## **New Challenges in Infection Control**

From increased handwashing to a shift away from routine culturing of the air and walls, partners from across the NIS are in the process of revolutionizing their infection control practices. But at the same time they face new obstacles in preventing and curing infections, speakers said at several breakout sessions.

David Heymann, MD, director of the Division of Emerging and Other Communicable Diseases Surveillance and Control with WHO, commended partners for their work to control infectious diseases. "A global alert demands a global response much as you're doing," he said.

But he warned that "A decrease in public infrastructure is certainly the case in an increase in infectious diseases like diphtheria and cholera in the NIS. These diseases did not parachute in, they did not come in on the tail of a comet. There are more and more opportunities for them to affect man."

Heymann told partners that everything from changes in sexual behavior to public health deterioration to increased flooding in some nations have made conditions ripe for a tide of new diseases. "Infectious diseases find the weak points in our society and through these weak points they enter and infect men and women," he said.

Epidemiologists and infection control experts from the NIS agreed with Heymann and outlined some of the successes and challenges they face.

Valeriy Filonov, deputy minister of health for Belarus, said it is essential for hospitals to create an epidemiologist position and to switch from passive to active surveillance.

"No nation, whether rich or poor, can afford to waste resources. We must stop environmental testing and rationalize our use of antibiotics. In some cases we're overprescribing and in others we're not prescribing the right antimicrobial. This will lead to new resistance of microbes and make all of our jobs harder," he said.

Ludmilla Zueva, MD, chair of the Department of Epidemiology at the State Medical Academy in St. Petersburg, Russia, said that her institution is working to train more epidemiologists. The program includes 12 to 16 credit hours in epidemiology taken during the fourth or fifth year of training, combined with practical clinical training with epidemiologists.

"More epidemiologists are crucial," she said. "There is no vacuum in nature. Once one infectious disease is eradicated, a new one will emerge to take its place."

Alexander Turchev, MD, epidemiologist at Pirogov First Municipal Hospital, said that although improved infection control should be bringing down overall nosocomial infection rates, advances have been eroded by increased drug resistance. Even with increased resistance to the antibiotics gentamicin and penicillin, however, the hospital is seeing only a 3 to 4 percent complication rate in the 150 to 200 meningitis patients per year, he said.

"We discovered that nearly 75 percent of our infections occurred during the winter, so we know that's when infection control protocols are extremely important. Whenever feasible we culture as early as possible to catch infections before they spread," he said.

At the Center for Pediatrics and Children's Surgery in Almaty, Kazakstan, increased vigilance in infection control basics have slashed nosocomial infection rates, said Zhanna Sekenova, MD, the center's chief physician. In 1995, the hospital systemized its infection control program, focusing on increased handwashing and sterilization of bandages and instruments. The

hospital saves about \$6,000 a year by implementing these changes and more than \$400 a year by halting routine environmental testing.

"We used to joke that people flew from across the ocean to teach us to wash our hands, but then when we thought about it, that was the basis for our improved infection control," she said.