Seminar

Present by**: Dr. Md. Ferdous Hasan, December 2013**

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**Topic:** **BIOTERRORISM**

**Bioterrorism Attack:** According to the U.S. Centre for Disease Control & Prevention (CDC):

A *bioterrorism attack* is the deliberate release of viruses, bacteria, toxins or other harmful agents used to cause illness or death in people, animals, or plants.

**Evolution of Chemical and Biological Weapon**

**Phase I :** Gaseous chemicals like Chlorine & Phosgene were used in World War – I

**Phase II :** Use of Nerve Agents – Tabum, a choline-esterage inhibitors and marks beginning of Anthrax and Plague in World War – II

**Phase III :** Herbicides were used causing crops destruction

**Phase IV :** In recent time, biotechnological and genetic engineering revolutions are in progress

**Top Biological Weapons**

* Bacillus Anthracis
* Yersinia Pestis
* Smallpox Virus
* Clostridium Botulinum
* Vibrio Cholerae
* Ebola Virus
* Mycotoxin

**Top Biological Weapons – Newer Trends**

Products of microbes that can kill or incapacitate targeted hosts, e.g; Hormones, neuropeptides and cytokines, called as ‘designer substances’ to target a particular organ or a type of enemy

* Russia seems to have a new type o genetically modified Anthrax to elude the vaccine used by America
* Rumors are that Israelis are working to prepare “Ethnic Bomb”
* Parasite BW are under trial to affect cash crops and cause huge economic loss.

**The Next Target of Bioterrorism is our Foods.**

**Delivery of Biological Weapon**

* Scud missiles
* Motor vehicles with a spray
* Hand pump sprayers
* By an individual
* Book or letter
* Gums
* Remote control devices
* Robotic delivery

**Prevention & Control Measures**

* To create awareness among the public and doctors
* To stock pile drugs and vaccines
* Allocation of separate funds
* Preparedness
* International Collaboration: BW do not respect “Boundaries, Culture, Language or Territory”
* Microbiologists are the main focal point of action