Guest columnists

Infectious-disease network needs money to keep microbes at bay

By Ann Marie Kimball and Louis Fox
Special to The Times

Traveling on an airplane returning to Seattle recently, the man behind us was sneezing and snorting, and the woman two seats away was clearly running a fever. We felt doomed, certain that we would come down with a cold or the flu or some such thing in a day or two. And we were inevitably right.

Sound familiar? Despite advanced cabin air circulation and other measures, all of us have had the experience in flight of catching our seatmate’s illness.

Suppose one of these passengers, instead of having a garden-variety cold or flu, had the newly identified and much-feared avian flu?

For three years, the control of "bird flu" in poultry has been a daily struggle for 11 countries in Asia. Fifty-three human cases, with 21 deaths, have occurred to date. In other words, almost half the people who contracted this flu have died of it.

Just the other week, the People's Republic of China (PRC) scrambled to deny a report that a number of human cases had occurred in Qinghai province. Late and ominous news from the PRC was a key feature in giving the 2003 SARS outbreak a head start. This latest information recalled that unfortunate time.

International authorities have been closely watching the sporadic bird-to-human transmission in Southeast Asia. The World Health Organization has rushed experts to the affected areas each time a new human case occurs. Poultry are culled, and human contacts are put into quarantine.

What keeps the bird flu from spreading? Will it fulfill the prophecy of the director of the Centers for Disease Control and Prevention, Dr. Julie Gerberding, who predicted in May of this year, "It is not a matter of if an avian pandemic flu will occur, it is a matter of when"?

What keeps the wolf at bay are timely alerts and timely action.
For nine years, the University of Washington has run one of the key networks providing such alerts: the Asia-Pacific Economic Cooperation's Emerging Infections Network (APEC EINet).

APEC EINet proved its value as the sole information link between commerce and health officials during the SARS epidemic, and was a key information resource during the aftermath of the recent tsunami in Asia. It connects international leaders in public health, business, policy and other sectors through biweekly e-mail bulletins, conferences and deployment of the latest communications technologies, all in support of better preparedness for infectious-disease outbreaks.

Many of the best minds at work on understanding the spread of infectious diseases are right here in Seattle. Our region is playing an increasingly important role in global health through the work being done at many leading institutions, including the University of Washington, the Bill & Melinda Gates Foundation, PATH (Program for Appropriate Technology in Health), and the Fred Hutchinson Cancer Research Center.

Researchers and practitioners at these institutions are at the core of public-health networks linking the leading universities in the Pacific Rim. Their collective knowledge of which emerging infectious diseases are a threat to our health, how best to understand these threats and how to contain them, grows ever more powerful.

Yet, as important as this growing body of knowledge is, it is so much more powerful when connected to an equally powerful telecommunications research and education network.

Here, too, the Pacific Northwest is well served by the advances made by the UW and its partners like the Pacific Northwest Gigapop (the hub for ultra-broadband research telecommunications networks in the Asia Pacific region), the Internet Educational Equal Access Foundation, the Asia Pacific Advanced Network, and the Asia-Pacific Economic Cooperation, which together have created the APEC EINet.

Public Health — Seattle & King County often serves as a model for other cities on how to deal with public-health emergencies. And this week, the 2005 Pacific Health Summit will be held in Seattle, bringing together leading health experts from throughout the Asian Pacific region.

Given Washington state's many ports of entry, the concentration of talent and expertise here is a wonderful insurance policy. It isn't just a matter of medicine; it is a matter of communication and intervention.

Ironically, with competing domestic and international federal funding priorities, APEC EINet has slipped through the cracks and will soon disappear without financial support. Fully funding this effort — less than $250,000 annually — is a matter of critical public-health policy.
It is time for our region — both private and public institutions — to invest in securing the ongoing critical linkages provided by APEC EINet. Given our strategic position in the region, it is in the interest of the people of Washington to do so.

Infectious diseases are incredibly fast and efficient in their spread and devastation. Almost nothing moves as fast as microbes traveling by aircraft ... except secure and high-speed Internet connections carrying essential information among networks of trusted professionals who have the knowledge and authority to do what is necessary to intervene.

Let's not wait until the person next to you on the airplane has something worse than a cold.

Ann Marie Kimball is a professor in the University of Washington School of Public Health. Louis Fox is a professor in the UW Information School. They are collaborators on APEC EINet and U.S. delegates to the APEC Health Task Force. For more information on APEC EINet, go to http://depts.washington.edu/einet/

Copyright © 2005 The Seattle Times Company