

# Transporting Category A Infectious Substances Safely

December 2, 2021



# Infectious Substances Guide



This brochure describes the revised USDOT regulations for the classification criteria and packaging requirements for the transportation of infectious substances, adopted into 49 CFR, Parts 171-180, revised April 28, 2020.

<https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2020-04/Transporting-Infectious-Substances-Safely.pdf>



# Objective

- Provide a general overview of the regulatory requirements for transporting Division 6.2 materials:
  - Package Selection
  - Marking and Labeling
  - Shipping Papers and Emergency Response Information
  - “Transportation” Security Plan and Training



## Category A Infectious Substance

- UN2900, Infectious substances, affecting animals *only*, 6.2 (Tech name; generic microbiological group)
- “or”
- UN2814 , Infectious substances, affecting humans, 6.2 (Tech name; generic microbiological group)

## Category B Infectious Substance

- UN3373, Biological substance, Category B, 6.2



# Packaging Requirements

	General Packaging Requirements for all HAZMAT Changes regarding Infectious Substances and mixed contents
173.134(b) 173.134(c)	Exceptions for: Division 6.2 Packaging Regulated Medical Waste
173.196	Category A Infectious Substance
173.197	Regulated Medical Waste
173.199	Category B Infectious Substance
178.609	6.2 Packaging Tests

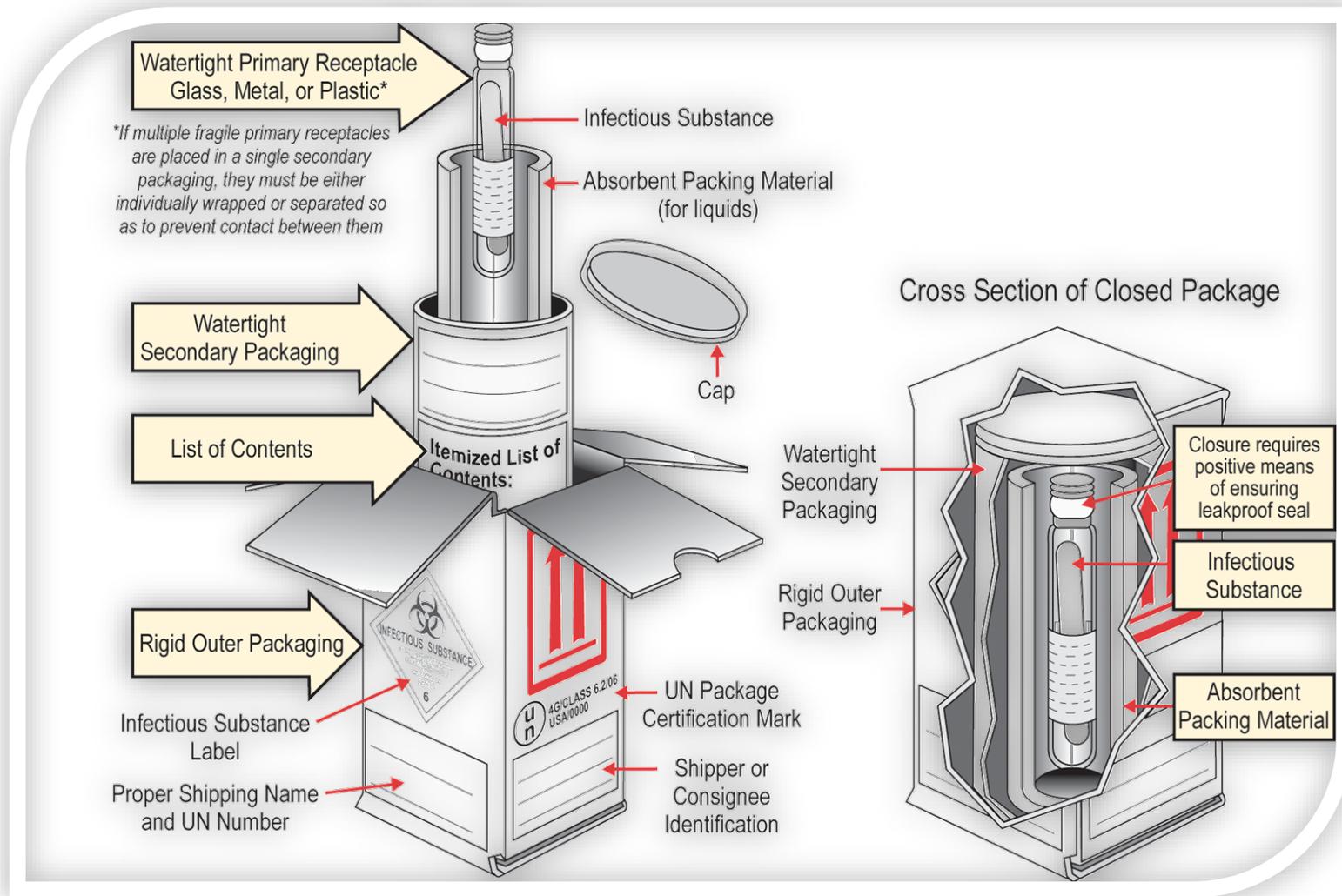


# Other Pertinent References

- 172.203(k) Shipping paper Technical Name  
(Tech name; generic microbiological group)
- 172.301(b) Package marking technical name
- 172.704(a) Hazmat Training
- 172.802 Transportation Security Plan
- 173.27 Aircraft Transportation

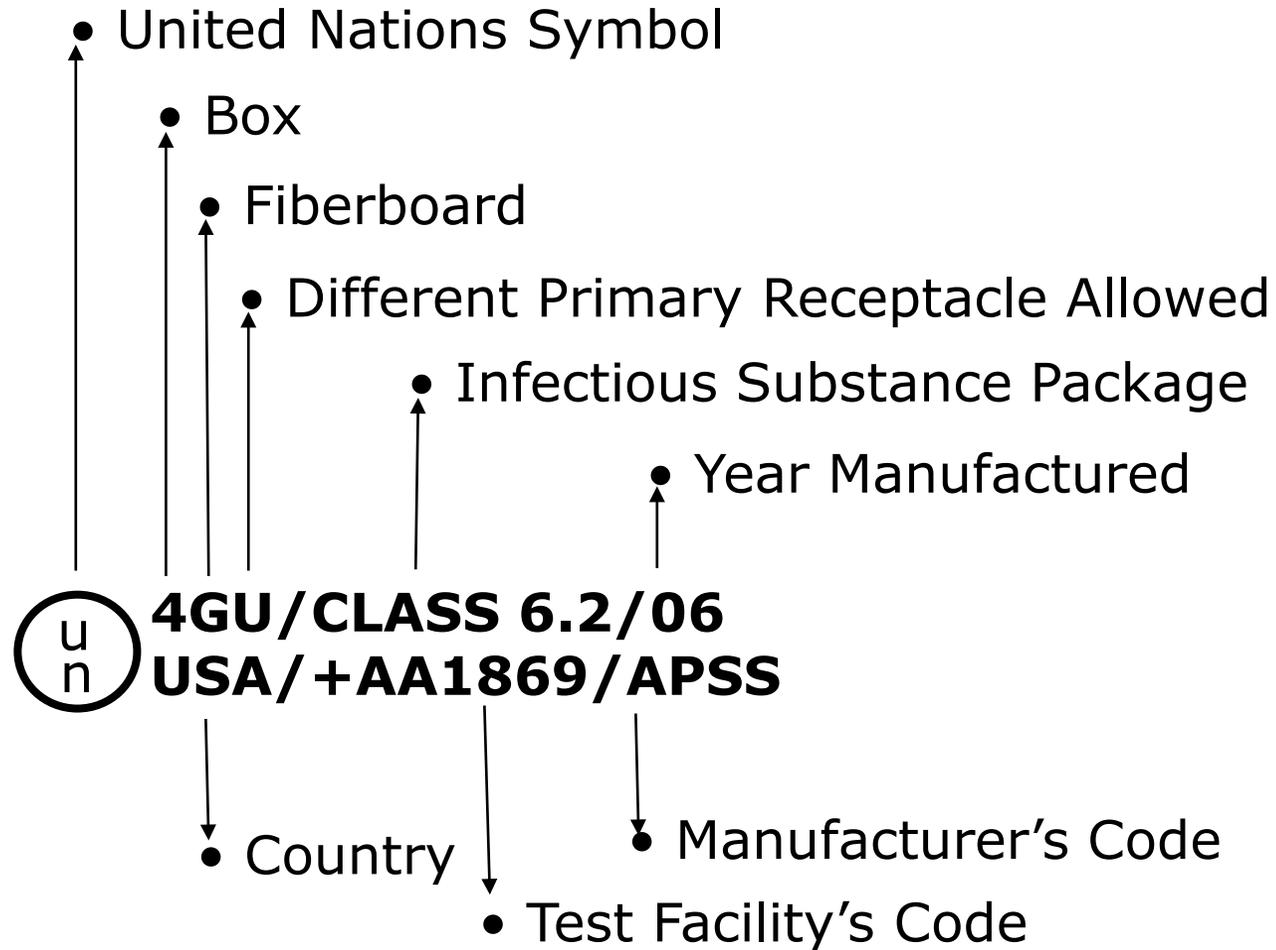


# Category A Packaging



# UN Packaging

## Division 6.2 Category A



# Testing of Packages

49 CFR 178.609

Cat A Pkg: UN certified (4G or 4GU /Class 6.2)

- Wet box for 1hr to represent 2” of rain per hr; then drop from 30 ft.
- Freeze pkg 24 hr at 0 degrees then drop test.
- Drop 1 ½” diameter, 15 lb steel rod, onto box or drop box onto steel rod.
- Dry Ice specific tests (if pkg intended to contain)
- Variations “U”: Smaller inner pkg; less number inner pkgs; fragile inner pkgs.



# Reuse of Packaging

49 CFR 173.28

- Packagings and receptacles used more than once must be in such condition, including **closure devices and cushioning materials**, that they conform in all respects to the prescribed requirements of this subchapter. Before reuse, each packaging must be inspected and may not be reused unless free from incompatible residue, rupture, or other damage which reduces its structural integrity. Packagings not meeting the minimum thickness requirements prescribed in paragraph (b)(4)(i) of this section may not be reused or reconditioned for reuse.





# Reuse of Packaging

49 CFR 173.28 (f)

- A Division 6.2 packaging to be reused must be disinfected prior to reuse by any means effective for neutralizing the infectious substance the packaging previously contained. A secondary packaging or outer packaging conforming to the requirements of §173.196 or §173.199 need not be disinfected prior to reuse if no leakage from the primary receptacle has occurred. Drums or jerricans not meeting the minimum thickness requirements prescribed in paragraph (b)(4)(i) of this section may not be reused or reconditioned for reuse.



# Category A Package Marking and Labeling

- Proper shipping name & UN 2814 or UN 2900  
(\*No tech name on pkg per 172.301(b))
- Shipper or Consignee identification
- Infectious Substance Label 172.432
- Orientation arrows (as applicable)



# Category A Package Marking and Labeling

## Category A Technical Name Requirements:

49 CFR 172.301(b) states in part, “A technical name should not be marked on the outer package of a Division 6.2 material.”



# Category A Shipping Papers

- UN Identification Number
- Proper Shipping Name
- Tech Name (49 CFR 172.203(k) & 171.8)
  - Generic microbiological group or
  - “Suspected Category A infectious substance”
- Hazard Class/Division
- NO Packing Group
- # and Type of Pkg / Weight (lbs. or kg)
- Shipper’s Certification
- Emergency Response Telephone Number



# Category A Shipping Papers

## Technical Name

**49 CFR 172.203(k)** states in part, “A material classed as Division 6.2 and assigned identification number UN 2814 or UN 2900 that is suspected to contain an unknown Category A infectious substance must have the words “suspected Category A infectious substance” entered in parentheses in place of the technical name as part of the proper shipping description. For additional technical name options, see the definition for “Technical name” in §171.8. A technical name should not be marked on the outer package of a Division 6.2 material (see §172.301(b)).”



# Category A Shipping Papers

## Technical Name

**49 CFR 171.8 definition for Technical Name** states in part, “Generic descriptions are authorized for use as technical names provided they readily identify the general chemical group, or microbiological group...For proficiency testing only, generic microbiological descriptions such as bacteria, mycobacteria, fungus, and viral samples may be used.”



# Transportation Security Plan

172.802

A “transportation” security plan is required by shippers and carriers of select agents or toxins regulated by CDC or USDA in any amount.

## The plan must include:

- Assessment of site/transportation security risks;
- Address personnel security, unauthorized access, and en-route security;
- Job titles, duties, training plan & testing;
- Reviewed annually/revised as required.



# Emergency Response Information

- Requirements for providing and maintaining emergency response information identified in 172.602, Subpart G
- **On shipping paper - Stands out.**
- Exception: not required if a shipping paper is not required



Photo: Lawrence Berkeley National Lab



# Training Requirements

- Federal hazmat transportation law 49 CFR, Part 172, Subpart H, requires training of *all* hazmat employees. Training must include:
  - General Awareness / Familiarization
  - Safety
  - Function Specific
  - Security Awareness
  - In-depth Security Tran Sec Plan (If Applicable)
- **CAT B ONLY**: Each person who offers or transports a Category B infectious substance under the provisions of this section (173.199(e)) must know about the requirements of this section.



# Training Requirements

- Within 90 days of employment or change in job function
- May perform function under direct supervision during 90 days
  - On the 91<sup>st</sup> day without training is non-compliant despite supervision.
- Recurrent training is due every 3 years from date of initial training

**Training + Testing = DOT HAZMAT TRAINING**



# Hazardous Material Info-Center

1-800-HMR-4922

(1-800-467-4922)

E-mail: [infocntr@dot.gov](mailto:infocntr@dot.gov)

[HAZMAT.dot.gov](http://HAZMAT.dot.gov)

Hours of Operation: 9 am – 5 pm ET



- Obtain answers to HMR questions
- Request copies of Federal Register, special permits or training materials
- Report HMR violations
- Fax on Demand



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