

U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration 1200 New Jersey Avenue, SE Washington, DC 20590

August 7, 2025

Keri Kolb Centers for Disease Control and Prevention 3156 Rampart Road Mail Stop 2 Fort Collins, CO 80521

Reference No. 25-0044

Dear Ms. Kolb:

This letter is in response to your April 10, 2025 email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to materials classified and described by the International Civil Air Organization (ICAO) as Division 6.2 infectious substances. Specifically, you request clarification on the proper classification (*i.e.*, Category A or B) of chimeric viruses (non-culture). In your incoming email, you reference the indicative list provided in the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions) and the International Air Transportation Association Dangerous Goods Regulations.

PHMSA notes that the Categories A and B described in the HMR at § 173.134 do not incorporate by reference nor are they intended to mirror the Categories A and B for Division 6.2 infectious substances listed in the ICAO Technical Instructions. For purposes of transporting infectious substances within the United States, the indicative list of example Category A infectious substances contained in the ICAO Technical Instructions should be considered solely as informational guidance to assist in appropriately classifying Category A and B infectious substances commensurate with the relevant HMR criteria. The ICAO list is not exhaustive and may omit new or emerging pathogens and require amendments from time to time based on the latest available data. Therefore, the indicative ICAO list is not included in the HMR as it is not intended to be regulatory in nature.

Furthermore, for purposes of the HMR, it is the shipper's responsibility to properly classify the material in accordance with § 173.134 classification criteria for Division 6.2 infectious substances. Therefore, chimeric viruses, whether in a culture or non-cultured form, must be classified in accordance with the criteria in § 173.134 and assigned the appropriate category for transportation.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

Dirk Der Kinderen

Chief, Standards and Development Branch

Standards and Rulemaking Division

Horne

Jones, Jessie Jane (PHMSA)

From: INFOCNTR (PHMSA)

Sent: Thursday, April 10, 2025 1:08 PM

To: Hazmat Interps

Subject: FW: CFR 49 IATA clarification about Chimeric viruses UN2814

Hello Hazmat Interps,

Please see the below request for letter of interpretation.

The mailing address for the request is:

Keri Kolb Centers for Disease Control and Prevention 3156 Rampart Rd Mail Stop 02 Fort Collins, CO 80521

Thanks, Jonathon, HMIC

From: Kolb, Keri (CDC/NCEZID/DVBD/ADB) <ryq1@cdc.gov>

Sent: Thursday, April 10, 2025 10:05 AM

To: INFOCNTR (PHMSA) < INFOCNTR.INFOCNTR@dot.gov>

Subject: CFR 49 IATA clarification about Chimeric viruses UN2814

You don't often get email from ryq1@cdc.gov. Learn why this is important

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hello,

I was wondering if you would be able to assist me with clarification on chimeric viruses under the UN2814 classification.

I have a question about a Category A shipment item.

On the list for Category A items in Table 3.6.D (2024 lata & CDF 49 book) it indicates that viruses such as West Nile virus (cultures only), Eastern Encephalitis (cultures only) and Dengue virus (cultures only) are considered category A items.

We have several variants of these items that we ship and need clarification as to whether or not these items would be considered category A items in the eyes of the government. Some of these examples are the following. They are what is considered chimeric viruses.

ChimeriVax West Nile virus

Eastern equine encephalitis/Sindbis Chimeric virus

These items are not cultures but "chimeric" viruses of items that are on the CAT A list. This is the definition of a chimeric

virus per the USDA:

A chimera or chimeric virus is a virus that contains genetic material derived from two or more distinct viruses. It is defined

by the Center for Veterinary Biologics (part of the U.S. Department of Agriculture's Animal and Plant Health Inspection

Service) as a "new hybrid microorganism created by joining nucleic acid fragments from two or more different

microorganisms in which each of at least two of the fragments contain essential genes necessary for replication."[1] The

term genetic chimera had already been defined to mean: an individual organism whose body contained cell populations

from different zygotes or an organism that developed from portions of different embryos.[citation needed] Chimeric

flaviviruses have been created in an attempt to make novel live attenuated vaccines.[2] (i got this from Wikipedia)

Do we ship these items as Cat A items, based on the name, or can we ship them as a CAT B because it's not a culture?

I also need some kind of documentation that would support the finding so that we can have it on file or even better yet,

someplace where I can go to get this clarified within the government. Can you please advise?

Thank you!

Keri Kolb

Administrative Support Specialist

US Department of Health and Human Services

Centers for Disease Control and Prevention

Ryq1@cdc.gov

Keri Kolb

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