

**SAFE TRANSPORT
OF
INFECTIOUS
SUBSTANCES**

**UTAH PUBLIC HEALTH
LABORATORIES**

**REVISED
1/2008**

Guidelines For The Safe Transport of Infectious Substances

Introduction

Packaging and shipping regulations are provided to protect postal, airline and other transport industry personnel from exposure to microorganisms that escape from broken, leaking or improperly packaged material. These regulations have been put together by several agencies within the federal government and by private industry associations. The regulations vary somewhat, but all of them give the responsibility to the shipper to correctly classify, package, label and prepare documentation for all shipments of diagnostic and infectious material. All national and international regulations require that anyone handling, packaging or shipping infectious substances must be trained. (See Appendix A for regulation sources)

At Utah Public Health Laboratories, tech services personnel usually take care of shipping specimens. It is the responsibility of the laboratorian to safely package the specimen in its primary container and to make sure that the primary container is free of contamination. The laboratorian takes the primary container, along with a memo addresses to the mailroom staff, to the mailroom for shipping. **Note: If the package contains a select agent, it is mandatory that the laboratorian hand the package to an FBI screened mailroom employee (as of 1/2008, these people are Chris Peper and Nancy Bishop).** (See Appendix E for an example of a memo to the mailroom staff.)

Transportation of Infectious Substances

An infectious substance is a material known to contain or reasonably expected to contain a pathogen. A pathogen is a microorganism (including bacteria, viruses, rickettsiae, parasites, fungi) or other agent, such as a proteinaceous infectious particle (prion), that can cause disease in humans or animals. Infectious substances may exist as purified and concentrated cultures, but may also be present in a variety of materials, such as body fluids or tissues. Transportation of infectious substances and materials that are known or suspected to contain them are regulated as hazardous materials by the United State Department of Transportation (DOT), foreign governments, and the International Civil Aviation Organization, and their transportation is subject to regulatory controls. For transport purposes, the term “infectious substance” is understood to include the term “etiologic agent.”

Transportation Regulations

International and domestic transport regulations for infectious substances are designed to prevent the release of these materials in transit to protect the public, workers, property, and the environment from the harmful effects that may occur from exposure to these materials. Protection is achieved through rigorous packaging requirements and hazard communication. Packages must be designed to withstand rough handling and other forces experienced in transportation, such as changes in air pressure and temperature, vibration, stacking, and moisture. Hazard communication includes shipping papers, labels, markings on the outside of packagings, and other information necessary to enable transport workers and emergency response personnel to correctly identify the material

and respond efficiently in an emergency situation. In addition, shippers and carriers must be trained on these regulations so they can properly prepare shipments and recognize and respond to the risks posed by these materials. (See Appendix A for a list of these regulations)

Select agents include infectious substances that have been identified by the CDC and the USDA as having the potential to pose a severe threat to public health and safety. Persons who offer for transportation or transport select agents in commerce in the United States must develop and implement security plans for such transportation. A security plan must include an assessment of the possible transportation security risks for materials covered by the security plan and specific measures to reduce or eliminate the assessed risks. At a minimum, a security plan must include measures to address those risks associated with personnel security, en route security, and unauthorized access.

TRANSFERS

Regulations governing the transfer of biological agents are designed to ensure that possession of these agents is in the best interest of the public and the nation. These regulations require documentation of personnel, facilities, justification of need and pre-approval of the transfer by a federal authority. See Appendix A for these regulations.

GENERAL PACKAGING REQUIREMENTS FOR TRANSPORT OF INFECTIOUS SUBSTANCES BY COMMERCIAL CARRIER

The DOT packagings for transporting infectious substances by aircraft are required by domestic and international aircraft carriers, and are the basis for infectious substance packaging for motor vehicle, railcar, and vessel transport. The following is a summary of each packaging type and related transportation requirements.

Classification

- **Category A Infectious Substance (UN 2814 and UN 2900): Figure 1.**
A Category A material is an infectious substance that is transported in a form that is capable of causing permanent disability or life-threatening or fatal disease to otherwise healthy humans or animals when exposure to it occurs. An exposure occurs when an infectious substance is released outside of its protective packaging, resulting in physical contact with humans or animals. Category A infectious substances are assigned to identification number “UN 2814” for substances that cause disease in humans or in both humans and animals, or “UN 2900” for substances that cause disease in animals only.
- **Biological specimen, Category B (UN 3373): Figure 2. (previously known as Clinical specimen and Diagnostic Specimen).**
A Category B infectious substance is one that does not meet the criteria for inclusion in Category A. A Category B infectious substance does not cause permanent disability or life-threatening or fatal disease to humans or animals when exposure to it occurs. The proper shipping name for a Category B infectious substance, “Biological specimen, Category B,” is assigned to identification number “UN 3373.” The proper

shipping names “Diagnostic specimen” and “Clinical specimen” may no longer be used after January 1, 2007.

Planning

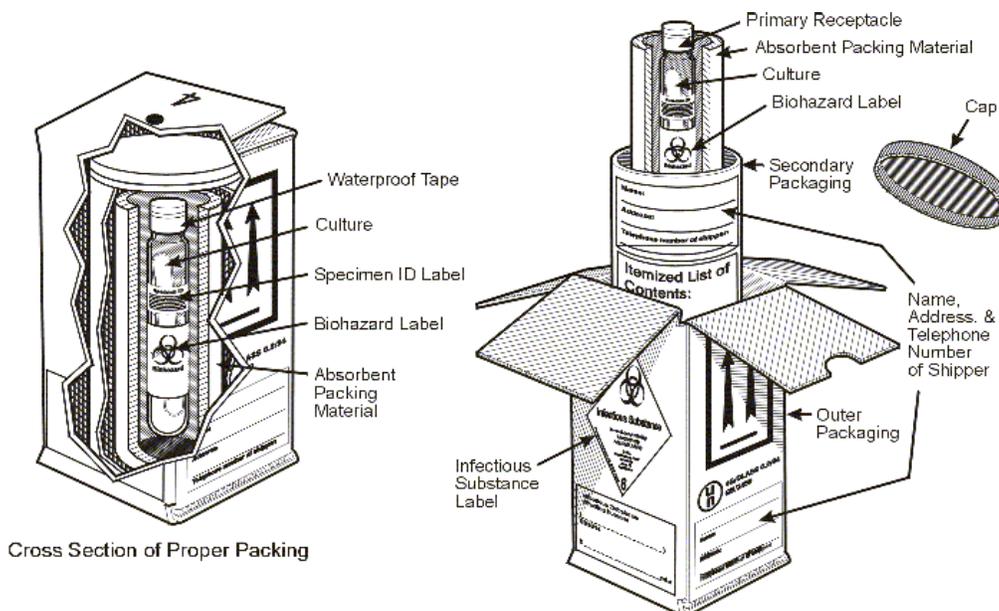
- Call the recipient to verify the shipping address and obtain the name and phone number of the contact person. Find out when the contact person will be able to receive the shipment.
- Shipments should not go out on Thursday or Friday unless the recipient agrees that they will be there to receive the package on the weekend.

Packaging

Proper packaging includes the classification, packing, labeling and documentation of materials for shipment.

Figure 1 below shows an example of the UN standard triple packaging system for materials known or suspected of being a **Category A infectious substance**. The package consists of a watertight primary receptacle or receptacles; a watertight secondary packaging; for liquid materials, the secondary packaging must contain absorbent material in sufficient quantities to absorb the entire contents of all primary receptacles; and a rigid outer packaging of adequate strength for its capacity, mass, and intended use. Each surface of the external dimension of the packaging must be 100 mm (3.9 inches) or more. The completed package must pass specific performance tests, including a drop test and a water-spray test, and must be capable of withstanding, without leakage, an internal pressure producing a pressure differential of not less than 95 kPa (0.95 bar, 14 psi). The completed package must also be capable of withstanding, without leakage, temperatures in the range of -40 °C to +55 °C (-40 °F to 131 °F). The completed package must be marked “Infectious substances, affecting humans, UN 2814” or “Infectious substances, affecting animals, UN 2900” and labeled with a Division 6.2 (infectious substance) label. In addition, the package must be accompanied by appropriate shipping documentation, including a shipping paper and emergency response information.

Figure 1. Category A, Infectious Substance



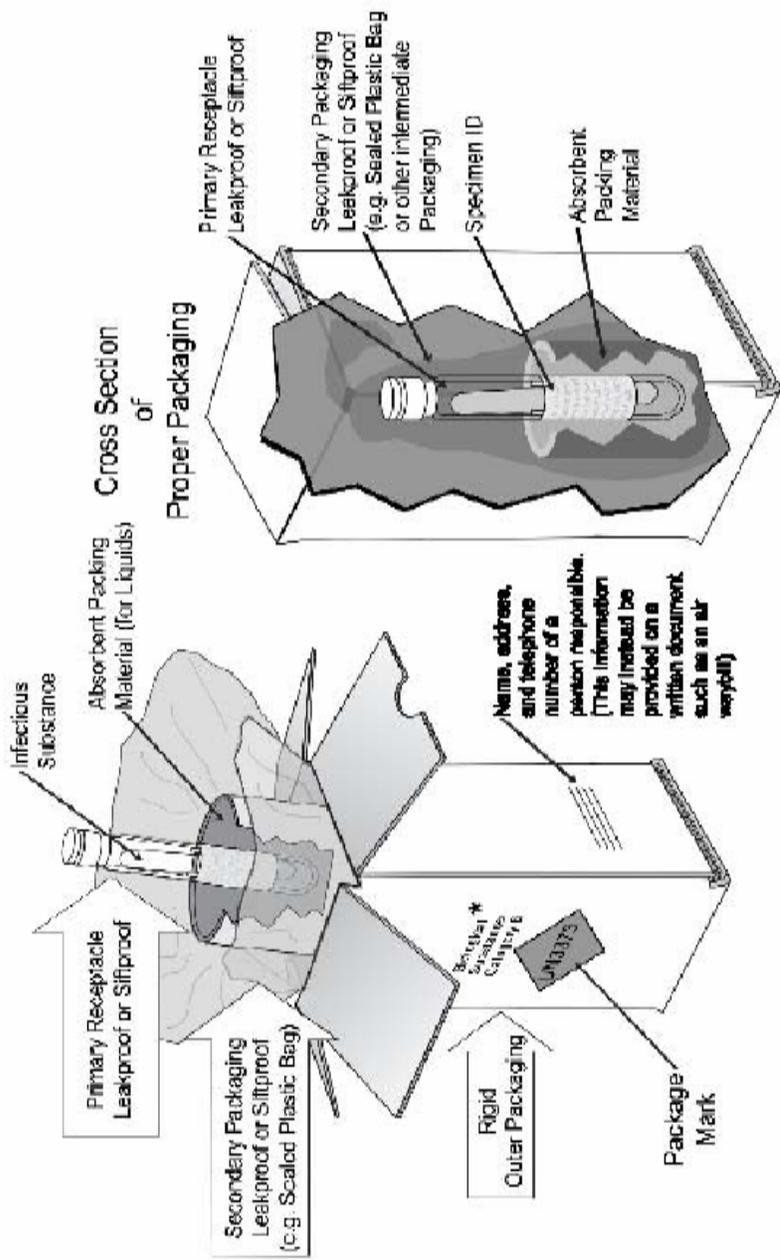
Packing and Labeling of Infectious Substances

Figure 2 below shows an example of the triple packaging system for materials known or suspected of containing a Category B infectious substance. A Category B infectious substance must be placed in a packaging consisting of a leakproof primary receptacle, leakproof secondary packaging, and rigid outer packaging. At least one surface of the outer packaging must have a minimum dimension of 100 mm by 100 mm (3.9 inches). The packaging must be of good quality and strong enough to withstand the shocks and loadings normally encountered during transportation.

For liquid materials, the secondary packaging must contain absorbent material in sufficient quantities to absorb the entire contents of all primary receptacles. The primary or secondary packaging must be capable of withstanding, without leakage, an internal pressure producing a pressure differential of 95 kPa. The package must be constructed and closed to prevent any loss of contents that might be caused under normal transportation conditions by vibration or changes in temperature, humidity, or pressure. The completed package must be capable of passing a 1.2- meter (3.9 feet) drop test. The package must be marked with a diamond-shaped marking containing the identification number "UN 3373" and with the proper shipping name "Biological substance, Category B." In addition, the name, address, and telephone number of a person knowledgeable about the material must be provided on a written document, such as an air waybill, or on the package itself.

Figure 2. Category B, Infectious Substance

Packing and Labeling of Category B Infectious Substances (See Packing Instruction 650)



* The proper shipping names "Biological Substance, Category B", "Clinical Specimen" and "Diagnostic Specimen" are authorized until December 31, 2006. From January 1, 2007 only the proper shipping name "Biological Substance, Category B" will be authorized.

Primary Sample Container

The primary sample container has to be waterproof and leak-proof.

- Seal culture plates and screw-capped tubes with tape or Parafilm.
- Wrap the specimen container with enough absorbent material to absorb the entire liquid contents in the event of a leakage.
- Put the sample container in a zip-locked biohazard bag. Put solid culture containers in one zip-locked bag. Put liquid culture containers in two bags.
- Pre-freeze samples that will be shipped frozen. At UPHL, this is the responsibility of the laboratorian.

Secondary Container

The secondary container is part of a complete packaging system. It should be unbreakable, waterproof, leak-proof and have a biohazard label on the outside. (See Appendix C for certified shipping systems, source information and packing instructions.)

Outer Shipping Package

A certified outer shipping package is strong enough to hold the capacity and mass indicated on the bottom of the box. Choose the appropriate package.

- It must meet the UN class 6.2 specifications and packaging instructions (PI) 602 and bear the UN Packaging Specification Marking. Containers and packaging systems must be 4G Class 6.2/98 or less than three years from the year of certification design.



4G CLASS 6.2 / 99
CAN / 8-2 SAF-T-PAK

- Each shipper comes with the required inner packaging and labels. Do not make any substitutions or the UN-certification becomes invalid. If the secondary container is reusable, you may use a refurbishment kit for each shipper. Ensure there are no holes or dents and remove previous labels from recycled shippers.
- Follow the **closing instructions** included with each UN-certified packaging system.
- If over-packs are used, the shipping package and the over-packs must be marked and labeled identically. An additional label is required on the over-pack:

“Inner packages comply with prescribed specifications”.

Labeling

Apply labels to a flat surface without overlap or corner wrap.

Hazard Labels for Dangerous Goods must be displayed on packages with infectious substances and/or dry ice.

1. **Hazard Class 6.2** Infectious Substances



Printing on the label should state:

Etiologic agents

Biomedical material

In case of damage or leakage

Notify Director CDC, Atlanta, Georgia

(404) 633-5313

Apply the Class 6.2 label on the blank diamond marked on the outside of the outer package.

2. **Miscellaneous Hazard Class 9** Dry Ice

The Hazard Class 9 dry ice label is only required for shipments containing dry ice. The weight of the dry ice (in kg) is handwritten on the white portion of the label.



Apply the Miscellaneous Hazard label on the side of the box opposite the Hazardous Substance label.

The **UN shipping name label for dry ice** should be in this format:

Carbon dioxide, solid

(Dry ice)

UN1845

_____kg.

Place this label next to the Miscellaneous Hazard label.

The **Orientation Labels** are printed on opposite sides of the shipping container not covered by the hazard warning labels. Do not cover them.



A **UN shipping name label** is required for **each infectious organism** in a shipment. The UN shipping label must have the exact format:

Infectious substances,
Affecting Humans
(*Escherichia coli*)
UN2814
X _____ mL.

It must be affixed to the outside package next to Hazard Class 6.2 label.

Apply an **Address Label** on one side of the box with the following information:

1. The receiver's name, shipping address (no P.O. Boxes) and telephone number, including the area code.
2. The shipper's name, address and telephone number
3. Temperature storage requirements of the package contents (optional)

Documenting

Complete the **forms and letters** that will be enclosed with the sample.

Memo: All shipments of infectious substances must include a **memo on letterhead** (See example in Appendix D). Insert one of these forms on top of the secondary container before closing the outer shipping package.

Test request form: If a sample is being forwarded from another lab, enclose a copy of the referral test request form.

D.A.S.H. form: If the sample is being sent to **CDC**, fill out a D.A.S.H. form (CDC 50.34 REV. 11-90). This form may be faxed or forwarded by the state lab.

Shipping record file: Make a copy of all forms to keep in a shipping record File folder. Keep shipping record folders for two years.

Complete **shipping documents** provided by the commercial carrier:

Commercial air shipments require an **Air Waybill** (tracking document). Include the name and telephone number of the person responsible for the shipment. This person must be knowledgeable and accessible 7 days a week, 24 hours a day. Put the Waybill in a shipping pouch with an address window and attach it to the top surface of the closed package.

Infectious substances require a **Dangerous Goods Declaration**. Follow exact directions to avoid a fine.

1. Insert the Dangerous Goods Declaration forms into a shipping pouch and apply the pouch to the bottom of the package.
2. The attachment pouches may overlap the edge of the top and bottom of the package. Make sure that the edges do not overlap any of the labels or markings on the side.

Shipping

Some commercial carriers will not ship infectious substances. Call your local carrier to make sure that they will accept an infectious substance. FedEx ships infectious substances for Utah Public Health Labs and provides a computer program that helps to prepare shipping documents.

When shipping select agents, a Form 2 must be completed. This is usually completed by the BT Lab Coordinator or Training Coordinator. Please refer to website below to download the appropriate forms & guidelines and consult the BT Laboratory Coordinator prior to transferring select agents.

<http://www.selectagents.gov/securitydoc.htm>

LOCAL TRANSPORT OF INFECTIOUS SUBSTANCES AND ENVIRONMENTAL SAMPLES

Local transport, usually performed by a courier service, may include the transfer of specimens from a doctor's office or hospital to a laboratory or from one laboratory to another. Safe transport by this means is as important as for air shipment. **The contents of a sample should not have any possibility of escaping from the package under normal conditions of transport.**

Packaging

The primary sample container has to be waterproof and leak-proof.

1. Seal culture plates and screw-capped tubes with tape or Parafilm.
2. Wrap the specimen container with enough absorbent material to absorb the entire liquid contents in the event of a leakage.

3. Put the sample container in a zip-locked biohazard bag. Put solid culture containers in one zip-locked bag. Put liquid culture containers in two bags. This bag should be labeled with the laboratory name, address and phone number.

Labeling

Attach a label with the name, address and telephone number of the recipient and storage requirements.

Put the specimen identification form or test request form in the outside pocket of the specimen biohazard bag. **DO NOT** put the form inside the specimen bag.

Transporting

The primary sample container should be placed in a leak-proof, unbreakable transport box with a secure, tight-fitting cover and a biohazard label. Frozen specimens should be put into a labeled, insulated box with dry ice (for long distances). If dry ice is not available, wet ice packs are acceptable.

The transport box should be carried to the courier vehicle and secured in position for transport.

The courier vehicle should carry a spill kit with absorbent material, disposable gloves, a chlorine disinfectant, and a leak-proof waste disposal container.

Appendix A. Regulations For the Transportation of Infectious Substances

Department of Transportation. 49 CFR Part 171-180, Hazardous Materials Regulations. Applies to the shipment of infectious substances in commercial transportation within the United States. Information on these regulations may be obtained at the Internet website: <http://hazmat.dot.gov>.

United States Postal Service (USPS). 39 CFR Part 20, International Postal Service (International Mail Manual), and Part 111, General Information on Postal Service (Domestic Mail Manual).

Regulations on transporting infectious substances through the USPS are codified in Section 601.10.17 of the Domestic Mail Manual and Section 135 of the International Mail Manual. A copy of the Domestic and International Mail Manuals may be obtained from the Government Printing Office by calling Monday through Friday, 7:30 a.m. - 9:00 p.m. EST: 202- 512-1800, 866-512-1800 (toll free), or from the Internet at: <http://bookstore.gpo.gov/http://pe.usps.gov/>.

Occupational Health and Safety Administration (OSHA). 29 CFR Part 1910.1030, Occupational Exposure to Bloodborne Pathogens. These regulations provide minimal packaging and labeling for blood and body fluids when transported within a laboratory or outside of it. Information may be obtained from your local OSHA office or from the Internet website: <http://www.osha.gov/>.

Technical Instructions for the Safe Transport of Dangerous Goods by Air (Technical Instructions). International Civil Aviation Organization (ICAO).

Applies to the shipment of infectious substances by air and is recognized in the United States and by most countries worldwide. A copy of these regulations may be obtained from the ICAO Document Sales Unit at (514) 954-8022, Fax: (514) 954-6769, E-Mail: sales_unit@icao.int, or from the Internet website: <http://www.icao.org>.

Dangerous Goods Regulations. International Air Transport Association (IATA).

These regulations are issued by an airline association, are based on the ICAO Technical Instructions, and are followed by most airline carriers. A copy of these regulations can be obtained from the Internet websites: <http://www.iata.org/index.htm> or <http://www.who.int/en/>, or by contacting the IATA Customer Care office at: Tel: +1 (514) 390 6726, Fax: +1 (514) 874 9659, for Canada and USA (800) 716-6326 (Toll free), Europe, Africa and Middle East +41 (22) 770 2751, Fax: +41 (22) 770 2674, TTY: YMQTPXB, or E-mail: "custserv@iata.org".

Importation of Etiologic Agents of Human Disease. 42 CFR Part 71 Foreign Quarantine. Part 71.54 Etiological Agents, Hosts and Vectors.

This regulation requires an import permit from the CDC for importation of etiologic agents, hosts or vectors of human disease. The regulation, application form, and additional guidance can be found at the CDC website: <http://www.cdc.gov/od/eaipp/>.

Completed application forms may be submitted to the CDC Etiologic Agent Import Permit Program by Fax: (404) 718-2093 or by mail:
Centers for Disease Control and Prevention
Etiologic Agent Import Permit Program
1600 Clifton Road, N.E., Mailstop A-46
Atlanta, GA 30333.

Importation of select agents or toxins into the U.S. also requires the intended recipient to be registered with the Select Agent Program and submit an APHIS/CDC Form 2 to obtain approval to import the select agent or toxin prior to each importation event (see 42 CFR 73 and/or 9 CFR 121). More information regarding select agents and toxins can be found at: <http://www.cdc.gov/od/sap>.

Importation of Etiologic Agents of Livestock, Poultry and Other Animal Diseases and Other Materials Derived from Livestock, Poultry or Other Animal. 9 CFR Parts 122. Organisms and Vectors.

The USDA, APHIS, Veterinary Services (VS) requires that a permit be issued prior to the importation or domestic transfer (interstate movement) of etiologic disease agents of livestock, poultry, other animals. Information may be obtained at (301) 734-5960, or from the internet at: <http://www.aphis.usda.gov/vs/ncie/>

Completed permit applications may be submitted electronically through <https://web01.aphis.usda.gov/ias.nsf/Mainform?OpenForm>

by Fax to

(301) 734-3652; or by mail:

USDA APHIS VS

National Center for Import and Export

Unit 2, Mailstop 22, Cubicle 1A07

Riverdale, MD 20737

Importation of select agents into the United States also requires the intended recipient to be registered with the Select Agent Program and submit an APHIS/CDC Form 2 to obtain approval to import the select agent or toxin prior to each importation event (see 42 CFR 73 and/or 9 CFR 121). More information regarding select agents and toxins can be found at http://www.aphis.usda.gov/programs/ag_selectagent/index.html.

Importation of Plant Pests 7 CFR Part 330. Federal Plant Pest Regulations; General; Plant Pests; Soil; Stone and Quarry Products; Garbage.

This regulation requires a permit for movement into or through the United States, or interstate any plant pest or a regulated product, article, or means of conveyance in accordance with this part. Information can be obtained by calling (877) 770-5990 or through the Internet at: <http://www.aphis.usda.gov/ppq/permits>.

Export of Etiologic Agents of Humans, Animals, Plants and Related Materials.
Department of Commerce (DoC). 15 CFR Parts 730 to 799.

This regulation requires that exporters of a wide variety of etiologic agents of human, plant and animal diseases, including genetic material, and products which might be used for culture of large amounts of agents, will require an export license. Information may be obtained by calling the DoC Bureau of Export Administration at (202) 482-4811, or through the Internet at: <http://bxa.fedworld.gov>, <http://www.access.gpo.gov/bis/index.html>, or <http://www.bis.doc.gov/>.

Transfer of CDC Select Agents and Toxin. 42 CFR Part 73 Possession, Use, and Transfer of Select Agents and Toxins.

The CDC regulates the possession, use, and transfer of select agents and toxins that have the potential to pose a severe threat to public health and safety. The CDC Select Agent Program registers all laboratories and other entities in the United States that possess, use, or transfer a select agent or toxin. Entities transferring or receiving select agents and toxins must be registered with the Select Agent Program and submit an APHIS/CDC Form 2 (see 42 CFR 73 and/or 9 CFR 121) to obtain approval prior to transfer of a select agent or toxin. The regulations, Select Agent Program forms, and additional guidance can be found at the CDC website: <http://www.cdc.gov/od/sap>.

Transfer of USDA Select Agents and Toxins. 9 CFR Part 121 Possession, Use, and Transfer of Select Agents and Toxins.

The USDA, APHIS, VS regulates the possession, use, and transfer of select agents and toxins that have the potential to pose a severe threat to animal health or animal products. The VS Select Agent Program oversees these activities and registers all laboratories and other entities in the U.S. that possess, use, or transfer a VS select agent or toxin. Entities transferring or receiving select agents and toxins must be registered with either the CDC or APHIS Select Agent Program, and submit an APHIS/CDC Form 2 (see 42 CFR 73 and/or 9 CFR 121) to obtain approval prior to transfer of a select agent or toxin. The regulations, Select Agent Program forms, and additional guidance can be found at the APHIS website:

http://www.aphis.usda.gov/programs/ag_selectagent/index.html

Appendix B
Infectious Agents Listed in 42 CFR Part 72
Interstate Shipment of Etiologic Agents

Bacterial Agents

Acinetobacter calcoaceticus
Actinobacillus – all species
Actinomycetaceae – all members
Aeromonas hydrophilia
Arachnia propionica
Arizona hinshawii – all serotypes
Bacillus anthracis
Bacteroides spp.
Bartonella – all species
Bordetella – all species
Borrelia recurrentis, *B. vincenti*
Brucella – all species
Campylobacter (Vibrio) foetus
Campylobacter jejuni
Chlamydia psittaci, *C. trachomatis*
Clostridium botulinum
Clostridium chauvoei
Cl. haemolyticum, *Cl. Histolyticum*
Clostridium novyi
Clostridium septicum
Clostridium tetani
Corynebacterium diphtheriae
Corynebacterium equi
Corynebacterium haemolyticum
Corynebacterium pseudotuberculosis
Corynebacterium pyogenes
Corynebacterium renale
Edwardsiella tarda
Erysipelothrix insidiosa
Escherichia coli – all enteropathogenic serotypes
Francisella tularensis
Haemophilus ducreyi
Haemophilus influenzae
Klebsiella – all species and all serotypes

Legionella – all species and all
Legionella-like organisms
Leptospira interrogans – all serovars
Listeria – all species
Mimae polymorpha
Moraxella – all species
Mycobacterium – all species
Mycoplasma – all species
Neisseria gonorrhoeae
Neisseria meningitidis
Nocardia asteroides
Pasteurella – all species
Plesiomonas shigelloides
Proteus – all species
Pseudomonas (Burkholderia) mallei
P. (Burkholderia) pseudomallei
Salmonella – all species & serotypes
Shigella – all species & serotypes
Sphaerophorus necrophorus
Staphylococcus aureus
Streptobacillus moniliformis
Streptococcus pneumoniae
Streptococcus pyogenes
Treponema careteum
Treponema pallidum
Treponema pertenue
Vibrio cholerae
Vibrio parahaemolyticus
Yersinia pestis
Yersinia enterocolitica

Fungal Agents

Blastomyces dermatidis
Coccidioides immitis
Cryptococcus neoformans
Histoplasma capsulatum
Paracoccidioides brasiliensis

Appendix B (cont'd)

Viral and Rickettsial Agents

Adenoviruses – human – all types

Arboviruses – all types

Coxiella burnetti

Coxsackie A and B viruses – all types

Creutzfeldt Jacob agent

Cytomegaloviruses

Dengue viruses – all types

Ebola viruses

Echoviruses – all types

Encephalomyocarditis virus

Hemorrhagic fever agents, including, but not limited to, Crimean Hemorrhagic Fever (Congo), Junin, Machupo viruses, and Korean Hemorrhagic fever viruses

Hepatitis associated materials (Hep A, Hep B, Hep nonA – nonB)

Herpesvirus – all members

Infectious bronchitis-like virus

Influenza viruses – all types

Kuru agent

Lassa virus

Lymphocytic choriomeningitis virus

Measles virus

Mumps virus

Parainfluenza viruses – all types

Polioviruses – all types

Rabies virus – all strains

Reoviruses – all types

Respiratory syncytial virus

Rhinoviruses – all types

Rickettsi – all species

Rocha limaia Quintana

Rotaviruses – all types

Rubella virus

Simian virus 40

Tick-borne encephalitis virus complex, including Russian Spring-Summer Encephalitis, Kyasanur Forest Disease, Omsk Hemorrhagic Fever and Central European Encephalitis viruses.

Vaccinia virus

Varicella virus

Variola major and Variola minor viruses

Vesicular stomatitis viruses – all types

White poxviruses

Yellowfever virus

Appendix C
UN-Certified Shipping Systems For Hazard Class 6.2, Infectious Substances
With Closing Instructions

SAF-T-PAK, Inc.
101, 17872 – 106 Avenue
Edmonton, Alberta, Canada T5S 1V4
Phone: 800-841-7484
Fax: 403-486-0235
<http://www.saftpak.com>

VWR Scientific Products
Sales Representative: Trinh Nguyen
Sales: (800) 932-5000
Sales Fax: (800) 477-4897
Voice Mail: (800) 873-8977 x3050
<http://www.vwr.com>

Speci-FREEZ Insulated Shipper
VWR Catalog No. 11217-086 4/\$56.00

Use the insulated shipper with the Infecon 3000 complete packaging system for transporting specimens that must be kept frozen or refrigerated. It is designed to hold the smaller package securely without shifting as the dry ice dissipates.



When packed with approximately 22 lbs. dry ice, this lightweight, insulated shipper keeps contents frozen for 76 hours. Transporter has 1 ½ inch thick expanded polystyrene sides and lid. It is enclosed in a 200 lb tested fiberboard carton for protection. It contains all the necessary hazard labels, handling labels and instructions.

Infecon 3000 Infectious Substance Shipper
VWR Catalog No. 11217-660 12/\$219.34



Refurbishment Kit

VWR Catalog No. 11217-114 4/\$79.69

Contains outer box, O-ring, coil, instructions, declaration and labels.

Use an Infecon 3000 Infectious Substance Shipper for small samples (less than 500 mL and less than 3" by 4") shipped at ambient temperature. The complete, ready-to-use pack includes a pressure vessel, cushioning material, absorbent material, labels, outer box and instructions. The 1.25L polypropylene pressure vessel (secondary container) with O-ring is airtight and leak-proof, autoclavable and will withstand up to 95-kPa pressure. The sturdy outer box is imprinted with instructions and clearly displayed UN markings. The pack may be completely refurbished for economical re-use.

Closing instructions for the Infecon 3000

1. Use the entire system as directed. Do not alter the inner packing material.
Failure to use the packaging system properly makes you liable for any damage or injury resulting from breakage or exposure to the infectious contents of the package.
2. Seal the primary container in a zip-locked biohazard bag with the lab's name, address and phone number.
3. Wrap the bagged container snugly in a piece of bubble wrap and secure it with pressure sensitive tape. Put an absorbent pad, sufficient to absorb any liquid, into the bottom of the wide-mouthed jar with the orange screw cap.
4. Place the wrapped primary container inside the jar and fill voids with bubble wrap.
5. If you are shipping more than one specimen in the same package, do not allow primary containers to come in contact with one another during shipment.
6. Make sure the O-ring seal is smooth and intact. Screw the cap on.
7. Tape an itemized list of contents on the outside of the jar.
8. Put the fiberboard coil into the outer shipping package.
9. Place the closed jar inside the fiberboard coil.
10. Leave the outer package open until the shipping documents are prepared.
11. Compare the information on the Air Waybill and Dangerous Goods

- Declaration to the information on the letterhead memo for accuracy.
12. Put the memo on top of the inner pack and close the box.
 13. Tape the flaps, top and sides with 3” shipping tape.
 14. Apply the Air Waybill, Dangerous Goods Declaration and hazard labels on the outside of the package according to the section on labeling and documentation.

Appendix D.
Example of a Memo To Accompany Infectious Substance Shipments

From: Name/Title
Facility Name
Address
Telephone

To: Name/Title
Facility Name
Address
Telephone

Date:

Re:

Explain what is being sent and why.

Storage conditions:

(Signature)

Instructions: Supply the required information and print on the letterhead paper.

(Save a copy of this for your shipping record file).

Appendix E.
Example of a Memo Addressed to the Mailroom Staff
To Accompany Infectious Substance Shipments

From: Name

To: Mailroom Staff

Date:

Re:

Explain what is being sent. Include the following information:

Hazardous or Non-hazardous

Room temperature or refrigerated

Low org that shipment should be charged to

Shipped overnight

Name, address and phone number – where the shipment is going

(Signature)

Email Address

(Save a copy of this for your shipping record file)

I have read and understand how to **safely package a specimen for shipping** for the Utah Department of Health Laboratory.

Name (print)	Signature	Date