



IATA

Transport Of Biological Samples: Air Transport View

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IATA
21st June 2010





Background

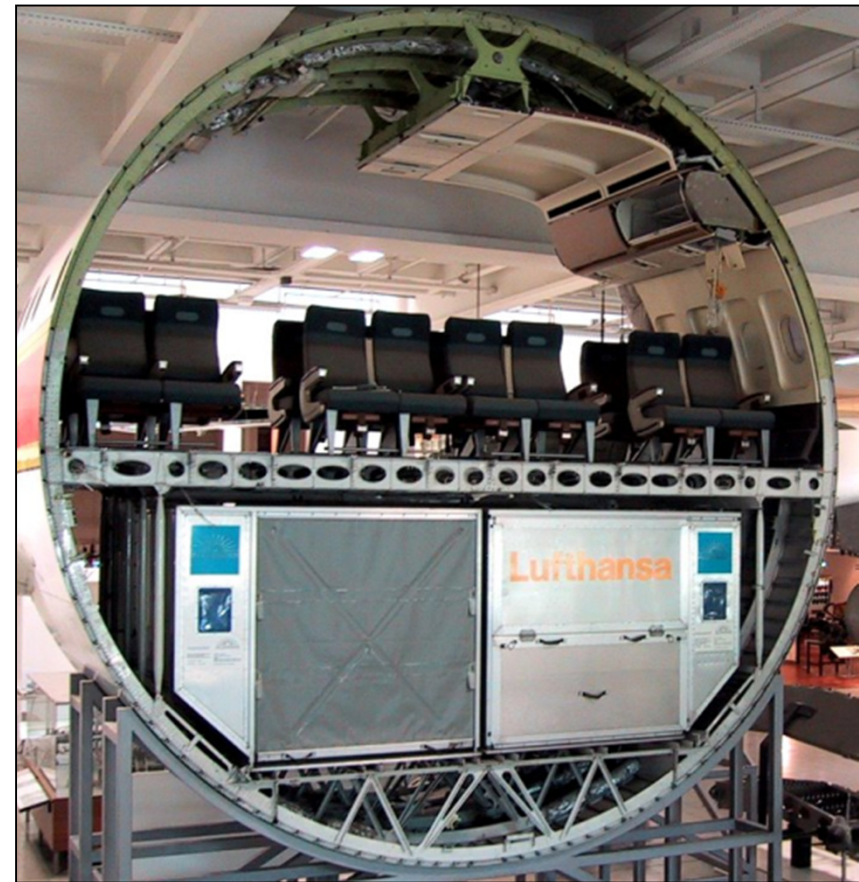


About IATA

- **The International Air Transport Association is the industry's global trade association**
- **Founded in 1945 with 230 members in 130 countries, IATA represents 93% of international scheduled traffic**
- **IATA's mission is to represent, lead and serve the air transport industry**
- **IATA delivers Standards and Solutions to ensure a successful air transport**

About Air Cargo

- Scheduled air cargo started 90 years ago with mail
- Essential engine of today's global economy and airlines business
- Consists of general & special cargo e.g. perishables
- 30% of worldwide value of Cargo transported and 3% in volume
- Speed and on time delivery are the competitive advantages



Example of a Belly Hold Aircraft

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Transport of Dangerous Goods



The IATA Dangerous Goods Regulations

- Basis for the International Regulations
- Recap of current regulations
- Changes effective 2011
- Importance of quality packaging



International Air Transport Regulations

- Originate with International Civil Aviation Organization (ICAO)
- Applicable to States (189) that are signatories to the Chicago Convention
- Annex 18 applies to “The Safe transport of Dangerous Goods by Air”
- Detailed in ICAO Technical Instructions
- IATA Dangerous Goods Regulations are recognized by ICAO as the “field guide” for practical reference by industry.

Classification

Division 6.2

- Category A – UN 2814 – “Infectious substances, affecting humans” or UN 2900 – “Infectious substances, affecting animals”, indicative list of pathogens
- Category B – UN 3373 – “Biological substance, Category B”, all other pathogens
- “Exempt human specimens” or “Exempt animal specimens”, patient specimens with a “minimal likelihood” that pathogens are present
- Other exceptions, e.g. blood for transfusions.

Special Provisions

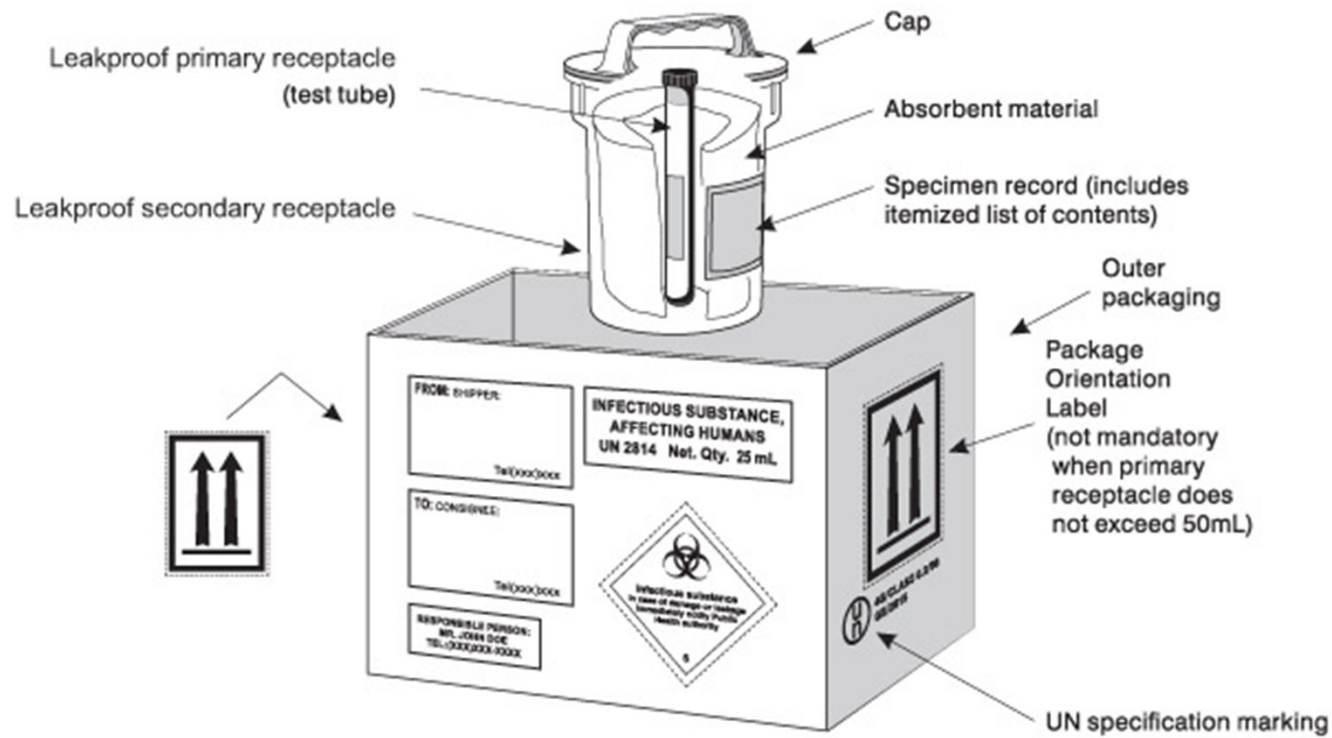
Infectious Substances

- A81, against UN 2814 & UN 2900 permits quantity in excess of normal limits for body parts/organs
- A140, against UN 2814 & UN 2900 identifies that while the technical name is no longer required on package it must be provided on the Shipper's Declaration.

Packing Instructions

Packing Instruction 602:

- triple packaging
- outer packaging must be “rigid”
- itemised list of contents may describe contents as “suspected category A infectious substance” where pathogen is unknown
- UN specification packaging



Packing Instructions (cont.)

Packing Instruction 650:

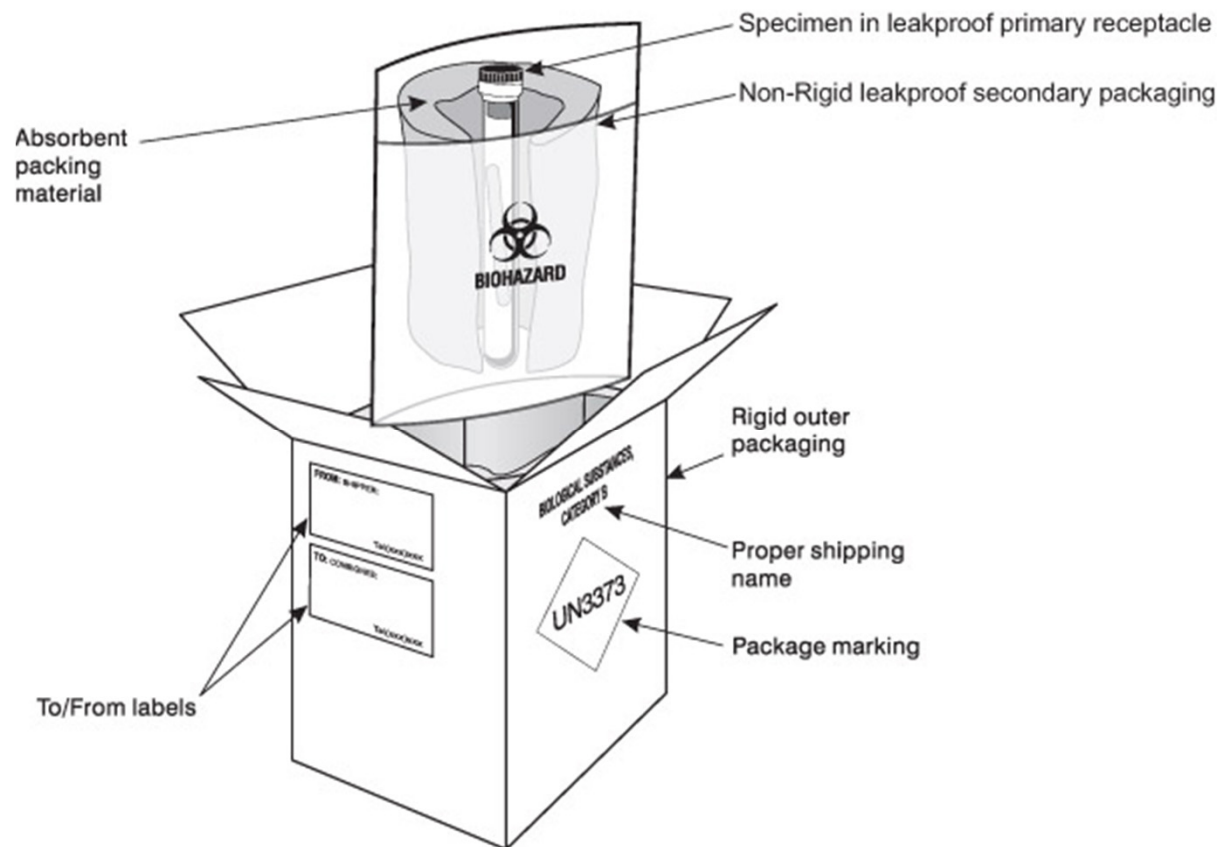
- triple packaging
- rigid outer packaging
- diamond shaped marking, must be a minimum of 50 mm



Packing Instructions (cont.)

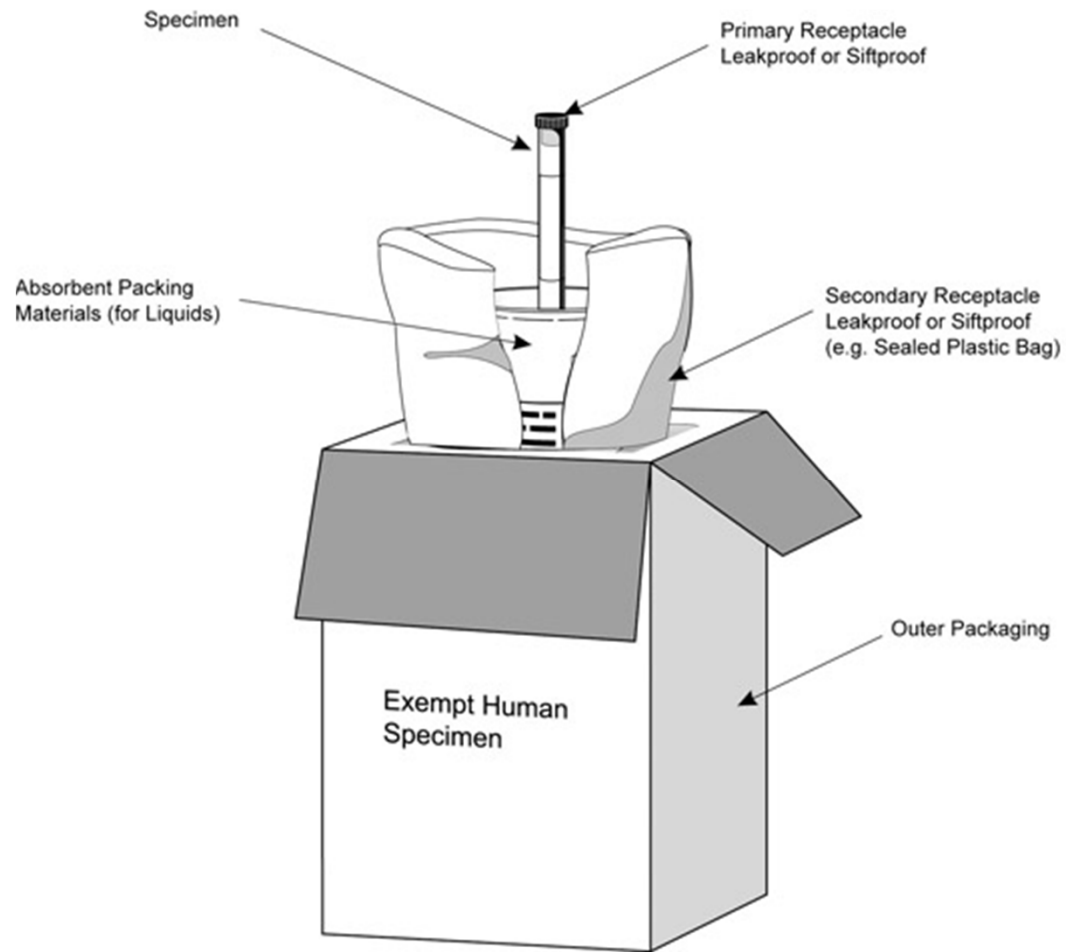
Packing Instruction 650 (Cont.):

- package must be marked with proper shipping name next to diamond marking
- minimum size of packaging
- overpack marking
- name, address and telephone number of responsible person on package or AWB
- clarification of other dangerous goods packed with UN 3373
- The AWB should contain the number of packages



Exempt Specimens

- No “formal” Packing Instruction, but packaging still mandated
- Triple packaging:
 - leak-proof primary
 - leak-proof secondary
 - outer packaging of adequate strength for its capacity
- Package must have one surface with minimum dimensions of at least 100 mm x 100 mm (4” x 4”)
- Package must be marked with “Exempt human specimen” or “Exempt animal specimen”.



2011 Changes

Packing Instruction 602

- Packing Instruction 602 becomes 620 to align with all other modes of transport
 - Part of the overall restructuring of the packing instructions

Packing Instruction 650

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High Quality Packaging

Why Bother?

- The regulations
- Ensure the safe transport of product to destination
- Timely transfers
- Minimizing delays at check-points





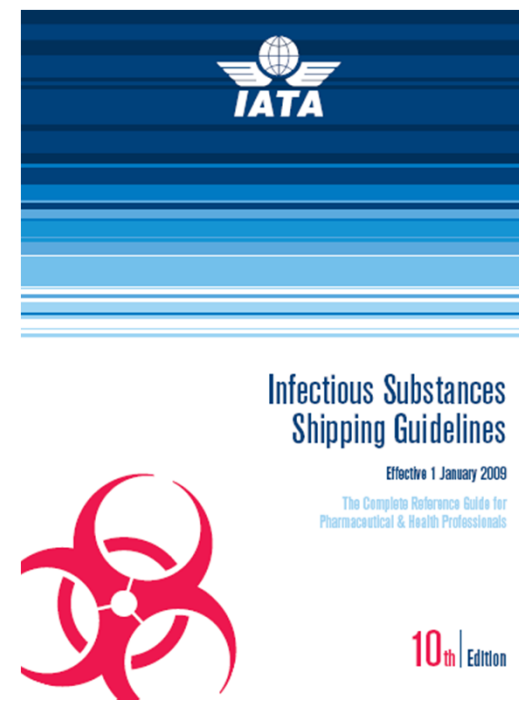


Regulations & Guidelines

➤ 51st Edition



➤ 10th Edition



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Time & Temperature Sensitive Goods

Perishable goods

- Among the first commodities carried by air
- Airlines have developed handling techniques for chilled and frozen products, providing shippers with optimum, cost-efficient packaging methods for time and temperature sensitive commodities.
- Airlines needed to address the issues related to the cold chain for transport of time and temperature sensitive healthcare products
 - ⇒ Storage of drug products under appropriate conditions of temperature, humidity, and light so that the identity, strength, quality, and purity of the drug products are not affected
 - ⇒ Cooperation between the stakeholder of the supply chain

IATA's Perishable Cargo Regulations (PCR)

- Reference guide for all stakeholders involved in the packaging and handling of perishables for air transportation
- Developed based on the experience of a number of major airlines and the scientific data supplied by research institutions.
- Chapter 17 – Air Transport Logistics for Time and Temperature – Sensitive Healthcare Products
- 10th Edition effective 1st July 2010



Perishable Cargo Regulations

Effective 1 July 2010



10th Edition

IATA Time & Temperature Task Force (TTTF)

- Dedicated Task Force under the IATA Live Animal and Perishable Board Governance to continuously address challenges of Chapter 17

- Comprising Airline & Non Airline Members
 - Supply Chain Stakeholders
 - Organizations
 - Subject Matter Experts
 - Regulatory Bodies

- Tasked to recommend standards for the procedures, documentation, cargo handling, packaging and acceptance of goods from the health care sector in order to facilitate, improve or maintain the logistics thereof.



IATA's Perishable Cargo Regulations

- The current edition of the PCR introduced new requirements for the transportation logistics of healthcare products, such as:
 - Quality Management System Requirement and Service Level Agreements applicable to the above commodities
 - Training Requirements
 - New Label for Time and Temperature Sensitive Healthcare products (mandatory as of 1st July 2010)

Time & Temperature Sensitive Healthcare Products Label – Effective 1st July 2010

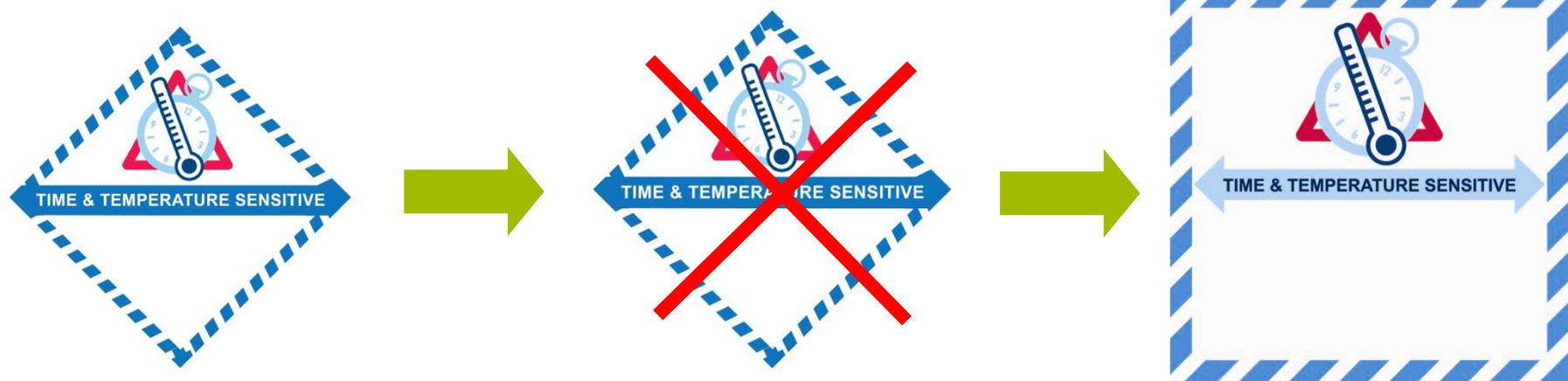
➤ Originally Approved
Apr. 2009

➤ PCR 9th Edition

➤ ICAO and US DOT
insisted on a change
of orientation (45°) so
as not to be mistaken
for a DG label

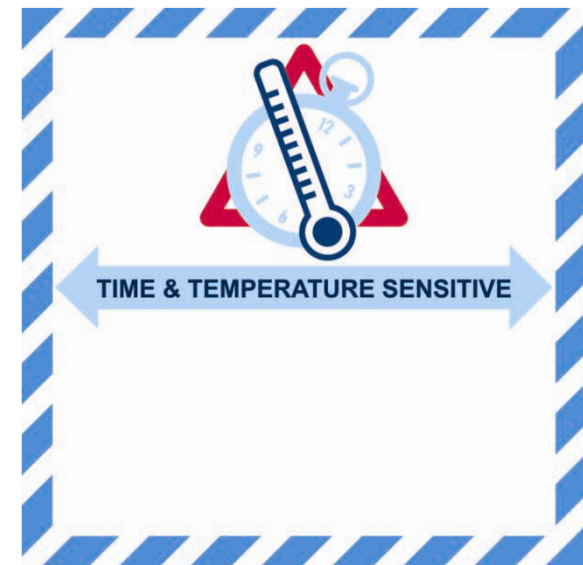
➤ Revised Oct.
2009

➤ PCR 10th Edition



Time & Temperature Sensitive Healthcare Products Label – Effective 1st July 2010

- Only for healthcare products as indicated in Chap.17
- Only to be used when there is a specific agreement in place with the stakeholders (shipper, forwarder, carrier, etc)
- Only to be completed as indicated in that agreement (i.e. in the SLA, QMS, SOP, etc).
- The temperature indicated on the label is the only one that will be followed during transport (other package markings will be disregarded) – Informs on the external handling temperatures
- The label will be a 3 color label with gradients for the effect of the different blues.





Next Steps

- Continuous enhancement of Chapter 17 of IATA's Perishable Cargo Regulations
- Seek for IATA's Chapter 17 education and compliance
- Gather feedback from stakeholders of the supply chain
- Continuous cooperation with International Organizations and Regulatory Bodies



Resources

- UN SCETDG Website:
<http://www.unece.org/trans/main/dgdb/dgsubc/c3age.html>
- ICAO Dangerous Goods Website:
<http://www.icao.int/anb/FLS/DangerousGoods/>
- IATA Dangerous Goods Website:
http://www.iata.org/whatwedo/cargo/dangerous_goods/index
- IATA Perishable Cargo Website
<http://www.iata.org/whatwedo/cargo/Pages/perishables.aspx>

IATA World Cargo Symposium, March 2011, Istanbul

- ⇒ Dangerous Goods Track
- ⇒ Time and Temperature Management Track



Thank You



to represent, lead and serve the airline industry