Empowering the Public in the Next Pandemic

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August 30, 2007
SIE: Social Innovation and Entrepreneurship

• Look for opportunities for innovation

• Bring worlds together

• Seek inspiration from the public and guidance from the experts
Saving Lives in the Next Pandemic

• Expert Partners

Public Health
Seattle & King County
HEALTHY PEOPLE. HEALTHY COMMUNITIES.

[Image] CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

• Passionate Students

• Public
Empowering the Public in the Next Pandemic: Summer 2007 Projects

• Innovative method to get people **prepared**

• Centralized source for official **local** information

• Understanding how people view their “**community**”

• Understanding the **technology** requirements for moving the pandemic hotline forward
Why is it so critical for people to be empowered throughout a pandemic?

• Unlike other disasters, a pandemic will be widespread.

• There may be no outside aid.

• Empowered people create resilient communities.
Resilient communities fight back.
How do you empower people during a time of emergency?

Give them the best information for protecting themselves and their families, and coping with changes in daily life.
What types of information do people need throughout a pandemic?

We let *people* tell *us*:

“What do I need to be stocking up on for the pandemic?”
“What can we do to prevent the spread of it?”
“What makes this flu different from the regular flu?”
“Where will there be food? Water?”
“Will there be electricity?”
“If you’re taking care of someone at home, what do you do?”
“Should I go to work? If so, what precautions should I take?”
“What area has it hit?”
Two of the types of information that emerged clearly:

• Information on **how to get prepared** for a pandemic

• **Local** Information
  – Official
  – Grassroots
The Challenge: To Get People **Prepared** for the Next Pandemic
So, people want information about how to get prepared…

…yet most people are not prepared for emergency situations.

Where are we losing them?
Barriers to Getting Prepared

• Same lecture, different topic
Barriers to Getting Prepared

• Same lecture, different topic
• Overwhelming, ambiguous tasks
• Information is not pre-digested or prioritized
• **Social Disruption May Be Widespread**
  - Plan for the possibility that usual services may be disrupted. These could include services provided by hospitals and other health care facilities, banks, stores, restaurants, government offices, and post offices.
  - Prepare backup plans in case public gatherings, such as volunteer meetings and worship services, are canceled.
  - Consider how to care for people with special needs in case the services they rely on are not available.

• **Being Able to Work May Be Difficult or Impossible**
  - Find out if you can work from home.
  - Ask your employer about how business will continue during a pandemic. (A Business Pandemic Influenza Planning Checklist is available at [www.pandemicflu.gov/plan/business/businesschecklist.html](http://www.pandemicflu.gov/plan/business/businesschecklist.html).)
  - Plan for the possible reduction or loss of income if you are unable to work or your place of employment is closed.
  - Check with your employer or union about leave policies.

• **Schools May Be Closed for an Extended Period of Time**
  - Help schools plan for pandemic influenza. Talk to the school nurse or the health center. Talk to your teachers, administrators, and parent-teacher organizations.
  - Plan home learning activities and exercises. Have materials, such as books, on hand. Also plan recreational activities that your children can do at home.
  - Consider childcare needs.

• **Transportation Services May Be Disrupted**
  - Think about how you can rely less on public transportation during a pandemic. For example, store food and other essential supplies so you can make fewer trips to the store.
  - Prepare backup plans for taking care of loved ones who are far away.
  - Consider other ways to get to work, or, if you can, work at home.
It gets worse.
Social Disruption May Be Widespread

Plan for the possibility that usual services may be disrupted. These could include services provided by hospitals and other health care facilities, banks, stores, restaurants, government offices, and post offices.

Prepare backup plans in case public gatherings, such as volunteer meetings and worship services, are canceled.

Consider how to care for people with special needs in case the services they rely on are not available.

Where do I start? What should I be doing now?

How long will this take?

But I can still go to hospital if I’m sick, right?

Who is at the most risk during a pandemic?

Who has the authority to cancel them?
Barriers to Getting Prepared

• Same lecture, different topic
• Overwhelming, ambiguous tasks
• Information is not pre-digested or prioritized
• People need to know “why”
Why would I need a blanket to protect myself against a virus?
Barriers to Getting Prepared

- Same lecture, different topic
- Overwhelming, ambiguous tasks
- Information is not pre-digested or prioritized
- People need to know “why”
- Tolerance for information increases with risk perception
So, now that we know what doesn’t work, how do we create something that does?
The Innovation:
An Internet viral epidemic to fight a real viral epidemic
The Story of Moveon.org

• Began with a one-line email with a very powerful message

• Sent out to less than 100 people

• Spread to half a million people in just a few weeks

• Now there are over 3 million members
Method Innovations

• Two levels of Preparation: Essential and Complete

• Preparation is organized by “mental models”
  – Transmission
  – Social Distancing
  – Home Care
  – Changes in Daily Life

• Actions to take and items to have

• Prioritization
Essential Preparation

You receive an email from your friend:

Hi __________,

I just spent about 15 minutes at the Pandemic Homepage and learned about a deadly new virus that could break out at any time and spread quickly around the world. They've got some really easy steps to take now to help protect yourself and your family. I've just taken them, and now I want to help you do the same.

Just click the link below to get started. The website is really helpful and easy to navigate, but if you need any help, feel free to email me back and I can help you figure out how to get prepared.

Take me to the Pandemic Homepage
The Pandemic Homepage

Welcome to Essential Preparation.

About three times every century, a deadly new flu virus breaks out, spreads quickly around the world, and causes a flu pandemic.

There is current concern about a virus circulating in Europe and Asia. The next pandemic may be closer to breaking out than you think.

How can you fight a deadly virus?

This section of the Pandemic Homepage, Essential Preparation, will show you. In about 15 minutes, you can take 5 simple steps that are critical to take now and may save your life.

In Essential Preparation you:

1. **Learn** what a pandemic is and how it will affect your life.
2. Take the **single-most important step** that may save your life.
3. Sign up to know when a pandemic is coming.
4. Spread the Pandemic Homepage to your friends, so they can start protecting themselves and their families.
5. Download simple checklists to see how ready you are now.

**Begin Essential Preparation!**
Welcome to Essential Preparation

Learn what a pandemic is and how it will affect your life.

New to Essential Preparation?
Click here to watch the 5-minute video.

OR

Read the Text Version of Video

☑️ I'm ready to go to Step 2!
2. **Buying Masks**: the single-most important step that may save your life.

A special mask can trap the virus before it has a chance to get into your body, or to infect people around you.

- Buying masks may be the most important step you can take to get prepared for a pandemic.
- Masks are not very expensive, and will be scarce during a pandemic. It is critical to get them ahead of time. They can be your insurance that you keep on a shelf until you need them during a pandemic.
- You will need special masks for different situations. Not just any type of mask will work.
- You need your masks to fit perfectly. One gap could be deadly.
- Download the 2-page Mask Guide, which will walk you through the special types of masks that will offer you the best protection in each situation, and where to find them. It will also walk you through the simple steps for how to store your masks until you need them.

[Download the Mask Guide Here.](#)

✔️ I'm ready to go to Step 3!
**The Pandemic Homepage**  
**Mask Guide**

Special masks that go over your nose and mouth can trap the virus before it has the chance to enter your body or infect others.

It is critical to buy these masks now, because they will be very scarce during a pandemic.

Some special masks are for you to wear to help you from catching virus, and other special masks are for others to wear when they are sick, so you can care for them more safely. The guide below shows which mask is recommended for each situation.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Recommended Mask</th>
</tr>
</thead>
</table>
| To keep from catching the virus when you are out in public or taking care of someone who is sick at home. | ![Elastomeric Mask](image1.jpg)  
An elastomeric mask may be your best option. You can wear it comfortably for extended periods of time, and it is reusable. This silicone mask costs $30, but it may be the inexpensive insurance that helps protects you from the virus. |
| For someone who is sick to wear, so you can care for them more safely.  | ![Surgical Mask](image2.jpg)  
A simple surgical mask will help to trap the virus when you cough, sneeze, or breathe out. They are inexpensive, disposable, and you can breathe comfortably while wearing one. |
Where to Get Them:

You can generally find surgical masks at pharmacies, and elastomeric masks are available at many hardware stores.

You can also visit the Pandemic Homepage, where there are links to places where you can buy these masks online.

http://xxx.xxx

How to Store Your Mask:

Once you get your masks, you can store them for when you need them. It is very important to keep them in a hard container so that they are not damaged while in storage.

Fitting Your Mask Perfectly is Critical.

It is very important to store your masks properly, because when you need to wear them during a pandemic, it is critical that they fit over your nose and mouth perfectly. One gap could be deadly. When you need to wear your mask, you can visit the Pandemic Homepage for detailed information on how to fit your mask just right.
3. Sign up to **know when a pandemic is coming**.

- Enter your **name** and **email address** below, and we will try our best to send you an email when the pandemic is much closer to breaking out. It is also important to pay attention to news updates.
- It will then be urgent to return to the **Pandemic Homepage** for the most up-to-date information, and to follow the **Pandemic Flu Preparation Guide** for **Complete Preparation**.
- **Enter a password** so you can keep track of where you are at in the preparation process, and how many people are getting prepared because of you.

```
Name (First, Last) [Text Box]
Email Address [Text Box]
Password [Text Box]
Confirm Password [Text Box]
```

Submit!

☑️ **I’m ready to go to step 4!**
4. Spread the Pandemic Homepage to Your Friends

The better prepared everyone is, the less severe the pandemic will be.

To tell your friends:

- Click on the link below to be taken to your own email account.

- You will then see a short email that you can edit as you like and send to your friends, urging them to visit the Pandemic Homepage.

- They can then start taking steps to protect themselves and their families during the next pandemic.

I want to tell my friends!

I'm ready to go to Step 5!
5. Download simple checklists to see **how ready you are now.**

- You have almost finished going through **Essential Preparation**, which has guided you through the steps that are very simple and urgent to do **ahead of time** to protect yourself and others during a pandemic.

- There are other steps that are also important to take before the pandemic breaks out that will help you to get more fully prepared. Many of these steps are very simple and may save your life during a pandemic.

- The **Complete Preparation Checklists** will guide you through these important steps to take to get more fully prepared. Download them now and either **put them on a shelf for later** or start **looking at them now**. You may find that you are already partly prepared, and can check off some of the steps.

  [Download the Complete Preparation Checklists Here.](#)

- The **Pandemic Homepage** has the most accurate, up-to-date information that will be a good resource to go with the checklists. Visit the **Complete Preparation section** when you are ready to get more fully prepared.

  - I'm ready to find out where to go from here!
Protecting Yourself and Others From the Virus: Checklist

To Know:

Young, old, and even healthy-looking people can spread the pandemic flu virus. You can catch the virus by:

- Breathing it in when someone exhales, coughs, or sneezes droplets containing the virus
- Getting the virus on your hands and touching your eyes, nose, mouth, or food

You can avoid from getting the virus by:

- Wearing a special kind of mask when in public or caring for those sick with the flu
- Washing your hands
- Not touching your eyes, nose, mouth, or food with unwashed hands

And you can keep from spreading it by keeping yourself healthy and learning to cough properly.

To Do:

☐ Adopt proper cough etiquette
  - Cough or sneeze into your elbow or sleeve
☐ Adopt proper handwashing technique
  - Wash for at least 20 seconds
☐ Avoid touching your eyes, nose, mouth, or food without washing your hands

To Have:

<table>
<thead>
<tr>
<th>Item (higher in list = higher priority)</th>
<th>Quantity/Person</th>
<th>Cost</th>
<th>Scarcity in Pandemic</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Elastomeric mask</td>
<td>1 mask</td>
<td>$30</td>
<td>Very scarce</td>
</tr>
<tr>
<td>☐ Soap</td>
<td>6 dispensers</td>
<td>$7</td>
<td></td>
</tr>
<tr>
<td>☐ Hand sanitizer</td>
<td>32 fl. oz.</td>
<td>$5</td>
<td>Scarce</td>
</tr>
<tr>
<td>☐ Paper towels</td>
<td>8 rolls</td>
<td>$5</td>
<td>Scarce</td>
</tr>
<tr>
<td>☐ Tissues</td>
<td>6 boxes</td>
<td>$5</td>
<td>Scarce</td>
</tr>
</tbody>
</table>

More information about the items above can be found at the Pandemic Homepage (http://xxx.xxx).
Welcome Back, John Smith!

Because of you, 118 people have started getting ready for the next flu pandemic!

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**Keep Track of How Prepared You Are**

**Essential Preparation**

1. Learn what a pandemic is
2. Take the most important step
3. Know when a pandemic is coming
4. Spread the Pandemic Homepage to friends
5. See how ready you are now.

**Complete Preparation**

1. Protect yourself and others from the virus
2. Avoid large gatherings of people
3. Learn how to care for someone sick at home
4. Cope with the changes in daily life
Complete Preparation

• People who are motivated can start now

• More urgent to do when the pandemic is closer to breaking out

• Helps you get more fully prepared

• Explains mental models in more detail
But this still leaves many of the people’s questions unanswered.

How do we bring people the **local** information they need to feel empowered?
The Need for **Local Information**
During a Pandemic
Official Local Information

• Officials will need to get out timely, local information to the public

• The public will need this information to feel empowered
San Carlos
Results 1-10 of about 20,745 for grocery store and near San Jose, CA
There must be an easier way.
Our goal: To directly connect the people with answers with the people who need them.
Information Providers

• Local Officials
  – Public Information Officers (PIOs)

• Essential Services
  – Food
  – Water
  – Power
  – Transportation
  – Law Enforcement
Insights from Talking with Information Providers

- Official local information will vary by:
  - How often it needs to be updated
  - Geographical level that it impacts
  - Importance

- The main connection between information providers and the public is the **media**

- A centralized source of local information would be convenient for information providers and the media
Your Local Pandemic Alerts

Most Critical Pandemic Announcements

- All CA public schools closed as of September 28.
- Firefighter shortage declared, CA Firefighters Union, 11 hours ago
- California Congress to take emergency recess, CA Congress, 9/26
- 27 confirmed cases of bird flu in SCC.
- Water main out on El Camino and University, PA WaterCo, 2 hours ago
- SJ police seek for pandemic volunteers, SJPD, 9 hours ago
- Rolling blackouts to start in SCC, SCP&G, 9/26
- SF Gate offers online ordering system, CAS & Agate, 9/26
- SFO, SJC flavours international passengers, FAA, 9/26

Can't find what you're looking for? Check out your community updates!
## Your Local Pandemic Alerts

### Most Critical Pandemic Announcements

- **Government**
  - All CA public schools closed as of September 26.
  - More restrictions during the pandemic.
  - Posted 4 hours ago by **CAGovernor**

- **Health**
  - 27 confirmed cases of bird flu in SCC.
  - Posted 9/24 by **SCCFHD**

### Government Announcements

- USA
- California
- Santa Clara County, Palo Alto

<table>
<thead>
<tr>
<th>Announcement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>All CA public schools closed as of September 26, CAGovernor.</td>
<td>4 hours ago</td>
</tr>
<tr>
<td>Firefighter shortage declared, CAFirefightersUnion.</td>
<td>11 hours ago</td>
</tr>
<tr>
<td>California Congress to take early recess. CACongress.</td>
<td>9/26</td>
</tr>
<tr>
<td>Trials delayed for immediate future across CA. CAlegalAssn.</td>
<td>9/24</td>
</tr>
</tbody>
</table>

### Health Announcements

- **SCCFHD closes rotating hospitals.**
- **SCCFHD, 12 minutes ago**
- Bay Area public health departments launch hotline. SAFHS, 7 hours ago
- Santa Clara County converts 6 hotels into Influenza Care Centers.
- **SCCFHD, 9/27**

### Local Services Announcement

- **Water**
  - Water main out on E.
  - **SCCFHD, 9/27**
- SJ police ask for patience.
- Rolling blackout to.
- CA national safety week.
- SFJIC quarantine international passengers. FAA, 9/27.

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Can’t find what you’re looking for? [Check out your community updates!](#)
Online Announcement Form

Title
All CA public schools closed as of September 28.

Jurisdiction
California

Select Importance

Full Article

Edit Automatic Summary
This summary will appear when people mouse over the headline. Enter a new summary, or let one be generated from the first two sentences of your article.

Upload photo
Optional: upload a photo to accompany your announcement.

Preview
Submit!
Online Announcement Form

5:02 PM, September 27, 2009

Title
All CA public schools closed as of September 28.

Jurisdiction
California

Select Importance
High

Full Article
As of tomorrow, all public schools across California, including K-12, community colleges, SCSU’s, and UC’s, will be closed to prevent further spread of the pandemic flu. It

Edit Automatic Summary
As of tomorrow, all public schools across California, including K-12, community colleges, SCSU’s, and UC’s, will be closed to prevent further spread of the pandemic flu. It

Upload photo

Preview
Submit!
Moving Forward

- Schools and faith-based organizations
- Technology is not complicated
- Need a major Internet company to host it
  - Capacity
  - Reliability
Grassroots Information

People need to stay connected to their communities throughout a pandemic.

But what does the idea of a “community” even mean to people?
Concept of a Community

• Most think locally, but not necessarily their neighbors

• Many turn to local organizations

• Younger people are connected to their schools

• Most would want to connect using Internet or phone
We’ve looked at some ways of using the Internet to keep people empowered during a pandemic. How do we design a pandemic hotline that will empower people as well?
The Pandemic Hotline: **Technology**
Required for Moving Forward
• A pandemic hotline will be a critical source of information during a pandemic.
  – Vulnerable populations
  – People who want to talk to another person
  – Problems with Internet

• A pandemic hotline could be set up on a county, regional, or national level.

• Current homesourcing technology allows calls to be routed to volunteers working safely from home.
Philip goes through e-training.
Elena calls the pandemic hotline.

- Self-service
  - Pre-recorded local information
- Routed to volunteer working from home
Philip uses the **Pandemic Homepage** or **Volunteer Handbook**.

- Chatrooms and online messaging
- Data collection
How do we make this happen?
How much will it cost?

• Critical to get design ahead of time

• It is not necessary to buy equipment ahead of time

• Pandemic hotline report outlines:
  – The companies that can do this
  – Advantages and disadvantages of companies
  – Cost estimates
Where do we go from here?

• Goal: Launch Pandemic Homepage by end of spring

• Build a team of students and advisors for the upcoming year
Special Thanks to:

Joy Alexiou
Laurel Anderson
James Apa
Janie Burkhart
Curtis L. Cobb III
Joe Cropley
Dr. Martin Fenstersheib
Chip Heath
Lisa Koonin
Meredith Li-Vollmer
Marta Lugo
Gwendolyn Mitchell
Rose Njiraini
Jim Rooney
Dorothy Teeter
Darlene Washington
Jim Wollbrinck
Diane Young
Final reports are available at:

http://sie-panflu.stanford.edu