Friday, November 2, 2001
MSG 2001-092a

MEMORANDUM FOR: Human Resources Directors

Subject: The Department of Health and Human Services Information Regarding Exposure to Anthrax

Introduction

This document is intended to address the concerns of workers in federal buildings with potential exposures to anthrax spores through their mailroom facilities. The first and foremost concern of the Administration is the health and safety of workers in these buildings, and we are doing everything possible to ensure the safety of all federal employees.

This document attempts to answer questions concerning the risk of development of disease from anthrax, questions about testing for anthrax spores in the workplace, and antibiotic treatment of persons who may be at risk for development of disease caused by anthrax. It is based on the best scientific information we have available to us today. Many questions, of course, still do not have definitive answers. We are moving to learn the answers as quickly as possible. In the meantime, we are determined to respond prudently. We need to carry on our service to the American people, while taking all the actions that are necessary to protect the health of federal employees.

The anthrax attack on America is unprecedented, and we all know that there is no way anyone can promise 100 percent that no further cases will occur. But we can indeed identify the locations where employees could be at risk, and equally important, the areas where they are unlikely to be at risk. By sharing what we know with all employees, and by acting together, we hope to keep the risk to workers as low as possible.

Background

There are several forms of the anthrax disease. These are related to the quantity of anthrax spores and the way in which a person comes in contact with these spores. Inhaling spores from the air causes the most serious form of disease. It appears that people who develop disease caused by inhaling anthrax spores must inhale a relatively large amount of the spores to become ill. Additionally, the spores must be of a certain size to invade the lungs. If the spores are too big, they will not get into the lungs; if they are too small, the spores will be exhaled. There have been several cases in the current U.S. outbreak caused by this form of the disease. Although our knowledge of how to cure the inhaled form of anthrax is improving, several people have died.

The goal of administering antibiotics is to prevent the more serious form of anthrax caused by the inhalation of large amounts of anthrax spores. Currently, the people at highest risk of developing disease from inhalation of anthrax spores are people in rooms where letters

containing powdered anthrax spores have been opened, like in the case of the letter to Senator Tom Daschle's office. Additionally, persons working in mailrooms that use high-speed mail sorting machinery are at risk of contracting inhalation anthrax, the most serious form of the disease.

The second form of anthrax that we have seen in this current outbreak is a skin disease. The skin form of the anthrax is far less serious than the disease caused by inhaling spores. It is caused by skin contact with anthrax spores on contaminated surfaces (not in the air). The spores enter the skin through a cut or break in the skin. The skin disease of anthrax can be diagnosed by its appearance and by appropriate cultures. Skin anthrax is also easily treatable. With appropriate antibiotic treatment, almost all persons with the skin form of anthrax recover without consequences.

There is no scientific evidence to suggest that persons coming in contact with letters contaminated letters with anthrax spores on the outside of the envelope are at risk of developing disease due to inhalation of anthrax spores, and even the theoretical possibility seems small. People handling these letters appear to be at low risk of inhaling the spores since they are not in the air, but are on the surface of the contaminated letter. Spores on the surface of the envelope may pose some risk of the skin form of anthrax, but even that risk appears to be quite low. We are aware, however, of a single case in New York City of a woman who died from inhalational anthrax and whose source of infection is still under investigation.

Since September 11, the U.S. Postal Service has delivered 25 billion of pieces of mail, but there are very few cases of skin disease due to anthrax at this point. The majority of these people came in contact with a cross-contaminated letter with anthrax spores on the outside of the envelope, and none of them developed inhalational anthrax. They have received appropriate treatment and are now recovering. HHS plans to monitor employees and closely examine any person who develops symptoms.

Testing of Buildings for Exposure to Anthrax

It is appropriate to test for exposure to anthrax spores in mailrooms where there is a high probability of exposure. Environmental testing for anthrax may pick-up a very small number of spores B less than what is believed to be necessary to cause the inhalational anthrax disease. Therefore, a positive test by itself does not mean that the persons in that building have a significant risk of developing inhalational anthrax disease. The results of these tests are only one factor in determining the most effective way to treat employees in those building as well as continued facility operations.

Working with the appropriate public health officials, determining whether a building is contaminated, and whether people are at risk will be based on the specifics of the contamination and the best science available. As stated previously, even though a building or room may test positive, the contamination may not be at a level deemed to put a person at risk for exposure to the anthrax disease from inhaling the spores.

Recommendations for Preventive Antibiotics

Since October 15, when we learned that a staff member in the office of Senator Tom Daschle noted a small burst of dust was released while opening a tightly sealed letter, we have been able to build upon our current knowledge of how to effectively identify and treat the disease. In the case of the incident in Senator Daschle's office, the area of exposure was determined to consist of two floors in the southeast quadrant of the building where the Senator's office is located. Preventive antibiotics were administered to persons from the area of exposure.

On October 19, as the investigation grew, a postal worker with an illness that was later confirmed as inhalational anthrax was identified. Subsequently, three additional cases of anthrax were identified in the Brentwood USPS facility. Although no specific letter containing powdered anthrax spores was identified at the Brentwood facility, investigators determined that the tightly sealed letter that was mailed to Senator Daschle's office was processed at this facility. Consequently there was a potential for exposure to anthrax spores among postal workers at the Brentwood facility. Once the postal facility was closed, antibiotics were recommended for all employees and visitors who had entered the nonpublic operations areas of this facility. The recommendation was subsequently extended to all postal workers and government postal offices directly served by this postal facility.

These two different situations mentioned above each required a unique approach for the dispensing of preventive antibiotics. In Senator Daschle's office there was a specific letter identified; in the postal facility, the inhalation anthrax disease was found. In the absence of a letter or a person developing inhalational anthrax, the following recommendations are made for those mailroom employees working in facilities that receive mail from the Brentwood Post office:

1. If testing of the building shows no exposure to anthrax, persons on antibiotics who are working in that area may discontinue taking the antibiotics.
2. If sites tested within the building show the presence of anthrax spores, persons on antibiotics should continue their antibiotic treatment, pending additional environmental testing.
3. Persons who come in contact with letters from a mailroom, which has shown exposure to anthrax spores, appear to be at negligible risk of developing disease from inhalation of anthrax spores and do not require treatment with antibiotics.
4. If a further assessment of the tested areas indicate a risk of inhalation anthrax disease, workers in the affected areas would require treatment with antibiotics for the full 60-day course.

It is important to note that all antibiotics are associated with some risk and should not be taken without a specific reason. Though it is uncommon for people to experience serious side effects, there have been reported cases of people having significant and severe reactions to antibiotics. In addition, taking antibiotics unnecessarily increases the risk of many types of antibiotic-resistant illnesses.

In addition, over the past few weeks, some workers have received what are commonly called "nasal swab tests." These tests are not used by physicians to determine who has anthrax or who

should be treated. In the first days after a building is determined to be contaminated, they can be helpful in determining where in the building contamination occurred. Because anthrax spores are not retained in nasal passages for extended periods of time, at the current time there is no reason for the conduct of additional nasal swab testing.

The Centers for Disease Control and the Federal Occupational Health Agency will continue to monitor the health and safety of federal workers and will provide clinical and environmental updates, as necessary.

Building Closures

Buildings in which persons have developed disease due to inhaling anthrax spores are assumed to have anthrax spores in the air. These buildings will be closed for clean up.

1. In buildings where the results of these environmental tests may indicate a more than minimal exposure, but not enough to suggest that a contamination has occurred, HHS, working in partnership with the affected federal agency, may initiate judicious testing of other, potentially affected, work areas.
2. If areas within a building that had previously been closed awaiting the results of confirmatory testing show no anthrax spores or negligible risk of anthrax in the air, those areas will be reopened and will be scheduled for cleaning, if necessary.
3. If testing in buildings that have remained open show no anthrax spores or negligible risk of anthrax spores in the air, those areas should remain open.

The Administration is taking all the necessary steps to keep America safe in an era when, unfortunately, biological and chemical attacks are possible.

We appreciate your continued cooperation as we work together to resolve these issues.

The Department of Health and Human Services Recommendation for Building Closures and Preventive Antibiotic Dispensing for Exposure to Anthrax Spores