



**For public distribution**  
Sunday, April 26, 2009

## **SITUATION REPORT #3**

### **INFLUENZA-LIKE ILLNESS IN THE UNITED STATES, MEXICO**

#### **Summary**

- The situation is evolving quickly. 3 Countries have reported confirmed H1N1 cases and 3 countries [New Zealand (25), Spain (8) and the UK (1)] report suspected H1N1 cases.
- In Mexico, 22 confirmed cases and 3 deaths have been confirmed as due to Influenza A/H1N1. Mexican health authorities have reported a total of 1455 suspected cases with 63 deaths which are currently under investigation.
- The United States has declared a public health emergency. 20 cases influenza A/H1N1 have been confirmed with no deaths.
- Today, countries worldwide are better prepared because of past achievements (such as improved surveillance, data collection, prepositioning of antiviral and other supplies, response plans and drills, etc.) in preparedness for pandemic influenza. All of these efforts are being put to good use; the rapid response of countries worldwide is evidence of this.

#### **Epidemiology**

On April 18, 2009, the National Focal Point in the **United States** reports the laboratory confirmation of 2 cases of human swine influenza in 9 and 10 year old children residing in the State of California (one in San Diego County, the other one in Imperial County).

Currently, 20 cases of human swine influenza have been confirmed in the United States (8 in New York, 7 in California, 2 in Texas, 2 in Kansas and 1 in Ohio). Other suspected cases are under investigation.

This virus has been described in the United States as a new subtype of the A/H1N1, not previously detected in either swine or humans.

In late March 2009, **Mexico** observed an unusual increase in severe acute respiratory infection which intensified during the first weeks of April. From April 17 to 26, 1,455 probable cases of influenza with severe pneumonia including 84 deaths were reported. The cases were registered in 24 out of the 32 States in Mexico. The majority of the probable cases of influenza with severe pneumonia were in the Federal District, Mexico and San Luis de Potosi States. The majority were young adults previously reported healthy. There have been few cases in individuals under 3 or over 59 years of age.

Until now 25 cases (out of 1455) of swine influenza A/H1N1 have been confirmed in reference laboratories in Winnipeg, Manitoba, Canada and in the CDC United States. The confirmed cases

are from the Federal District (17), State of Mexico (6), Oaxaca (1) and Veracruz (1). There have been 5 deaths and 25 confirmed cases, 4 from the Federal District and one from the State of Mexico.

In **Canada**, there have been 4 confirmed human cases of swine influenza H1N1 in children in the province of Nova Scotia, some of them with a history of a recent travel to Cancun. All cases developed a mild form of the disease and have now recovered. The laboratory analysis was performed by the laboratory in Winnipeg, Canada. Indigenous transmission has not been ruled out because not all cases have a history of traveling to Cancun.

In relation to the results in the first two cases confirmed by laboratory in the United States, A/California/05/2009 and A/California/04/2009 virus were isolated. They show a genetic recombination pattern of swine influenza virus in the Americas with a swine influenza virus of Eurasia. This particular gene combination had not been recognized previously. Both proved to be resistant to amantadine and rimantadine, but susceptible to neuraminidase inhibitors, oseltamivir and zanamivir. Both have been expanded in cell culture of low concentration of MDCK cells and inoculated in ferrets for the production of antisera. The complete genome of the virus A/California/04/2009 has been published and is available in the GISAID database ([www.gisaid.org](http://www.gisaid.org)). 5 other viruses confirmed cases correspond to the new strain.

In conclusion:

- There is evidence of circulation of a strain not previously detected in either swine or humans.
- Currently the extension of the human-to-human transmission is under investigation.

### **Epidemiological surveillance and strain research**

In the United States, confirmed cases of swine influenza in humans (H1N1) were identified in 5 states. Currently, research is being conducted to determine the source of infection and whether there are additional cases. All cases were mild and the patients recovered. No cases previously recorded had contact with pigs.

In Mexico prevention and control measures including surveillance are being implemented, kindergartens, schools and universities in Mexico City have been closed as a precautionary measure. Social and cultural activities for 10 days have also been suspended.

This new virus sub-type could be circulating in swine and this is investigated.

## International Health Regulation (IHR)

To advise the DG on the event, the IHR Emergency Committee has been convened on April 25. The Committee concluded that the event constitutes a public health emergency of international concern. So far, no recommendations have been issued. The Emergency Committee will advise the DG on the basis of the available information.

**At Risk Area see Map**



Figure 1<sup>1</sup>

## Response from Mexico

- The Government has taken a number of measures to monitor the evolution of disease for appropriate treatment and to make early diagnoses.
- Antiviral and protective equipment are available in the country.

## PAHO/WHO Response

- A telephone press conference was held today in Geneva, during which many useful questions from the international press were answered by Dr Keiji Fukuda<sup>2</sup>.

<sup>1</sup> Summary of locations with reported deaths (red triangles) and confirmed cases (blue icons).

<sup>2</sup> Audio of the press briefing with Dr Keiji Fukuda, Assistant Director-General - Health Security and Environment can be heard online in [http://new.paho.org/hq/index.php?option=com\\_content&task=view&id=1267&Itemid=569](http://new.paho.org/hq/index.php?option=com_content&task=view&id=1267&Itemid=569). A transcript can also be found in <http://www.who.int/csr/disease/swineflu/transcript26April.pdf>.

- PAHO is organizing a briefing for Ministers of Health and country officers.
- Mobilization of a multidisciplinary team to Mexico under the GOARN system.
- Preparation/update of WHO guidelines for field use.
- Shipping of supplies from stockpiles in Panama and Geneva to Mexico for the investigation team.
- The WHO SHOC room and PAHO Emergency Operations Center (EOC) remain activated.

### Conclusions

- The epidemiological characterization of the present outbreak remains a key to understanding the behavior of the novel virus.
- All cases reported worldwide are mild cases or not confirmed; to date, only Mexico has reported fatal cases.

### For more information

- [PAHO Influenza website](#)<sup>3</sup>.
- [Alerta preventiva por brote de influenza](#)<sup>4</sup>, Secretaría de Salud de México.
- [CDC Human Swine Influenza Investigation](#)<sup>5</sup>.
- [World Health Organization](#)<sup>6</sup>.

The PAHO EOC can be contacted at +1 202 974 3399 or <a href="mailto:eoc@paho.org">eoc@paho.org</a>
--

---

<sup>3</sup> [http://new.paho.org/hq/index.php?option=com\\_content&task=blogcategory&id=805&Itemid=569](http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=805&Itemid=569)

<sup>4</sup> [http://portal.salud.gob.mx/contenidos/noticias/influenza/alerta\\_influenza.html](http://portal.salud.gob.mx/contenidos/noticias/influenza/alerta_influenza.html)

<sup>5</sup> <http://www.cdc.gov/swineflu/investigation.htm>

<sup>6</sup> <http://www.who.int>