



Update New virus *Influenza A(H1N1)*



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The data and information of this report are updated daily and are available at: http://new.paho.org/hq/index.php?option=com_frontpage&Itemid=1&lang=en Data can change as new notifications from countries are received.

The information is obtained from official websites of the Ministries of Health of the countries of the Americas and information submitted by the International Health Regulations (IHR) National Focal Points.

Summary of the current situation

Up to 18 May 2009, **9,723 confirmed cases** of the new virus influenza A (H1N1) infection, including **80 deaths**, have been notified in **14 countries** of the Americas: Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Mexico, Panama, Peru and the United States. (**Figure 1**) The date of the onset of symptoms of the first confirmed case was 28 March 2009 in the United States.

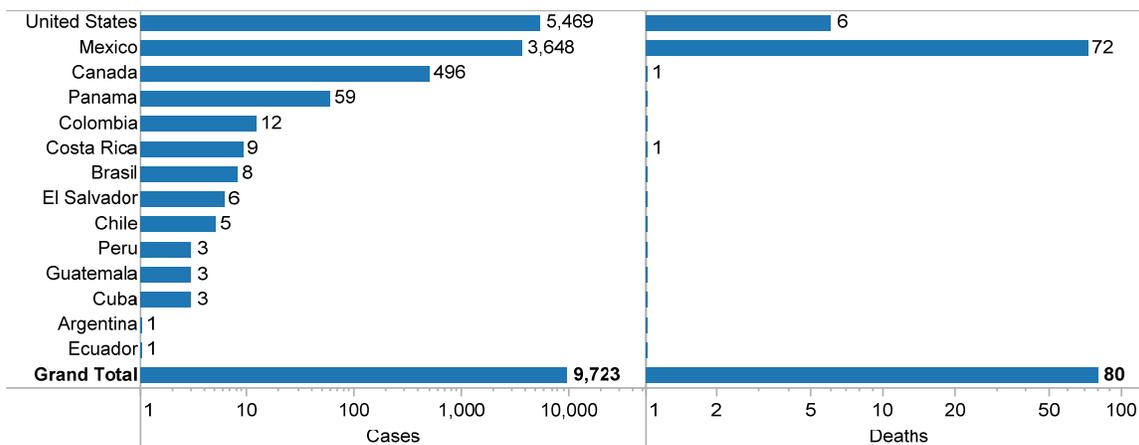
WHO is not recommending any travel restrictions related to the outbreak of the *Influenza A(H1N1)* virus. Individuals who are ill should delay travel plans and returning travelers who fall ill should seek appropriate

medical care. These recommendations are prudent measures which can limit the spread of many communicable diseases, including *Influenza*.

As of 19 May 2009, 11:00 AM ET, 48 states of the United States have reported a total of **5,469 confirmed and probable cases** and **6 deaths**. The most affected states are: Wisconsin (with 766 cases), Illinois (with 707), Texas (556 cases, with 3 deaths), California (553 cases), Arizona (488 cases, with 2 deaths), and Washington state (362 cases, with 1 death).

Source: CDC. <http://www.cdc.gov/h1n1flu/update.htm>

Figure 1. Number of confirmed cases and deaths by the new virus influenza A (H1N1) in countries of the Americas - Updated to 19 May 2009



Source: Ministries of Health of the countries of the Americas.

Human-animal interface aspects of Influenza A/H1N1

Swine influenza¹ (not the *Influenza A/H1N1* virus currently causing human infections) is, in general, a highly contagious respiratory disease of pigs caused by one of several swine influenza viruses (SIVs). Morbidity in pigs tends to be high (23% - 30%) and mortality low (1% - 4%). Often, pigs do not show signs of infection. Outbreaks in pigs occur year round, with an increased incidence in autumn and winter in temperate zones. Swine influenza is not notifiable to the OIE (www.oie.int), therefore its international distribution in animals is not well characterized. Respiratory disease in pigs due to SIV is thought to occur in most countries in the world and many countries routinely vaccinate swine populations against swine influenza.

Swine influenza viruses do not normally infect humans. However, outbreaks and sporadic human infection with SIVs have been occasionally reported and serological studies have demonstrated exposure of humans in certain risk groups. Most commonly, infection occurs in people in direct and close contact with pigs such as farmers and abattoir workers. Human influenza viruses have also been transmitted from people to pigs.

Transmission among and between pigs and humans is likely to occur through direct or indirect contact with respiratory secretions or inhaling large droplets or aerosols spread through coughing and sneezing. The clinical picture of SIV infection in people is generally similar to that of human seasonal influenza. It is likely that most people, especially those who do not have regular contact with pigs, do not have immunity to SIVs and thus would be susceptible to SIV infection, although cross-protectivity studies are ongoing to explore this question further. Currently, there is no vaccine to protect people from SIV infection.

Swine influenza viruses are most commonly of the H1N1 subtype, but other subtypes are also circulating in pigs (e.g., H1N2, H3N1, H3N2). As with all influenza viruses, SIVs change, evolve and reassort continuously. Pigs can be infected by

avian influenza and human influenza viruses, as well as SIVs. When influenza viruses from different species infect pigs (or other animals) simultaneously, the viruses can reassort (i.e. swap genes) and new viruses that are a mix of swine, human and/or avian influenza viruses can emerge. This type of reassortment has already happened in pigs, for example, a triple reassortant with swine, avian and human genes has been circulating in the swine population of the USA since at least 1998. This type of reassortment can also occur in humans. The currently circulating influenza A/H1N1 virus is also a reassortant one, composed of genes of swine, avian and human origin. This particular combination has so far not been seen in humans or in swine, and the origin of this reassortment, and when and where it happened, is not known.

The current epidemic by the new virus Influenza A(H1N1) has not been linked to the contact with live pigs nor with consumption of pork or pig meat products. Research of cases by public health authorities indicates that the contact with another person infected with the new virus has been the source of the infection.

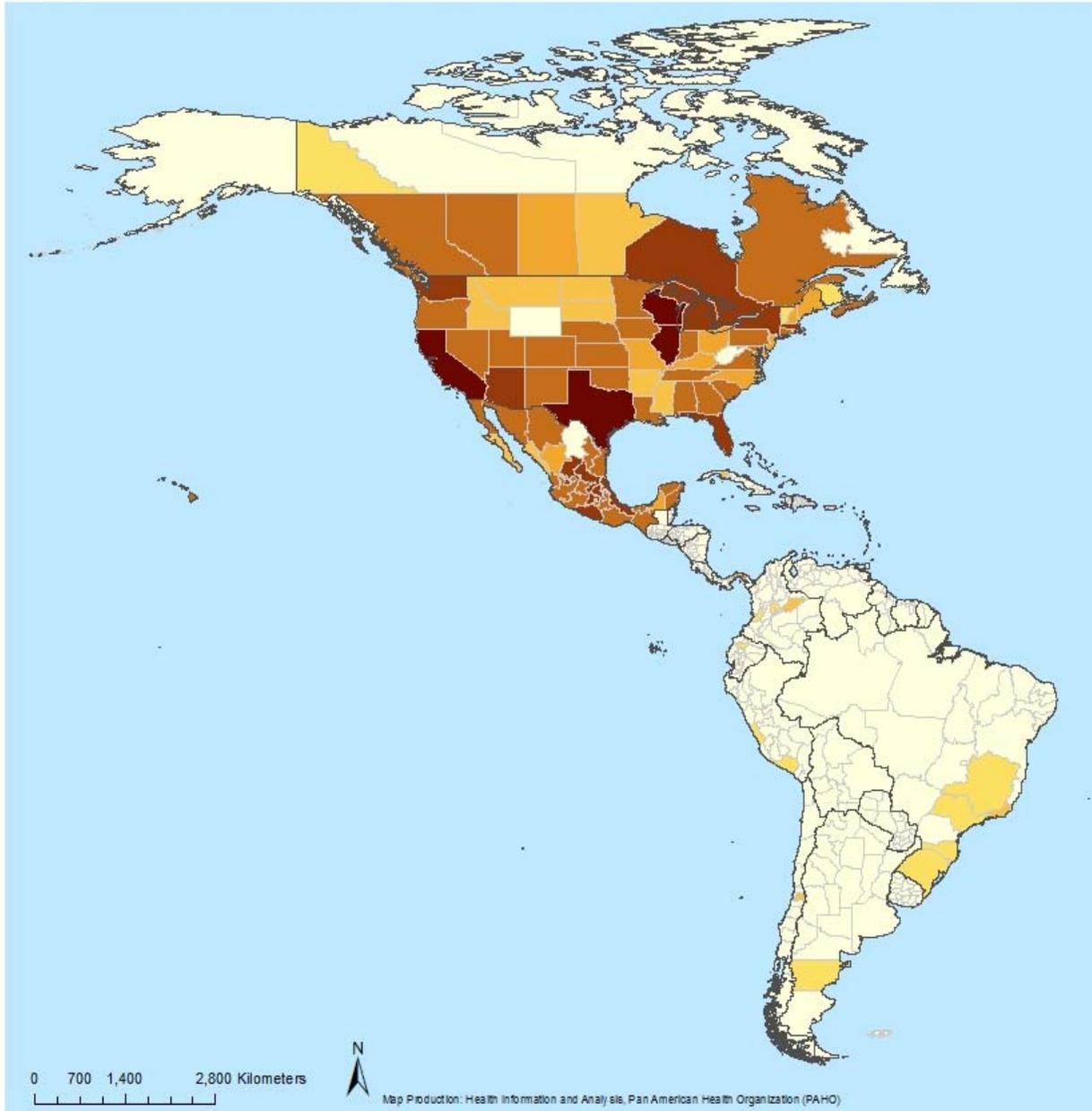
Due to the potential or eventual interactions between human and porcine populations, health and agriculture authorities, in close coordination, should promote and facilitate an active surveillance in people who interact directly with pigs. Furthermore, as stated by OIE and FAO recommendations, active surveillance should also include pig populations for an early detection of new viruses that can compromise the human and animal health.

Source: INFOSAN Information Note No. 2/2009 – “Human-animal interface aspects of Influenza A/H1N1”. The International Food Safety Authorities Network (INFOSAN). WHO/FAO. 2009.

For further information visit the PAHO portal for the new Influenza virus A(H1N1):
http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=805&Itemid=569&lang=en

¹ * The term “swine influenza” is used to designate the influenza disease circulating on pigs produced by different viruses of the new virus Influenza A(H1N1).

Influenza A/H1N1. Region of the Americas. 19 May 2009 (23 h GMT; 18 h EST)



0 700 1,400 2,800 Kilometers



Map Production: Health Information and Analysis, Pan American Health Organization (PAHO)

