The time to prepare
IS NOW

by STEPHEN WEBER, MD

To the other patients, the woman entering the primary care clinic does not appear particularly ill. She checks in at the front desk, wiping her nose with her bare hand before taking a pen and clipboard from the receptionist. She coughs and sneezes repeatedly as she sits in the waiting area. A young father, bringing in his infant son for a well-baby check up, gives the woman a tissue. When her name is finally called, she politely offers her copy of the Chicago Tribune to an elderly man sitting next to her.

In the exam room, the woman and the nurse exchange stories about the perils of illness on vacation. “The air on those planes never circulates,” remarks the nurse as she feels for the woman’s pulse and records a fever of nearly 102 degrees. Later, after nearly 20 minutes with the patient, the doctor effects a travel history: The woman has just returned from visiting family in Asia.

Within seven days, the woman is dead. Both the young father and the elderly man from the waiting room are hospitalized in critical care, each requiring a ventilator. The primary care clinic does not appear particularly ill. Neither the young father nor the elderly man were quarantined at home.

HOW CAN THIS SCENE BE AVOIDED?

Preparing for emerging infections should not hinder our ability to provide efficient, safe and cost-effective care to patients with infections such as tuberculosis.

The designation of a dedicated emerging infection specialist within the institution might offer the opportunity to recognize such deficiencies and develop novel solutions. These same skills could be applied to challenges we face each day in the hospital, including patient safety, health care-associated infections and emerging infections such as tuberculosis.

The answer depends on the decisions we make now regarding the medical resources we devote to emerging infections. With resources and personnel already stretched to the limit of delivering high-quality care in an era of increasing costs, skilled-labor shortages and diminishing revenue, it may seem impractical or even irresponsible to devote time and money preparing for emerging infections. After all, terrorists may never release smallpox. The next pandemic of influenza, long anticipated, may never come. SARS may not rise again and sweep across the globe. Even our best response plans might go unused, collecting dust in thick black binders on every nursing unit.

Unfortunately, emerging infections have not seemed all that rare at the University of Chicago Hospitals in the past two years. During 2002, Illinois experienced more cases of West Nile virus disease than any other state. Our proximity to a diverse university community and a major hub for international air travel put us in the crosshairs of the SARS epidemic. Chicago was identified by the federal government as being at high risk for terror attack — to such an extent that it was chosen as a site for TOPOFF 2, an elaborate drill simulating a mock plague attack. Finally, just when things appeared to be slowing down, a number of people in our region became the first in this hemisphere to be infected with monkeypox. From this perspective, emerging infections seem more typical than rare.

But no matter the likelihood of such events, the potential consequences of poor preparation far exceed the expense of readiness. The rapid and unpredictable course of emerging infections like SARS defies attempts to “play catch-up” once events are set in motion. History is full of such examples. Political and social denial during the 1980s permitted the unchecked spread of the most important emerging infection of our era: HIV. A poorly coordinated and miscommunicated response, in which individual risk was seriously underestimated, needlessly cost the lives of postal workers during the anthrax attacks in fall 2001. Most recently, after a rapid and effective response to the emerging SARS epidemic in Toronto, a relaxation in readiness permitted the infection to flare again, costing a number of lives and perpetuating the panic that crippled the city.

PREPAREDNESS APPLIES NOT ONLY to our mission to care for patients in the community, but also to our need to protect ourselves. The SARS epidemic reminded us of another grim aspect of emerging infections: one can be so acutely since the great plagues and pandemics of history. For the first time, modern medical professionals have been forced to confront uncertainty about our own safety as we care for patients. More than half of the health care workers who had contact with initial SARS cases in Asia became ill themselves.

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The designation of a dedicated emerging infection specialist within the institution might offer the opportunity to recognize such deficiencies and develop novel solutions. These same skills could be applied to challenges we face each day in the hospital, including patient safety, health care-associated infections and emerging bacterial resistance. From humbling the bottom line, this approach to preparedness instead offers the opportunity to address long-standing, costly and dangerous problems and add value to the institution.

WHATEVER STEPS ARE TAKEN, AN institution prepared for emerging infections must clearly communicate its commitment to staff and employees. Meaningful preparedness depends on well-informed individuals acting in the best interests of patients in a way that never sacrifices individual safety. Each of us is responsible for identifying the high-risk patient, for taking the proper precautions and for initiating the appropriate responses. As an institution, we must also identify at-risk employees, train them, and develop and enforce programs and policies to heighten and maintain vigilance. The failures apparent in the hypothetical scene at the beginning of this article should serve as a reminder that without reaching out to individuals, an institution’s efforts to prepare are unlikely to succeed.

We do not have the luxury of choosing to confront emerging infections. As the recent past has shown, we have already been chosen: by afflicted patients who seek our care, by public health authorities who seek our cooperation and by the medical community that already turns to the university for investigative and clinical leadership. Preparedness must not be undertaken merely to keep pace with institutional peers, to position ourselves for research funding or to enhance our profile with the media or accreditation agencies. Emerging infections will come. Timely and appropriate preparedness is important to serve our patients and protect ourselves — and it can be done without compromising fiscal health. The time to prepare is now.

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