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2009 A-H1N1 Influenza Virus Resource Sheet

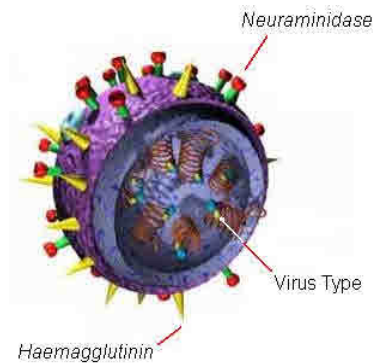
About the Influenza Virus

There are three types of influenza viruses: A, B, and C, based on the genetic code inside the nucleus (see illustration). Influenza type A viruses are the most dangerous and are divided into subtypes.

Virologists name the subtypes according to two different proteins on their surface: *Haemagglutinin* (HA) and *Neuraminidase* (NA). For example, an “H1N1” virus has an HA 1 protein and an NA 1 protein. Many different combinations of HA and NA proteins are possible. Influenza A subtypes currently circulating among people worldwide include H1N1, H1N2, and H3N2.

Note that calling this virus “swine flu” is misleading and has significantly impacted the swine industry in a negative way. Its genetic material is comprised of mostly human flu combined with some Asian swine flu, some N. American swine flu, and some N. American avian flu.

It is important to note that as of this writing, there are no documented cases indicating swine-to-human transmission of this virus.



How The Virus Replicates

The influenza material uses the pointed *Haemagglutinin* “spikes” like spears to pierce the wall of a healthy cell. The “infected” genetic code then moves into the healthy cell and uses it to manufacture more viral material. After it’s finished, the influenza uses its *Neuraminidase* “feet” to push away so it can infect another healthy cell.

Terms & Definitions

communicable – capable of being transmitted from one person to another.

epidemic – local or regional outbreak of a contagious disease.

incubation – development of an infectious disease from time of the pathogen’s entrance to the appearance of clinical symptoms (up to 24 hours in A-H1N1). A person is contagious during this period.

isolation – controlling spread of disease by separating persons known to be ill from those who aren’t.

outbreak – sudden rise in the incidence of a disease.

pandemic – epidemic that quickly becomes wide-spread and affects an entire continent or the world.

quarantine – isolation for people exposed to the disease but may or may not yet be ill.

social distancing – voluntarily maximizing personal space between people to reduce chance of infection.

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2009 A-H1N1 Resources – Human and Animal Health

Food and Drug Administration (FDA)

- ▶ A-H1N1 and Food: http://www.fda.gov/oc/opacom/hottopics/H1N1Flu/faq_food.html
- ▶ Emergency Use Authorization: <http://www.fda.gov/bbs/topics/NEWS/2009/NEW02002.html>

Department of Agriculture

- ▶ <http://www.usda.gov/wps/portal>

Centers for Disease Control and Prevention (CDC)

1. Main H1N1 Page: <http://www.cdc.gov/h1n1flu/index.htm>
2. Case Counts: <http://www.cdc.gov/swineflu/investigation.htm>
3. Influenza General Resources: <http://www.cdc.gov/flu/pandemic/>
4. Key Facts: www.cdc.gov/swineflu/key_facts.htm
5. Interim Guidance for EMS and 9-1-1 PSAPs: http://www.cdc.gov/h1n1flu/guidance_ems.htm
6. Press Briefing Transcripts: <http://www.cdc.gov/media/transcripts/2009/t090426.htm>
7. Seasonal Flu Overview: <http://www.cdc.gov/flu/weekly/>
8. Travel Updates and Guidance: <http://wwwn.cdc.gov/travel/contentSwineFluTravel.aspx>

World Health Organization

- ▶ A-H1N1 Page: <http://www.who.int/csr/disease/swineflu/en/index.html>
- ▶ Pandemic Alert Phases: http://www.who.int/csr/disease/avian_influenza/phase/en/index.html

PanFlu.Gov

1. Home Page: <http://www.pandemicflu.gov/>
2. State-by-State Pandemic Planning: <http://www.pandemicflu.gov/plan/states/index.html>
3. Response Stages: <http://www.pandemicflu.gov/plan/federal/fedresponsestages.html>
4. H1N1 FAQ: <http://pandemicflu.gov/faq/swineflu/>
5. Use of Pneumococcal Vaccine: <http://www.pandemicflu.gov/vaccine/pneumococcal.html>

Oklahoma State Department of Health (OSDH)

- ▶ Home Page: <http://www.ok.gov/health/>

Pan American Health Organization

- ▶ Influenza Briefings: <http://new.paho.org/hq/index.php?lang=en>
- ▶ http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=805&Itemid=569

Association of State and Territorial Health Officers (ASTHO)

- ▶ Flu Updates by State: http://www.astho.org/templates/display_pub.php?pub_id=3797&admin=1

Agency for Healthcare Research and Quality (AHRQ)

- ▶ Tools and Resources: <http://www.ahrq.gov/prep/swineflu.htm>

Society of Critical Care Medicine (SCCM)

- ▶ http://www.sccm.org/Public_Health_and_Policy/Disaster_Resources/Pages/default.aspx

National Library of Medicine

- ▶ Swine Flu Resources: <http://sis.nlm.nih.gov/enviro/swineflu.html>

Public Health Agency of Canada (PHAC)

- ▶ Flu Info: http://www.phac-aspc.gc.ca/alert-alerte/swine_200904-eng.php
- ▶ Travel Warnings: <http://www.phac-aspc.gc.ca/tmp-pmv/2009/hsf-mexico-090427-eng.php>

2009 A-H1N1 Resources – Miscellaneous

British Broadcasting Company (BBC)

- World Map of H1N1 progress: <http://news.bbc.co.uk/2/hi/americas/8021547.stm>

Department of Homeland Security (DHS)

- Flu Updates: <http://www.dhs.gov/xprepresp/programs/swine-flu.shtm>

Federal Emergency Management Agency (FEMA)

- FEMA Assistance for Pan Flu: http://www.fema.gov/government/grant/pa/9523_17.shtm

Government of Canada

- Home Page: <http://www.canada.gc.ca/home.html>
- General Influenza Information: <http://www.fightflu.ca/index-eng.html>

Occupational Safety and Health Administration (OSHA)

- Healthcare Workers Guidance: http://www.osha.gov/Publications/OSHA_pandemic_health.pdf
- Workplace Guidance: http://www.osha.gov/Publications/influenza_pandemic.html

Office of Personnel Management

- General Pandemic Information: www.opm.gov/pandemic/
- Pandemic Memo: <http://www.chcoc.gov/Transmittals/TransmittalDetails.aspx?TransmittalId=2227>

PPE / Masks

1. Stockpiling Guidance: <http://www.osha.gov/dsg/guidance/stockpiling-facemasks-respirators.html>
2. Interim Homecare Guidance: http://www.cdc.gov/swineflu/guidance_homecare.htm
3. Respirators Cleared by FDA: <http://www.fda.gov/bbs/topics/NEWS/2007/NEW01630.html>
4. Interim Healthcare Guidance: http://www.cdc.gov/swineflu/guidelines_infection_control.htm
5. Recommendations for Face-Mask Use in Community: <http://www.cdc.gov/swineflu/masks.htm>

Disclaimer: The information provided in this document was derived from credible sources and is intended for general informational purposes only. Those readers who desire more detailed, up-to-date information should consult the appropriate source.