



Canadian Food
Inspection Agency

Agence canadienne
d'inspection des aliments



GF-TADs
GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES



Food and Agriculture
Organization of the
United Nations



World Organisation
for Animal Health
Founded as OIE

Regulation in the Shipping of Samples for ASF Diagnostics

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5th Meeting of the Standing Group of Experts on ASF for the Americas
August 23, 2022

Canada

Canadian Food Inspection Agency (CFIA)'s 13 Reference & Research Laboratories Across Canada



- 1. Sidney, BC
- 2. Burnaby, BC
- 3. Lethbridge, AB
- 4. Calgary, AB
- 5. Saskatoon, SK
- 6. Winnipeg, MB
- 7. Greater Toronto Region, ON
- 8. Ottawa (Fallowfield), ON
- 9. Ottawa (Carling), ON
- 10. Longueuil, QC
- 11. St. Hyacinthe, QC
- 12. Charlottetown, PEI
- 13. Dartmouth, NS



NCFAD

National Centre for Foreign Animal Disease (NCFAD)



- The Canadian National Reference Laboratory for FADs
- High containment BSL3 & BSL4 Laboratory with large animal facilities
- ISO/IEC 17025:2017 accredited for diagnostics and research
- WOAHO/OIE Reference Laboratories for CSF, ASF, High Path. Avian Influenza & FMD
- FAO Reference Centers for FMD & Zoonotic & Emerging Pathogens

- Functions:
 - Diagnostic Services: CFIA's National Animal Health Program
 - Technology Development and Research
 - Training
 - Scientific Advice & International Consultation



National Centre for Foreign Animal Disease (NCFAD)

1. Avian Diseases Unit (ADV)
2. Mammalian Diseases Unit (MDU)
3. Vesicular Diseases Unit (VDU)
4. Special Pathogen Unit (SPU)
5. CL2 Serology Unit
6. Genomics Unit (GU)
7. Reagent Development Unit (RDU)
8. Animal Care Unit (ACU)
9. Quality Assurance Unit (QAU)
10. The Canadian Animal Health Surveillance Network (CAHSN)

Diagnosics and Research

- ❖ Avian Influenza
- ❖ Newcastle Disease
- ❖ Egg Drop Syndrome
- ❖ Turkey Rhinotracheitis
- ❖ **Swine Influenza**
- ❖ **Foot & Mouth Disease**
- ❖ Vesicular Stomatitis
- ❖ **Swine Vesicular Disease**
- ❖ **Seneca Valley disease**

- ❖ West Nile
- ❖ Rift Valley Fever
- ❖ **Ebola Reston**
- ❖ Eastern Equine Encephalitis
- ❖ Western Equine Encephalitis,

- ❖ Bluetongue
- ❖ Epizootic Hemorrhagic Disease
- ❖ Schmallenberg
- ❖ **Classical Swine Fever & other pestiviral diseases**
- ❖ **African Swine Fever**
- ❖ Pseudorabies
- ❖ Porcine Epidemic Diarrhea
- ❖ Rabbit Hemorrhagic Disease
- ❖ Cache Valley
- ❖ Sheep & Goat pox
- ❖ Lumpy Skin Disease

NCFAD Roles and Responsibilities for ASF

❖ Diagnostic services

- Confirmatory testing
Agent: PCR, Sanger and Next Generation Sequencing, Isolation, Pathotyping
Antibodies: ELISA, IPT, IB
- Surveillance - CanSpotASF
- Disease investigations

❖ Technology development and research

- Diagnostic assay development and validation
- Alternative sample identification and validation
- Disease models and pathogenesis
- Vaccine evaluations

❖ Training

- CAHSN
- OIE twinning projects
- International assistance
- Annual FAD course

❖ Scientific advice and international consultation

NCFAD - Ongoing Activities Related to CSF & ASF

CSF OIE Reference Lab

- Diagnostic Support & Training (IICA)
- CSF Proficiency Panels
- Ongoing OIE Twinning Project with LARRSA, Guatemala

ASF OIE Reference Lab - 2022

- Harmonization of ASF Diagnostics: US-Canada-Mexico
- Training at the NCFAD: Mexico, Haiti and Guatemala (IICA)
- ASF Proficiency Panels
- Twinning Projects ?

ASF Differentials

- ASF can't be differentiated by clinical or PM examinations
- ASF not always manifest with obvious clinical signs, especially during early stages or when small numbers are affected
 1. Classical swine fever
 2. Porcine circovirus associated diseases
 - Post-weaning multi-systemic wasting syndrome
 - Porcine dermatopathy nephropathy syndrome
 3. Virulent PRRS
 4. Pseudorabies
 5. Bacterial septicemia
 6. Swine erysipelas
 7. Poisoning

Approved Sample Types for ASF Diagnosis

- Animals showing clinical signs
 - Whole blood (EDTA) & Serum -10 ml each

- Tissues (dead or euthanized pigs - full set of tissues)
 - Tonsils
 - Spleen
 - Lymph nodes
 - Liver
 - Heart
 - Kidney
 - Lung
 - Brain/spinal cord
 - Body cavity fluids - collected in a red top tube
 - Bone marrow - if carcass is decomposed



NCFAD Blanket Import Permit – Clinical specimens and Isolates



Canadian Food Inspection Agency
Government of Canada

Agence canadienne d'inspection des aliments
Gouvernement du Canada

Permit No./N° de permis:

A-2022-02647-4
ORIGINAL
2022/04/08
year/mo/day
année/mois/jour

All countries

IMPORT PERMIT

PERMIS D'IMPORTATION

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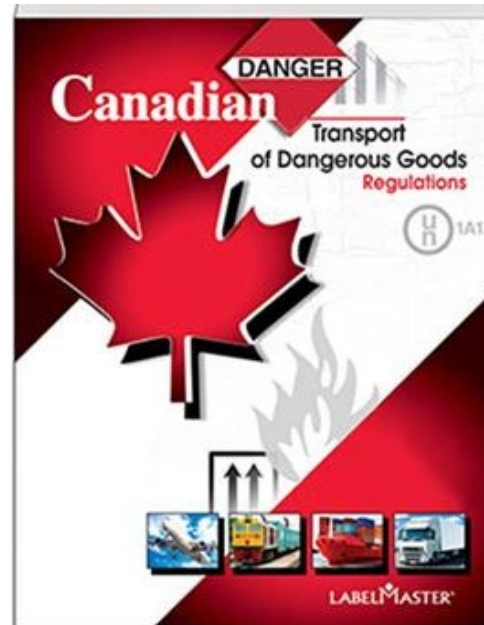
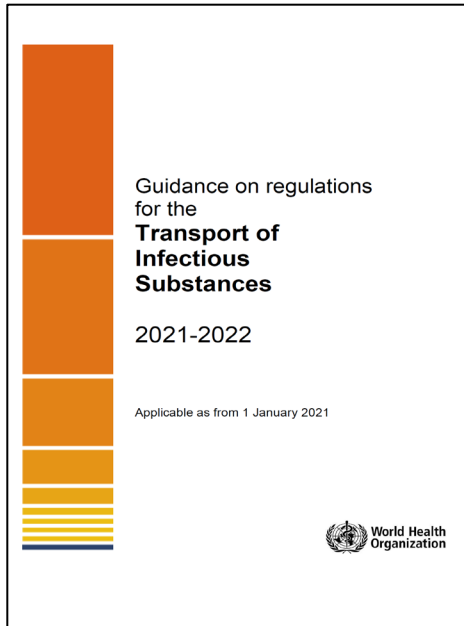
THIS PERMIT IS ISSUED PURSUANT TO:/CE PERMIS EST DÉLIVRÉ CONFORMÉMENT A:

THE HEALTH OF ANIMALS ACT AND REGULATIONS/LOI ET RÈGLEMENT SUR LA SANTÉ DES ANIMAUX			
Importer/Importateur CANADIAN FOOD INSPECTION AGENCY (CFIA) - NATIONAL CENTRE FOR FOREIGN ANIMAL DISEASE (NCFAD) 1015 ARLINGTON STREET WINNIPEG, MANITOBA R3E3M4 Contact: MICHELE ROY Applicant Name: DR KATHLEEN HOOPER-MCGREVVY Phone: 204-789-2057 Email: MICHELE.ROY@INSPECTION.GC.CA		Exporter/Exportateur VARIOUS SUPPLIERS WITHIN VARIOUS COUNTRIES	
Quarantine/Destination/Quarantaine CFIA-NCFAD 1015 ARLINGTON ROOMS CL2, CL3 (ROOM A2050-ID#14) WINNIPEG, MANITOBA R3E3M4		Producer/Producteur	
Valid/Valide	from/du	2022/05/31 year/month/day année/mois/jour	to/au 2023/05/31 year/month/day année/mois/jour
		Country of Origin/ Pays d'Origine ALL COUNTRIES	
For the entry of/ Pour l'entrée de: <input type="checkbox"/> Single shipment/Chargement simple <input checked="" type="checkbox"/> Multiple shipments/Chargements multiples			
Place of entry into Canada/Lieu d'entrée au Canada: ALL REGULATED PORTS			
FOR THE IMPORTATION OF:/POUR L'IMPORTATION DE: (Description of things(s)/Description de la ou des choses) 1. Product Description: SERUM, TISSUES, SWABS AND CELL CULTURE SUPERNATANT SAMPLES CONTAINING THE FOLLOWING ANIMAL PATHOGENS: - FOOT-AND-MOUTH DISEASE VIRUS (FMDV), SWINE VESICULAR DISEASE VIRUS (SVDV) AND VESICULAR STOMATITIS VIRUS (VSV) SAMPLES COLLECTED FROM CATTLE, PIGS AND/OR SMALL RUMINANT SPECIES - BLUETONGUE VIRUS (BTV) AND EPIZOOTIC HEMORRHAGIC DISEASE VIRUS (EHDV) SAMPLES COLLECTED FROM RUMINANT SPECIES - AFRICAN SWINE FEVER VIRUS (ASFV) AND CLASSICAL SWINE FEVER VIRUS (CSFV) SAMPLES COLLECTED FROM PIGS			

Shipping ASF/suspected samples to NCFAD

Under the regulations of

- WHO Guidance on regulations for the transport of infectious substances 2021-2022
- The Canadian Transportation of Dangerous Good Act and regulations (TDGR)
- The International Air Transport Association (IATA) for AIR Transport



<https://www.who.int/publications/i/item/9789240019720>

Only the trained/certified personnel can handle or offer for transport of dangerous goods – Penalties and Imprisonment

Shipping ASF Positive/Suspected Samples to NCFAD

Air shipments of ASFV cultures

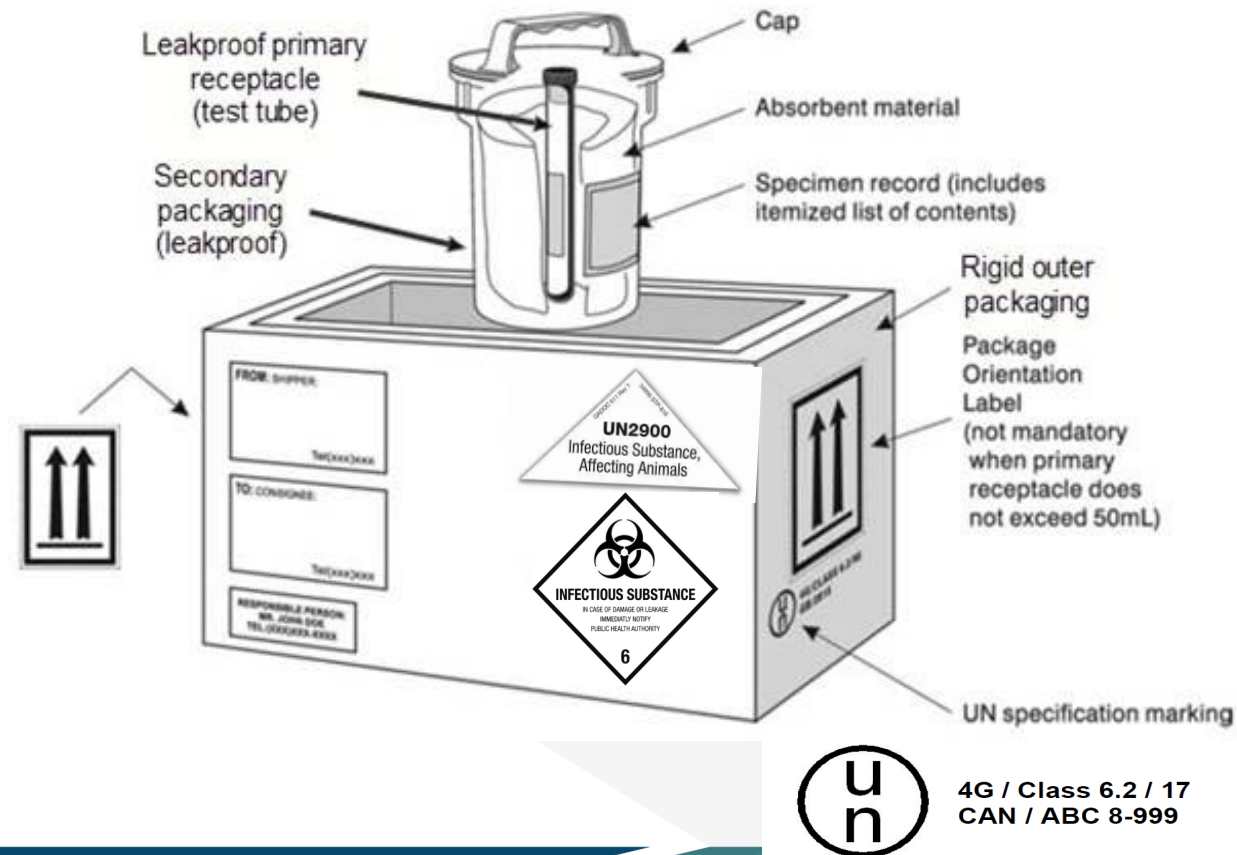
Category A: UN2900: Infectious Substance, Affecting Animals only

Passenger Plane: Limited to 50ml (50g)

Cargo Planes: Limit to 4L or 4Kg

Packaging : **Type P620 - A high integrity package.** Must pass tests for internal pressure, drop resistance, impact resistance and quality assurance. The manufacture and testing of Type P620 packaging must be done by facilities registered with Transport Canada.

- 1. Rigid Outer Packaging:** UN specification marking, Class 6.2 infectious substance label - "infectious substance affecting Animals " and the UN number. Labels for the consignor (i.e. shipper) and consignee includes their telephone number. Two arrows pointing up - when the primary receptacle > 50 ml
- 2. Leak proof secondary receptacle** – A tube is surrounded by absorbent material.
- 3. Leak proof primary receptacle** - Cylindrical in shape, has a screw-on cap. Is affixed with a label that includes an itemized list of its contents.



Air or Ground Shipment of Clinical Samples

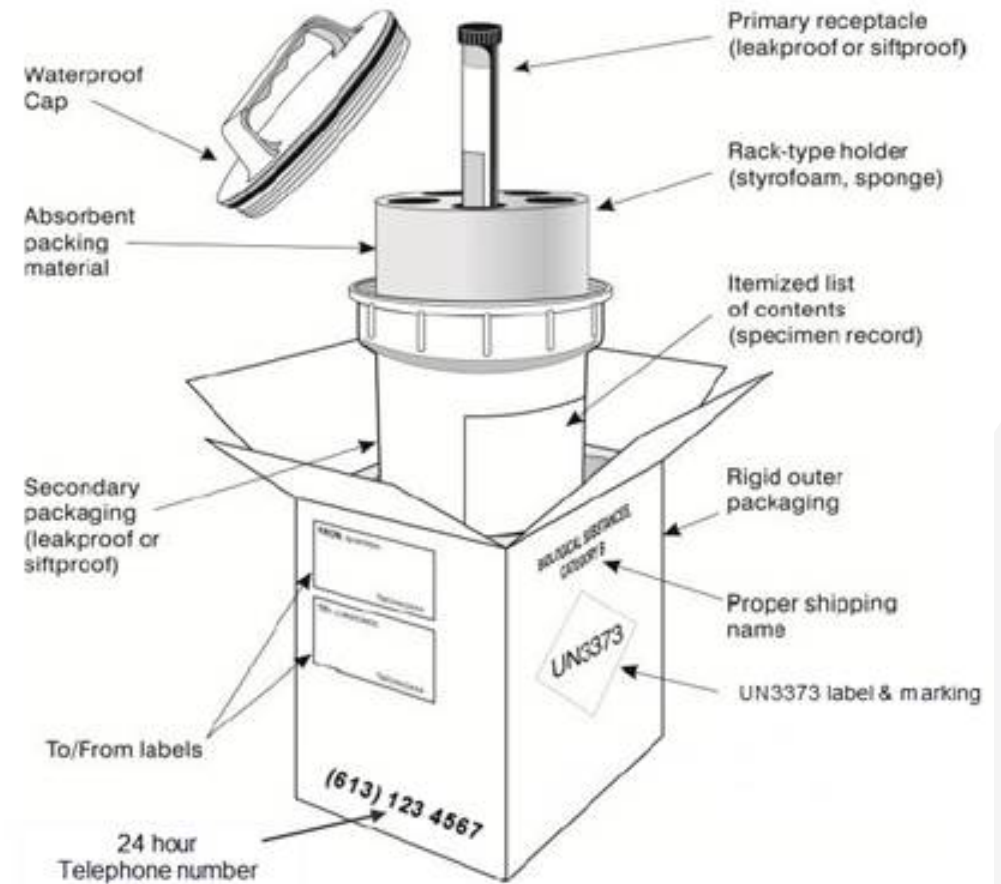
Category B: UN3373 - Biological Substance

Packaging: **Type P620 or Type P650** - For routine uses

The outer packaging is a box that is labelled with the Category B mark, "UN3373" written inside. Shipping name "Biological Substances Category B". 24 hour telephone number. Labels for the consignor (i.e. shipper) and consignee.

Secondary packaging - which is leakproof or siftproof. Cylindrical in shape and has a screw-on cap. The secondary packaging is affixed with a label that includes an itemized list of its contents.

Inside the secondary receptacle is a rack-type holder made from styrofoam or sponge holding **the primary receptacles**, which are test tubes and surrounded by cushioning and absorbent material



Documents

- Waybill - three copies (shipper, carrier and receiver)
- A paper copy must always accompany the shipment
- An itemized list of all contents – between the secondary and outer container
- Import permit
- Export permit
- Custom declarations – Custom invoice



Planning to Ship Sample to Canada

- Export Permit requirement
- Identify the courier
- Contact NCFAD – aruna.ambagala@inspection.gc.ca

- Cover the shipping cost
- No charges for diagnostics



Questions???

aruna.ambagala@inspection.gc.ca