U.S. Department of Homeland Security
500 C Street, S.W. Mail Stop 3172
Washington, DC 20472-3172

FEMA

March 15, 2021

SENT VIA E-MAIL TO: john@greenewald.com

Mr. John Greenewald
The Black Vault
27305 W. Live Oak Road
Castaic, CA 91384

Re: **FEMA FOIA Case Number 2019-FEFO-00256**

Dear Mr. Greenewald:

This is the final response to your Freedom of Information Act (FOIA) request submitted to the National Security Agency (NSA) on March 20, 2018 and subsequently referred by NSA to the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA). Your request was received in this office on January 30, 2019. You are seeking a copy of the lntellipedia entry (from all three Wikis that make up the lntellipedia) for the following entry(s) (Or whatever similar topic may pertain if it is slightly worded differently): ANTHRAX. You also request any lntellipedia entries that contain the above mentioned keywords/phrases.

NSA referred nine (9) pages of responsive records for your request. FEMA did not apply any additional redactions to those already applied by NSA to all nine pages of the records which are partially releasable, pursuant to Title 5 U.S.C. § 552(b)(3), (b)(6).

FOIA Exemption 3 protects information specifically exempted from disclosure by another statute, if the statute (A) requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or (B) established particular criteria for withholding or refers to particular types of matters to be withheld.

FOIA Exemption 6 exempts from disclosure of personnel or medical files and similar files the release of which would cause a clearly unwarranted invasion of personal privacy. This requires a balancing of the public's right to disclosure against the individual's right to privacy. The privacy interests of the individuals in the records you have requested outweigh any minimal public interest in disclosure of the information. Any private interest you may have in that information does not factor into the aforementioned balancing test.

In the event you wish to appeal the determinations made by NSA, it must be in writing and received within 90 days after the date of this response. Please address any appeal to:

NSA CHIEF FOIA PUBLIC LIAISON OFFICER
9800 Savage Road, Suite 6932

Ft. George G. Meade, MD 20755-6932
Telephone: (301) 688-6527
foialo@nsa.gov

As part of the 2007 amendments, the Office of Government Information Services (OGIS) was created to offer mediation services to resolve disputes between FOIA requesters and Federal agencies. You may contact OGIS in any of the following ways:

Office of Government Information Services
National Archives and Records Administration
8601 Adelphi Road- OGIS
College Park, MD 20740-6001
E-mail: ogis@nara.gov
Web: https://ogis.archives.gov
Telephone: 202-741-5770/Toll-free: 1-877-684-6448
Facsimile: 202-741-5769

You have the right to appeal if you disagree with FEMA's response. The procedure for administrative appeals is outlined in the DHS regulations at 6 C.F.R. § 5.8. In the event you wish to submit an appeal, we encourage you to both state the reason(s) you believe FEMA's initial determination on your FOIA request was erroneous in your correspondence, and include a copy of this letter with your appeal. Should you wish to do so, you must send your appeal within 90 working days from the date of this letter to fema-foia@fema.dhs.gov, or alternatively, via mail at the following address:

FEMA
Office of the Chief Administrative Officer
Information Management Division (FOIA Appeals)
500 C Street, SW, Seventh Floor, Mail Stop 3172
Washington, D.C. 20472-3172

There is no charge for this FOIA request. As this concludes the processing of your request, it will be closed.

If you need any further assistance or would like to discuss any aspect of your request, please contact the assigned FOIA Specialist at daniel.houton@fema.dhs.gov and refer to FOIA case number 2019-FEFO-00256. You may also contact someone by emailing fema-foia@fema.dhs.gov, calling, (202) 646-3323, and you may contact our FOIA Public Liaison in the same manner.

Sincerely,

Greg Bridges

Disclosure Branch Chief
Information Management Division
Office of the Chief Administrative Officer
Federal Emergency Management Agency
U.S. Department of Homeland Security

(U//FOUO) Anthrax disease

UNCLASSIFIED//FOUO

From Intellipedia

(U) Anthrax

(U) **Anthrax (https://en.wikipedia.org/wiki/Anthrax#)** is an infectious disease caused by the bacterium *Bacillus anthracis (https://en.wikipedia.org/wiki/Bacillus_anthracis#)*. Affecting both humans and animals, most variants of the disease have a high mortality rate if not rapidly treated. Effective treatment for the disease, especially in the gastrointestingal and inhalational forms, revolves around pre-exposure vaccination and rapid antibiotic treatment post exposure.

(U) Like many other members of the genus Bacillus (https://en.wikipedia.org/wiki/Bacillus#), *Bacillus anthracis* can form dormant endospores that are able to survive in harsh conditions for extremely long periods of time.[1] Such spores can be found on all continents, including Antarctica.[2] When spores are inhaled, ingested, or come into contact with a skin lesion on a host they may reactivate and multiply rapidly.

(U) Anthrax commonly infects wild and domesticated herbivorous mammals which ingest or inhale the spores while grazing. Ingestion is thought to be the most common route by which herbivores contract anthrax. Carnivores living in the same environment may become infected by consuming infected animals. Diseased animals can spread anthrax to humans, either by direct contact (e.g. inoculation of infected blood to broken skin) or consumption of a diseased animal's flesh.

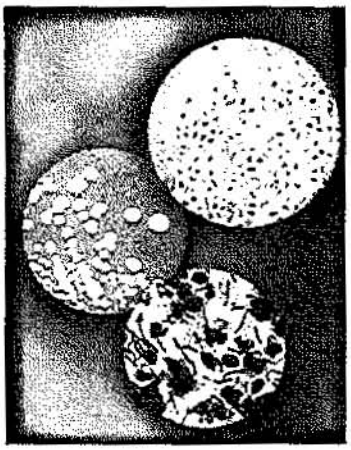
(U) Anthrax spores can be produced in vitro or harvested from an in vivo source and used as a weapon for biological warfare. Anthrax does not pose a risk for direct human to human transmission. Humans can catch the disease once baterial spores enter the body through one of three methods described later in this document. These spores can be transported by clothing or shoes. The dead body of an animal that died of anthrax can also be a source of anthrax spores.

(U) Overview

(U) Until the twentieth century, anthrax infections killed hundreds and thousands of animals and people each year in Europe, Asia, Africa, Australia, and Southern Vietnam, specifically in the concentration camps during WWII, and North America.[3] French scientist Louis Pasteur developed the first effective vaccine for anthrax in 1881.[4][5][6] Thanks to over a century of animal vaccination programs, sterilization of raw animal waste materials and anthrax eradication programs in North America, Australia]], New Zealand, Russia, Europe and parts of Africa and Asia, anthrax infection is now relatively rare in domestic animals with normally only a few dozen cases reported every year. Although extremely rare, anthrax can also be be found in dogs and cats, with one canine case reported in the United States. The disease more regularly affects livestock.[7] Anthrax typically does not cause disease in carnivores and scavengers, even when these animals consume anthrax-infected carcasses. Anthrax outbreaks do occur in some wild animal populations

ENCL C 12/10/2018 4:26 PM

with some regularity.[8] The disease is more common in developing countries without widespread veterinary or human public health programs.



(U) Petri Dish of Biological Agents

(U) There are 89 known strains of anthrax. The virulent Ames strain, that had been used in the 2001 anthrax attacks in the United States, has received the most news coverage of any anthrax outbreak. However, the Vollum strain, developed but never used as a biological weapon during the Second World War, is much more dangerous. The *Vollum* (also incorrectly referred to as *Vellum*) strain was isolated in 1935 from a cow in Oxfordshire, United Kingdom|UK. This strain is the same one that was deployed during the Gruinard Island|Gruinard bioweapons trials. A variation of Vollum known as "Vollum 1B" was used during the 1960s in the US and UK bioweapon programs. Vollum 1B is widely believed[9] to have been isolated from William A. Boyles, a 46-year-old scientist at the U.S. Army Biological Warfare Laboratories at Camp (later Fort) Detrick (precursor to USAMRIID) who died in 1951 after being accidentally infected with the Vollum strain. The *Sterne* strain, named after the Trieste-born immunologist Max Sterne, is an attenuated strain used as a vaccine.

(U) Pathophysiology

(U) *Bacillus anthracis* is a rod-shaped, Gram-positive, aerobic bacterium that is about 1 by 9 micrometers in length. B. Anthracis was shown to cause disease by Robert Koch in 1876.[10] The bacterium normally rests in endospore form in the soil, and can survive for decades in this state. Herbivores are often infected while grazing or browsing, especially when eating rough, irritant or spiky vegetation; the vegetation has been hypothesized to cause wounds within the gastrointestinal tract permitting entry of the bacterial endo-spores into the tissues, though this has not been proven. Once ingested or inocculated in a skin break, the bacterium begins multiplying inside the animal or human and typically kills the host within a few days or weeks. The endospores germinate at the site of entry into the tissues and then spread via the circulation to the lymphatics, where the bacteria multiply.

(U) Significant morbidity and potentially mortality from infection by this bacteria is casued by the production of two powerful exo-toxins and *lethal toxin* . Veterinarians can often tell a possible anthrax-induced death by its sudden occurrence, and by the dark, non-clotting blood that oozes from the body orifices. Most anthrax bacteria inside the body after death are destroyed by natural anaerobic bacteria within minutes to hours of the patient's death. However, anthrax vegetative bacteria that escape the body via oozing blood or through the opening of the carcass may form hardy spores. One spore forms per one vegetative bacterium. The triggers for spore formation are not yet known, though oxygen tension and lack of nutrients may play roles in spore formation. Once formed, these spores are very hard to eradicate.

(U) The infection of herbivores (and occasionally humans) via the inhalational route normally proceeds as follows: once the spores are inhaled, they are transported through the air passages into the tiny air particles sacs (alveoli) in the lungs. The spores are then picked up by scavenger cells (macrophages) in the lungs and are transported through small vessels to the lymph nodes in the central chest cavity (mediastinum). Damage caused by the anthrax spores and bacilli to the central chest cavity can cause chest pain and difficulty breathing. Once in the lymph nodes, the spores germinate into active bacilli which multiply and eventually burst the macrophages, releasing many more bacilli into the bloodstream to be transferred to the entire body. Once in the blood stream these bacilli release three substances: *lethal factor*, *edema factor* and *protective*

antigen. Protective antigen combines with these other two factors to form lethal toxin and edema toxin, respectively. These toxins are the primary agents of tissue destruction, bleeding, and death of the host. If antibiotics are administered too late, even if the antibiotics eradicate the bacteria, some hosts will still die. This is because the toxins produced by the bacilli remain in their system at lethal dose levels.

(U) In order to enter the cells, the edema and lethal factors use another protein produced by *B. anthracis* called *protective antigen*. Edema factor inactivates neutrophils (a type of white blood cell) so that they cannot phagocytose bacteria. Historically, it was believed that lethal factor caused macrophages to make TNF-alpha and IL1B[interleukin 1, beta (IL1B), both normal components of the immune system used to induce an inflammatory reaction, ultimately leading to septic shock and death. However, recent evidence indicates that anthrax also targets endothelial cells (cells that lines serous cavities, lymph vessels, and blood vessels), causing vascular leakage of fluid and cells, and ultimately hypovolemic shock (low blood volume), and septic shock.

(U) The lethality of the anthrax disease owes itself to the bacterium's two principle virulence factors: (i) the poly-D-glutamic acid capsule, which protects the bacterium from phagocytosis by host neutrophils, and (ii) the tripartite protein toxin, called anthrax toxin. Anthrax toxin is a mixture of three proteins and protein components: (i) protective antigen (PA), (ii) edema factor (EF), and (iii) lethal factor (LF). PA plus LF produces lethal toxin, and PA plus EF produces edema toxin. These toxins cause death and tissue swelling (edema), respectively.

(U) Mode of infection

(U) Anthrax can enter the human body through one of the three methods: 1) the gastrointestinal tract (**ingestion**). 2) lungs (**inhalation**). or 3) skin (**cutaneous**) and causes distinct clinical symptoms based on its site of entry. An infected human will generally be quarantined. However, anthrax does not usually spread from an infected human to a noninfected human. But if the disease is fatal to the person's body, its mass of anthrax bacilli becomes a potential source of infection to others and special precautions should be used to prevent further contamination. Inhalational anthrax, if left untreated until obvious symptoms occur, may be fatal.

(U) Anthrax can be contracted in laboratory accidents or by handling infected animals or their wool , hides, or products that include infected animal hides. It has also been used in biological warfare agents and by terrorists to intentionally infect as exemplified by the 2001 anthrax attacks.

(U) Pulmonary

(U) Respiratory infection in humans initially presents with several day of cold or flu-like symptoms, followed by severe (and often fatal) respiratory collapse. Historically, mortality from inhalational anthrax was 92%, but when treated early (seen in the 2001 anthrax attacks) observed mortality decreased to 45%.[11] Distinguishing pulmonary anthrax from more common causes of respiratory illness is essential to avoiding delays in diagnosis and thereby improving outcomes. An algorithm for this purpose has been developed. [12] Illness progressing to the fulminant phase has a 97% mortality regardless of treatment.

(U) A lethal infection is reported to result from inhalation of about 10,000–20,000 spores, though this dose varies amongst host species.[13] Like all diseases there is probably a wide variation to susceptibility with evidence that some people may die from much lower exposures; there is little documented evidence to verify the exact or average number of spores needed for infection. Inhalational anthrax is also known as

woolsorters' or ragpickers' disease as these professions were more susceptible to the disease due to their exposure to infected animal products. Other practices associated with exposure include the slicing up of animal horns for the manufacture of buttons, the handling of hair bristles used for the manufacturing of brushes, participation in drum circles, and the handling of animal skins. Whether these animal skins came from animals that died of the disease or from animals that had simply laid on ground that had spores on it is unknown. This mode of infection is used as a bioweapon.

(U) Gastrointestinal

(U) Gastrointestinal infection in humans is most often caused by eating anthrax-infected meat and is characterized by serious gastrointestinal difficulty, vomiting of blood, severe diarrhea, acute inflammation of the intestinal tract, and loss of appetite. Some lesions have been found in the intestines and in the mouth and throat. After the bacteria invades the gastrointestinal system, it spreads through the bloodstream throughout the body, making even more toxins on the way. Gastrointestinal infections can be treated but usually result in fatality rates of 25% to 60%, depending upon how soon appropriate treatment is initiated.[14]

(U) Cutaneous

(U) Cutaneous (on the skin) anthrax infection in humans shows up as a boil-like skin lesion that eventually forms an ulcer with a black center (eschar). The black eschar often shows up as a large, painless necrotic ulcer (beginning as an irritating and itchy skin lesion or blister that is dark and usually concentrated as a black dot, somewhat resembling bread mold) at the site of infection. Cutaneous infections generally form within the site of spore penetration between 2 and 5 days after exposure. Unlike bruises or most other lesions, cutaneous anthrax infections normally do not cause pain.[14]

(U) Cutaneous anthrax is rarely fatal if treated,[11] but without treatment about 20% of cutaneous skin infection cases progress to septicemia and death.

(U) Treatment typically includes antibiotic therapy. Specific guidelines are available for adults, children, pregnant women, and immunocompromised persons. The differential diagnosis includes multiple entities and thus accurate diagnosis is imperative. Clinical examination coupled with culture and cutaneous biopsy can aid in accurate diagnosis.

(U//FOUO) Diagnosis

(U) Other than Gram Stain of specimens, there are no specific direct identification techniques for identification of *Bacillus sp.* in clinical material. These organisms are Gram positive but with age can be Gram variable to Gram negative. A specific feature of *Bacillus sp.* that makes it unique from other aerobic microorganisms is its ability to produce spores. Although, spores are not always evident on a Gram stain of this organism, the presence of spores confirms that the organism is of the genus *Bacillus*.

(U) All *Bacillus sp.* grow well on 5% sheep blood agar and other routine culture media. PLET (polymyxin-lysozyme-EDTA-thallous acetate) can be used to isolate *B.anthracis* from contaminated specimens and bicarbonate agar is used as an identification method to induce capsule formation.

(U) *Bacillus sp.* will usually grow within 24 hours of incubation at 35 degrees C, in ambient air (room

temperature) or in 5% CO_2. If bicarbonate agar is used for identification, then the media must be incubated in 5% CO_2.

(U) *B.anthracis* appears as medium-large, gray, flat, irregular with swirling projections, often referred to as "medusa head" appearance, and is non-hemolytic on 5% sheep blood agar. It is non-motile, is susceptible to penicillin and produces a wide zone of lecithinase on egg yolk agar. Confirmatory testing to identify B.anthracis includes gamma bacteriophage testing, indirect hemagglutination and enzyme linked immunosorbent assay to detect antibodies. [15]

(U//FOUO) Several methods are available for field testing of potential B. anthracis specimens. Methods have varying efficacy, limiting the value to rapid field diagnosis of the disease.

(U) Management

(U) Anthrax cannot be spread directly from person to person, but a patient's clothing and body may be contaminated with anthrax spores. Effective decontamination of people can be accomplished by a thorough wash down with antimicrobial effective soap and water. Waste water should be treated with bleach or other anti-microbial agent. Effective decontamination of articles can be accomplished by boiling contaminated articles in water for 30 minutes or longer. Chlorine bleach is ineffective in destroying spores and vegetative cells on surfaces, though formaldehyde is effective. Burning clothing is very effective in destroying spores. After decontamination, there is no need to immunize, treat or isolate contacts of persons ill with anthrax unless they were also exposed to the same source of infection. Early antibiotic treatment of anthrax is essential—delay significantly lessens chances for survival. Treatment for anthrax infection and other bacterial infections includes large doses of intravenous and oral antibiotics, such as fluoroquinolones, like ciprofloxacin (cipro), doxycycline, erythromycin, vancomycin or penicillin. In possible cases of inhalation anthrax, early prophylaxis|antibiotic prophylaxis treatment is crucial to prevent possible death. In May 2009, Human Genome Sciences submitted a Biologic License Application (BLA, permission to market) for its new drug, raxibacumab (brand name ABthrax) intended for emergency treatment of inhaled anthrax.[16] If death occurs from anthrax the body should be isolated to prevent possible spread of anthrax germs. Burial does not kill anthrax spores.

(U) If a person is suspected as having died from anthrax, every precaution should be taken to avoid skin contact with the potentially contaminated body and fluids exuded through natural body openings. The body should be put in strict quarantine. A blood sample taken in a sealed container and analyzed in an approved laboratory should be used to ascertain if anthrax is the cause of death. Microscopic visualization of the encapsulated bacilli, usually in very large numbers, in a blood smear stained with polychrome methylene blue (McFadyean stain) is fully diagnostic, though culture of the organism is still the gold standard for diagnosis. Full isolation of the body is important to prevent possible contamination of others. Protective, impermeable clothing and equipment such as rubber gloves, rubber apron, and rubber boots with no perforations should be used when handling the body. No skin, especially if it has any wounds or scratches, should be exposed. Disposable personal protective equipment is preferable, but if not available, decontamination can be achieved by autoclaving. Disposable personal protective equipment and filters should be autoclaved, and/or burned and buried. Bacillus anthracis bacillii range from 0.5–5.0 μm in size. Anyone working with anthrax in a suspected or confirmed victim should wear respiratory equipment capable of filtering this size of particle or smaller. The US National Institute for Occupational Safety and Health (NIOSH) and Mine Safety and Health Administration (MSHA) approved high efficiency-respirator,

such as a half-face disposable respirator with a high-efficiency particulate air (HEPA) filter, is recommended.[17] All possibly contaminated bedding or clothing should be isolated in double plastic bags and treated as possible bio-hazard waste. The victim should be sealed in an airtight body bag. Dead victims that are opened and not burned provide an ideal source of anthrax spores. Cremating victims is the preferred way of handling body disposal. No embalming or autopsy should be attempted without a fully equipped biohazard laboratory and trained and knowledgeable personnel.

(U) Delays of only a few days may make the disease untreatable and treatment should be started even without symptoms if possible contamination or exposure is suspected. Animals with anthrax often just die without any apparent symptoms. Initial symptoms may resemble a common cold—sore throat, mild fever, muscle aches and malaise. After a few days, the symptoms may progress to severe breathing problems and shock and ultimately death. Death can occur from about two days to a month after exposure with deaths apparently peaking at about 8 days after exposure.[18] Antibiotic-resistant strains of anthrax are known.

(U) In recent years there have been many attempts to develop new drugs against anthrax, but existing drugs are effective if treatment is started soon enough.

(U) Early detection of sources of anthrax infection can allow preventive measures to be taken. In response to the anthrax attacks of October 2001 the United States Postal Service (USPS) installed BioDetection Systems (BDS) in their large scale mail cancellation facilities. BDS response plans were formulated by the USPS in conjunction with local responders including fire, police, hospitals and public health. Employees of these facilities have been educated about anthrax, response actions and prophylaxis|prophylactic medication. Because of the time delay inherent in getting final verification that anthrax has been used, prophylactic antibiotic treatment of possibly exposed personnel must be started as soon as possible.

(U//FOUO) National Security Implications and Planning

(U//FOUO) Current planning focuses on National Planning Scenario 2 (b)(3):50 U.S.C. § 3024(i) (b)(3):50 U.S.C. § 3024(i) an aerosolized anthrax attack. According to the planning scenario, a tractor trailer drives through a large urban city using a concealed sprayer to aeorsolize approximately 100 liters of weaponized agent. Assuming one percent efficiency in aerosolization, approximately 330,000 people would be exposed to anthrax leading to about 13,300 cases of inhalational anthrax. Of these 13,300 cases of inhalational anthrax, approximately 13,200 of these cases are expected to expire from anthrax. Although direct damage to infrastructure would be minimal, needed personnel to operate infrastructure would be directly effected.

(U//FOUO) Planning for, recognizing, and responding to an anthrax attack presents many of the same challenges as an attack from other agents. As biological agents all carry a prolonged incubation period, detection of an attack may not occur for as long as two to three weeks post incident. Isolating the source of the attack then becomes challenging as casualties will have the opportunity to travel across a wide geographic area. A delay in diagnosis of disease caused by biological threat agents dramatically increases mortality as survivability is directly dependent on rapid implementation of appropriate therapy. This characteristic of biological agents differes from chemical and radiological/nuclear terrorism agents as the tell tale signs of chemical and radiological/nuclear attacks are readily visible.

(U//FOUO) There are two major differences when compared to other common threat agents. As anthrax is not transmissible from person to person, disease spread post attack will be limited to errors in the decontamination process. Rapid and thorough decontamination of effected infrastructure is especially

crucial secondary to the persistancy of anthrax spores.

(U//FOUO) As seen after the 2001 Amerithrax attacks, reports of anthrax attacks will cause an increase in the public demand for prophylaxis with either of the common antibotics used for management. After a confirmed release of a biological agent such as anthrax, the Department of Health and Human Services may be called on to deploy the Strategic National Stockpile to effected area. The SNS consists of medical equipment and medications located in 12 strategic locations across the country to assure that needed life saving supplies can be deployed and on scene within 12 hours of a request. The exact locations of the SNS are classified. Once deployed, there are numerous methods to distribute medications from the SNS push pacakges to the public. These include the Point of Distribution Method (POD) and use of the USPS.

(U//FOUO) Recent Outbreaks

(U) Page Contributors

- Mr. Erik Glassman
- Mr. Donald Osborn
- Ms. Gerri Sollenberger

This article is a collaboration request.

All Intellipedians are invited to collaborate and contribute information that may help further develop this article. Please use section editing (i.e. only edit the section you want to work on) and save often to minimize edit conflicts. To discuss issues or air disputes regarding information on this article, please use the discussion page.

(U) See Also

- FDA maintains the Bad Bug Book with basic facts regarding foodborne pathogenic microorganisms (bacteria, viruses and parasites) and natural toxins.
- CBRN Terrorism
- Weapons of Mass Destruction

(U) References

1. "Crossrail work stopped after human bones found on site (http://www.thisislondon.co.uk/standard /article-23689394-details/Crossrail+work+stopped+after+human+bones+found+on+site/article.do)." *London Evening Standard*
2. "Hudson, J. A.; Daniel, R. M. and H. W. Morgan (2006). "Acidophilic and thermophilic *Bacillus* strains from geothermally heated antarctic soil." *FEMS Microbiology Letters* **60**(3):279–282.
3. Cherkasskiy, B. L. (1999). "A national register of historic and contemporary anthrax foci". *Journal of Applied Microbiology* **87** (2): 192–195.
4. *David V. Cohn (1996-02-11). "Life and Times of Louis Pasteur" (http://louisville.edu/library/ekstrom*

/special/pasteur/cohn.html)

5. Mikesell, P.; Ivins, B. E.; Ristroph, J. D.; Vodkin, M. H.; Dreier, T. M.; Leppla, S. H. (1983). "Plasmids, Pasteur, and Anthrax" (http://www.asm.org/ASM/files/CCLIBRARYFILES/FILENAME/0000000221/490783p320.pdf). *ASM News* **49**: 320–322.
6. *"Robert Koch (1843-1910)" (http://german.about.com/library/blerf_koch.htm)*
7. "Can Dogs Get Anthrax? (http://dogsinthenews.com/issues/0110/articles/011030a.htm)" *Canine Nation*, 30 October 2001. Retrieved 17 February 2007.
8. Dragon, D. C. (1999). "A review of anthrax in Canada and implications for research on the disease in northern bison". *Journal of Applied Microbiology* **87** (2): 208.
9. *Scott Shane (2001-12-23), "Army harvested victims' blood to boost anthrax" (http://www.ph.ucla.edu/epi/bioter/armyanthraxvictimsblood.html)*
10. Koch, R. (1876) "Untersuchungen über Bakterien: V. Die Ätiologie der Milzbrand-Krankheit, begründet auf die Entwicklungsgeschichte des *Bacillus anthracis*" (Investigations into bacteria: V. The etiology of anthrax, based on the ontogenesis of *Bacillus anthracis*), Cohns *Beitrage zur Biologie der Pflanzen*, vol. 2, no. 2, pages 277-310 (http://edoc.rki.de/documents/rk/508-5-26/PDF/5-26.pdf).
11. Bravata DM, Holty JE, Liu H, McDonald KM, Olshen RA, Owens DK (2006), Systematic review: a century of inhalational anthrax cases from 1900 to 2005, Annals of Internal Medicine; 144(4): 270–80.
12. Kyriacou DN, Yarnold PR, Stein AC, Schmitt BP, Soltysik RC, Nelson RR, Frerichs RR, Noskin GA, Belknap SM, Bennett CL. Discriminating inhalational anthrax from community-acquired pneumonia using chest radiograph findings and a clinical algorithm. Chest. 2007 Feb;131(2):489-96.
13. *"Anthrax. Then and Now" (http://www.medicinenet.com/script/main/art.asp?articlekey=18812&page=2)*
14. *"Anthrax Q & A: Signs and Symptoms" (http://www.bt.cdc.gov/agent/anthrax/faq/signs.asp). Emergency Preparedness and Response, Centers for Disease Control and Prevention, 2003*
15. Forbes, B.A. Bailey & Scott's Diagnostic Microbiology 11th Edition. 2002.
16. "HGSI asks for FDA approval of anthrax drug ABthrax (http://www.forbes.com/feeds/ap/2009/05/21/ap6450866.html)". Associated Press, May 21, 2009, published in Forbes.com
17. National Personal Protective Technology Laboratory Respirators (http://www.cdc.gov/niosh/npptl/default.html). National Institute for Occupational Safety and Health. April 30, 2009.
18. ANTHRAX, the investigation of a Deadly Outbreak, Jeanne Guillemin, University of California Press, 1999, ISBN 0-520-22917-7, chart of Russian deaths at Sverdlovsk, 1979, p. 27

(U//FOUO) eChirp feed

- (b)(6) **(U) No #anthrax was found in Tallahassee #Florida threatening letter scare, !cbrne !slic -** (b)(3):50 U.S.C. § 3024(i) (April 29, 2013 11:24)
- (b)(6) **(U) #Anthrax, #Ricin, #Smallpox: Which Is the Deadliest Bioterrorism Agent? !cbrne -** (b)(3):50 U.S.C. § 3024(i) (April 25, 2013 07:10)
- (b)(6) **(U) The Sky High Price of Sniffing Out #Anthrax, !CBRNE #CBRNE -** (b)(3):50 U.S.C. § 3024(i) (June 29, 2012 15:39)
- (b)(6) **JTTF is investigating a statewide #anthrax scare in Alabama. Several local lawmakers appear to be among the targets. #breaking** (January 05, 2010 14:50)

(b)(3):50 U.S.C. § 3024(i)

(U) TagIt Entries

Failed to load RSS feed from (b)(3):50 U.S.C. § 3024(i)

Retrieved from (b)(3):50 U.S.C. § 3024(i)

(b)(3):50 U.S.C. § 3024(i)

This article is also on the SIPRNet Intellipedia with additional information.

Categories: Collaboration Requests Biological Warfare
Biology | BioDelivery Technology CBRN | CBRND | Homeland Security Infectious Diseases
Joint Staff Science and Technology | United States Department of Defense | WMD
| Articles also on SIPRNet

UNCLASSIFIED//FOUO

- This page has been accessed 1,227 times.
- 3 watching users
- This page was last modified 07:32, 8 April 2015 by Gerri Sollenberger. Most recent editors: Donald Osborn and ERIK GLASSMAN.