

Infectious Substance Shipping

SAND2020-2905PE

Q&A Refresher Training 2020

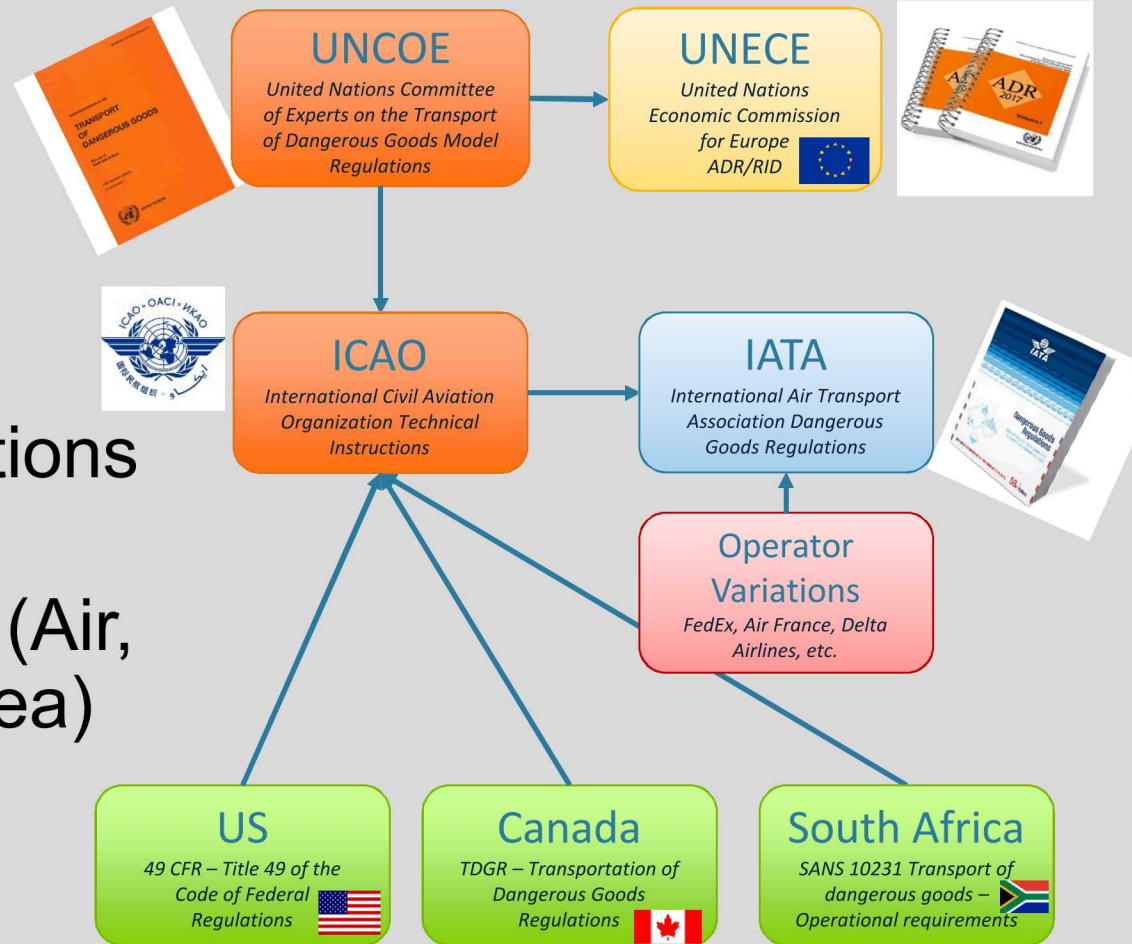


Agenda

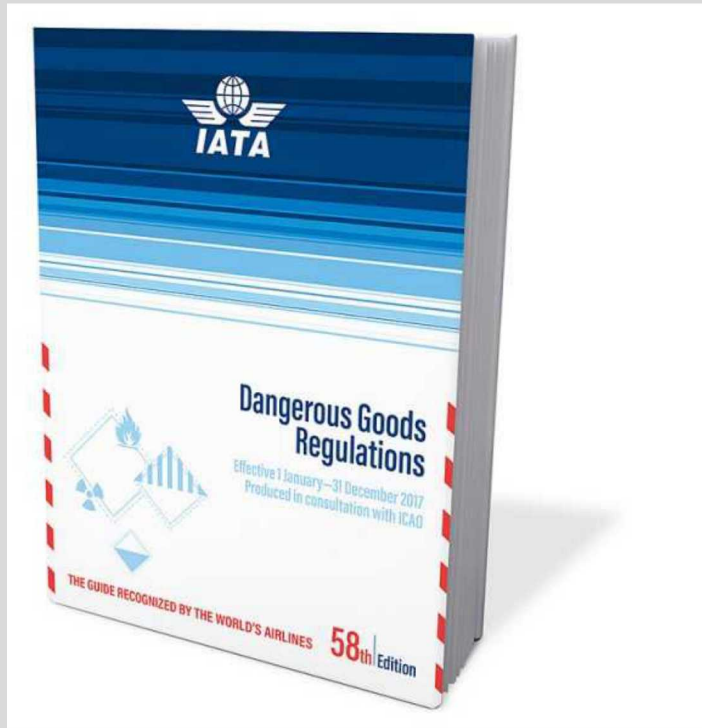
- Review of infectious substance shipping regulations
- Presentation of changes in the regulations over the past few years
- Answer regulatory related questions submitted by participants
- Discussion of frequently asked questions

Shipping & Transport Regulations

- International
- Regional
- National
- Industry
- Postal regulations
- Mode requirements (Air, Road, Rail, Sea)
- Carrier requirements
- Import/Export



IATA Dangerous Goods Regulations



- IATA – Represents, leads, protects and serves the air industry
- 230 member airlines and air carriers (93% of intl. air traffic)
- International standard – most air shipments will be inspected based on IATA requirements
- Generally most restrictive
- Incorporates all ICAO/UN requirements and most national regulations

http://www.iata.org/whatwedo/cargo/dangerous_goods

Comprehension Check 1

What is the difference between IATA and ICAO?

Select the best answer:

- A. One covers ground transport and the other covers air transport
- B. ICAO is recognized as an international law making body whereas IATA is an industry standard protecting the air industry
- C. IATA is international and ICAO is only regional
- D. ICAO is more restrictive than IATA

Steps to shipping

- Classify - Determine whether or not a substance is dangerous and using classification criteria determine the relevant class(es)/division(s)
- Identify - Select a proper shipping name from the *List of Dangerous Goods (or Hazardous Materials Table)*
- Select Proper Packaging - Use the packing instruction to identify and select appropriate packaging.
- Package - Follow the instructions provided by the packaging manufacturer and the packing instruction to pack the dangerous good.
- Mark and Label - Addresses, proper shipping name, name and tel. number of person responsible, appropriate hazards labels, other necessary labels
- Complete documentation - air waybill, shipper's declaration for dangerous goods
- Make arrangements - check for import/export permit, check compliance with variations, security and emergency response planning, notify consignee, confirm receipt, etc.



Classification

Category A Definition

3.6.2.2.2.1 Category A: 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.

(emphasis added)



Examples: Category A Infectious Substances

- Table lists examples and is not exhaustive
- New or emerging pathogens meeting the same criteria should be classified as Category A
- Cultures may be Category A or B depending on the microorganism

Table 3.6.D
Indicative Examples of Infectious Substances Included in Category A in Any Form Unless Otherwise Indicated (3.6.2.2.2.1)

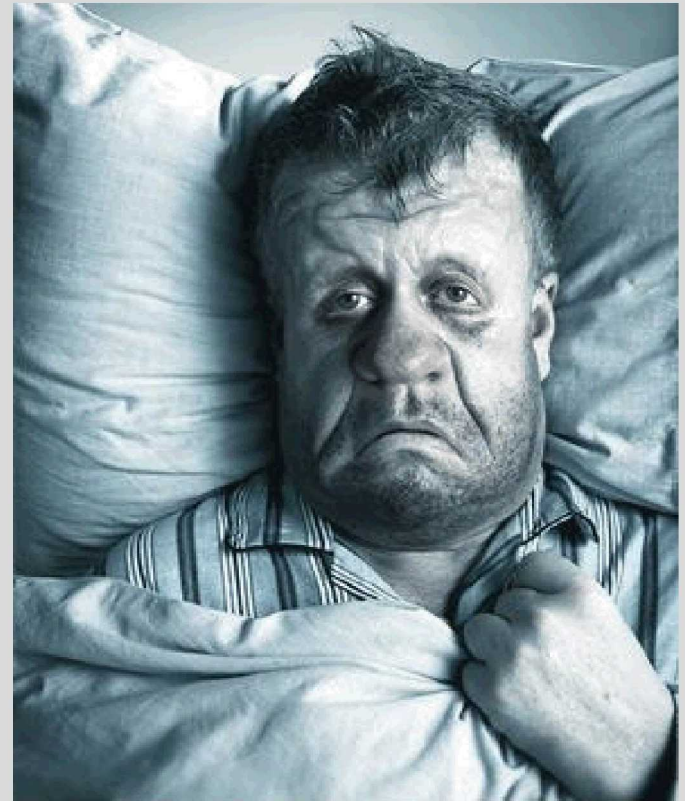
UN Number and Proper Shipping Name	Micro-organism
UN 2814	<i>Bacillus anthracis</i> (cultures only)
Infectious substance affecting humans	<i>Brucella abortus</i> (cultures only)
	<i>Brucella melitensis</i> (cultures only)
	<i>Brucella suis</i> (cultures only)
	<i>Burkholderia mallei</i> – <i>Pseudomonas mallei</i> – Glanders (cultures only)
	<i>Burkholderia pseudomallei</i> – <i>Pseudomonas pseudomallei</i> (cultures only)
	<i>Chlamydia psittaci</i> – avian strains (cultures only)
	<i>Clostridium botulinum</i> (cultures only)
	<i>Coccidioides immitis</i> (cultures only)
	<i>Coxiella burnetii</i> (cultures only)
	Crimean-Congo hemorrhagic fever virus
	Dengue virus (cultures only)
	Eastern equine encephalitis virus (cultures only)

UN Number and Proper Shipping Name	Micro-organism
	Kyasanur Forest disease virus
	Lassa virus
	Machupo virus
	Marburg virus
	Monkeypox virus
	<i>Mycobacterium tuberculosis</i> (cultures only)
	Nipah virus
	Omsk hemorrhagic fever virus
	Poliovirus (cultures only)
	Rabies virus (cultures only)
	<i>Rickettsia prowazekii</i> (cultures only)
	<i>Rickettsia rickettsii</i> (cultures only)
	Rift Valley fever virus (cultures only)
	Russian spring-summer encephalitis virus (cultures only)
	Sabia virus
	<i>Shigella dysenteriae</i> type 1 (cultures only)
	Tick-borne encephalitis virus (cultures only)
	Variola virus
	Venezuelan equine encephalitis virus (cultures only)
	West Nile virus (cultures only)
	Yellow fever virus (cultures only)
	<i>Yersinia pestis</i> (cultures only)
UN 2900	African swine fever virus (cultures only)
Infectious substances affecting animals	Avian paramyxovirus Type 1 – Velogenic Newcastle disease virus (cultures only)
	Classical swine fever virus (cultures only)
	Foot and mouth disease virus (cultures only)
	Goatpox virus (cultures only)
	Lumpy skin disease virus (cultures only)
	<i>Mycoplasma mycoides</i> – Contagious bovine pleuropneumonia (cultures only)
	Peste des petits ruminants virus (cultures only)
	Rinderpest virus (cultures only)
	Sheep-pox virus (cultures only)
	Swine vesicular disease virus (cultures only)
	Vesicular stomatitis virus (cultures only)

Definitions: Category B

3.6.2.2.2 Category B:
An *infectious substance*
which does not meet the
criteria for inclusion in
Category A

(emphasis added)



Exceptions (Not Regulated)

- Substances which do not contain infectious substances (unlikely to cause disease)
- Non-pathogenic micro-organisms
- Neutralized pathogens (no longer pose health risk)
- Environmental samples which are not considered to pose a “significant” risk of infection
- Dried blood spots, faecal occult blood screening samples
- Blood, blood components, tissues, organs intended for transfusion/transplantation
- Patient specimens with “minimal likelihood” that pathogens are present

Basic Classification Summary

Category A	Category B	Exempt/Not Regulated
High Risk	Moderate to Low Risk	Minimal Risk
Permanent Consequences	Short term consequences	No consequences
RG4, RG3 (Cultures)	RG3 (Patient Specimens), RG2	RG1 and non-pathogens

Regulatory Updates - Classification



In 2017 IATA updated the classification requirements for live infected animals. Specifically, they have added and clarified in 3.6.2.6. a definition for “Infected Animal Material”

Essentially, they required material from animals that have been intentionally infected to be treated the same as a “culture”. Such material must be classified as UN2814, UN2900 or UN3373 as appropriate for a culture of the agent.

Removed this text in 2019.

Comprehension Check 2

Various pure cultures of putative *Salmonella typhi* isolated from chicken eggs collected from local farms

A – Category A Infectious substance

B – Category B Infectious substance

C – Exempt or not regulated

Comprehension Check 3

Blood from an AIDS patient sent to quantify HIV viral load.

A – Category A Infectious substance

B – Category B Infectious substance

C – Exempt or not regulated

Comprehension Check 4

Human breast tissue biopsy from an otherwise healthy patient for cancer screening.

A – Category A Infectious substance

B – Category B Infectious substance

C – Exempt or not regulated

Comprehension Check 5

Blood collected from a very sick patient suspected to have Lassa hemorrhagic fever.

A – Category A Infectious substance

B – Category B Infectious substance

C – Exempt or not regulated

Comprehension Check 6

Swabs collected from patients with suspected 2019-nCoV

- A – Category A Infectious substance
- B – Category B Infectious substance
- C – Exempt or not regulated



Identification

Proper Shipping Names & UN ID Numbers



UN/ID No. A	Proper Shipping Name B	Class or Div. C	Hazard Label(s) E	PG F	Passenger and Cargo Aircraft		Cargo Aircraft Only		Special provisions M	ERG Code N
					Pkg Inst I	Max Net Qty/Pkg J	Pkg Inst K	Max Net Qty/Pkg L		
3291	Clinical waste, unspecified n.o.s.	6.2	Infectious substance		622	No Limit	622	No Limit		6L
3373	Diagnostic specimens	6.2			See 650	See 650	See 650	See 650		6L
3373	Biological substance, Category B	6.2			See 650	See 650	See 650	See 650		6L
1845	Dry ice	9	Misc.	III	904	200 kg	904	200 kg	A48	9L
2814	Infectious substance, affecting humans	6.2	Infectious substance		602	50mL or 50 g	602	4L or 4kg	A81 A140	11Y
2900	Infectious substance, affecting animals only	6.2	Infectious substance		602	50mL or 50 g	602	4L or 4kg	A81 A140	6L

- Every dangerous good must be assigned a **Proper Shipping Name (PSN)**
- The United Nations publishes a list of internationally standardized proper shipping names with corresponding four digit “UN” numbers
- **A dangerous good can have only one PSN**

Examples of Proper Shipping Names

Category A

- UN 2814 – **Infectious substance, affecting humans***
- UN 2900 – **Infectious substance, affecting animals* *only***

Category B

- UN 3373 – **Biological substance, Category B**

Dry Ice

- UN 1845 – **Dry ice**
- UN 1845 – **Carbon dioxide, solid**

Non-pathogenic GMOs

- UN 3245 – **Genetically modified micro-organism**

Exempt

- Exempt human specimen
- Exempt animal specimen

Regulatory Updates - Identification



None recently

Comprehension Check 7

Which of the following proper shipping names are acceptable? Select only one answer:

- A. UN2814 Infectious substance, affecting humans and animals
- B. UN3373 Biological substance, cat. B
- C. UN1845 Solid Dry Ice
- D. UN3373 Infectious substances, category B
- E. None of these are acceptable

Comprehension Check

Which of the following proper shipping names are acceptable? Select only one answer:

- A. UN2814 Infectious substance, affecting humans ~~and animals~~
- B. UN3373 Biological substance, ~~cat. B~~
Category B
- C. UN1845 ~~Solid~~ Dry Ice
- D. UN3373 ~~Infectious~~ substances, category B
Biological
- E. ~~None of these are acceptable~~



Comprehension Check 8

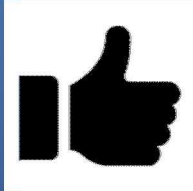
Which of the following proper shipping names are acceptable? Select only one answer:

- A. UN2814 Infectious substances, effecting humans
- B. UN2900 Infectious substance, affecting animals
- C. UN1895 Dry ice
- D. UN3245 Genetically modified Escherichia coli
- E. None of these are acceptable

Comprehension Check

Which of the following proper shipping names are acceptable? Select only one answer:

A. UN2814 Infectious substances, affecting humans
a



B. UN2900 Infectious substance, affecting animals

C. UN1895 Dry ice
4

D. UN3245 Genetically modified ~~Escherichia coli~~
micro-organism

E. None of these are acceptable



Packaging and Packing Instructions

Overview of Packaging

Triple packaging required for Category A, B, and Exempt

Primary receptacle

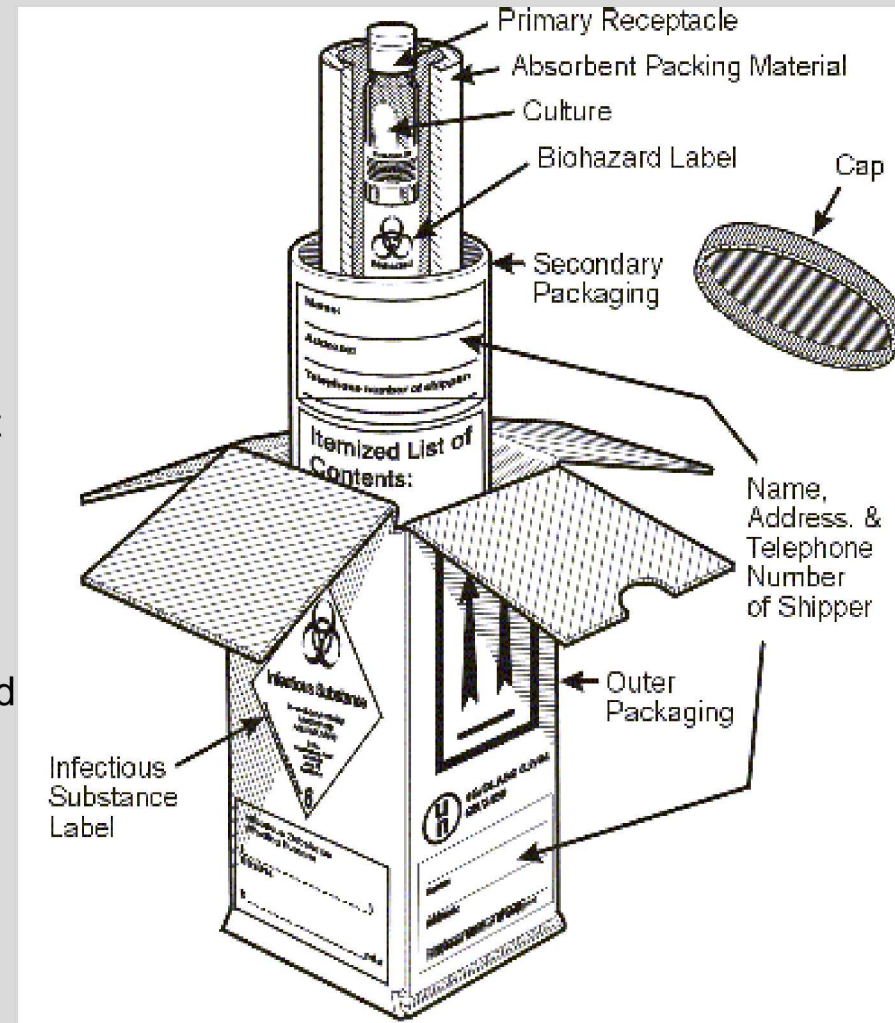
- A primary watertight, leakproof receptacle containing the specimen

Secondary packaging

- A durable, watertight, leakproof packaging to enclose and protect the primary receptacle(s)
- Absorbent material shall be used to absorb all fluid in case of breakage

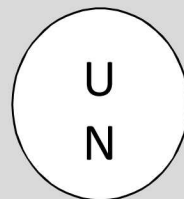
Outer packaging

- Secondary packagings are placed in outer packagings with cushioning material
- Outer packagings protect their contents from physical damage while in transit
- At least one external surface with a minimum dimension of 10x10 cm



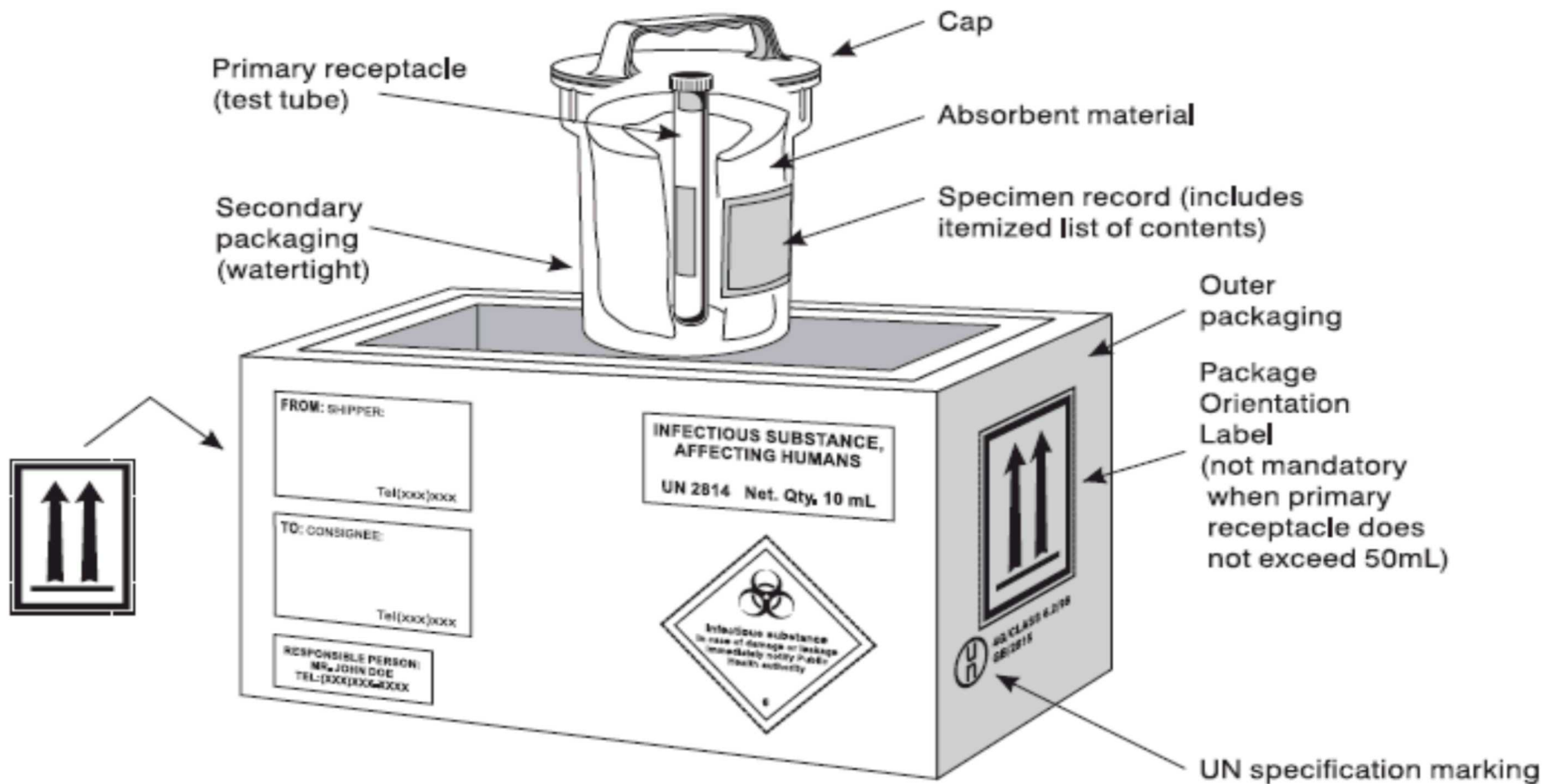
Category A Packaging: IATA PI 620

- Good condition
- Leakproof primary
- Leakproof secondary
- Pressure capable primary or secondary
- Absorbent (for liquids)
- Multiple fragile primaries wrapped individually
- Itemized list
- Rigid outer packaging
- 4 in. minimum
- Qty Limit 50 mL or 50 g for passenger aircraft. 4 L or 4 kg for cargo only aircraft
- Name and telephone # marked on package
- **Must be marked with UN specification**



4G/Class 6.2/2010
USA/+AA16324

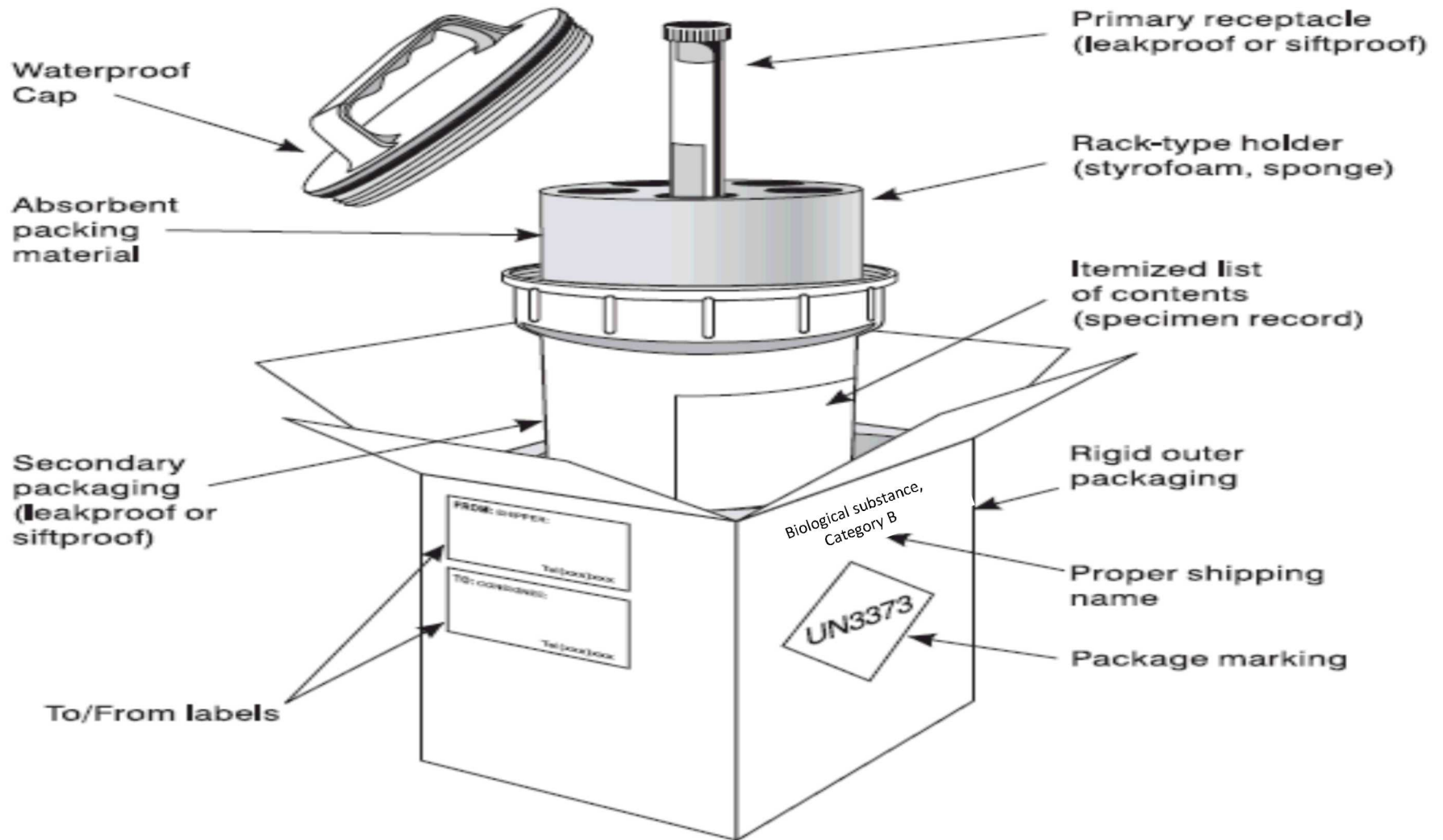
Category A Packaging



Category B Packaging: IATA PI 650

- Good quality
- Leakproof/siftproof primary (1 L max)
- Leakproof/siftproof secondary
- Absorbent
- Multiple fragile primaries wrapped individually
- Pressure capable primary or secondary
- Itemized list
- Rigid outer packaging
- Two sides at least 4 in.
- Qty. less than 4L or 4kg
- Name and telephone # marked on package or airwaybill
- **NO spec marks but 1.2m drop**

Category B Packaging



Regulatory Updates – Packaging



There are no packaging updates or changes for 2020.

Comprehension Check 9

True or False

UN2900 must be in a Class 6.2 UN specification marked package.

Comprehension Check 10

True or False

When using Class 6.2 UN spec packaging for **Category A**, the package must be used in the way it was tested and certified by the mfg, including all the original components. No mixing or matching alternate secondary containers, different configurations, etc.

Comprehension Check 11

True or False

When using Class 6.2 UN spec packaging for **Category B**, the package must be used in the way it was tested and certified by the mfg. No mixing or matching alternate secondary containers, different configurations, etc.



Marking and Labeling

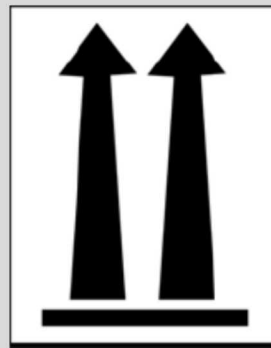
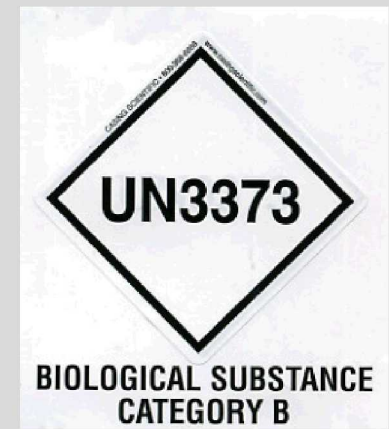
Marking & Labeling Overview

Markings provide information on

- Contents of package
- Nature of hazard
- Applicable packaging standards
- Must be clearly visible

Labels – two types

- Hazard labels required for most dangerous goods
 - Diamond-shaped
- Handling labels required for some dangerous goods
 - Various shapes
- Affixed to outside of each package



Marking & Labeling

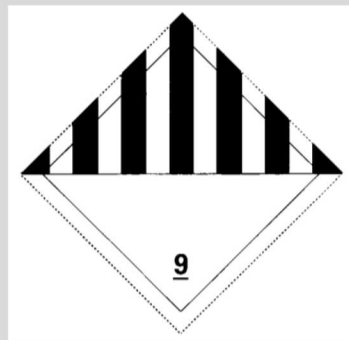
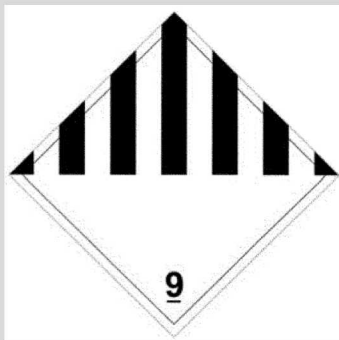
- Addresses of shipper and consignee
- Name and Phone number of person responsible
- Applicable Hazard labels for each dangerous good
- Proper shipping name
- UN Number
- Quantity of Dry Ice



Regulatory Updates – Marking and Labeling



There are no marking or labeling updates or changes in 2020. Here are a few changes from years past:



49 CFR 172.446(b) . . . The solid horizontal line dividing the lower and upper half of the label is optional in the U.S.

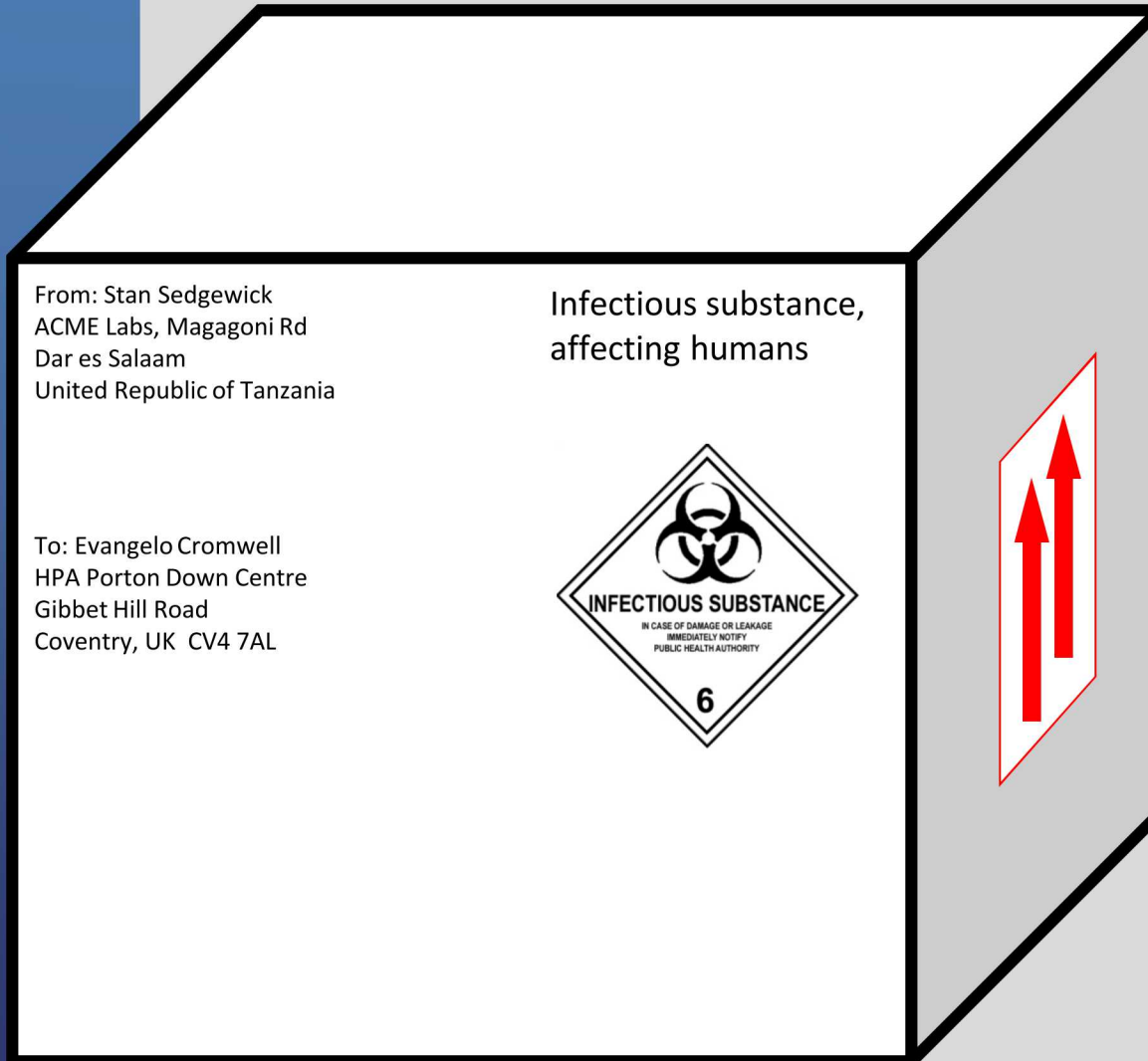


Danger label was phased out. No longer acceptable

Overpack marking height minimum
12 mm, effective Jan 01, 2016

Comprehension Check 12

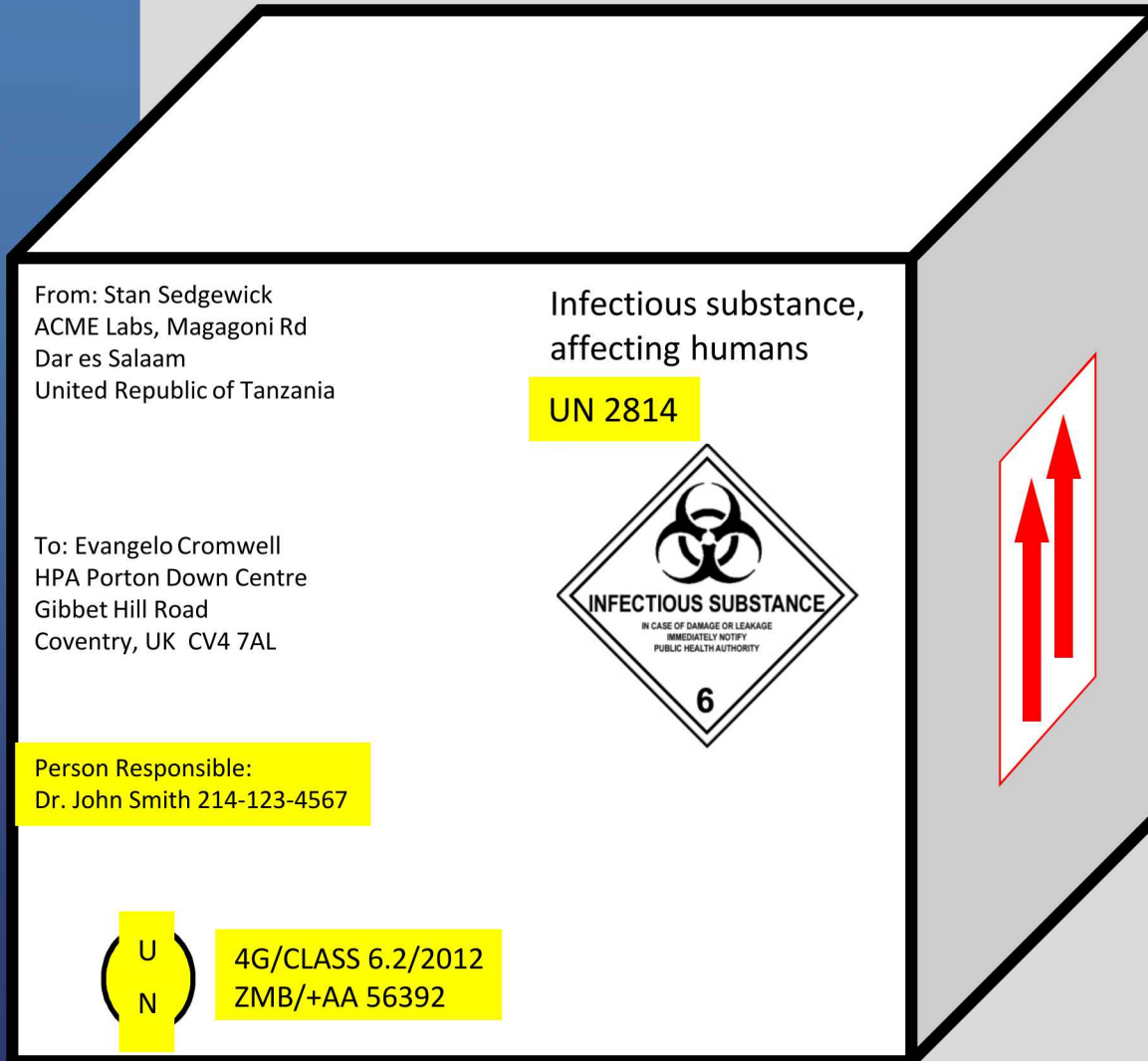
How many marks, markings, or labels are missing from this package?



- A. I don't see anything missing. This looks good to go
- B. There is one thing missing
- C. There are two things missing
- D. There are three things missing
- E. There are four or more things missing.

Comprehension Check 12

How many marks, markings, or labels are missing from this package?



- A. I don't see anything missing. This looks good to go
- B. There is one thing missing
- C. There are two things missing
- D. There are three things missing
- E. There are four or more things missing.



Documentation

Required Documentation

1. Packing list / proforma invoice, which includes
 - Receiver's address
 - Number of packages
 - Detail of contents
 - Weight
 - Value (for customs purposes, indicate a minimal value if items supplied free of charge)
2. Shipping waybill
3. An itemized list of contents (e.g. packing list) which is **enclosed between the secondary and outer packaging**
4. **Category A packages also require**
 - **Shipper's Declaration for Dangerous Goods**

Shipper's Declaration

SHIPPER'S DECLARATION FOR DANGEROUS GOODS



Shipper Eric Cook (505) 284-3986 Sandia National Laboratories Albuquerque, NM 87123	Air Waybill No. _____ Page 1 of 1 Pages Shipper's Reference No. _____ (optional)
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Consignee Bronco Mendenhall Quality Laboratories 456 Downtown Avenue Atlanta, GA 01010	
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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) PASSENGER AIR CARGO AIRCRAFT XXX	Airport of Departure (optional): _____	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.
Airport of Destination (optional): _____	Shipment type: (delete non-applicable) NON-RADIOACTIVE XXXXXXXXXXXX	

NATURE AND QUANTITY OF DANGEROUS GOODS

Dangerous Goods Identification						
UN or ID No.	Proper Shipping Name	Class or Division (subsidiary hazard)	Packing Group	Quantity and Type of Packing	Packing Inst.	Authorization
UN2814	Infectious substance, affecting humans (Francisella tularensis)	6.2		1 - Fiberboard box - 30 mL	620	
	Dry ice	9		5 KG OVERPACK USED	954	

Additional Handling Information
 24 Hour emergency contact 800-123-4567

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 applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.

Name of Signatory
 Eric Cook
 Date 10/20/2020
 Signature (See warning above) *Eric Cook*

- **Required for Category A shipments**
- Need at least three original copies
- Technical Name must be on declaration
- Must be in English
- Most countries require 24-hour emergency phone number
- Legal document must be accurate
 - Legible
 - Neat
 - No spelling errors; no abbreviations
 - Whiteout must never be used

Regulatory Updates – Documentation



Since 2017, IATA no longer requires a “Title” or a “Place” to be entered in the signature line. These are now considered optional on the shipper’s declaration until 2025.

IATA has changed the term “Subsidiary Risk” to “Subsidiary Hazard”

New Shipper’s Declaration form. Old format is acceptable until December 31, 2024

SHIPPER'S DECLARATION FOR DANGEROUS GOODS



Shipper Eric Cook (505) 284-3986 Sandia National Laboratories Albuquerque, NM 87123		Air Waybill No. _____ Page 1 of 1 Pages Shipper's Reference No. _____ (optional)				
Consignee Bronco Mendenhall Quality Laboratories 456 Downtown Avenue Atlanta, GA D1010						
Two completed and signed copies of this Declaration must be handed to the operator.		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.				
TRANSPORT DETAILS This shipment is within the limitations prescribed for: _____ Airport of Departure (optional): _____ (delete non-applicable) _____ PASSENGER AND CARGO AIRCRAFT XXX _____ Airport of Destination (optional): _____ Shipment type: (delete non-applicable) _____ NON-RADIOACTIVE XXXXXXXXXX _____						
NATURE AND QUANTITY OF DANGEROUS GOODS						
Dangerous Goods Identification						
UN or ID No.	Proper Shipping Name	Class or Division (subsidiary hazard)	Packing Group	Quantity and Type of Packing	Packing Inst.	Authorization
UN2814	Infectious substance, affecting humans (Francisella tularensis)	6.2		1 - Fiberboard box - 30 mL	620	
	Dry ice	9		5 KG OVERPACK USED	954	
Additional Handling Information 24 Hour emergency contact 800-123-4567						
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 applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.						Name of Signatory Eric Cook Date 10/20/2020 Signature (See warning above) <i>Eric Cook</i>

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

Shipper Eric Cook (505) 284-3986 Sandia National Laboratories Albuquerque, NM 87123		Air Waybill No. _____ Page 1 of 1 Pages Shipper's Reference Number _____ (optional)				
Consignee Bronco Mendenhall Quality Laboratories Ltd. 456 Downtown Avenue Atlanta GA 01010		For optional use for Company logo name and address				
Two completed and signed copies of this Declaration must be handed to the operator.		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.				
TRANSPORT DETAILS This shipment is within the limitations prescribed for: _____ Airport of Departure: _____ (delete non-applicable) _____ PASSENGER AND CARGO AIRCRAFT XXXXXXXXXX _____ Airport of Destination: _____ Shipment type: (delete non-applicable) _____ NON-RADIOACTIVE XXXXXXXXXX _____						
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 Inst.	Authorization
UN2814	Infectious substance, affecting humans (Francisella tularensis)	6.2		1 Fiberboard box - 30 mL	620	
UN1845	Dry Ice	9		5 KG OVERPACK USED	954	
Additional Handling Information 24-hour Emergency contact 800-555-6789						
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 applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.						Name/Title of Signatory Ramon Ortiz, Biosafety Officer Place and Date Albuquerque, NM December 12, 2012 Signature (see warning above) <i>Ramon Ortiz</i>

Comprehension Check 13

How many errors are on this shipper's declaration?
Can you find them all?

- What errors? This looks good to go.
- There are fewer than 4 errors
- There are between 4 and 6 errors
- There are between 7 and 10 errors
- There are more than 10 errors

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

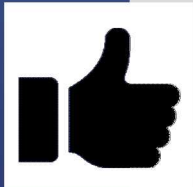


Shipper Eric Cook (505) 284-3986 Sandia National Laboratories Albuquerque, NM 87123		Air Waybill No. _____ Page <input type="text"/> of <input type="text"/> Pages Shipper's Reference No. _____ (optional)				
Consignee Bronco Mendenhall Quality Laboratories 456 Downtown Avenue Atlanta, GA 01010						
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 (optional): _____				
PASSENGER AIR CARGO AIRCRA <input type="checkbox"/> XXX <input checked="" type="checkbox"/>		Airport of Destination (optional): _____				
Shipment type: (delete non-applicable)		NON-RADIOACT <input type="checkbox"/> RADIOACTIVE <input checked="" type="checkbox"/>				
NATURE AND QUANTITY OF DANGEROUS GOODS						
Dangerous Goods Identification						
UN or ID No.	Proper Shipping Name	Class or Division (subsidiary hazard)	Packing Group	Quantity and Type of Packing	Packing Inst.	Authorization
2814	Infectious substance, affecting humans Anthrax Culture	6.2		75 mL	602	
1845	Solid dry ice	9	III	5 KG	954	
Additional Handling Information Person responsible: Jen Gaudioso 217-325-9784						
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 applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.				Name of Signatory Eric Cook Date 10/20/2020 Signature (See warning above)		

Comprehension Check 13

How many errors are on this shipper's declaration?
Can you find them all?

- A. What errors? This looks good to go.
- B. There are fewer than 4 errors
- C. There are between 4 and 6 errors
- D. There are between 7 and 10 errors
- E. There are more than 10 errors



SHIPPER'S DECLARATION FOR DANGEROUS GOODS



Shipper Eric Cook (505) 284-3986 Sandia National Laboratories Albuquerque, NM 87123		Air Waybill No. _____ Page _____ of _____ Pages Shipp (optio) _____ noe No. _____				
Consignee Bronco Mendenhall Quality Laboratories 456 Downtown Avenue Atlanta, GA 01010						
Two completed and signed copies of this Declaration must be handed to the operator.		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.				
TRANSPORT DETAILS This shipment is within the limitations prescribed for: _____ Airport of Departure (optional): _____ (delete non-applicable)						
PASSENGER AT CARGO AIRCRA <input type="checkbox"/> XXX <input checked="" type="checkbox"/>		Shipment type: (delete non-applicable) NON-RADIOACT <input type="checkbox"/> RADIOACTIVE <input checked="" type="checkbox"/>				
NATURE AND CLASSIFICATION OF DANGEROUS GOODS						
Dangerous Goods Identification						
UN or ID No.	Proper Shipping Name	Class or Division (subsidiary hazard)	Packing Group	Quantity and Type of Packing	Packing Inst.	Authorization
2814	Infectious substance, affecting humans Anthrax Cul	6.2		75 mL	602	
1845	Solid, n.o.s.	9	III	5 KG # and type of packing	954	
Additional Handling Information Person responsible: Jen Gaudioso 217-325-9784						
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 applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.				Name of Signatory Eric Cook Date 10/20/2020 Signature (See warning above)		



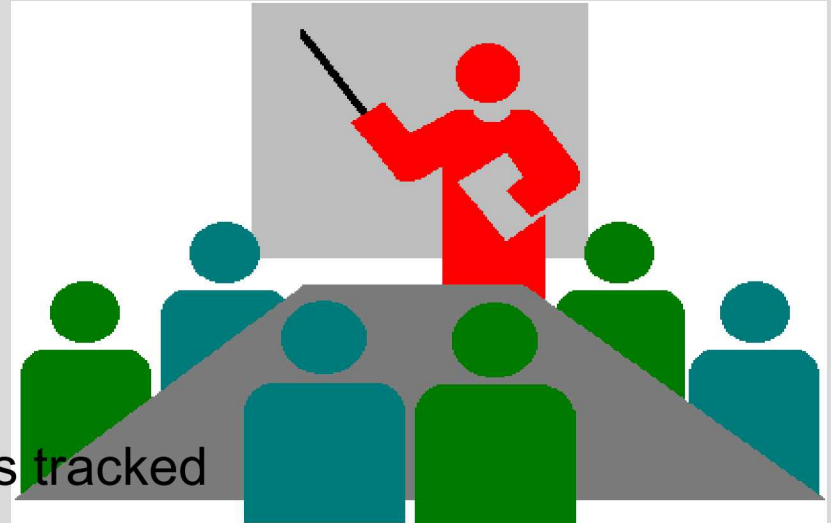
Making arrangements

For All Shipments, Consider:

- Is an import and/or an export permit needed?
- Material transfer agreement or other agreement to share materials prior to shipping?
- Documentation indicating recipient is authorized to have material?

Training Requirements

- General Awareness/Familiarization
- Function Specific
- Safety/Security
- Record Keeping
- Testing
- Employer certification
- Valid for 24 months (training is tracked by month, not day)
- If retraining is completed within 3 months of the expiration then the new training is good for two years beyond the expiration of previous training
- Update when regulations change



Example

- A person attends initial course 14 April 2017
- Validity expires 30 April 2019
- If they attend recurrent training any time between 1 February and 30 April 2019 then validity is good until 30 April 2021
- If they complete recurrent training 1 January 2019 then validity expires 31 January 2021

Security Requirements

DANGEROUS GOODS SECURITY IATA 1.6

Handlers of high consequence DGs must have a security plan. Plan must be based on risk assessment. Basic elements of a security plan

- Specific allocation of responsibilities and authorities
- Record keeping
- Review of current operations and risk assessment
- List of mitigation measures (training policies, operating practices, response to higher threat conditions, personnel verification process, access controls, equipment and other resources) to be used to reduce security risks.
- Procedures for reporting and dealing with security threats, breaches and incidents

Performance measures and periodic review and update plan



Elements of a Shipping Program

- Training program
- Records retention
- Written security and safety plans
- Emergency response plan
- Written policies that ensure:
 - appropriate approvals and paperwork in place prior to shipping
 - packages are prepared in such a manner that they arrive at their destination in good condition and present no hazard to persons or animals during transport
- Access control (secure storage)
- Personnel assurance

Regulatory Updates – Other



IATA/ICAO Moving toward a “competency based” training requirement. New requirements will go into effect in 2021 (with a two year transition)

Appx H in IATA lists the proposed new requirements

May require extensive changes to training programs and record keeping, especially around competency assessments

New requirements for instructor qualification

Instructor Qualifications

- Must demonstrate or be assessed as competent to deliver/train in the functions that they will instruct in
- Must successfully pass an initial training course
- Must either deliver a course or attend a course every 24 months
- Receive and understand updates to Regulations on an annual basis with issuance of each addition of DGR



Additional Instructor Qualifications for 2021. IATA DGR H.5.7.3

- Read all of IATA DGR Appendix H (about 40 pages)
- Three keys:
 1. Training designed and targeted to specific functions of the individual based on job functions
 2. Trainee must demonstrate competency. Multiple modalities of both training and assessment may be necessary
 3. New record keeping requirements and evaluations of not just the individual but the training program effectiveness
- Instructors must demonstrate “advanced” proficiency level related to functions they training others in
- Instructors must have knowledge of local regulations and proof of approval (if required) by State
- Alternatively rather than work experience, proof that employer (of the instructor) has undergone an instructor qualification program (approved by the State if necessary)
- Instructors should also have a “hands-on”/”one the job” experience program (e.g. job shadowing) practical activity at least every 2 years.
- Instructors must have at least 3 years of practical experience prior to teaching
- New instructors must co-teach with experienced instructors in a graduated fashion: I do, we do, you do concept.

* Changing in 2021

Comprehension Check 14

A person completes initial training on December 12, 2017. What is the last day that they must complete recurrent training (according to IATA)?

- A. December 31, 2019
- B. December 12, 2019
- C. November 30, 2019
- D. December 12, 2020

Select the best answer:

Intersession Assignment

- Complete intersession worksheet and turn it in by March 13th
- Be sure to include any and all questions that you have from today and after completing the worksheet
- Next workshop will be March 17th
- Review the intersession assignment
- Answer any questions
- Distribute final exam