

APHIS Plant Pathogens, HHS Select Infectious Agents & USDA High Consequence Livestock Pathogens/Toxins

Viruses

1. African horse sickness virus³
2. African swine fever virus³
3. Akabane virus³
4. Avian influenza virus (highly pathogenic)³
5. Bluetongue virus (exotic)³
6. Camel pox virus³
7. Cercopithecine herpesvirus 1 (Herpes B virus)²
8. Classical swine fever virus³
9. Crimean-Congo haemorrhagic fever virus²
10. Eastern equine encephalitis virus⁴
11. Ebola viruses²
12. Foot and mouth disease virus³
13. Goat pox virus⁴
14. Hendra virus⁴
15. Japanese encephalitis virus³
16. Lassa fever virus²
17. Lumpy skin disease virus³
18. Malignant catarrhal fever virus (Alcelaphine herpesvirus type 1)³
19. Marburg virus²
20. Menangle virus³
21. Monkeypox virus²
22. Newcastle disease virus (velogenic)³
23. Nipah virus⁴
24. Peste des petits ruminants virus³
25. Rift Valley fever virus⁴
26. Rinderpest virus³
27. Sheep pox virus³
28. South American haemorrhagic fever viruses [(Junin, Machupo, Sabia, Flexal, Guanarito)]²
29. Swine vesicular disease virus³
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)]²
31. Variola major virus (Smallpox virus) and Variola minor (Alastrim)²
32. Venezuelan Equine Encephalitis virus⁴
33. Vesicular stomatitis virus (exotic)³

Prion

1. Bovine spongiform encephalopathy agent³

Toxins

1. Abrin²
2. Botulinum neurotoxins⁴
3. *Clostridium perfringens* epsilon toxin⁴
4. Conotoxins²
5. Diacetoxyscirpenol²
6. Ricin²
7. Saxitoxin²
8. Shigatoxin and Shiga-like ribosome inactivating proteins⁴
9. Staphylococcal enterotoxins⁴
10. Tetrodotoxin²
11. T-2 toxin⁴

Bacteria

1. *Bacillus anthracis*⁴
2. Botulinum neurotoxin producing strains of *Clostridium*⁴
3. *Brucella abortus*⁴
4. *Brucella melitensis*⁴
5. *Brucella suis*⁴
6. *Burkholderia mallei*⁴
7. *Burkholderia pseudomallei*⁴
8. *Candidatus Liberobacter africanus*¹
9. *Candidatus Liberobacter asiaticus*¹
10. *Coxiella burnetii*⁴
11. *Cowdria Ruminantium* (Heartwater)³
12. *Francisella tularensis*⁴
13. *Liberobacter africanus*, *Liberobacter asiaticus*¹
14. *Mycoplasma capricolu/M. F38/M. mycoides capri* (contagious caprine pleuropneumonia)³
15. *Mycoplasma mycoides mycoides* (contagious bovine pleuropneumonia)³
16. *Ralstonia solanacearum* race 3 biovar 2¹
17. *Rickettsia prowazekii*²
18. *Rickettsia rickettsii*²
19. *Xanthomonas oryzae* pv. *oryzicola*¹
20. *Xylella fastidiosa* (citrus variegated chlorosis strain)¹
21. *Yersinia pestis*²

Fungi

1. *Coccidioides immitis*⁴
2. *Coccidioides posadasii*²
3. *Peronosclerospora philippinensis*¹
4. *Sclerophthora rayssiae* var. *zeae*¹
5. *Synchytrium endobioticum*¹

Exemptions

The following select agents or toxins are exempt:

1. Any select 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.
2. Non-viable select agent organisms or nonfunctional toxins.
3. Toxins under the control of a principal investigator, treating physician or veterinarian, or commercial manufacturer or distributor, if the aggregate amount does not, at any time, exceed the following amounts:
 - 100 mg of abrin
 - 0.5 mg of botulinum neurotoxins
 - 100 mg of *Clostridium perfringens* epsilon toxin
 - 100 mg of conotoxins
 - 1,000 mg of diacetoxyscirpenol
 - 100 mg of ricin
 - 100 mg of saxitoxin
 - 100 mg of shigatoxin
 - 5 mg of staphylococcal enterotoxins
 - 100 mg of shiga-like ribosome inactivating proteins
 - 100 mg of tetrodotoxin
 - 1,000 mg of T-2 toxin

Genetic Elements, Recombinant Nucleic Acids, and Recombinant Organisms

1. Nucleic acids that can produce infectious forms of any of the select agent viruses.
2. Recombinant nucleic acids that encode for the functional form(s) of any of the select agent toxins if the nucleic acids: a) can be expressed *in vivo* or *in vitro*, or b) are in a vector or recombinant host genome and can be expressed *in vivo* or *in vitro*.
3. Select agents that have been genetically modified.

Restricted Experiments

1. Experiments utilizing recombinant DNA that involve the deliberate transfer of a drug resistance trait to select 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 select toxins lethal for vertebrates at an LD₅₀ < 100 ng/kg body weight.

¹ APHIS Plant Pathogen

² HHS Select Infectious Agent

³ USDA High Consequence Livestock Pathogen or Toxin

⁴ USDA-HHS Overlap Agent