

PHLS interim guidelines for health professionals dealing with packages suspected of containing anthrax

Current assessment of the threat of bioterrorism in the UK remains LOW. However, anxiety is being generated about what action should be taken following the receipt of a suspicious package, and this guidance provides a proportionate response to this situation.

This document advises on:

- A. General handling of mail and identification of suspect mail**
- B. What to do if you discover suspect mail**
- C. Risk assessment**
- D. Medical management**

This document does not cover action to be taken in the event of a deliberate release of anthrax - details of the diagnosis and clinical, laboratory and public health management of this situation can be found in the Interim PHLS Guidelines For Action In The Event Of A Deliberate Release Of Anthrax, but are also summarised in Appendix A.

A. General handling of mail and identification of suspect mail

1. General advice on mail

Every business and organisation should assess and review their protocols for handling mail. Good sense and care should be used in inspecting and opening mail or packages.

- Do not open letters with your hands: use a letter opener.
- Open letters and packages with a minimum of movement to avoid spilling any contents.
- Each organisation should assess whether it is at heightened risk of receiving mail containing a biological or chemical agent. Based on this assessment, organisations may wish to consider additional precautions such as wearing gloves and restricting the opening of mail to a limited number of trained individuals.

2. Identification of suspect mail

What Types of Letters and Packages May be Suspect:

- Any envelopes or packages with suspicious or threatening messages written on it
- Letters with oily stains
- Envelopes that are lopsided, rigid, bulky, discoloured, have an obvious strange odour or feel like they contain powder
- Unexpected envelopes from foreign countries (including the USA)
- No postage stamp, no franking, no cancelling of the postage stamp
- Improper spelling of common names, places or titles
- Hand written envelopes/packages from an unknown source particularly if addressed to an individual and marked personal or addressee only

B What to do if you discover suspect mail

1. Action in the event of finding unopened suspicious mail

- DO NOT OPEN THE ENVELOPE OR PACKAGE.
- NOTIFY your manager, who if he/she confirms the risk should call the police on 999 who will advise on further management.
- Do NOT take the letter / package to police
- Do NOT take the letter / package to any health service (including A&E Departments or GP).

2. Action in the event of opening a package/envelope which contains suspicious material, or finding an already opened package

INITIAL MANAGEMENT

Call the manager who if he/she confirms the risk should call the police immediately by 999.

The key to initial management is getting the police to assess the situation immediately.

People already in the room should stay there¹ until the police have made an initial assessment, so as to prevent any biological agent spreading to other parts of the building.

- Close the door and windows of the room with the package,
- If possible immediately switch off the air conditioning
- Do not allow anyone other than qualified emergency personnel to enter.
- Close or cover up the package if that can be done without disturbing any powder within it. Do not clean powder up; keep others away.
- Do not touch eyes, nose or any other part of the body.
- If possible, wash hands thoroughly with soap and water.
- If clothing is heavily contaminated, don't brush vigorously.
- Have someone make a complete list of all people who had actual contact with the material and who were in the room where the letter / package was open for investigating authorities.

Time is usually available to assess the situation. Those involved in raising the alarm should be reassured from the outset that their lives are not at risk if proper procedures are followed.

¹ In **chemical** incidents there may be a requirement to leave the room as quickly as possible, but in the current situation where biological agents, especially anthrax, remain the most likely threat, staying in the room is an essential element of biological containment. Signs that a package contains hazardous chemical material, and that people need to vacate the room immediately, include immediate skin irritation or blistering, streaming eyes, etc. following exposure. Rapid police assessment is equally important in a chemical incident.

C. Risk Assessment

Risk assessment **by the police** is the key to managing these incidents. They will quickly advise on whether to keep people in the room with the package. A proper description of the package and what has happened to it is ESSENTIAL. This is the basis on which all subsequent action is determined.

Risk assessment is carried out by the police, on the basis of the story from the recipient of the package and their own observation. It will enable the package to be put into one of two categories ("Credible threat" or "No credible threat"), and determine other action. SEE **Responding to suspect Packages—Actions to be taken**. The local Consultant in Communicable Disease Control (CCDC) should be involved in all credible threat incidents, and kept informed of the risk assessment and progress.

- No credible threat. In most cases, initial assessment of the letter or package by the police will provide reassurance that it is a false alarm, or it may obviously be a hoax. No further action will be taken.
- Credible threat. These are packages felt by the police to have features which warrant deployment of the full panoply of specialist support.

D Medical management

➤ If the police assessment is declared "No credible threat"

The police will advise that the package (whether opened or not) can be handled as normal mail, be discarded. No clinical, laboratory or public health action should be taken. There is no need for environmental specimens to be taken. The people who might have been exposed must be reassured.

➤ If the police assessment is declared a "Credible threat"

Once the police have completed their assessment, the package (whether opened or not) and any material from it, will be taken by the police or other agencies and sent to a national specialist laboratory for testing of environmental samples (usually the one at Porton Down, not to a local NHS or PHLS laboratory).

- The police will define who has been potentially exposed. This will include all people who have been in the room with the open package and people who moved through any contaminated area (eg a corridor)
- The police will advise that caustic chemical is not involved.

- Those potentially exposed will be decontaminated by the emergency services, with all clothing removed and bagged and held until the results from the powder or other suspicious substances are available. Alternative clothing is provided.
 - A list of those exposed must be made by a health professional. Names, addresses, telephone numbers, and GP details (name and telephone number) should be recorded.
 - Because of the importance of early treatment for anthrax, chemoprophylaxis should be started for that.
 - Therefore exposed people should be started on ciprofloxacin, 500mg bd – initially for 3 days by which time the results for the powder or other samples should be available. If this is contraindicated, the alternative is doxycycline; 100mg twice daily. **Antibiotics should be provided at the scene, or the aftercare location – preferably given or arranged by the CCDC.** There is no reason to give ciprofloxacin more widely.
 - Reassurance should be given that they have been given full treatment and pose no risk to their family and friends. They should be told they will be contacted as soon as the results become available (most likely within 24 hours). **They should then go home.**
 - Aftercare should be arranged - people may be anxious and will have handed in wallets etc. and should be looked after (e.g. by the Local Authority).
 - The room or exposed areas should remain closed until the results from the sample are received. Heating or air conditioning should remain off.
 - There is no reason for people to go to routinely to casualty although there may be special reasons such as if casualty is the decontamination point.
 - The taking of nose swabs or blood samples is **not** recommended.
- ◆ **If the results are negative** The exposed persons should be contacted for example by the CCDC and told the result. They should be assured and told to stop the antibiotics. The exposed room/areas can be used as usual.

If the results confirm anthrax was present in the sample:

- ◆ The exposed persons will need to be contacted, preferably by the CCDC or their deputy. Their GP will be contacted and asked to supply 60 days of treatment.
- ◆ Since the patient is on treatment, no nasal swabs are necessary since they do not affect their management. However, nasal swabs may now be requested by CDSC for epidemiological purposes.
- ◆ The exposed room/areas must remain sealed off because this is now officially a crime scene and the police will need to investigate. Only then, can the room be decontaminated. Heating or air conditioning must stay off.
- ◆ Clothing will need decontamination or disposal by autoclaving or incineration.

- ◆ This is now a Major Incident and CDSC will advise on further medical action.

Appendix A

This appendix covers background and clinical information, clinical procedures, laboratory procedures, and public health procedures.

1 Deliberate release of anthrax

The threat from a deliberate release of anthrax is a release of large quantities of spores as an aerosol. Anthrax can be aerosolised from an envelope or package containing powder, and this may pose a risk of inhalation anthrax, which is a serious infection. Cutaneous anthrax can also occur from contaminated environmental surfaces, but this is less serious. Note that inhalation anthrax is **not** contagious, and cutaneous anthrax requires an existing skin lesion in order to cause infection.

Identification and treatment of persons potentially exposed to anthrax spores aims to prevent these infections, although the threat of inhalation (or pulmonary) anthrax is potentially more serious.

2 Epidemiology

The infectious dose for inhalation anthrax is high compared to other infectious organisms, estimated at 10,000 spores, which means it is **not** highly infectious. The incubation period is 1 day to 8 weeks (mode 5 days), dependent on dose and exposure route.

3 Clinical features

Human anthrax can occur in three forms: inhalation/pulmonary, cutaneous or gastrointestinal, depending on the route of exposure. For details of these clinical conditions, please refer to the [Interim PHLS Guidelines For Action In The Event Of A Deliberate Release Of Anthrax](#).

Clinicians should be aware of the possibility of cases of inhalation anthrax, and any previously healthy patient with the following clinical presentations should be immediately reported to the Consultant in Communicable Disease Control and to the duty doctor at CDSC (020 8200 6868 - 24 hour service).

- A severe, unexplained febrile illness or unexplained death from febrile illness.
- Severe sepsis or respiratory failure with a widened mediastinum.
- Severe sepsis with *Bacillus species* or gram-positive rods identified from clinical specimens in the blood or cerebrospinal fluid and thought not to be contaminants or to an underlying predisposing condition.

Cutaneous anthrax [see *Questions commonly asked by health care providers about Anthrax*]

4 Treatment

Treatment is most effective if initiated as early as possible. For current recommendations for treatment of anthrax, please consult the [Interim PHLS Guidelines For Action In The Event Of A Deliberate Release Of Anthrax](#).

Responding to suspect Packages—Actions to be taken

