Empowering the Public in the Next Pandemic

Overcoming Barriers to Public Preparation

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The Challenge: People Do Not Get Prepared for Emergency Situations

Even though most people have been informed many times about what they "should" be doing to get prepared for an emergency such as an earthquake or other natural disaster, very few people feel motivated enough to take the next step of actually getting themselves and their families prepared. For example, out of the various employees we talked with at Stanford University, located in the heart of earthquake country, only one was fully prepared for an earthquake, while the more common response was a look of guilt and a shy confession of being unprepared, as if we were their parents catching them sneaking out of the house. What is causing this general sense of apathy? For one, it seems as if people have heard the same message to get prepared for so many different things – earthquakes, hurricanes, Y2K – that by now it is difficult to really have a sense of urgency for any at all. Besides, if someone has been fine without getting prepared for this long, it doesn't seem necessary to suddenly be concerned about a threat he or she has never seen.

Our Goal: To Get People Prepared for the Next Pandemic

To gain greater insight into the types of information people would want during a pandemic, we guided volunteers at a commuter train station and nearby bus stop through pandemic scenarios, describing aspects of the pandemic such as school closings, restrictions on public gatherings, overwhelmed hospitals, tap water that is not potable, and a push for the public to get prepared. While we put them in these contexts, we asked them at several points what questions they would have, in order to better understand their concerns, as well as other emergencies or situations they associated the pandemic with. For example, did these scenarios remind people more of an earthquake or a war?

After talking with several people and compiling a list of nearly a hundred questions that they had, it was clear that they were very concerned about how to get prepared for a pandemic. Although this was not inherently surprising, this simple insight gave us compelling motivation to develop an effective way to get people motivated to actually get prepared. If it was not a matter of people not being interested in getting prepared, there had to be some barriers that we needed to better understand in order to turn getting prepared from another chore that people avoid with guilt, into a simple experience that people can feel good about.

We were also able to gain a better understanding of how people viewed the pandemic and what other emergency situations it evoked. When people imagined themselves dealing with the challenges that we described, we noticed that they reacted with a fear that seemed to be more closely associated with bioterrorism or a foreign invasion, rather than a natural disaster such as an earthquake or hurricane. People were surprised by the scenarios we described, and often struggled to relate the idea of a pandemic to something
that was more familiar to them. What was also important to note was that this mental distinction between the pandemic and more "common" emergency situations seemed to effectively hold people's attention.

Once we had an initial idea of how uniquely the pandemic resonated with people, as well as the types of information that would help them feel supported during a pandemic, we wanted to dive more deeply into the looming question of what was keeping people from getting prepared. The people we talked with had seemed so intrigued by the scenarios that we had guided them through. Their fear had many times physically crossed their faces, and they had seemed relieved by the idea of a means to get prepared. Yet the general public is not prepared for a pandemic, despite the fact that information currently exists to guide them. Where are we losing them?

To begin to understand what the barriers are that keep people from getting prepared, we conducted a second round of testing, this time putting Stanford University employees in similar pandemic scenarios and having them look through preparation information from leading organizations in the field of pandemic planning such as the Centers for Disease Control and Prevention (CDC), the American Red Cross, Santa Clara County Public Health Department, and the Seattle-King County Department of Public Health. The scenarios themselves were challenging to create, as we had to find the right balance between not sounding like another public health scare and relating the severity of the situation. However, each test gave us new insight, and we finally got to the point where the scenarios seemed to resonate with people. Our goal was to then gain empathy for how people felt when they went through the information that was supposed to help them deal with these scenarios. We listened to their feedback and reactions, and carefully studied their faces and body language in order to understand even the subconscious ways in which people approach the idea of getting prepared. We thought if we could understand the barriers that exist between receiving information and taking action, we could use these insights to drive our innovation process for a new preparation method.

**Barriers to Getting Prepared**

From this testing, we gained several insights into the barriers that prevent people from taking the mental and physical leap from knowing what they should do to actually feeling motivated and empowered to do it:

**Even though the idea of a pandemic is very unique and intriguing to them, the current information for getting prepared reminds them of the lecture they have heard for every other disaster.** From our first two rounds of testing, we noticed that for the most part, people paid close attention to the pandemic scenarios we described. The scenarios were unexpected, and as people imagined themselves needing to care for someone who is sick at home or not being able to drink the water coming out of their taps, the need for a guiding source of information became urgent. Yet, when we showed people the information that currently exists, it completely deflated their heightened state of alarm, and brought them back into the mindset of earthquakes, hurricanes, and other disasters they feel guilty about not preparing for. It did not take long for people to glaze...
People need to have a clear picture in their minds of what a pandemic is and how it will impact their lives. They need to understand the "why" behind everything they do to prepare. Before people are willing to actually take the steps to get prepared, it is important for them to be able to clearly understand what a pandemic is, what it will look like, and how it will affect their daily lives. Painting this picture for them allows them to understand the “why” behind what they are doing, and thus they feel less like they are being lectured and more like they are being guided by a trusted source. For example, the leading pandemic sources of information recommend having a flashlight and batteries to get prepared. If you know nothing about the pandemic however, it may not make sense to need a flashlight to protect yourself from the virus. However, once you understand that the pandemic may cause a significant portion of the workforce to be sick and unable to work, therefore causing potential problems with electricity, having a flashlight then seems like a sensible and important step.

People are more motivated to get prepared and absorb more information when they perceive a greater and more imminent risk. When people reviewed the existing preparedness information, they generally found most of it informative, but explained that they would really only go through the lengthy, detailed information when there was a critical need for in-depth information, such as if they knew someone was who sick. While the perceived risk is low, like now when a pandemic is not imminent, people generally lack the motivation to read lengthy piles of information or take great steps to get prepared.

People respond well to simple, concrete tasks that they feel are reasonable for them to do. In order for people to feel motivated to get prepared, they must first feel that what they are instructed to do is practical and not so ambiguous or overwhelming that they don't know where to begin. For example, a leading source of information about preparing for a pandemic informs you that you should, "Help schools plan for a pandemic influenza. Talk to the school nurse or the health center. Talk to your teachers, administrators, and parent-teacher organizations." What exactly do you talk to them about? Who is most important to talk to first? How long is this going to take? The guidance is unclear and leaves people feeling overwhelmed, so they simply tune it out.

People need the preparation measures to be pre-digested and prioritized for them. People do not want to spend a great amount of time going through lists, trying to figure out on their own how they should spend their limited time and money getting prepared. From a public health perspective, it makes sense to give people all the information they need and all the measures that are important to take at once, but the average person wants to know what is important to do now, and what will be important to do later.

People are not empowered to act if they feel like they are being lectured or patronized. The tone in which preparation education and instruction is presented is extremely important. It became clear very quickly that people do not respond well if they
feel like someone is nagging at them, lecturing them, or patronizing them. It is very easy to turn people away from important information simply by making it sound like they "should" be doing this and that and are irresponsible if they don't.

**People are not pandemic experts.** Preparation information must be presented in a way that is easy for someone who knows nothing about the pandemic to understand. Information should use simple language, avoiding pandemic jargon that experts may find interesting but only cause the public to glaze over. Even more important, the ideas presented must be simple and concrete themselves. For example, a leading source of pandemic information explains in the overview of preparation designed for "individuals" and "families" that, "Community strategies that delay or reduce the impact of a pandemic (also called non-pharmaceutical interventions) may help reduce the spread of disease until a vaccine is available." While this is true, this idea is very abstract, and does not paint a clear picture in a reader's mind. In addition, from our testing with the public, we can safely say that many people would tune out at the word "pandemic," and even if they made it past that point, there is little hope for them getting past, "non-pharmaceutical interventions."

**People need to feel that the preparation advice is applicable to them.** Although it is impossible to create preparation materials tailored to every person individually, preparation measures need to recognize individual differences, such as in diet and habits. Instead of listing highly specific foods on a preparation checklist for example, broader categories seem to be more effective, with examples that people can choose from. For example, one of the leading preparation checklist lists "yeast" as something to stock up on to prepare for a pandemic, but this just did not resonate with the middle-aged bachelor we talked with. In fact, it seemed to make the checklist as a whole lose all meaning for him. However, people did respond much more positively to broader categories of food to stock up on, which had subsequent examples and details. A person can visualize themselves going to the grocery store and adding an extra can of beans or fruit to their cart. It is much harder for a person to visualize themselves getting a bag of yeast if they would not even know what to do with it.

With these insights in mind, we have designed a simple and effective method of getting people prepared for the next pandemic. This method incorporates several innovative ideas, all inspired by testing with the public, that distinguish it from other current methods. While our method is still just a prototype and will need to be further tested and improved, it is already at a place where it is starting to resonate with people, and make them feel empowered rather than overwhelmed.
An Internet Viral Epidemic to Fight a Real Viral Epidemic

Method Innovations

We are creating an Internet viral epidemic to fight a real viral epidemic. In designing an innovative method for getting people prepared, we had to consider the best method for spreading the word of our preparation method. With people being constantly bombarded by news, advertisements, and entertainment, we wanted to spread this information to people through a source that was trusted across a diversity of ages, cultures, and communities. Rather than attempting to find one ultimate source, we decided to look at viral marketing, which employs the power of a source which may have the most credibility of all – friends.

There are many examples of widespread trends or successful movements that started with just a small group of people and gained momentum by word of mouth or friends passing information to each other. We hope that if we can create an effective preparation method that is simple and resonates with people, they will be excited about sharing this information with people they know, especially if there is also an easy way to do this. In this way, we can create an epidemic of preparation.

The process for getting prepared is broken up into two levels, Essential Preparation and Complete Preparation. As we found through testing, people are not motivated to take many measures to get prepared for a pandemic when the threat of a pandemic is not imminent. However, certain steps in the preparation process may be very important to do far ahead of time, such as getting masks that may be scarce once the pandemic breaks out. The first part of our method is thus Essential Preparation, which guides people through five very simple steps that are cost-effective and important to do now, before the pandemic has broken out. It also gives them a very easy method of spreading the pandemic homepage to their friends, so that they can start taking steps to protect themselves and their families as well. Once people have gone through Essential Preparation, they then have the option of immediately going through Complete Preparation, which will guide them through the process for getting more fully prepared, but it is more urgent for them to do so when the pandemic is closer to breaking out. From a public health perspective, it makes sense to urge people to go through all the steps of preparation at once, especially since experts know that people may not have much time to get prepared once the pandemic has broken out. However, by making it simple for them to take the high-priority steps now, people feel good that they are doing the most important things now in a short amount of time, and they become invested in the idea of preparation. If we give them everything to do now, we risk losing them completely.

Preparedness measures are organized by "mental models." We have found that in order for people to feel motivated to get prepared, they need to understand why they are doing what they are instructed. Thus, we present the preparation information in our method by explaining four mental models – key aspects of the pandemic that help people
to understand and visualize it – and then follow these educational pieces with associated preparedness measures. Using mental models as an organization method breaks pandemic preparedness into accessible and logical parts, and accentuates unique features of the pandemic, helping to distinguish it from other disasters and the associated preparedness information that many people already feel saturated with. We feel that this method will be less overwhelming for people not only because it has been divided into sections that people can better psychologically manage, but also because many of the key measures are relatively easy and can leave people with a sense of accomplishment, without asking a lot of them.

The four mental models break the pandemic into the following main ideas:

1. How the virus is transmitted
2. Social distancing
3. Home care
4. How daily life will change

The preparation measures for transmission and home care in particular are deliberately very simple, so that people can feel good about getting prepared for these critical aspects of the pandemic without becoming overwhelmed. The more standard preparation measures, such as long checklists with more general emergency supplies, which people seem to have been conditioned to ignore, have been separated out to the end of the preparation process. Then we incorporate the idea that these measures will also get you prepared for more emergency situations than just a pandemic, such as an earthquake or hurricane.

Each section of preparedness measures includes actions to take as well as things to have. For each mental model, it is important to know what to do as well as what to buy to get prepared, so that people can feel empowered by the knowledge that simple actions can make a big difference in keeping themselves and their families safe. Some actions require a fair amount of planning ahead, such as those to prepare for social distancing measures, but hopefully will seem much more manageable if they are concrete and people have a good understanding of why they are important.

Preparedness measures are prioritized so that people do not have to guess at what order they should be doing or buying things in. In this preparation method, measures are organized with a clear sense of priority. This allows people to feel that the information has already been digested for them, and they can feel empowered by the fact that there are things that are really important to do now, and other things that are less urgent. This allows people to more wisely allocate their limited time and resources.

**Essential Preparation**

The following usage scenario describes what the experience of Essential Preparation would look like as we currently envision it.
We are currently in Phase 3 of the World Health Organization (WHO) pandemic alert. A person gets an email from her friend encouraging her to go to a website and spend about 15 minutes learning about the pandemic and how she can begin to get prepared. People do not have much time to sort through which emails are worthwhile and which are junk mail. Therefore, it is critical that we give people the main idea in the email immediately. Through our conversations with people, we have also found that it is very important to give the email a friendly tone, so that people can distinguish it from the various scripted emails they receive and tend to tune out. Thus far, the emails that we have developed have not been particularly effective, but we hope that further testing will help us to develop succinct, powerful emails that resonate with people. We can then actually send these different versions out to people to see which versions are effective.

A link from the email brings her to the Essential Preparation page of the overarching Pandemic Homepage. This page explains at a very high level what a pandemic is, and that the next one may be closer to breaking out than she thinks. It also explains that Essential Preparation will walk her through five simple steps that are critical to do before a pandemic breaks out, and gives her an idea of what the five steps will entail. By bringing her to this page first, she is introduced to the idea that Essential Preparation is a small part of the much larger Pandemic Homepage that can serve as her guide to pandemic information throughout the pandemic.

She then clicks the link to begin Essential Preparation.

Step 1: She is brought to the first page of Essential Preparation, where she watches a five-minute video that explains what a pandemic is, and introduces the key concepts that she needs to know in order to concretely understand how she may be affected. This video explains in more detail what a pandemic is, and introduces the four mental models at a high level, so she has a more concrete understanding of how the pandemic will affect her life.

Step 2: She is instructed to buy masks. Having people buy special masks before anything else is strategic for several reasons. First, once the pandemic actually breaks out, there will be a high demand for these masks and they will be extremely hard to find. Producers will not be able to meet this sudden increase in demand. If we can spread the demand out however, this will ensure that more people can have them, and there will be less chaos once the pandemic breaks out. Also, getting special types of masks for different situations is an extremely concrete task that is not very difficult and does not cost much money, but it really helps to paint the picture of the pandemic in a person's mind and differentiate it from other emergency situations. People can view these special masks as their inexpensive insurance that may keep them healthy during the pandemic.

People are also instructed to download a two-page Mask Guide, which describe the different situations in which a person will need a mask, and the mask that we recommend for each situation. These current recommendations are based on our preliminary conversations with experts in the field, and are in accordance with the CDC’s 2007
Step 3: She is prompted to enter her email address so that she can receive an email alert when the pandemic is closer to breaking out. Many people are wary of signing up for email lists that will then flood their inboxes. We thus attempt to differentiate ourselves by only sending one email, when the pandemic is imminent. She can also enter a password so that she can log in to the Pandemic Homepage when she returns, and keep track of where she is in the preparation process, and how many people are getting prepared because of her.

Step 4: She is prompted to click a link that will take her to her own email account. There, she will find a short email that automatically appears, which she can edit as she likes and send to her friends. An essential aspect of this innovation is spreading the word to others so that they can start to take the critical steps for protecting themselves and their families. The more people that are prepared, the more we may be able to mitigate the impacts of the pandemic and keep individuals empowered and communities resilient.

Step 5: Finally, she is encouraged to download four simple checklists that correspond to the four mental models, which will help her to get more fully prepared. She can either start going through these now, or choose to keep them on her shelf for later. Already from our testing, we have found that while some people like to get prepared one piece at a time, there are some people who will prefer to do everything at once. Thus, this step accommodates multiple levels of motivation to get prepared. People are also encouraged to look at the checklists to see how prepared they may already be. They may be surprised to find that they can check many things off the list, especially relating to transmission and home care.

Essential Preparation Prototype

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!
VIDEO:

There is current concern about a very serious, deadly virus that can spread quickly around the world, but if you take some very simple steps now, you can protect yourself and your family.

Each year, usually during the winter, we are used to the flu going around, especially in schools and workplaces. In fact, it has become such a regular part of the year that we have even named it "flu season." But what would happen if suddenly people around you of all ages who caught the flu were completely healthy in the morning and dead by that night? What if this was happening all across the world at the same time? What if instead of "flu season" this went on for a "flu year"? Or even a year and a half?

In 1918, this was the reality that people around the world faced when a new type of flu virus broke out, leading to what we call a flu pandemic. It went on for a grueling 18 months, but in just this time it killed about 500,000 people in the United States alone. The fall was an especially deadly time, and in just the month of October almost 200,000 Americans died. Think back to where you were and what you were doing when you first found out about the tragedy of the September 11th attacks. Think about the lives you mourned with the rest of the country. Now imagine this happening every day, twice a day, for an entire month, and you can begin to understand the devastation that this flu virus caused.

Could this ever happen again? The answer is yes. In fact, there have been two more flu pandemics since 1918, in 1957 and 1968. While these pandemics were less deadly than the one in 1918, they show us that these outbreaks are not just an interesting history lesson, but events that repeat themselves, and will happen again. Although no one can know for certain when one will happen again, the next pandemic may be closer to breaking out than you think. This website will serve as your guide to help you understand what a flu pandemic is, what the next one may look like, and how you can take very simple steps now to protect yourself and your family.

A flu pandemic is an outbreak of a new type of flu virus that spreads rapidly from one country to another. The new virus affects only birds or animals at first, but gradually changes to affect people as well. A pandemic begins when the new flu virus is easily passed from person to person. Because the pandemic is caused by a new type of flu virus, people would have no immunity to it and no vaccine would exist to prevent it. It would take months to develop and produce a vaccine that works against a new pandemic flu virus. Because of this – and because people would have no immunity – a new flu virus would spread rapidly. Hundreds of thousands in our country could get sick, and many could die.¹

¹ This paragraph and the next have been taken from the following source and modified slightly, since we feel it is a good example of using simple language to convey a complicated idea: Washington State Department of Public Health. Preparing for Pandemic Influenza.
Currently, health officials are concerned about the avian flu virus in Asia and Europe, because it could change and spread easily from person to person. This could lead to a pandemic flu that is as bad as – or worse than – 1918. Far more people travel today than in the past, which makes it easier for diseases to spread quickly around the world. A flu outbreak in another country may be just an airplane ride away from the United States.

Until a vaccine is developed, education and taking some simple steps to protect yourself and your family are the best ways to stay safe during a pandemic. Now that you have a better understanding of what a flu pandemic is, here are four things to know about what a flu pandemic will actually look like and how it will affect your daily life. First, you can catch the flu virus primarily by being close to someone who is sick and breathing in droplets they breathe out, even if they look completely healthy. Fortunately, simple steps can keep you from catching it or spreading it. Second, to keep people from spreading the virus to each other, many places where large groups of people come together, such as schools, houses of worship, and sporting events will be closed, and many people may have to work from home. Third, with a large proportion of people getting sick in the United States during a pandemic, hospitals, clinics, and doctors' offices will become overwhelmed very quickly, and critically ill people will have to be cared for at home. Fortunately, some simple techniques can help save their lives. Finally, with so many people sick and unable to go into work during a pandemic, there may be disruptions in daily life such as interruptions in electricity, tap water being unsafe to drink, and shortages of food.

The rest of this website will help you to understand these ideas in more detail, and will guide you through the steps, many of which are very simple, that may actually save your life.
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 you which mask is recommended for each situation.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Recommended Mask</th>
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<tbody>
<tr>
<td>To keep from catching the virus when you are out in public or taking care of someone who is sick at home.</td>
<td><img src="image" alt="Elastomeric Mask" /> An <em>elastomeric mask</em> 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.</td>
</tr>
<tr>
<td>For someone who is sick to wear, so you can care for them more safely.</td>
<td><img src="image" alt="Surgical Mask" /> A simple <em>surgical mask</em> 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.</td>
</tr>
</tbody>
</table>
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.

![Form]

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></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).
The following designs are our current prototypes for features that have appealed to people throughout our testing process. People appreciated the ability to keep track of where they are in the preparation process, and also thought it would be interesting to see how many people were getting prepared because of them. We think this latter feature may be a fun incentive for people to pass the email along to their friends, and is technologically simple to include in a viral marketing design.
Complete Preparation

The following usage scenario describes what the experience of Complete Preparation would look like as we currently envision it.

The WHO has just announced that we are in WHO Phase 4 of pandemic alert, and it appears that a pandemic is imminent. A person now receives an email alerting her about this news and prompts her to go back to the Pandemic Homepage.

Step 1: She visits the website again, and watches a new five-minute introductory video, updated to explain the more immediate urgency of the pandemic.

Step 2: She is then prompted to go through the Complete Preparation section of the Pandemic Homepage, which will guide her through the mental models (included below) in more detail, and urge her to fully go through the corresponding preparation measures.

Step 3: She is once again prompted to click a link that will take her to own email account and spread a short email to her friends, encouraging them with a heightened sense of urgency to visit the Pandemic Homepage to begin the preparation process.

Mental Models

Mental Model 1: How the Virus Spreads from Person to Person

You can catch the virus primarily by being close to someone who is sick and breathing in what they breathe out, even if they look completely healthy. Fortunately, simple steps can keep you from catching it or spreading it.

Think back through your day so far and try to remember every time you’ve come close to another person. Did you use public transportation to get to work or school this morning? Did you stop to have a conversation with any of your family, friends or coworkers? Did you shake anybody’s hand in greeting? If any of these people around you were sick with pandemic flu, they could have easily spread the virus to you during these regular, day-to-day actions. What makes this especially dangerous is that they could have looked completely healthy when they gave it to you. Once you have caught it, you can also spread the virus to other people without even knowing that you are sick. By the time you’re starting to show signs of being sick a day later, the damage has already been done; these people are already spreading it to others without knowing it themselves. In this way, pandemic flu is able to spread very rapidly to many people.

Pandemic flu is very easy for anyone to catch and spread, especially since a person can be passing it to other people for a full day before they start to show signs of being sick, and for another several days after they do show signs. When someone who is sick
coughs or sneezes, droplets containing the virus go into the air and fall to the ground. If you are close to this person, you can catch the virus just by breathing the droplets in. You can also become infected if you touch their hand or a surface where the virus has landed and then touch your eyes, nose, or mouth.

Fortunately, there are simple steps that you can take to keep you from catching the virus or spreading it. How can you protect yourself from infection, given that you can't stop breathing? The best way to protect yourself from breathing in droplets from the air is to cover your nose and mouth with a mask. A mask can defend you by trapping the droplets before they have a chance to get into your body. Since not just any mask will work, this website will guide you on the best types to use and how to wear them so that they give you the best protection possible.

Another very simple action that you can take to reduce the spread of the flu is learning a way to cough or sneeze that won't spread droplets to other people as easily. If you are infected and you cough or sneeze into your hand and then touch a doorknob, another person can get the virus on her own hand just by touching the doorknob after you. Or, you could just as easily get the virus on your own hands by touching a doorknob that someone who is sick has touched. Then, if you touch your eyes, nose or mouth, or touch food before you eat it, you can get the virus inside you and become sick. This website will help you develop simple habits for coughing and sneezing to keep you from spreading the virus from others, as well as for washing your hands as well as keeping your hands away from your nose, eyes, and mouth to protect you from catching the virus yourself.

Mental Model 2: Why It is Important to Avoid Large Groups of People

To keep people from spreading the virus to each other, many places where large groups of people come together, such as schools, houses of worship, and sporting events will be closed, and many people may have to work from home.

Now that you know how the virus is passed from person to person, imagine a student going to school, like any other day. The only difference today is that she is sick with the pandemic flu virus and doesn't know it. She goes into her classroom and sits down at her desk as usual, spreading the virus from her hands onto the desk, which could then be picked up by the next student who sits there. She coughs without covering her mouth, spreading the virus into the air. She passes a pencil – and the virus – to her friend. The people sitting close to her inhale the virus that she breathes out. Before the end of the period, she may have spread the virus to many of her classmates, who can go on to spread the virus to others, such as other classmates or their families when they go home at the end of the day. Think about how many people the virus can infect just because a student went to school, like any other day.

Since it is so easy for people to spread the virus to each other, sometimes without even knowing it, many places where large groups of people come together may be closed during a pandemic. Some of the first places to close may be schools, since they bring so
Many students, teachers and other people who work at the school together into a small space, who then can leave the school and spread the flu in their communities. This website will help families to learn the policies of their schools and make plans ahead of time for when schools are closed and children are at home during the day. These measures for getting prepared are more urgent to do once the pandemic is closer to actually breaking out, but you can either get started early now or keep this guide on the shelf and feel good that it will be there when you need it.

Many people may also have to find a way to work from home, so that they can take care of their children that are home from school or to keep from spreading the virus at work. Coming up with a plan to work from home will also take some planning ahead, and is unfortunately not quite as simple as learning how to wash your hands properly. However, this website can guide you on techniques and strategies for working from home that may help you to develop a plan. It may be easier to start planning now than it will be when the pandemic actually hits, and people are confused and panicking, but again, this will be more critical to do once the pandemic is closer to breaking out.

In addition to planning for schools closing and the possibility of working from home, it is important to know that many public events and public gatherings may be canceled or put on hold, and places where many people come together may be closed, such as houses of worship, sporting events, and theaters. Even things many of us depend on from day to day may change, for example public transportation routes and times may be limited. Many of these places and parts of our lives are very important to us, and it is hard to imagine not having them in our routine. However, staying away from large groups of people is one of the best and most basic measures you can take to keep yourself and others healthy.

Mental Model 3: Taking Care of Someone who is Sick at Home

With a large proportion of people getting sick in the United States during a pandemic, hospitals, clinics, and doctors' offices will become overwhelmed very quickly, and critically ill people will have to be cared for at home. Fortunately, some simple techniques can help save their lives.

Imagine yourself lying in your bed. Your head is burning, and your whole body is hot and sweating from a high fever. Your chest hurts from coughing and sneezing. You try to get up to get some water, but your whole body aches to even move a little. It hurts even to open your eyes. What would you do? One of your first thoughts is probably to call your doctor, or go to a local hospital or clinic for help. However, you feel so sick that you think this might be an emergency, and decide to call 911. After ringing and ringing, a woman answers the phone, and you feel very relieved. You describe how you are feeling and that you would like to be taken to a hospital right away. The woman says she is very sorry, but explains clearly that you need to stay at home, and if you go to a hospital now, you will only be turned away. There will just be too many people who are all infected with the same virus at the same time. But how can you be expected to fight this on your own?
Our medical system is not prepared to care for the number of people that may become sick during the next pandemic. Estimates of the number of people sick during a pandemic show that there may be over 75 times the number of people sick than hospital beds. If you also consider the people who will need hospital beds because of other illnesses, injuries, etc. as well as the health care workers who will become sick themselves, it becomes clear that there may be just too many people who are sick and not enough resources to care for them all. Although not everyone will be getting sick at the same time, hospitals, clinics and doctors’ offices will become overwhelmed very quickly. People may be fighting to get care, but these places may be forced to turn people away, and critically ill people will have to be cared for at home. You may suddenly find yourself needing to take care of a sick family member, or even needing to take care of yourself.

Fortunately, there are some simple techniques that you can learn to help save their lives. One of the most important ways to care for someone in your household who is sick is to make sure that they are hydrated, and do not lose too much of the fluid and salts that keep your body healthy. It is very simple to make a rehydration solution, and can be done with materials you might already have around your house. This website will walk you through the recipe, and will also guide you on the other simple actions that you can take, and the items that you will need, to keep your family safe and healthy.

Mental Model 4: How Daily Life Will Change

With so many people sick and unable to go into work during a pandemic, there may be disruptions in daily life such as interruptions in electricity, tap water being unsafe to drink, and shortages of food.

Think back to the last time you ate a slice of bread. Maybe you buttered toast for breakfast this morning or had a sandwich for lunch. Did you stop to think about what it takes for the bread to arrive on your counter? What allows there to be bread on the shelf at the store when you need it? The answer is people. People are at every step of the way: They supplied the flour to make the bread, they baked the bread, packaged the bread, shipped the bread, delivered the bread to the store, and put the bread on the shelf. During a pandemic however, 40% of the people at each step may be sick and unable to go to work. With so many people gone, these steps may be disrupted and bread may be harder to get when you want it. The same is true for other services and supplies. There may be interruptions in electricity, tap water may be unsafe to drink, and there may be shortages of many other foods.

It may seem overwhelming to imagine your daily life changing in ways you probably had never thought about, but there are steps you can take so that these changes will not be as hard to get used to during a pandemic. These steps will be more critical to take once the pandemic gets closer to actually breaking out, so you may just want to have this guide on the shelf for when you need it. However, getting prepared ahead of time may be actually safer and simpler. By taking steps to prepare for these changes now, you can avoid the chaos that may break out once the pandemic hits, with people panicking and trying to get
all their supplies at the same time. While these large crowds of people are desperately trying to get prepared, possibly spreading the virus to each other without knowing it, you will be ready with the supplies you will need to protect yourself and your family.

These steps to getting prepared will take more time and planning, but you can feel good that you've already learned the very simple ways to keep from spreading the virus and how to take care of someone who is sick at home. While it is good to get prepared for power outages and shortages of supplies, keeping yourself and your family safe are much more critical. However, getting prepared for changes in daily life may not be as hard as you have imagined. This website will walk you through all the best actions to take and supplies to have, and you may find that you are already prepared some of the way without even realizing it. Plus, one of the best things about getting prepared for changes in daily life during a pandemic is that you will also be getting prepared for other emergencies at the same time, such as earthquakes, hurricanes, or blizzards.

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Sources
