

Alphabetical Listing of Export Restricted Biological Items

There are two sets of regulations for export restricted biological items, the International Traffic in Arms Regulations (ITAR) from Dept. of State and the Export Administration Regulations from Dept. of Commerce. These items require export licenses to all countries. Licensing takes about 6 weeks. Fines are \$250,000 to \$1,094,010 per violation. See the Export Control website within the Office of Research at: <https://research.uci.edu/ref/export-controls/index.html>

These listed items are controlled for export regardless of quantity or attenuation, genetic elements or genetically modified organisms for such agents or “toxins”, including small quantities or attenuated strains of select biological agents or “toxins” that are excluded from the lists of select biological agents or “toxins” by APHIS, CDC, or DHHS.

Under the ITAR, Biological agents and biologically derived substances specifically developed, configured, adapted, or modified for the purpose of increasing their capability to produce casualties in humans or livestock, degrade equipment or damage crops are controlled under CATEGORY XIV—TOXICOLOGICAL AGENTS, INCLUDING CHEMICAL AGENTS, BIOLOGICAL AGENTS, AND ASSOCIATED EQUIPMENT. Please note that there are proposed regulations on this category that if they become final will impact the listing of biologicals. See [Part 121 United States Munitions List Category XIV](#).

Certain precursor chemicals, Biosafety gear, and lab equipment are also export restricted see Categories 1 & 2 of the [Commerce Control List](#) and [Part 121 United States Munitions List Category XIV](#).

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| Abrin |
| Aflatoxins |
| African horse sickness virus |
| African Swine fever virus |
| Andean potato latent virus (Potato Andean latent tymovirus) |
| Andes virus |
| Avian influenza (AI) viruses with high pathogenicity (HP), AI viruses that have an intravenous pathogenicity index (IVPI) in 6-week old chickens greater than 1.2; or AI viruses that cause at least 75% mortality in 4- to 8-week old chickens infected intravenously. |
| Note: Avian influenza (AI) viruses of the H5 or H7 subtype that do not have either of the characteristics described in above should be sequenced to determine whether multiple basic amino acids are present at the cleavage site of the haemagglutinin molecule (HA0). If the amino acid motif is similar to that observed for other HPAI isolates, then the isolate being tested should be considered as HPAI and the virus is export restricted |
| Bacillus anthracis |
| Bluetongue virus |
| Botulinum toxins |
| Brucella abortus |
| Brucella melitensis |
| Brucella suis |
| Burkholderia mallei (Pseudomonas mallei) |
| Burkholderia pseudomallei (Pseudomonas pseudomallei) |
| Chapare virus |
| Chikungunya virus |
| Chlamydia psittaci (formerly Chlamydia psittaci) |
| Choclo virus |
| Cholera toxin |
| Classical swine fever virus (Hog cholera virus). |

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| Clavibacter michiganensis subspecies sepedonicus (syn. Corynebacterium michiganensis subspecies sepedonicum or Corynebacterium sepedonicum); |
| Clostridium argentinense (formerly known as Clostridium botulinum Type G) botulinum neurotoxin producing strains |
| Clostridium baratii, botulinum neurotoxin producing strains |
| Clostridium botulinum |
| Clostridium butyricum, botulinum neurotoxin producing strains |
| Clostridium perfringens, epsilon toxin producing types |
| Clostridium perfringens alpha, beta 1, beta 2, epsilon and iota toxins |
| Coccidioides immitis |
| Coccidioides posadasii |
| Cochliobolus miyabeanus (Helminthosporium oryzae) |
| Colletotrichum kahawae (Colletotrichum coffeanum var. virulans) |
| Conotoxins |
| SARS-associated coronavirus (SARS-CoV) |
| Coxiella burnetii |
| Crimean-Congo hemorrhagic fever virus |
| Dengue virus |
| Diacetoxyscirpenol toxin |

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| Diagnostic & food testing kits containing: <ul style="list-style-type: none"> • Abrin; • Aflatoxins; • Botulinum toxins; • Cholera toxin; • Clostridium perfringens alpha, beta 1, beta 2, epsilon and iota toxins; • Conotoxin; • Diacetoxyscirpenol toxin; • HT-2 toxin; • Microcystin (Cyanoginosis); • Modeccin toxin; • Shiga toxin; • Staphylococcus aureus enterotoxins, hemolysin alpha toxin, and toxic shock syndrome toxin (formerly known as Staphylococcus enterotoxin F); • T-2 toxin; • Tetrodotoxin; • Verotoxin and other Shiga-like ribosome inactivating proteins; Viscum Album Lectin 1 (Viscumin); or • Volkensin toxin |
| Dobrava-Belgrade virus |
| Eastern Equine Encephalitis virus |
| Ebolavirus (includes all members of the Ebolavirus genus) |
| Enterohaemorrhagic Escherichia coli (E Coli), Shiga toxin producing Escherichia coli (STEC) of serogroups O26, O45, O103, O104, O111, O121, O145, O157, and other shiga toxin producing serogroups Note: Shiga toxin producing Escherichia coli (STEC) is also known as enterohaemorrhagic E. coli (EHEC) or verocytotoxin producing E. coli (VTEC). |
| Equine Morbillivirus (Hendra Virus) |
| Foot-and-mouth disease virus |
| Francisella tularensis |

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| <p>“Genetic elements” or genetically modified organisms that contain nucleic acid sequences associated with the pathogenicity of the microorganisms controlled by 1C351.a to .c, 1C352, 1C354, items in this alphabetical list.</p> <p>“Nucleic acid sequences associated with the pathogenicity of any of the microorganisms controlled by 1C351.a to .c, 1C352, or 1C354” means any sequence specific to the relevant controlled microorganism that: in itself or through its transcribed or translated products represents a significant hazard to human, animal or plant health; or is known to enhance the ability of a microorganism controlled by 1C351.a to .c, 1C352, or 1C354, or any other organism into which it may be inserted or otherwise integrated, to cause serious harm to human, animal or plant health.</p> <p>“Genetically modified organisms” include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially in whole or in part.</p> <p>“Genetic elements” include, inter alia, chromosomes, genomes, plasmids, transposons, and vectors, whether genetically modified or unmodified, or chemically synthesized in whole or in part.</p> <p>“Genetic elements” or genetically modified organisms that contain nucleic acid sequences coding for any of the “toxins” controlled by 1C351.d or “sub-units of toxins” thereof.</p> |
| Goatpox virus |
| Guanarito virus |
| Hantaan virus |
| Hendra virus (Equine morbillivirus) |
| Herpes virus (Aujeszky's disease) |
| Hog cholera virus (Swine fever virus) |
| HT-2 toxin |
| Immunotoxins containing: <ul style="list-style-type: none"> • Abrin; • Aflatoxins; • Botulinum toxins; • Cholera toxin; • Clostridium perfringens alpha, beta 1, beta 2, epsilon and iota toxins; • Conotoxin; • Diacetoxyscirpenol toxin; • HT-2 toxin; • Microcystin (Cyanginosin); • Modeccin toxin; • Ricin; • Saxitoxin; • Shiga toxin; • Staphylococcus aureus enterotoxins, hemolysin alpha toxin, and toxic shock syndrome toxin (formerly known as Staphylococcus enterotoxin F); • T-2 toxin; • Tetrodotxin; • Verotoxin and other Shiga-like ribosome inactivating proteins; Viscum Album Lectin 1 (Viscumin); or • Volkensin toxin |
| Reconstructed 1918 Influenza virus |
| Japanese encephalitis virus |

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| Junin virus |
| Kyasanur Forest disease virus |
| Laguna Negra virus |
| Lassa virus |
| Louping ill virus |
| Lujo virus |
| Lumpy skin disease virus |
| Lymphocytic Choriomeningitis virus (LCV) |
| Lyssa virus (aka Rabies) |
| Machupo virus |
| Magnaporthe oryzae (Pyricularia oryzae) |
| Marburgvirus (includes all members of the Marburgvirus genus) |
| Medical products containing: <ul style="list-style-type: none"> • Abrin; • Aflatoxins; • Cholera toxin; • Clostridium perfringens alpha, beta 1, beta 2, epsilon and iota toxins; • Diacetoxyscirpenol toxin; • HT-2 toxin; • Microcystin (Cyanginosin); • Modeccin toxin; • Shiga toxin; • Staphylococcus aureus enterotoxins, hemolysin alpha toxin, and toxic shock syndrome toxin (formerly known as Staphylococcus enterotoxin F); • T-2 toxin; • Tetrodotxin; • Verotoxin & other Shiga-like ribosome inactivating proteins; Viscum Album Lectin 1 (Viscumin); or • Volkensin toxin |
| Microcyclus ulei (syn. Dothidella ulei) |
| Microcystin (Cyanginosin) |
| Modeccin toxin |
| Monkeypox virus |
| Murray Valley encephalitis virus |
| Mycoplasma capricolum subspecies capripneumoniae (“strain F38”). |
| Mycoplasma mycoides subspecies mycoides SC (small colony) (a.k.a. contagious bovine pleuropneumonia); |
| Newcastle disease virus |
| Nipah virus |
| Omsk hemorrhagic fever virus |
| Oropouche virus |
| Peronosclerospora philippinensis (a.k.a. Peronosclerospora sacchari); |
| Peste-des-petits ruminants virus |
| Phoma glycinicola (formerly Pyrenochaeta glycines) |
| Porcine herpes virus (Aujeszky's disease) |
| Porcine Teschovirus |
| Andean potato latent virus (Potato Andean latent tymovirus) |
| Potato spindle tuber viroid. |
| Powassan virus |
| Puccinia graminis ssp. graminis var. graminis/Puccinia graminis ssp. graminis var. stakmanii (Puccinia graminis [syn. Puccinia graminis f. sp. tritici]) |

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| Puccinia striformis (syn. Puccinia glumarum) |
| Rabies virus and all other members of the Lyssavirus genus |
| Ralstonia solanacearum, race 3, biovar 2 |
| Rathayibacter toxicus; |
| Reconstructed 1918 influenza virus |
| Ricin |
| Rickettsia prowazekii |
| Rift Valley fever virus |
| Rinderpest virus |
| Rocío virus |
| Sabia virus |
| Salmonella typhi |
| Severe acute respiratory syndrome-related coronavirus (SARS-related coronavirus) |
| Saxitoxin |
| Sclerophthora rayssiae var. zeae; |
| Seoul virus |
| Sheeppox virus |
| Shiga toxin |
| Shigella dysenteriae |
| Sin Nombre virus |
| St. Louis encephalitis virus |
| Staphylococcus aureus enterotoxins, hemolysin alpha toxin, and toxic shock syndrome toxin (formerly known as Staphylococcus enterotoxin F) |
| Suid herpesvirus 1 (Pseudorabies virus; Aujeszky's disease) |
| Swine fever virus (Hog cholera virus) |
| Swine vesicular disease virus |
| Synchytrium endobioticum; |
| T-2 toxin |
| Tetrodotxin (TTX) |
| Tick-borne encephalitis complex viruses (Russian Spring-Summer encephalitis virus aka Far Eastern subtype) and (Siberian subtype, formerly West Siberian virus) |
| Thecaphora solani |
| Tilletia indica |
| Vaccines against items in this alphabetical list (ECCNs 1C351, 1C353, or 1C354) |
| Variola virus (Smallpox virus) |
| Venezuelan Equine Encephalitis virus |
| Verotoxin & other Shiga like ribosome inactivating proteins |
| Vesicular stomatitis virus |
| Vibrio cholerae |
| Viscum Album Lectin 1 (Viscumin) |
| Volkensin toxin |
| Western equine encephalitis virus |
| Xanthomonas albilineans |
| Xanthomonas axonopodis pv. citri (Xanthomonas campestris pv. citri A) (Xanthomonas campestris pv. citri) |
| Xanthomonas oryzae pv. oryzae (syn. Pseudomonas campestris pv. oryzae); proteobacteria |
| Yellow fever virus |
| Yersinia pestis |

Biological International Shipments or Hand carry Questions to Ask

Exports

1. Will this item be for a prohibited end use like creation of weapons of mass destruction or use by a foreign military?
 - a. Yes, transaction must stop and alert campus export control and authorities.
 - b. No, proceed to next step
2. What country is it shipping to? Is it an [embargoed country](#)?
 - a. Yes, this may be a prohibited export or an export license or general license may be required. (Cuba, Iran, North Korea, Syria)
 - b. No, proceed to next step
3. What is the export classification of the item? [ECCN](#) or [USML](#) category
4. Is the item listed as requiring an export license?
 - a. Yes, Contact Export Control and we will file licenses and advise on any available exceptions. Licensing takes a minimum of 6 weeks to obtain from the US government and must be in place prior to the export.
 - b. No, proceed with shipment according to dangerous goods shipping requirements, if applicable.
5. What is the schedule B or HS code for the item?
<https://uscensus.prod.3ceonline.com/> or <http://hts.usitc.gov/>
This is required on the international shipping invoice for customs clearance.
6. Are there related limitations or issues, such contract terms, payment issues (e.g., with letters of credit); intellectual property rights (material transfer agreements), internal business policies, conflict of interest rules, foreign export and import laws, or hazardous materials or other safety-related regulations?

Contact Export Control Officer at 949-824-0445 or exportcontrol@research.uci.edu

International shipping legal requirements: <https://research.uci.edu/ref/export-controls/exporter/international-shipping.html>

Short training videos on export restricted biologicals and international shipping:
<https://research.uci.edu/ref/export-controls/basics/education/index.html>

United States Import Permits for Infectious or Toxic Agents

Certain items may require an import permit from CDC, USDA APHIS or USFWS. Export Control can advise on filing requirements for these agencies' permits and import/export declarations for wildlife, which include Chinese Hamster Ovary Cells and specimens from wildlife.

CDC Etiologic Agent Import Permit Program (EAIPP) <http://www.cdc.gov/od/eaipp/>

Items Requiring Permits:

Infectious biological agent

A microorganism (including, but not limited to, bacteria (including rickettsiae), viruses, fungi, or protozoa) or prion, whether naturally occurring, bioengineered, or artificial, or a component of such microorganism or prion that is capable of causing communicable disease in a human.

Infectious Substance: Any material that is known or reasonably expected to contain an infectious biological agent.

Vectors

Any animal (vertebrate or invertebrate) including arthropods or any noninfectious self-replicating system (e.g., plasmids or other molecular vector) or animal products (e.g., a mount, rug, or other display item composed of the hide, hair, skull, teeth, bones, or claws of an animal) that are known to transfer or are capable of transferring an infectious biological agent to a human.

Bats: All live bats require an import permit from the CDC and the U.S. Department of Interior, Fish and Wildlife Services. The application for a CDC import permit for live exotic bats is on this website.

Snails: Snail species capable of transmitting a human pathogen require a permit from CDC.

- USDA Animal and Plant Health Inspection Service (APHIS) permits are required for infectious agents of livestock & biological materials containing animal material. Tissue culture materials & suspensions of cell culture grown viruses or other etiologic agents containing growth stimulants of bovine or other livestock origins are controlled by the USDA due to the potential risk of introduction of exotic animal diseases into the U.S. USDA/APHIS at (301) 734-7834 (<http://www.aphis.usda.gov/permits/index.shtml>)
- U.S. Fish & Wildlife Service permits are required for certain live animals, including bats. Please call 1-800-344-WILD for further information (<http://www.fws.gov/le/businesses.html>).
- Individuals wishing to import select agents and toxins must be registered with CDC's Select Agent Program for the select agent(s) and toxin(s) listed on the import permit application. Also, In accordance with 42 CFR Part 73.16(a), an APHIS/CDC Form 2 must be completed and submitted to the CDC Select Agent Program & granted approval prior to the shipment of the select agents or toxins under the import permit. Additional information can be found at www.cdc.gov/od/sap.