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

Viruses

1. African horse sickness virus [u]
2. African swine fever virus [u]
3. Akabane virus [u]
4. Avian influenza virus (highly pathogenic) [u]
5. Bluetongue virus (exotic) [u]
6. Camel pox virus [u]
7. Cercopithecine herpes virus 1 (Herpes B virus) [h]
8. Classical swine fever virus [u]
9. Crimean-Congo haemorrhagic fever virus [h]
10. Eastern equine encephalitis virus [hu]
11. Ebola viruses [h]
12. Foot-and-mouth disease virus [u]
13. Goat pox virus [u]
14. Hendra virus [hu]
15. Japanese encephalitis virus [u]
16. Lassa fever virus [h]
17. Lumpy skin disease virus [u]
18. Malignant catarrhal fever virus (Alcelaphine herpes virus type 1) [u]
19. Marburg virus [h]
20. Menangle virus [u]
21. Monkeypox virus [h]
22. Newcastle disease virus (velogenic) [u]
23. Nipah virus [hu]
24. Peste des petits ruminants virus [u]
25. Reconstructed 1918 Influenza virus (Reconstructed replication competent forms of the 1918 pandemic influenza virus containing any portion of the coding regions of all eight gene segments.) [h]
26. Rift Valley fever virus [hu]
27. Rinderpest virus [u]
28. Sheep pox virus [u]
29. South American haemorrhagic fever viruses (Flexal, Guanarito, Junin, Machupo, Sabia) [h]
30. Swine vesicular disease virus [u]
31. 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) [h]
32. Variola major virus (Smallpox virus) [h]
33. Variola minor virus (Alastrim) [h]
34. Venezuelan equine encephalitis virus [hu]
35. Vesicular stomatitis virus (exotic) [u]

Prion

1. Bovine spongiform encephalopathy agent [u]

a = APHIS Plant Pathogen
h = HHS Select Infectious Agent
hu = HHS-USDA Overlap Agent
u = USDA High Consequence Livestock Pathogen or Toxin

Toxins

1. Abrin [h]
2. Botulinum neurotoxins [hu]
3. Clostridium perfringens epsilon toxin [hu]
4. Conotoxins [h]
5. Diacetoxyscirpenol [h]
6. Ricin [h]
7. Saxitoxin [h]
8. Shigatoxin [hu]
9. Shiga-like ribosome inactivating proteins [h]
10. Staphylococcal enterotoxins [hu]
11. Tetrodotoxin [h]
12. T– 2 toxin [hu]

Bacteria

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

Fungi

1. *Coccidioides immitis* [hu]
2. *Coccidioides posadasii* [h]
3. *Peronosclerospora philippinensis* [a]
4. *Schlerophthora rayssiae var zeae* [a]
5. *Synchytrium endobioticum* [a]

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Genetic Elements, Recombinant Nucleic Acids, and Recombinant Organisms

1. 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 selected 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. NIH Guidelines: Major Action, RAC approval.
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. NIH Guidelines: Require NIH/OBA and IBC approval.

Exemptions:

1. Clinical or diagnostic laboratories are exempt
   • Select agents used only for diagnosis, verification, or proficiency testing (no reference or retention allowed).
   • Transferred or destroyed after identification.
2. Products approved under a Federal Act.
3. Investigational products (must apply for exemption).
4. Public health or agricultural emergency (must apply for exemption).

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

Exclusions:

   • Select agents or toxins in their naturally occurring environment, provided that it has not been intentionally introduced, cultivated, collected, or otherwise extracted from its natural source.
   • Non-viable select agent organisms or nonfunctional toxins.
   • Entities with specific quantities of toxins under the control of a principal investigator.
   • May exclude attenuated strains of select agents or toxins upon a determination that they do not pose a severe threat to the public health and safety. For complete list, go to:
http://www.cdc.gov/od/sap/sap/exclusion.htm