

Pandemic Flu

DON'T PANIC, PREPARE

Address by J. EDWARD HILL, M.D., Immediate Past President of American Medical Association
Delivered to the National Association of Counties Conference, Chicago, Illinois August 8, 2006

Almost 88 years ago, in the waning days of World War One, an enemy more deadly than the Kaiser's armies invaded our country. Silently. Stealthily.

In Philadelphia, city officials used steam shovels to dig trenches. Not for defense purposes. But for mass graves.

In Chicago, 2,100 casualties were reported in the second week of October alone. It was around this time that the city started running out of hearses.

In Kentucky, officials were so afraid, they banned all public gatherings, including funerals.

In the meantime, in morgues across the nation, the bodies of soldiers and civilians, young and old, hale and weak, were stacked to the ceilings.

Finally, following wave after wave of attacks, it was over. This silent, invisible enemy disappeared from our shores, leaving approximately 675,000 Americans dead in its wake.

The enemy I refer to was, of course, the so-called "Spanish flu," caused by a novel strain of the influenza virus. The occasion was the pandemic, or global epidemic, of 1918.

More Americans died in that pandemic than died in combat for all the wars of the 20th century combined. If the same percentage of Americans were to lose their lives today, in a similar time frame, one and a half million people would die from flu between now and New Year's Day.

► Will It Happen Again?

But such a virus couldn't strike us again. Or could it?

In terms of the virus itself, it's not a matter of if but when. We will see the emergence of novel influenza strains. We may even see a strain as ruthless as "la grippe" of 1918, which some say took the lives of 50 million people worldwide.

What's different today, however, is that we know it's coming.

We don't know when or where it will strike, or if the devastation will be mild or severe. But we know a flu pandemic will occur.

And we know that our success or failure in combating it will depend in good part on people like you, representing local government and local public health, and me, representing the medical and scientific communities.

Pretty scary, isn't it—having all those lives in our hands?

Well, I have some simple words of advice: Don't panic. Prepare.

We Are in Better Shape Now Than We Were in 1918

One of the main reasons we shouldn't panic is this: We have much better tools for combating flu today than we did in 1918.

Dr. Victor Vaughan, an AMA president who cared for

patients back then, once wrote: "[We] knew no more about the flu than 14th century Florentines knew about Black Death." Scientists in 1918 did not have the technology to map viruses, so they could not identify different strains or create effective vaccines and treatments.

In contrast, scientists today can identify viruses. For example, we know that the Asian victims of avian flu usually contracted it from close contact with infected birds. Indeed, avian flu, or the H5N1 influenza virus, infects birds almost exclusively and cannot jump easily from human to human.

Should virus mutation make such a jump possible, however, scientists will know—and quickly. Consider that the viral genome for SARS was mapped in about a week.

Our forebears would have been astounded by this fact. They also would have been astonished at the vaccines we are capable of developing.

Vaccination for seasonal flu currently saves thousands of lives each year, even though vaccine production is a complex process that takes place over the course of months. In the near future, promising new technologies, such as reverse genetics, may help us to shorten production time, reduce production problems and develop vaccines against novel strains—again, quickly.

Just last week, for example, one pharmaceutical company announced that it has created a vaccine that protects against avian flu, or H5N1.

Vaccines are not our only line of defense, however. We also have powerful antiviral medications at our disposal. Some scientists hypothesize that widespread use of antivirals could help curb the spread of disease even in the absence of vaccines.

We are also much better able to treat secondary infections today. Before the advent of antibiotics and pneumococcus vaccines, many influenza victims died from bacteriological infections and not from the flu itself. These kinds of flu-related deaths would be far less likely to happen today.

► But That Doesn't Mean We're Safe

But do all these changes mean we can rest easy and not worry? Far from it.

Back in 1918, the influenza virus followed the railroad lines, which enabled it to travel quickly across the nation. Today, thanks to mass transit, airplanes and cars, people and their diseases can move even more quickly across county, state and national lines. Faster than our forebears could have imagined.

The question we face is this: In this high-speed environment, can we mobilize our defenses quickly enough?

That question is open to debate. Back in February, the director of a county public health department in one major U.S. city said: “At this point, we can get through a 1918-like flu pandemic. But no one will think we did a good job. When it happens, it’ll be bad. It’ll make Hurricane Katrina look like a picnic.”

Hardly words to instill confidence.

Yet, we cannot allow ourselves to be discouraged. We must continue to prepare, and to remember that we already have, or are capable of producing, the tools we need to combat a flu pandemic.

We just need to deploy these tools effectively and efficiently. Under the most challenging circumstances possible. And we must remember: All healthcare is local.

► **Reporting and Surveillance**

Should a flu pandemic strike, one of the first things we’ll need to do is to understand what’s hit us.

For physicians, this means recognizing that high numbers of patients are suffering from unusually severe flu symptoms. Physicians (and hospitals, too) will need to report unusual patterns of disease to local public health authorities. Public health officials, in their turn, will need laboratory surge capacity so they can identify exactly what we’re dealing with.

Because all healthcare is local, one of the most important things you can do for your county, is to protect the strength of your local public health department. This means that they should not be first on the chopping block when budget cuts loom. Nor should they stand last in line to get funding for new technology and positions.

Public health departments are a vital link in the chain of response that stretches from your county all the way up to the CDC, even the World Health Organization. You need to protect this link. I also suggest that your county build bridges between public health officials, community physicians and other first responders, such as nurses, EMTs, hospital workers and the like.

According to one AMA survey, the majority of America’s doctors want to provide medical help in the event of a disaster but don’t feel prepared to do so. They don’t know what they are supposed to do or even where they should go in the event of a major health catastrophe.

Make sure physicians in your community know about your public health department’s pandemic flu plan. Keep them connected to disaster response planning overall. Do the same for all of the health professionals in your community. Before disaster strikes.

► **Communication**

Communication will be key before—and during—a flu pandemic. Have a countywide communication plan in place that, in the event of disaster, will enable you to keep in contact with all sectors of your community. This is something the AMA tries to do for the national community of physicians. For example, during the SARS pandemic, the

AMA regularly relayed late-breaking information from the Centers for Disease Control and Prevention to physicians across the U.S. We used e-mail newsletters, direct e-mails and an AMA SARS Web site to provide doctors with up-to-the-minute information about diagnosing and managing SARS patients, as well as infection control.

At the height of the outbreak, our SARS Web site alone was getting more than 5,000 hits a day. Even though the disease never found its way to the U.S. Should a flu pandemic occur, local physicians, health professionals and patients will be hungry for facts. Be prepared to deliver them. Consider asking your county medical society to help. They can keep physicians informed about the regional availability of antivirals and vaccines, surge capacity locations and volunteer opportunities.

► **Infection Control: Hygiene, Isolation and Quarantine**

Another issue you’ll need to cope with is infection control, especially during the early phases of pandemic.

You will need to remind the public, and especially county workers, to exercise basic preventive measures, such as avoiding people who are sick with flu, staying home when ill, maintaining good hand hygiene and keeping up good health habits. These simple measures may help slow the spread of disease.

Health professionals working with flu patients will likewise use masks, gowns and gloves to stem transmission. These are supplies that you or your local hospitals may want to stockpile.

The medical community will also need your support when we use even stronger infection control measures, such as isolation (or the practice of keeping sick patients away from others) and quarantine (or the practice of isolating individuals and groups who do not show signs of flu, but who have been exposed to it).

The counties may be called on to help implement quarantine or isolation measures. My own great-grandfather’s first job as a county official was to guard a bridge and uphold quarantine during a smallpox outbreak in 1906. County officials may also be called upon to shut down public places or cancel public events.

Make sure you have plans in place to do all of this humanely, safely and ethically. Research suggests that patients are much more likely to comply voluntarily with quarantine measures, for example, if they understand what’s happening, are treated well and know that their families, jobs and homes are safe.

The experience with SARS in Toronto presents a good case in point. Thanks to the compassionate and transparent implementation of quarantine there, only one person out of thousands broke quarantine.

► **Surge Capacity, Stockpiling and Workforce**

Issues of infection control and the spread of disease raise other challenges, too, such as surge capacity—or the need for extra beds and supplies.

If hospitals admit large numbers of influenza patients,

all of whom must be isolated from others, it is likely your local hospital will run out of beds. Local governments, together with hospitals and doctors, need to plan for such surges in patient population, as well as increased demand for ventilators and antiviral medications, not to mention vaccines. We will also need to address severe disruptions in the healthcare workforce. Sick nurses, doctors and health professionals won't be able to come to work, and hospitals and surge centers may have to rely on a skeleton staff.

Groups like the local Red Cross can help you build lists of volunteers to help. Working with the private sector will help ensure you can deploy them. This will help alleviate workforce disruptions in the healthcare community.

► Federal, State and County Planning

Thus far I have focused on the medical impact of flu pandemic, but you will also be addressing the wider social implications, such as keeping the water running, the electricity humming, and the streets safe, when many are ill and others are panic stricken.

For this reason, I suggest you coordinate your overall preparedness efforts with state authorities, if you have not already. Work closely with the private sector, too. Look to federal authorities, such as the CDC and the Department of Health and Human Services, for guidance on complex issues, such as vaccine prioritization—that is to say, decisions about who gets vaccinated first.

But don't rely too heavily on big government. A flu epidemic will strike the nation in waves. State and federal authorities will probably be too swamped to help you directly. Look to them for guidance but understand that local government will manage the on-the-ground response.

That means you will have to plan how to implement quarantine, manage surge capacity, distribute vaccines, engage volunteers, and more.

► AMA Activities

The AMA and the physicians of America want to help you with this challenging task. We are particularly focused on improving the development, production and distribution of flu vaccine. For example, we have pressed the federal government to increase research on pandemic flu vaccine,

and we have pushed for increased national capacity in terms of vaccine production overall.

For the past five years, we have also convened a national influenza summit. It brings together manufacturers, government agencies and medical associations with the goal of addressing problems in flu vaccine production, capacity and distribution, among other issues.

In addition to our vaccine advocacy, we also provide physicians with important information regarding the potential impact and treatment of both seasonal and pandemic flu. This includes information about the ethical use of quarantine and isolation.

Finally, we are trying to educate all health professionals and first responders through a program known as National Disaster Life Support. This AMA-sponsored program helps prepare attendees for mass casualty events, like pandemic flu. I urge you to send first responders from your county to attend one or more of these courses. You can find out more at www.bdls.com.

► Conclusion

I, for one, am proud of the advances that science, medicine and public health have made over the past one hundred years. I pray that we are able to capitalize on these advances should an influenza virus as ruthless as the "Spanish flu" strike our nation and the world.

But lest we grow too confident, and lose the sense of urgency that leads to true preparedness, I ask that we recall what AMA President Victor Vaughan said during the pandemic of 1918:

He wrote: "The saddest part of my life was when I witnessed [... the] deaths of the soldiers in the Army camps and did not know what to do. At that moment I decided never again to prate about the great achievements of medical science and [instead] to humbly admit our dense ignorance ..."

Today, I hope I have avoided prating and touched instead upon our strengths—and our very real weaknesses—in terms of pandemic flu response.

We have much work to do, but it can be done. If we don't panic. If we prepare.

God bless you, and god bless your efforts to plan for this very real threat. ♦

E Pluribus Unum Today

AMERICA HAS SHOWN WE CAN LIVE TOGETHER IN HARMONY

Address by DANIEL ROSE, Chairman, Rose Associates Inc.

Delivered to the Counselors of Real Estate Conference, "A Clash of Cultures," Park City, Utah, July 14, 2006

The term "culture clash" implies not simply a dispute over preferences but a confrontation of different ways of thinking, different value systems, different ways of

looking at the world.

If one prefers potatoes to another's rice or noodles, sliced white bread to frittatas, or Southern fried chicken

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