Personal Pandemic Preparedness: Bridging the Gap Between Institutional and Individual Response

presented by Mary A. Wyandt-Hiebert, PhD, CHES
with contributions from Mary Alice Serafini, MA

Pat Walker Health Center, University of Arkansas
It’s tough being a Hog these days...
Objectives:

- Explain the relative importance for personal pandemic preparedness.

- Discuss multi-media initiatives that reinforce educational outreach for personal pandemic preparation.

- Describe a multi-faceted personal pandemic preparation program.
Why prepare?

- The CDC, DHHS, and other public health experts agree:

  “It is not a question of IF a pandemic will occur, but WHEN it will occur.”

- If a pandemic similar to 1918 occurs, it is estimated that 90 million Americans could become ill and about 2 million could die.

  We have time to prepare!
  If prepared, lives can be saved!
Why create a personal preparedness program?

- Preparing for a pandemic influenza outbreak involves everybody.

- Government and institutions alone cannot prepare the Nation for pandemic flu; this challenge requires everybody’s help.
Lessons from history...

- In the 20th Century, three flu pandemics have killed more than 50 million worldwide.

- The 1918–1919 (“Spanish Flu”)
  - During the worst 12 weeks, 6 million died worldwide.
  - By the end of the pandemic, millions more died.

- 1957–1958 (“Asian Flu” – over 70,000 deaths in U.S.)

- 1968–1969 (“Hong Kong Flu” – over 33,000 deaths in U.S.; 1 million worldwide)
History of U of A’s personal preparedness program...

- understanding that the threat is real
- recognition that individuals need to prepare
  - inspired by groups such as readymoms.org, studentsprepamerica.org, and getpandemicready.org
- University Health Services teamed with Environmental Health & Safety
- Later, added the University Bookstore to the team
What did we do?

- used a multi-disciplinary team approach
- identify and resolve challenges
- gathered materials to be distributed
- designed marketing/promotional materials
- developed bookstore display
- designed website pages
- created a personal preparedness presentation
Multi-Disciplinary Team

- team consisted of staff from
  - Pat Walker Health Center
    - Health Educator, Nurse, Director
  - Environmental Health & Safety
    - Educator, Director
  - University Bookstore
    - Supply Manager, Director
Our Challenges

- obtaining appropriate respirators for sale at the bookstore
- meeting time for team
- general attitude of apathy
  - “You’re just paranoid.”
It’s not about paranoia,
it’s about preparedness!
This is preparedness!
This is paranoia!
Materials Gathered

- Preparedness booklets and brochures secured from county health department.
Materials Distributed

- Information Stations
  - Library, Union, HPER, Dining Halls, Health Center, academic buildings, other high traffic areas
- Seasonal Flu Shot Clinics
- Student and Employee Health Fairs
Marketing & Promotional Materials
Bookstore Display
Note on N–95 Respirators

- May 2007, the FDA approved the 3M Particulate Respirator (models 8612F and 8670F) “for use by the general public in public health medical emergencies”

  - Each household should have 20 respirators, 100 face masks, and a box of latex/nitrile gloves
Personal Pandemic Preparedness

Being prepared at the time of an emergency can make the difference of its outcome.

Most of us have become accustomed to seasonal influenza or more commonly known as the “flu.” From time to time, new strains of influenza develop. Currently, concern exists that a new strain is emerging as a possible pandemic influenza that could infect many and result in significant mortality around the world.

In 1918, a pandemic influenza swept across the world and up to 100 million deaths occurred worldwide. If a pandemic similar to 1918 occurs today, it is estimated that 90 million Americans could become ill and about 2 million could die. However, we have time to prepare!

Following some basic practices of stocking supplies, engaging in healthy habits, and planning ahead will make a difference. This website, along with other preparedness programs, offer suggestions for preparation, awareness information, and the availability of additional resources that will help guide you to becoming prepared for a pandemic or any other emergency.

a collaborative effort of
Pat Walker Health Center
Environmental Health and Safety
U of A Bookstore

Links Related to H1N1 Flu (Swine Flu)
Presentation

- conduct education sessions at
  - staff and faculty departmental meetings
  - academic classes
  - human resource trainings
  - student groups

- focus on why prepare and how to prepare

- slide presentation also made available on-line
# Presentation Evaluation

<table>
<thead>
<tr>
<th>Before H1N1</th>
<th>After H1N1</th>
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<tbody>
<tr>
<td>Prior to this presentation, I was already aware that pandemic flu was a concern.</td>
<td>100% agreed</td>
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<td>55% agreed</td>
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<tr>
<td>Overall, the content of this presentation was useful.</td>
<td>100% agreed</td>
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<td>85% agreed</td>
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<td>My knowledge increased due to this presentation.</td>
<td>100% agreed</td>
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<td>85% agreed</td>
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<td>I plan to use some of the strategies for pandemic preparedness.</td>
<td>100% agreed</td>
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<td>74% agreed</td>
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<td>I would recommend this presentation for others.</td>
<td>100% agreed</td>
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<td>82% agreed</td>
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**Introduction**

<table>
<thead>
<tr>
<th>HELPING OTHERS IS OUR GOAL</th>
<th>EDUCATION IS THE KEY TO PREPAREDNESS</th>
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</thead>
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*Image showing a nurse helping a patient and a group of graduates with various educational icons.*
Introduction

- Preparing for a pandemic influenza outbreak involves everybody.

- Government alone can’t prepare the Nation for pandemic flu; this challenge requires your help.

- The design of this program uses key concepts and information from the Department of Health and Human Services and the Centers for Disease Control.
Public Health and Education:

- Educational campaigns which emphasize personal hygiene and community hygiene are crucial tools in the battle to prevent disease.

- In the early 20th Century, health campaigns were mounted by Local, State, and Federal authorities.
What is a flu pandemic?

- An outbreak of a new flu virus that spreads around the world.
- In the 20th Century, three flu pandemics have killed more than 50 million worldwide.
  - The 1918-1919 flu pandemic was the most severe
    - During the worst 12 weeks of the 1918 pandemic, at least 675,000 Americans died and 6,000,000 died worldwide.
    - By the end of the pandemic, millions more died.
  - 1957-1958 flu pandemic (over 70,000 deaths in U.S.)
  - 1968-1969 flu pandemic (over 33,000 deaths in U.S.)
Historical Notes About the 1918 Influenza

Lessons from History in America

The 1918-1919 Influenza Pandemic
The Spread of the 1918 “Spanish” Flu

- March 4, 1918 - first observed at Fort Riley, Kansas
- March 11, 1918 - observed in Queens, New York
- August 1918 - a more virulent strain appeared simultaneously in Brest, France; in Freetown, Sierra Leone; and in Boston, Massachusetts
- October 4, 1918 – Arkansas reports first flu case (Public Health Service did not require states to report influenza before September 27th, so it was undoubtedly present in the state much earlier)
- November 1918 – pandemic moves into Spain
  - Allies of WWI came to call it the “Spanish” flu primarily because it received greater press coverage there as a result of Spain not being involved in the war and not imposing wartime censorship.
The Spread of the 1918 Influenza from September 14th to October 5th, 1918 (3 weeks)
Emergency Hospital at Camp Funston, Kansas 1918 Influenza
U. S. Navel Center, 1918 Influenza
Emery Hill in Lawrence, Massachusetts
Caring for the Sick, 1918 Influenza
Seattle Police, 1918 Influenza
Patrolling Streets to Keep People Indoors
Streetcar Conductor in Seattle, 1918
No riding without a mask!
Public Health Initiatives, 1918 Influenza

Closes Public Assemblages As Precaution

INFLUENZA
Spread by Droplets sprayed from Nose and Throat

Cover each COUGH and SNEEZE with handkerchief.
Spread by contact.
AVOID CROWDS.
If possible, WALK TO WORK.
Do not spit on floor or sidewalk.
Do not use common drinking cups and common towels.
Avoid excessive fatigue.
If taken ill, go to bed and send for a doctor.
The above applies also to colds, bronchitis, pneumonia, and tuberculosis.

INFLUENZA
Frequently Complicated with PNEUMONIA
Is prevalent at this time throughout America.
This theatre is cooperating with the Department of Health.
You must do the same.
If you have a cold and are coughing and sneezing, do not enter this theatre.
Go home and go to bed until you are well.

Help us to keep Chicago the Healthiest City in the World
John Dill Robertson
Commissioner of Health
Even children’s play was influenced.

- Children would sing as they jumped rope:

  “I had a little bird, it’s name was Enza, I opened the window and in-flew-Enza.”

413 children playing jump rope in the middle of Center Street at the Welcome Home Victory Jubilee celebration 1919, Burlington, Massachusetts
A Common 1918 Headline: 6,000,000 Deaths from Influenza (World Estimate for Past 12 Weeks)

- Estimated that 20 to 100 million died worldwide during its entire duration
- Killed more people than WWI
- More people died of flu in a single year than in four-years of the Black Death (Bubonic Plague) from 1347 to 1351
Looking Ahead

LEARNING FROM HISTORY
AND
PREPARING FOR TOMORROW
Today, is the threat of a flu pandemic real?

- The Centers for Disease Control, Department of Health and Human Services, and other public health experts agree:
  
  “It is not a question of **IF** a pandemic will occur, but **WHEN** it will occur.”

- If a pandemic similar to 1918 occurs, it is estimated that 90 million Americans could become ill and about 2 million could die.

*We have time to prepare! If prepared, lives can be saved!*
When will a pandemic influenza outbreak occur?

- Influenza pandemics are sporadic and their timing is difficult to predict.

- But, the **difference** today is that we have time to **prepare** for a pandemic or any type of emergency.
Do we know which flu virus will become pandemic?

- The Avian Influenza (AI), the bird flu, is of suspicion.
  - Specifically, the H5N1 Avian Flu Virus

[Note: Numbers are confirmed by World Health Organization and may not reflect news or country reports.]
Will a vaccine be available?

- A vaccine cannot be made before knowing for certain which virus will cause the pandemic.
- It could take 4-6 months before a vaccine is available.
- Only limited supplies will be available at first.
Why prepare now?

- This is the first generation with the opportunity to prepare in advance for a pandemic.
- It is likely that when a pandemic hits, necessary items will be in short-supply.
- Personal pandemic preparation will save lives!
  - Preparing now will reduce the negative impact a pandemic (or any type of emergency) will have on individuals, society, and our economy.
  - Centers for Disease Control estimates that up to 70% of pandemic deaths are preventable.
What are the steps of personal preparedness?

- Remember 3 key concepts:
  1) Stock Up
  2) Health Habits
  3) Plan Ahead
Stock Up

- Having extra supplies on hand will make it easier to stay at home for extended periods of time.

- Also, supplies will be readily available to you in your home as local stores may run out of supplies and shipments delayed.
## Stock Up: Food

- Ready-to-eat canned meats, fish, fruits, vegetables, beans, and soups
- Protein and/or fruit bars
- Dry cereal or granola
- Dried fruit
- Peanut butter and/or nuts
- Crackers
- Rice and noodles
- Canned or jarred baby food and formula
- Canned juices
- Bottled water
- Other non-perishable foods
- Pet food

*Stock up with food items that you normally eat so that you don’t have a dietary crisis on top of an emergency crisis.*

*Stock up for at least 2 weeks of food for the household.*
**Stock Up: Health Supplies**

- Prescription medications
  - Medicines for fever (ibuprofen, acetaminophen)
  - Anti-diarrheal medication
- Fluids with electrolytes
- Vitamins
- Thermometer
- Alcohol-based (60%-95%) hand wash and/or soap and water

- Glucose and blood pressure monitoring equipment (if needed)
- 100 surgical masks and 20 N95 respirators per household
- Latex gloves

*Remember to keep up-to-date medical histories for each member of the household.*
# Stock Up: Supplies

- Toilet paper
- Disposable Diapers (if needed)
- Feminine hygiene products (if needed)
- Tissues
- Cleansing agents/soap

- Portable radio (and batteries)
- Flashlights (and batteries)
- Garbage bags
- Manual can opener
- Games, DVDs, arts & crafts, activities for children
How do go about stocking up?

- Break the task down into stages
- Write down what you eat over a 2-week period
- Add a few extra items (food, health supplies, and other supplies) on each shopping trip
- Look for specials and bulk purchases
- Remember to add lunches for children who otherwise eat at school or daycare
- Quick Start for Stocking Up Food: buy rice, beans, noodles, soups...these items can stretch a family meal
- Rotate items so to keep your supplies refreshed.
What if I don’t have much storage space?

- Don’t have room for water storage, then invest in collapsible water containers, blow-up swimming pools, etc...you can fill these later when needed
- Stock up on condensed foods...dried foods take up less space than canned or boxed items
- Consider taking individually wrapped items out of their boxes (e.g. granola bars or protein bars)...the box that contains them simply takes more space
- Seal supplies in food grade buckets, new trash cans, or plastic bins...seal the lids with tape
Improve Health Habits Now

- Frequent hand washing, and coughing and sneezing into your sleeve or a tissue are still the best ways to stay healthy and prevent the spread of germs.

- Although people think they already do this, healthy habits are practiced less often than realized.

- Staying healthy with proper nutrition, exercise, and rest now will be beneficial when a pandemic occurs.

- Get a yearly flu shot.
Good Health Habits

- Wash hands thoroughly:
- Wet hands with warm running water.
- Scrub between fingers, on the backs of hands, and under nails for the amount of time it takes to sing the “Happy Birthday” song twice.
- Dry hands with paper towels or an electric hand dryer.
- Use a paper towel when you turn off the tap.
- If soap and water aren’t available, use alcohol-based disposable hand wipes or gel sanitizers, keeping hands wet for 10-15 seconds.

- Keep telephones, computers, and other frequently touched machines or equipment clean and regularly disinfected.
Good Health Habits

Hand Washing Etiquette

• Always wash your hands:
  ➢ after blowing your nose, coughing, or sneezing;
  ➢ after touching your eyes, nose, or mouth;
  ➢ after using the bathroom;
  ➢ after being near someone who is ill;
  ➢ after touching things handled by many people;
  ➢ before and after eating or drinking; and
  ➢ after handling garbage.
Good Health Habits

Cough and Sneeze Etiquette

- Never cough or sneeze into your bare hand. Cover your nose and mouth with a tissue to avoid spreading germs and then throw the tissue into the trash.

- Don’t have a tissue handy? Cough or sneeze into the bend of your arm. It may feel strange at first, but soon it will come naturally.

- Wash your hands as soon as possible after coughing or sneezing. Use alcohol-based hand gel, if soap and water are not available.
Additional Health Habits
When Pandemic Occurs

- Community Mitigation or Social Distancing is critical!
  - Limit contact with other people
  - Avoid crowds, individuals with flu-like illness, and other situations that may increase exposure
  - When necessary to be around other people, limit the amount of time and increase distance between you (a minimum of 6 feet between people)
  - This may help slow the spread of the disease
Plan Ahead

- Start planning for what you will do if:
  - children are dismissed from school
  - daycares close
  - eldercare services are suspended
  - public transportation is interrupted
  - a family member becomes sick and needs care
  - or other issues that may arise
Will we need to wear facemasks and respirators during a flu pandemic?

- If used correctly, facemasks and respirators may help prevent exposure to flu viruses and reduce the risk of becoming infected.
  - These should be used along with other preventive measures, such as frequent hand washing and covering coughs and sneezes.

- May 2007, the FDA approved the 3M Particulate Respirator (models 8612F and 8670F) “for use by the general public in public health medical emergencies”
  - Each household should have 20 respirators and 100 face masks
### What is the difference between a mask and a respirator?

<table>
<thead>
<tr>
<th>Mask</th>
<th>Respirator</th>
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<tbody>
<tr>
<td>• A barrier to protect from large droplets of body fluids</td>
<td>• Designed to reduce exposure to airborne contaminants</td>
</tr>
<tr>
<td>• Traps large particles of body fluids that may contain bacteria or viruses when they are expelled by the wearer</td>
<td>• Provide a tighter seal between the respirator's edge and the face</td>
</tr>
<tr>
<td>• <strong>NOT</strong> designed or certified to prevent the inhalation of small airborne contaminants</td>
<td>• Forces inhaled air to be pulled through the respirator's filter material</td>
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What is the correct way to wear a mask or respirator?

- Remove facial hair and jewelry from the mouth and nose
- Follow directions that come with the mask or respirator for the best fit
Where to get respirators, masks, and gloves?

- Appropriate N95 respirators, masks, and gloves are available at the University Bookstore.
Resources

- [http://health.uark.edu/pandemicflu](http://health.uark.edu/pandemicflu)
- [http://www.readymoms.org/](http://www.readymoms.org/)
If all else fails...

...follow the latest prevention recommendation...
...and don’t do this!