

Construction micro-organisms: Anthrax from contaminated land and buildings

Construction workers might be exposed to anthrax in some situations. This page tells you how to control this risk and why. You also need to be aware of the [general information on micro-organisms](#)^[1].

What you must do

Follow the [Assess, Control and Review mode](#)^[2]. Pay particular attention to the following things:

Assess

Identify and assess: The general risk of getting anthrax is **very low**. Workers may be at more risk in a number of situations including:

- building on some types of old land; eg an old burial site with anthrax-infected carcasses or an old tannery where there may be a risk of soil contamination
- crypt clearances involving the opening of coffins containing people who have died of anthrax
- demolition of buildings where infected animal hair was used to bind the plaster

Control

Prevent: For potentially hazardous sites, appropriate soil sampling/building material sampling and laboratory testing can give an indication of risk. Alternatively, you could adopt a precautionary approach and assume that anthrax spores are likely to be present. **However, any spores are probably at low numbers which would not put the worker at significant risk and the simple hygiene controls described below will probably be enough.**

Control: Where anthrax spores are known / assumed to be present, control this risk by:

- **General controls** – Follow the [general controls for harmful micro-organisms](#)^[3]. Pay particular attention to:
 - wearing disposable coveralls and gloves
 - following good basic hygiene including regular hand-washing and avoiding

hand to mouth/eye etc contact

- taking rest breaks, including meals and drinks, away from the work area;
 - covering all cuts, abrasions and other breaks in the skin with waterproof dressings and/or gloves
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- **Respiratory Protective Equipment (RPE)** – wear [RPE](#)^[4] if removing old plaster containing animal hair. This will also protect you from other risks such as [dust](#)^[5] and [Aspergillus](#)^[6]. Choose RPE with an assigned protection factor of 20 (eg FFP3 disposable mask or half mask with P3 filter). For longer duration work consider powered RPE with the same protection (eg TH2 powered hood / helmet). Make sure any RPE is compatible with other protective equipment.
 - **Immunisation** – this may be needed in some circumstances to supplement your controls above. [Take competent advice](#)^[7]. You should ensure that workers are aware of the advantages and disadvantages of immunisation and its limitations. Keep adequate records of any immunisation provided.

Review

Supervise: Ensure that controls such as work methods, PPE and welfare are effective and used by the workers. Anyone using tight fitting RPE needs to be clean shaven and face fit tested.

What you should know

Anthrax is a potentially fatal infection caused by the bacterium *Bacillus anthracis*. It is a zoonosis, ie a disease that is transmitted from animals to humans. Animals become infected when consuming contaminated water, hay, feed (like bonemeal) , by grazing on contaminated land or inhaling large numbers of spores.

Cases of people getting anthrax are very rare. People generally contract it from contact with diseased animals, their secretions, hides, hair or other products. It can occur in a number of forms. The most common type accounts for almost all of the cases and affects the skin but is readily treated with antibiotics. Other types are pulmonary (lung) anthrax, and intestinal (gut) anthrax, but there are no recorded cases of these types in construction workers.

- [More information on anthrax](#)^[8]

Link URLs in this page

1. general information on micro-organisms
<http://www.hse.gov.uk/construction/healthrisks/hazardous-substances/harmful-micro-organisms.htm>
2. Assess, Control and Review model
<http://www.hse.gov.uk/construction/healthrisks/managing-essentials/managing-essentials.htm>
3. general controls for harmful micro-organisms
<http://www.hse.gov.uk/construction/healthrisks/hazardous-substances/harmful-micro-organisms.htm>
4. RPE
<http://www.hse.gov.uk/respiratory-protective-equipment/index.htm>
5. dust
<http://www.hse.gov.uk/construction/healthrisks/hazardous-substances/construction-dust.htm>
6. Aspergillus
<http://www.hse.gov.uk/construction/healthrisks/hazardous-substances/harmful-micro-organisms/aspergillus.htm>
7. Take competent advice
<http://www.hse.gov.uk/health-surveillance/setup/competent-advisors.htm>
8. More information on anthrax
<http://www.hse.gov.uk/pubns/books/hsg174.htm>