

Facing a Flood of Infectious Diseases in Russia

By Joanne Neuber

For many Muscovites hoping to beat the sizzling summer heat, the Moscow River serves as a favorite getaway. But the once-crowded banks of the river were empty during the hottest days of July after it became polluted with dangerously high levels of a new cholera strain.

Sewage leaks occurring on July 4 and 13 in Moscow contributed to a rapid rise in levels of the cholera bacteria in the Moscow River. The level of the bacteria increased by 47 times during the month, according to the State Sanitary and Epidemiological Control Center in Moscow. The center also discovered a new cholera strain in the water, *V cholerae* O139 Bengal, which spreads rapidly and is highly resistant to certain antibiotics.

For Murray Feshbach, PhD, a research professor in the School of Foreign Service at Georgetown University in Washington, DC, the discovery of new threats from cholera in Moscow reinforces his long-standing belief that years of environmental pollution and neglect of the health care system will result in an escalation of infectious disease.

"I think infectious and parasitic disease will replace accidents and poisonings as a leading cause of death," he said. The failing health infrastructure and continued socioeconomic constraints in Russia "compound the risks associated with infectious diseases even further," said Feshbach, who has published three books based on his research about health and environment in Russia.

Last year, approximately 20,000 people died from tuberculosis in Russia, according to Russian Ministry of Health Statistics, compared with 1,590 deaths in the US. In fact, although Russia has 120 million fewer residents than the US, the number of TB deaths in Russia last year exceeded the number of new TB cases in the US. And Feshbach believes the level of TB may be as much as twice as high as the 75,000 cases currently reported because prisoners, migrants, refugees and the homeless are not included in the data.

"The real concern now is that the people of Russia are presenting at a later stage, when their health problems are much more serious, in order to avoid costly medical bills. And this makes it more difficult for health care personnel, even as willing and as perhaps capable as they are, to resolve positively the problem," he says.

In addition, a chronic lack of government funds precludes health ministry attempts to combat the rise in infectious diseases, he said. The Russian Ministry of Health projects a government cost of \$8 billion per year to administer drugs to the estimated 800,000 patients who will acquire HIV and AIDS by the year 2000. Yet, Feshbach noted, that would mean spending most of the annual health budget of \$11 billion on one disease.

"That kind of money they just don't have. And we haven't even discussed how they will cover the costs associated with the potential spread of TB and cholera, which means that a lot of these people will die--maybe not immediately, but they will die fairly soon thereafter."

Other problems abound. Feshbach said he is very concerned about the effects of burgeoning disease on Russia's youth and future generations. There has been a 30-fold increase in syphilis among girls ages 10 to 14 in the past five years. The disease can cause reproductive impairment. Last year in Russia, there were 170,000 cases of rubella, which enhances the probability of birth defects in babies born to pregnant women with the disease, while there were 210 in the US. Similarly, there were 60,000 cases of mumps in Russia and 450 in the US.

But a few efforts are under way to make high quality vaccine available and to encourage its use in Russia, Feshbach said. Within the last two years, for example, Russian health authorities implemented large-scale immunization campaigns that successfully reduced the diphtheria level, from 49,703 cases in 1994 to 13,604 cases in 1996. A similar health ministry campaign targeting polio brought the level of adult polio immunization coverage to 80 percent in 1996. And a rise in public service announcements heighten the public's awareness of the dangers of sexually transmitted diseases.

"Fortunately, there are now national vaccination days in the NIS which have given them a big boost in their booster shots as well as their first shots," Feshbach says. "Time is the key determinant for Russia's future. But the real question is, how quickly can they address the rise in infectious and parasitic disease rates?"