



# ANTHRAX e-TOOL ..... Protecting the Worksite against terrorism

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## Who is at risk for anthrax exposure?

In October 2001, five workers died from inhalation anthrax and an additional 13 developed cutaneous or inhalational disease as a result of intentional terrorist activity. In most cases seen so far, the disease was linked to unexpected workplace exposures to anthrax spores contained in letters mailed through the United States Postal Service. Fortunately, the number of workplaces contaminated with the spores has also been quite limited. Nevertheless, employers and workers are concerned about possible exposure to *Bacillus anthracis* in the workplace.



Use the following link to help you decide if there is a credible risk of anthrax exposure at your worksite:

- ④ [The Anthrax Risk Reduction Matrix](#)

The following categories of employees could potentially be exposed to anthrax:

- ④ [Workers Exposed Through Criminal/Terrorist Acts](#)
- ④ [Emergency Response Workers](#)
- ④ [Health Care Workers](#)

The anthrax exposures that occurred as a result of the criminal/terrorist acts received a great deal of media attention. However, anthrax exposure is most common in animal handling and related occupations, where *Bacillus anthracis* spores can exist naturally. The following link provides more information regarding other occupations that are at-risk of anthrax exposure:

- ④ [Animal Handling and Related Occupations](#)

### Anthrax Risk Reduction Matrix

This matrix was developed to offer basic advice and suggest protective measures that OSHA believes will reduce the risk of exposure in light of current concerns about the presence of anthrax spores in the workplace. To help employers determine appropriate precautions, OSHA categorizes worksites into three risk zones - green, yellow, and red - based on the likelihood of contamination with anthrax spores.



- ④ **Green Zone:** Workplaces where contamination with anthrax spores is unlikely

This zone covers the vast majority of workplaces in the United States. Since October 2001, anthrax spores have been discovered only in a very limited number of workplaces. If your workplace falls into the Green Zone, it is unlikely that specific

measures to protect against anthrax exposure are necessary.

- ④ **Yellow Zone:** Workplaces where contamination with anthrax spores is possible

Examples of workplaces in the Yellow Zone may include:

- ④ Workplaces that handle bulk mail (especially, working near equipment such as high-speed processors/sorters that could aerosolize anthrax spores),
- ④ Workplaces that handle mail from other facilities that are known to be contaminated,
- ④ Workplaces in close proximity to other facilities known to be contaminated, and
- ④ Workplaces that may be targets of bio-terrorists.

The following link provides additional information for workplaces that fall into the Yellow Zone:

- ④ [How should I prepare if my company has a credible risk or anthrax exposure?](#)

- ④ **Red Zone:** Workplaces where authorities have informed you that contamination with anthrax spores has been confirmed or is strongly suspected

Red Zone guidance addresses two situations:

- ④ Workplaces where authorities have informed you that contamination with anthrax spores has been confirmed or is strongly suspected, and
- ④ Sites where emergency response workers are engaged in emergency response to, and cleanup of, bio-terrorist releases of anthrax spores.

Actions taken by an employer under these circumstances may vary depending on the specific facts and the nature of the incident. Employers should follow instructions given by law enforcement and public health agencies and convey appropriate information to employees.

The following links provide additional information for workplaces that fall into the Red Zone:

- ④ [What should I do if I have an anthrax threat at my worksite?](#)
- ④ [How do I clean up my worksite that has been contaminated with anthrax?](#)

### Workers Exposed Through Criminal/Terrorist Acts

- ④ Workers whose jobs would not ordinarily involve anthrax exposure could be exposed through acts of terrorism.
- ④ Conventional thinking is that terrorists are likely to target places where large populations can be found such as large buildings, sporting events, or mass transit systems.
- ④ Recent events have shown that there is a wider range of physical locations that could be targeted and this expands the range of employees who could be exposed.



## Emergency Response Workers

- ④ Emergency responders, including police, firefighters, emergency medical services workers, and others who are responsible for responding to acts of terrorism may be exposed to anthrax.
- ④ Health and safety precautions, including [personal protective equipment](#) (PPE) and respirators, used by emergency response workers will help protect them against anthrax exposure.



The following link will help you determine if your normal health and safety precautions will protect you or your employees against anthrax exposure during an emergency response.

- ④ [Interim Recommendations for the Selection and Use of Protective Clothing and Respirators Against Biological Agents](#), Centers for Disease Control and Prevention, Public Health Emergency Preparedness and Response

## Health Care Workers

- ④ Health care workers in occupational settings such as hospitals, clinics, and medical laboratories may be exposed to anthrax as a result of contact with patients whose skin, clothing, or personal effects are contaminated with anthrax spores, or through contact with contaminated equipment.
- ④ Anthrax is not a contagious disease.
- ④ Because the most likely exposure route for health care workers is dermal contact, normal health and safety precautions (such as wearing latex/nitrile examination gloves) will protect these workers against cutaneous anthrax exposure.



The following links will provide additional emergency response information for health care workers:

- ④ U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), [Hospitals and Community Emergency Response -- What You Need to Know](#), OSHA 3152, 1997
- ④ [Anthrax Page for Lab and Health Professionals](#). CDC Public Health Emergency Preparedness and Response (2002)

## Animal-Handling Occupations

- ④ Anthrax is most common in occupations involving animals, animal hides, or fibers. Grazing animals such as cattle, sheep, goats, and horses are chief animal hosts of anthrax.
- ④ Occupations susceptible to exposure include shepherds, farmers, butchers, handlers of imported hides or fibers, weavers, veterinarians, and veterinary pathologists.
- ④ Anthrax can be found globally. However, it is more common in developing countries or countries without veterinary public health programs.



Employers in animal-handling occupations who anticipate exposure may find the following information useful:

- ④ [Anthrax, Veterinary Services](#), USDA 10/2001

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