Free critical thinking about biological weapons and high-explosives

Science, Biology



High-yield explosives are explosives that have a great amount of potential energy that produces explosions once they release energy suddenly. The explosions are usually having loud sound, light, heat, and pressure accompanying them. The energy so contained may be chemical energy as in the case of grain dust or nitroglycerin, pressurized gas as it is in aerosol cans, or nuclear energy as that produced by plutonium-239 or Uranium-235. The explosives are categorized based on the rate of reaction within its components. Those explosives with the reaction faster than the speed of sound are "high-explosives". The materials that a slower than the speed of sound are "low explosives" (Cooper, Paul W., 1996). Why is America at a higher threat to high -explosives? They are easy to assemble, easy to transport, and easy to use i. e. can be remotely controlled. In the history of America, the explosives have been used by terrorism.

Terrorist may also use biological weapons to attack their victims. In this case, biological toxins and disease causing agents are used. For example, bacteria's, fungi, and virus that replicate in the body of the host causing damages, and at times death are used. They may also incapacitate human beings or plants. The main aim of using the biological weapon is to make the victims weak so as to take tactical advantage over them. There is an overlap between chemical weapons: psycho-chemical weapons (mid spectrum agents) with short incubation period (Gray, Colin, 2007), and biological weapon since both tend to incapacitate the victim. At times, these weapons are used for areal denial. Why is America Prone to biological attack? The mode of attack is easy, the results are catastrophic to the victims, and hence

gives absolute advantage to the attacker over the victim. They are also very difficult to control after an attack.

References

Cooper, Paul W. (1996). "Chapter 4: Use forms of explosives". Explosives Engineering. Wiley-

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Gray, Colin. (2007). Another Bloody Century: Future Warfare. Page 265 to 266. Phoenix.