

**Oregon State Public Health Laboratory (OSPHL)-  
Laboratory Response Network (LRN)  
Roles and Responsibilities for Laboratory Emergency Preparedness**

**Sentinel Labs Rule-Out –And-Refer Potential Bacterial\*\*and Viral\*\*\* BT Agents:**

Each of the 51 Oregon LRN microbiology sentinel labs (includes 34 Advanced\* sentinels) are responsible to rule out and refer isolates that are potential bacterial agents of bioterrorism (BT) (and other increases of naturally occurring organisms of potential public health significance), properly to the Oregon State Public Health Laboratory (OSPHL) for confirmation. Those labs having virology capabilities rule out and refer any suspicious viral agents to the OSPHL for confirmation. The OSPHL is the Oregon nationally verified referral or confirmatory LRN lab.

“Basic” clinical sentinel labs that do not perform microbiology or “advanced” microbiology are responsible for properly submitting patient specimens for direct referral to “advanced sentinels” or the OSPHL. (See the Oregon LRN web site “Quick References” for information: <http://www.oregon.gov/DHS/ph/lrn/index.shtml> )

**Clinical Labs\* Collect and Package and Ship Chemical Terrorism Specimens:**

In a chemical terrorism (CT) event, Oregon clinical labs are responsible for safely collecting, handling, packaging, and possibly shipping clinical blood and urine specimens to the OSPHL according to Centers for Disease Control requirements. (See the Oregon LRN web site “Quick References” for information: <http://www.oregon.gov/DHS/ph/lrn/index.shtml> )

**Sentinels Handle and Refer BT Specimens Safely:**

Each of the “advanced”sentinels (and “basic” sentinels when submitting patient specimens for microbiology) are responsible for safely handling, packaging and shipping and transporting rule-out and refer bacterial isolates to the OSPHL (for identification of possible bacterial BT agents) according to published Department of Transportation and international regulations. (See Biosafety in Microbiological Laboratories 5<sup>th</sup> Ed. <http://www.cdc.gov/biosafety/publications/bmbl5/index.htm>

**Sentinels Contact Their Local County Health Department and the OSPHL:**

The sentinels upon suspicion of a BT agent or a naturally occurring agent of public health significance, contact their local county health department and the OSPHL at 503-693-4100 (See Sentinel Labs Emergency Preparedness Plan and urgent transport algorithm: <https://lrn.hr.state.or.us/documents/docs/3-6-07%20Draft%20Sentinel%20Lab%20Preparedness%20Plan.doc>

**Materials and Procedures Needed at Each LRN Sentinel Lab:**

1. “Advanced” sentinels have available the CDC BT Response Guide for Clinical Labs presented to each of the Oregon sentinel microbiology labs by the OSPHL-LRN (and returned the post card supplied by CDC verifying its receipt).
2. All sentinels have available the Shipping Instructions for Samples Collected from People Potentially Exposed to CT Agents mailed by the OSPHL-LRN to 90 Oregon clinical labs in September 2004 (and also located on the web site above).

3. At least one person from each of the “advanced” sentinel microbiology labs has attended the Oregon BT agent identification training and the packaging and shipping of specimens training, via free train the trainer courses offered by the Oregon LRN. Contact [LRN.Office@state.or.us](mailto:LRN.Office@state.or.us) for training information.
4. Laboratory microbiology supplies are available for ruling out and referring specimens for potential BT agents or other naturally occurring agents.
5. Packaging and shipping supplies for sending biological specimen category B shippers and infectious substance category A shippers on hand at all times. One Category A dry ice infectious shipper was sent to every Oregon county health department in 2004 and to every sentinel lab in 2006.
6. Method of transport of both infectious isolates and clinical specimens including chemical terrorism event clinical specimens to the OSPHL. The sentinel lab can use their regular courier or arrange for transport by contacting the OSPHL Sentinel Lab Coordinator or Client Services Coordinator to reroute the OSPHL courier for pick up and transportation to OSPHL.

**Materials and Procedures Supplied for LRN Sentinel Labs and Clinical Labs by the OSPHL:**

1. BT agent identification and packaging and shipping DOT certification train-the-trainer courses for all LRN sentinel labs (and county health departments) including handouts and CD-ROMS are available at no cost to participants. Internet packaging and shipping training module available on line providing DOT training at: <http://www.oregon.gov/DHS/ph/lrn/index.shtml> click on “Training and Outreach” on left side menu.
2. Annual sentinel lab emergency preparedness exercises and drills.
3. Annual College of American Pathologists laboratory preparedness challenge surveys for “advanced” sentinels.
4. CDC BT Response Guides for Clinical Labs provided to all LRN microbiology sentinel labs.
5. Shipping Instructions, and telephone and/or on-site technical assistance to Oregon clinical labs for Samples Collected from People Potentially Exposed to CT Agents .
6. Consultative resources via phone and LRN website, and rapid confirmatory testing of possible BT agents for all sentinel labs as well as providing feedback of possible safety concerns to the referring sentinel lab-ASAP after receipt of specimen at the OSPHL.
7. Packaging and shipping supplies for sending at least 20 infectious substance shippers to national labs for definitive characterization of potential BT agents (available at all times). Specimen collection and shipping supplies available for 500 in a CT event.
8. Secure internet communication access for all Oregon sentinel LRN contacts via the LRN home page at: <http://www.oregon.gov/DHS/ph/lrn/index.shtml> (go to secure login on left side menu.)
9. Secure sentinel LRN internet web site containing all messages, alerts, updates, links, documents, and trainings is available for all LRN sentinel lab directors,

managers and microbiology supervisors and microbiology contacts. All lab managers contact information is available on the HAN website as well.

10. Through grant-funded programs, provide safety and communication equipment to sentinel labs that lack these resources.

\* “Advanced” sentinel laboratories are those that perform comprehensive microbiology testing and participate in CAP-LPX proficiency testing. An Oregon clinical, veterinary, or environmental microbiology lab with all micro staff having training and proficiency in the identification of select agents (or bacterial agents of bioterrorism) and capable of "ruling out and referring" these agents by referring them to the OSPHL (state LRN confirmatory lab). The clinical labs are certified under CLIA 1988 with a specialty in microbiology (and inspected via the state or approved accreditation agencies); the environmental labs are certified under environmental microbiology accreditation; and the state veterinary diagnostic lab is certified under national veterinary microbiology lab accreditation.

The “advanced” sentinel micro lab uses physical containment practices to minimize infectious aerosols including a certified biological safety cabinet Class II or higher and Biosafety Level 3 practices; has appropriate PPE; procedures for microbiology waste disposal; and staff trained in packaging, labeling and shipping of infectious substances according to Oregon Department of Transportation regulations. See the Biosafety in Microbiological and Biomedical Laboratories (BMBL) 5<sup>th</sup> Edition:

<http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm>

The clinical sentinel micro lab performs high complexity microbiology on wound, respiratory, and/or blood and spinal fluid culture specimens.

#### Clinical Laboratories Performing Comprehensive Microbiology:

As of February 2011 there are 51 Oregon sentinel micro labs including: 35 hospital labs (includes 2 federal); 7 clinics, 5 reference labs, 2 environmental labs, 1 veterinary lab and 1 food lab. The sentinel lab packages and ships clinical specimens during a chemical event and is trained in the collection, packaging, labeling and shipping of these specimens.

#### \*Clinical Laboratories Not Performing Comprehensive Microbiology:

As of February 2011 there are 28 hospital-based clinical laboratories in Oregon that do not perform comprehensive high complexity microbiology "in-house", but are listed in the LRN database. There are also 9 large clinics. These labs would be handling and shipping specimens during a chemical or biological event. These labs are trained in the packaging, labeling and shipping of clinical specimens during a chemical event.

- **\*\*Bacterial Agents**
  - Bacillus anthracis*
  - Brucella spp.*
  - Burkholderia spp.*
  - Francisella tularensis*
  - Yersinia pestis*
  - Botulinum toxin

Other increases of bacterial agents of potential public health significance (such as enteric pathogens)

- \*\*\*Viral Agents
  - Smallpox
  - Viral hemorrhagic fevers
  - Other increases of viral agents of potential public health significance (such as SARS, influenza)

(updated 2-17-2011)