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**The South Carolina Public Health Laboratory System**

We are excited to send you the 1st issue of the Sentinel Support Network Newsletter from the Special Pathogens Laboratory in the Microbiology Division at the SC Department of Health and Environmental Control (DHEC) Bureau of Laboratories (BOL). This quarterly publication was created to share information with clinical laboratories about the Laboratory Response Network (LRN) for Bioterrorism, to communicate our role in this network and to disseminate up-to-date information about services offered at the DHEC-BOL.

**Laboratory Response Network**

The LRN was created in 1999 by the Centers for Disease Control and Prevention (CDC), the Federal Bureau of Investigation (FBI) and the Association of Public Health Laboratories (APHL). The basic structure of the LRN consists of three levels of laboratories with varying capabilities. Each laboratory operates according to its level of capability. The CDC performs the most complex testing and participates at the national level. State public health laboratories provide advanced confirmatory testing and disease monitoring and function as reference laboratories at the state level. Hospital and commercial laboratories in each state are considered sentinel-level participants that refer suspect agents to their state public health laboratory for confirmatory testing.

As the state public health laboratory, the BOL is responsible for coordinating and conducting certain LRN activities

with the sentinel laboratories in the state. Some of these activities include:

- Maintaining a database of sentinel laboratories in South Carolina, including 24/7 contact information.
- Contacting sentinel laboratories to provide information on training opportunities and regional meetings.
- Disseminating information with sentinel laboratories during public health emergencies.
- Providing training for specimen referral to the Bureau of Laboratories, including current information on packaging and shipping regulations.
- Testing the ability of sentinel laboratories to notify, package, and ship specimens to the state LRN laboratory/BOL.
- Training sentinel laboratories on current rule-out procedures used to identify Agents of Bioterrorism. (Procedures can be obtained at the ASM web site: [www.asm.org/index.php/guidelines/sentinel-guidelines](http://www.asm.org/index.php/guidelines/sentinel-guidelines).)
- Supporting a 24/7 on-call number to receive, test, and/or provide technical consultations for Agents of Bioterrorism.

The results of these activities help to ensure South Carolina's preparedness and to unite the state and local levels in all laboratory surveillance, infectious disease recognition, and emergency response efforts. Continuing communication from our laboratory to South Carolina's sentinel network is crucial. The BOL is working on various mechanisms to enhance communications and relationships within the sentinel network. Look for exciting updates in future newsletters! Thank you for your efforts to maintain your contact information with us!

## Bureau of Laboratories

The DHEC-BOL is the only public health laboratory in South Carolina and is a branch of the Client Services Section of DHEC. The laboratory is comprised of four divisions and two offices that all work seamlessly together to provide the best service possible to clients.

The Chemistry Division is comprised of two sections: the Clinical and Newborn Screening Laboratory and Analytical Chemistry Laboratory. The division provides screening for clinical chemistry, genetic inborn metabolic errors/hemoglobinopathies, blood lead levels, chemical exposure testing, and maintains chemical terrorism capabilities in the event of a state and/or national emergency event.

The Microbiology Division has eight individual laboratories and is capable of screening, isolating, and/or identifying a variety of infectious agents of public health importance at a state and national level. The division utilizes an array of testing methodologies including gold standard culture techniques and the newest technology in PCR and DNA probe analysis. The eight laboratories are Clinical Microbiology, Diagnostic Serology, Food Microbiology, Medical Entomology, Molecular

Epidemiology, Mycobacteriology, Special Pathogens, and Virology/Rabies.

The Logistic Division allows the BOL to ship and receive infectious agents throughout South Carolina and the country, provides in-house maintenance on essential laboratory equipment, and maintains supplies to aid in outbreak and routine surveillance specimen collection. The Support Division handles the processing/ordering of tests, on-site media and reagent preparation, and ensures that computer software meets the standard of service needed to provide fast, reliable final reports to customers.

The Office of Health and Safety works closely with the four divisions to ensure the safety of all BOL personal and enforces proper infectious waste disposal and chemical hygiene plans. The office of Quality Assurance maintains the BOL QA program and ensures all accreditation standards are met by the laboratories.

Future newsletters will highlight each individual laboratory's testing capabilities and how the laboratory contributes to the overall mission at the BOL.



**Location:**

James A. Hayne Building  
8231 Parklane Road  
Columbia, SC 29223  
(803) 896-0800

**Business Hours:**

8 a.m – 4 p.m  
Monday – Friday

**Mission:**

To provide laboratory-based health and environmental assessments for accurate diagnosis, prevention and surveillance of infectious and chronic diseases, congenital disorders and environmental hazards to reduce the incidence of illness and death and to improve the quality of life among the people of the state. For more info visit: [www.scdhec.gov/health/lab/](http://www.scdhec.gov/health/lab/).

## Health Alert Networks (HAN/SCHAN)

The National Health Alert Network (HAN)

[www.bt.cdc.gov/han/](http://www.bt.cdc.gov/han/) is a national emergency messaging system that was developed by the Centers for Disease Control (CDC) in 1998 to support rapid transmission of information during public health events or emergencies. It provides a mechanism for sharing information between state, local and federal health agencies as well as hospitals, laboratories and community healthcare providers. The purpose of the system has expanded and includes communication of important public health events information such as bioterrorist threats, emerging infections as well as disease and outbreak surveillance.

### There are four types of messages:

#### Health Alert:

Conveys the highest level of importance; requires immediate action or attention.

#### Health Advisory:

Provides important information for a specific incident; may not require immediate action.

#### Health Update:

Provides updated information regarding an incident or situation; unlikely to require immediate action.

#### Info Service:

Provides general information that is not necessarily considered to be of an emergent nature.

In addition to the national HAN network created by CDC, CDC has encouraged states to develop their own HAN networks. South Carolina's Health Alert Network (SCHAN) is an extension of CDC's national HAN system and is maintained by DHEC's Division of Acute Disease Epidemiology (DADE). Visit their home page at

[www.scdhec.gov/han](http://www.scdhec.gov/han) for links to current and past HAN notifications, as well as information about diseases/agents associated with bioterrorism and emerging infectious diseases. If you are a public health professional interested in receiving health notifications from the South Carolina Health Alert Network, please contact Shana Dorsey, HAN Coordinator at (803) 898-0431 or email [SCHAN@dhec.sc.gov](mailto:SCHAN@dhec.sc.gov).

## Lab Notes

### Mycobacteria Laboratory

#### Submission Notes:

- TB specimens must arrive by 6 a.m in order to be processed the same day.
- Labeling on the specimen and the requisition must match.
- Hospital ID or local ID number must be placed on each sample that is submitted.
- Please ensure the print on the request form and specimen is legible.
- Lids must be securely tightened to avoid leaks; do not parafilm.
- When using tape, please fold one end to create a tab. This makes removal of the tape easier.

### Bacteriology

- In addition to the normal isolates you submit to the BOL, please remember to send the following isolates to DHEC BOL Clinical Microbiology Lab: *Listeria monocytogenes*, *Neisseria meningitidis* (from sterile sites), and *Vibrio species*.
- If your laboratory submits shiga toxin broths to the BOL Clinical Microbiology lab, please ensure broths arrive at the lab within five days of broth inoculation to ensure optimal organism recovery.
- *Staphylococcus aureus*, Vancomycin-resistant or intermediate (VRDA/VISA).

Please only send in *Staphylococcus* isolates with an Etest mic > 6 or an instrument mic ≥ 8. These isolates will be forwarded to the CDC. When sending VRSA/VISA, please send both the isolate sub-plate and the original culture plate as well. Isolates less than these values do not need to be sent in, only the Disease Reporting form including the drug susceptibility profile.

### Molecular Microbiology

- To assist us in the detection of foodborne clusters within South Carolina, please ensure that county of residence and patient ethnicity is accurate on all request forms.



Thank you for reading *The Petri Dish*, a  
South Carolina Public Health Laboratory Newsletter  
by the DHEC Bureau of Laboratories

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