Transporting Infectious Substances Safely
CDC Webinar
Atlanta, GA
August 15, 2018
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 (NO Tech name)
  “or”
– UN2814, Infectious substances, affecting humans, 6.2 (NO Tech name)

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
  (not on shipping paper or package)
- 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

49 CFR 178.503(f)
Testing of Packages
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.
Category B Packaging

- **Primary Receptacle**: Leakproof or Siftproof
- **Secondary Packaging**: Leakproof or Siftproof (e.g., Sealed Plastic Bag)
- **Rigid Outer Packaging**
- **Biological Substance** Category B
- **Package Mark**
- **Infectious Substance Absorbent Packing Material** (for liquids)
- **Cushioning Material**
- **Name and telephone number of a person responsible** (This information may instead be provided on a written document such as an air waybill)
- **Secondary Packaging (e.g., Sealed Plastic Bag or other intermediate packaging)
- **Primary Receptacle (Leakproof or Siftproof)
- **Absorbent Material**

**49 CFR 173.199**

To Protect People and the Environment From the Risks of Hazardous Materials Transportation

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

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

3291

Section 172.302
Bulk Marking (can also be on plain white placard)

$\section{173.134(c)(d)}$

$\section{173.134(c)(d)}$

$\section{172.432}$

$\section{172.432}$
Shipping Papers

• **Category A**
  - Identification Number
  - Proper Shipping Name / Tech Name
    - “Suspected Category A infectious substance” (Lost in the crowd concept)
  - Hazard Class/Division
  - NO Packing Group
  - Type Pkg/Unit of Measure (QTY)
  - Shipper’s Certification
  - Emergency Response Telephone Number

• **Category B** (unless excepted)
  - No shipping papers required

49 CFR Part 172, Subpart C
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!!!!!!**

Introduction / Invite your representatives

Purpose / Tour facility: Inf Sub – Reg Med Waste – Chemical Waste

Packaging: Non-bulk, bulk, inner pkging/liners,

  Tested packages used (UN) (Pkging is Our specialty)

Bills of Lading (Infectious Sub)

Training: Gen Aw/Function Spec/Sec Awareness/

  Safety/Security plan (if required)

Security Plan (Select Agent Shippers only)

Exit Briefing: With or without violations noted.
Top Violations / Inspection Results

- Training
- Security Plan Requirements
- DOT/CDC Inspection Team – 300 + inspections since 2008
- Last 2 years been great. Minor violations.
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
Contact Information

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