Plans to fight pandemic flu must focus on senior citizens

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In announcing their new approach to preparing for a possible influenza pandemic, both President Bush and the Department of Health and Human Services viewed the 1918 flu pandemic as a precedent. That outbreak killed an estimated 50 million people worldwide, including half a million Americans. A lot has changed since 1918 and much of it for the better. For example, seniors today are healthier and living longer. But other factors -- particularly the demographic shift toward a larger elderly population -- could make the next flu pandemic even more deadly for older Americans.

Public health experts are concerned about a particular strain of bird flu, H5N1, that has emerged as a major threat to birds in Asia and killed, thus far, more than 60 humans who have come in contact with infected birds. It’s too early to say when the next flu pandemic will occur or even if it will be the H5N1 strain. Whatever strain leads to the next flu pandemic, we need to be prepared.

The president and the government report rightly emphasize the critical role that vaccines and anti-viral drugs could play in defending us against a flu pandemic.

Flu vaccines protect two ways. They provide immunity to people who have been vaccinated, and they interrupt the person-to-person chain of infection whenever the flu virus encounters an immune person. New flu strains require new vaccines, which is why it’s recommended that people get flu shots every fall. A pandemic virus will need its own vaccine and this requires time to develop. The government has 20 million doses of vaccine against the H5N1 virus "on order," although those doses don’t yet exist.

Anti-viral drugs are the latest advance in the fight against flu. Properly administered, they offer both preventive and curative benefits. They are also useful in treating some groups, such as the elderly, for whom vaccines seem to provide less protection. Plans call for the government to acquire 20 million courses of anti-viral treatment.

In responding to a potential flu pandemic, we must also take into account changing demographics.

The flu is typically most lethal among the very young and the elderly. In the unusual case of the 1918 flu, young adults died in high numbers. But we are a rapidly aging society. When the next flu pandemic strikes, the numbers suggest that we will see more elderly who are killed.

In the 1920 census, there were just under 4.9 million Americans 65 and older. In 2000, the United States had just more than 35 million in the same age group. And by 2030, the census estimates there will be nearly 71.5 million people 65 or older.

Twenty million vaccine doses won’t be enough to cover this huge senior population. Nor did we succeed in doing so in 2003, when the government set a goal of inoculating 90 percent of seniors and actually got vaccine to only about 65 percent. Studies show black and Hispanic seniors fare even less well in getting vaccinated, averaging around 42 percent.

But it’s not only the sheer number of older Americans that poses a special risk. Because the immune system declines as we age, vaccines work less well in the elderly. We do not fully understand just how much less effective they are.

Also, today’s elderly live in increasingly dense living arrangements -- conditions conducive to rapid and profuse transmissions. In the event of an outbreak, we will need to exercise special care to protect nursing homes and retirement communities.

Even in non-pandemic years, the flu kills about 36,000 Americans, most of them elderly. Because of our changing demographics, even a slightly stronger flu strain could wreak plenty of havoc. We don’t need another mysteriously virulent flu strain, as in 1918, to kill 500,000 Americans.
In preparation for stronger flu outbreaks, Health and Human Services and the Bush administration should focus on how to protect our ballooning vulnerable elderly population. As America ages, a lot of changes in policies and practices will be needed. That certainly applies to how we will handle the next serious outbreak of flu, whether or not it’s an avian flu pandemic.

Relying on vaccines and anti-virals is a start, but it’s not enough.

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