Transporting Infectious Goods Safely

CDC IPP Webcast
Atlanta, GA
December 4, 2019
Transporting Infectious Substances Safely

FEDERAL REGISTER
Hazardous Materials: Infectious Substances; Harmonization With the United Nations Recommendations

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

To Protect People and the Environment From the Risks of Hazardous Materials Transportation
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
• Inspection Process / Top Violations
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

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Other Pertinent References

- 171.15 Incident Reporting
- 172.203(k) Shipping paper Technical Name (Tech name; generic microbiological group)
- 172.301(b) Package. No technical name
- 172.704(a) Hazmat Training
- 172.802 Transportation Security Plan Requirements
- 173.27 Aircraft Transportation
Category A Packaging

49 CFR 173.196

To Protect People and the Environment From the Risks of Hazardous Materials Transportation
UN Packaging
Division 6.2 Category A

- United Nations Symbol
- Box
- Fiberboard
- Different Primary Receptacle Allowed
  - Infectious Substance Package
  - Year Manufactured
- 4GU/CLASS 6.2/06
- USA/+AA1869/APSS
- Country
- Manufacturer’s Code
- Test Facility’s Code

49 CFR 178.503(f)
Testing of Packages
178.609

- **Cat A Pkg:** UN certified (4G or 4GU /Class 6.2)
  
  Wet box for 1 hr 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.
Category B Packaging

49 CFR 173.199

To Protect People and the Environment From the Risks of Hazardous Materials Transportation
Cat “B” Non-Spec Package
173.199 Requirements Only

- Strong outer package
- Triple package – non tested.
- **Capable** of passing drop testing from 3.9 ft.
- Primary receptacles: Leakproof, will not break.
- Secondary receptacles: Secured within outer pkg
- Outer receptacles: Pkg prevents release of material
- Marking: **UN 3373**, Label “4 inch sides” (2” min)
- Name/address of person knowledgeable: Doc or pkg.
- Liquid Stabilizers: 1 oz/30 ml max.
Pkg Marking/Label Requirements

• Category A
  – 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 (Chgd 1 Oct 14)
  – Orientation arrows (as applicable)

• Category B
  – Proper shipping name and UN3373 Label
  – Name and telephone number of responsible person
    (may be placed on separate document such as air waybill)
  – Orientation arrows (as applicable)
Labeling Requirements

UN3373

§ 173.199(a)(4)
Category B infectious substance

3291

§ 173.134(c)(d)

§ 172.432

Bulk Marking (can also be on plain white placard)

& § 172.302
Shipping Papers

• Category A
  – Identification Number
  – Proper Shipping Name / Tech Name
    • Generic microbiological group or
    • “Suspected Category A infectious substance” (Lost in the crowd concept)
  – Hazard Class/Division
  – NO Packing Group
  – # and Type of Pkg / Weight (lbs. or kg)
  – Shipper’s Certification
  – Emergency Response Telephone Number

• Category B (unless excepted)
  – No shipping papers 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 (Info: Shipper name/phone # on pkg or airway bill)

Photo: Lawrence Berkeley National Lab
Transportation Security Plan
172.802

• A “transportation” security plan is required:
  – Ship Select agents or toxins regulated by CDC or USDA (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
  – Reviewed annually/revised as required

49 CFR 172.800(b)(6)
Other 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)

• Anyone shipping infectious substances must have “knowledge and training”

49 CFR 172.704(a); 173.134(b); 173.199(e)
Compliance Inspections

**NO NOTICE!!!!!!**

1. Introduction / Invite your representatives
3. Packaging: Non-bulk, bulk, inner packaging/liners, Tested packages used \[\text{Packaging is Our specialty}\]
4. Documents: Bills of Lading
5. Training: Gen Awareness, Function Specific, Safety, Security Awareness and In-depth Security (if required).
6. Security Plan review (if required)
7. Exit Briefing: With or without violations noted.
Top Violations / Inspection Results

- Training
- Security Plan Requirements
- Emergency Response Telephone Number
- Covering packaging certification markings
Hazardous Material Info-Center
1-800-HMR-4922
(1-800-467-4922)
E-mail: infocntr@dot.gov
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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