NPHL Updates

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This issue of the NPHL newsletter contains articles on topics that are common to public health as well as issues new to the laboratory community. Since laboratorians have been familiar with the importance of *Staphylococcus* for many years, the recent attention focused on methicillin resistant *S. aureus* (MRSA) was long overdue. The revelation that disease from *Staphylococcus* infections caused more deaths than AIDS in 2005 put the significance of this problem into terms that are understandable by all Americans. It's important that laboratory scientists keep up to date on new developments associated with MRSA. Nebraska is fortunate to have the expertise of nationally recognized researchers at both Creighton and UNMC to provide us with their insights. Dr. Paul Fey has investigated the molecular basis for antibiotic resistance for the type of *Staphylococcus* originally called community acquired MRSA and his article describes important changes to our understanding of this disease.

Although culturing and identification of *Salmonella* has been a long-standing topic, the development of new patterns of antimicrobial resistance in *Salmonella* species represents a continually changing challenge. Peter Iwen, PhD. contributes his special expertise with an update of current trends and approaches for antimicrobial susceptibility testing of *Salmonella*.

We also continue the discussion of laboratory preparedness with a story focused on the National Incident Management System or NIMS. NIMS training is recommend for a number of reasons best summarized by the Admiral in charge of the medical response to the tsunami that struck the Philippines. His team practiced addressing what they expected to encounter during the entire boat trip from the west coast but when they arrived nothing happened according to plan. The Admiral said that without their NIMS training they would have been totally ineffective. In other words, although you can never correctly anticipate all the challenges of a crisis, you can prepare yourself to address an ever changing environment.

The article on laboratory informatics expands on an earlier introduction to this topic, one that will continue to develop as the capability of laboratory and hospital information systems expands. There are many factors contributing to the emphasis on electronic data exchange and the opportunities for improving laboratory efficiency and accuracy are only beginning. While most laboratory scientists did not grow up with this technology, it is essential that we learn to adapt and use it to our advantage, just as we do to prepare ourselves for emergencies of all types.

We also want to call your attention to an article on the risk of laboratory acquired infections, the summary by Beth Schweitzer reminds us to pay attention to the details.

All the staff at the NPHL wish you all a happy and safe holiday season.