

Sap Comments (CDC)

From: ThomasDavis@PacificBioLabs.com
Sent: Thursday, August 12, 2010 4:54 PM
To: Sap Comments (CDC)
Cc: MichellePyeatt@PacificBioLabs.com
Subject: Comments on the changes to the list of select agents and toxins

Part 1—The appropriateness of the current HHS list of select agents and toxins.

Previous responses to public comments in previous editions of the Federal Register related to botulinum neurotoxin (BoNT) shows that the CDC and APHIS understand the potential for use of BoNT by terrorists to be negligible. While BoNT is deadly, it cannot be effectively used by a terrorist as a weapon since it is readily denatured and must be injected or consumed to be effective. BoNT cannot be put into a water system, for example, as purification of water supplies would denature it and the proteins would also degrade with a short half life, even if no purification additives were in the water. Aerosolization can be deadly in the immediate vicinity of the aerosolization, but BoNT is quickly denatured (your own data shows it's viable half life in previous Federal Register notices) so while it is possible to harm a few people, it is not able to be used as a weapon of mass destruction nor would a few isolated cases of BoNT deaths be a terror weapon. Similarly, consumption of BoNT can be deadly (spreading some through a salad bar, for example), but the addition of salad dressings (vinegar based) would denature it readily and again, it's half life at Standard Temperatures and Pressure is short (it would not be an effective weapon for a long time (no time bomb effect)). Finally, consider that BoNT can be easily grown by terrorists (any skilled microbiologist can create an anaerobic incubator for growth) since the source microbes are readily accessed in most parts of the world (dig a hole and incubate what you find anaerobically). Why would CDC/APHIS control a substance that can be readily made by the terrorists (in other words, why would they steal something that they could easily make).

Consequently, **the current HHS list is inappropriate** since it lists BoNT which should be removed from the list.

Part 2--Tiering of the select agent list **is advisable**.

Highest risk agents are those that have high potential as weapons of mass destruction or mass terror.

Criteria for choosing the high risk items would include, therefore:

1. Self-Creation; That is, in a host the material would create more material (viable germ or virus).
2. Vector (Listed from most risk to least);
 - Human to Human is most risky (common cold, STD);
 - Animal to human (common pests (mosquito, mouse, rat, birds are slightly less risky);
 - Animal Pet to human;
 - Food/Water supply to human (this is listed as least risky because US FDA already has systems in place for monitoring and removing unhealthy materials and making known what materials are unhealthy (e. Coli in spinach for example).

3. Death “type” The most gruesome (remember TV will spread the panic) death type is most risky (e.g., hemorrhagic fever); heart attack where there are no visible signs for death least risky.
4. Numbers of potential deaths. In a single event, how many people will die or be affected. The more, the most risk (atom bomb versus grenade).

Thanks for asking. Feel free to call if anything above needs clarification. If you were to follow your own guidelines on performing security risk assessments on the items in the HHS list, you would achieve the same result.

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