



What can we do now to help people prepare for the pandemic flu?

The world is overdue for a flu pandemic. Historically, pandemic flu strikes every 25-30 years, or about three times per century, and it has been 39 years since the last pandemic circled the globe in 1968. Health officials are tracking several flu strains which, if they shift enough to be passed easily from human to human, could cause the next pandemic. Experts agree, when it comes to pandemic flu, it's not a matter of if, it's a matter of when.

Unlike tornados, which strike fast and then are gone, a moderately severe flu pandemic could cripple society for quite awhile. While tornados destroy physical things, pandemic flu attacks human beings. Pandemics come in waves which can be separated by one or more months, and it would take at least six months for a vaccine to be widely available. In the meantime, we can expect work absenteeism of 30-50 percent, overwhelmed hospitals, utilities struggling to stay online, shortages of basic supplies like medicine, groceries and gasoline, and closures of schools, churches and offices.

But there is good news.

Unlike a tornado, where survival often depends on luck and a sturdy basement, each one of us can take action now that will help us ride out the storm of pandemic flu. Actions we take today – to stockpile food, gather emergency supplies, and think through how we might respond – will reduce chaos and loss of life.

By taking action, we help our entire communities. One study found that if just 30 percent of the population is able to isolate itself at home, we can reduce the proportion of people infected by half. If 40 percent can isolate themselves, we can reduce the proportion of people affected by two-thirds. The duration of the pandemic flu can be reduced by one-third if 30 percent of the public stays at home for months.

For people to be able to isolate themselves at home, they and their communities must be prepared with plans, stockpiles of food and supplies, and a web of support that will make isola-

tion feasible. From meetings with hundreds of citizens in Clay, Eastern Jackson and Wyandotte counties and in Independence, it is clear that most people are unprepared. It was equally clear that, once the threat is known, many people are willing to take responsibility for themselves, their families, neighbors and friends.

What is pandemic flu?

When a new strain of influenza virus spreads quickly from human-to-human, infects people worldwide, and causes more serious illness and deaths than the annual flu, scientists know they are dealing with the pandemic flu.

Pandemic flu is different from the annual flu in several key ways:

- Annual flu occurs every winter, but pandemic flu can begin any time during the year;
- Annual flu affects 5-20 percent of the U.S. population, but pandemic flu could infect 25-50 percent of U.S. residents;
- Most people recover from the annual flu after a week or two, but pandemic flu makes people sicker and results in more deaths;
- The elderly and children are most at risk for the annual flu, but all age groups may be at risk from pandemic flu;
- Antiviral drugs can reduce symptoms in people who are most at risk from the annual flu, but may not be effective against a new strain of pandemic flu.

How likely is pandemic flu?

Flu pandemics are recurring events. Three pandemics happened in the 20th century. During each, about 30 percent of the U.S. population got sick, but the death toll was very different because some strains were more virulent than others. For example, the Spanish flu pandemic of 1918 killed 500,000 U.S. residents, while the 1968 Hong Kong flu pandemic killed 34,000. (Many believe that the Spanish flu began in Kansas, when an infected soldier from Haskell County carried the flu with him to a military camp near Fort Riley.)

Scientists are tracking the H5N1 strain of influenza, also known as avian or bird flu, which is considered the biggest threat to become a pandemic. Bird flu first infected humans in Hong Kong in 1997, and has since spread to other parts of Southeast Asia. So far, more than half of those infected have died - mainly previously healthy children and young adults. Scientists are worried because the H5N1 virus can infect a wide range of hosts, including birds and humans. So far, however, the virus has not shown an ability to transmit from human to human.

“We would like to keep people at work, but they will want to go home to their families. We have to count on losing workers who aren’t sick because they are concerned about their families. That will be their first priority.”

“Employers aren’t immune to the pandemic. They’d have to be sympathetic, wouldn’t they?”

Why would it take so long to get a pandemic flu vaccine?

When you get an annual flu shot, you benefit from a process that started at least 18 months ago, when the Centers for Disease Control and Prevention (CDC) predicted the type of flu likely to strike.

After the CDC predicts the flu strain, manufacturers start making vaccine. Just four manufacturers are approved to market their vaccines in the U.S.: Chiron Vaccines, Ltd.; GlaxoSmithKline Biologicals; MedImmune Vaccines, Inc.; and Sanofi Pasteur, Inc. The process for manufacturing flu vaccines is time-consuming. Vaccines are developed by growing the flu virus in hens' eggs, then inoculating patients with a weakened or killed form of the virus. People who are allergic to eggs cannot get a flu shot.

When an influenza virus mutates to a completely new virus that can be spread by human-to-human contact, the race is on to identify the virus and develop a vaccine that can protect against it. Every day counts. The situation is made even more difficult because in a pandemic, each person would need the vaccine, while the annual flu shots mainly go to people considered to be most at risk because of age or pre-existing conditions.

Health officials predict significant shortages and delays in making the new vaccine available, with limited allotments shipped to states every week or so. The federal government would control the vaccine supply, and each state would be responsible for distribution. Missouri, for example, would use the infrastructure currently used to distribute childhood vaccine.

Antiviral medications can help prevent and treat the flu, particularly for people who have chronic disease. The CDC recommends that people at high risk of the flu, health care workers and people who work in institutions like nursing homes receive preventative antivirals. Antivirals can reduce the severity of flu symptoms when taken within 48 hours of developing symptoms. Unlike the flu vaccine, they are safe for people who are allergic to eggs.

Like a vaccine, antivirals would be in very short supply in a pandemic. Conventional antivirals, too, may not work with a new strain of influenza.

Who is responsible for dealing with pandemic flu?

In a word, the answer is "everyone." The national strategy for pandemic influenza lays out specific roles for federal, state and local governments, as well as the private sector and individuals.

The **federal government** works alone and with groups like the World Health Organization to plan for a pandemic, produce and stockpile vaccines and antivirals, advance scientific knowledge, and advise groups that aren't used to responding to a health crisis, such as private businesses and utility companies. It en-

"What if we're not allowed to go back home? How can we be able to stay indefinitely on campus?"

"What are you morally obliged to do? You don't know until you're really in that situation. When it comes down to your personal survival, what are you willing to do?"

asures rapid reporting of outbreaks, shares information with travelers and monitors travel and shipping. In a pandemic, it would work to contain outbreaks by limiting non-essential movement of people and goods and by mobilizing public health surge capacity.

State and local governments are responsible for taking steps to limit the spread within and beyond their borders. They are responsible for having preparedness and response plans that involve non-health entities like law enforcement, utilities, and political leadership. They establish state and community-based stockpiles, identify key spokespersons, and provide public education campaigns.

According to the Trust for America’s Health, a public health policy group, Kansas and Missouri rank above most other states in meeting 10 benchmarks that provide a snapshot of preparedness. Kansas was the only state to meet nine benchmarks; Missouri was one of 12 states that met eight benchmarks.

Some states have taken major steps to assure preparedness. New Jersey, for example, launched the “Get Flu Ready, New Jersey” campaign in 2006, which included ads at supermarket checkouts that urged people to stockpile food and bottled water, practice good hygiene and stay home when sick. New Jersey businesses are caching their own supplies and lining up volunteers and equipment to help out, and some three dozen big corporations in the state recently ran a tabletop exercise of an emergency scenario.

Other areas are exploring creative options for keeping things going during a pandemic. Students in Alabama, for example, may take classes via public television if schools close. Dallas librarians may replace sick 911 operators, and Louisiana has discussed expanding hospital visiting hours so that relatives can help with some patient care.

The national strategy says that the **private sector and critical entities like utilities** have roles and responsibilities, as well. They include:

- Creating an ethic of infection control by educating workers, allowing people to work at home when they’re sick, and putting systems in place to reduce transmission;
- Planning for ways to deliver essential goods and services when workers are absent;
- Putting plans in place to allow workers to work from home, if possible, when health officials encourage people to stay home; and
- Partnering with other members of the sector to provide mutual support so that essential services continue during a pandemic.

“The TV stations, the newspaper and even the health department might have to get people who are not health professionals to make the appeal along with them. There is always the question about if the government is just talking again. People will question if there’s a money game being played on them. But somebody might say, my Sunday school teacher wouldn’t say it if it isn’t true, they wouldn’t falsify. Professionals often believe they’re the only ones who can make the point, and overlook the fact that there are others who can appeal to a whole lot of people.”

Okay, so what about individuals like me?

Because one person can spread the disease to many others, individuals have perhaps the most important role to play in preparing for and responding to pandemic flu. There are several things that each one of us can do:

- If you have the flu, stay home from work and take precautions to avoid spreading the virus to others, such as covering your mouth and nose with a tissue when coughing or sneezing;
- If you don't have the flu, take preventive measures to avoid it, such as staying away from people who are sick, washing your hands thoroughly and often, and not touching your eyes, nose or mouth;
- Follow guidelines that may include avoiding public gatherings and non-essential travel for days or weeks; and
- Keep supplies of food, water, and other materials that would allow you and your family to survive, preferably for a month or more.

Voluntary home isolation can make a major difference. The more people can isolate themselves at home, the less likely that they will get the flu or give it to someone else. "If you want to contain the flu, you have to make it livable for people" to comply with infection-control steps, according to Robert Blendon, a health policy specialist at the Harvard School of Public Health. "This really is a Catch-22 here. If you can't help people make it at home, then the epidemic's going to get much more severe."

Some people we talked with saw home isolation as a good chance to catch up on the stack of magazines they'd accumulated. The reality, though, is that isolation will bring its own set of challenges. Imagine the worst case of cabin fever you've ever had, multiplied by shortages and chaos in the outside world, and you get the idea.

Without planning and community support, people may face hunger, major loss of income, and psychological difficulties that come from confinement, boredom, stress and loss of contact with loved ones and the outside world.

One study, conducted by the Center for the Advancement of Collaborative Strategies in Health at the New York Academy of Medicine, called for a community-wide effort to make it possible for a large portion of the public to voluntarily isolate themselves at home. The study suggested five steps, including:

- People who will provide help to those who are isolating themselves at home should be on the priority list to receive antiviral drugs or vaccine.
- People who isolate themselves should have the opportunity to earn money by working at home for their employers or on pandemic-related tasks;
- As many households as possible should have a working phone, radio, TV and access to the Internet so they can stay in touch.

"There are thousands of people with disabilities who are going to need help, but how do you find all of the people with special needs?"

"Unless it was the level of the 1918 pandemic, I don't think we'd hole up. The pandemics of the '50s and '60s weren't that bad."

- Local networks of residents and organizations should support those isolating themselves by keeping track of neighbors, training residents to help isolated households, and organizing the delivery of supplies.
- Because people who voluntarily isolate themselves are contributing to the public good, they should receive all the protections that society owes to people under quarantine.

What are the major issues affecting individuals before and during a pandemic?

The pandemic flu citizen engagement project met with hundreds of individuals at 25 meetings inside the boundaries of the four public health departments involved in the project: Clay, Jackson (outside of Kansas City, Missouri), and Wyandotte counties, and Independence. We asked people to share their questions and concerns around three scenarios, summarized as:

- The pandemic flu has come to the U.S. but no cases have occurred locally;
- The pandemic flu has hit metro Kansas City hard; and
- It's six months later and a vaccine is available.

They talked with us about a range of issues related to how they might prepare, where they would go for information, who they would ask for help, and how they might handle issues like child care and work.

At the pandemic flu workshop, we will deal with five broad issues that arose during meetings with local citizens.

1. Most people know very little about pandemic flu.

While people are very aware of the annual flu, most have little knowledge about pandemic flu. Lack of knowledge reduces people's urgency and understanding of what they should do to prepare. Getting the word out early is critical, because once a pandemic has struck it may be too late for people to stockpile food or develop home-office arrangements with their employers.

Denial and wishful thinking come into play. Some people expected that government and social service agencies will deliver food, employers will continue to cut paychecks, and creditors will not demand payment during an emergency. Some people know they should prepare, but don't know exactly what kind of foods to stockpile or what to include in their emergency kits.

We distributed surveys to participants before providing any information on pandemic flu. While 57% knew that existing vaccines wouldn't work against a new strain of the flu, just 25% knew that it would take about six months for a vaccine to be available. While 69% knew that pandemic flu would kill more people than the seasonal flu does every winter, just 27% knew that pandemics occur about every 25-30 years.

"I ought to be able to take care of myself without my son chasing up here to take care of me. When you consider him getting to the airport and getting here, and looking at poor old mom upchucking, that just doesn't sound good."

Information that can help individuals prepare is available at www.pandemicflu.gov.

2. The biggest barrier to people being able to isolate themselves at home is the need to earn a paycheck. Lower income and hourly workers are typically the least able to work from home or go without pay.

A recent Harvard School of Public Health survey of Americans found that, while most people would comply with public health requests, the lowest area of cooperation was likely to be the workplace.

- Only 29 percent said they could work at home for a month, and 57 percent said that if they had to miss one month of work they would face serious financial problems.
- Nearly a quarter were very or somewhat worried that their employer would make them go to work if they were sick, and half believed their workplace would stay open even if health officials recommended that business shut down.
- A quarter of employed Americans thought that if they stayed home from work they would get paid, while 42 percent think they wouldn't get paid and 22 percent didn't know if they would get paid.

3. Very few businesses have created pandemic flu plans, which may reduce the number of employees who can work at home.

Of the hundreds of people we talked with, the only people who knew whether their employers had a pandemic flu plan were those who worked for hospitals. While we know some local institutions have developed plans, either none of their employees attended a meeting or communication with employees is lacking.

Information that can help businesses or other institutions prepare is available at pandemicflu.gov.

4. Neighborhood, church and school leaders could be vital in helping people survive, but few are involved now in preparing for pandemic flu.

In any community, there are people who, by position or personality, have the desire to help others. During our meetings, people who were in leadership positions in their neighborhoods, churches and schools were likely to ask for information about what they could do to help people prepare and to assist in the case of a pandemic flu emergency. Some had already included pandemic flu information in newsletters or had received emergency training, but none were involved in any organized way in planning or preparation.

In addition, we heard that respected local leaders, like Sunday school

"We could plant gardens, so at least we could get food to eat. We would have to come up with original ideas on how to make our time productive, and we would need things we couldn't buy even if we had a credit card. Back during the Depression, I knew many families that started businesses in the basement and sold the products they made and could sustain themselves when there were no jobs."

"If it was practical and I could do it, I would help. I could take people to the doctor, or take food to people."

teachers and neighborhood presidents, can be especially vital in communities that distrust the powers that be. Otherwise, we heard, residents may assume that someone will profit from their misfortune or that they're getting the vaccine after more privileged individuals.

5. People are likely to disregard public health department advisories if they feel they need to in order to care for children or parents.

The citizens we talked with were very clear that nothing would stand in the way of getting care for their elderly parents or sick children. If a child's dorm was quarantined but the child was not sick, one parent said she would bring the child home. If there was a ban on travel, one man would find a way to get to his mother in another town. People wouldn't hesitate to find medical care for loved ones, even if hospitals were overloaded.

In contrast, people who lived alone were equally adamant that, if they were sick, they would tough it out by themselves. Their main concern was that they might make their caregiver sick, and they were unwilling to do that.

About the pandemic flu citizen engagement project

The pandemic flu citizen engagement is a project of One KC Voice in partnership with Consensus. One KC Voice seeks to get citizens engaged in regional issues and is an alliance of nonprofit organizations managed by the Mid-America Regional Council. For more information, see onekcvoice.org. Consensus puts the *public* in public policy through philanthropically and client-funded projects. For more information, see consensuskc.org.

The project is guided by a steering committee that includes citizens and health department staff members. Its citizen members are Carol Cobb, Elaine Lenz, Steve Pew, Wayne Vaught, and Lois McDonald. Its health department members are Gay Hall (Wyandotte), Jodee Fredrick and Nola Martz (Clay), Josh Walsh and Kate Donaldson (Independence) and Nicole Schlaefli and Rhonda Charboneau (Jackson). Marlene Nagel represents the Mid-America Regional Council and Mike Chamberlain represents the American Academy of Family Physicians. The steering committee is convened by Dan Blom from One KC Voice and Jennifer Wilding from Consensus.

The project relied upon members of the One KC Voice Citizen Engagement Network to sponsor meetings with members of their groups or nearby citizens. Their assistance was vital in assuring a cross-section of people were heard from. Sponsors included:

- Bishop Ward High School and St. John the Evangelist Catholic Church
- Bolling Heights Neighborhood Association
- Bonner Springs City Library

"Whatever you have is what you have to exist on. If it doesn't give out, those that don't have are going to be so desperate that they'll be breaking into homes and everything else. I would stay at home and do a lot of praying."

- City of Blue Springs
- City of Lee's Summit
- Family Partnership
- Grain Valley Schools Emergency Planning
- Jackson County Inter-Agency Council
- Kansas City, Kansas, Public Library
- Kiwanis Club
- Lee's Summit Chamber of Commerce
- Livable Neighborhoods
- League of Women Voters of Kansas City/Jackson, Clay and Platte Counties
- Metropolitan Community Colleges
- Mount Zion Baptist Church
- Northland Neighborhoods
- Progress Independence, meetings held at Tri-City Ministries, Fairmount Community Center, and Palmer Senior Citizen Center.
- Rosedale Development Association
- Shepherd's Center of the Northland
- University United Methodist
- William Jewell College
- YWCA of Greater Kansas City

"Financial concerns would be a tremendous driving force. Most people in the average neighborhood are not salaried so they lose money when they don't go to work. They would weather the storm as best they could and go to work, unless there was community service that would let people stay home."

The quotes that appear throughout this discussion guide are from citizens who attended meetings to discuss how they might deal with a flu pandemic.

This project received funding from the federal Cities Readiness Initiative, the Health Care Foundation of Greater Kansas City, and the health departments of Independence and Clay, Jackson and Wyandotte counties.

For more information:

Dan Blom, One KC Voice, at 816/701-8363 or dblom@marc.org

Jennifer Wilding, Consensus, 816/531-4507 or jenwilding@consensuskc.org

Discussion guide released March 9, 2007.



Bibliography

“Antiviral Medication for Influenza Prevention and Treatment,” National Foundation for Infectious Diseases, <http://www.connectlive.com/events/infectiousdiseases/presskit2006/NFID%20Antiviral%20Fact%20Sheet%20FINAL.pdf>

“DNA Vaccine For H5N1 Avian Influenza Enters Human Trial,” news release from NIH/ National Institute of Allergy and Infectious Diseases, January 4, 2007, downloaded from www.sciencedaily.com 3/3/2007.

“Emergency Response and Terrorism Plan,” Missouri Department of Health and Senior Services, working document version 2.0, February 9, 2006.

“Engaging the Public in Pandemic Flu Planning,” Roz D. Lasker, M.D., director, division of public health and the Center for the Advancement of Collaborative Strategies in Health, the New York Academy of Medicine, www.cacsh.org.

“Ethical Hazards in Pandemic Flu Planning and Response,” Harvey Kayman, MD, MPH, Center for Public Health Preparedness, Arnold School of Public Health, University of South Carolina, transcript of interview as part of the University at Albany Center for Public Health Preparedness Grand Rounds Series, May 11, 2006.

“FDA Approves Influenza Vaccines to Be Manufactured for Upcoming Flu Season,” U.S. Food and Drug Administration news release, August 2, 2006.

“From hospital beds to Tamiflu, state planning for pandemic varies,” Luran Neergaard, Associated Press, Kansas City Star, December 17, 2006.

“In the case of an outbreak of pandemic flu, large majority of Americans willing to make major changes in their lives,” Harvard School of Public Health press release, October 26, 2006, www.hsph.harvard.edu/press/releases/press10262006.html.

“Kansas, Missouri improve readiness,” Kansas City Star, December 13, 2006.

“Kansas Pandemic Influenza Preparedness and Response Plan,” Kansas Department of Health & Environment.

National Strategy for Pandemic Influenza, Homeland Security Council, November 2005.

“NJ only partly prepared for expected flu pandemic,” Linda A. Johnson, Associated Press, Kansas City Star, December 16, 2006.

“Opening remarks prepared for delivery by the Honorable Mike Leavitt, secretary of health and human services,” May 31, 2006, at the Kansas State Summit.

“Opening remarks prepared for delivery by the Honorable Mike Leavitt, secretary of health and human services,” February 23, 2006, at the Missouri State Summit.

“Report finds U.S. bioterror, bird flu, and health disaster preparedness inadequate: Half of states score 6 or less out of 10 key indicators,” Trust for America’s Health news release, December 12, 2006.

“Ten things you need to know about pandemic influenza,” World Health Organization, October 14, 2005, www.who.int/csr/disease/influenza/pandemic10things/en/print.html.

“I would try to get at least my neighborhood organized where we could work together to help take care of the needs of people who can’t do by themselves.”
