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COMMENTARY

Pandemics: good hygiene is not enough

The US government is doing well to communicate uncertainty over swine flu. It must also help the public to visualize what a bad pandemic might be like, says Peter M. Sandman.

y the time you read this, the outbreak of H1N1 'swine flu' may no longer seem to be a worldwide threat and the disease may have receded from the headlines. As the initial fuss dies down, public-health experts will remain on high alert, but the media and public will move on to something else, muttering about fear-mongering.

And whatever the situation is like now, it won't be the end of the story. A mutated virus (more virulent or transmissible or resistant to drugs) could appear a few months later.

As a risk-communication professional, I have been watching the US government walk a tightrope between over-reassurance and overalarm about a swine-flu outbreak that could easily turn out to be devastating, relatively mild or anywhere in between. The United States hasn't issued false reassurances that they will keep the pandemic from 'our' shores — a temptation to which dozens of governments have succumbed. Here I will show what else I think the country is doing right — and wrong.

The US Centers for Disease Control and Prevention (CDC) is doing a superb job of explaining the current situation and how uncertain it is. The reiteration of uncertainty and what that means — advice may change; local strategies may differ — has been unprecedentedly good.

The CDC's biggest failure is in not doing enough to help people visualize what a bad pandemic might be like so they can understand and start preparing for the worst.

For the ordinary citizen, the US government

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of describing the worst case

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prepare for that?"

has so far recommended only hygiene. It has told people to stay at home if they are sick and to wash their hands. It hasn't told people to stock up on food, water, prescription

medicines or other key supplies. Two years ago in response to 'bird flu' worries, Mike Leavitt, the then US secretary of health and human services (HHS), was criss-crossing the country with that advice (www.pandemicflu.gov). Today, CDC officials won't say whether it is still good advice. It is.

Richard Besser, the acting director of the CDC, isn't understating the risk. He says he is "very concerned", but expresses his concern with a soothing bedside manner. He doesn't have



Hygiene is useful, but getting ready for a pandemic also requires stocking up on key supplies.

that rumpled, exhausted emergency-manager look that the Nuclear Regulatory Commission's Harold Denton perfected in the 1979 Three Mile Island crisis. Denton left people feeling that the risk was serious and that they were in good hands. Besser says it is serious but leaves us feeling that he doesn't want us to worry much.

Still, I don't fault Besser for looking and sounding reassuring. Good crisis communication means saying alarming things in a calm tone, and he is doing exactly that.

The problem is that he isn't giving us any-

thing to do except being hygienic. He keeps telling us, accurately, that the CDC is being aggressive in its response to the outbreak. But he is not asking the public to take further action. He

needs to urge citizens, schools, hospitals and local governments to follow Leavitt's advice.

Instead, we have a surreal situation in which the federal government has released one-quarter of the Strategic National Stockpile of antiviral drugs, so there will be enough oseltamivir (Tamiflu) to deploy to millions of sick Americans. But it hasn't yet asked those Americans to stock up on tinned fruit and peanut butter.

We've been here before. In 2005, the pandemic influenza threat came from avian

H5N1. The CDC and HHS were similarly § convinced that the risk was serious, similarly committed to aggressive preparatory action — that's why we have that Strategic National Stockpile — and similarly disinclined to alarm the public. The feeling was that people had \square been alarmed enough by the 11 September \pm 2001 terrorist attacks and the wars in Afghanistan and Iraq, and that the government had exhausted its quota of scary utterances. There \vec{a} is much the same feeling today about the economic meltdown.

I was in the minority then, as I am now, urging officials to involve the public in pandemic-preparedness efforts. In early 2005 my recommendations fell largely on deaf ears.

Don't panic!

That summer, President George W. Bush read about the 1918 pandemic in John Barry's The Great Influenza. Then Hurricane Katrina hit New Orleans. The two together convinced the White House that raising concerns about worst-case scenarios was more appropriate than confident over-optimism. Soon the CDC and HHS were sounding the alarm about a possible pandemic. They aroused some concern, but no panic; they inspired some individual and community-preparedness efforts. And then attention shifted elsewhere, until now.

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THINGS TO SAY WHEN A PANDEMIC SEEMS IMMINENT

- It looks as if a flu pandemic is starting.
- It is no longer about the birds.
- This is a new warning, more urgent than any warning so far.
- The experts still aren't sure.
- We don't know how bad it will be.
- Here's what we know so far about the severity issue.
- Society will survive, but the pandemic may be very bad.
- We might have a window of opportunity now to make some practical preparations. Make the most of it even though the effort might be wasted.
- What matters most is how households, neighbourhoods, community groups and businesses prepare.
- Individual and community preparations will focus on three tasks — reducing each person's chance of becoming sick, helping households with basic survival needs and minimizing and coping with larger societal disruption.
- Social distancing to impede contagion will be important but unpleasant.
- School closings present a difficult socialdistancing dilemma.
- Hand-washing is far from a panacea. But it is easy, it is under your control and it has no significant downside.
- Like washing your hands, wearing a face mask may help a bit. But doing this has more downsides.
- Getting ready for a pandemic is largely about preparing for possible shortages.
- It is probably too late to stockpile much now, but do what you can.
- Now is the time to think about how to care for loved ones at home.
- To get ourselves through the hard times that may be coming, we will need volunteers. How can you help?
- If the pandemic is severe, the hardest job won't be coping with the disease. It will be sustaining the flow of essential goods and services, and maintaining civil order.
- Here's what the government is doing...
- Try not to switch off. Try not to overreact.
- Even though we hope riots, panics and other sorts of civil disorder will not be common, it is important to be on guard.
- We are going into this pandemic crisis determined to be candid. That means you need to expect bad news, confusing changes in policy, conflicting opinions and conflicting information.
- Listen to stories about what 1918 was like, and to guesses about what the coming pandemic may be like.
- This is how to get more information...

Adapted from a 2007 article (http://tinyurl.com/r6g6ur) by Peter M. Sandman and Jody Lanard.

benefits, there are two psychological impacts worth describing.

First, consider the people officials are most worried about — those who are excessively alarmed. Here is a secret of preparedness that is easy to forget: it is calming to prepare. Having things to do gives people a sense of control. It builds confidence, and it makes them more able to bear their fear.

Second, there are those who are not worried, or who have already 'switched off'. Each time officials repeat practical advice, more people take it. Some of them take it sceptically, but take it nonetheless. Whenever someone acts, the scepticism is reduced. So urging people to prepare can calm those whose concern is excessive and rouse those whose concern is insufficient. It also offers the practical benefits of putting key supplies to hand.

As Besser says, we are currently in a "prepandemic" phase. The World Health Organization raised the alert level up from phase 3 to 4 on 27 April; and ratcheted it up again to phase 5 on 29 April. Phase 6 is a full-blown pandemic.

In announcing phase 5, Margaret Chan, the WHO director-general, echoed the CDC advice. When asked what individuals could do to protect themselves and their families, she advised hygiene and social distancing; wash your hands, stay home when sick, less hugging in public. But the WHO's own guidance for phase 5 emphasizes that a pandemic is "imminent" and that the time to finalize preparations is short. That ought to mean more action than reducing hugging.

We may stay at phase 5 for weeks or months. Or we could progress to a full pandemic that is mild, not catastrophic, or the threat could recede. So the key issue is what to say to the public when a pandemic seems imminent, but no one knows how it will turn out.

Two years ago, my wife and colleague Jody Lanard and I tried to answer that question in an online article. To aid officials we delineated 25 specific messages (see 'Things to say when a pandemic seems imminent') and the risk-communication rationales behind them.

Fundamentally, officials need to ask themselves whether they see the public as potential victims to be protected and reassured, like young children, or as pandemic fighters — grown-ups — who can play an active part in the crisis that might be ahead. The difference in tone could save lives.

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See also Essay, page 324, and for ongoing coverage of the H1N1 outbreak: www.nature.com/swineflu. A longer version of this article is available at http://tinyurl.com/prbwf2.

Predicting deaths

To its credit, the CDC has not made overreassuring statements, suppressed alarming information or belittled people's fears. For several days before the first US swine-flu death on 29 April, Besser predicted that there would be US deaths. That is excellent risk communication. He has not understated how bad things were or how bad things could get. His failure has been subtler than that: sending the message that the CDC will do whatever it takes to protect us, and that we need do little or nothing to protect ourselves. From the outset, CDC messaging has aimed to keep us calm.

Why are officials so wary of describing the

worst case vividly and urging people to pre-

pare for that possibility? There are two reasons

— first, a fear of fear itself. Although crisis-

management experts have known for decades

that panic is rare (http://tinyurl.com/ogofyw),

officials routinely expect the public to panic if

told alarming things, and misdiagnose orderly

Officials terrified of creating panic make over-

reassuring statements, suppress alarming infor-

mation and belittle those who are frightened as

'irrational'. Frightened people are left alone with

their fears, persuaded that their government

has betrayed them. This increases public anxi-

ety, which officials cannot channel into effective

action because they have already delegitimized

it. During the 2003 severe acute respiratory

syndrome (SARS) outbreaks, for example, the

Chinese government denied that Beijing was

seeing SARS cases and SARS deaths. These false

denials led to actual panic in Beijing.

This approach nearly always backfires.

efforts to prepare as panic.

The second reason for the wariness of officials is a fear of being seen to overreact. Critics are already accusing officials of over-warning the public. And if the virus recedes and a pandemic never materializes, these critics will consider themselves proved right — as if the fact that your house didn't burn down this year proved the foolishness of last year's decision to buy insurance against fire. The only consolation I can offer officials is that many more people have lost their jobs for failing to take a disaster seriously than for being excessively alarmist about a possible disaster that never happened.

The risk-communication solution to this quandary is to issue warnings that are both scary and tentative. Public-health officials need to use the same sound bite to say, "This could get very bad, and it is time to prepare in case it does", and "This could fizzle out, and we'll probably feel a bit foolish if it does".

It might help if officials had a better understanding of the relationship between taking precautions and fear. Leaving aside the practical