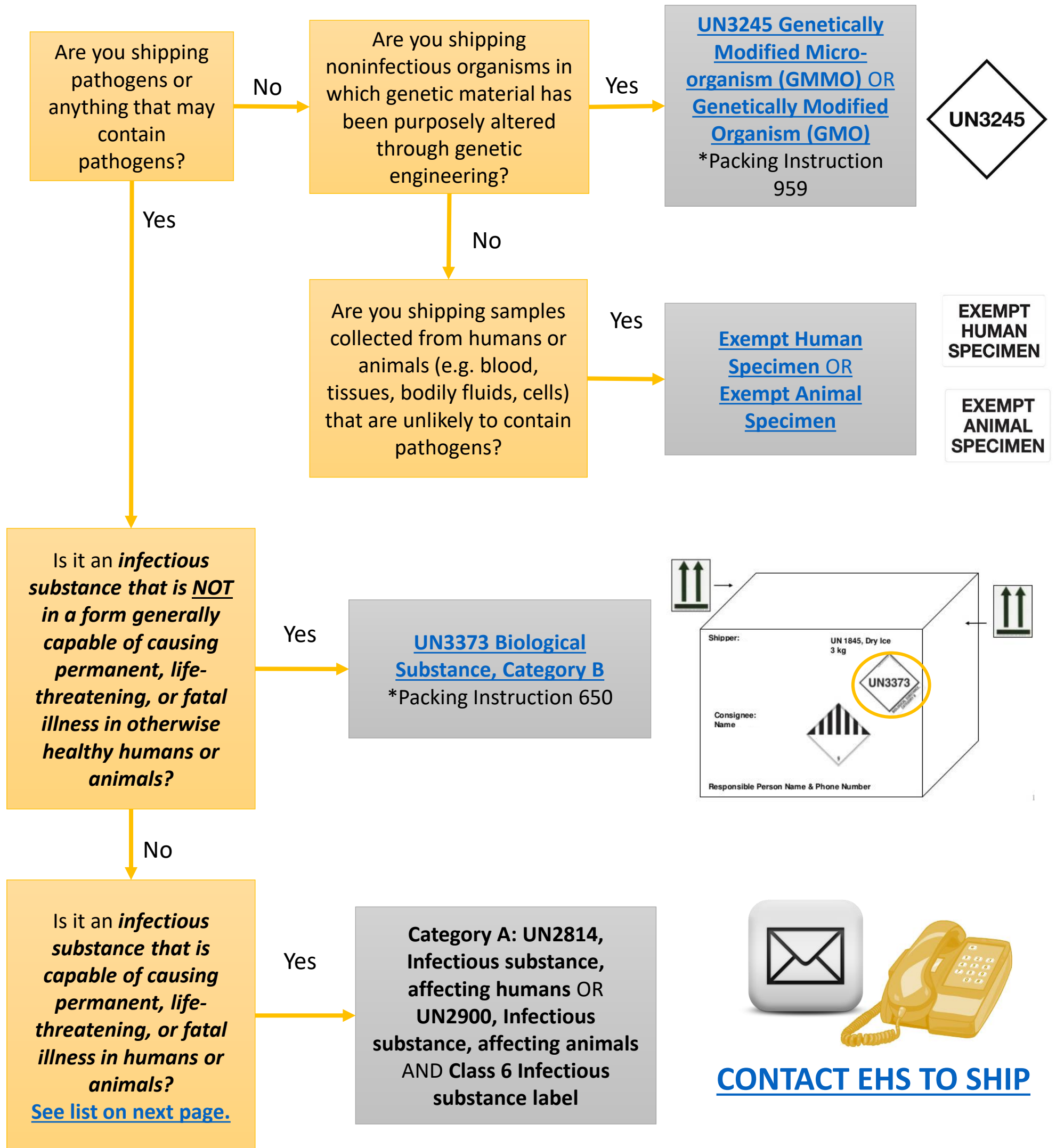


Guide to Preparing Biological Shipments

Appropriate HTP Shipper Training within the last two years is needed prior to classifying and preparing a shipment—note these trainings do NOT certify you to ship all hazardous materials. Other requirements below



*DOT/IATA Packaging Instructions can be found through a search engine. Guidance is also on the EHS website.

- **DRY ICE:** Shipments must be prepared according to Packaging Instruction 954 (example above).
- **PRESERVATIVES (ethanol, formalin, formaldehyde):** Biological materials shipped with preservatives might have additional packaging, marking, and labeling requirements. Quantities and concentrations are limited. **Contact EHS for all other chemical shipments.**
- **SHIPPING OUTSIDE THE U.S.:** Contact Research Compliance to determine Export Controls requirements.
- **SHIPPING INTO/WITHIN THE U.S.:** Some materials may require import/transport permits (USDA, CDC, etc.). NOTE: This may include materials exempt from DOT/IATA regulations.

NOTE: This flowchart is provided as guidance only. Please consult the regulations and EHS for more information.

Examples of Infectious Substances Included in Category A in Any Form Unless Otherwise Indicated

UN 2814 Infectious Substances Affecting Humans

Bacillus anthracis (cultures only)
Brucella abortus (cultures only)
Brucella melitensis (cultures only)
Brucella suis (cultures only)
Burkholderia mallei - *Pseudomonas mallei* – Glanders (cultures only)
Burkholderia pseudomallei – *Pseudomonas pseudomallei* (cultures only)
Chlamydia psittaci - avian strains (cultures only)
Clostridium botulinum (cultures only)
Coccidioides immitis (cultures only)
Coxiella burnetii (cultures only)
Crimean-Congo hemorrhagic fever virus
Dengue virus (cultures only)
Eastern equine encephalitis virus (cultures only)
Escherichia coli, verotoxigenic (cultures only)
Ebola virus
Flexal virus
Francisella tularensis (cultures only)
Guanarito virus
Hantaan virus
Hantaviruses causing hemorrhagic fever with renal syndrome
Hendra virus
Hepatitis B virus (cultures only)
Herpes B virus (cultures only)
Human immunodeficiency virus (cultures only)
Highly pathogenic avian influenza virus (cultures only)
Japanese Encephalitis virus (cultures only)
Junin virus
Kyasanur Forest disease virus
Lassa virus
Machupo virus
Marburg virus
Monkeypox virus
Mycobacterium tuberculosis (cultures only)
Nipah virus
Omsk hemorrhagic fever virus
Poliovirus (cultures only)
Rabies virus (cultures only)
Rickettsia prowazekii (cultures only)
Rickettsia rickettsii (cultures only)
Rift Valley fever virus (cultures only)
Russian spring-summer encephalitis virus (cultures only)
Sabia virus
Shigella dysenteriae type 1 (cultures only)
Tick-borne encephalitis virus (cultures only)
Variola virus
Venezuelan equine encephalitis virus (cultures only)

West Nile virus (cultures only)
Yellow fever virus (cultures only)
Yersinia pestis (cultures only)

UN 2900 Infectious Substances Affecting Animals

African swine fever virus (cultures only)
Avian paramyxovirus Type 1 – Velogenic Newcastle disease virus (cultures only)
Classical swine fever virus (cultures only)
Foot and mouth disease virus (cultures only)
Lumpy skin disease virus (cultures only)
Mycoplasma mycoides - Contagious bovine pleuropneumonia (cultures only)
Peste des petits ruminants virus (cultures only)
Rinderpest virus (cultures only)
Sheep-pox virus (cultures only)
Goatpox virus (cultures only)
Swine vesicular disease virus (cultures only)
Vesicular stomatitis virus (cultures only)

NOTE 1: This list is not exhaustive. Infectious substances, including those containing new or emerging pathogens, which do not appear in the list but which meet the same criteria must not be transported as a diagnostic specimen. In addition, if there is doubt as to whether or not a pathogen falls within this category it must not be transported as a diagnostic specimen.

NOTE 2: In this list, the microorganisms indicated in italics are bacteria, mycoplasmas, rickettsia, or fungi.

NOTE 3: Cultures are the result of a process by which pathogens are intentionally propagated. This definition does not include human or animal samples.

NOTE 4: If a health authority list is available that shows other pathogens regarded as Risk Group 4 this should also be taken into account and the substances should not be transported as diagnostic specimens.