Army Says Loaded Plane Can Kill Half New York

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WASHINGTON, Nov. 25 — President Nixon's limited ban on chemical and biological weapons would bar American use of an array of killers whose very names stir thoughts of a chamber of horrors.

The terrifying but authentic names for chemical and biological warfare agents include plague, Q-fever, anthrax, VX, psittacosis, VEE, sarin, BZ, phosgene, DM, mustard gas and tick-borne encephalitis.

According to any Army document, one fighter plane making just one pass over New York City could drop enough of a lethal biological agent such as anthrax bacteria to kill half the people.

Planes can also spray a nerve gas code-named BZ that can reduce a human to a gibbering idiot in seconds. The violent, irrational behavior may last for days, although the chemical is not believed to cause serious, long-lasting effects.

The Department of Defense divides chemical and biological warfare a Gents into four groups: chemical, such as BZ; biological, such as anthrax; riot control, such as tear gas; and "fire and smoke agents," such s napalm. The last two are unaffected by Mr. Nixon's order.

Some on the Border

White House advisers and Pentagon officials said that riot control agents and fire agents would not be removed from use.

One border-line case involves the chemical gas DM, or Adamsite, which the Army describes as being a "riot control agent" but which also may be lethal under certain conditions. Widely used in World War I, but little employed today, DM causes violent sneezing, nausea and vomiting. It would apparently be outlawed under Mr. Nixon's directive. It has been used in Vietnam.

Few of the other chemical and biological agents have been used in recent years.

VX, a nerve gas developed in Britain after World War II, killed 6,000 sheep at the Army's Dugway Proving Grounds in Utah last year. Droplets of the agent enter the body from the nose or the pores in the skin. It may remain toxic on the ground for up to three weeks.

Sarin, a nerve gas more volatile than VX but less persistent, was developed by the Germans during World War II, but never used. Like VX, sarin, or GB, as it is sometimes called, kills when inhaled or absorbed by the skin.

Other chemical agents once popular in warfare but seldom used today include phosgene, a room temperature gas that irritates the lungs, and HD or mustard gas, which blisters the eyes, skin and lungs.

Other agents such as the blistering gas lewisite and the blood gases hydrogen cyanide and cyanogen chloride, which cause suffocation, have not been used in recent years. Aside from the tear gases, vx is the major chemical agent in the American defense arsenal. It can be put into land mines, mortar rounds, artillery shells and rockets.

Most, if not all the biological warfare agents are refinements and conentrations of organisms that cause natural diseases. About 100 of these diseases could, theoretically, be used in warfare.

The Department of Defense is known to have developed and in some cases stockpiled organisms that would cause plague, anthrax, tularemia, psittacosis, Q-fever, botulism, Rocky Mountain spotted fever, burcellosis and Venezuelan equine encephalitis, or Vee.

A British chemical and biological warfare worker died a year ago after contracting pneumonic plague, which is fatal in almost all cases without prompt treatment.

Botulism toxin, sometimes found in improperly cooked or anned foods, will kill two-thirds of those persons who are infected within 24 hours. It interferes with breathing.

Anthrax, a bacterial lung infection, is almost always fatal within a few days of infection if not treated rapidly.

Q-fever and psittacosis, also known as parrot fever, are caused by organisms named rickettsiae, which are a cross between a bacterium and a virus. They lead to pneumonia-like diseases. Q-fever is not usually fatal, although the mortality rate for psittacosis may be high.

Tick-borne encephalitis and Venezuelan equine encephalitis, diseases that may inflame the brain and spinal cord, are not usually fatal. Vaccines for both forms are under development.