



Bioterrorism Preparedness

June 2003

Information provided by the Information Resource Center

Embassy of the United States of America

Madrid, Spain

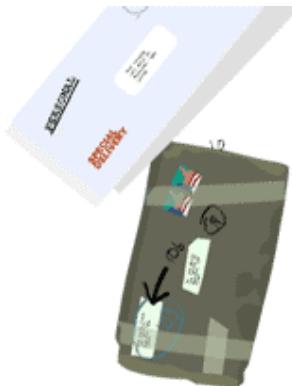
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1. Preguntas más frecuentes sobre el ántrax, Departamento de Defensa de los EE.UU.

Source: Centers for Diseases and Control Prevention,
http://www.cdc.gov/ncidod/dbmd/diseaseinfo/anthrax_g_sp.htm



¿Qué es el ántrax?

El ántrax es una enfermedad infecciosa aguda causada por la bacteria que se llama *Bacillus anthracis* que forma esporas. El ántrax ocurre con mayor frecuencia en los vertebrados menores, silvestres y domésticos (ganado vacuno, ovejas, chivos, camellos, antílopes, y otros herbívoros), pero también puede ocurrir en seres humanos cuando tienen contacto con los animales infectados o el tejido de animales infectados.

¿Por qué hay mucho interés sobre el ántrax en la actualidad?

Debido a que el ántrax es considerado un agente que puede ser usado en una guerra biológica, el Departamento de Defensa (DoD) ha comenzado el proceso obligatorio de vacunar a todo el personal militar activado que pudiera verse involucrado en combate.

¿Es común el ántrax y quién puede contraerlo?

El ántrax es más común en regiones agrícolas donde los animales tienen la enfermedad. Estas regiones incluyen Sudamérica, Centroamérica, Europa del sur y del este, Asia, África, el Caribe y el Oriente Medio. Cuando el ántrax afecta a los seres humanos, es normalmente por causa de exposición ocupacional a los animales infectados o sus productos. Los trabajadores que están expuestos a los animales muertos y a los productos de otros países donde el ántrax es más común, podrían resultar contaminados con *B. anthracis* (ántrax industrial). En los Estados Unidos se han registrado casos de ántrax en ganado salvaje.

¿Cómo se transmite el ántrax?

La infección de ántrax puede ocurrir en tres formas: cutánea (piel), por inhalación, y gastrointestinal. Las esporas de *B. anthracis* pueden vivir en la tierra por muchos

años, y los seres humanos pueden resultar infectados con ántrax al tocar los productos de animales infectados o por inhalar las esporas de los productos de animales contaminados. El ántrax también puede contraerse al comer carne de animales infectados que no fue suficientemente cocida. Es poco común encontrar animales infectados en los Estados Unidos.

¿Cuáles son los síntomas de ántrax?

Los síntomas de la enfermedad dependen de la forma en la que se contrajo, pero normalmente los síntomas se presentan dentro de los primeros 7 días.

Cutáneo: La mayoría (casi 95%) de las infecciones de ántrax ocurren cuando la bacteria entra en una lesión o abrasión en la piel, como por ejemplo cuando se toca lana, pieles, cuero u otros productos de pelo de animales infectados (especialmente pelo de chivos). La infección de piel empieza como una protuberancia similar a la de un piquete insecto pero que en 1 a 2 días se convierte en una bolsa llena de líquido y después en una úlcera sin dolor, usualmente de 1 a 3 cm. de diámetro, con una característica área negra y necrótica (en el proceso de morir) en el centro. Las glándulas linfáticas en el área adyacente se pueden hinchar. Aproximadamente un 20% de los casos que no reciben tratamiento médico contra el ántrax cutáneo provocarán la muerte. La muerte es poco común si se recibe una terapia antimicrobiana apropiada.

Inhalación: Los síntomas al principio pueden confundirse con los de un catarro común. Después de varios días, los síntomas pueden empeorar y convertirse en problemas graves de respiración y shock. El ántrax de inhalación generalmente es fatal.

Intestinal: La forma intestinal del ántrax puede ser el resultado de haber consumido carne contaminada y los síntomas incluyen inflamación severa del tracto intestinal. Los primeros síntomas de náusea, pérdida de apetito, vómito, y fiebre son seguidos por dolor abdominal, vómito de sangre, y diarrea grave. En 25% a 60% de los casos de ántrax intestinal el resultado final es la muerte.

¿Normalmente, dónde se encuentra el ántrax?

El ántrax se encuentra por todo el mundo. Es más común en los países en vías de desarrollo o en los países sin programas de salud pública veterinaria. Ciertas regiones del mundo (Sudamérica, Centroamérica, Europa del sur y del este, Asia, África, el Caribe y el Oriente Medio) reportan más ántrax en los animales que en otros países.

¿Puede ser transmitido el ántrax de persona a persona?

El riesgo de que el ántrax se contagie de persona a persona es muy poco probable. No tiene que preocuparse de contraer la enfermedad si está a cargo de o si visita a un paciente que tiene el ántrax inhalado.

¿Hay manera de prevenir la infección?

En los países donde el ántrax es común y los niveles de vacunación en los animales son bajos, los seres humanos deben evitar el contacto con el ganado y los productos animales así como evitar el comer carne que no ha sido procesada y cocinada adecuadamente. También, existe ya una vacuna aprobada contra el ántrax para usarse en los seres humanos. Se estima que la vacuna es eficaz en 93% de los casos para la protección contra ántrax.

¿Qué es la vacuna contra el ántrax?

La vacuna contra el ántrax es fabricada y distribuida por BioPort Corporation, Lansing, Michigan. La vacuna es una vacuna filtrada para eliminar las células, lo que significa que en la preparación no se usa bacteria viva ni muerta. El producto final no contiene más de 2.4 mg. de hidróxido de aluminio. Las vacunas de ántrax para animales no deben ser usadas en seres humanos.

¿Quién debe ser vacunado contra el ántrax?

El Comité de Consultoría Sobre las Prácticas de Inmunización ha recomendado la vacunación de ántrax para los siguientes grupos:

Las personas que trabajan directamente con el organismo en el laboratorio.

Las personas que trabajan con pieles de animales importadas en áreas en las que las medidas de seguridad e higiene no son suficientes para prevenir la exposición a las esporas de ántrax.

Las personas en áreas con altos incidentes de ántrax que tocan los productos animales que podrían estar infectados. (Son bajos los incidentes en los Estados Unidos, pero los veterinarios que viajan a trabajar en otros países deben pensar en vacunarse).

El personal militar enviado a las áreas con alto riesgo de exposición al organismo (cuando se usa como arma en guerra biológica).

Puede comunicarse con el Programa de Inmunización de la Vacuna contra el Ántrax de la U.S. Army Surgeon General's Office al 1-877-GETVACC (1-877-438-8222) <http://www.anthrax.osd.mil> (en inglés).

Las mujeres embarazadas sólo deben vacunarse si es absolutamente necesario.

¿Cuál es el itinerario para la vacuna de ántrax?

La inmunización consiste de tres inyecciones subcutáneas dadas cada dos semanas, seguidas por tres inyecciones subcutáneas adicionales dadas a 6, 12, y 18 meses. Después, se recomienda la aplicación de inyecciones de refuerzo cada año.

¿Hay reacciones desfavorables a la vacuna de ántrax?

Se presentan reacciones locales leves 30% de los vacunados y consisten en poco dolor y rojez en el lugar de inyección. Las reacciones locales graves son poco

frecuentes y consisten en una hinchazón extrema del antebrazo además de la reacción local. Las reacciones del sistema ocurren en menos de 0.2% de los vacunados.

¿Cómo se diagnostica el ántrax?

Se diagnostica el ántrax por el aislamiento de *B. anthracis* de la sangre, lesiones de piel, o las secreciones respiratorias o mediante la medida de anticuerpos específicos en la sangre de las personas posiblemente afectadas.

¿Hay tratamiento para el ántrax?

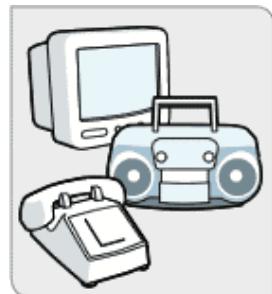
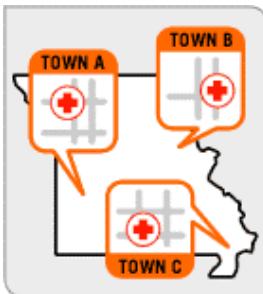
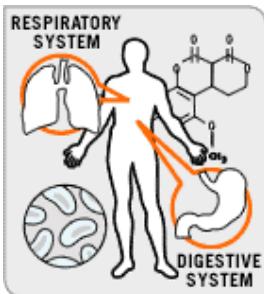
Los doctores pueden recetar antibióticos efectivos. Para ser eficaz, el tratamiento debe comenzar temprano. Si no se atiende, la enfermedad puede ser fatal.

¿Dónde puedo obtener más información sobre una decisión reciente del Departamento de Defensa que requiere que los hombres y mujeres en los servicios armados se vacunen contra el ántrax?

El Departamento de Defensa recomienda que el personal militar se comunique con su cadena de mando para cualquier pregunta sobre la vacuna y su distribución. Puede comunicarse con el Programa de Inmunización de la Vacuna de Ántrax de la U.S. Army Surgeon General's Office al 1-877-GETVACC (1-877-438-8222) <http://www.anthrax.osd.mil>.

2. Biological Threat

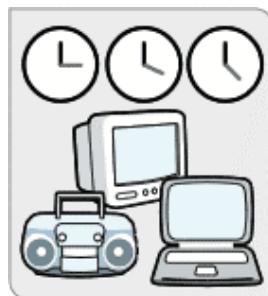
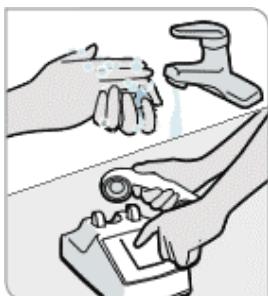
Source: Ready.gov, Department of Homeland Security
<http://www.ready.gov/>



1. A biological attack is the release of germs or other biological substances. Many agents must be inhaled, enter through a cut in the skin or be eaten to make you sick. Some biological agents can cause contagious diseases, others do not.
2. A biological attack may or may not be immediately obvious. While it is possible that you will see signs of a biological attack it is perhaps more likely that local health care workers will report a pattern of unusual illness.
3. You will probably learn of the danger through an emergency radio or TV broadcast.



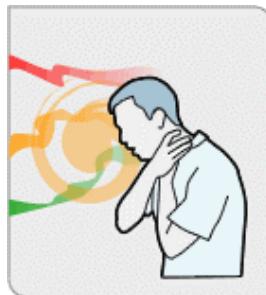
4. If you become aware of an unusual or suspicious release of an unknown substance nearby, it doesn't hurt to protect yourself.
5. Get away from the substance as quickly as possible.
6. Cover your mouth and nose with layers of fabric that can filter the air but still allow breathing.



7. Wash with soap and water and contact authorities.
8. In the event of a biological attack, public health officials may not immediately be able to provide information on what you should do. However, you should watch TV, listen to the radio, or check the Internet for official news as it becomes available.
9. At the time of a declared biological emergency be suspicious, but do not automatically assume that any illness is the result of the attack. Symptoms of many common illnesses may overlap. Use common sense, practice good hygiene and cleanliness to avoid spreading germs, and seek medical advice.

3. Chemical Threat

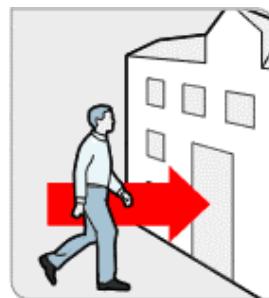
Source: Ready.gov, Department of Homeland Security
<http://www.ready.gov/>



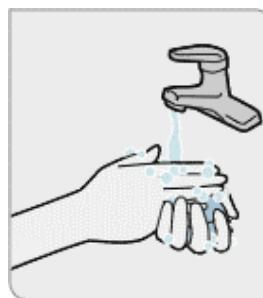
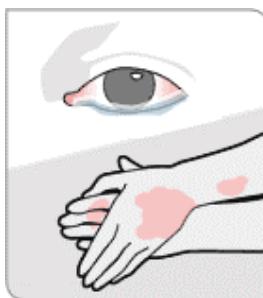
1. A chemical attack is the deliberate release of a toxic gas, liquid or solid that can poison people and the environment.
2. Watch for signs such as many people suffering from watery eyes, twitching, choking, having trouble breathing or losing coordination.
3. Many sick or dead birds, fish or small animals are also cause for suspicion.



4. If you see signs of a chemical attack, quickly try to define the impacted area or where the chemical is coming from, if possible.
5. Take immediate action to get away from any sign of a chemical attack.
6. If the chemical is inside a building where you are, try to get out of the building without passing through the contaminated area, if possible.



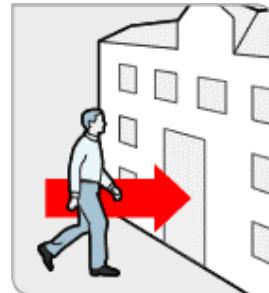
7. Otherwise, it may be better to move as far away from where you suspect the chemical release is and "shelter-in-place."
8. If you are outside when you see signs of a chemical attack, you must quickly decide the fastest way to get away from the chemical threat.
9. Consider if you can get out of the area or if it would be better to go inside a building and follow your plan to "shelter-in-place."



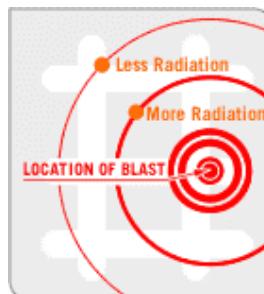
10. If your eyes are watering, your skin is stinging, you are having trouble breathing or you simply think you may have been exposed to a chemical, immediately strip and wash. Look for a hose, fountain, or any source of water.
11. Wash with soap and water, if possible, but do not scrub the chemical into your skin.
12. Seek emergency medical attention.

4. Nuclear Blast

Source: Ready.gov, Department of Homeland Security
<http://www.ready.gov/>



1. Take cover immediately, below ground if possible, though any shield or shelter will help protect you from the immediate effects of the blast and the pressure wave.
2. Consider if you can get out of the area;
3. Or if it would be better to go inside a building and follow your plan to shelter-in-place.
4. In order to limit the amount of radiation you are exposed to, think about shielding, distance and time.



Shielding: If you have a thick shield between yourself and the radioactive materials more of the radiation will be absorbed, and you will be exposed to less.

Distance: The farther away from the blast and the fallout the lower your exposure.

Time: Minimizing time spent exposed will also reduce your risk.

5. "TOPOFF 2" - Week-Long National Combating Terrorism Exercise May 12 - 19, 2003

Source: Department of Homeland Security
<http://www.dhs.gov/dhspublic/display?content=735>



Mock explosion of radioactive "dirty bomb" during bioterrorism drill in Seattle Monday.

"TOPOFF 2" - Week-Long National Combating Terrorism Exercise Begins May 12, 2003

For Immediate Release
Department of Homeland Security
Office of the Press Secretary
May 5, 2003

Beginning May 12 at 3:00 p.m. EDT, the U.S. Department of Homeland Security and U.S. Department of State, in cooperation with Federal, State, local, and Canadian partners, will undertake a five-day, full-scale exercise and simulation of how the Nation would respond in the event of a weapons of mass destruction (WMD) attack.

The exercise consists of simulated attacks in the Chicago and Seattle metropolitan areas. The State of Washington, King County, and the City of Seattle respond to a hypothetical explosion containing radioactive material. The State of Illinois, Cook, Lake, DuPage and Kane Counties, and the City of Chicago respond to a covert release of a biological agent. Nineteen Federal agencies and the American Red Cross will become involved during the five-day exercise. The National Capital Region, including the District of Columbia, State of Maryland, and Commonwealth of Virginia, are participating in the first day of the exercise.

The Government of Canada, including the Province of British Columbia and the City of Vancouver, are also engaged in exercise play. Canada's participation in TOPOFF 2 is in keeping with the commitment to conduct joint exercises, as outlined in Point 30 of the Smart Border Declaration Action Plan. Approximately 18 Federal departments and agencies with counter-terrorism and consequence management roles are involved,

as well as the province of British Columbia. Canadian participation is coordinated by the Department of the Solicitor General and the Office of Critical Infrastructure Protection and Emergency Preparedness. Canada and the United States have a history of conducting joint counterterrorism exercises dating back to 1989.

The exercise consists of simulated WMD incidents; there will be no release of any actual agents. While the exercise scenario, extent of damage, and level of threat are based on a hypothetical situation and are not intended as a forecast of future terrorist-related events, they do reflect the current threat to the United States.

"Protection against terrorism requires that organizations at every level of government and in the private sector work together in partnership to prepare for events and deal with their consequences," said U.S. Secretary of Homeland Security Tom Ridge.

"TOPOFF 2 provides the opportunity to test our preparedness, and at the same time identify ways to improve response in the future."

The exercise will enable top officials and response personnel to practice different courses of action, gain and maintain situational awareness, and deploy appropriate resources. Top Federal officials, State governors, county executives, mayors, city managers, along with State and local responders, will be key participants and play active roles throughout the exercise.

"TOPOFF 2 embodies the spirit of interagency and international cooperation that surfaced in the aftermath of September 11th," stated Secretary of State Colin L. Powell. "It is this cooperation that will help defeat terrorism worldwide."

"The Smart Border Declaration laid out an aggressive road map to secure and strengthen our borders. The commitment to conduct joint exercises is an important part of that agreement," said Deputy Prime Minister John Manley. "TOPOFF 2 is an excellent opportunity to collaborate with our American partners, test our response plans, and further enhance our joint response capabilities."

Over the five days of the exercise, Federal, State, local, and Canadian participants will be engaged in unclassified and classified round-the-clock exercise play.

The goals of TOPOFF 2 are to improve the nation's capacity to manage extreme events; create broader frameworks for the operation of expert crisis and consequence management systems; validate authorities, strategies, plans, policies, procedures, and protocols; and build a sustainable, systematic national exercise program to support the national strategy for homeland security.

The TOPOFF 2 exercise series is overseen by the U.S. Department of Homeland Security/Office of Domestic Preparedness (ODP), which provides training, equipment, exercises, and technical assistance to the Nation's first responders, in partnership with the U.S. Department of State/Office of the Coordinator for Counterterrorism.

6. Annotated Web Sites



Ready.gov, Department of Homeland Security

<http://www.ready.gov/>

Terrorists are working to obtain biological, chemical, nuclear and radiological weapons, and the threat of an attack is very real. The Department of Homeland Security, throughout the federal government, and organizations across America are working hard to strengthen the Nation's security. Whenever possible, they want to stop terrorist attacks before they happen. All Americans should begin a process of learning about potential threats so they are better prepared to react during an attack. Thus website informs about how to do it.

Centers for Disease Control and Prevention



Centers for Disease Control and Prevention, Bioterrorism

Public Health Emergency Preparedness and website

<http://www.bt.cdc.gov>

The Bioterrorism Preparedness and Response Program website provides information about biological agents, press releases, training, contacts, and other important information dealing with the public health aspects of bioterrorism preparedness and response.



Citizen Corps

<http://www.citizencorps.gov/>

Citizen Corps, a vital component of USA Freedom Corps, was created to help coordinate volunteer activities that will make our communities safer, stronger, and better prepared to respond to any emergency situation. It provides opportunities for people to participate in a range of measures to make their families, their homes, and their communities safer from the threats of crime, terrorism, and disasters of all kinds.



Federal Emergency Management Agency
<http://www.fema.gov>

The Federal Emergency Management Agency -- FEMA -- is an independent agency of the federal government, reporting to the President. Since its founding in 1979, FEMA's mission has been clear: to reduce loss of life and property and protect our nation's critical infrastructure from all types of hazards through a comprehensive, risk-based, emergency management program of mitigation, preparedness, response and recovery.



Anthax.mil
<http://www.anthrax.mil/>

The Official DoD Anthrax Vaccine Immunization Program (AVIP) Web Site. Your definitive source for information about anthrax - the disease, the threat, the safety and effectiveness of the vaccine and the implementation of the Anthrax Vaccine Immunization Program. A reference guide for our troops, their families and friends to help understand the AVIP and its importance as a part of Total Force Health Protection.



Department of Education
Emergency Preparedness Plans for Schools
<http://www.ed.gov/emergencyplan/>

As schools and communities across the U.S. prepare and develop plans for responding to potential emergency situations, U.S. Secretary of Education Rod Paige has unveiled this new web resource to help. It is designed to be a one-stop shop that provides school leaders with information they need to plan for any emergency, including natural disasters, violent incidents and terrorist acts. The site will be regularly updated.



U.S. Environmental Protection Agency

Environmental Protection Agency, Emergency Preparedness
<http://www.epa.gov/ebtpages/emeremergencypreparedness.html>

The EPA develops, implements and coordinates preparations for chemical and other emergencies. The Agency carries out this work in partnership with regions, domestic and international organizations in the public and private sectors, and the general public. The goal of the preparations is to be able to respond quickly and effectively to environmental crises and to keep the public informed about hazards in their community. The EPA approaches these preparations with an emphasis on flexibility and cooperation with its emergency partners at all levels. Recommended EPA Web pages: Chemical Emergency Preparedness and Prevention: EPCRA Information Contains links to information on CEPP's Community Right-to-Know program, and Chemical Emergency Preparedness and Prevention Homepage of the Chemical Emergency Preparedness and Prevention Office; describes who they are and what they do.



Chemical Stockpile Emergency Preparedness Program
Residential Shelter-in-Place
<http://www.ornl.gov/EMC/CSEPPweb/SIP/SIP.htm>

The purpose of the Residential Shelter-in-Place training is to teach residents how to shelter-in-place during an accidental or intentional release of chemical agent vapor. Although intended for residents living in the areas serviced by the Chemical Stockpile Emergency Preparedness Program (CSEPP), residents in other areas that could be affected by a release of hazardous chemical vapors may also find the training useful. The training has been developed by Oak Ridge National Laboratory (ORNL) for the Federal Emergency Management Agency (FEMA) and the United States Army's Soldier and Biological Chemical Command (SBCCOM).



BT Updates from the American Academy of Family Physicians
<http://www.btresponse.org/>

Medical professionals are the first line of defense against bioterrorism. They must be ready to respond to bioterrorism and other threats. The American Academy of family

Information provided by the Information Resource Center
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Physicians marshaled materials to help you answer patients' questions about bioterrorism; recognize terrorist threats and events without overreacting; and know what, when and where to report.



Together, we can save a life



American Red Cross
<http://www.redcross.org>



The Information Resource Center

Embassy of the United States of America

Madrid, Spain

<http://www.embusa.es>

June 2003