Panel	\$35.00
Porcine respiratory coronavirus (PRCV) and PCR	\$35.00
Potomac horse fever (<i>Neorickettsia risticii</i>) PCR	\$35.00
PRRSV Eurasian/North America strain PCR	\$35.00
† <i>Salmonella</i> Enteritidis (SE) PCR [FDA only]	\$30.00
<i>Salmonella</i> Group D PCR	\$20.00
† SE PCR (PEQAP & FDA or NPIP) egg or environmental	\$25.50
<i>Salmonella spp.</i> PCR	\$35.00
SARS-CoV-2 real-time PCR	\$50.00
† Scrapie Prion Protein (PRNP) Genotyping	\$35.00
Seneca Valley virus (SVA) PCR	\$35.00

<i>Streptococcus equi</i> subspecies <i>equi</i> PCR	\$37.00
<i>Streptococcus zooepidemicus</i> PCR (SeM virulent gene)	\$35.00
Swine influenza PCR (including novel H1N1)	\$40.00
Transmissible gastroenteritis virus (TGEV) PCR	\$35.00
<i>Tritrichomonas foetus</i> PCR	\$35.00
West Nile virus (WNV) PCR	\$35.00

Parasitology (fecal)

Cryptosporidium ELISA	\$15.00
Cryptosporidium and Giardia FA	\$22.00
Cryptosporidium acid fast testing	\$9.00
Centrifugation/fecal flotation, quantitative	\$25.00
Fecal parasite direct smear	\$13.00
Modified double fecal centrifugation	\$15.00
Modified McMaster's fecal flotation	\$15.00
Preserved Parasite identification	\$35.00

Pathology

Histopathology

Field autopsy (histopathology only)	\$100.00
Surgical Biopsy	\$70.00
Surgical Biopsy – eye	\$80.00
#† CWD IHC	\$25.00
Endometrial biopsy with epicrisis	\$50.00

H & E slide preparation, only	\$10.00
Immunohistochemistry per slide	\$40.00
Special stains	\$10.00

Accession fee waived for veterinarian/CCT submitted cervines, only (please see Hunter harvest submission form)

Field autopsy/necropsy or head, tier 2	\$200.00
Out-of-state	\$400.00
Field autopsy/necropsy or head, Dog/Cat/Small companion animal	\$143.00
Out-of-state	\$286.00

*** Mammalian autopsy fees include accession and carcass disposal fees. Please contact NBC for additional fees related to carcass disposal.

Autopsy/Necropsy – mammals ***

Aborted fetus, per dam (serology not included)	\$200.00
Out-of-state	\$400.00
Animals <250 lbs., tier 1	\$120.00
Out-of-state	\$240.00
Animals <250 lbs., tier 2	\$220.00
Out-of-state	\$440.00
Animals >250 lbs., non-equine, tier 1	\$180.00
Out-of-state	\$360.00
Animals >250 lbs., non-equine, tier 2	\$280.00
Out-of-state	\$560.00
Equine >250 lbs., tier 1	\$325.00
Out-of-state	\$650.00
Equine >250 lbs., tier 2	\$425.00
Out-of-state	\$850.00
Dog/Cat/Small companion animal	\$425.00
Out-of-state	\$850.00
Dog/Cat/Small companion animal, non-profit organization	\$150.00
Out-of-state	\$300.00
Dog/Cat/Small companion animal, non-profit, legal case	\$200.00
Out-of-state	\$400.00
Field autopsy/necropsy or head, tier 1	\$100.00
Out-of-state	\$200.00

Additional Pathology Fees

Autopsy surcharge <250 lbs NBC only	\$25.00
Autopsy surcharge, 250-500 lbs., NBC only	\$75.00
Autopsy surcharge, >500 lbs., NBC only	\$150.00
Demineralization	\$30.00
Diarrhea panel	
2 weeks and younger	\$125.00
Over 2 weeks old	\$140.00
Dog/Cat/Small companion animal Carcass disposal>100 lbs.	\$25.00
Field autopsy/necropsy mailers (partials available)	\$16.00
Orthopedic exam (per site)	\$150.00
Spinal cord exam level 1	\$150.00
Spinal cord exam level 2	\$250.00
TSE (CWD & Scrapie) sample extraction/head	\$16.00
TSE (CWD & Scrapie) head disposal	\$21.00
TSE (CWD & Scrapie) carcass disposal	\$42.00

Autopsy/Necropsy – Avian

Backyard flocks	\$30.00
Commercial poultry, pet birds	\$70.00
Wild birds	

SE Reactors (cultures/PCR additional)\$70.00

Hatchery residue break-out analysis \$120.00

Avian carcass disposal with autopsy, \$10.00
necropsy <25 lbs.

Avian carcass disposal with autopsy, \$21.00
necropsy >25 lbs.

Carcass Disposal (no testing requested)
<250 lbs. \$25.00

>250 lbs. \$75.00

>500 lbs. \$150.00

★ Please contact NBC and ADL for fees related to carcass disposal.

Serology – Avian

† All avian AGID, except avian Influenza \$3.00

† Avian influenza – AGID program serum \$1.55

† Avian influenza – AGID eggs \$2.50

† Avian influenza – AGID (program) \$0.55

Avian influenza – AGID (out-of-state) \$2.00

All avian serological ELISA \$2.00

† All avian HI (except as noted) \$3.00

Infectious bursal disease – AGID \$3.00

† Mycoplasma – plate \$1.00

Mycoplasma – plate (out-of-state) \$1.30

Mycoplasma gallisepticum (MG) ELISA \$1.50

Mycoplasma synoviae (MS) ELISA \$1.50

† Mycoplasma (MG/MS) Combo Elisa \$2.00

† *Salmonella pullorum* – plate/tube \$0.50

Salmonella pullorum – plate/tube \$1.00
(out-of-state)

Serology – Mammalian

Anaplasmosis - cELISA \$6.00

Bluetongue- AGID \$4.50

Bluetongue – cELISA \$6.00

Bovine leukosis virus (BLV) - ELISA \$6.00

Bovine parainfluenza-3 – HI \$6.00

† Bovine pregnancy - ELISA \$3.50

Bovine prepurchase panel (ea.) \$20.00

Bovine reproductive panel (ea.) \$40.00
(includes acute + convalescent)

Bovine respiratory panel (ea.) \$40.00
(includes acute + convalescent)

Bovine respiratory syncytial virus (BRSV) – SN \$11.00

Bovine viral diarrhea (BVD) – SN \$11.00

Brucellosis

Brucella acidified plate (BAPA) \$2.00

Brucella canis Indirect Immunofluorescent Antibody test (IFA) \$17.50

Brucella canis Tube Agglutination \$17.00

Card agglutination \$2.00

Complement fixation \$10.00

Export, any test except CF \$2.00

Fluorescent polarization assay (FPA) \$2.50

Standard plate test (SPT) \$2.00

Standard tube test (STT) \$2.00

(Brucellosis) Ovine - ELISA	\$6.00
Positive cases sendout	referral fee
Eastern equine encephalitis virus (EEE) IgM antigen-capture ELISA	\$20.00
†Equine infectious anemia – AGID (Coggins)	\$7.50
Coggins/EIA Reissue >30 days	\$10.00
†Equine infectious anemia – cELISA	\$20.00
Equine rhinopneumonitis (EHV 1, 4) - SN	\$11.00
<i>Histophilus somni</i> - AGGL	referral fee
Infectious bovine rhinotracheitis (IBR) – kinetic-ELISA	referral fee
Infectious bovine rhinotracheitis (IBR) – SN	\$11.00
†Johne's disease (serum) – ELISA [program]	\$4.00
Johne's disease (serum) – ELISA [non-program]	\$5.00
†Johne's disease (milk) – ELISA [program]	\$5.00
Johne's disease (milk) – ELISA [non-program]	\$5.50
Leptospirosis (5 serovars) – MAT <i>canicola, grippotyphosa, hardjoprajitno, icterohaemorrhagiae, and pomona</i>	\$14.00
Leptospirosis (6 serovars) – MAT <i>canicola, grippotyphosa, hardjoprajitno, icterohaemorrhagiae, pomona, plus bratislava or autumnalis</i>	\$16.50
Leptospirosis (7 serovars) – MAT <i>canicola, grippotyphosa, hardjoprajitno, icterohaemorrhagiae, pomona, bratislava & autumnalis</i>	\$20.00
Neospora caninum – ELISA	\$7.00

Equine Piroplasmosis (Babesia caballi)	\$18.00
Equine Piroplasmosis (Theileria [Babesia] equi)	\$18.00
Equine Piroplasmosis (Babesia caballi & Theileria [Babesia] equi)	\$34.00
Porcine parvovirus – HI	\$10.00
Porcine reproductive & respiratory syndrome (PRRS) – ELISA	\$5.50
Pseudorabies (PRV) ELISA (PRV gpl differential)	\$4.50
Pseudorabies (PRV) ELISA (PRV gB non-differential)	\$4.50
Q fever (<i>Coxiella burnetii</i>) – ELISA	\$12.00
Salmonella Dublin – ELISA	\$12.50
Small ruminant lentivirus (SRLV) - cELISA [CAE, OPP]	\$6.00
Small ruminant pre-purchase panel Johne's, CLA, CAE, OPPV cELISA	\$20.00
Small ruminant reproductive panel	\$45.00
Swine influenza – HI (Includes HI and H3)	\$6.00
Toxoplasmosis – HA	referral fee
West Nile virus – IgM antigen-capture ELISA	\$16.00

Toxicology

Algal toxins (anatoxin, microcystins, and nodularin)	\$158.00
Anion, single – various sample types	\$40.00
Anticoagulant rodenticides (coumafuryl, pindone, warfarin, coumachlor, diphacinone, dicourmarol, chlorophacinone, bromadiolone)	\$82.00

Chloride	\$40.00	Ocular fluid (Ca, Cl, Mg, Na, K, P)	\$47.00
Chlorinated hydrocarbon (insecticide screen)	\$112.00	Lead	\$27.00
Convulsants (Penitrem, roquefortine, and strychnine)	\$82.00	Mercury	\$33.00
Cyanide (prussic acid)	\$38.00	Selenium (blood, serum, tissue)	\$30.00
Drug analysis, single drug (call lab for availability)	\$158.00	Selenium (feed)	\$39.00
Drug screen, prepurchase	\$202.00	Single element – not Se or Hg (fluid, tissue, feed)	\$27.00
Electrolytes panel (Mg, Ca, Cl, P, K, Na)	\$42.00	Single element, non-routine	\$61.00
Ethylene glycol (antifreeze)	\$65.00	Mycotoxin (aflatoxins, DON/vomitoxin, fumonisins, ochratoxin, T-2 toxin, and zearalenone)	\$112.00
Fat content	\$23.00	Mycotoxin, single	\$54.00
Ionophore (monensin, lasalocid, narasin, salinomycin, and maduramicin))	\$112.00	Nitrates/nitrites	\$40.00
LC/MS screen	\$82.00	Nonsteroidal anti-inflammatory (acetaminophen, carprofen, flunixin, flurbiprofen, furosemide, ibuprofen, ketoprofen, mefenamic acid, meloxicam, naproxen, oxyphenbutazone, phenylbutazone, salicylic acid, tolmetin, and diclofenac)	\$82.00
LC/MS confirmation of GC/MS or LC/MS screens	\$82.00	Organic chemical screen	\$82.00
Macrolides (ivermectin, moxidectin, doramectin, selamectin, eprinomectin, spinosad, and milbemycin)	\$112.00	Organochlorine insecticide and PCB screen	\$112.00
Melamine/cyanuric acid	\$158.00	PCBs (total)	\$112.00
<u>Mineral panels</u>		Plant identification	\$29.00
Heavy metals (As, Cd, Pb, Se, Tl)	\$40.00	Prussic acid (cyanide)	\$38.00
Serum minerals w/selenium	\$47.00	Tranquilizer screen (call for list of drugs included)	\$82.00
Nutritional tissue or biopsy metals panel (Ca, Co, Cu, Fe, Mg, Mn, Mo, Se, Zn)	\$47.00	Vitamin E (serum)	\$31.00
Complete (tissue, feed, biological fluid – [Se, but no Hg])	\$58.00	Vitamin E (tissue)	\$37.00

Virology, Avian

(see Molecular Diagnostics also)

microscopy negative staining
(per specimen)

AGID test for detection of avian virus antigens	\$5.00
Avian influenza (AIV) and/or Avian paramyxovirus 1 (APMV-1) – VI	\$35.00
Avian influenza – dot ELISA (AIV, only)	\$7.50
† Avian influenza - VI for show/ Exhibition/LBM 5 swabs/pool [in-state]	\$15.00
Chlamydia isolation	\$40.00
FA test for detection of avian virus antigens	\$15.00
Infectious bronchitis virus - monoclonal antibody-based dot ELISA	\$7.50
Infectious bronchitis virus – monoclonal antibody-based IFA for Mass., Conn., & Ark.	\$88.00
Influenza A – antigen-capture immunoassay	\$18.00
Virus isolation (all others)	\$45.00

Influenza A – antigen-capture immunoassay	\$18.00
---	---------

Virus isolation	\$40.00
-----------------	---------

Call the PA Beef Council @ (888) 423-3372 for information on BVD, BQA & DBQA programs

Virology, Mammalian

All mammalian virology – FA	\$10.00
Bovine rotavirus – LFIA	\$8.00
BVD ear notch immunohistochemistry	\$5.50
BVD ear notch - ELISA	\$5.50
BVD microplate assay pi (persistent infection)	\$10.00
BVD virus ELISA (serum)	\$6.00
Bovine coronavirus – ELISA	\$20.00
Direct transmission electron	\$90.00