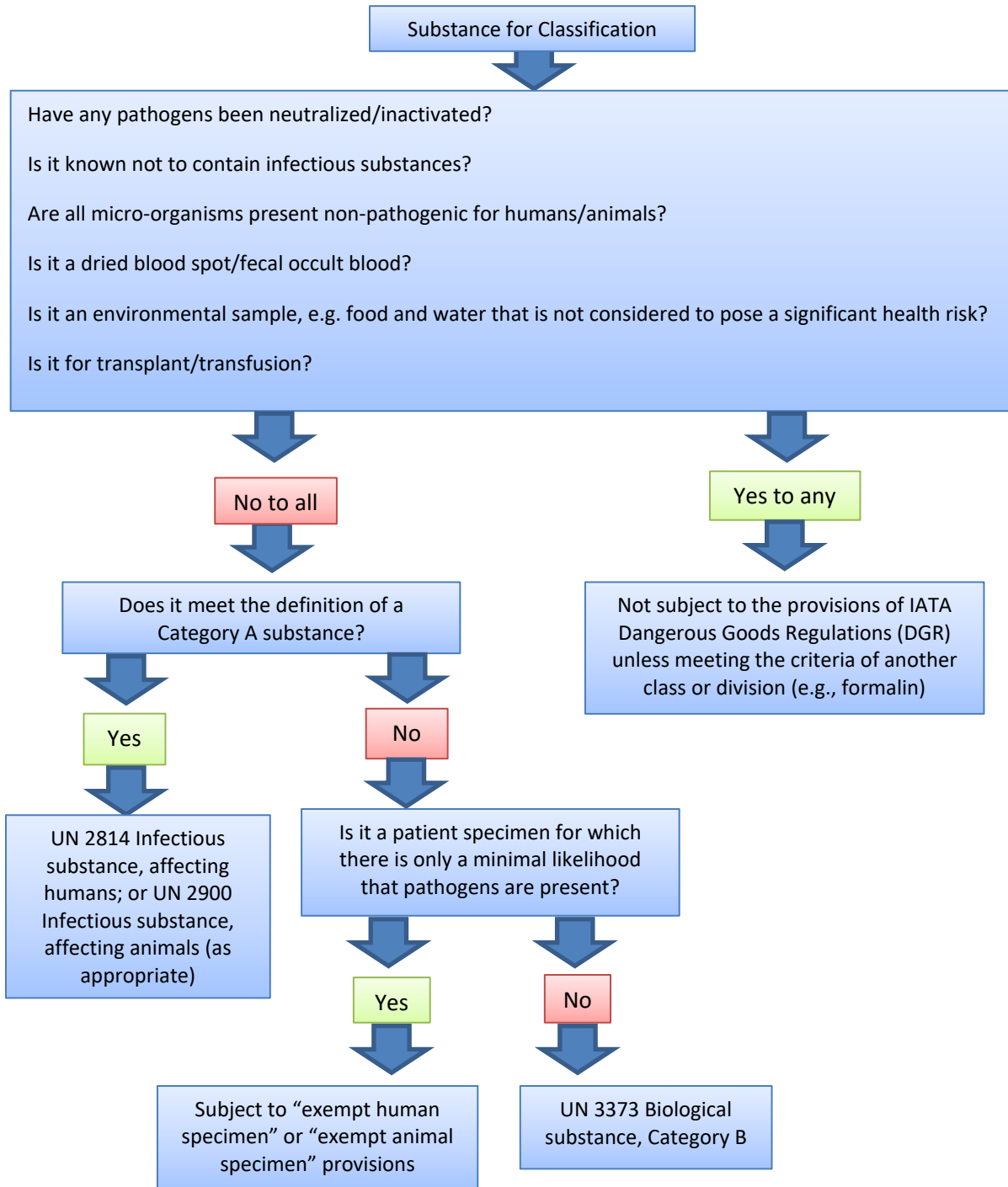




## Step 2: IATA Job Aid

Use the decision tree below to help you determine the classification for your substance if shipping by air. Use the DOT job aid for packages sent by motor vehicle courier/ground.



## IATA Category A Indicative List

The following list is not exhaustive. Infectious substances, including new or emerging pathogens, which do not appear in the list, but which meet the same criteria must be assigned to Category A. In addition, if there is doubt as to whether a substance meets the criteria it must be included in Category A.

### **UN2814 Infectious substance, affecting humans**

*Bacillus anthracis (cultures only)*  
*Brucella abortus (cultures only)*  
*Brucella melitensis (cultures only)*  
*Brucella suis (cultures only)*  
*Burkholderia mallei – Pseudomonas mallei – Glanders (cultures only)*  
*Burkholderia pseudomallei – Pseudomonas pseudomallei (cultures only)*  
*Chlamydia psittaci – avian strains (cultures only)*  
*Clostridium botulinum (cultures only)*  
*Coccidioides immitis (cultures only)*  
*Coxiella burnetii (cultures only)*  
*Crimean-Congo hemorrhagic fever virus*  
*Dengue virus (cultures only)*  
*Eastern equine encephalitis virus (cultures only)*  
*Escherichia coli, verotoxigenic (cultures only)*  
*Ebola virus*  
*Flexal virus*  
*Francisella tularensis (cultures only)*  
*Guanarito virus*  
*Hantaan virus*  
*Hantavirus causing hemorrhagic fever with renal syndrome*  
*Hendra virus*  
*Hepatitis B virus (cultures only)*  
*Herpes B virus (cultures only)*  
*Human immunodeficiency virus (cultures only)*  
*Highly pathogenic avian influenza virus (cultures only)*  
*Japanese Encephalitis virus (cultures only)*  
*Junin virus*  
*Kyasanur Forest disease virus*  
*Lassa virus*  
*Machupo virus*

*Marburg virus*  
*Monkeypox virus*  
*Mycobacterium tuberculosis (cultures only)*  
*Nipah virus*  
*Omsk hemorrhagic fever virus*  
*Poliovirus (cultures only)*  
*Rabies virus (cultures only)*  
*Rickettsia prowazekii (cultures only)*  
*Rickettsia rickettsii (cultures only)*  
*Rift Valley fever virus (cultures only)*  
*Russian spring-summer encephalitis virus (cultures only)*  
*Sabia virus*  
*Shigella dysenteriae 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)*  
*Yersinia pestis (cultures only)*

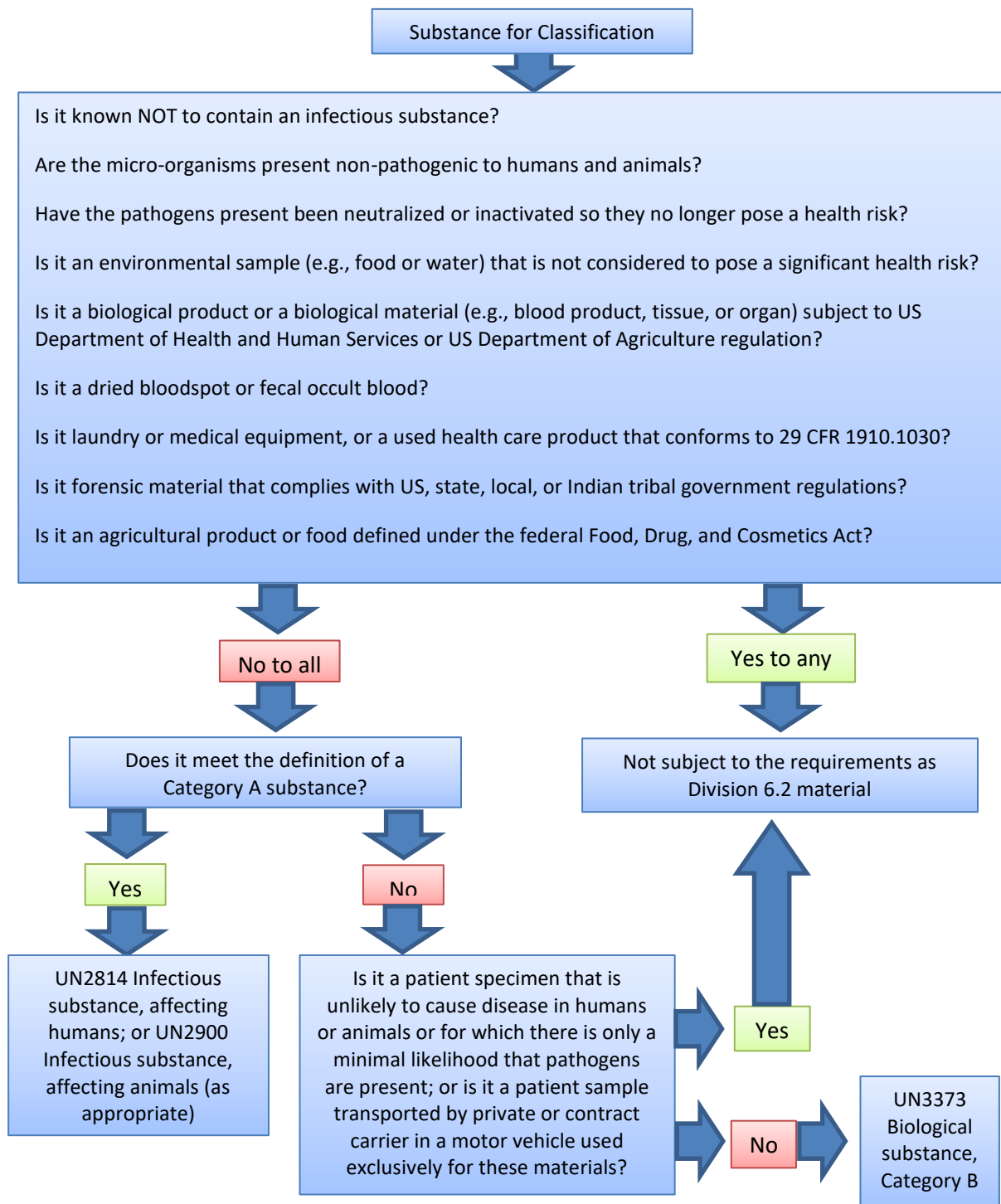
### **UN2900 Infectious substance, affecting animals**

*African swine fever virus (cultures only)*  
*Avian paramyxovirus Type 1 – Velogenic Newcastle disease virus (cultures only)*  
*Classical swine fever virus (cultures only)*  
*Foot and mouth disease virus (cultures only)*  
*Lumpy skin disease virus (cultures only)*  
*Mycoplasma mycoides – Contagious bovine pleuropneumonia (cultures only)*  
*Peste des petits ruminant's virus (cultures only)*  
*Rinderpest virus (cultures only)*  
*Sheep-pox virus (cultures only)*  
*Goatpox virus (cultures only)*  
*Swine vesicular disease virus (cultures only)*  
*Vesicular stomatitis virus (cultures only)*

This job aid is a component of the free, on-demand CDC training course “Packing and Shipping Dangerous Goods: What the Laboratory Staff Must Know.” Find the course at <https://www.cdc.gov/labtraining>.

## Step 2: DOT Job Aid

Use the decision tree below to help you classify your substance if shipping by motor vehicle courier/ground in accordance with Hazardous Materials Regulations (HMR). Use the IATA job aid for packages sent by air.



## DOT Category A Indicative List

The following list is not exhaustive. Infectious substances, including new or emerging pathogens, which do not appear in the list, but which meet the same criteria, must be assigned to Category A. In addition, if there is doubt as to whether a substance meets the criteria it must be included in Category A.

### **UN2814 Infectious substance, affecting humans**

*Bacillus anthracis (cultures only)*  
*Brucella abortus (cultures only)*  
*Brucella melitensis (cultures only)*  
*Brucella suis (cultures only)*  
*Burkholderia mallei – Pseudomonas mallei – Glanders (cultures only)*  
*Burkholderia pseudomallei – Pseudomonas pseudomallei (cultures only)*  
*Chlamydia psittaci – avian strains (cultures only)*  
*Clostridium botulinum (cultures only)*  
*Coccidioides immitis (cultures only)*  
*Coxiella burnetii (cultures only)*  
*Crimean-Congo hemorrhagic fever virus*  
*Dengue virus (cultures only)*  
*Eastern equine encephalitis virus (cultures only)*  
*Escherichia coli, verotoxigenic (cultures only)*  
*Ebola virus*  
*Flexal virus*  
*Francisella tularensis (cultures only)*  
*Guanarito virus*  
*Hantaan virus*  
*Hantavirus causing hemorrhagic fever with renal syndrome*  
*Hendra virus*  
*Herpes B virus (cultures only)*  
*Human immunodeficiency virus (cultures only)*  
*Highly pathogenic avian influenza virus (cultures only)*  
*Japanese Encephalitis virus (cultures only)*  
*Junin virus*  
*Kyasanur Forest disease virus*  
*Lassa virus*  
*Machupo virus*  
*Marburg virus*

*Monkeypox virus*  
*Mycobacterium tuberculosis (cultures only)*  
*Nipah virus*  
*Omsk hemorrhagic fever virus*  
*Poliovirus (cultures only)*  
*Rabies and other lyssaviruses (cultures only)*  
*Rickettsia prowazekii (cultures only)*  
*Rickettsia rickettsii (cultures only)*  
*Rift Valley fever virus (cultures only)*  
*Russian spring-summer encephalitis virus (cultures only)*  
*Sabia virus*  
*Shigella dysenteriae type 1 (cultures only)*  
*Tick-borne encephalitis virus (cultures only)*  
*Variola virus*  
*Venezuelan equine encephalitis virus (cultures only)*  
*Vesicular stomatitis virus (cultures only)*  
*West Nile virus (cultures only)*  
*Yellow fever virus (cultures only)*  
*Yersinia pestis (cultures only)*

### **UN2900 Infectious substance, affecting animals**

*African swine fever virus (cultures only)*  
*Avian paramyxovirus Type 1 – Velogenic Newcastle disease virus (cultures only)*  
*Classical swine fever virus (cultures only)*  
*Foot and mouth disease virus (cultures only)*  
*Lumpy skin disease virus (cultures only)*  
*Mycoplasma mycoides – Contagious bovine pleuropneumonia (cultures only)*  
*Peste des petits ruminant's virus (cultures only)*  
*Rinderpest virus (cultures only)*  
*Sheep-pox virus (cultures only)*  
*Goatpox virus (cultures only)*  
*Swine vesicular disease virus (cultures only)*

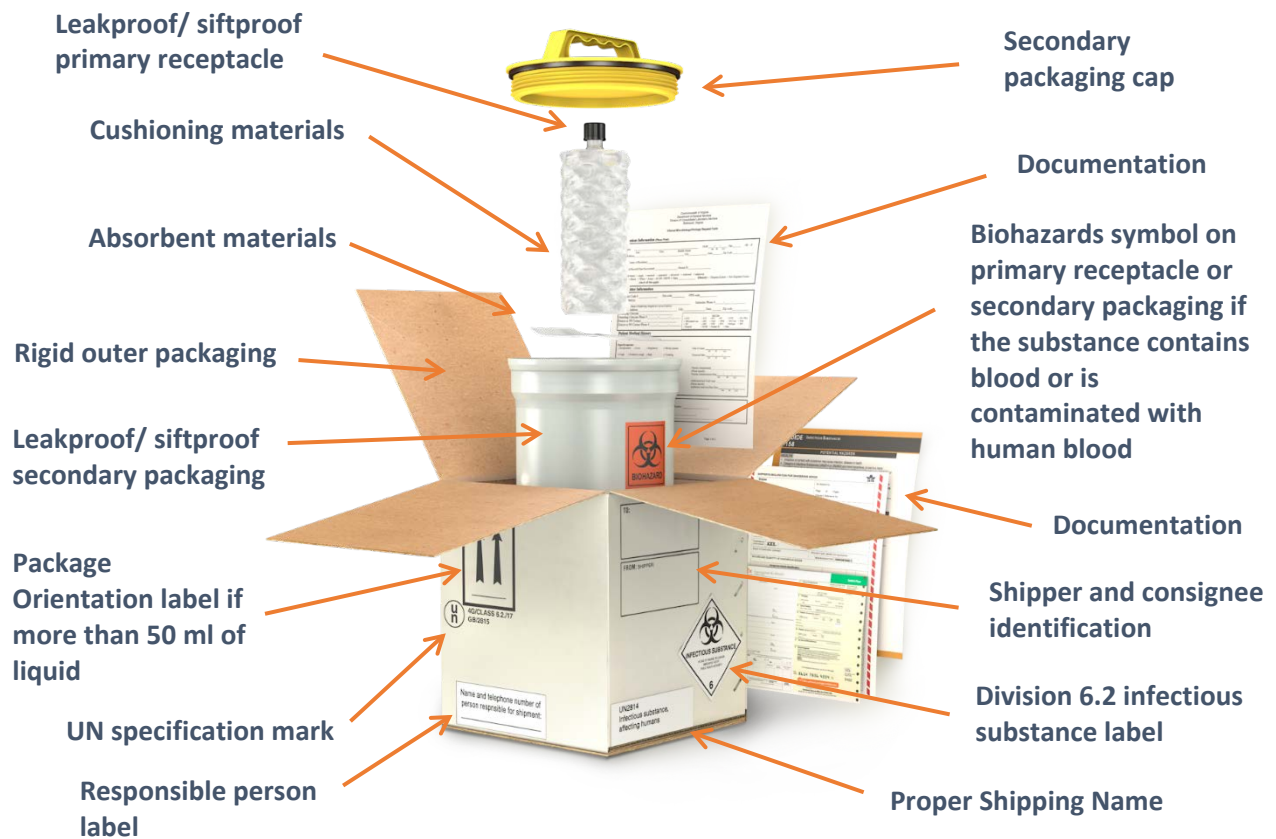
This job aid is a component of the free, on-demand CDC training course “Packing and Shipping Dangerous Goods: What the Laboratory Staff Must Know.” Find the course at <https://www.cdc.gov/labtraining>.

## Step 3: Packing Category A and B and Exempt Human and Exempt Animal Specimens Job Aid

Use the pages below as a reference for packing Category A, B, and Exempt Specimens.

### Category A Substance Packaging

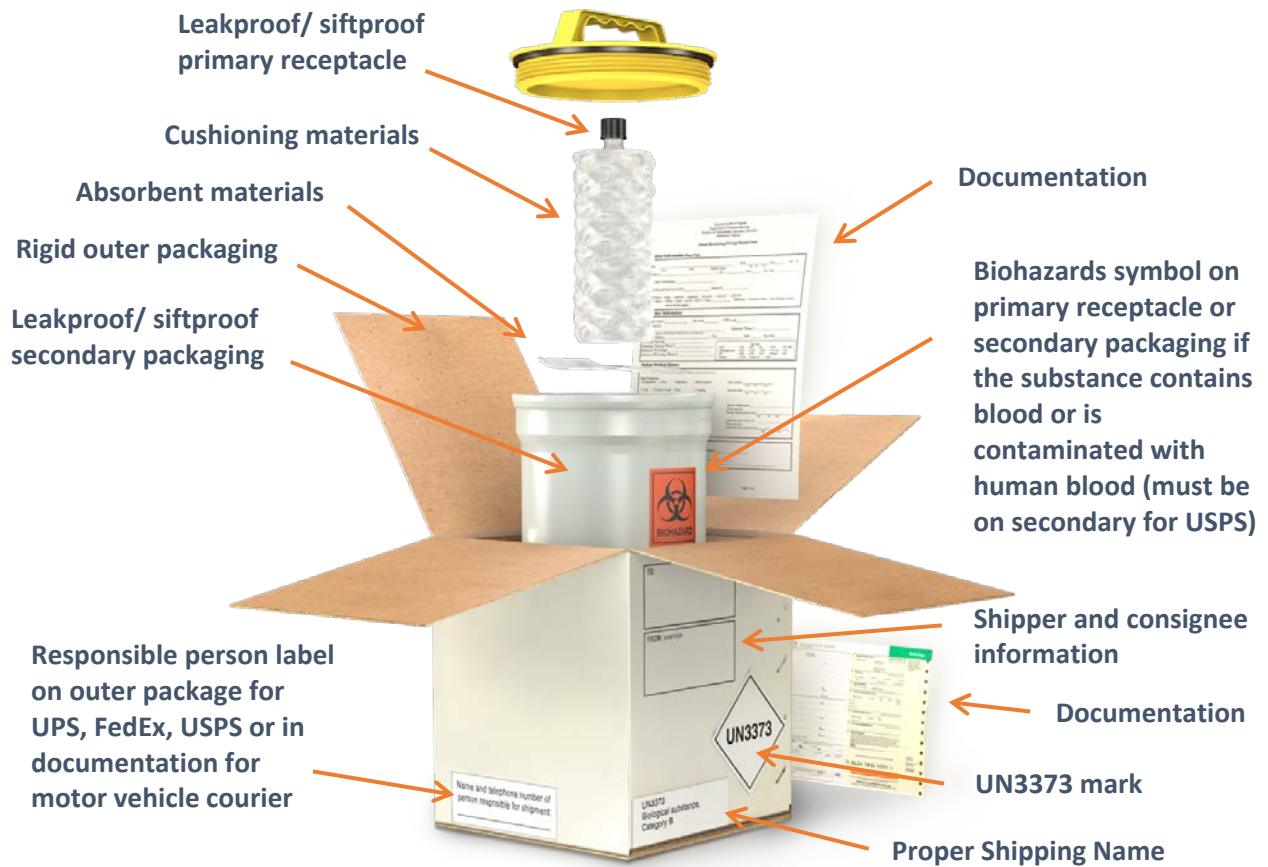
**NOTE:** The packaging is the same for both types (UN 2814 and UN2900) of Category A packaging, only the UN mark and Proper Shipping Names change.



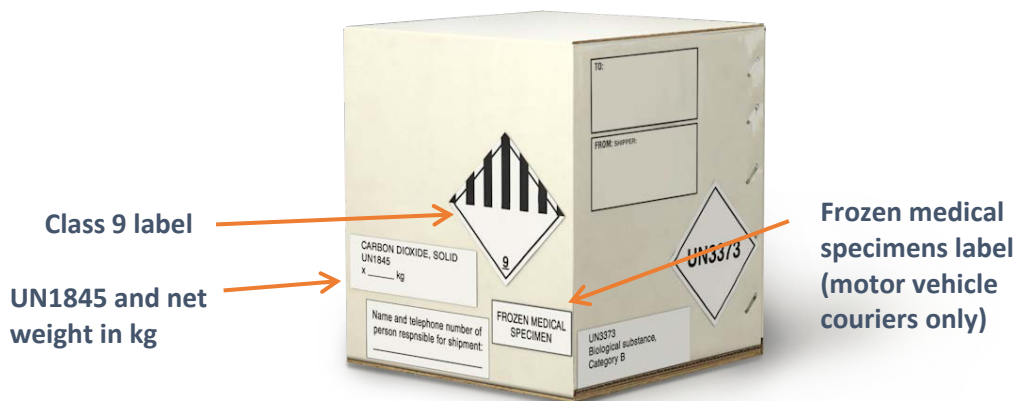
### Category A Substance Packaging with Dry Ice



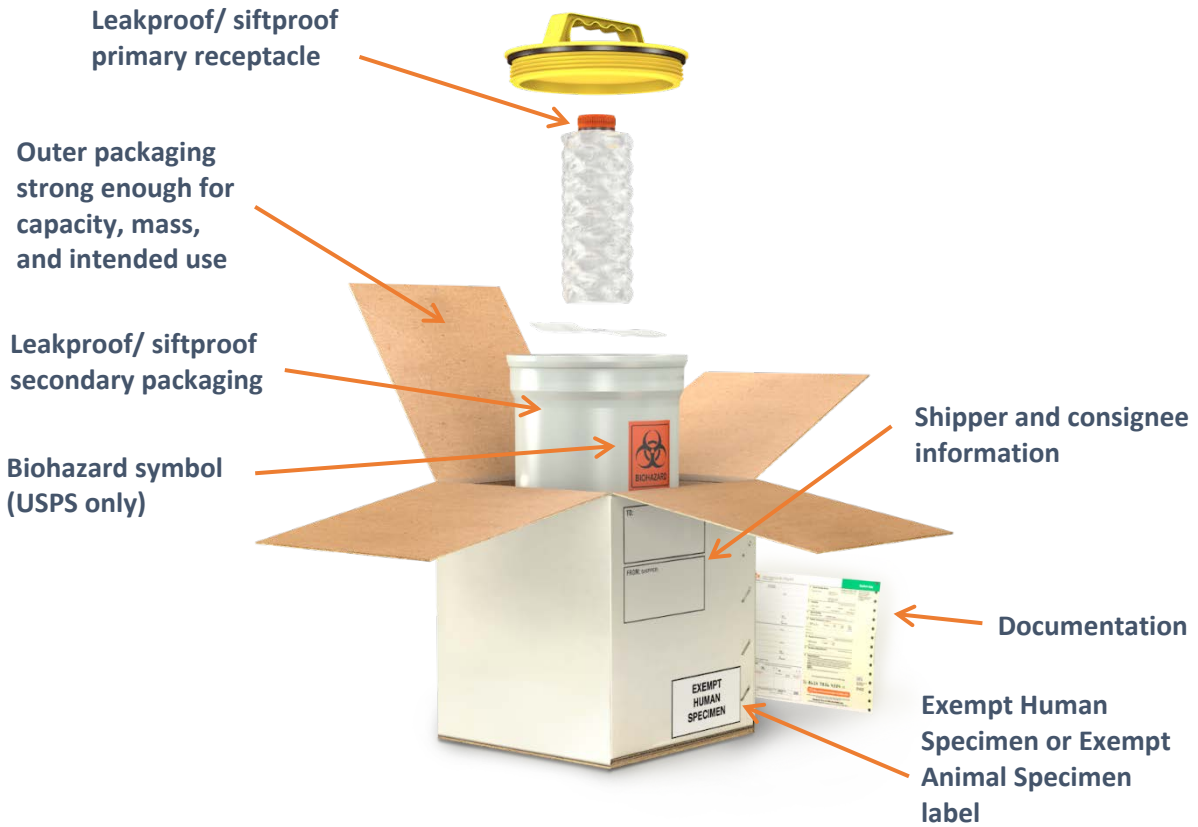
## Category B Substance Packaging



## Category B Substance Packaging with Dry Ice



## Exempt Human Specimen or Exempt Animal Specimen Packaging



## Exempt Human Specimen or Exempt Animal Substance Packaging with Dry Ice



This job aid is a component of the free, on-demand CDC training course “Packing and Shipping Dangerous Goods: What the Laboratory Staff Must Know.” Find the course at <https://www.cdc.gov/labtraining>.



## Step 4: Labeling, Marking, and Documenting Requirements Job Aid

Use the table below as a reference for labeling, marking, and documenting requirements for the various classifications and modes of transport.

Mode of Transport	Classification	Required Labeling & Marking	Required Documentation
Motor vehicle courier	Not subject to DOT regulations	Outer packaging: <ul style="list-style-type: none"> <li>• Shipper and consignee information</li> </ul>	None
	Category B	If overpack is used: <ul style="list-style-type: none"> <li>• Marks and labels for each inner package</li> </ul> Outer packaging: <ul style="list-style-type: none"> <li>• UN3373 mark</li> <li>• Proper shipping name</li> <li>• Responsible person contact information on outer package or in documentation</li> <li>• Shipper and consignee information</li> </ul> Primary or secondary packaging: <ul style="list-style-type: none"> <li>• Biohazard symbol if the substance contains blood or is contaminated with human blood</li> </ul>	None
	Category A	If overpack is used: <ul style="list-style-type: none"> <li>• Marks and labels for each inner package</li> </ul> Outer packaging: <ul style="list-style-type: none"> <li>• UN specification mark</li> <li>• 6.2 infectious substance label</li> <li>• Proper shipping name</li> <li>• Responsible person contact information</li> <li>• Shipper and consignee information</li> <li>• Package orientation labels if package contains more than 50 ml of liquid</li> </ul>	<ul style="list-style-type: none"> <li>• Itemized list of contents</li> <li>• Shipping papers with a 24/7 emergency contact (Shipper's Declaration can satisfy)</li> <li>• Emergency response information, such as Guide 158.</li> </ul>



Mode of Transport	Classification	Required Labeling & Marking	Required Documentation
		Primary or secondary packaging: <ul style="list-style-type: none"> <li>• Biohazard symbol if the substance contains blood or is contaminated with human blood</li> <li>• Primary receptacle or secondary packaging must be capable of withstanding an internal pressure of 95 kPa without leakage</li> </ul>	
	Dry ice	If overpack is used: <ul style="list-style-type: none"> <li>• Marks and labels for each inner package and dry ice</li> </ul> Outer packaging: <ul style="list-style-type: none"> <li>• Class 9 Miscellaneous Dangerous Goods label</li> <li>• UN1845 mark</li> <li>• Net weight of dry ice in kg</li> <li>• Proper shipping name (Carbon dioxide, solid or Dry Ice)</li> <li>• Category B substances should indicate that the material being refrigerated is being transported for diagnostic or treatment purposes (e.g., frozen medical specimens)</li> </ul>	None
USPS	Substance that does not meet Category A or B criteria	Follow DOT ground transport for Category B, omitting UN3373 mark and biological substances, Category B proper shipping name	None
	Exempt Human Specimen or Exempt Animal Specimen	If overpack is used: <ul style="list-style-type: none"> <li>• Marks and labels for each inner package</li> <li>• Overpack label</li> </ul> Outer packaging: <ul style="list-style-type: none"> <li>• Shipper and consignee address</li> </ul> Secondary packaging: <ul style="list-style-type: none"> <li>• Biohazard symbol</li> </ul>	None
	Category B	If overpack is used: <ul style="list-style-type: none"> <li>• Marks and labels for each inner package</li> </ul>	None

Mode of Transport	Classification	Required Labeling & Marking	Required Documentation
		<ul style="list-style-type: none"> <li>• Overpack label</li> </ul> Outer packaging: <ul style="list-style-type: none"> <li>• UN3373 mark</li> <li>• Proper shipping name</li> <li>• Responsible person contact information</li> <li>• Shipper and consignee information</li> </ul> Secondary packaging: <ul style="list-style-type: none"> <li>• Biohazard symbol</li> </ul> Primary receptacle or secondary packaging must be capable of withstanding an internal pressure of 95 kPa without leakage	
	Category A	Not allowed for transport by USPS	Not allowed for transport by USPS
	Dry ice	If overpack is used: <ul style="list-style-type: none"> <li>• Marks and labels for each inner package and dry ice</li> </ul> Outer packaging: <ul style="list-style-type: none"> <li>• Class 9 Miscellaneous Dangerous Goods label</li> <li>• UN1845 mark</li> <li>• Net weight of dry ice in kg</li> <li>• Proper shipping name (Carbon dioxide, solid or Dry Ice)</li> </ul>	None
Air transport by IATA member airline such as FedEx or UPS	Exempt Human Specimen or Exempt Animal Specimen	If overpack is used: <ul style="list-style-type: none"> <li>• Marks and labels for each inner package</li> <li>• Overpack label</li> </ul> Outer packaging: <ul style="list-style-type: none"> <li>• Exempt human specimen or exempt animal specimens label</li> <li>• Shipper and consignee information</li> </ul>	Air Waybill

Mode of Transport	Classification	Required Labeling & Marking	Required Documentation
	Category B	<p>If overpack is used:</p> <ul style="list-style-type: none"> <li>• Marks and labels for each inner package</li> <li>• Overpack label</li> </ul> <p>Outer packaging:</p> <ul style="list-style-type: none"> <li>• UN3373 mark</li> <li>• Proper shipping name</li> <li>• Responsible person contact address</li> <li>• Shipper and consignee information</li> </ul> <p>Primary or secondary packaging:</p> <ul style="list-style-type: none"> <li>• Biohazard symbol if the substance contains blood or is contaminated with human blood</li> </ul> <p>Liquids only: Primary receptacle or secondary packaging must be capable of withstanding an internal pressure of 95 kPa without leakage</p>	<ul style="list-style-type: none"> <li>• Itemized list of contents</li> <li>• Air Waybill or Shipping Label generated using proprietary software (e.g., FedEx’s Ship Manager®)</li> </ul>
	Category A	<p>If overpack is used:</p> <ul style="list-style-type: none"> <li>• Marks and labels for each inner package</li> <li>• Overpack label</li> </ul> <p>Outer packaging:</p> <ul style="list-style-type: none"> <li>• UN specification mark</li> <li>• 6.2 infectious substance label</li> <li>• Proper shipping name</li> <li>• Responsible person contact information</li> <li>• Shipper and consignee information</li> <li>• Package orientation label (if primary receptacle exceeds 50 ml of liquid)</li> </ul> <p>Primary or secondary packaging:</p> <ul style="list-style-type: none"> <li>• Biohazard symbol if the substance contains blood or is contaminated with human blood</li> </ul>	<ul style="list-style-type: none"> <li>• Itemized list of contents</li> <li>• Air Waybill or Shipping Label generated using proprietary software (e.g., FedEx’s Ship Manager®)</li> <li>• Shipper’s Declaration with a 24/7 emergency contact</li> </ul>

Mode of Transport	Classification	Required Labeling & Marking	Required Documentation
	Dry ice	<ul style="list-style-type: none"> <li>• Primary receptacle or secondary packaging must be capable of withstanding an internal pressure of 95 kPa without leakage</li> </ul> <p>If overpack is used:</p> <ul style="list-style-type: none"> <li>• Marks and labels for each inner package and dry ice</li> </ul> <p>Outer packaging:</p> <ul style="list-style-type: none"> <li>• Class 9 Miscellaneous Dangerous Goods label</li> <li>• UN1845 mark</li> <li>• Net weight of dry ice in kg</li> <li>• Proper shipping name (Carbon dioxide, solid or Dry Ice)</li> </ul>	Shipper's Declaration filled out for dry ice

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