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URGENT COMMUNICATION

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To:

HSS(MD)27/2001

Directors of Public Health for onward transmission to:
All General Practitioners/General Practitioners Co-Ops
(for onward dissemination to all Practice Staff)

17th October 2001

Dear Colleague

DEALING WITH PATIENTS EXPOSED TO SUSPICIOUS SUBSTANCES

Further to my letter of 11th October 2001 regarding Anthrax cases in Florida, USA, I am writing to advise you that there have been a number of reports of people in Northern Ireland being exposed to unknown suspicious substances. This has understandably generated considerable public concern. The purpose of this letter is to advise you of the action you should take should patients contact you for advice or present to your surgery with a documented exposure.

Human Anthrax is a bacterial infection caused by the organism *bacillus anthracis* and Anthrax is very rarely seen in Northern Ireland. Full details on Anthrax, including symptoms and signs of infection are included at Annexe 1. I would like to emphasise that there have been no confirmed human cases of Anthrax in Northern Ireland since 1993 and no confirmed cases of Anthrax associated with any of these recent exposures. In addition, there is no evidence to suggest that the general public in Northern Ireland are at an increased risk of malicious Anthrax exposure related to the recent events in the USA.

Patients may contact GP surgeries for advice or if they believe they may have been exposed to a suspicious substance. A flow-chart is attached at Annexe 2 which details the action which should be taken in dealing with these queries, specifically the action to be taken if you believe a patient may have been exposed to a suspicious substance. A possible exposure in a patient may be defined as having been in contact with a suspicious substance or package, and a confirmed exposure as having been in the immediate vicinity of a confirmed Anthrax release. GPs should contact their local Consultant in Communicable Disease Control to inform them of exposed patients and seek advice on further management, including chemoprophylaxis.

Patients who have not had a documented exposure should be reassured that they have not been exposed.

Members of the public are understandably concerned about the potential for coming in contact with suspect substances or packages, in particular through the mail. The Department of Health, Social Services and Public Safety have issued a checklist for members of the public to use in relation to dealing with suspect mail or packages and this is included at Annexe 3 for your information.

It is likely that the situation in relation to exposure to suspect substances and/or packages and also in relation to Anthrax exposures will be updated on a daily basis. The lead Agency for communication and information in relation to these possible exposures in Northern Ireland is the Department of Health, Social Services and Public Safety and they can be contacted through the Press Office at 02890 520738. In addition, up-to-date information on Anthrax will be available at the Department's website on www.dhsspsni.gov.uk and also at the Public Health Laboratory Service's website on www.phls.org.uk.

Yours sincerely

Dr HENRIETTA CAMPBELL
Chief Medical Officer

MISS JUDITH HILL
Chief Nursing Officer

cc: Consultants in Communicable Disease Control
Dr Smyth, CDSC (NI)
Chief Executives of Boards and Trusts

PHLS Communicable Disease Surveillance Centre

Questions Commonly asked by Health Care Providers about Anthrax

Section A: Anthrax Disease Facts:

1. What is Anthrax?

Anthrax is a bacterial infection caused by the organism *Bacillus anthracis*. This bacterium is carried by wild and domestic grass eating animals such as cows in Asia, Africa, South America and parts of Europe. The bacterium can exist in a form known as a spore, which allows it to survive in the environment (for example, in the soil).

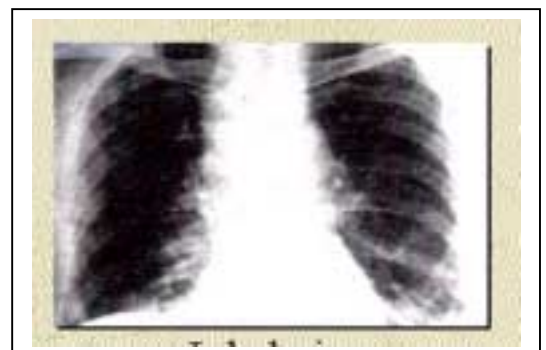
2. What are the Symptoms?

There are three different types of Anthrax. The most common type is the skin (cutaneous) type. Very rarely it can cause gut or lung (inhalational) disease.

In **cutaneous anthrax**, itching occurs first. This is followed by appearance of a lesion commonly on the head, forearms or hands. At first, the lesion is a small bump. It then ulcerates and becomes weepy, and although surrounded by marked swelling, it is rarely painful. This **painless swelling** is the cardinal feature of the disease and differentiates it from cellulitis. The ulcer develops a depressed, black centre in 2-6. If untreated the infection can spread and cause blood poisoning. If untreated, it used to be fatal in 5-20% of cases but with effective antibiotic therapy very few deaths occur.



Initial symptoms of **Inhalational Anthrax** are mild and non-specific. They characteristically include fever, tiredness, mild cough or chest pain. This is followed by the second phase characterised by acute respiratory distress, sepsis and acute haemorrhagic mediastinitis causing **mediastinal widening on chest X-ray**. This in a previously healthy patient is highly suggestive of



anthrax. At this stage, the disease often has a fatal outcome. Inhalational Anthrax, note Widened Mediastinum

Intestinal Anthrax is a very rare form of food poisoning and results in severe gut disease, fever and blood poisoning. It is very difficult to recognise and consequently is often fatal

Intestinal Anthrax



3. What does cutaneous (skin) anthrax look like in children?

The first sign, an itchy bump and over the next day or two, the bump forms a small blister. Often the top gets broken and then there is a weepy ulcer in the middle of a swollen area. Over the next couple of days the ulcer usually develops a black covering very much like the adults form (see Picture in an adult). Local lymph nodes may become enlarged. The child usually remains well and the area surrounding the lesion is very swollen. In comparison to other skin infections, the swelling is usually painless. If the infection starts to spread, usually in the later stages of the infection, then the child will develop a fever, and is obviously ill.

4. How is Anthrax caught?

Anthrax is primarily a disease of animals not humans. It is an occupational hazard of workers who process hides, hair, bone and bone products, vets and agricultural workers and people in specialist laboratories working with anthrax.

Its reservoir is in herbivores. When their blood is spilt however accidentally or intentionally, the bacteria is in contact with air whereupon it converts to a tough coated spore which can last in the soil for years.

Cutaneous Anthrax is by contact with tissues of animals dying with the disease or by contact with contaminated products.

Inhalational Anthrax results from inhalation of spores in industrial processes e.g. From hides of animals. It is very rare, the last case in England and Wales was in 1974..

Intestinal Anthrax is even more rare but occurs from swallowing spores in contaminated meat.

It is extremely unusual for anthrax to be transmitted from person to person

5. How long can you have the infection before developing symptoms?

From 1 –7 days, although incubation period can be up to 60 days.

6. How can anthrax be prevented?

There is a vaccine against anthrax, but this is recommended only for those in highest risk (for example laboratory staff who may be handling the organism or those working in tanneries). Vaccination is not recommended for the general public.

Correct treatment of hides and wool (washing, or disinfecting them) as well as adequate ventilation of work areas in hazardous industries are also recommended.

7. How do you treat Anthrax?

Anthrax can be treated effectively with a variety of antibiotics, but early recognition of the disease is essential if the treatment to be successful.

In case of cutaneous anthrax, antibiotic therapy sterilises a skin lesion within 24 hours but the ulcer goes on through its natural cycle.

The antibiotics of choice are penicillin for cutaneous anthrax, given for 5-7 days. Tetracyclines, erythromycin and chloramphenicol are also effective. Intravenous ciprofloxacin is the drug of choice for inhalational anthrax.

If exposure to aerosolised anthrax is credible or confirmed, person at risk should begin post exposure prophylaxis with both antibiotics (fluoroquinolones are the drug of choice or doxycycline) and vaccine. Immunisation is recommended because of the uncertainty of when or if the inhaled spores may germinate. It consists of 5 injections, first one is as soon as possible followed by 3 weeks, 6 weeks, 6 months and 1 year after the exposure

8. Do patients need to be Quarantined?

No there is no need for quarantine

Section B: Frequently Asked Questions by Health Professionals About the Perceived Threat of Anthrax:

1. I have a patient who has come back from Florida, does he or she need to be tested or to be given antibiotics or vaccine for anthrax?

No, they do not need any of these. The general population in Florida is not at risk. Only people who worked in the American Media Inc. (AMI) publishing house in, Florida or visited the building for

more than an hour between August 1st and October 4th 2001 need to be tested for anthrax spores and be put on antibiotics.

2. One of my patients is very concerned about ANTHRAX and believes that he / she should be vaccinated. Where can I get the vaccine from?

Anthrax Vaccination is not recommended for the general public. It is recommended for a very few people at risk from their work. This is those working with animal hides (especially imported hides), in abattoirs or laboratories. Details are in the recommendations of the UK Joint Committee for Vaccination and Immunisation (JCVI) in the current Green Book (Immunisation Against Infectious Disease pp 61-3). The vaccine is not produced commercially and cannot be purchased.

3. My patient works in a tannery / abattoir does he need to be vaccinated against Anthrax?

Yes, he is in the population group that is at higher risk and can be vaccinated. The Green book page 61 gives details of the vaccine. Your GP or Occupational Health Specialist need to contact immunisation department at CDSC to arrange vaccine issuance.

4. One of my patients is going to work abroad where I hear anthrax is common. Should he be vaccinated?

No, you only need anthrax vaccine if it is recommended as a vaccine in the Green Book (see question 2) or in the yellow book on "Health Information for Overseas Travel"

5. I am a GP, Can I buy anthrax / smallpox vaccines privately for my patients?

No. Both vaccines are produced by the government and are not for sale to private individuals or companies. They are not produced commercially in the UK.

6. My patient has received a letter from AMI. Is it dangerous?

Treat it like any other letter. There is no risk from mail from AMI.

7. My patient has received a package from the USA. He is anxious about whether it could contain anthrax. What shall I advise?

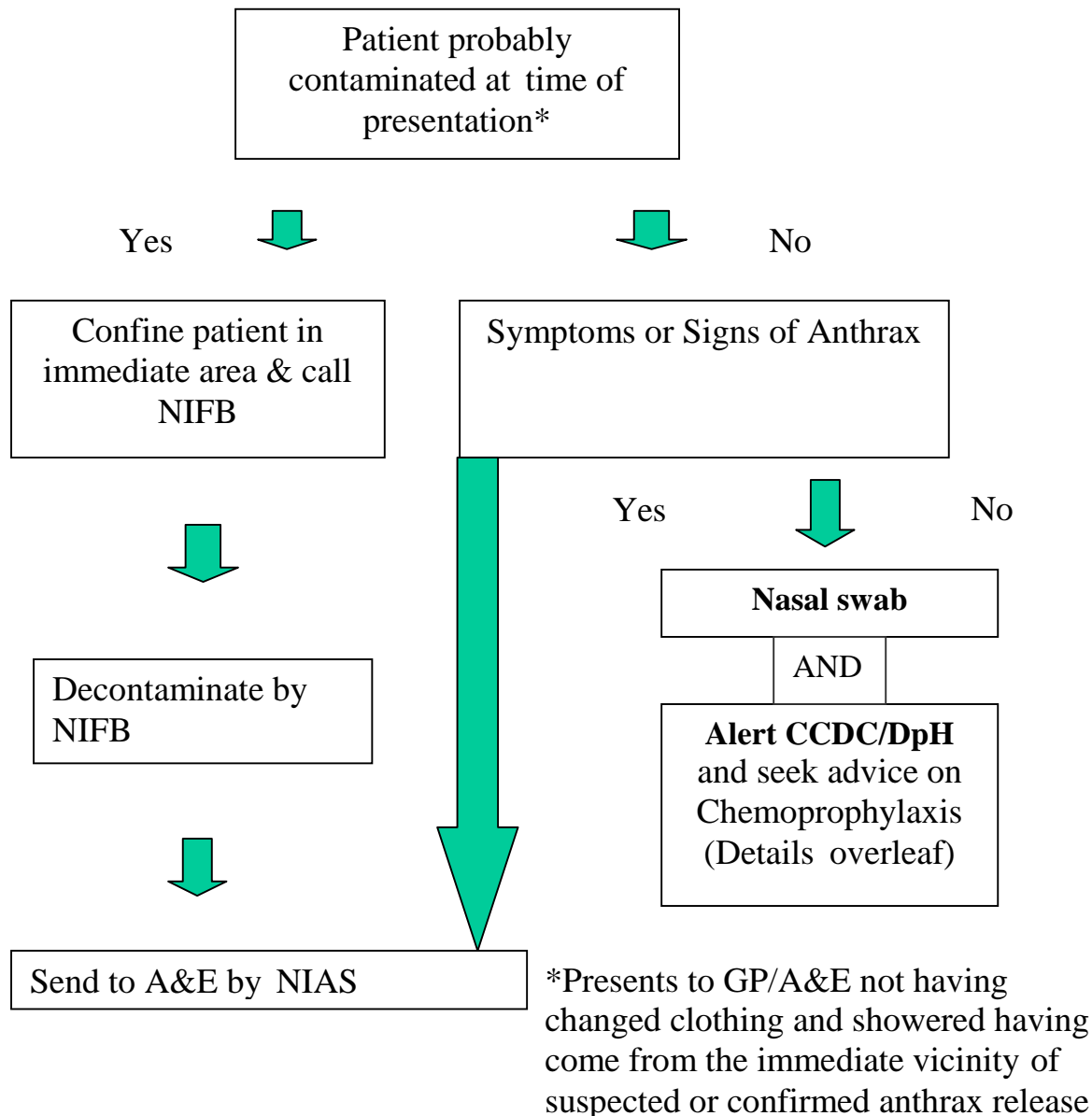
He should treat it like any other package. However, if you feel that the package is suspect, then put it in a plastic bag and call the local police. Do not take it to the local police station.

8. I / my patient has received what he feels is a suspect letter / package. What shall I do?

You should not open the suspect package, letter but should call the local police station.

Annexe 2

Dealing with patients exposed to unknown substance, possibly Anthrax



Recommended prophylaxis after exposure to *B. anthracis*

Antimicrobial agent	Adults	Children
Oral Fluoroquinolones Ciprofloxacin	500mg bd	20-30mg per kg of body mass daily, divided into two doses – as a guide 10kg: 125mg bd 20kg: 250mg bd 30kg: 375mg bd 40kg: as for adult
If fluoroquinolones are not available or are contraindicated Doxycycline	100mg bd	5mg per kg body mass per day divided into two doses

Paediatric use of fluoroquinolones and tetracyclines can be associated with adverse effects that must be weighed against the risk of developing a serious disease.

If *B. anthracis* exposure is confirmed, the organism must be tested for penicillin susceptibility. If susceptible, exposed children may be treated with oral amoxicillin 40mg per kg of body mass per day divided with doses 8 hourly (not to exceed 500mg, three times daily).

Executive Information Service

Department of Health, Social Services and Public Safety

17 October 2001

GUIDANCE FROM DHSSPS ABOUT HANDLING SUSPICIOUS MAIL

DHSSPS today issued the following guidelines:

1. Do not shake or empty the contents of any suspicious envelope or package.
2. PLACE the envelope or package in a plastic bag or some other type of container to prevent leakage of contents.
3. If you do not have any container, then COVER the envelope or package with anything (e.g. clothing, paper, waste paper bin etc) and do not remove this cover.
4. DO NOT try to CLEAN UP or vacuum the powder. COVER the spilled contents immediately with anything (clothing, paper, waste paper bin etc) and DO NOT remove the cover.
5. Then LEAVE the room and CLOSE the door, or section off the area to prevent others from entering.
6. WASH your hands with **soap and water** to prevent spreading the powder to your face.
7. What to do next....

If you are at HOME, then report the incident to the emergency services.

If you are at WORK, then report the incident to the emergency services and notify Head of Security or your line manager.

8. List all the people who were in the room or the area when this suspicious letter or package was recognised. Give this list to both the police and the public health authorities for follow-up investigations and advice.

