



THE OPRAH WINFREY SHOW

JANUARY 24, 2006

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JANUARY 24, 2006  
Page 1

HOST: Oprah Winfrey

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BIRD FLU: THE UNTOLD STORY

OPRAH WINFREY: Today, more of what you need to know now. An all new special report, the deadly bird flu: the untold story.

Dr. MICHAEL OSTERHOLM (Infectious Disease Expert): Everybody should know this.

WINFREY: You've heard reports, but is it really headed our way? How dangerous is it?

Dr. OSTERHOLM: We're not going to have a vaccine. Modern medicine is not going to save us.

WINFREY: Can it be stopped?

Who is most at risk?

How to protect your family. This is important information.

But what should we be doing now?

Huge eye-opener.

Dr. OSTERHOLM: It's going to happen.

WINFREY: It's going to happen.

Next.

Yesterday, we were discussing on the show what we should be worried about. Today is part two of that conversation. It may be one of the most important shows we've ever done. I want you to prepare yourself to have your eyes opened, as I have, in a huge way, because we're talking about the bird flu in a way that I haven't heard before and I doubt that many of you have either.

Everyone has had the flu at some time in their lives. We all know what that is. It's not something that you even think twice about, until we all got wind of this bird flu, and rumors are flying, and some people are so frightened they're already stocking up on special masks and medicines like Tamiflu. Will that do them any good? Just how concerned should we be about this ominous disease? Here's what's got everybody almost panicked about it.

The deadly H5N1 strain of avian, or bird flu, is normally found in chickens, turkeys and a variety of other birds and fowl. But in southeast Asia, Vietnam, Indonesia, China, Thailand, Cambodia, and most recently Turkey, this virus has spread to humans, forcing some countries to destroy millions of birds. To date, 148 people have been infected by bird flu, and 82 of them have died. The victims are believed to have contracted bird flu after coming



JANUARY 24, 2006  
Page 2

in contact with feces, blood or mucous from infected birds. But humans getting the virus from sick birds is not what has medical experts up in arms.

Dr. NANCY COX (Centers for Disease Control): This virus is particularly nasty.

Dr. KEN FUKUDA (Flu Epidemiologist): What we're really afraid of is it gaining the ability to spread easily like regular influenza does.

Dr. TIM UYEKI (Flu Epidemiologist): At the moment, the viruses don't have the ability to really go from person to person.

WINFREY: But that could change at any moment if this ever-evolving bird flu mutates into a strain that could spread human to human, an occurrence some experts say is inevitable.

Ms. GINA SAMAAAN (Epidemiologist, World Health Organization): We are seeing widespread animal outbreaks in the southeast Asian region. So this increases the risk of this virus mutating to produce something that may infect humans easily.

WINFREY: If the virus mutates, this highly contagious flu could travel around the globe in a matter of days, infecting every city in every country on the planet. If that takes place, are we prepared?

Dr. UYEKI: The short answer is probably no.

President GEORGE W. BUSH: If we wait for a pandemic to appear, it will be too late to prepare. In the event of a pandemic, we must have enough vaccine for every American.

WINFREY: Scientists and medical personnel are frantically searching for a solution. But right now, if that virus mutates into a contagious human flu, no one on the planet will be safe.

Dr. Michael Osterholm is the director of the Center for Infectious Disease Research and Policy at the University of Minnesota.

For more than 30 years, Dr. Michael Osterholm has been a leader in the fight against every major health threat on our planet from smallpox to AIDS and ebola. He has consulted with governments, the World Health Organization, the Centers for Disease Control, and the US Department of Defense. He's watching for the next pandemic, and believes it could be bird flu.

How concerned should we be in the United States about bird flu?

Dr. OSTERHOLM: As a worldwide community, we have to be very concerned about this. Pandemics of influenza are like hurricanes, tsunamis and earthquakes, they occur. We've 10 of them in the past 300 years, we've had three in the last century.

WINFREY: What are the three in the last century?



Dr. OSTERHOLM: Well, the 1918 pandemic, which was really a world-defining event, where over 100 million people died. And we had milder ones in 1957 and '58 and again in 1968 and '69. And we expect them roughly every 20 to 40 to 50 years. So in that sense, our time clock is ticking.

WINFREY: And so, what--what do we do?

Dr. OSTERHOLM: Well, first of all, have you to understand that there really are, in a sense, three different kinds of influenza virus that we worry about, and that's where I think the public is confused. There is that which is in the birds.

WINFREY: Yeah.

Dr. OSTERHOLM: That virus doesn't really hurt us very often.

WINFREY: OK.

Dr. OSTERHOLM: Then we have the flu virus we think every season, you know, that you and I worry about...

WINFREY: Yeah.

Dr. OSTERHOLM: ...we get our flu shot for. That is a second kind of virus that still kills in the United States 36,000 people a year just routinely. It's the third kind of flu virus which is the in-between of those two that we worry about. It's when a virus changes, mutates from the bird virus to the human virus. That's when we see a pandemic, or a worldwide epidemic, and that's what we worry about.

WINFREY: And how does it change? You have contact with a bird who's infected? You wouldn't know that it's an infected bird, and then it mutates to you?

Dr. OSTERHOLM: Right. In Asia and now in Turkey, we have enough of the virus out there that it occasionally can get into a human. But what makes for a pandemic is when it mutates even more, and now it human to human transmits. The birds become incidental. It's me transmitting to you and you transmitting to the audience and the audience--audience transmitting to their families.

WINFREY: Yeah. It's sitting on a plane and you sneezing on me.

Dr. OSTERHOLM: That's right. Unfortunately, I wish it were that simple. You're actually becoming infectious with the influenza virus up to a day before you get sick. So right now, if I have influenza infection and I'm going to be sick tonight at midnight when I wake up in the middle of the night with muscle aches, fever and chills, I've already exposed you right now.

WINFREY: OK.

Dr. OSTERHOLM: Or--or--or...

WINFREY: Or.

JANUARY 24, 2006  
Page 4

Dr. OSTERHOLM: ...you could have exposed me, but I've had my shot this year.

WINFREY: You've had--OK. And so would any shot do?

Dr. OSTERHOLM: No.

WINFREY: No.

Dr. OSTERHOLM: That's the problem. Influenza viruses are very unique. It turns out that--I think about every year we tell people to get a flu shot.

WINFREY: Yes.

Dr. OSTERHOLM: Why? Because even the every-year flu virus that's in humans basically is, because of this mutation problem, it changes enough from year to year that we actually need to get a new flu shot every year because it's changing.

WINFREY: Oh, really? OK.

Dr. OSTERHOLM: See, you don't get that from mumps or measles or rubella or all the things your vaccinate your kids for.

WINFREY: That's right.

Dr. OSTERHOLM: One shot's good for a long time. Well, when a virus mutates to the point it becomes a new pandemic strain, the bird virus jumps to people and now people can transmit it back and forth, that needs a whole new virus vaccine. And the problem we have today, Oprah, in the whole world, with all the pipes and plumbing and machines and buildings and experts we have, in a year's time we can only make about enough vaccine to protect about 300 million people in the world. Well, your audience down here would tell you there's a lot more than 300 million people in this world. So what we're worried about today is if a pandemic were to begin, if this bird virus now mutates to the point where we as humans transmit it, we will not be with vaccine of any meaningful manner in that first year to do anything about it.

WINFREY: To vaccinate the world.

Dr. OSTERHOLM: We're on our own. We're back to 1918-like situations.

WINFREY: Wow. That's incredible. What are the chances of this becoming human-to-human?

Dr. OSTERHOLM: Well, first of all, let me just make it real clear, this is not a probability issue, it's going to happen, it's going to happen. What we don't know is which strain it's going to be or when it's going to happen. It could be tonight, it could be 10 years from now. Bottom line is we have a lot to do to get better prepared.

WINFREY: It's going to happen.

Dr. OSTERHOLM: Right. And today, we're talking about, by the way, a disease

JANUARY 24, 2006  
Page 5

that, if it was like a 1918 experience, would kill 180 million- to 360 million people. HIV-AIDS, which is a very important disease, in the last 30 years has killed just slightly over 30 million people. It gives you a sense of proportion and why, when you ask me do I worry, of all the things I've ever worked on combined, terrorism, infectious diseases, all these issues, this one is by and far above all by itself.

WINFREY: The thing you worry about the most?

Dr. OSTERHOLM: Absolutely.

WINFREY: Now, you see people running out just like--which was so crazy, during when everybody was on alert, we were getting the orange alerts and yellow alerts, people were using duct tape. And I was always, like, 'What the hell do you think the duct tape'--the craziest thing--people--you go to supermarkets, people are stocking up on duct tape. Now people are getting the mask. Will the mask actually do anything?

Dr. OSTERHOLM: Actually, certain kinds of masks can clearly reduce your risk. The problem with a pandemic of influenza is it lasts for a year or two. It'll go in waves. But some communities will be affected for six to eight weeks at a time, maybe 12 weeks.

WINFREY: Uh-huh.

Dr. OSTERHOLM: And so one of the problems we know we're going to be confronted with is, during a pandemic, when we will obviously shut borders. Look what's happening in Turkey right now with just these two cases, people are shutting borders. We will basically see, I believe, a collapse of the global economy as we know it, which means we're going to run out of those things, things like medical supplies, drugs, masks, whatever. So, yes, they'll work, but I don't have any belief that much of this will be available during a pandemic.

WINFREY: Well, as you're saying this, then that means people who have access will have the vaccine. And people who have access will have the masks. And then people who don't have--just like in New Orleans. So the people who are the poor people, who are the people who don't have as much, you know, access to resources will be left behind?

Dr. OSTERHOLM: Well, it's not even that simple. All the money in the world, the Oprahs of the world won't necessarily have access.

WINFREY: I'm going to get mine now.

Dr. OSTERHOLM: If we--if we don't have them...

WINFREY: Yeah. OK. Yeah.

Dr. OSTERHOLM: If we don't have them--it's like the drug Tamiflu, it's like the vaccine, you can't have a vaccine that doesn't exist.

WINFREY: Right.



JANUARY 24, 2006  
Page 6

Dr. OSTERHOLM: And what will you do here at Harpo Productions during a 12- to 18-month pandemic when you have many of the people who won't--who will be afraid to come out of their homes, or you may not have workers that want to come to work? That's what we've seen in the past. That--that's not a historical response. It's the kind of things you have to think about. It's the Katrina mindset before Katrina happens.

WINFREY: Wow. And you're saying it is going to happen?

Dr. OSTERHOLM: Well, a 1918-like experience is surely a possibility, particularly if it's this bird flu virus, which is a kissing cousin of the 1918 virus and why we're so concerned.

WINFREY: Well--and one of the lessons of Katrina is about being prepared before it happens instead of panicking in the middle of it.

Dr. OSTERHOLM: That's right. And unfortunately, it is the question about, so what do we do about it? How prepared should we be? We live in a world of risk today. Is it earthquakes? Is it tsunamis? Is it terrorism? Is it infectious agents? Was it SARS? What is the next risk? And one of the problems is it's hard to sort all that out. As an infectious disease person, I...

WINFREY: Are you worried?

Dr. OSTERHOLM: I am worried. And I'm worried because...

WINFREY: Are you scared?

Dr. OSTERHOLM: I'm not scared because I deal with this as a business, and I'm--you know, failure's not an option here. We have to get...

WINFREY: Do you have your mask?

Dr. OSTERHOLM: We do have masks.

WINFREY: OK.

Dr. OSTERHOLM: And the problem is, I have to be honest and say I don't have enough masks to get me through one. So in a sense, it's almost as if I almost had a spare tire, not quite. You know, I'm like everyone else, and that's why we have to do much better in terms of preparing us as a community, as a country, as a country, as a world. Remember, the whole world is going to be vulnerable here. A pandemic is not going to just affect one country one time.

WINFREY: Right. We'll be right back.

Coming up, if a pandemic strikes, will you be prepared? What experts say you should always have in your house, just in case. Back in a moment.

(Announcements)

Mr. MICHAEL LEAVITT (Secretary of Health and Human Services): The virus



JANUARY 24, 2006  
Page 7

continues to spread in wild birds across the world. That means that ultimately it would find its way to the United States. If we had a pandemic that was similar to the one that happened in the United States in 1918, roughly 90 million people would be ill. About 45 million people would require some kind of medical attention. And roughly two million people would perish. We have to prepare for a situation where you could literally have thousands of communities battling this in their own unique way in waves over the time period that could go nine to 18 months. We need to be prepared.

WINFREY: We're talking with Dr. Michael Osterholm about the threat of bird flu. You were saying that the issue with the mask is there just won't be enough.

Dr. OSTERHOLM: There's two things. There won't be enough and you need to have the right kind. Just a piece of cloth across your face, as we saw in many of the shots from Asia during the SARS epidemic, will not do that much too protect you.

WINFREY: Why?

Dr. OSTERHOLM: Because think about the surgical mask. Why does a surgeon wear a mask? A surgeon wears a mask basically so they don't breathe and cough onto the patient. These are special kinds of masks. They're different. When you wear a mask like this, you're attempting to seal the sides as well as through the mask. When you're worried about influenza, I'm worried that someone in this room who is infected, infectious, breathing the air, putting the virus out, I'm going to share that air with them. Well, those side vents are going to fill in. So in many cases where you've seen pictures of people with surgical masks on, it really is potentially as much cosmetic as it is real in terms of protection.

WINFREY: So they're kidding themselves. And you were saying, though, that the virus lives outside the mask for two to three days, and so the mask is then contaminated at the end of the day.

Dr. OSTERHOLM: Right. If I had influenza and you could use the modern technology of videography here and you could see all I'm spewing on this audience right now, I've nailed about the first five rows here throughout the interview, as have you. And what happens is these microparticles, like perfume-like particles that you don't see...

WINFREY: Yeah.

Dr. OSTERHOLM: They basically end up drying quickly. And this is why winter is very important for influenza, because the lower humidity makes these dry and which actually makes the virus survive in there. It falls down onto the surface. Surfaces become contaminated. So as I'm around someone, my mask gets contaminated and it's just--the point is you have to be careful with your hands, because one of the other things we all as humans do often, hands to the eyes, hands to the nose, hands to the mouth. And so mask is only part of the entire response. It's not everything.

WINFREY: I'm listening to you, I feel hopeless.



Dr. OSTERHOLM: Yeah.

WINFREY: Because I don't have a vaccine, I don't know where to go, I can't get the vaccine, I--you know?

Dr. OSTERHOLM: You can't feel hopeless. You can't feel hopeless, because, for example, there are things you can do.

WINFREY: Well, not hopeless, but I feel like I--I don't know what to do. There's nothing I as a citizen can do about this.

Dr. OSTERHOLM: What we need to do is understand how we're going to care for our people. How are we going to get food? The food that we eat today doesn't sit in warehouses somewhere, it literally is produced, moved by ocean freighter over land trucking and in your grocery store within days. The milk that comes from the farms today that you drink in the morning...

WINFREY: Yeah.

Dr. OSTERHOLM: ...actually came from the farm 24 hours before. And so if we interrupt things on a global basis with transportation, we basically have that fear and panic. We have a very different...

WINFREY: That's why you're saying it's going to shut the world economy down.

Dr. OSTERHOLM: Right. And we have to prepare for that. And that's--we have to help citizens understand, 'What should I stockpile? What shouldn't I?' Let's make sure we don't...

WINFREY: What? Tell me now, tell me.

Dr. OSTERHOLM: Everyone should have enough food today so that they could basically be in their homes for four or five weeks if they needed to be. The area that we're in big trouble on--you can have canned goods, whatever--the area that I worry about most is, frankly, our pharmaceutical supplies. Today, 80 percent of all the drugs that we take in the United States, the raw ingredients come from offshore. Basically, we've outsourced almost all of our drug-making capacity in the world. Very thin supply chains, meaning there's one plant in one country with a whole lot of ingredients that come together that then move that drug to the United States. If that shuts down, we have a problem. So I'm going to tell you to go stockpile drugs--well, one, most people could never afford to do it.

WINFREY: Right.

Dr. OSTERHOLM: Number two, your health plan wouldn't let you do it. If you're under a prepaid health plan, you get 30 days and that's it. And number three, right now, as we sit here, there are over 40 drugs in this country that are in short supply or not available because just one chink in the supply chain interrupted that. We have to deal with that. We have to figure out how are we going to allow people to have more drugs so they don't worry like a Katrina event, 'I'm separated from my drugs.'



WINFREY: Yeah.

Dr. OSTERHOLM: In this case, it wouldn't be physical damage, it would basically be, 'I can't get to the pharmacy to get my drugs,' or the pharmacy doesn't have them.

WINFREY: OK. So I got my food supply.

Dr. OSTERHOLM: You've got your food supply.

WINFREY: I don't have my drugs. I got water.

Dr. OSTERHOLM: And you--well, you want to make sure on water. This is where you want to ask your community here. Go ask the city of Chicago, 'How much chlorine do they have?' Today, many of the cities in this world have no more than five to seven days' of chlorine on hand to actually use and purify that water supply.

WINFREY: Yeah.

Dr. OSTERHOLM: Just-in-time delivery again. We have a whole world that's set up around this kind of environment.

WINFREY: So interesting, because these are all things we take for granted. I've never thought one moment about how much chlorine does the city of Chicago have? Yeah. Yeah.

Dr. OSTERHOLM: Or your electricity. Who's going to run the utility plants? Who's going to haul your garbage? Who's going to bury the dead? In 1969, the last pandemic we had, which was a mild one, the average time from a casket being made till the time it was in the ground was six months. Large inventory. What offended us more than anything in Katrina?

WINFREY: It's the--the dead just lying on the streets.

Dr. OSTERHOLM: Seeing those dead lying there in that water with the thing. See, I believe if we have this kind of event, and we can't manage in a timely, respectful and honorable way our dead, that's what tips populations over the top. In 1918, we did dig holes. We buried people in holes. In the months of September and October of 1918, 7 percent of the residents of Boston between 20 and 40 years of age died. That's what we're talking about. And today, in this country, you think you're going to get intensive care medicine.

WINFREY: What percentage did you say?

Dr. OSTERHOLM: Seven percent died.

WINFREY: Seven percent between the ages of 20 and 40.

Dr. OSTERHOLM: Yes. Today, there are 105,000 mechanical ventilators in this country, the kinds of things you think of in intensive care rooms; 80,000 are in use every day for just routine medical care. We have no surge capacity whatsoever. Nobody will have intensive care medicine during a flu pandemic.



So we have to think now.

WINFREY: Just like what we have had the preview of seeing in New Orleans is what you're talking about.

Dr. OSTERHOLM: New Orleans has so many lessons for us, even though it was a natural disaster of a very different kind, very limited. The thing that was different in New Orleans, Oprah, 47 states and the federal government, whatever part of it, could respond and basically could help. During a pandemic, Chicago, Bangkok, San Francisco, Waukeg, Iowa, all of these communities around the world are going to be in it at the same time. There isn't going to be anybody there. That's why Secretary Michael Leavitt, the secretary of Health and Human Services in this country has said, 'Understand, you will be largely on your own.' He's been very honest, he's been very forthright and fair to say that, because nobody's going to bring in the cavalry during that time, it won't exist. And we have to prepare our communities now. So we want to know in Chicago, what are they doing if they needed to handle a major increase in dead bodies.

WINFREY: So everybody should be asking that of their city government?

Dr. OSTERHOLM: And every company should be asking that.

WINFREY: And I should be asking that of my company.

Dr. OSTERHOLM: You should be asking that of Harpo.

WINFREY: And to not to ask ourselves these questions would mean we didn't learn the lesson from Katrina?

Dr. OSTERHOLM: Exactly. And I think the second part of it is that's going to be the difference between being hopeless and being hopeful.

WINFREY: OK.

Dr. OSTERHOLM: We're going to come out the other end. It's how well we can come out the other end.

WINFREY: OK. We'll be right back.

Coming up, Dr. Osterholm talks about any foods we should stay away from.

(Announcements)

(Excerpt from CNN's "Killer Flu" with Dr. Sanjay Gupta)

Dr. WILLIAM KARESH (Wildlife Conservation Society): Avian influenza is already a huge problem, and we're certainly worried that it will become a human pandemic.

Ms. LAURIE GARRETT (Council on Foreign Relations): The only thing I can think of that could take a larger human death toll would be thermonuclear war.



JANUARY 24, 2006  
Page 11

Dr. ROBERT WEBSTER (St. Jude Children's Research Hospital): If this virus learns to transmit human to human, we've got a global catastrophe.

(End of excerpt)

WINFREY: And if it mutates, how fast would that then spread?

Dr. OSTERHOLM: That's what we worry about with the situation in Turkey. In Turkey, just in the last two weeks, we have now seen another mutation that has come forward. Today in this world where we have so many poultry, in 1969, again, the last pandemic, China had 12 million chickens in China, today it has 15 billion. That's how much has changed. We have an endless supply...

WINFREY: Should we not be eating chickens?

Dr. OSTERHOLM: No, chicken's a very good food. By the way, it's perfectly safe in this country. I don't worry about chicken.

WINFREY: OK. OK.

Dr. OSTERHOLM: I want to make--make sure that Americans understand that. But the point of it is around the world, where these chickens are kept out in the open, where they're not protected by these secure barns...

WINFREY: Yeah.

Dr. OSTERHOLM: ...each one of those is, in a sense, a virus test tube. And we keep replenishing them, because people need protein.

WINFREY: And who is most at--at risk for contracting the bird flu?

Dr. OSTERHOLM: Over there, it's the people having close contact with the infected chicken. But I worry about all these chickens and where the mutations are going to occur. So one day, the virus that you and I worry about here in the Midwest is actually a virus that finally had its final mutation, this kind of genetic roulette table, was in China somewhere, it was in Vietnam, it was in Thailand. It may have been in Turkey. That's why, as much as it circulates--that's why, in a sense, also, we have to be concerned, because today we have the perfect setup for this virus to continue to mutate.

WINFREY: OK. So, what should we be doing as a nation? What should the media be doing? Because what's going to happen, mutates, you're going to have panic. People are just going to be panicked and crazy. So what should we be doing now to avoid being panicked and crazy?

Dr. OSTERHOLM: This is the world of contrasts. You have Secretary Michael Leavitt and even the president saying that this is really something that's a very important issue, yet in the debate in December in our--in our Congress, the president's request for \$7 billion to jump-start the vaccine program was met with a resounding thud, and Congress finally put in \$3 billion. When I think of all the risks to the world's security today, you know, that's not even one aircraft carrier.



JANUARY 24, 2006  
Page 12

WINFREY: You know what that's like? That's not--that's like the government not giving enough money to shore up the levees.

Dr. OSTERHOLM: That, to me, is the very least. So what we need to do is understand that.

WINFREY: Like the government not giving enough money to shore up the levees. And everybody saying, `One day, there's going to be a Category four or five. Yeah. And then it happened. And then the levees broke.

Dr. OSTERHOLM: Right. You know, if--if the American citizen wants to understand influenza, John Berry, a historian from Tulane University, wrote a book called "The Great Influenza," it's a story about the 1918 pandemic. I would urge everyone to read it. It's been a New York Times best seller-book. But it goes into the nuts and bolts, into the gripping feelings of what happens during a pandemic. That will help Americans understand why this is so important. I had the unusual situation of writing a book, which was actually on terrorism. It was published on 9/11 of 2000 called "Living Terrors." But I talked about the al-Qaeda and the World Trade Center towers in that book, and I feel like it's almost deja vu all over again for me.

WINFREY: Well, do you feel sort of like Noah? Yeah. The flood's coming. The flood's coming.

Dr. OSTERHOLM: I think it's--it's--it's a situation where, you know, Noah had a way of basically pulling everybody into the boat and--and riding it out.

WINFREY: Yeah.

Dr. OSTERHOLM: I think, for me, it's a situation right now, I want to make sure that we've got somebody building the ark.

WINFREY: Yeah.

Dr. OSTERHOLM: And what I feel like right now is that we're not. This vaccine I talked about, which we could actually take this off the scope as a problem if we could make vaccine for the world, but it's a commitment issue. We have the technology today to make a vaccine that we could make ahead of time, that could be very effective and we could make for the world, we're just not committed to it.

WINFREY: Well, you know what's interesting about that--it's one of the reasons why I wanted to do this show--is because I am just like everybody else, bombarded by the news, the evening news and the local news and the national news, but you're not--I don't feel like we're really getting information, we're just being told a bunch of stuff. And I think if people were educated--for example, if the American public understood that we got \$3 billion worth of an opportunity to create a vaccine instead of seven billion, and that's what it's going to require, people would be up in arms about that. But I think we just don't know.

Dr. OSTERHOLM: And I think the world community--the same way, the private sector has to understand the economic implications are huge. It's not just



about, you know, life and death, which by itself is critical, but it's the idea of what is going to allow business continuity. I mean, I'm very serious when I talk about how many of these businesses will be threatened when an 18-month pandemic sweeps here.

WINFREY: Yeah.

Dr. OSTERHOLM: And people have to understand this, this is not science fiction, these are going to happen. This is why this group of infectious disease people are trying to wake the world up, shake them, and say, 'You've got to understand this.' Even if the bird flu is the one that doesn't do it, but another one's going to, it's going to happen. And today--remember what 22 cases of anthrax and five deaths did to our Congress, shut it down for the first time since the Civil War. Remember what SARS did.

WINFREY: Yeah, that's true.

Dr. OSTERHOLM: And we have to remember on a worldwide basis what pandemic influenza will do, it will be significant.

WINFREY: OK. We'll be right back.

Coming up, who will be most at risk if a pandemic strikes? Find out when we come back.

(Announcements)

Dr. BILL FRIST (Senate Majority Leader): Think of a fast-moving, highly contagious disease that wipes out 50 million people, a half a million here in the United States. The killer pandemic claims more victims in 24 weeks than HIV-AIDS can claim in 24 years. In the United States, the most developed nation in the world, bodies pile up in the streets. There aren't enough morticians to bury the dead, nor are there enough doctors or nurses to tend to the sick.

WINFREY: So we're talking today with Dr. Michael Osterholm.

Obviously, this conversation about bird flu has raised a lot of questions, because, if I'm hearing you correctly, what you've said about the bird flu makes me very worried that we're not paying attention in the right way.

Dr. OSTERHOLM: The priorities in the world that we have right now, which are many and are important, I can't imagine a more important one from a socioeconomic, political, health or just moral basis than this. It is really something. It is going to happen. How bad it's going to be, we don't know. But it's not a guess that it is, it's going to. And what we need to do is so much more--be--be better prepared for it.

WINFREY: And the bottom line is we're not prepared now?

Dr. OSTERHOLM: We as a world are hardly prepared at all.

WINFREY: And who is most at risk for contracting this flu?



JANUARY 24, 2006  
Page 14

Dr. OSTERHOLM: Well, it--it's interesting that when we think of the typical seasonal flu, you think of the very young and the very old being most at risk because of the fact that they are the ones that are most vulnerable to infectious diseases. If it's the 1918-like experience, the highest death rates were actually in those between the ages of 20 and 40. And the reason for that is the fact that it turns out that this virus multiplies very quickly in your body. The--the bird flu virus is doing this just as we saw with the 1918 virus. It turns on your immune system, and the people who have the healthiest immune systems are the ones that succumb to the virus, because the immune system goes into overdrive. Who has the healthiest immune system? Those who've spent the first 20 years of their life building it up don't have as good as the 20 to 40 years old. And for the few in the audience over 40, it's on the way downhill. The last group that's at very high risk--in 1918, 55 percent of all pregnant women died from having this flu virus. And the reason is there is no more precarious time in a healthy person's life immunologically in your immune system than being pregnant. Part of you says, 'Get rid of that thing. It's not all me.' And part of you says, 'This is the most precious cargo I'll ever carry, protect it.' And when the virus got into that interaction, half the women died.

Modern medicine is not going to save us. Our emergency rooms are overfilled now. We don't have the hospital beds. We'll quickly run out of the drugs. We have a shortage of a number of major antibiotics right now just because one glitch in the production capability made it a problem. Think of our childhood immunizations; I'm sure many of the people in the audience know that today we continue to have shortages of all of our childhood immunizations. Why? Every one of them are made offshore. Every one of them are made in one or two plants in the world. All they have is one problem and we don't have them anymore. This is the kind of global economy we've come to. And the overlay pandemic influenza on that, which pandemic influenza is really bad, set up with this economy it only will accent that. I worry will people get their cancer drugs? Will they get their drugs for their diabetes?

WINFREY: Now, when I likened earlier, was--was that--was that a sensational metaphor or on target, when I said this sounds to me, based upon what you're saying, like New Orleans not paying attention to shoring up the levees, not investing in shoring up the levees, and the levees ended up breaking and they knew that there was going to be a storm eventually.

Dr. OSTERHOLM: The difference is you could argue that someone in New Orleans should have known that. Someone in Louisiana should have known that. And probably somebody in Washington should have known that. But you don't expect the people in Portland, Oregon, to know it or people in Portland, Maine.

WINFREY: Yes. Right.

Dr. OSTERHOLM: What I'm saying about pandemic influenza, it doesn't matter where your Portland is, everybody should know this. And that's what the problem is. On a worldwide basis, we're not taking this seriously enough.

WINFREY: But I--but we hear it on the news every day.

Dr. OSTERHOLM: I think that part of it is we've not really told the full



story yet.

WINFREY: You know--you know why I feel uninformed about this is because there's so much white noise about it. I mean, the news treats this story the same way they treat Brad and Angelina. So it's all the same. You know, it's Brad and Angelina were there, and this is happening with the bird flu. And it's all 40 seconds or a minute and a half, and that's it.

Dr. OSTERHOLM: And you know what, there's a model for that: Katrina.

WINFREY: Katrina.

Dr. OSTERHOLM: Because there were many warnings that what was going to happen would happen. And it did happen. And I think that...

WINFREY: You're saying beyond a shadow of a doubt it's going to happen.

Dr. OSTERHOLM: We're going to have more flu. We're going to have pandemics. I don't know if the bird flu virus is going to be the one to do it. But today, with the modern pandemic of influenza, unlike HIV-AIDS, unlike malaria, unlike all these other problems, will so change the world.

WINFREY: What are the symptoms? Is it like every other flu that we imagine, you know, cold, achy?

Dr. OSTERHOLM: Yeah. Influenza virus, first of all, causes a muscle aches, fever, kind of cough--cough, and just feeling terrible all over. It's not diarrhea, which a lot of people think it is, it's not just a runny nose. It's really that. The bird flu virus, unfortunately, and what we saw in the other pandemics, actually causes a different type of disease where it not only infects your lungs and, in some cases, it affects your other body organs, that's what we're seeing now, but then this immune response causes a thing we call a cytokine storm. This is where your immune system goes into overdrive. The kids that we've seen dying today are dying because their own immune systems are killing them, they're in overdrive.

WINFREY: And that's what makes it dead--deadly.

Dr. OSTERHOLM: That's what makes this different than the typical kind of influenza that we talked about.

WINFREY: And that's what makes it deadly.

Dr. OSTERHOLM: That's also what makes it deadly, yes.

WINFREY: We'll be right back.

Coming up, what should we be doing right now to prepare for a pandemic? Dr. Osterholm weighs in next.

(Announcements)

Mr. KOFI ANNAN (Secretary-General, United Nations): Once human-to-human



JANUARY 24, 2006  
Page 16

transmission has been established, we would have only a matter of weeks to lock down the spread before it spins out of control. We'd know what happens when millions of people die and millions more are infected. When health systems are overburdened and overwhelmed, when families, communities and whole societies are devastated, when transport and trade, education and other services are disrupted or cease to function, when the economic and social progress of nations risks being reversed.

WINFREY: So we're talking today with Dr. Michael Osterholm about the threat of bird flu.

Explain what Tamiflu is, and will it work?

Dr. OSTERHOLM: Tamiflu is a drug that actually is very effective against the current flu virus, the seasonal flu virus that we see.

WINFREY: Uh-huh.

Dr. OSTERHOLM: What we're finding with the bird flu virus is it doesn't work nearly as well. What's happening now is the bird flu virus, like we saw in 1918, causes this overwhelming growth of the virus, not just in your respiratory tree, not just in your--kind of your upper respiratory, into your lungs, but throughout your lungs, your kidneys, your liver, even your brain, your gastrointestinal tract, and is just overwhelming the body. Unless you have the drug onboard, meaning you're taking it at about the time you get infected, probably at a much higher dose, we're not sure how effective it's going to be. So I still think we should stockpile it, I think we need to have it. We realize we're going to have a real logistic problem to make sure when you become infected, within hours you can get that drug, and probably if you don't have it within hours, it's not going to be very effective.

WINFREY: But what should we be doing now? What should the average citizen be--be doing now? You talked about stockpiling and having, you know, groceries or canned goods. But how could we put pressure on Congress to understand this in a way that we all have come to understand it?

Dr. OSTERHOLM: We need to hold our lead--leaders accountable. I have to give the president, I think, great credit, he clearly has identified this as a key issue. Now the question is how do you translate that into action? Because I think there's a disconnect. I think we believe today, just as with SARS and other things, we'll--we'll just suddenly quash it, it'll be OK. We're in the world of modern medicine, why should we worry about it?

WINFREY: And also because we have a short attention span for holding it. Yeah.

Dr. OSTERHOLM: You assume you'll have an intensive care bed here in--in Chicago for you when it happens, right? Well, there are about seven million people who think the same thing. Yet in Chicago here on a given day during a mild flu season, your emergency rooms are overflowing to the point where they have to shut down any new admissions.

WINFREY: I'm not assuming anything after today.



Dr. OSTERHOLM: That's good.

WINFREY: Are you kidding? Are you kidding? Not a darn thing. OK.

More on the bird flu when we come back.

(Announcements)

WINFREY: Obviously, this conversation about bird flu has raised a lot of questions. We're going to open it up to our audience. Audience, question? Anybody? Yes, lady in blue?

Unidentified Woman: I'm curious what this will do to our nation's blood supply.

Dr. OSTERHOLM: Well, I think that's one of the things we haven't planned for. I will tell you, elective surgeries will go off the map. They won't exist anymore. Today in this country, when we think about controversy and life and death issues...

WINFREY: Yeah.

Dr. OSTERHOLM: ...pull somebody off the ventilator is a term we often hear. It's always based on really the idea are they alive or dead? You know, are they brain-dead or not? It's that kind of emotional right to life, all these things. Now imagine with 105,000 mechanical ventilators in this country and many of them in use and 20 people waiting to get them, do we keep the 72-year-old end-of-life patient on that ventilator because they're vent-dependent, or we've got now a 24-year-old who we might be able to save if we can get them on a ventilator? And now we've got to make that choice. And we're going to be making it many times a day in many hospitals around the world. We've never prepared ourselves for that. So, much of our health care systems is going to undergo major change.

WINFREY: As I'm sitting here listening to you, I think everybody is thinking about--because we sort of had the first run with Katrina. Because we, in the United States, never imagined that there would be those elderly people, you know, in the hospitals with them trying to, you know, keep them on ventilators with no electricity. We never imagined that there would be dead people in the streets. We never imagined that you would have an entire city in the United States un--so unprepared.

Dr. OSTERHOLM: Well, let me follow that one step further to give you a sense of what I'm talking about with the pandemic of influenza and Katrina. Following the events of Katrina, the Federal Emergency Management Agency put out a broad call to truckers in this country to say 'we're going to need refrigerated trucks down here, whether we have to hold 10,000 bodies or ice or whatever, and we'll pay you to come and sit in one of several parking lots down here in the adjacent area.' And so a group of truckers did that. Literally within hours, we started seeing shortages of trucks to move food from processing plants to wholesale and retail because the truckers had already gone down there.



WINFREY: The...

Dr. OSTERHOLM: That's how razor thin it is. When I talk about moving the food supply, if you suddenly start to slow down surface transportation, you don't even have to think about unloading freighters or whether airplanes are going to make it in. Now you've got that issue. We've done nothing to address that issue.

WINFREY: OK. Last question. Man in blue. Hi.

Unidentified Man: I manage a busy retail pharmacy, and I've come to, you know, have experiences where we've run out of certain drugs before. So if we run out of Prozac, we'll switch them to something like Paxil. However, Tamiflu doesn't have a TheraFlu and an Amiflu and a keraflu--I wonder what we're going to do if we run out of that. And talk about paying attention, out of the last 30 or so boxes, and I can only speak for my pharmacy, that I've dispensed, I've noticed they've been dispensed either to a physician, to a physician's family member. Is that fair? Or--and are they more educated than your average consumer? Oprah's shows have definitely changed the way America responds. I mean, when you did the anti-aging, people flocked in for the folic acid and vitamin E. So you definitely have a profound impact on this.

WINFREY: Yeah.

Dr. OSTERHOLM: We have a real legitimate scientific debate right now about how to even use Tamiflu.

WINFREY: Yeah.

Dr. OSTERHOLM: In other words, we don't want to use it when people don't have the real serious pandemic flu, because you do two things, one is you use it up, and we can't produce it fast enough. If the one company that makes Tamiflu could go with unlimited production today, we can probably still make enough to fulfill the needs for about 5 percent of the world's population in the next five years. But the second part of it, which is also very important news, to our total surprise, just this past week we have learned that the current flu strain, which is out there, the H3N2, the seasonal flu, suddenly went from a 3 percent resistance rate to two other kinds of drugs we use for flu, amantadine and ramantidine, and now it's running at 91 percent. Something dramatic happened where we lost amantadine and ramantidine as drugs, which leaves us now really only with Tamiflu and one other drug. We don't want to have that happen to Tamiflu. So we're trying to curb its use now and saving it for really the life-threatening infections, or those related to the pandemic.

So I'm not so sure I want a lot of people going to the pharmacy to buy this, even if they could, because I think we need to strategically place it. Think about this. We're not going to have a vaccine and we may not have any drug and we're going to run out of masks. What health care worker are you going to ask to come to work every day when they have little kids at home and ask them to walk into the face of the fire if you don't have something to offer them? I for one says, you know what, if I could save my Tamiflu, I'd save it for health care workers right now, because I think we better have somebody there



that can be involved.

WINFREY: Thank you. We'll be right back.

(Announcements)

WINFREY: So if anybody out there is saying that we--that you are overspeaking, if anybody out there is saying we shouldn't be worried about the bird flu and comparing it to, say, the swine flu or SARS, which never really turned out to be, obviously, a pandemic, what do you say to that?

Dr. OSTERHOLM: And that's a very legitimate point. There are two considerations, though. One is I don't know if bird flu is going to ultimately continue this mutation towards this pandemic. I can tell that you we now know the 1918 virus actually did just that. As you probably are aware, it's been in the media recently, we've now actually rediscovered the 1918 virus through the miracles of modern technology. Actually, researchers at the Armed Forces Institute of Pathology, Jeffrey Taubenberger Group, went back and, from recovering the virus off of old genetic slides, not the full virus, but the slides--I should say the pathology slides of patients that died in 1918, they were able to get five of the eight genes off of those. They then went to Alaska and unburied bodies in a village up there that 75 percent of the residents died in one short time period in 1918, they were buried in permafrost. With permission of the local people, they exhumed those bodies. They got material from the lungs of one. They couldn't grow the virus, but they got the other three genes. We've now recreated the 1918 virus with those eight genes. Science fiction.

WINFREY: Wow.

Dr. OSTERHOLM: We now know from that that the 1918 virus jumped directly from birds to people. It didn't go through some other changes, the thing we're worried about with this. So I'll tell you right now, there isn't an influenzologist out there that can tell you it won't happen. Most of them will tell you we don't know what will keep it from happening. But even if it doesn't happen, pandemic influenza is going to happen again. It's like saying we already had our big hurricanes last year, we're all done.

WINFREY: Yeah. Yeah.

Dr. OSTERHOLM: No, we're not. And that's the part that we have to get across to people. This will be a planning exercise. This will be an effort we will never waste. We will never waste this.

WINFREY: That's--that's good news. That's the hopeful news. That we can prepare ourselves.

Dr. OSTERHOLM: That's exactly right.

WINFREY: Thank you. We'll be right back.

(Announcements)



JANUARY 24, 2006  
Page 20

WINFREY: Well, I do thank you for sharing this hour. This was an unexpected hour for me, and I'm sure for our viewers. I--originally when we were talking about this, I was hoping were you going to come on and say, 'You know what? It's all been blown out of proportion. Everybody's overreacting.' And that's not what you said. It's just really the opposite, is that we need to prepare ourselves. And I--and I thank you, because I do believe information is power.

Dr. OSTERHOLM: Thank you.

WINFREY: Thank you. Thank you.

See you tomorrow.