

Training Supplemental Guide 2011



Proper Shipment of Patient Specimens and Infectious Substances



KECK GRADUATE INSTITUTE
of Applied Life Sciences

**Keck Graduate Institute
Chemical and Biological Laboratory Safety
For questions, call 607-8698**

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SHIPPING CLASSIFICATION DEFINITIONS

Patient Specimens:

Specimens collected from humans or animals including, but not limited to, excreta, secretions, blood and its components, tissue and tissue fluid swabs, and body parts being transported for purposes such as research, diagnosis, investigational activities, disease treatment or prevention.

Note: If specimen has a high likelihood that it contains a human or animal pathogen, then it should be shipped as an Infectious Substance. An element of professional judgment is required when making such a decision. That judgment should be based on the known medical history, symptoms and individual circumstances of the source, and endemic local conditions.

Infectious Substances:

Substances which are known or reasonably expected to contain pathogens. Pathogens are defined as micro-organisms (including bacteria, viruses, rickettsiae, parasites, fungi) and other agents such as prions, which can cause disease in humans or animals

- A. **Category A Infectious Substances:** An infectious substance which is transported in a form that, when exposure to it occurs, is capable of causing permanent disability, life-threatening or fatal disease in otherwise healthy humans or animals. See page 4 for a list of example agents.
- B. **Category B Infectious Substances:** An infectious substance which does not meet the criteria for inclusion in Category A

Genetically Modified Microorganisms (GMMO) and Organisms (GMO):

Microorganisms and organisms in which genetic material has been purposely altered through genetic engineering in a way that does not occur naturally

Example List of Category A: Infectious Substances

UN # and Proper Shipping Name	Micro-organism
UN 2814, Infectious Substances Affecting Humans	<p> <i>Bacillus anthracis</i> cultures <i>Brucella abortus</i> cultures <i>Brucella melitensis</i> cultures <i>Brucella suis</i> cultures <i>Burkholderia mallei</i> & <i>Pseudomonas mallei</i> cultures <i>Burkholderia pseudomallei</i> cultures <i>Pseudomonas pseudomallei</i> cultures <i>Chlamydia psittaci</i> – avian strains cultures <i>Clostridium botulinum</i> culture- <i>Coccidioides immitis</i> cultures <i>Coxiella burnetii</i> cultures Crimean- Congo hemorrhagic fever virus Dengue virus cultures Eastern equine encephalitis virus cultures <i>Escherichia coli</i>, verotoxigenic cultures Ebola virus cultures Flexal virus <i>Francisella tularensis</i> cultures Guanarito virus Hantaan virus Hantavirus causing hemorrhagic fever with renal syndrome Hendra virus Hepatitis B virus cultures Herpes B virus cultures Human immunodeficiency virus cultures Highly pathogenic avian influenza virus cultures </p> <p> Japanese Encephalitis virus cultures Junin virus Kyasanur Forest disease virus Lassa virus Machupo virus Marburg virus Monkeypox virus Mycobacterium tuberculosis cultures Nipah virus Omsk hemorrhagic fever virus Poliovirus cultures Rabies virus cultures Rickettsia prowazekii cultures Rickettsia rickettsia cultures Rift Valley fever virus cultures Russian spring-summer encephalitis virus Sabia virus Shigella dysenteriae type 1 cultures Variola virus Venezuelan equine encephalitis virus cultures West Nile virus cultures Yellow fever virus cultures Yersinia pestis cultures </p>
UN 2814, Infectious Substances Affecting Humans	<p> African swine fever virus cultures Avian paramyxovirus Type 1 – Velogenic Newcastle disease virus cultures Classical swine fever virus cultures Foot and mouth disease virus cultures Lumpy skin disease virus cultures <i>Mycoplasma mycoides</i> – Contagious bovine pleuropneumonia cultures Peste des petits ruminants virus cultures Rinderpest virus cultures Sheep pox virus cultures Goatpox virus cultures Swine vesicular disease virus culture Vesicular stomatitis virus cultures </p>

Shipping Information Summary

Shipment Type	Shipping Name	Proper UN Number	Hazard Class	Packing Group (PG)	Packing Instruction (PI)	Hazard Label(s)	Max. Net qty./pkg. for Passenger Aircraft	Max. Net qty./pkg. for Cargo Aircraft	Special Provisions (**)
Category A infectious substance, affecting humans	Infectious substance, affecting humans, (*)	UN 2814	6.2	-	602	Infectious substance	50mL / 50g	4L / 4kg	A81, A140
Category A infectious substance, affecting only animals	Infectious substance, affecting animals, (*)	UN 2900	6.2	-	602	Infectious substance	50mL / 50g	4L / 4kg	A81, A140
Category B infectious substance	Biological substance, category B	UN 3373	6.2	-	650	UN 3373	4L / 4kg	4L / 4kg	-
Category B infectious substance	Biological substance, category B	UN 3373	6.2	-	650	UN 3373	4L / 4kg	4L / 4kg	-
Genetically modified micro-organisms & organisms (non-infectious)	Genetically modified micro-organisms	UN 3245	9	-	913	Miscellaneous	No Limit	No Limit	A47
Patient Specimens (minimal likelihood that pathogens are present)	N/A	N/A	N/A	N/A	See Checklist on Pg.6	N/A	N/A	N/A	N/A

*** Identify technical name of agent in parenthesis**

**** Special Provisions:**

A81 – The maximum quantity of infectious substance that can be shipped by air in one package is 4L or 4kg. The maximum quantity that may be shipped via passenger aircraft is 50mL or 50g. The Special Provision A81 allows the shipment of body parts, organs or whole bodies to not be restricted based on quantity limits, however the shipment must still comply with Packing Instruction 602. Specimens transported in accordance with this Special Provision must be noted on the Shipper’s Declaration of Dangerous Goods in the “Authorization” column of the Declaration form.

A48 – Packaging tests are not considered necessary.

A47 – Genetically modified micro-organisms and genetically modified organisms, which meet the definition of an infectious substance and the criteria for inclusion in Division 6.2 (Category A or Category B Infectious Substances), must be transported as UN 2814, UN 2900 or UN 3373, as appropriate.

A140 – For the purposes of documentation, the proper shipping name must be supplemented with the technical name. Technical names need not be shown on the package. When the Infectious Substances to be transported are unknown, but suspected of meeting the criteria of Category A, and assigned to UN 2814 or UN 2900, the words “Suspected Category A Infectious Substance” must be shown in parenthesis following the proper shipping name on the Shipper’s Declaration of Dangerous Goods, but not on outer package.

Checklist for Shipping *Patient Specimens*

(for which there is minimal likelihood that pathogens are present)

Specimen Packaging

- ☐ Specimen in leakproof primary container
- ☐ Absorbent material is sufficient to absorb entire contents of primary container(s)
- ☐ Primary containers are wrapped individually
- ☐ Leakproof secondary container

Labeling Outer Container

- ☐ Statement: “Exempt human specimen” or “Exempt animal specimen”
- ☐ Miscellaneous Class 9 label(2) if shipment contains dry ice, "UN 1845" and amount used in kg

Completing the Airbill

- ☐ Name and address of shipper and recipient
- ☐ Check “Saturday Delivery” box if applicable
- ☐ In Section 6 (Special Handling) of the airbill, indicate that the shipment is NOT a dangerous good
- ☐ Check the “Dry Ice” box if applicable and indicate “UN 1845” and the quantity of dry ice in kg
- ☐ Shipper’s signature (optional)

Note: *In determining whether a patient specimen has a minimal likelihood that pathogens are present, an element of professional judgment is required. That judgment should be based on the known medical history, symptoms and individual circumstances of the source and endemic local conditions.*

Checklist for Shipping *Category A Infectious Substances*

Specimen Packaging

- ☐ Specimen in leakproof primary container
- ☐ Absorbent material is sufficient to absorb entire contents of primary container(s)
- ☐ Primary containers are wrapped individually
- ☐ Leakproof secondary container
- ☐ Itemized list of contents placed between secondary and outer container

Labeling Outer Container

- ☐ Infectious Substance, Class 6 label
- ☐ “Infectious Substance Affecting Humans”, “UN 2814” or “Infectious Substance
- ☐ Affecting Animals, “UN 2900” and net quantity of infectious substance
Miscellaneous Class 9 label if shipment contains dry ice, “UN 1845” and amount used in kg
- ☐ Name and telephone number of the responsible party, knowledgeable of the package contents and available 24 hours a day
- ☐ If shipment includes >50mL or 50g of a Category A infectious substance, then add a “Danger, do not load in passenger aircraft” label to the outer container

Dangerous Goods Declaration Form

- ☐ Name, address and phone number of shipper and recipient
- ☐ Mark out non-applicable “Aircraft Box”
- ☐ Mark out non-applicable “Radioactive” box
- ☐ 24-hour emergency response telephone number for the responsible party, knowledgeable of the package contents
- ☐ Name and title of signatory, place, and date
- ☐ Shipper’s signature

“Nature and Quantity of Dangerous Goods” section of the Declaration Form”

- ☐ Complete this section using the information provided on Pages 5, 9 & 10 of this Guide

Checklist for Shipping *Category B Infectious Substances*

Specimen Packaging

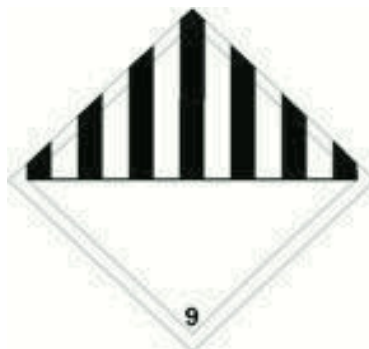
- ☐ Specimen in leakproof primary container
- ☐ Absorbent material is sufficient to absorb entire contents of primary container(s)
- ☐ Primary containers are wrapped individually
- ☐ Leakproof secondary container
- ☐ Itemized list of contents placed between secondary and outer container

Labeling Outer Container

- ☐ UN 3373 label(1)
- ☐ Statement: “Biological Substance, Category B” adjacent to UN 3373 (2) label
- ☐ Miscellaneous Class 9 label(1) if shipment contains dry ice, "UN 1845"(1) and amount used in kg

Completing the Airbill

- ☐ Name and address of shipper and recipient
- ☐ Check “Saturday Delivery” box if applicable
- ☐ In Section 6 (Special Handling) of the airbill, indicate that the shipment is a
- ☐ dangerous good, which does NOT require a Shipper’s Declaration
- ☐ Check the “Dry Ice” box if applicable and indicate “UN 1845”(1) and the quantity of dry ice in kg
- ☐ Shipper’s signature (optional)



(1)



(2)

Checklist for Shipping ***Genetically Modified Micro-organisms & Organisms***

Specimen Packaging

- ☐ Specimen in leakproof primary container
- ☐ Absorbent material is sufficient to absorb entire contents of primary container(s)
- ☐ Primary containers are wrapped individually
- ☐ Leakproof secondary container
- ☐ Itemized list of contents placed between secondary and outer container

Labeling Outer Container

- ☐ Miscellaneous Class 9 label
- ☐ “Genetically modified micro-organism” or “Genetically modified organism”, “UN 3245”
- ☐ If shipment contains dry ice, “UN 1845” and amount used in kg
- ☐ Name and telephone number of the responsible party, knowledgeable of the package contents and available 24 hours a day

Dangerous Goods Declaration Form

- ☐ Name, address and phone number of shipper and recipient
- ☐ Mark out non-applicable “Aircraft Box”
- ☐ Mark out non-applicable “Radioactive” box
- ☐ 24-hour emergency response telephone number for the responsible party, knowledgeable of the package contents
- ☐ Name and title of signatory, place, and date
- ☐ Shipper’s signature

“Nature and Quantity of Dangerous Goods” section of the Declaration Form

- ☐ Complete this section using the information provided on Pages 5, 9 & 10 of this Guide

Completing the Top-half of a Dangerous Goods Declaration

SHIPPER'S DECLARATION FOR DANGEROUS GOODS			
Shipper		Air Waybill No.	
A		Page of Pages	
		Shipper's Reference Number (optional)	
Consignee		WARNING Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.	
B			
Two completed and signed copies of this Declaration must be handed to the operator.			
TRANSPORT DETAILS			
This shipment is within the limitations prescribed for: (delete non-applicable)		Airport of Departure	
<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">PASSENGER AND CARGO AIRCRAFT</div> <div style="border: 1px solid black; padding: 2px;">CARGO AIRCRAFT ONLY</div> </div>		C	
Airport of Destination		D Shipment Type (delete non-applicable) <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">NON-RADIOACTIVE</div> <div style="border: 1px solid black; padding: 2px;">RADIOACTIVE</div> </div>	

*** Remember, FedEx requires all dangerous goods declaration forms to be typed or computer generated!**

A – Shipper: Enter your full name, address and telephone number.

B – Consignee: Enter full name and address of recipient. When shipping infectious substances, include the text, “Person responsible:” plus his/her name and phone number at the bottom of “Consignee” box.

C – Transport Details: Indicate here if your shipment is restricted to cargo aircraft only (if it is > 50ml or 50g of an infectious substance). Airport of departure and airport of destination will be filled out by the carrier, leave blank

D – Shipment Type: Cross out “radioactive” to indicate you are shipping a non-radioactive substance.

Completing the Bottom-half of the Dangerous Goods Declaration

NATURE AND QUANTITY OF DANGEROUS GOODS						
Dangerous Goods Identification						
UN or ID No.	Proper Shipping Name	Class or Division (Subsidiary Risk)	Packing Group	Quantity and Type of Packing	Packing Instructions	Authorization
E	F	G	H	I	J	K
Additional Handling Information						
Emergency Telephone Number						
I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to the applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.				Name/Title of Signatory Place and Date Signature <i>(see warning above)</i>		
				M		

Created by Andy Glode at the University of New Hampshire Office of Environmental Health and Safety

E – UN or ID Number: Enter appropriate UN number (i.e. UN 2814 or UN 3245).

F – Proper Shipping Name: Enter the proper shipping name with the technical name in parentheses – i.e. “Infectious substance, affecting humans (Hepatitis B virus)”.

G – Class or Division: Enter appropriate hazard class (i.e. 6.2 or 9).

H – Packing Group: For dry ice, enter “III” in this column. Biological materials are not assigned packing groups.

I – Quantity and Type of Packaging: Enter the net quantity for each material here. Use only metric units. At the bottom of this column, indicate the number and type of packages. If multiple packages are packed in one overpack state (“All packed in one fibreboard box.”). Do not spell like “fiberboard.” If using an overpack, indicate here with “Overpack Used.”

J – Packing Instructions: Enter appropriate packing instruction number. The Packing Instruction for infectious substances is 602. The Packing Instruction for dry ice is 904. The Packing Instruction for genetically modified micro-organisms or organisms is 913.

K – Authorization: Note any Special Provisions, if applicable (i.e. if you choose to not include the technical name on outer package, you must list A140 in this column).

L – Additional Handling Instructions: The statement “Emergency Contact:” followed by a 24-hour emergency telephone response number where the shipper can be reached.

M – Sign and date each copy of your Shipper’s Declaration.

**** A statement must appear on the Shipper’s Declaration. The statement reads as follows: “I declare that all of the applicable air transport requirements have been met.”** This statement is often pre-printed on the form (see above). If this statement does not appear on the form then it should be typed in the “Additional Handling” section of the form.

Packed in Compliance with IATA Packing Instruction 602 (Category A Infectious Substances)

An Introduction to the Classifications and Packing Guidelines

Packaging for Infectious Substances Category A & B must comprise of 3 packaging layers:



Primary/Inner Packaging (e.g. evacuated tubes; sample pouch; universal pots): Primary must be leak-proof and primary or secondary must withstand an internal pressure of 95kPa.

Absorbent (e.g. absorbent material, 4 bay pouch): For liquids, there must be absorbent sufficient to absorb entire contents contained in primary packaging. Multiple primaries must be individually wrapped or separated in order to prevent contact between them.

Secondary Packaging (e.g. pouch/bag, container): Secondary must be leak-proof and secondary or primary must withstand an internal pressure of 95kPa.

Outer Packaging (e.g. outer box): Rigid outer packaging of adequate strength for its capacity, mass and intended use, and with at least one surface having minimum dimensions of 100mm x 100mm. Also to contain suitable cushioning material and be clearly marked appropriately.



Note: Shipments that include > 50mL or 50g of Category A Infectious Substances must have this label attached to the outer container.

Does your shipment need a permit?

CDC Import Permit:

- Is required if you import:
 - ✓ any etiologic agent
 - ✓ any arthropod or other animal host or vector of human disease
 - ✓ any exotic living arthropod or other animal capable of being a host or
 - ✓ vector of human disease

CDC: Etiologic Agent Import Permit Program

- Website: <http://www.cdc.gov/od/ohs/biosfty/imprtper.htm>
- Telephone: 404-498-2260; FAX: 404-498-2275
- Permit Application: <http://www.cdc.gov/od/ohs/biosfty/0753.pdf>

USDA/ APHIS Permit:

- May be required for all imports/ exports, and inter-state transport of:
 - ✓ Animal or plant pathogens
 - ✓ specimens reasonably believed to contain animal or plant pathogens
 - ✓ any pest or vector of animal or plant disease
 - ✓ potentially hazardous animal or plant products

APHIS: National Center for Import and Export (NCIE)

- Website: <http://www.aphis.usda.gov/vs/ncie/>
- Telephone: 301-734-3277 (primary contact: Dr. Waleid Muhmed)
- Permit Application (VS Form 16-3):
<http://www.aphis.usda.gov/vs/ncie/pdf/vs16-3.pdf>

Department of Commerce (DOC) Export License:

- May be required when exporting:
 - ✓ infectious agents of human, plant and animal diseases
 - ✓ genetic material, and products which might be used for culture of large amounts of agents

DOC: Bureau of Industry and Security (BIS):

- Website: <http://www.bis.doc.gov/index.htm>
- Telephone: 202-482-4811
- Review list of biological materials which may require an export license on pages 14 and 15 of this guide.

For questions about import or export requirements, contact Biological Safety at 607-0160

Contact Biological Safety at 607-8698 prior to Shipment or Receipt of the following:

List of Biological Materials that MAY Require a DOC Export License

HUMAN PATOGENS AND TOXINS	
<p>Bacteria Bacillus anthracis Brucella abortus Brucella melitensis Brucella suis Burkholderia mallei (Pseudomonas mallei) Burkholderia pseudomallei (Pseudomonas pseudomallei) Chlamydia psittaci Clostridium botulinum Clostridium perfringens, epsilon toxin producing types Enterohaemorrhagic Escherichia coli, serotype O157 and other verotoxin producing serotypes Francisella tularensis Salmonella typhi Shigella dysenteriae Vibrio cholerae Yersinia pestis</p>	<p>Toxins Abrin Aflatoxins Botulinum toxins Cholera toxin Clostridium perfringens toxin Conotoxin Diacetoxyscirpenol toxin HT-2 toxin Microcystin (Cyanoginsin) Modeccin toxin Ricin Saxitoxin Shiga toxin Staphylococcal aureus toxins T-2 toxin Tetrodotoxin Verotoxin Volkensin toxin Viscum album lectin 1 (Viscumin)</p>
<p>Viruses Chikungunya virus Congo-Crimean haemorrhagic fever virus Dengue fever virus Eastern equine encephalitis virus Ebola virus Hantaan virus Hendra virus (Equine morbillivirus) Japanese encephalitis virus Junin virus Kyasanur forest virus Lassa fever virus Louping ill virus Lymphocytic choriomeningitis virus Machupo virus Marburg virus Monkeypox virus Murray Valley encephalitis virus Nipah Virus Omsk haemorrhagic fever virus Oropouche virus Powassan virus</p>	<p>Viruses cont'd Pulmonary and renal syndrome haemorrhagic fever viruses (Seoul, Dobrava, Puumala, Sin Nombre) Rabies virus cultures Rift Valley fever virus cultures Rocio virus South American haemorrhagic fever virus (Sabia, Flexal, Guanarito) St. Louis encephalitis virus Tick-borne encephalitis virus (Russian Spring-Summer encephalitis virus) Variola virus Venezuelan equine encephalitis virus cultures Western equine encephalitis virus White pox virus Yellow fever virus</p>

Contact Biological Safety at 607-8698 prior to Shipment or Receipt of the following:

List of Biological Materials that MAY Require a DOC Export License – Continued

ANIMAL PATHOGENS AND TOXINS

Bacteria

Mycoplasma mycoides

Viruses

African horse sickness virus
African swine fever virus
Avian influenza virus (highly pathogenic strains)
Bluetongue virus
Foot and mouth disease virus
Goat pox virus
Lumpy skin disease virus
Lyssa virus

Viruses continued

Newcastle disease virus
Peste des petis ruminants virus
Porine enterovirus type 9 (Swine vesicular disease virus)
Porcine herpes virus (Aujeszky's disease)
Rinderpest virus
Sheep pox virus
wine fever virus (Hog cholera virus)
Teshen disease virus
Vesicular stomatitis virus

PLANT PATHOGENS

Fungi

Colletotrichum coffeanum var. *virulans* (C. kahawae)
Cochliobolus miyabeanus (*Helminthosporium oryzae*)
Magnaporthe grisea (*pyricularia grisea*/
pyricularia oryzae)
Microcyclus ulei (*Dothidella ulet*)
Puccinia graminis (*Puccinia graminis* f. sp. tritici)
Puccinia striiformis (*Puccinia glumarum*)

Bacteria

Xanthomonas albilineans
Xanthomonas campestris pv. citri types A, B, C, D, E or otherwise classified as X. citri, X campestris pv. aurantifolia or X. campestris pv. Citrumelo
Xanthomonas oryzae
Clavibacter michiganensis subspecies sepedonicus
Ralstonia solanacearum Races 2 & 3
Viruses
Potato Andean latent tymovirus
Potato spindle tuber viroid

Viruses

Potato Andean latent tymovirus
Potato spindle tuber viroid

GENETIC ELEMENTS/GENETICALLY MODIFIED ORGANISMS

Genetic elements that contain nucleic acid sequences associated with the pathogenicity of controlled microorganisms. Genetic elements that contain nucleic acid sequences coding for any controlled "toxins" or "subunits of toxins".

Technical Note: Genetic elements include, inter alia, chromosomes, genomes, plasmids, transposons, and vectors, whether genetically modified or unmodified. Genetically modified organisms that contain nucleic acid sequences associated with the pathogenicity of controlled microorganisms. Genetically modified organisms that contain nucleic acid sequences coding for any controlled "toxins"

HHS AND USDA SELECT AGENTS AND TOXINS 7 CFR Part 331, 9 CFR Part 121, and 42 CFR Part 73

HHS SELECT AGENTS AND TOXINS

Abrin
 Botulinum neurotoxins
 Botulinum neurotoxin producing species of *Clostridium*
 Cercopithecine herpesvirus 1 (Herpes B virus)
Clostridium perfringens epsilon toxin
Coccidioides posadasii/Coccidioides immitis
 Conotoxins
Coxiella burnetii
 Crimean-Congo haemorrhagic fever virus
 Diacetoxyscirpenol
 Eastern Equine Encephalitis virus
 Ebola virus
Francisella tularensis
 Lassa fever virus
 Marburg virus
 Monkeypox virus
 Reconstructed replication competent forms of the 1918
 pandemic influenza virus containing any portion of the
 coding regions of all eight gene segments (Reconstructed
 1918 Influenza virus)
 Ricin
Rickettsia prowazekii
Rickettsia rickettsii
 Saxitoxin
 Shiga-like ribosome inactivating proteins
 Shigatoxin
 South American Haemorrhagic Fever viruses
 Flexal
 Guanarito
 Junin
 Machupo
 Sabia
 Staphylococcal enterotoxins
 T-2 toxin
 Tetrodotoxin
 Tick-borne encephalitis complex (flavi) viruses
 Central European Tick-borne encephalitis
 Far Eastern Tick-borne encephalitis
 Kyasanur Forest disease
 Omsk Hemorrhagic Fever
 Russian Spring and Summer encephalitis
 Variola major virus (Smallpox virus)
 Variola minor virus (Alastrim)
Yersinia pestis

OVERLAP SELECT AGENTS AND TOXINS

Bacillus anthracis
Brucella abortus
Brucella melitensis
Brucella suis
Burkholderia mallei (formerly *Pseudomonas mallei*)
Burkholderia pseudomallei (formerly *Pseudomonas pseudomallei*)
 Hendra virus
 Nipah virus
 Rift Valley fever virus
 Venezuelan Equine Encephalitis virus

USDA SELECT AGENTS AND TOXINS

African horse sickness virus
 African swine fever virus
 Akabane virus
 Avian influenza virus (highly pathogenic)
 Bluetongue virus (exotic)
 Bovine spongiform encephalopathy agent
 Camel pox virus
 Classical swine fever virus
Ehrlichia ruminantium (Heartwater)
 Foot-and-mouth disease virus
 Goat pox virus
 Japanese encephalitis virus
 Lumpy skin disease virus
 Malignant catarrhal fever virus
 (Alcelaphine herpesvirus type 1)
 Menangle virus
Mycoplasma capricolum subspecies *capripneumoniae*
 (contagious caprine pleuropneumonia)
Mycoplasma mycoides subspecies *mycoides* small
 colony (*MmmSC*) (contagious bovine pleuropneumonia)
 Peste des petits ruminants virus
 Rinderpest virus
 Sheep pox virus
 Swine vesicular disease virus
 Vesicular stomatitis virus (exotic): Indiana subtypes
 VSV-IN2, VSV-IN3
 Virulent Newcastle disease virus¹

USDA PLANT PROTECTION AND QUARANTINE (PPQ) SELECT AGENTS AND TOXINS

Peronosclerospora philippinensis (*Peronosclerospora sacchari*)
Phoma glycinicola (formerly *Pyrenochaeta glycines*)
Ralstonia solanacearum race 3, biovar 2
Rathayibacter toxicus
Sclerophthora rayssiae var *zeae*
Synchytrium endobioticum
Xanthomonas oryzae
Xylella fastidiosa (citrus variegated chlorosis strain)

11/17/2008

¹ A virulent Newcastle disease virus (avian paramyxovirus serotype 1) has an intracerebral pathogenicity index in day-old chicks (*Gallus gallus*) of 0.7 or greater or has an amino acid sequence at the fusion (F) protein cleavage site that is consistent with virulent strains of Newcastle disease virus. A failure to detect a cleavage site that is consistent with virulent strains does not confirm the absence of a virulent virus.

Manufacturers of Certified Shipping Containers for Infectious Substances, Patient Specimens & Dry Ice

DG Supplies, Inc.
5 Boxal Drive
Cranbury, NJ 08512
Phone: 800-347-7879
<http://www.dgsupplies.com>

CARGOpak Corporation
3215-A Wellington Court
Raleigh, NC 27615
Phone: 800-266-0652
<http://www.cargopak.com>

Corporate One Way
1195 Washington Pike
Bridgeville, PA 15017
Phone: 800-245-2283
<http://www.all-pak.com>

JIT Certified, Inc.
1740 Fenpark Drive
Fenton, MO 63026
Phone: 800-962-8636
<http://www.jitcertified.com>

Inmark, Inc.
220 Fisk Drive S.W.
Atlanta, GA 30336-0309
Phone: 800-646-6275
<http://www.inmarkinc.com>

HAZMATPAC, Inc.
5301 Polk St., Bldg. 18
Houston, TX 77023
OgibeL 800-347-7879
<http://www.hazmatpac.com>

Source Packaging of New
England, Inc.
405 Kilvert St.
Warwick, RI 02886
Phone: 800-200-0366
<http://www.sourcepak.com>

SAF-T-PAK, Inc.
10807-182 Street Edmonton,
Alberta, Canada, T5S 1J5
Phone: 8008-814-7484
<http://www.saftpak.com>

Polyfoam Packers
Corporation
2320 S. Foster Avenue
Wheeling, IL 60090
Phone: 888-765-9362
<http://www.polyfoam.com>

Therapak Corporation
1440 Arrow Highway, Unit A
Irwindale, California 91706
Phone: 888-505-7377
[Http://www.therapak.com](http://www.therapak.com)

EXAKT Technologies, Inc.
7416 N Broadway Ext.,
Suite E
Oklahoma City, OK 73116
Phone: 800-923-9123
<http://www.exaktpak.com>

Air Sea Atlanta
1234 Logan Circle
Atlanta, GA 30318
Phone: 404-351-8600
<http://www.airseatlanta.com>
All-Pak, Inc.