## HHS and USDA Select Agents and Toxins 7CFR Part 331, 9 CFR Part 121, and 42 CFR Part 73

## HHS SELECT AGENTS AND TOXINS

#### Abrin

Botulinum neurotoxins\* Botulinum neurotoxin producing species of Clostridium\* Conotoxins (Short, paralytic alpha conotoxins containing the following amino acid sequence  $X_1CCX_2PACGX_3X_4X_5X_6CX_7)^1$ *Coxiella burnetii* Crimean-Congo haemorrhagic fever virus Diacetoxyscirpenol Eastern Equine Encephalitis virus<sup>3</sup> Ebola virus\* Francisella tularensis\* Lassa fever virus Lujo virus Marburg virus\* Monkeypox virus<sup>3</sup> Reconstructed replication competent forms of the 1918 pandemic influenza virus containing any portion of the coding regions of all eight gene segments (Reconstructed 1918 Influenza virus) Ricin Rickettsia prowazekii SARS-associated coronavirus (SARS-CoV) Saxitoxin South American Haemorrhagic Fever viruses: Chapare Guanarito Junin Machupo Sabia Staphylococcal enterotoxins A,B,C,D,E subtypes T-2 toxin Tetrodotoxin Tick-borne encephalitis complex (flavi) viruses: Far Eastern subtype Siberian subtype Kyasanur Forest disease virus Omsk hemorrhagic fever virus Variola major virus (Smallpox virus)\* Variola minor virus (Alastrim)\* Yersinia pestis\*

# **OVERLAP SELECT AGENTS AND TOXINS**

Bacillus anthracis\* Bacillus anthracis Pasteur strain Brucella abortus Brucella melitensis Brucella suis Burkholderia mallei\* Burkholderia pseudomallei\* Hendra virus Nipah virus Rift Valley fever virus Venezuelan equine encephalitis virus<sup>3</sup>

## USDA SELECT AGENTS AND TOXINS

African horse sickness virus African swine fever virus Avian influenza virus<sup>3</sup> Classical swine fever virus Foot-and-mouth disease virus<sup>\*</sup> Goat pox virus Lumpy skin disease virus *Mycoplasma capricolum*<sup>3</sup> *Mycoplasma mycoides*<sup>3</sup> Newcastle disease virus<sup>2,3</sup> Peste des petits ruminants virus Rinderpest virus<sup>\*</sup> Sheep pox virus Swine vesicular disease virus

## USDA PLANT PROTECTION AND QUARANTINE (PPQ) SELECT AGENTS AND TOXINS

Peronosclerospora philippinensis (Peronosclerospora sacchari) Phoma glycinicola (formerly Pyrenochaeta glycines) Ralstonia solanacearum Rathayibacter toxicus Sclerophthora rayssiae Synchytrium endobioticum Xanthomonas oryzae

\*Denotes Tier 1 Agent

<sup>1</sup> C = Cysteine residues are all present as disulfides, with the 1st and 3rd Cysteine, and the 2nd and 4th Cysteine forming specific disulfide bridges; The consensus sequence includes known toxins α-MI and α-GI (shown above) as well as α-GIA, Ac1.1a, α-CnIA, α-CnIB; X1 = any amino acid(s) or Des-X; X2 = Asparagine or Histidine; P = Proline; A = Alanine; G = Glycine; X3 = Arginine or Lysine; X4 = Asparagine, Histidine, Lysine, Arginine, Tyrosine, Phenylalanine or Tryptophan; X5 = Tyrosine, Phenylalanine, or Tryptophan; X6 = Serine, Threonine, Glutamate, Aspartate, Glutamine, or Asparagine; X7 = Any amino acid(s) or Des X and; "Des X" = "an amino acid does not have to be present at this position." For example if a peptide sequence were XCCHPA then the related peptide CCHPA would be designated as Des-X.

<sup>2</sup> A virulent Newcastle disease virus (avian paramyxovirus serotype 1) has an intracerebral pathogenicity index in day-old chicks (Gallus gallus) of 0.7 or greater or has an amino acid sequence at the fusion (F) protein cleavage site that is consistent with virulent strains of Newcastle disease virus. A failure to detect a cleavage site that is consistent with virulent strains does not confirm the absence of a virulent virus. <sup>3</sup> Select agents that meet any of the following criteria are excluded from the requirements of this part: Any low pathogenic strains of avian influenza virus, South American genotype of eastern equine encephalitis virus , west African clade of Monkeypox viruses, any strain of Newcastle disease virus which does not meet the criteria for virulent Newcastle disease virus, all subspecies Mycoplasma capricolum except subspecies mycoides small colony (Mmm SC) (contagious bovine pleuropneumonia), and any subtypes of Venezuelan equine encephalitis virus except for Subtypes IAB or IC, provided that the individual or entity can verify that the agent is within the exclusion category. 9/10/13