

APHIS Plant Pathogens, HHS Select Infectious Agents, and USDA High Consequence Livestock Pathogens or Toxins

Viruses

1. African horse sickness virus ^β
2. African swine fever virus ^β
3. Akabane virus ^β
4. Avian influenza virus (highly pathogenic) ^β
5. Blue tongue virus (exotic) ^β
6. Camel pox virus ^β
7. Cercopithecine herpes virus (Herpes B virus) ^ψ
8. Classical swine fever virus ^β
9. Crimean-Congo haemorrhagic fever virus ^ψ
10. Eastern equine encephalitis virus ^χ
11. Ebola viruses ^ψ
12. Foot and mouth disease virus ^β
13. Goat pox virus ^β
14. Japanese encephalitis virus ^β
15. Lassa fever virus ^ψ
16. Lumpy skin disease virus ^β
17. Malignant catarrhal fever ^β
18. Marburg virus ^ψ
19. Menangle virus ^β
20. Monkeypox virus ^ψ
21. Newcastle disease virus (exotic) ^β
22. Nipah and Hendra complex viruses ^χ
23. Peste des petits ruminants ^β
24. Plum pox potyvirus ^α
25. Rift Valley fever virus ^χ
26. Rinderpest virus ^β
27. Sheep pox ^β
28. South American haemorrhagic fever viruses [(Junin, Machupo, Sabia, Flexal, Guanarito)] ^ψ
29. Swine vesicular disease virus ^β
30. Tick-borne encephalitis complex (flavi) viruses [Central European Tick-borne encephalitis, Far Eastern Tick-borne encephalitis (Russian Spring and Summer encephalitis, Kyasanur Forest disease, Omsk Hemorrhagic Fever)] ^ψ
31. Variola major virus (Smallpox virus) and Variola minor (Alastrim) ^ψ
32. Venezuelan equine encephalitis virus ^χ
33. Vesicular stomatitis virus (exotic) ^β

Prion

1. Bovine spongiform encephalopathy agent ^β

Toxins

1. Abrin ^ψ
2. Botulinum neurotoxins ^χ
3. *Clostridium perfringens* epsilon toxin ^χ
4. Conotoxins ^ψ
5. Diacetoxyscirpenol ^ψ
6. Ricin ^ψ
7. Saxitoxin ^ψ
8. Shigatoxin and Shiga-like ribosome inactivating proteins ^χ
9. Staphylococcal enterotoxins ^χ
10. Tetrodotoxin ^ψ
11. T-2 toxin ^χ

Bacteria

1. *Bacillus anthracis* ^χ
2. Botulinum neurotoxin producing strains of *Clostridium* ^χ
3. *Brucella abortus* ^χ
4. *Brucella melitensis* ^χ
5. *Brucella suis* ^χ
6. *Burkholderia mallei* ^χ
7. *Burkholderia pseudomallei* ^χ
8. *Cordaria Ruminantium* (Heartwater) ^β
9. *Coxiella burnetii* ^χ
10. *Francisella tularensis* ^χ
11. *Liberobacter africanus*, *Liberobacter asiaticus* ^α
12. *Mycoplasma capricolum*/M. F38/M. *mycoides capri* (contagious caprine pleuropneumonia agent) ^β
13. *Mycoplasma mycoides mycoides* (contagious bovine pleuropneumonia agent) ^β
14. *Ralstonia solanacearum* Race 3 ^α
15. *Rickettsia prowazekii* ^ψ
16. *Rickettsia rickettsii* ^ψ
17. *Xanthomonas oryzae* pv. *oryzicola* ^α
18. *Xylella fastidiosa* (citrus variegated chlorosis strain) ^α
19. *Yersinia pestis* ^ψ

Fungi

1. *Coccidioides immitis* ^χ
2. *Coccidioides posadasii* ^ψ
3. *Peronosclerospora philippinensis* ^α
4. *Phakopsora pachyrhizi* ^α
5. *Sclerophthora rayssiae* var *zeae* ^α
6. *Synchytrium endobioticum* ^α

Genetic Elements, Recombinant Nucleic Acids, and Recombinant Organisms

1. Select agent viral nucleic acids (synthetic or naturally derived, contiguous or fragmented, in host chromosomes or in expression vectors) that can encode infectious and/or replication competent forms of any of the select agent viruses.
2. Nucleic acids (synthetic or naturally derived) that encode for the functional form(s) of any of the listed toxins if the nucleic acids: a) are in a vector or host chromosome; b) can be expressed *in vivo* or *in vitro*; or c) are in a vector or host chromosome and can be expressed *in vivo* or *in vitro*.
3. Listed viruses, bacteria, fungi, and toxins that have been genetically modified.

Restrictions

1. Experiments utilizing recombinant DNA that involve the deliberate transfer of a drug resistance trait to the listed agents that are not known to acquire the trait naturally, if such acquisition could compromise the use of the drug to control disease agents in humans, veterinary medicine, or agriculture.
2. Experiments involving the deliberate formation of recombinant DNA containing genes for the biosynthesis of listed toxins lethal for vertebrates at an LD50 < 100 ng/kg body weight.

Exemptions

The medical use of toxins for patient treatment is exempt.

The following agents or toxins are exempt if the aggregate amount under the control of a principal investigator does not, at any time, exceed:

- 0.5 mg of Botulinum neurotoxins
- 5 mg of *Staphylococcal* enterotoxins
- 100 mg of abrin, *Clostridium perfringens* epsilon toxin, conotoxin, ricin, saxitoxin, shigatoxin, shiga-like ribosome inactivating protein, and tetrodotoxin
- 1,000 mg of diacetoxyscirpenol and T-2 toxin

The following agents or toxins are also exempt:

- Any agent or toxin that is in its naturally occurring environment provided it has not been intentionally introduced, cultivated, collected, or otherwise extracted from its natural source.
- Non-viable select agent organisms or nonfunctional toxins.
- The vaccine strains of Junin virus (Candid #1), Rift Valley fever virus (MP-12), Venezuelan Equine encephalitis virus vaccine strain TC-83.

^α APHIS Plant Pathogen

^ψ HHS Select Infectious Agent

^β USDA High Consequence Livestock Pathogen or Toxin

^χ USDA-HHS Overlap Agent