Introduction

This is a list of terms you should know when transporting Category A or B Substances or when shipping with Dry Ice.

Animal and Plant Health Inspection Services (US)

Also known as APHIS (pronounced A FIS)

Biological Product (IATA 3.6.2.3)

Biological products are those products derived from living organisms which are manufactured and distributed in accordance with the requirements of appropriate national authorities, which may have special licensing requirements, and are used either for

- prevention
- treatment
- diagnosis of disease in humans or animals
- development
- experimental
- investigational purposes related thereto

They include, but are not limited to, finished or unfinished products such as vaccines.

Biological Substance, Category B (IATA 3.6.2.2.2)

An infectious substance that is not in a form generally capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when exposure occurs

Carrier

Any commercial company that transports goods. In this context, a carrier (or courier) refers to companies such as Federal Express (FedEx), DHL, the United States Postal Service (USPS), etc. who transport Category B, Infectious Substances. Also known as a courier

Centers for Disease Control and Prevention (US)

The Centers for Disease Control and Prevention (or CDC) requires permits when shipping some Category B packages. Check with the UAB OH&S or your carrier/courier for more information.

Courier

Any commercial company that transports goods. In this course, a courier (or carrier) refers to companies such as Federal Express (FedEx), DHL, the United States Postal Service (USPS), etc. who transport infectious substances or materials. Also known as a carrier.
Cultures

The result of a process by which pathogens are intentionally propagated. Does not include specimens as in IATA 3.6.2.1.4

Dangerous Goods

IATA Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the IATA DGR or which fall under the classifications according to the IATA DGR.

DGR

Dangerous Goods Regulations

DOT

Department of Transportation

Dry Ice

Dry Ice is a refrigerant made from carbon dioxide gas and can be dangerous to work with if not handled properly.

Exempt Specimens (IATA 3.6.2.2.3.6)

Patient specimens for which there is minimal likelihood that pathogens are present AND when packed in packaging that will prevent leakage AND is marked with the words “Exempt human specimen” or “Exempt animal specimen.” A professional opinion is required when determining whether something qualifies as an Exempt Specimen.

Genetically Modified Organism (GMO)

An organism whose genetic material has had the genetic material of another organism inserted into its own.

Governing Agencies

There are several international and national agencies that regulate the shipment of Category B, Infectious Substances and Materials. Among these are:

- International Air Transportation Association (IATA)
- International Civil Aviation Organization (ICAO)
- The United States Department of Transportation (DOT)
- The United Nations
Harmonization

The coordination of multiple agencies and regulations to cause as little confusion as possible. IATA (Dangerous Goods Regulations) DGR

Hazardous Materials

Hazardous Materials (or HazMat)

HHS

US Department of Health and Human Services

HIV

Human immunodeficiency virus

HMR

Hazardous Materials Regulations

IATA - International Air Transportation Association

Trade association of the world’s major airlines

IATA (Dangerous Goods Regulations) DGR

 Contains all of the requirements from the ICAO Technical Instructions, plus more restrictive regulations for shipping. Following the IATA DGR ensures that you are following federal law.

ICAO - International Civil Aviation Organization

The part of the United Nations that governs all international matters related to flight

Infectious Substance, Category A (IATA 3.6.2.2.2.1)

An infectious substance which is transported in a form that, when exposure occurs, is capable of causing permanent disability, life-threatening or fatal disease in otherwise healthy humans (UN 2814) or animals (UN 2900).

Kilogram (Kg)

Metric measurement of weight; equal to 1000 grams
May - a regulatory term

When used within a regulation, indicates a preferred, but not mandatory requirement. Example: "The complete shipper's address MUST be placed on the outside of the package. A shipper's phone number MAY be included, but is not required." (From the DRG)

MRSE

Methicillin-Resistant Staphylococcus aureus

Must - a regulatory term

When used within a regulation, indicates a mandatory requirement. Example: "The complete shipper's address MUST be placed on the outside of the package. A shipper's phone number MAY be included, but is not required." From the DRG

Numerical cross reference

An IATA list that will allow the user to look up a Proper Shipping Name using a UN number

OHSA

US Department of Occupational Safety and Health Administration

Overpack

An overpack is a fiberboard box or container designed to hold packages and/or some type of refrigerant (dry ice or gel packs) during shipment and remain leak proof.

Package

The completed product of packaging combined with the method of packing to make an item ready for transport.

Packaging

The materials necessary for a completed package to comply with minimum packing requirements of regulations (amount of containment, absorbent materials, pressure test).

Packing

The method that is used to enclose articles or substances in packaging.
Packing Instructions (PI)

A set of specific instructions for packing material for transport by air.

Examples include:

- PI 650 for Biological Substances, Category B
- PI 959 for GMOs
- PI 954, Dry Ice
- PI 620, Category A

PI can also indicate a researcher who is the Principal Investigator - the person whose name appears as the lead or primary person on the grant or contract. Make sure you read the material in context.

Pathogen

A microbial agent (bacteria, virus, parasite, fungus, prion) capable of causing disease.

Patient specimens (IATA 3.6.2.1.4)

A specimen collected directly from humans or animals, including, but not limited to

- excreta
- secreta
- blood and its components
- tissue and tissue fluid swabs
- body parts

being transported for purposes such as

- research
- diagnosis
- investigational activities
- disease treatment
- prevention

Permits

Documentation that may be required when shipping some Category B packages. An example of this would be Select Agents/Toxins.

PG

Packing Group
PHMSA

US Pipeline and Hazardous Materials Safety Administration

Primary container

The tube, container, or vial in which an item is placed for shipment.

Proper Shipping Name (PSN)

Is a name which is used in shipping documents and, when required, on a package. Proper shipping names are designated by IATA and may be found in the IATA DGR list 4.2 or 49CFR 172.101

PSN

Proper Shipping Name

Receiver

The person accepting the Category B package from the courier/carrier

Restrictions

Some states/countries or couriers/carriers may have more "variations of the regulations" (i.e. restrictive regulations) than IATA DGR or ICAO TI. These restrictions (i.e. "variations of the regulations") still apply no matter how restrictive they may seem.

RMW

Regulated Medical Waste

Secondary container

This is also known as the inner container. The secondary container is a container, inside a shipping container that holds the primary container, along with enough material to absorb the entire contents of the primary container, if liquid, and also withstand pressure requirements.

Select Agents/Toxins

These are highly regulated materials that may be classified as Category A or B substances. They require a laboratory certificate of registration from federal agencies and a permit in order to be transported.

Shall

When used within a regulation, indicates a mandatory requirement.
Should

When used within a regulation, indicates a preferred, but not mandatory requirement.

Sublimate

A physical reaction where a solid turns directly into a gas. For example, dry ice sublimes into carbon dioxide gas.

TDG

Transportation of Dangerous Goods

TDGR

Transport of Dangerous Good Regulations Clear Language Edition (Canada)

Technical Instructions (TI)

Regulations set forth by ICAO. The source of US Department of Transportation federal laws regarding transport of dangerous goods

The United Nations (UN)

This international organization seeks cooperation from all parties involved in determining international law that affects everyone - as in the transportation of Biological Substances, Category B and Materials.

Title 49 Code of Federal Regulations (49CFR)

The Code of Federal Regulations (CFR) is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government. It is divided into 50 titles that represent broad areas subject to Federal regulation. Title 49 covers Transportation. This is also known as 49CFR.

UN Mark

The marking that appears on all approved boxes used for shipping Category B packages. In this example, the UN is in a circle at the bottom of the box.
**UN Number**

The letters "UN" followed by a four digit number. UN numbers are another method used to identify Dangerous Goods. Every dangerous good has a unique UN number, to match a unique Proper Shipping Name. The letters “UN” must appear before the number to be considered correct.

**UPU**

Universal Postal Union

**US DOT**

It is the federal cabinet department of the United States government concerned with transportation. The United States Department of Transportation

**USDA**

US Department of Agriculture

**USPHS**

US Public Health Service Commissioned Corps

**USPS**

The United States Postal Service (or USPS) has specific guidelines for packing, labeling, and marking Category B packages. The United States Postal Service

**Variations**

Some states/countries or couriers/carriers may have more restrictive regulations than IATA DGR or ICAO TI. These “variations of the regulations” (or restrictions) still apply no matter how restrictive they may seem.

**Waybill**

A waybill is documentation of a contract for the transport of cargo. It contains information such as the nature and amount of a dangerous good.