Dispatches

Tackling the Next Pandemic

Iztok Podbregar and Teodora Ivanusa

LJUBLJANA—By now, the threat of avian influenza, also known as bird flu, has receded from the headlines. But the danger posed by the disease remains very real. There still is no definitive vaccine or remedy, and experts agree that if a human-to-human transmission occurs, millions of people will die and the global economy could dip into recession.

The first problem facing the international community is scientific. Bird flu is a deadly disease caused by the influenza type A virus. But, because all influenza viruses have the ability to change, scientists are concerned that the disease could one day mutate into a strain that could both infect humans and spread easily between people. Such antigenic shifts have happened several times over the past century: specifically, in 1918, 1957, 1968 and 1977. And, because these viruses do not commonly infect humans, there is little or no immune protection against them in the human population. Moreover, figuring out the exact mutation of the next avian influenza strain is bound to be difficult, and the associated degree of uncertainty makes pharmaceutical companies reluctant to produce mass stocks of drugs in advance of the flu season.

The second stems from the human factor. Limiting the spread of bird flu requires controlling vaccine production, distribution and access, as well as pricing. It also means improving control over open corridors related to civilian air travel, and stepped-up protection of industry sectors, namely poultry, against deliberate attacks.

In order to do so, we first need to identify high-risk avian influenza zones or at least rank regions according to their risk of exposure. Second, airport surveillance should be increased in regions where the type A virus is most widespread. Closer analysis of past patterns of infection is also necessary; the first wave of the virus was recorded in Southeast Asia, infecting first poultry and later moving sporadically through the human population; the second was recorded in China. Finally by October 2005, avian influenza had reached Central Europe, with cases reported in Romania and Croatia. Additional security upgrades are thus urgently needed in airports across Southeast Asia. Medical records showing that the traveler is not infected with the flu should be required before a visa is issued to individuals living in countries where the risk of avian influenza is the highest. Because interrupting air travel indefinitely is impossible, the solution will have to be in better management of security along air channels and airports.

Bird flu has also shed light on a very different danger—that of economic terrorism and organized crime. Even if we manage to escape a human pandemic in 2006/2007, the lack of coordination in response to this global threat should be reason for serious concern. For, without good government planning and proper

GENERAL IZTOK PODBREGAR is Director of the Slovenian Intelligence and Security Agency and the national coordinator for the fight against terrorism.

TEODORA IVANUSA is assistant professor in the Veterinary Faculty at the University of Ljubljana.

Dispatches

oversight, pandemic diseases like the bird flu could become a boon for terrorists and organized crime syndicates alike.

In fact, the upsurge in organized crime experienced by Southeast Europe this year was directly attributable in large part to the region's failure to formulate a coordinated policy for Tamiflu. With many seeing the drug as a remedy, demand increased exponentially as soon as the avian influenza scare engulfed Europe. But the availability of the drug, and its price, remained unregulated on the pan-European level. And with high demand, low and uncontrolled supply, the opportunity to make an extra buck by smuggling the drug across borders was soon seized upon by trans-Balkan criminal networks. The results were predictable; available on the Belgrade market for 45 Euro apiece, the drug came to be sold in Italy and other EU markets for over 100 Euro per unit.

Bird flu has also turned out to be a boon to the counterfeiting business. With demand for Tamiflu outpacing production, counterfeits—called "Tamiflu candies"—have flooded regional markets. This is more than just a criminal nuisance; it is also a serious impediment to governmental response. As countries begin to formulate defenses against the bird flu, they will be forced to grapple with counterfeit "medicine" sold at cut-rate prices and, worse still, with a false sense of security among those who have already purchased what they believe to be the cure.

In order to weed out organized crime from this field, governments must make three changes to their approach. The first involves public outreach; people need to be better acquainted with the Tamiflu drug, particularly with the fact that it may not be a one-stop cure. Better understanding of this reality could help stabilize market demand. Second, there is a need to better regulate the drug's availability and pricing. As long as the alert for avian influenza remains high, governments should coordinate to keep the price of Tamiflu and other remedial drugs more or less the same. By eliminating price differences between national markets of close proximity, it is possible to decrease the incentives for criminal groups to trade Tamiflu on the black market. Finally, Tamiflu should be made more readily available. As long as demand is sky-high, more of the drug should be produced and brought to market at a controlled price in order to eliminate the attractiveness of counterfeiting. This may also be the right time to consider making a generic version of Tamiflu—a move that would simultaneously knock down the price of the drug and make it widely available, particularly in regions classified as high risk.

Not least, there is a need to better guard against terrorists using the type A virus against commercial targets. Because avian influenza is typically found in birds, commercial poultry is particularly vulnerable. And if avian influenza is spread across livestock, sales will almost certainly drop. Poultry consumption across Europe has dropped drastically in recent months, with the sales of chicken at times dropping by more than 70 percent. This is just a foretaste of what is to come if this makeshift bio-weapon is exploited by terrorists.

Such steps are crucial. Even if science fails, there is a reasonable chance that we can control the spread of avian influenza if there is a strategy in place that allows us increased surveillance over civilian air travel, livestock trade, and gives us the means to better protect key economic sectors from terrorist attacks. The only certainty is that there are no certainties, and time is running out.