Chemical Warfare Essay, Research Paper

Is the World in Danger of A chemical Warfare?

Hell is a place on earth and it is located 2300 miles south of Moscow in the middle of the Aral Sea. Its name is Vokroshdeniye Island. In English this means Renaissance Island. Renaissance Island was a Soviet Union biochemical test sight before its fall in 1990. They where testing such things as small pox, the plague, and most importantly anthrax. The Islands main mission was to develop a strain of the diseases that could be put into the warheads of SS-18 an intercontinental bolistic missile, to be pointed at American cities. The thought targets are New York, Seattle, Chicago, and Boston. Renaissance Island officials did open air experiments such as, sending monkeys out downwind of the lab and releasing bombs of the chemicals to see if they would kill the monkeys, and they did. In fact thousands of animals were said to have died on the island. The germs were engineered to be antibiotic resistant thus the effects are extremely life threatening. Alibek the former chief at Renaissance Island said, ? people can die during a conversation for example, they start bleeding through the noose and mouth, then they die.? At the end of the cold war America and the British put pressure on the Soviets, mainly their leader of the time Mikhail Gorbachey, to tell them what was going on. He wouldn?t and continued on with the testing, however when evidence was shown to him that the U.S. and Britain knew for sure that they were doing those things, Gorbachey ordered the chemicals to be buried. The put the anthrax into 11 sand pits, leaving the chemicals to be free and living underground. U.S. officials say that to this day there are still living spores underground.

The worst thing about it is that the Aral Sea is shrinking. It is said to be about waist deep. The Island is only 2 miles away from civilization, thus allowing animals and weather conditions to bring the disease to populated land. Not only that, but winds are causing these air born diseases to reach land. People on the shore are getting sick there is said to be high rates of tuberculosis, which is extremely drug resistant. There are anemia problems in women as well as an unexplained high rate of cancers. A nine-year-old bot died of the plague and there were two cases of anthrax. It is very scary to think what went on at Renaissance Island and is even scarier to know that it is still an unprotected hazard.

The Biochemical warfare is the reason for the military vaccinations. The thing that I wonder about is why is just our military being vaccinated? At the same time however I am glad that it is. Let me explain. The vaccination is said by chemists who have been studying anthrax for decades, how have much more severe the affects are then our government is letting on to. First of all they are vaccination approximately 2.4 million military personal. The scary part is that with this mass vaccination the government is not taking into consideration long-term effects side effects, the differences in peoples immune systems, or the fact that other countries could just alter the strain of anthrax so that the vaccine dose not even work. Secondly from 1990 to 1991 215 reports of adverse effects of the vaccine were reported. Within this group 5 people where hospitalized for severe skin reaction on the sight of the injection. Another contracted aseptic meningitis, (an inflammation of the meanings, the thin membranes that cover the brain and spinal cord) two people contracted Guillian Barre syndrome (a disease that effects the muscles leading to weakness and possible paralization, and sensation problems). One person contracted bio-polar disorder, and another contracted lupus, (leads to problems with the joints, skin, kidney, brain, lug, heart and gastrointestinal tract) and still has not recovered. Is the pentagon telling military personnel about this? No way! In a study at Fort Detrick scientists subjected guinea pigs to fist the anthrax vaccination and then to anthrax itself. 9 out of the 27 strains tested killed 50% of the pigs. In another test 26 out of the 33 strains tested killed 50% of the pigs. Those are not promising figures. So why is the military still insisting on the vaccination? My theory is that they think that if other countries find out about the military vaccinations that they will not use their biochemical weapons. The department of defense spokesman Jim Turner says, ? I take weapons away from our enemies. It is a verified threat. If you vaccinate our people, you take the weapons out of their hands.? I think that the statement is ignorant. What happens if the change the strain of anthrax? Are they going to revaccinate the entire military? How do we even know what strain they are using anyway? The weirdest part is the punishment for not taking the vaccine is so extreme. First you are court-martialed then when convicted you receive a felony charge of bad conduct which gives you 30 days in military prison and a dishonorable discharge once you are released. If you choose to stay in the military and refuse the shot again you can get 5 years in prison. That is a little extreme. Why is our government so concerned about the vaccination? If people do not want to take the shot they should sign a release form and be on their way. It is crazy how much money that we are losing because of this shot. Over 200 Air Force Pilots have resigned. It cost 6 million dollars walk out the door is crazy. What is really going on? I don?t know and neither will anyone else unless the government clues us in. Here is the information the government is letting the military know.

Anthrax or Wool Sorter?s disease is defined as an infectious and often-fatal disease associated with animal contact (mostly farm animals) and is rarely seen in the U.S. but still exists in Africa, Asia, and The Middle East. The bacterium that causes Anthrax is Bacillus Anthracites. Baccillius Anthracis is defined as a spore-bearing bacteria that causes disease (primarily Inhalation anthrax or Cutanous anthrax, which will be discussed later) in humans and in animals. For the most part the disease is found in horses, cattle, swine, sheep, and goats. However rarely in humans. People, who are most susceptible, are wool workers, farmers, and veterinarians. The main thing that makes anthrax so lethal is the fact that the spores can remain alive and infectious for a very long time. It can be transferred very easily from an old animal skin, or a wool blanket. When anthrax is contracted symptoms occur in about seven days. There are three forms of anthrax. One is Pulmonary, or inhalation anthrax. The second one is cutaneous anthrax, which is contracted through the skin. The third is intestinal anthrax.

Inhalation anthrax is defined as a disease that effects mostly farm animals. Humans acquire it through inhaling little spores, when in contact with the infected animals. Inhaling spores, which can lead to pneumonia, is very fast spreading, and can lead to respiratory distress, contracts it. It can be lethal. Death can occur in less than 48 hours from the time of infection. Inhalation anthrax however is very rare and there is a vaccination available. According to Health Answers,

Symptoms include:

• Fever

• General Discomfort, uneasiness, or ill feeling (malaise)

• Headaches

• Shortness of breath

• Cough

• Congestion of the nose and throat

• Pneumonia

• Joint Stiffness

• Joint pain

Signs and tests:

• Blood culture is positive for anthrax

• Chest x-ray

• Serologic test for anthrax

• Spinal tap for CSF culture, and analysis

Treatment:

• Antibiotics (Penicillin)

Complications:

• Hemorrhagic Meningitis

• Mediastinitis

• Shock

• ARDS (adult respiratory distress syndrome)

The death rate is extremely high even with proper treatment.

Cutaneous anthrax or anthrax skin, is defined as a disease that effects mostly farm animals. Humans acquire it through a break in the skin when in direct contact with animals. When it seeps through a cut it intern causes a lesion infection. This infection can spread causing chills, shock, sweating, and collapsing. The incidence ratio is 1:100,000 people. There is a vaccination available. According to Health Answers,

Symptoms include:

• A reddish brown sore that breaks open and forms a scab

• Fever

• Chills

• General Discomfort, uneasiness, or ill feeling (malaise)

• Headaches

• Nausea and vomiting

Signs and tests:

• Blood cultures positive for anthrax

• Cultures of skin lesions

• Skin or Mucosal biopsy

Treatment:

• Penicillin

• Tetracycline

Complications:

• Hemorrhagic meningitis

• Mediastinitis

• Shock

The death rate is low if treated properly.

Intestinal anthrax may follow the consumption detected in contaminated meat, and is characterized by inflammation of the intestinal tract.

Symptoms include:

• Nausea

• Loss of appetite

• Vomiting

• Fever (followed by)

• Abdominal pain

• Vomiting blood

• Severe diarrhea

Treatment:

• Antibiotics

Death occurs in about every 25% to 60% of the cases.

There are a few things that can be done one are to get vaccinated for anthrax. The anthrax vaccine is an injection of dead anthrax bacteria. ?The current U.S. vaccine is made of protein filtrate purified from anthrax cultures and contains predominantly protective antigens absorbed to aluminum hydroxide the final product includes no more than 2.4 mg of aluminum hydroxide per 0.5ml does, from aldehyde (0.02 or less) and benzethonium chloride (.0025% or less) as preservatives.? The vaccine developed by the Michigan Biological product institute, in Lansing Michigan. The U.S. Food and Drug Administration (FDA) license the vaccine. The vaccination is first given as a series of three shots. One shot is given every three weeks. This is followed by a shot 6 months later, then at 12 months, and then at 16 months. You have to get all of the shots in order for it to be effective.

So is the vaccine safe? As I said before it is FDA approved and has been given in the U.S. since 1970. However 30% of people who get injected complain of slight tenderness and redness at the injection sight. The more sever effects have been extreme swelling of the forearm, and flu-like symptoms. The most common complaints however are joint aches, nausea, loss of appetite, and headaches. The anthrax vaccine should only be given to healthy men and women between the ages of 18 and 65. It should not be given to pregnant women because of the unawareness of the effects on the fetus.

If you think that you are showing signs of anthrax what can be done? Two things that can be done are one a serologic test and two a CSF culture. A serologic test is defined as a blood test to detect the presence of antibodies against B anthracis. The test is done by taking a blood sample from a vein, most commonly from the inside of the elbow or the back of the hand. The blood is then taken to a lab. ?Serology refers to the study of serum for its antibody content. The B anthracis microorganism stimulates the body to produce antibodies during an active infection. In the laboratory, the antibodies react with antigens in specific ways. There are several serology techniques that can be used depending on suspected antibodies, serology techniques include agglutinations, precipitation, complementfixation, fluorescent antibodies and others.? According to Health Answers,

Risks include:

• Excessive bleeding

• Fainting or felling light headed

• Hematoma (blood accumulating under the skin)

• Infection (a slight risk any time the skin is broken)

• Multiple punctures to locate veins

The test costs about $91. The problem with the serologic test is that it can tell if you have ever been exposed to anthrax before, but that dose not necessarily means that you are currently infected. If signs of anthrax are present another test may be performed to see if the antibody levels have increased or not. If they have you most likely have been effected.

The CSF test, cerebral spinal fluid, is defined as a test to detect the presence of bacteria in the cerebrospinal fluid (CSF). CSF is a clear fluid that surrounds and protects the spaces in the spinal cord. CSF protects the spinal cord and the brain from injury and physical shock. The test is done by having a spinal tap. The fluid is brought to a lab where it is placed and allowed to grow. According to Health Answers,

Risks include:

• Hypersensitivity (allergic) reaction to the anesthetic

• Discomfort during test

• Headache after test

• Bleeding into spinal canal

• Brain herniation, resulting in brain damage

• Damage to the spinal cord

The cost is about $130. The reason for the test is to try and find any viruses, bacteria, or fungus that could be present. The test will identify the type of organism, fungus etc. that you have in your body.

Anthrax will always be a biochemical threat to the U.S. vaccination or not. It?s Hanes?s effects and virtual undetectability will haunt the U.S. for years to come. You can think you have the flu, then you could be dead, and it?s as crazy as that. Treatment can in fact be effective, but how can you treat the unknown? This article has opened my eyes to a lot of things and it is scary. My brother is scheduled to receive the anthrax vaccination for sometime soon, because he is in the Air Force. I fear for his health. If nothing else I hope that people make themselves more aware about anthrax and it?s vaccination. I hope that they refuse it until more extensive research can be done to perfect it and minimize the side effects. God bless our military!