



Wyoming's Lab Loop

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SAVE THE DATE !!!

Be sure to check your calendars and save the date for this significant training event! Wyoming Public Health Lab in conjunction with the Bioterrorism Program is hosting a workshop on Transportation of Infectious Substances. This workshop will be facilitated by U.S. DOT Transportation Safety Institute and will provide you with the skills and materials you need to safely and legally ship infectious substances through the mail or other methods of shipment.

It is a 1-day course to be held at the Holiday Inn at Casper, Wyoming, on August 25, 2005. Upon completion of the course certificates will be awarded to participants. Workshop information and registration will be sent out at a later date.

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GRAND ROUNDS

Wyoming's Bioterrorism Response Laboratory (BRL) is planning a Grand Rounds exercise for the state's sentinel labs.

Sentinel labs are defined as voluntary labs identified by the State Lab Response Network Reference Laboratory as being qualified to serve at the front line of defense in detecting agents of terrorism and emerging threats to public health. It is important to realize that any clinical laboratory that performs microbiology in their facility has the potential to be a sentinel lab based on the fact that organisms considered to be a bio-threat can show up anywhere.

Due to the fact that qualification of the sentinel laboratory is based on competency of staff, appropriateness of facilities, and completion of specific training in the use of standardized protocols for detection and ruling-out potential bioterrorism agents, we offer this round of testing to help improve your level of response. Continued page 3

Submission of reportable diseases for gastrointestinal illness:

The Wyoming Department of Health (WDH) reportable disease statutes require that shigatoxin producing isolates of *E. coli* (O157:H7 and non-O157:H7) and *Shigella*, as well as *Salmonella* and *Campylobacter* isolates be submitted to the WDH Public Health Lab (PHL). Samples should be submitted preferably on agar slants although Petri plates that have the lids taped and are well padded can be sent. All isolates are confirmed for identification, typed for both O and H antigens, and analyzed for their Pulsed Field Gel Electrophoresis pattern. All information is maintained in a database for future epidemiological reference.

The WDH-PHL, along with the Emerging Diseases and Health Statistics Section is working with the Foodborne and Diarrheal Diseases Branch at CDC in establishing surveillance to determine the incidence of antimicrobial resistance among *Salmonella* Paratyphi isolates in the
Continued page 2.....

Dewey Long Retires

Originally hired in June of 1985 to enforce state laws overseeing the licensing of clinical labs in Wyoming, Dewey Long has been working for 20 years within the Public Health Department. It is with mixed emotions that we would like to announce Dewey's retirement, effective June 30, 2005.

Dewey has worn many hats while working for the Public Health Department. He trained and served as the CLIA Inspector after President Reagan implemented CLIA 88. He also carried out the duties of State Laboratory Educational Coordinator. In 1992, the Mammogram Quality Standard Act was signed, and then enacted in 1994. Dewey trained to become qualified to oversight the inspections for Wyoming's mammography facilities. Currently he inspects 25 mammography sites across the state of Wyoming. In addition to his state duties, he also works part time for the Veteran's Administration Hospital Laboratory here in Cheyenne.

It is with great anticipation that Dewey looks forward to his retirement. He plans on continuing to work as a bench tech for the VA. Dewey still enjoys the hands on work he gets in the hospital setting. He is also planning a trip to Israel in September of 2005. After that he looks forward to working on his house and yard, getting more exercise and work outs, and most importantly, spending more time with his family.

Submission of reportable diseases for gastrointestinal illness continued

United States during a one-year period. This organism produces enteric fevers similar to, but less severe than, *Salmonella typhi*. Isolates may be obtained from blood, stool, urine, bone marrow or duodenal secretions (see Mandell et al. Principles and Practice of Infectious Diseases 5th edition).

Although rarely observed in Wyoming, any isolate identified as *Salmonella* from a patient exhibiting symptoms of enteric fevers is suspicious. Since all isolates of *Salmonella* are required to be sent to the WDH-PHL, our participation in this study will not require any additional assistance from you. The WDH-PHL will forward any isolates identified as *S. Paratyphi* to the Centers for Disease Control and Prevention (CDC) Diarrheal Diseases Laboratory so that antimicrobial susceptibility testing can be done in a standardized manner. The accuracy of the survey depends upon the receipt of as many isolates as possible. Employees of the WDH will be interviewing the cases with a questionnaire that will be used to determine risk factors. Timely reporting will contribute to the accuracy of these questionnaires.

Thank you for your continued assistance in the surveillance of infectious diseases in Wyoming. Your cooperation is essential to efficient surveillance, control, and prevention of infectious disease. Please feel free to call (307.777.8634) or e-mail (molkow@state.wy.us) Monica Olkowski if you have questions or concerns about this study.

Gale Stevens Accepts Position as Bioterrorism Laboratory Program Advisor

Since the beginning of Wyoming's Bioterrorism Response Program in 1999, the program has seen many changes. Another personnel change has taken place recently and I would like to introduce myself.

Recently I accepted the position of BT Lab Program Advisor. My new position mainly serves as Public Health's link to the Sentinel Labs across the State. Along with my new duties, I will also be accepting the responsibilities of State Laboratory Trainer. I look forward to working closely with everyone as we approach the next grant cycle, and plan to be a good resource for educational opportunities and training.

I worked as a bench technologist for 8 years and laboratory manager for 4 years at Community Hospital in Torrington, Wyoming from 1993 through 2004. I relocated to Cheyenne and joined the Bioterrorism Team in January of 2005. I feel my background as a bench tech in a clinical setting will be a positive asset for me in this new position.

Please feel free to contact me with any training/educational needs your staff may be interested in. Questions and suggestions are most welcome too. I am excited to be given this opportunity to network with Wyoming's great laboratorians across the state!



Gale at LRN meeting in New Orleans, May 2005

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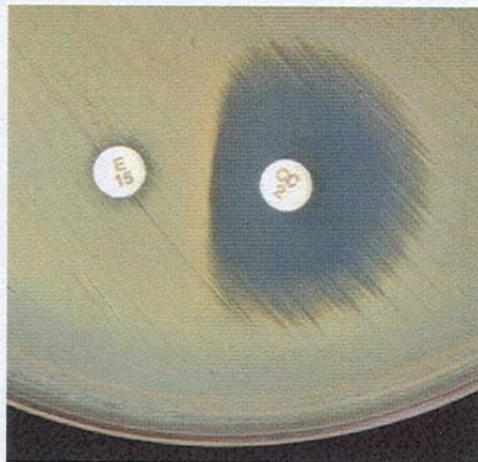
D Test for Inducible Clindamycin Resistance (erm Mediated)

In this day of emerging drug resistant organisms, laboratorians are required in many cases to take susceptibility testing one step further. *Staphylococcus aureus* isolates that test resistant to erythromycin but exhibit susceptibility to clindamycin using routine susceptibility testing require further investigation due to certain genetic expressions that can induce clindamycin resistance.

Staphylococcus aureus exhibiting this type of susceptibility pattern may be expressing certain phenotypes that can result in macrolide (erythromycin) resistance. This will induce production of methylase, which allows clindamycin resistance to be expressed.

The D Test is a simple disk diffusion test that can detect if inducible resistance to clindamycin is present. A positive test result is observed when a flattened zone is demonstrated between the erythromycin and the clindamycin disks. The zone around the clindamycin disk resembles a "D".

Inducible Clindamycin Resistance (erm-mediated)



A distinctive flattened zone of susceptibility is present around the clindamycin disk when inducible clindamycin resistance is demonstrated.

D Test continued

The materials needed for this test are a standard Mueller Hinton plate, a 15 mcg Erythromycin disk, and a 2 mcg Clindamycin disk. As in all disk diffusion tests, the standards for these testing recommendations are followed; the testing is done on a pure culture. NCCLS has not yet suggested a QC strain for this procedure, but using *S. aureus* ATCC 25923 is an acceptable choice. In-house strains of *S. aureus* are also appropriate if positive and negative D Test reactions can be demonstrated and documented.

Laboratorians need to determine how to report clindamycin resistance to the physician. There are many options, such as simply reporting resistance without an MIC value. Additional comments can be added to reports stating that inducible clindamycin resistance was demonstrated in vitro.

Negative results reporting can simply state a susceptible result for clindamycin with the MIC value. If the resistance/susceptibility pattern was present in the initial susceptibility testing and the technologist was prompted to test for clindamycin resistance but the D Test was negative, optional comments can be added.

A comment stating "inducible clindamycin resistance is not demonstrated" is acceptable. These comments are at the lab's discretion and should be chosen based on what information would be clearest and most beneficial to the physician.

The clinical implications of reporting clindamycin as susceptible for *S. aureus* that test erythromycin resistant and clindamycin susceptible, without checking for inducible clindamycin resistance, may promote inappropriate clindamycin therapy.

In closing, the D Test is a very simple test, familiar to all who have performed disk diffusion testing in their bacteriology department. The information provided by this procedure is very helpful in the treatment and recovery of the patient involved.

For further information and for the scientific background of the genetic expression of this process, type the following in to your Google Search Engine:

[Jhindler M100-S14 Dtest 1_04](#)

*credited as reference for this article

GRAND ROUNDS continued

Two unknown specimens are to be shipped to all labs across the state. Labs will be asked to identify the unknowns and determine whether the unknown could be a suspect agent of bioterrorism or ruled out as such.

Participation is strictly voluntary!

Approximately one month after shipment, Grand Rounds will take place via telephone conference to discuss any issues or questions that may have come up during the work up of the unknown.

With today's staffing crunches, it is very difficult to send participants to training events, and only a limited number of techs can attend the training. This is the first round of this type of training for the BRL. It is our intent that we offer the sentinel labs quality training in-house in order to involve as many laboratorians as possible.

We encourage comments and suggestions about this mode of training and plan to discuss this during the telephone conference. Your feedback will be invaluable!



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Information Available in this Issue

-  *Transportation of Infectious Substances Workshop*
-  *Grand Rounds*
-  *Dewey Long Retires*
-  *Submission of Reportable Diseases for Gastrointestinal Illness*
-  *Bioterrorism Laboratory Program Advisor*
-  *D Test*

What's Coming Up?

Event	Location	Date
ASCLS 2005 National Meeting	Orlando, FL	July 26-30, 2005
Transportation of Infectious Substances Workshop	Holiday Inn Casper, WY	August 25, 2005
InterMountain States Seminar	Jackson Hole, WY	Sept. 14th - 17th

Check out the BT Resources page at:
<http://wdh.state.wy.us/lab/BT%20Resources.asp>



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