Chemical Warfare Essay, Research Paper

Chemical weapons are a serious threat to the world and have the ability to wipe out entire cities, destroying everything in sight. Chemical weapons were first widely used in WWI. Just how many people were killed or injured in WWI due to chemical weapons? According to the Chemical Weapons Convention webpage, 1,400,000 people were affected by chemical weapons during WWI. The most serious casualties occurred in Russia where 475,000 people were injured and 56,000 people were killed ( CWC Homepage E. The threat of Chemical weapons is still among us today. Recently Saddam Hussein avoided weapon inspections by the United Nations. It has been discovered that Hussein had used chemical weapons during Desert Storm and may still have some.

Chemical warfare can be used in more ways than one. The most common use of chemical warfare is through the use of gasses. These chemical gasses can be used in hand-to-hand combat where the gasses are stored in grenades and thrown or fired from a grenade launcher. To get a wider effect, the gasses can be sprayed from an airplane, similar to crop-dusting. Many times, bombs that contain nuclear chemicals or poisonous gasses are dropped on cities. Missiles have now been filled with nuclear warheads and biological toxins. The United States ETomahawk missiles and Iraq s S.C.U.D. missiles are examples of this (Mitretek).

Chemical weapons are made to attack a person s central nervous system. They attack the eyes, nose, throat, and skin. Most chemical agents are airborne. A common airborne chemical weapon used by the police in riot situations is tear gas. The tear gas is kept in grenades and irritates the eyes and lungs, causing violent coughing, blurry vision, and an inability to fight back. Another very common chemical weapon is mustard gas.

The molecular formula for mustard gas is C4H8Cl2S (Mitretek). Mustard gas has no immediate effect but after approximately four hours symptoms of itching, burning, and inflammation in areas where the gas has contact with the skin occurs. These symptoms are followed by tissue swelling and after twenty to twenty four hours, blisters form around the infected area growing into large blisters with a colorless liquid. The wounds from the gas take several months to heal (Mitretek). Exposure or inhalation of mustard gas, as well as other chemicals, for a long period of time can also be fatal.

A more recent type of chemical warfare is nuclear weapons such as the atomic bomb used in World War II. In nuclear weapons, atoms are split and when these atoms split, huge explosions occur, raising the temperature of the area where the nuclear weapon is dropped to one million degrees Fahrenheit in less than one second (Hiroshima). Everything close to the area becomes vaporized and a huge blast expands from the epicenter of the explosion (Hiroshima). Radiation from the blast causes severe damage to the DNA of an organism and improper cell mitosis. Victims of nuclear bomb victims suffer from severe radiation burns, mutations, sterility in men, and birth defects in pregnant women (Mitretek).

Biological warfare is probably the deadliest type of chemical warfare. Biological warfare, also know as germ warfare, is the use of microorganisms, viruses, and the toxins that are produced from them to cause disease and death of enemy soldiers, civilians, animals, and even crops. This type of warfare is more dangerous than other types of warfare because the diseases are contagious; once one person catches it, it spreads to

others causing the disease to be more effective and last longer long after the original sample has been exposed (Mitretek).

Anthrax is one of the most popular biological weapons. There are two main types of anthrax. The less dangerous type of anthrax is found in soil and can be contracted by humans when handling infected animals. This type of anthrax causes nausea and sickness. The more dangerous type of anthrax is airborne and is dropped from airplanes. When the airborne anthrax is inhaled, it causes cardiac and or respiratory arrest leading to immediate death. Viruses can also be used as chemical weapons (Mitretek).

The small pox virus, also known as poxviridae, still exists today but can only be found in two places: in a freezer in a lab in the United States, and the other in a lab in Russia. Both nations would like to end the threat of smallpox but each nations fear that if one of them destroys their strain of smallpox, the other will attack with the virus. Each of the two nations still holds the biological weapon because of this fear. This is an example of why we do not have complete chemical weapon banning today. Everyone fears that if they turn over their chemical weapons, another nation will attack and overtake their country ( CWC Homepage E.

The idea of chemical warfare is not a new one. For centuries, chemical and biological agents have been used in battles to overtake enemies. In ancient times, the Spartans used pitch and sulfur in battles. In medieval times, soldiers would use a catapult to throw bodies of plague victims over the walls of their enemies to spread the plague ( History E. They would also throw bodies of plague victims in the wells of their enemies to contaminate their supply of water ( History E. Even our nation was gained by

using the idea of chemical warfare. During the French and Indian wars, American colonists gave blankets used by victims of the smallpox virus to the Native Americans ( History E. The Native Americans had never been exposed to the European disease and the disease spread quickly among their population.

The first time chemical warfare was widely used was during World War I. In 1915 in Ypres, France, the Germans spread chlorine gas near the British and French lines. This sparked the use and development of deadly chemical agents by both side during the war. By 1917, the Germans were using nerve and mustard gasses. Soon the gas mask became the most important piece of equipment to a soldier, next to his gun (Mitretek). The war made chemical weapons popular and production and use of chemical weapons increased.

Only recently have people begun to realize the dangers of chemical warfare. In 1972, seventy nations, including the United States and the Soviet Union, signed the Biological Weapons Convention. By signing the Biological Weapons Convention, these seventy nations pledged to stop the production of chemical weapons and to destroy all of the chemical and biological agents in their possession. The nations agreed that the chemical weapons killed too many people. Today President Clinton is still working hard to outlaw the use, production, and possession of chemical weapons. A treaty was designed in 1992 and was opened for signature in January of 1993 ( CWC Homepage E. By November 1997, 168 countries signed the treaty and 105 other countries ratified it ( CWC Homepage E. The threat of chemical warfare may never end because of the fear that if a nation gives up their research and supply of weapons, they leave themselves open

for attack by a country with chemical weapons. With the recent fear of Iraq s weapon supply, the threat of chemical warfare is still alive today and may never end.

Works Cited

1. The Chemical Weapons Convention Homepage. E 4 April 2000

2. Hiroshima. Dir. Koreyoshi Kurahara and Spottiswoode. Made for TV, 1995

3. History of Biological Warfare E 22 April 2000

4. Mitretek Systems. Background on Chemical Warfare. E 17 Feb. 1999