OVERVIEW: THE USE AND CONTROL OF CHEMICAL AND BIOLOGICAL WARFARE

BIOLOGICAL WARFARE: ITS USE AND CONTROL UNDER THE BWC

Arthur Forer, of the Department of Biology at York University, discussed the nature of biological weapons (BW). He defined biological warfare as the use of living material --funguses, bacteria, viruses -- to cause deleterious effects in enemy troops during war. Biological agents have no immediate effect because they have a lengthy incubation time. The amount of the delay has to be acceptable to make a particular agent acceptable for use in war. The goal is to cause disease in humans, or in animal stocks and food crops.

From a US Army training manual, published in the 1960s, the objective of BW was to "weaken or destroy the target group's ability to wage war." Brigadier Rothschild, in a 1964 book entitled, *Tomorrow's Weapons*, cited the advantage of BW over more conventional arms: "the costs are lower." Spreading the material in aerosols -- tiny droplets suspended in air -- became the preferred method of dispersal. The trick was to incapacitate or kill enemy soldiers, without having your own troops contract the disease. It was helpful if it were a disease for which your own soldiers were immunized, but not if the enemy troops were also immunized against the same disease.

Thus, these became the three main areas of BW research:

How does the agent behave in aerosol form?

How can it be disseminated effectively?

How can your own troops be protected?

Forer's discussion of BW research in Canada is included in the second section following, on Canadian Issues.

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Barbara Hatch Rosenburg, of the Memorial Sloan-Kettering Cancer Centre in New York, gave a brief history of the development of biological warfare. She then summarized