

2009 H1N1 Flu

Name: _____

Date: _____ Block: _____

Answer these questions RIGHT NOW:

1. Do you know anybody who had swine flu? _____
2. What is the H1N1 virus? (have you heard of it)? _____
3. From where did you get your information about swine flu? (TV, Internet, Uncle Gary?) _____
4. Based on what you think you know, estimate the number of people who have died from swine flu in the US: _____

In this reading activity, we will learn a little about an infectious disease and focus on several objectives: Learn what the Swine Flu really is; compare data collected from different sources; discuss data discrepancies; reflect on what is really happening versus what we believe is happening.

There are two articles on this page. The first article is from the U.S. Center of Disease Control and Prevention, a US federal agency within the department of Health and Human Services. The CDC is staffed by journalists, doctors and politicians. The second article is from Wikipedia, an open source web page designed to have free and unlimited access to all information. Wikipedia is not peer-reviewed, but internal reliability studies suggest that as a whole, it's "pretty good."

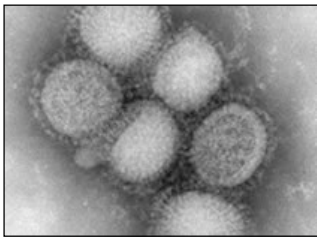
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**Source: U.S. Center for Disease Control and Prevention.**

<http://www.cdc.gov/H1N1flu/qa.htm>. 12 January 2010. Accessed 3 Feb 2010.

## What is 2009 H1N1 (swine flu)?

2009 H1N1 (sometimes called "swine flu") is a new influenza virus causing illness in people. This new virus was first detected in people in the United States in April 2009. This virus is spreading from person-to-person worldwide, probably in much the same way that regular seasonal influenza viruses spread. On June 11, 2009, the World Health Organization (WHO) signaled that a pandemic of 2009 H1N1 flu was underway.



## Why is 2009 H1N1 virus sometimes called "swine flu"?

This virus was originally referred to as "swine flu" because laboratory testing showed that many of the genes in this new virus were very similar to influenza viruses that normally occur in pigs (swine) in North America. But further study has shown that this new virus is very different from what normally circulates in North American pigs. It has two genes from flu viruses that normally circulate in pigs in Europe and Asia and bird (avian) genes and human genes. Scientists call this a "quadruple reassortant" virus.

## How does 2009 H1N1 flu compare to seasonal flu in terms of its severity and infection rates?

With seasonal flu, we know that seasons vary in terms of timing, duration and severity. Seasonal influenza can cause mild to severe illness, and at times can lead to death. Each year, in the United States, on average 36,000 people die from influenza and flu-related complications, and more than 200,000 people are hospitalized from flu-related causes. Of those hospitalized, 20,000 are children younger than 5 years old. Over 90% of deaths and about 60 percent of hospitalization occur in people older than 65.

When the 2009 H1N1 outbreak was first detected in mid-April 2009, CDC began working with states to collect, compile and analyze information regarding the 2009 H1N1 flu outbreak, including the numbers of confirmed and probable cases and the ages of these people...

Laboratory Confirmed Influenza-Associated Hospitalizations and Deaths from August 30 2009 to January 23, 2010

Posted January 29, 2010, 11:00 AM ET

Data reported to CDC by January 26, 2010, 12:00 AM ET. <http://www.cdc.gov/h1n1flu/updates/us/>

| Cases Defined by           | Hospitalizations | Deaths |
|----------------------------|------------------|--------|
| Influenza Laboratory-Tests | 39,387           | 1,857  |

Source: Wikipedia. [http://en.wikipedia.org/wiki/2009\\_flu\\_pandemic#cite\\_note-NYT5-27-8](http://en.wikipedia.org/wiki/2009_flu_pandemic#cite_note-NYT5-27-8)

### 2009 Flu Pandemic

The 2009 flu pandemic is a global outbreak of a new strain of H1N1 influenza virus, often referred to colloquially as "swine flu". Although the virus, first detected in April 2009, contains a combination of genes from swine, avian (bird), and human influenza viruses, it cannot be spread by eating pork or pork products.[3][4]

The outbreak began in the state of Veracruz, Mexico, with evidence that there had been an ongoing epidemic for months before it was officially recognized as such.[5] The Mexican government closed most of Mexico City's public and private facilities in an attempt to contain the spread of the virus. However the virus continued to spread globally, clinics in some areas were overwhelmed by people infected, and the World Health Organization (WHO) and US Centers for Disease Control (CDC) stopped counting cases and in June declared the outbreak to be a pandemic.[6]

While only mild symptoms are experienced by the majority of people,[6] some have more severe symptoms. Mild symptoms may include fever, sore throat, cough, headache, muscle or joint pains, and nausea, vomiting, or diarrhea. Those at risk of a more severe infection include: asthmatics, diabetics,[7] those with obesity, heart disease, the immunocompromised, children with neurodevelopmental conditions,[8] and pregnant women.[9] In addition, even for persons previously very healthy, a small percentage of patients will develop viral pneumonia or acute respiratory distress syndrome. This manifests itself as increased breathing difficulty and typically occurs 3–6 days after initial onset of flu symptoms.[10][11]

Similar to other influenza viruses, pandemic H1N1 is typically contracted by person to person transmission through respiratory droplets.[12] Symptoms usually last 4–6 days.[13] To avoid spreading the infection, it is recommended that those with symptoms stay home, away from school, work, and crowded places. Those with more severe symptoms or those in an at risk group may benefit from antivirals (oseltamivir or zanamivir).[14] Currently, there are 14,286 confirmed deaths worldwide. This figure is a sum of confirmed deaths reported by national authorities and the WHO states that total mortality (including deaths unconfirmed or unreported) from the new H1N1 strain is "unquestionably higher" than this.[15] The CDC estimates that, in the United States alone, and as of November 14, there had been 9,820 deaths (range 7,070–13,930) caused by swine flu.[16] On January 18, 2010, Margaret Chan, WHO Director-General, said the pandemic appeared to be easing in the northern hemisphere but could still cause infections until winter ends in April, and that it was too soon to say what would happen once the southern hemisphere enters winter and the virus becomes more infectious

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Questions for after reading:

5. Where did the name "swine flu" come from? _____
6. Is this an accurate name? _____
7. Why do you think we used this name? _____
8. How many people have died from the H1N1 virus in the US? _____
9. Is this number higher or lower than your estimate above? Why? _____
10. Why you think we paid so much attention to the H1N1 virus? _____
11. Do more people die from the H1N1 virus or the regular flu? How big is the difference? _____
12. Why do you think Wikipedia's numbers are different from the CDC's numbers? _____
13. Who do you think is correct? _____
14. Why do you think that? _____

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Consider this: Are you more afraid of getting hit by a car while walking or of catching the H1N1 virus? Now consider this: Last year, over 2000 pedestrians were hit by a car, truck, or bus in the Bay Area. (KCBS News, Friday 29 Jan. 2010) According to this, you are roughly twice as likely to hit by a car while walking than catch H1N1. On a separate piece of paper, write a free-response to this information. Consider the press, the medical community, the general population, and why we trust who we trust.