
Lincoln/Greater Nebraska Sentinel Laboratories Packaging and Shipping to Nebraska Public Health Laboratory Category A Infectious Substances, Affective Humans UN2814 Category B Biological Substances, UN3373

Principle:

The shipper is responsible to comply with the rules and guidelines for transport of Division 6.2 infectious substances, which is regulated as a hazardous material under the U.S. Department of Transportation's (DOT) Hazardous Materials Regulations (HMR; 49 CFR Parts 171-178). These regulations are based on and in substantial agreement with the International Civil Aviation Organization (ICAO) and the International Air Transportation Association (IATA) regulations.

The following steps are specifically described for sentinel laboratories in Nebraska to package and ship a Category A infectious substance to the Nebraska Public Health Laboratory (NPHL), which may possess material capable of posing unreasonable risk to health and safety when transported in commerce. Purpose of adherence to these regulations and requirements is to minimize the potential for damage to the contents of the package during transport and to reduce the exposure of the shipper to the risks of criminal and civil liability associated with the improper shipment of dangerous goods.

Definitions:

1. **DIVISION 6.2 (INFECTIOUS SUBSTANCE):** A material known or reasonably expected to contain a pathogen. A pathogen is a micro-organism (including bacteria, viruses, rickettsiae, parasites, fungi) or other agent, such as a proteinaceous infectious particle (prion) that can cause disease in humans or animals.
2. **Infectious substances, affecting humans, UN2814 (Category A):** An infectious substance in a form capable of causing permanent disability or life-threatening or fatal disease in 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.
3. **Biological Substance UN3373 (Category B):** An infectious substance not in the form generally capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans when exposure to it occurs. **Former proper shipping names "Diagnostic Specimen" or "Clinical Specimen" is no longer acceptable and will be rejected.**
4. **Select Agents:** Category A pathogens that have been designated as agents of bioterrorism. United States federal regulations require shippers to have special permits to possess, use, transfer, and receive these agents.
5. **Classification:** Criteria used to determine acceptable levels of safety during transportation. Developed by ICAO and published in the *52nd Edition (2010) of the IATA Dangerous Goods Regulations (DGR)*. Classification must be based on the known medical history or symptoms of the source patient or animal, endemic local conditions, or professional judgment concerning the individual circumstances of the source. Infectious substances are now classified either as Category A or Category B.
6. **Patient Specimen:** Material collected directly from human for transport for research, diagnosis, investigational activities, or disease treatment or prevention including but not limited to excreta, secretions, blood and its components, tissue and swabs, body parts and specimens in transport media (e.g. transwabs, culture media and blood culture bottles prior to growth). Patient specimens (dried blood spots, blood or urine tests ordered as part of routine medical exams to monitor levels of cholesterol, blood glucose, hormones or organ functions; tests conducted for insurance or employment purposes such as drug screens) should be packed and shipped as Exempt Human Specimens (IATA and US Postal Service) or are not subject to the requirements as Division 6.2 material.
7. **Culture:** An infectious substance containing a pathogen that is intentionally propagated.
8. **Proper Shipping Name and UN/ID Number:** Terminology used with Category A that is required on label of box and paperwork, cannot be abbreviated. Correct format is "Infectious substance, affecting humans UN2814." The technical pathogen name is no longer allowed (as of Jan 1, 2012) on the outer box but the correct technical name (IATA List of Dangerous Goods) must be listed on the Shipper's Declaration or the NPHL Ground Courier Shipping Paper in parenthesis.

Procedure Notes:

1. In accordance with Dangerous Goods regulations, **only personnel trained and certified for packaging and shipping are allowed to package Category A at the sentinel laboratory.** Initial training is recommended through the Association of Public Health Laboratories (APHL). Laboratory/clinical managers are responsible for assuring their staff is capable of correctly packaging and shipping and upon doing so, is responsible for certifying the employee. Managers should keep records for each employee, include employee’s name, location and date of training, name of the trainer, course content, documentation of testing, and a copy of the certificate of training. IATA certification is valid for 2 years.
2. IATA rules apply to transportation with the FedEx Corporation. All Category A shipments originating from the sentinel lab outside of Omaha must transported by FedEx and require additional measures, therefore strict compliance with NPHL Packaging Instructions (PI) is mandatory.
3. Packaging Instructions - DOT regulations, IATA requirements, and IATA Packing Instructions (PI) describe the minimum standards for the safe transport of various biological materials. **The shipper is legally responsible for complying with these regulations,** for following prescribed PI, and for packing substances correctly to ensure the safety of all personnel who handle the package before, during, and even after shipment to the point of acceptance of the package by the consignee. After determining the exact nature and category of the substance to be shipped, the shipper must select the most appropriate packing instructions to use.
4. Category A packaging is required by IATA and DOT to be tested and certified for internal pressure requirements of 95kPa and only those components that have been tested together can be used together for packaging. Therefore, no substitution is allowed between manufacturers nor can components be interchanged from the same company unless the user has tested those multiple components together. The manufacturer provides certification stating what components can be used together, using UN specification packaging. **Certification should be kept with all shipping documents and made available to CAP inspectors upon request.**
5. Examples of Category A and B pathogens: The list is provided as guidance only, not all inclusive and subject to change. These are specific organisms required by state regulation Title 173 to be shipped to NPHL.

<u>Category A Shipper</u>	<u>Category B Shipper</u>
<p>Infectious Substance UN2814 (White Shipper)</p> <p>Culture reasonably suspected to be:</p> <p><i>Bacillus anthracis</i>*</p> <p><i>Brucella spp.</i>*</p> <p><i>Burkholderia mallei</i> *</p> <p><i>Burkholderia pseudomallei</i> *</p> <p><i>Francisella tularensis</i>*</p> <p><i>Yersinia pestis</i>*</p> <p><i>Escherichia coli, verotoxigenic</i> (shigatoxin positive)</p> <p><i>M. tuberculosis complex</i></p> <p><i>Shigella dysenteriae</i></p> <p>*If cannot rule out by LRN protocol, contact NPHL (ship via FedEx). If confirmed by sequencing or Maldi-Tof, then considered Select Agent - Do NOT ship via FedEx/ requires CDC permit to transport by ground</p>	<p>Biological Substance UN3373 (Brown Shipper)</p> <p>Culture or Tube:</p> <p><i>Bordetella pertussis</i></p> <p><i>Haemophilus influenza</i> (sterile site)</p> <p><i>Listeria monocytogenes</i></p> <p><i>Neisseria meningitidis</i></p> <p><i>Salmonella spp</i></p> <p><i>Vibrio cholerae</i></p>

6. Certified shipper must hand-deliver non-select Category A shipments directly to the Fed Ex courier. Include the necessary shipment paperwork.
7. **Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.**

Shipping Instructions for Category A (FedEx Only)

Lincoln/Greater Nebraska Sentinel Laboratories

Supplies and Equipment:

1. White Shipper - Infectious substances, affecting humans, UN2814 (Category A):
 - a. Leak proof primary container – supplied by sentinel laboratory, must be leakproof and sealed by parafilm or tape.
 - b. Secondary & Outer Packaging - must use corresponding products certified to meet the internal pressure requirements of 95kPa(13.8 lbs/in²) because shipments are likely to be placed into unpressurized cargo sections of aircraft which fly at high altitudes. Therefore, the shipping systems are provided by NPHL which contain corresponding components including a leak proof, pressure-resistant secondary vessel, absorbent material, bubble wrap and rigid durable outer box which measures at least the required 4x4 inch on one surface and labeled with strict UN manufacturing markings:
 - i. Ambient temperature: Safety T Pak™ (STP-100 Category A Shipping System, Ambient. Maximum Capacity: four 10 mL vials. System includes secondary, absorbent, and rigid outer packaging.) See drop/pressure certification.
Example: *Eschericia coli*, verotoxigenic culture (O157 and non-O157), *Mycobacterium tuberculosis* complex, *Shigella dysenteriae*, or organisms reasonably suspected or cannot be ruled out for *Bacillus anthracis*, *Brucella* spp, *Burkholderia mallei* or *pseudomallei*, *Francisella tularensis*, *Yersinia pestis*.
 - c. Leakproof Biohazard bag
 - d. Extra adsorbent (gauze or paper towel) may be necessary
 - e. Clear Tape
 - f. Preprinted FedEx Airbill (provided by NPHL)
 - g. FedEx Blank Shipper’s Declaration Form (completed on Saf-T-Pak website. NPHL to provide candy-stripped paper if color printer not available)

Certification:

- a) Managers should keep training records for each shipper, include name, location and date of training, name of the trainer, course content, documentation of testing, and a copy of the certificate of training. IATA certification is valid for 2 years.
- b) Box Certification must be kept at original site of shipment. If requested by inspectors, this can be found in the NPHL Shipping Notebook, labeled “Saf-T-Pak Proprietary Information – Development Report.”



Procedure:

Appropriate biological safety cabinet level must be used and appropriate PPE worn when performing this procedure. Standard Universal Precautions must be followed.

An organism classified as Category A to be transported outside of NPHL requires the following guidelines:

1. Locate white NPHL shipping system with UN2814 label (see above Supplies & Equipment).
2. The organism to be shipped is transferred to a primary container using standard laboratory protocol and must be performed in a biological safety cabinet. The primary container must be leak proof and sealed with tape or parafilm. It is highly recommended tube media be used as the primary container. If time does not permit subculture to tube media, please call NPHL on contact page.
3. Label primary container with at least 2 patient identifiers, date and the name of the contents.
4. Place primary container and adsorbent in biohazard bag. NPHL provides sufficient absorbent for one primary container. If multiple primary containers are used, add additional adsorbent.
5. Expel all air and seal.

6. Wrap primary container/biohazard bag snugly in piece of bubble wrap included in system. Multiple primary containers must be wrapped to prevent contact between them.
7. Place biohazard bag/bubble wrap in the round secondary vessel. Use sufficient bubble wrap to keep the inner contents from shifting. **DO NOT PLACE DRY ICE INSIDE SECONDARY VESSEL.**
8. Thread lid onto the vessel and close tightly.
9. Place vessel into the outer box with Fibreboard Coil.
10. Place completed NPHL Special Microbiology Requisition between the vessel and outer container. This serves as the list of contents.
11. At this point, it is strongly suggested the Responsible Person (supervisor) or other certified shipper evaluate package to confirm it is correctly packaged.
12. Seal box using clear tape.
13. **OUTER BOX LABEL** - Manually complete the following lines on pre-printed label on outer box:
 - a. "Shipper" - **Responsible person certified to ship Category A**
 - b. "24 hr Emergency Phone Number" - **Responsible person MUST have immediate access to phone number given during entire duration of shipment (approximately 24 hours) and must have knowledge of the contents of the shipper. Pager numbers/answering machines not acceptable.**
 - c. Do NOT enter quantity on outside of box (as it will be reused).
14. **FedEx AIR WAYBILL** - Complete Airbill preprinted by NPHL:

		FedEx Tracking Number 8625 4740 6229	Form ID No. 0200	Sender's Copy						
1 From <small>Please print and press hard</small> Date _____ Sender's Name _____ Company _____ Address _____ City _____ State _____ ZIP _____		Sender's FedEx Account Number 711896562 NUMBER ONLY	4a Express Package Service <input checked="" type="checkbox"/> FedEx Priority Overnight <small>Next business afternoon* Shipments will be delivered on Monday unless SATURDAY Delivery is selected.</small> <input type="checkbox"/> FedEx Standard Overnight <small>Next business afternoon* Saturday Delivery NOT available.</small> <input type="checkbox"/> FedEx First Overnight <small>Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.</small> <input type="checkbox"/> FedEx 2Day <small>Second business day* Shipments will be delivered on Monday unless SATURDAY Delivery is selected.</small> <input type="checkbox"/> FedEx Express Saver <small>Third business day* Saturday Delivery NOT available.</small> <small>*To meet locations.</small>							
2 Your Internal Billing Reference First 24 characters will appear on invoice. 33-5301-3476		4b Express Freight Service <input type="checkbox"/> FedEx 1Day Freight* <small>Next business day** Shipments will be delivered on Monday unless SATURDAY Delivery is selected.</small> <input type="checkbox"/> FedEx 2Day Freight <small>Second business day** Shipments will be delivered on Monday unless SATURDAY Delivery is selected.</small> <input type="checkbox"/> FedEx 3Day Freight <small>Third business day** Saturday Delivery NOT available.</small> <small>**Call for Confirmation.</small>								
3 To Recipient's Name Client Services Company Nebraska Public Health Laboratory Recipient's Address Medical Science Bldg (MSB) 3500 4400 Emile Street City Omaha State NE ZIP 68105		5 Packaging <input type="checkbox"/> FedEx Envelope* <input type="checkbox"/> FedEx Pak* <small>Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.</small> <input type="checkbox"/> FedEx Box <input type="checkbox"/> FedEx Tube <input checked="" type="checkbox"/> Other <small>*Declared value limit \$500.</small>								
6 Special Handling <input checked="" type="checkbox"/> SATURDAY Delivery <small>NOT Available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 2Day Freight.</small> <input type="checkbox"/> HOLD Weekday at FedEx Location <small>Available ONLY for FedEx First Overnight.</small> <input type="checkbox"/> HOLD Saturday at FedEx Location <small>Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.</small> Does this shipment contain dangerous goods? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <small>As per attached Shipper's Declaration.</small> <input type="checkbox"/> Yes <small>Shipper's Declaration not required.</small> <input type="checkbox"/> Dry Ice <small>Dry Ice, UN 1845</small> _____ kg <input type="checkbox"/> Cargo Aircraft Only <small>Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.</small>		7 Payment <small>Bill to:</small> Enter FedEx Acct. No. or Credit Card No. below. <input type="checkbox"/> Sender Acct. No. Section 1 not billable <input checked="" type="checkbox"/> Recipient <input type="checkbox"/> Third Party <input type="checkbox"/> Credit Card <input type="checkbox"/> Cash/Check FedEx Acct. No. 711896562 Exp. Date _____ Credit Card No. _____ <table border="1"> <tr> <td>Total Packages</td> <td>Total Weight</td> <td>Total Declared Value*</td> </tr> <tr> <td>1</td> <td>2</td> <td>\$.00</td> </tr> </table> <small>*Your liability is limited to \$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.</small>			Total Packages	Total Weight	Total Declared Value*	1	2	\$.00
Total Packages	Total Weight	Total Declared Value*								
1	2	\$.00								
 Find drop-off locations at fedex.com Simplify your shipping. Manage your account. Access all the tools you need.		8 Residential Delivery Signature Options <small>If you require a signature, check Direct or Indirect.</small> <input type="checkbox"/> No Signature Required <small>Package may be left without obtaining a signature for delivery.</small> <input checked="" type="checkbox"/> Direct Signature <small>Someone at recipient's address may sign for delivery. Free option.</small> <input type="checkbox"/> Indirect Signature <small>If no one is available at recipient's address, someone at a neighboring address may sign for delivery. Free option.</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">520</div>								

- a. Box 1 "From" including ship date, shipper's name, company, address, city, state and zip.
 - i. **MUST have immediate access to phone number given during entire duration of shipment (approximately 24 hours) and must have knowledge of the contents of the shipper. Pager numbers not acceptable.**
 - ii. Sender's FedEx Number – leave blank
- b. Box 2 – confirm NPHL Billing Reference number begins with 33-5301-3476
- c. Box 3 – confirm shipment is going to the following updated address (cross out old address and write above the line; address on box, airbill and shippers declaration MUST match):

- Name – Client Services
- Company – Nebraska Public Health Laboratory (Do NOT ship to other recipients)
- Address – Medical Science Bldg (MSB) 3500
- Address – 4400 Emile Street
- City – Omaha
- Country - USA
- Providence/State – Nebraska
- Postal Zip – 68105
- Telephone (800) 334-0459

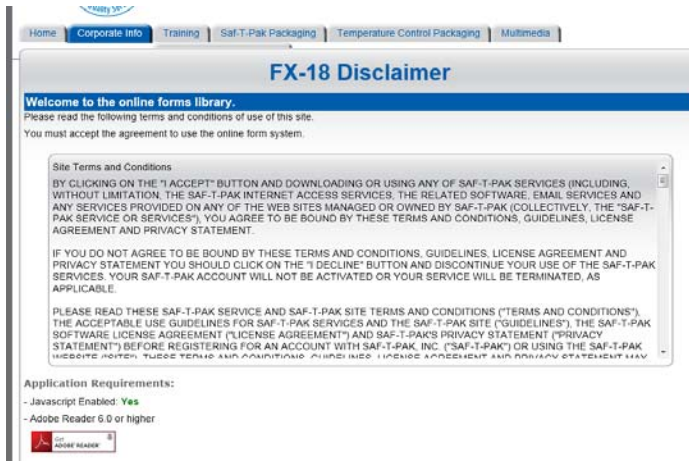
- Box 4a – confirm check on FedEx Priority Overnight.
- Box 4b – leave blank
- Box 5 – confirm “Other” packaging is checked.
- Box 6 – confirm SATURDAY Delivery is checked if shipping on Friday
- Box 6 – confirm “Does this shipment contain dangerous goods? Yes – As per attached Shipper’s Declaration” is checked
- Box 7 –
 - confirm Bill to: Recipient is checked and NPHL FedEx number is listed (NOT intended for any other use).
 - confirm Total Package is 1 (one)
 - confirm Total Weight is approximately 2 lbs (adjust if necessary)

15. **SHIPPERS DECLARATION FORM** - Must be completed on FedEx Express FX-18 recognized software.

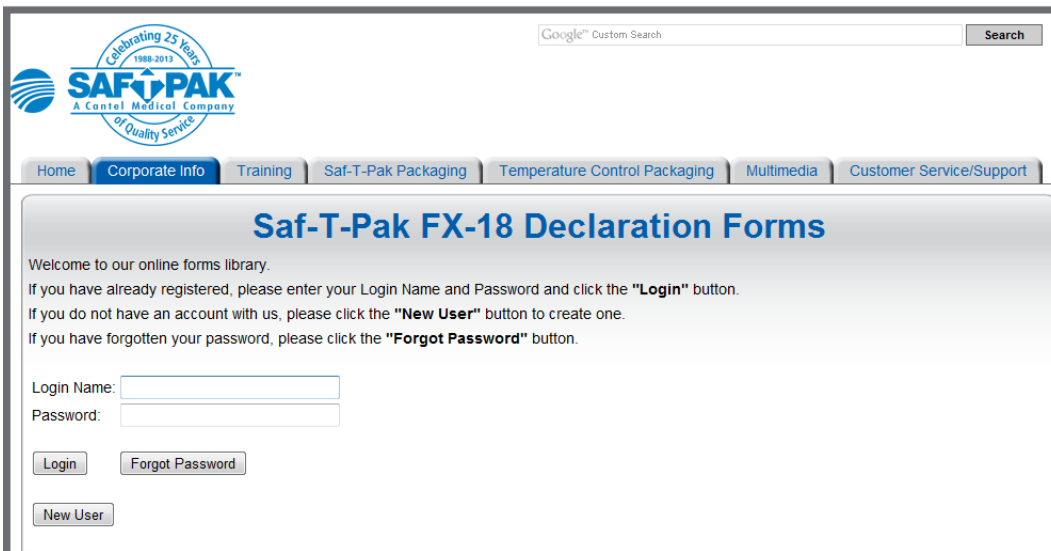
- Logon to www.saftpak.com.
- Click on Online Forms (left side of home page)



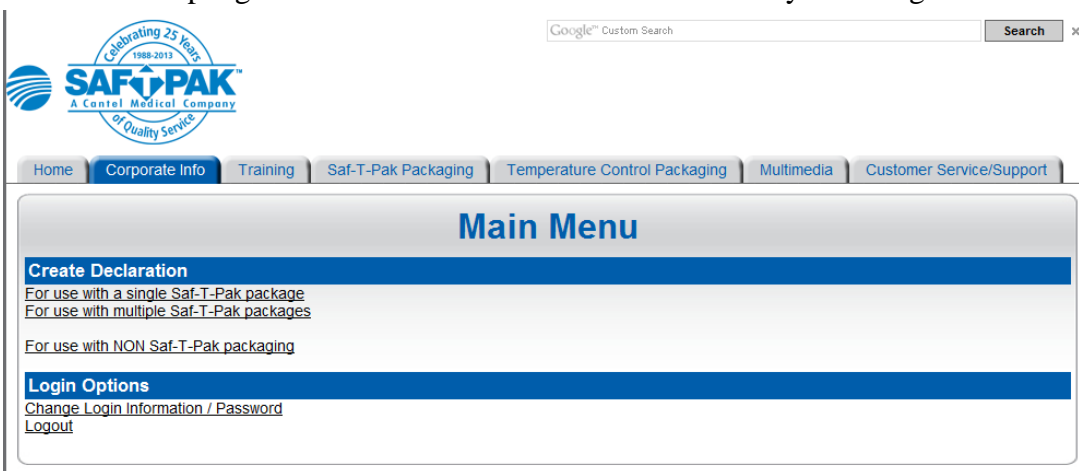
- Read and accept the terms of the FX-18 Disclaimer.



d. First time users must create profile. Keep passwords for future reference.



16. Read and accept agreement when asked. Create declaration by choosing “for use single Saf-T-Pak”



- a. Select STP-100 for package selection. Click NO when asked if using refrigerant. Click Next.



- b. Complete the following details on the form:
- i. Profile option – create profile name for future use
 - ii. Complete all fields in **Shippers Details** sections with your facility information

Home Corporate Info Training Saf-T-Pak Packaging Temperature Control Packaging Multimedia

Declaration Details

New Profile Saved.

Profile Options

Profile Name:

Save current information as new profile named:

Shipper's Declaration

Shipper Details

First Name	<input type="text"/>	Company	<input type="text"/>
Last Name	<input type="text"/>	Zip/Postal Code	<input type="text"/>
Address	<input type="text"/>	City	<input type="text"/>
	<input type="text"/>	Country	<input type="text" value="--Choose--"/>
	<input type="text"/>	State	<input type="text" value="--Choose a Country--"/>
Telephone	<input type="text"/>	Recommended Format: 780 486 0296	

Consignee Details

First Name	<input type="text"/>	Company	<input type="text"/>
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- c. Complete **Consignee Details** as Follows:
- i. First Name – Client
 - ii. Last Name – Services
 - iii. Company – Nebraska Public Health Laboratory
 - iv. Address – Medical Science Bldg (MSB) 3500
 - v. Address – 4400 Emily Street
 - vi. City – Omaha
 - vii. Country - USA
 - viii. Providence/State – Nebraska
 - ix. Postal Zip – 68105
 - x. Telephone 800 334 0459

d. Transport Details

Transport Details

Air Waybill

Shippers Reference Number

Aircraft Type Passenger and Cargo Cargo Only (Automatically Determined)

Airport of Departure

Airport of Destination

Nature And Quantity Of Dangerous Goods

Dangerous Goods Identification				Quantity and type of Packaging	Packing Inst.	Authorization
UN or ID no.	Proper Shipping Name	Class or Division (Subsidiary risk)	Packing Group			
UN2814	Infectious Substance, affecting humans	6.2		# <material> box(es) x <qty> <units> Fibreboard box x mL	620	A81? <input type="checkbox"/>

- i. Waybill - Enter number from FedEx Airbill to be sent with package
- ii. Shippers Reference Number – Enter “33-5301-3476”
- iii. Aircraft Type – will be automatically determined
- iv. Airport of Departure – enter your city
- v. Airport of Destination – enter Omaha

e. Nature and Quantity of Dangerous Goods

Nature And Quantity Of Dangerous Goods

Dangerous Goods Identification				Quantity and type of Packaging	Packing Inst.	Authorization
UN or ID no.	Proper Shipping Name	Class or Division (Subsidiary risk)	Packing Group			
UN2814	Infectious Substance, affecting humans	6.2		# <material> box(es) x <qty> <units> Fibreboard box x mL	620	A81? <input type="checkbox"/>

- i. UN or ID no. – Default to UN2814
- ii. Proper Shipping Name – type exact technical name as below:
 - 1. Suspected Category A Infectious Substance
- iii. Quantity and type of Packaging
 - 1. Default to #<material>box(es) x <qty> <unites> at first dropdown box
 - 2. Enter “1” Fibreboard box
 - 3. Enter approximant number and click on correct dropdown choice (mL or g)

f. Additional Handling Information

New Line

Additional Handling Information

Person Responsible Name

Person Responsible Number Recommended Format: 780 486 0296

24-Hour Emergency Name

24-Hour Emergency Number Recommended Format: 780 486 0296

Other

Name of Signatory

Title of Signatory

Place

Date Required Format: 26-Nov-2013

Miscellaneous

Printer Type

Main Menu Create Declaration

- i. Person Responsible Name – enter name (must know contents of package)
- ii. Person Responsible Phone Number – enter 24/7 number which will be answered by actual person who will be knowledgeable of the contents of package during entire duration of shipment (usually overnight).
- iii. 24-Hour Emergency Number – usually same as responsible person or 3rd party contract number ie)Chemtrec
- iv. Name of Signatory – enter Responsible Person name
- v. Title of Signatory – enter “Shipping Manager”
- vi. Place – Enter your city
- vii. Shipping Date – enter actual date shipped

g. Miscellaneous

i. Printer type –

1. If color printer available, use blank paper;
2. If black & white printer – use “blank candy stripped paper” provided by NPHL

h. Click on “Create Declaration”

i. **Print four (4) copies of Shipper’s Declaration (one copy for your files and 3 copies for FedEx)**

17. Make copies of all paperwork (airbill receipt, shipper declaration, etc.). **Save all shipping documents for 2 years** in NPHL Packaging and Shipping Division 6.2 Materials Notebook under “shipping records” tab or other designated area.
18. Place paperwork into a clear resealable FedEx pouch, the following paperwork in specific order. Close flap and remove label backing. Adhere pouch to top of packaging such that address shows (may need to fold over only on side with arrows – do not cover other labels):
 - a. Top - Air Waybill
 - b. 3 copies of candy-stripped Shipper’s Declaration – fold in half, place such that candy- stripped edge can be seen under the Air Waybill)
19. At this point, it is strongly suggested Responsible Person (supervisor) or other certified shipper evaluate paperwork to confirm it is correctly completed. If not correctly completed, FedEx carrier will NOT accept.
20. Deliver FedEx shipment **in person** to FedEx carrier.

21. **Notify NPHL at 24/7 pager (402) 888-5588 with FedEx tracking number**

Shipping Instructions for Category B (NPHL Ground Courier Only)

Supplies and Equipment:

2. Biological Substances UN3373 (Category B):
 - a. Leak proof primary container – supplied by sentinel laboratory, must be leakproof and sealed by parafilm or tape.
 - b. Secondary & Outer Packaging - must use corresponding products certified to meet the internal pressure requirements of 95kPa(13.8 lbs/in²) because shipments are likely to be placed into unpressurized cargo sections of aircraft which fly at high altitudes. Therefore, the shipping systems are provided by NPHL which contain corresponding components including a leak proof, pressure-resistant secondary vessel, absorbent material, and rigid durable outer package which measures at least the required 4x4 inch on one surface and labeled with strict UN manufacturing markings:
 - i. Ambient temperature: Safety T Pak™ (STP-200 Category B Shipping System, Ambient. Maximum Capacity: four 10 mL vials. System includes secondary, absorbent, and rigid outer packaging.) See drop/pressure certification.
Example: *Bordetella pertussis*, *Haemophilus influenzae* (sterile site), *Listeria monocytogenes*, *Neisseria meningitidis*, *Salmonella* spp, *Vibrio cholerae*.
 - c. Leakproof Biohazard bag
 - d. Extra adsorbent (gauze or paper towel) may be necessary
 - e. Clear Tape
 - f. NPHL Ground Courier Category B Shipping Paper (provided by NPHL)
 - g. Emergency Response Information Guide 158 (provided by NPHL)

Certification:

Box Certification must be kept at original site of shipment. If requested by inspectors, this can be found in the NPHL Shipping Notebook, labeled “Saf-T-Pak Proprietary Information – Development Report.”

Procedure:

Appropriate biological safety level must be used and appropriate PPE worn when performing this procedure. Standard Universal Precautions must be followed.

An organism classified as Category B to be transported outside of NPHL requires the following guidelines:

1. Locate NPHL brown shipping system with UN3373 label (see above Supplies & Equipment).
2. The organism to be shipped is transferred to a primary container using laboratory protocol. The primary container must be leak proof and sealed with tape or parafilm. It is highly recommended tube media be used as the primary container.
3. Label primary container with at least 2 patient identifiers, date and the name of the contents.
4. Place primary container and absorbent material in biohazard bag. Expel all air and seal.
5. Wrap primary container/biohazard bag snugly in piece of bubble wrap to prevent shifting in secondary vessel. Multiple primary containers must be wrapped to prevent contact between them.
6. Place biohazard bag/bubble wrap in the round secondary vessel above the absorbent material provided. Use sufficient bubble wrap to keep the inner contents from shifting. **DO NOT PLACE DRY ICE INSIDE SECONDARY VESSEL.**
7. Thread lid onto the vessel and close tightly.
8. Place vessel into the outer box with Fibreboard Coil.
9. Place completed NPHL Special Microbiology Requisition between the vessel and outer container.

10. Seal box using clear tape.
11. Manually complete the following lines on pre-printed label on outer box:
 - a. Responsible Person – print name
 - b. Phone number. **Responsible Person MUST have immediate access to phone number given during business day and must have knowledge of the contents of the shipper.**
12. **NPHL Ground Courier Category B Shipping Paper** – complete the following:
 - a. Responsible Person and Phone Number, same as listed on outside of box.
 - b. List of Contents – list all organism shipped in secondary vessel
 - c. Total Quantity – list number of plates or tubes
 - d. Complete Shipper Name Box:
 - i. Print Name – who actually physically packaged the Category B material
 - ii. Signature
 - iii. Date
13. Make copy of all paperwork (requisition, shipping paper, etc.). **Save all shipping documents for 2 years** in NPHL Packaging and Shipping Division 6.2 Materials Notebook under “shipping records” tab or other designated area.
14. Place paperwork into clear resealable pouch attached to top flap.
15. Arrange with current NPHL courier for pickup. If NPHL courier not available, please call NPHL 24/7 pager at (402) 888-5588 to make arrangements.

References:

1. Transporting Infectious Substances Safely, US Department of Transportation Pipeline and Hazardous Materials Safety Administration. October 1, 2006
2. Sentinel Laboratory Guidelines for Suspected Agents of Bioterrorism and Emerging Infectious Diseases, Packing and Shipping Infectious Substances, American Society for Microbiology. 15 November 2010.
3. FedEx Ship Manager® User Guide:
[http://fedex.com/us/software/pdf/FedEx_Ship_Manager_Software_User_Guide_v2440_\(English\)_03122010.pdf](http://fedex.com/us/software/pdf/FedEx_Ship_Manager_Software_User_Guide_v2440_(English)_03122010.pdf)
4. IATA Volume 2 Air Operator and Agency Certification and Application Process, Chapter 2 General Information for Air Carrier Certification and Fractional Ownership Application, Section 6 Hazardous Materials or Dangerous Goods 7/24/2009:
[http://fedex.com/us/software/pdf/FedEx_Ship_Manager_Software_User_Guide_v2440_\(English\)_03122010.pdf](http://fedex.com/us/software/pdf/FedEx_Ship_Manager_Software_User_Guide_v2440_(English)_03122010.pdf)
5. Packaging & Shipping Division 6.2 Materials Workshop, National Laboratory Training Network, Presented by Patricia L Payne, PhD, MT(ASCP), consultant to APHL, 2012