revision date: 18 November 2005

Section 4 Select agents and toxins

- 1. The select agents and toxins controlled under the University of Kentucky Select Agent Program include:
 - All HHS non-overlap select agents and toxins, USDA high-consequence pathogens and toxins, USDA listed plant pathogens and overlap agents. (The current list of these select agents and toxins may be found at http://www.cdc.gov/od/sap/)
 - 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.
 - Nucleic acids (synthetic or naturally derived) that encode for the functional form(s) of any of the listed toxins if the nucleic acids:
 - Can be expressed in vivo or in vitro; or
 - Are in a vector or recombinant host chromosome and can be expressed *in vivo* or *in vitro*.
 - Any listed viruses, bacteria, fungi, and toxins that have been genetically modified.

2. Exclusions:

- 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.
- Non-viable select agent organisms or nonfunctional toxins.
- The vaccine strain of Junin virus (Candid 1). (effective 2-7-2003)
- Coccidiodes posadasii Δ (effective 10-14-2003)
- *Bacillus anthracis* strains devoid of both plasmids pX01 and pX02. (effective 2-27-2003)
- *Bacillus anthracis* strains devoid of the plasmid pX02 (e.g., *Bacillus anthracis* Sterne, pX01⁺pX02⁻). (effective 2-27-2003)
- Brucella abortus Strain 19. (effective 6-12-2003)
- Brucella abortus strain RB51 (vaccine strain). (effective 5-7-2003)

- *Coxiella burnetii* Phase II, Nine Mile Strain, plaque purified clone 4 (effective 10-15-2003)
- Francisella tularensis subspecies novicida (also referred to as Francisella novicida) strain, Utah 112 (ATCC 15482). (effective 2-27-2003)
- Francisella tularensis subspecies holartica LVS (live vaccine strain; includes NDBR 101 lots, TSI-GSD lots, and ATCC 29684). (effective 2-27-2003)
- Francisella tularensis ATCC 6223 (also known as strain B38). (effective 4-14-2003)
- Rift Valley Fever (RVF) virus vaccine strain MP-12. (effective 2-7-2003)
- Venezuelan Equine Encephalitis (VEE) virus vaccine candidate strain V3526. (effective 5-5-2003)
- Venezuelan Equine Encephalitis (VEE) virus vaccine strain TC-83. (effective 2-7-2003)
- the following Conotoxins: the class of sodium channel antagonist μ-conotoxins, including GIIIA; the class of calcium channel antagonist ω-conotoxins, including GVIA, GVII, MVIIA, MVIIC, and their analogs or synthetic derivatives; the class of NMDA-antagonist conantokins, including con-G, con-R, con-T and their analogs or synthetic derivatives; and the putative neurotensin agonist, contulakin-G and its synthetic derivatives. (effective 4-29-2003)
- Yersinia pestis strains which are Pgm⁻ due to a deletion of a 102-kb region of the chromosome termed the pgm locus (i.e., Δpgm). Examples are Y. pestis strain E.V. or various substrains such as EV 76. (effective 3-14-2003)
- *Yersinia pestis* strains (e.g., Tjiwidej S and CDC A1122) devoid of the 75 kb low-calcium response (Lcr) virulence plasmid. (effective 2-27-2003)
- The following toxins (in the purified form or in combinations of pure and impure forms) if the aggregate amount under the control of a single Principal Investigator does not, at any time, exceed the amount specified:

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; or 100 mg of Shiga-like ribosome inactivating proteins; or 5 mg of Staphylococcal enterotoxins; 1,000 mg of T-2 toxin. 100 mg of Tetrodotoxin.

3. The HHS Secretary may exclude from this section attenuated strains of HHS select agents or toxins upon a determination that they do not pose a severe threat to the public health and safety. Exclusions will be published in the notice section of the Federal Register and will be listed on the CDC Web site at http://www.cdc.gov/od/sap/.