



O R E G O N

QUARTERLY REPORT

**1st Quarter
March 2005**

Marion County Health Department
3180 Center St NE
Salem OR 97301-4592
(503) 588-5357
www.co.marion.or.us/mhealth

To report a communicable disease:
(24 hours a day, 7 days a week)

Telephone: (503) 588-5621
Fax: (503) 566-2920

Vital Statistics Quarter Ending: Mar 2005	1st Quarter 2005		Year to Date 2005	
<u>BIRTHS</u>				
TOTAL DELIVERIES	1219	1248	1219	1248
Delivery in Hospital	1209	1234	1209	1234
Teen Deliveries (10-17)	49	48	49	48
<u>DEATHS</u>				
TOTAL	677	660	677	660
Medical Investigation	51	47	51	47
Homicide	0	04	0	04
Suicide	06	07	06	07
Accident – MVA	06	08	06	08
Accident – Other	13	10	13	10
Natural / Undetermined / Pending	26	18	26	18
Non-Medical Investigation (all natural)	626	613	626	613
Infant Deaths	04	05	04	05
Fetal Deaths	01	01	01	01
<u>COMMUNICABLE DISEASES</u>				
E-Coli: 0157	01	0	01	0
Hepatitis A	0	01	0	01
Acute Hepatitis B	05	04	05	04
Chronic Hepatitis B	12	15	12	15
Meningococcus	0	02	0	02
Pertussis	48	0	48	0
Tuberculosis	06	07	06	07
<u>SEXUALLY TRANSMITTED DISEASE</u>				
PID (Pelvic inflammatory Disease)	0	01	0	01
Chlamydia	222	192	222	192
Gonorrhea	11	18	11	18
Syphilis	0	03	0	03
AIDS	01	0	01	0
HIV Positive	03	01	03	01

FAQs about the BDS

by Karen Landers MD MPH, Marion County Health Officer

What is it?

The BDS or Biohazard Detection System is a device for detecting anthrax in the mail supply using an automated combination of air sampling and testing. The machine continuously samples the air and analyzes the material sampled every 1.5 hours using real-time polymerase chain reaction (PCR) technology. A positive signal results in an alarm, alerting authorities in a variety of agencies (Oregon State Public Health laboratory, emergency operations, law enforcement, public health, haz-mat etc.) who will be responding to this event. High-speed mail-handling equipment can aerosolize Bacillus anthracis spores sent through the mail as was demonstrated in the 2001 anthrax attacks. Identification of aerosolized B. anthracis spores through the BDS will allow prompt decontamination of exposed postal workers and any exposed members of the public, as well as subsequent post-exposure prophylaxis, to take place before the onset of symptoms. It will also serve to interrupt the flow of contaminated letters or packages into the postal stream. No bioterrorism agents other than anthrax are detectable by the BDS at this time.

Where is it?

The United States Postal Service (USPS), in response to the anthrax contamination of the mail in 2001, is planning to install approximately 700 BDS machines in nearly 300 mail processing and distribution centers across the country. Systems have been in place in some parts of the U.S. since late 2002. The BDS in Cleveland was the first to go on-line.

Continued

The BDS devices are installed on or near key equipment that process incoming mail (e.g. advanced face-canceller system machines). Oregon is scheduled to receive a total of 5 BDS machines. The first two have recently been installed in the Portland and Salem postal distribution centers and are now operational. The postal facility located on 1050 25th Street houses the BDS in Salem. The other three BDS machines are scheduled to be installed in Bend, Eugene, and Medford by July of 2005.

When does it operate?

The BDS operates Monday through Saturday beginning at 3:00 in the afternoon and continuing through the evening hours until approximately 11:00 pm. It does not operate on Sundays but may operate on holidays depending on mail volume.

How accurate is the BDS?

The DNA technology utilized by the BDS is highly sensitive and may detect as few as 100 spores of anthrax if present. It is also fairly specific; an estimated one out of every 500,000 tests may be a false positive. When all BDS devices are installed and operational across the U.S., approximately four million tests are expected to be run annually. This may result in 5-10 false positive tests per year. Although the BDS has been operating in the U.S. since late 2002, no false positives have been reported as of this time. It should be noted that the recent anthrax detected at Pentagon postal facilities and which was later determined to be a false positive, was not from BDS machines. The postal facilities at the Pentagon are utilizing a different type of testing.

What happens if a BDS alarm sounds?

If the BDS detects anthrax in a sample, a repeat test is automatically done. If the test is positive, an alarm sounds. When the BDS alarm sounds, the following steps (many will occur simultaneously) will be taken:

1. All employees, members of the public, and any other workers in the postal facility will be evacuated according to the local USPS plan. The building will be closed pending further testing and all trucks and mail shipments from the facility during the testing window will be recalled to avoid/reduce contamination of other postal facilities.
2. The alarm will result in notification of several key agencies including Oregon Emergency Response, Oregon State Public Health Laboratory (OSPHL), law enforcement, haz-mat, and local and state public health.

3. The USPS Inspection Service will retrieve the cartridges from the BDS and transport these to the Oregon State Public Health Lab for confirmatory PCR testing and culture. Initial confirmatory testing from OSPHL is expected within hours of the BDS alarm.

4. The persons in the building at the time of the alarm will receive appropriate decontamination at the post office site in a designated area.

5. If confirmatory testing is positive (e.g. a positive PCR or the presence of spores identified microscopically at OSPHL), Marion County Health Department will begin post-exposure prophylaxis for exposed workers and any potentially exposed member of the public. A five-day supply of antibiotics will initially be dispensed, awaiting final culture confirmation. The post-exposure clinic is targeted to start within 24 hours of the BDS alarm in order to reduce the risk of exposed persons developing symptoms of anthrax.

6. If the cultures are positive for anthrax, the local health department will recall persons who initially received post-exposure prophylaxis and dispense the remainder of the recommended 60-day course of antibiotics. Any other persons identified as exposed will also receive post-exposure prophylaxis.

7. Additional testing in the postal facility will be done to determine the extent of contamination and to determine necessary clean-up procedures to reopen the facility. Mail will be re-routed per USPS protocols until the facility is reopened.

What should I do if a patient reports exposure after a BDS alarm?

Marion County Health Department in conjunction with the USPS will be working to identify any potentially exposed members of the public and will be issuing information bulletins about the BDS alarm and anthrax to the medical community and the general public. Persons with concerns about possible exposure at the post office following a BDS alarm should be referred to Marion County Health Department for more information. The health department's contact number in the event of a BDS alarm will be shared in public communications, and additional lines will be available to handle the volume of calls.

Any suspected clinical case of anthrax is reportable immediately to your local health department. Please call (503) 588-5621 anytime of the day or night (including weekends and holidays) to report. A person will be available to take your call 24 hours a day, 7 days a week.