

What you need to do about the 2019 Novel Coronavirus

Interview with David Weber Medical Director, Infection Prevention, UNC Medical Center

What is the new coronavirus?

"Coronaviruses are viruses that generally attack the respiratory tract. They're similar to influenza and there are a number of different coronaviruses, some of which we have routinely here in the United States. But, over the years we've seen novel coronaviruses starting with SARS several decades ago starting in Asia, then we had MERS which we still have that started in the Middle East and more recently just at the end of December a new novel coronavirus called 2019 Novel Coronavirus originated in Wuhan, China."

What symptoms to lookout for?

"It causes a flu-like illness. You really can't distinguish it from influenzas. For most patients, it's fever, cough, shortness of breath would be the initial symptoms and it can progress to pneumonia or more severe respiratory disease."

Under what circumstances should a person go to the doctor, ER or health department?

"In terms of the novel coronavirus, if you have those symptoms and you have been in China in the last two weeks then again stay home and first call your health care provider and talk to them about the symptoms. If you're having severe illness, then you will need to be seen but you should call ahead."

How is the virus spread?

"These respiratory viruses, not only the novel coronavirus, but influenza and others are spread first by droplets, people coughing and sneezing generally within six feet, and – certainly by direct contact meaning touching hands and then touching your nose without performing hand hygiene."

Is this life-threatening?

"There have been more than 400 deaths reported, we don't really know exactly what the risks are that's because we don't really have an estimate of how many people have been affected, so we don't know what percentage people will go on to have severe disease and severe pneumonia, sepsis and die. But, certainly people have died from this virus, as do for flu and other viruses."



Is this contagious?

"We know the incubation period appears to be about two to seven days meaning from when you're exposed to getting it with a range of up until 14 days."

"We don't really know for this virus how long you would be infectious, and there's at least a suggestion in one or two cases of someone who had no symptoms potentially transmitting virus."

How do doctors treat patients with this virus?

"Potentially intravenous fluids, good care of their electrolyte balances and obviously if they got sick we could put them on a ventilator, although I'm not aware of that's ever been used. If they get any sicker, we can put them on an equim machine which is like a heart lung machine which has salvaged some very sick people."

"There are a few drugs that have been tested in animal models that are available with a few individual subjects having been tested. They are not FDA approved, but potentially they could be used with appropriate FDA approvals on an emergency basis for someone who is critically ill."

What can patients do to protect themselves?

"It's not too late to get your flu shot. Flu is a much bigger risk, particularly in the United States than this virus, so go get your flu shot. Second of all, if you're sick and you have any respiratory virus, stay home and don't infect the rest of your colleagues and friends. If you are outside then you follow what we call respiratory etiquette, which means if you're coughing and sneezing take a tissue and cover your nose and your mouth. That dramatically decreases the spray of the infectious droplets and reduces other peoples' risk."

Discuss in general how UNC Medical Center is prepared for any pandemic, including ebola or coronavirus?

"We have a general disaster plan that covers everything from tornadoes, hurricanes, floods, electrical outages. Nestled within that is what we call our highly communicable disease plan and that's broken into two broad groups. One, our highly contagious and often fatal diseases that are transmitted by touching and bodily fluids, that would be things like ebola, lots of fever, and Marburg ferry fever. None of those exists in the United States but they do exist in the world and we could see a patient here, just as any hospital could. So, we have a plan on how to deal with that."

"Separate from that is our highly contagious respiratory plan, those are not so much by bodily fluids but there by droplets from breathing out and coughing. Those include SARS which doesn't really exist and this new virus about 70% similar to



SARS, MERS which still exists, and highly contagious, dangerous, pathogenic influenza viruses if we ever saw a pandemic. Within those plans, two key things are notification of the public, notifying people as they come into the hospital to tell us, respiratory hygiene, etiquette with the masks and tissues, so we're planned for that." (More detailed information is included in this sound bite for general use)

How is the state of NC preparing for this?

"The county is prepared, the state is prepared, the CDC is prepared, and all have guidance and plans on how they would manage highly communicable diseases."

How do you develop a test to confirm the virus, and how is it executed? "So the current test would be...we can start off with the upper respiratory tract. You take a swab and put it through the nose to the back of the throat or through the mouth and you would get a sample. Currently only the Centers for Disease Control can test for this novel virus. If somebody were more ill, we would get a sample from deeper within the lungs and that can be done in a variety of ways. The Centers for Disease Control is planning to take their test and make it available to all the state laboratories. That has not yet occurred because they have to develop the lab components to be able to do that, but that is the plan to make it more widespread testing." (More detailed information is included in this sound bite for general use)

How is the coronavirus different from the flu?

"This virus is distinct microbiologically, that is under an electron microscope or the way you grow it is not at all related to influenza, but in terms of symptoms...it's exactly the same."

Should people be more concerned about other viruses right now, here in NC? If so, which?

"People should be most concerned about flu and other respiratory viruses because those are much more likely. Keep in mind, as of today we only had 11 cases of the novel coronavirus in all of the United States. We've had more than 10 million cases of influenza alone, not to mention the other respiratory viruses."

At what point will UNC Medical Center and affiliated UNC Health Care hospitals need to start screening potential coronavirus patients?

"We're working on additional screening, at least during this outbreak, so that this will be a part of our routine screening test. Screen them for travel first. And – if they have traveled then screen them for respiratory symptoms." (More detailed information is included in this sound bite for general use)



When was the last time we actually had a "pandemic" in North Carolina? "One of our major influenza strains is that 2009 pandemic. That was probably the last pandemic we've had in both the US and the world. And, of course it did involve North Carolina."

Any other information you think the public needs to know right now?

"I want them to not look at what's happening in China and think this is what's going to happen in the United States. Given the notice we've had with the appropriate screening of people, travel screening, our health care system screening, public health system, I highly doubt that we'll see this large number of cases and number of deaths with our current planning and ability to protect both the public and our health care providers."