

Canadian lab confirms human swine flu cases in Mexico

World health agency schedules emergency meeting after 20 deaths

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People wearing surgical masks enter the general hospital in Mexico City on Friday. Mexican health authorities closed schools across the metropolis of about 20 million after more than 1,000 people were sickened by what is thought to be a new strain of swine flu. (Dario Lopez-Mills/Associated Press) The national laboratory in Winnipeg has confirmed human swine influenza virus in clinical specimens sent from Mexico for testing, Canada's health minister said Friday.

"Today we have received ... results which confirm that the virus is human swine influenza," Leona Aglukkaq told a press conference in Ottawa.

A handful of cases of flu-like illness in Canadian residents who recently returned from Mexico are being monitored, however, "there have been no confirmed cases of human swine influenza yet" here, said Dr. David Butler-Jones, Canada's chief public health officer.

Mexico sent 51 specimens for testing to Canada's National Microbiology Laboratory on Wednesday. Sixteen positives of swine flu were found among the samples.

Mexican Health Minister Jose Angel Cordova said Friday that 20 people were killed in the outbreak and 1,004 were infected throughout the country, prompting the World Health Organization to convene an emergency meeting Saturday.

Officials closed schools, museums and libraries in Mexico City on Friday to limit spread of the virus.

Dr. Rich Besser, acting head of the U.S. Centers for Disease Control, said early analysis of Mexican samples of the virus showed it is very similar to those responsible for eight American cases, one confirmed Friday. All the U.S. victims have recovered.



Dr. David Butler-Jones, Canada's Chief Public Health Officer, speaking at a news conference in Ottawa on Friday

Canada is working with Mexican and U.S. health officials to confirm that the virus in both countries is linked and is in fact a new strain of influenza A H1N1 human swine virus, he added.

"This is an interesting virus. It's a brand new virus, not only to humans but to the world," said Dr. Frank Plummer, scientific director of the Winnipeg lab.

"About 80 per cent of the virus is highly related to a North American body of swine flu that's been around for a number of years, but about 20 per cent of it comes from an Eurasian variety of swine flu first seen in Thailand, so it's recombined to create something totally new. How it did that, where it did it, when it did it, I don't think we know yet."

Pandemic criteria

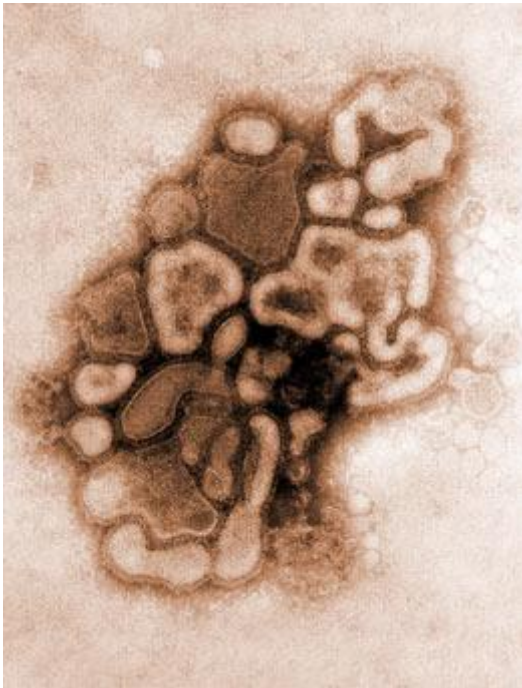
A pandemic is the sustained human-to-human transmission of disease over a wide area. To declare a pandemic, the WHO considers three factors:

1) Is the virus new?

The U.S. Centers for Disease Control said the current strain of swine flu includes genetic material from four sources: North American swine influenza viruses, North American avian influenza viruses, human influenza virus and swine influenza viruses found in Asia and Europe — a new combination that has not been recognized anywhere in the world before.

2) Does it cause severe disease? The eight ill people in the U.S. have all recovered, with one requiring hospitalization. But the WHO also needs to weigh the deaths and more severe illnesses in Mexico.

3) Does it move easily between people? There appears to be human-to-human spread in both the U.S. and Mexico over a wide geographic area at this point, but investigators are still checking for direct contact with swine.



This colorized image from a transmission electron micrograph (TEM)

depicts the ultrastructural details of a number of influenza virus particles. (U.S. Centres for Disease Control)

WHO spokesperson Gregory Hartl said the agency needs to determine whether the outbreaks constitute an international public health threat.

Hartl also said 12 of 18 samples taken from victims in Mexico showed the virus had a genetic structure identical to that of the virus found in California earlier this week. But he said the agency needs more information before it changes its pandemic alert level, which currently stands at three on a scale of one to six.

The virus was first reported earlier this week as U.S. health officials scrambled to deal with the diagnoses of seven people with the never-before-seen strain in Texas and California. The states share a border with Mexico not far from a town where two deaths were reported.

Hartl said health officials are dealing with three separate events in Mexico, with most of the cases in and around the capital, Mexico City.

Most of the cases have occurred in healthy young adults, he added.

"Because these cases are not happening in the very old or the very young, which is normal with seasonal influenza, this is an unusual event and a cause for heightened concern," Hartl said in an interview from WHO headquarters in Geneva.

It is also rare to see such high flu activity so late in the season, he said.

"The end of April, especially in a place like Mexico, you would think that we would see quite a steep decline," said Hartl.

On Thursday, Canadian health officials issued an advisory warning travellers who have recently returned from Mexico to be on alert for flu-like symptoms that could be connected to the illness.

People infected with the virus initially suffer flu-like symptoms that include:

- Fever.
- Cough.
- Sore throat.
- Muscle and joint pain.
- Shortness of breath.

The illness may elevate to a severe respiratory illness within about five days.

In Canada, the advisory includes the same advice given to all travellers: Get a flu shot and take precautions such as covering coughs and staying home when sick. But it also gives locations in Mexico where cases of severe respiratory illness have occurred.

However, tourists returning from Mexico who feel well don't need to see a doctor, Butler-Jones said.

Source: <http://www.cbc.ca/health/story/2009/04/24/health-flu-mexico090424.html>