

High-Tech Horizons

By Stefanie Condie

In Boston, emergency medicine personnel were just finishing their morning cups of coffee. Four-thousand miles away in St. Petersburg, conference participants were attending late-afternoon workshops. But through the use of new technology, AIHA partners were able to bridge space and time differences to learn about disaster preparedness. They watched as still video images of the Boston faculty and slides outlining key points appeared on a computer screen and listened to their "live" presentations. When the presenters in Boston made marginal notes to emphasize a point, the St. Petersburg audience saw the markings appear simultaneously on the screen.

The audio and video signals that made this type of interaction possible were not transmitted through a sophisticated television satellite link, but through two standard telephone lines. Because of its simplicity, this technology offers a relatively inexpensive means of communication between remote sites, giving the partners a cost-effective alternative to international travel.

This year's NIS conference placed great emphasis on the use of technology to promote communication between partnerships. Through technologies demonstrated at the conference, NIS partners can hold teleconferences and medical consultations with their US partners. In addition, the Internet and other computer-based resources allow the partners to access a wide range of health and medical literature from their home institutions.

During the conference, 10 computers with a direct Internet link were set up so that participants could learn how to use electronic mail and access the World Wide Web. AIHA Clearinghouse staff conducted individual consultations throughout the week to show participants how to locate health resources on the Internet. A two-day workshop on technology and information resources demonstrated how partners could make better use of computer-based resources, while teleconference sessions illustrated new distance-learning technologies utilized by the Yerevan-Boston and Tbilisi-Atlanta partnerships.

Technology and Information Resources Workshop.

AIHA Associate Director Marty Saggese and Clearinghouse Director Mark Storey announced plans to create a learning resource center at each of the NIS partnership institutions. These centers will include a library of health and medical resources, a computer with e-mail/Internet access and a bulletin board where current information downloaded from the AIHA Clearinghouse will be posted. Each institution will appoint an information coordinator, who will be responsible for setting up the learning center and for ensuring that partnership participants have access to information from the Internet.

"It's time to reach out and make more people in the hospital aware of the possibilities that are available through computer-based information resources," Saggese said.

Participants saw some of the tools available for obtaining information from the National Library of Medicine (NLM) and the World Health Organization (WHO), including Grateful Med, a software program that allows users to access the NLM's Medline database; Current Medical Citations, which provides abstracts from Medline on disk; and WHO's Health For All database, which contains information on health indicators for all countries in Europe and the NIS.

Teleconference sessions.

The disaster planning seminar demonstrated advanced technology for transmitting medical information between remote sites. The Yerevan-Boston partnership has used this system to conduct five telemedicine sessions on emergency medicine. "We think that this technology has

become indispensable to our work," said Ara Minasian, MD, general director of the EMS Scientific and Medical Center in Yerevan, Armenia.

Conference participants observed a clinical application of telemedicine technology during a teleconference on radiology. Sergei Lapekine, MD, of the Department of Nuclear Medicine at Pavlov Medical Institute in St. Petersburg, demonstrated the WinRad Teleradiology software program, which allows medical images (x-rays, magnetic resonance images, ultrasounds, etc.) to be transmitted between remote sites through standard telephone lines. Daniel Schwartzberg, MD, of Georgia Baptist Medical Center, who developed the software, conducted a case-based consultation with Lapekine over the telephone, transmitting medical images from Atlanta that were displayed on a computer screen in St. Petersburg.