

Matters

King County Health Reform Initiative Presents a Special Pandemic Flu Issue

Pandemic Influenza: Not Your Ordinary Flu

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f you've been paying attention to the news lately, you've probably heard a lot about pandemic flu and bird flu. But with all the media attention, it's hard to separate the hype from the real information. What's the difference between pandemic flu and bird flu? Just how threatening are these diseases? What can you expect during a pandemic? And what can you do to be ready?

Pandemic flu is a worldwide disease outbreak in humans caused by a new influenza **virus** — one that has not infected humans before. Unlike the seasonal flu viruses we see each winter, most people will not have immunity to a new influenza virus, and no vaccine currently exists to prevent it. So if the virus acquires the ability to pass easily from person to person, it will spread rapidly from one community to another and across the globe.

A severe pandemic flu outbreak can be much more serious than ordinary, seasonal flu. It will infect large numbers of people, and has the potential to cause serious illness. Some of those infected with a pandemic virus will die, and if the virus strain is a particularly severe one, those numbers could be high. If we have a pandemic similar to the "Spanish influenza" pandemic of 1918, 540,000 people in King County could become ill in the first six weeks.



Workers in downtown Seattle during the 1918 influenza pandemic. University of Washington Libraries, Special Collections, SOC306.

Out of that number, experts estimate that 270,000 would need outpatient

care, over 59,000 would need hospitalization, and 11,500 would die.

Everyday life won't be the same during a pandemic. To slow the spread of infection, schools may close and public gatherings may be canceled. With so many people ill, caring for the ill, or staying home with their children, the U.S. workforce may be reduced by as much as forty percent. Services provided by businesses, banks, government offices, and public utilities may be limited. Transportation may be restricted, affecting the delivery of food, fuel, and other essentials to stores and retailers. And unlike other catastrophic events, pandemic flu will hit communities all over the world at the same time. No region will be able to depend on outside assistance since every region will

be trying to cope. We will need to pull together as a community to help and support each other through a difficult time that could last months, even over a year.

At this moment, there is no pandemic flu virus circulating. But the current outbreak of bird flu around the world raises concerns that it could change into a human, pandemic flu virus if it develops the ability to spread easily from person to person (see page 2).

We don't know the exact date when the next flu pandemic will arrive, but we know that flu pandemics do happen. In the 20th century alone, large pandemics occurred in 1918, 1958, and 1967. No one can prevent a flu pandemic, but we can all be better prepared for one. Please read this special edition of *Health Matters* to learn more about pandemic flu, what King County is doing to prepare, and the simple measures you can take to prepare yourself, your families, and your community.

This Special Pandemic Flu Issue was developed by



learn more

Bird Flu vs. Pandemic Flu

edia reports often talk about bird flu and pandemic flu in the same breath, but it's important to know that they are not the same thing.

Pandemic flu is a global outbreak of human disease. It is caused by a new influenza virus that is unlike any previous flu, so people will not have any natural immunity to it. The lack of immunity means that a pandemic flu can pass readily from person to person, creating widespread illness. Currently, there is no pandemic flu circulating.

Bird flu (or avian influenza) refers to a large group of different influenza viruses that primarily affect birds. Occasionally, these bird viruses can infect other species, including pigs and humans, but the vast majority of avian flu viruses do not infect people.

The current bird flu outbreak in many parts of the world is caused by a type of influenza A virus called "H5N1." H5N1 is already spreading widely in global bird populations. In a very small number of cases, it has passed from birds to humans generally through direct contact with infected birds — and in a handful of cases, it has passed from human to human. In the few instances of avian flu in humans, it has been deadly, killing nearly half of those infected. However, H5N1 remains a bird flu because it has not developed the ability to pass easily from person to person. If this change occurs, H5N1 will become a human influenza virus that could start a pandemic and that's what worries health experts.

PANDEMIC FLU FAO

How would a pandemic flu virus spread?

It would spread from person to person primarily through "respiratory secretions," the same way seasonal influenza viruses spread. Respiratory secretions are virus-containing droplets (such as spit or mucous) that are spread when an infected person coughs or sneezes. These droplets can then land on the surfaces of the mouth, nose, and throat of anyone nearby (i.e., within 3 feet). The virus may also be spread through contact with the infectious respiratory secretions on the hands of an infected person and other objects and surfaces, like doorknobs.

Is there a vaccine for pandemic flu?

Not at this time.
Because viruses change over time, it is difficult to produce a vaccine before the pandemic emerges in humans. Vaccine production is a complicated and lengthy process. Once a pandemic influenza virus has been identified, it will likely take 4–6 months to develop, test, and begin producing a vaccine in large quantities.

In preparation, the U.S. government is making efforts to increase manufacturers' ability to produce vaccine. Research is also underway to develop new ways to produce vaccines more quickly.

For more info, please go to the pandemic flu link at www.kingcounty.gov/health.



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Pandemic Flu Planning Checklist for Individuals and Families

AT HOME

Store water, food, and other essentials. Prepare to get by for at least a week on what you have at home (see sidebox below).

Store medical and health supplies. Ask your healthcare provider for a prescription for an extra supply of your regular drugs. Keep health supplies and non-prescription drugs on hand (see sidebox on next page).

Make household emergency plans.

 Prepare for possible changes in healthcare. For example, medical advice and healthcare may be more difficult to obtain during a severe pandemic. There may not be enough medical supplies, healthcare providers, and hospital beds for all persons who are ill.

- Difficult decisions about who receives medical care and how much treatment can be administered will be necessary.
 Talk about these possibilities with your family and loved ones.
- In a severe pandemic, you may be advised to stay away from others and from public places as much as possible. Plan to limit the number of trips you take to run errands.
- Think about how you would care for people in your family who have disabilities if support services are not available.
- Decide who will take care of children if schools are closed.



Prepare to stay at home. Staying at home from work when you are sick is the most important thing you can do to protect others.

Know policies. Ask your employer or union about sick leave and policies about absences, time off, and telecommuting.

Encourage planning. Every
business, organization and
agency should have a plan for mak-
ing sure essential work can get done
if large numbers of employees are
absent over many months. You may
be asked to perform duties that are
not typically part of your job.

Explore other ways to get your work done. Find ways
to reduce personal contact, such as
increased use of emails or phone
conferences. Plan to work from home
whenever possible.

(Continued on next page)



Examples of Nonperishable Food

- Canned meats
- Canned beans, fruits, vegetables, soups
- Protein or fruit bars
- Dry cereal or granola
- · Dried fruit
- Peanut butter
- Nuts and trail mix
- Crackers
- Comfort food, including cookies, candy, instant coffee, tea bags
- Canned juices
- Bottled water
- Baby formula and baby food

Examples of Other Emergency Supplies

- Pet food, cat litter
- Disposable diapers
- Feminine supplies
- Flashlight
- Portable radio
- Batteries
- Manual can opener
- Plastic garbage bags
- Tissues and toilet paper
- Entertainment games, crafts, books, movies, etc.
- Supplies for persons with special needs — the elderly or disabled
- Some extra cash

stay well

Pandemic Flu Planning Checklist for Individuals and Families

(Continued from previous page)

IN YOUR COMMUNITY

Know your neighbors.
Talk with family, friends, and neighbors to make sure everyone is prepared. Be ready to help neighbors who are elderly or have special needs if services they depend on are not available.

Know school policies.
Know policies about illness and being absent. Be prepared for school closures.

Volunteer with community groups. Assist with planning for emergency response to disasters and pandemic influenza.



Examples of medical and health supplies

- Prescribed medicines and supplies, such as glucose meters and bloodpressure monitoring equipment
- Soap and water
- Alcohol-based hand cleaner
- Medicines for fever and pain, such as acetaminophen and ibuprofen
- Diarrhea remedy, such as Pepto-Bismol® or Kaopectate®

- Throat lozenges
- Cough syrup containing Dextromethorphan
- Thermometer(s)
- Vitamins
- Fluids with electrolytes, like Gatorade® and Pedialyte®

www.kingcounty.gov/health

Stop Germs, Stay Healthy!







stop infection

Preventing the Spread of Flu

ost patients with pandemic flu will be able to remain at home during the course of their illness and can be cared for by others in the household. This information is intended to help you care for ill persons in the home, both during a typical flu season and during a flu pandemic.

PREVENT THE SPREAD OF ILLNESS IN THE HOME

WHAT CAREGIVERS CAN DO

- Physically separate influenza patients from other people as much as possible.
- Designate one person in the household as the main caregiver for the ill person.
- Watch for influenza symptoms in other household members.
- Wearing surgical masks may help decrease the spread of influenza when worn by the patient and/or caregiver during close contact (within 3 feet). If masks are worn, to be useful they must be worn at all times when in close contact with the patient.

WHAT EVERYONE IN THE HOUSEHOLD CAN DO

 Wash hands with soap and water or alcohol-based hand cleanser after each contact with an influenza patient or with objects in the area where the patient is located.

- Don't touch your eyes, your nose, or your mouth without first washing your hands for 20 seconds.
 Wash hands before and after using the bathroom.
- Wash soiled dishes and eating utensils used by a flu patient either in a dishwasher or by hand with warm water and soap.
- Soiled linen and laundry used by a patient can be washed in a standard washing machine with warm or cold water and detergent. Wash hands with soap and water after handling soiled laundry.
- Place tissues used by the ill patient in a bag and throw away with other household waste.
- Clean counters and other areas in the home regularly using everyday cleaning products.

PREVENT THE SPREAD OF ILLNESS IN THE COMMUNITY

- Stay at home if you are sick.
- If the ill person must leave home, he or she should wear a surgical mask, if available, and take the following steps:
 - Cover the mouth and nose when coughing and sneezing, using tissues or the crook of the elbow instead of the hands.
 - Use tissues to contain mucous and watery discharge from the mouth and nose.
 - Dispose of tissues in the nearest waste bin after use or carry a

- small plastic bag for used tissues.
- Wash hands with soap and water or alcohol-based hand cleanser after covering a cough or sneeze, wiping your nose, and handling contaminated objects.
- Only people who are essential for patient care or support should enter a home where someone is ill with pandemic flu unless they have already had the illness.

Know the symptoms of influenza, which may include:

- Sudden onset of illness
- Fever higher than 100.4° F (38° C)
- Chills
- · Cough
- Headache
- Sore throat
- Stuffy nose
- Muscle aches
- Feeling of weakness and/or exhaustion
- Diarrhea, vomiting, abdominal pain



home care

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How to Care for Someone with Influenza

MONITORING AND COMFORTING THE PATIENT

• **Keep a care log.** Record information about the ill person (such as temperature, unusual skin color or rash, quantity of fluids consumed) at least once a day, plus date and time.

 Keep the ill person as comfortable as possible. Rest is important.

 Keep tissues and a trash bag for their disposal within reach of the patient.

• Keep in mind that fever is a sign that the body is fighting the infection. It will go away as the patient gets better. Sponging with lukewarm water may lower the patient's temperature, but only during the period of sponging. Do not sponge with alcohol.

• Watch for complications.

Call your healthcare provider or the pandemic flu hotline if the ill person:

- Has difficulty breathing, fast breathing, or bluish color to the skin or lips
- Begins coughing up blood
- Shows signs of dehydration and cannot take enough fluids
- Does not respond appropriately or appears confused
- Complains of pain or pressure in the chest
- Has convulsions
- Gets worse again after appearing to improve
- Is an infant younger than 2 months old with fever, poor feeding, urinating less than 3 times per day or other signs of illness

MEDICATIONS

• Use ibuprofen or acetaminophen or other measures, as recommended by your healthcare

provider, for fever, sore throat and general discomfort.

• Do not use aspirin in children or teenagers with influenza because it can cause Reye's syndrome, a life-threatening illness.

FLUIDS AND NUTRITION

- If the patient is **not** vomiting, offer small amounts of fluid frequently to prevent dehydration, even if he or she does not feel thirsty. If the ill person is not eating solid foods, include fluids that contain sugars and salts, such as broth, sports drinks (diluted half and half with water), Pedialyte® or Lytren® (undiluted), sodas, but not diet drinks.
- If the patient is vomiting, do not give any fluid or food for at least 1 hour. Next, offer a clear fluid in very small amounts. If the patient vomits, let the stomach rest again for an hour. Again, try to give small frequent amounts of clear fluid. When there is no vomiting, gradually increase the amount of fluid offered and use fluids that contain sugars and salts. After

- 6-8 hours of a liquid diet without vomiting, add solid food that is easy to digest, such as saltine crackers, soup, or rice.
- Babies who are breast-fed and vomiting can continue to nurse, but offer smaller amounts.
- Make sure the patient avoids drinking alcohol and using tobacco.
- Watch for signs of dehydration. Someone who is dehydrated may have:
 - Weakness or unresponsiveness.
 - Decreased saliva/dry mouth and tongue.
 - Decreased output of urine, which becomes dark in color. Ill persons who are getting enough fluids should urinate at least every 8-12 hours.
- If the ill person is dehydrated, give a generous amount of fluid through frequent sips or spoonfuls over a 4-hour period. Watch for an increase in urination, a lighter color of the urine, and improvement in the patient's overall condition.

know what to expect

We're Preparing. Are You?

eeping the community strong and healthy is a top priority in King County. Some of our numerous pandemic preparedness efforts include:

- Developing systems for maintaining critical King County services and expanding the ability of Public Health to mobilize and respond during a pandemic emergency.
- Convening a coalition of health care organizations and providers to create plans for effective communications and optimal use of healthcare resources during emergencies.
- Engaging the business community in developing plans to protect employees and continue business operations with a reduced workforce.
- Providing planning assistance to school districts, daycares, community-based organizations, and governments in all 39 King County cities.



- Developing support plans to help individuals and families cope with potential fatalities.
- Working with the medical community to detect and track any suspected cases of pandemic flu.
- Purchasing a stockpile of antiviral medication for the most severely ill and developing plans for efficient distribution of any vaccine that is made available.
- Educating the public about pandemic flu through the mass

- media, distribution of informational materials, and public presentations.
- Conducting simulated pandemic flu exercises and drills to test King County's readiness.

Much work remains to get ready for an emergency of this magnitude. Everyone who lives and works in King County can help out just by taking the preparedness steps described in this issue.

Doc Talk

Prepare for Change

n a typical day, emergency rooms in King County are busy with a steady stream of illnesses and injuries. Now imagine what our ERs would look like during a severe influenza pandemic when hundreds of additional patients are added each day — and with a third of the hospital staff out with the flu. It's the kind of scenario that may face all hospitals, clinics, and doctors' offices during a severe flu pandemic.

The strain on the healthcare system during a severe flu pandemic will be unlike any other disaster, so we all need to be prepared for possible changes. Even though healthcare facilities in King County are working to increase their ability to care for

a surge in pandemic flu patients, it may be difficult to get medical care or talk to your healthcare provider. There may not be enough medical supplies, healthcare providers, and hospital beds for all persons who are ill. As a result, healthcare providers will need to make tough decisions about who receives medical care and how much treatment can be administered.

Vacant hospital beds may be scarce, but most people who get a pandemic flu virus can be cared for at home and will recover (see the center pages of this issue). During a pandemic, updated information and advice about home medical care will be available on the Public Health website and through a telephone hotline. Know how to get information from your healthcare provider



and public health officials during an emergency, including about how to obtain medical care. Health care information and hotline numbers will be broadcast over local news media and on the Public Health-Seattle & King County website.

A severe pandemic will place tremendous stress on everyone, including healthcare providers. But in most cases, people with the flu can receive the care they need at home, and basic precautions and attention (such as those detailed in the center pages) will really help.

Jeff Duchin, MD

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know the facts



Things You Should Know About Pandemic Flu

- 1. Pandemic flu is much more serious than seasonal flu. It is likely to be more severe, widespread, and deadlier than seasonal influenza (see page 1).
- 2. A pandemic flu will be global. Travel routes will make it easy for the virus to spread quickly across borders. Communities across the U.S. and around the world will be affected at the same time.
- 3. The single best thing you can do to avoid getting any flu virus is to wash your hands. Wash frequently with soap and water for 20 seconds, or use alcohol-based hand sanitizer.
- 4. A vaccination will not be available at the outset of a pandemic. Once a pandemic flu virus is identified, it could take several months to develop and produce large quantities of vaccine.
- 5. Pandemic flu and bird flu are not the same thing (see page 2).

- 6. A pandemic may cause widespread social and economic disruption. Services provided by government agencies, public utilities, stores, the post office, and other businesses may be limited. Transportation services may be disrupted and schools may be closed (see page 1).
- 7. It may be difficult or impossible to work during a flu pandemic. Find out if you can work from home and ask your employer if they have a plan in place. Plan for a possible reduction in income if you are unable to work or if your workplace closes.
- 8. A pandemic could overwhelm the health care system. High numbers of ill people during a severe pandemic will put enormous pressure on our health care system. Prepare to follow instructions from your health care provider and public health officials about how to obtain medical advice and receive care (see page 7).

- 9. We will need to pull together as communities during a pandemic. We will need to check on our neighbors and help those around us, especially if we experience major social and economic disruptions. This may be as simple as calling your neighbor from a "phone tree" list, or dropping off supplies on the doorstep of a homebound friend.
- 10. There are simple steps you can take to prepare for a flu pandemic. Learn how to protect your health, stock your home with supplies, and make household plans (see checklist inside).

For more information:

- Public Health Seattle & King County www.kingcounty.gov/health
- Washington State Department

www.doh.wa.gov/panflu

Department of Health and Human Services/Centers for Disease Control and Prevention www.pandemicflu.gov

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