

# 2009 H1N1 Influenza Virus Vaccination Training

Louisiana Department of Health & Hospitals  
Office of Public Health

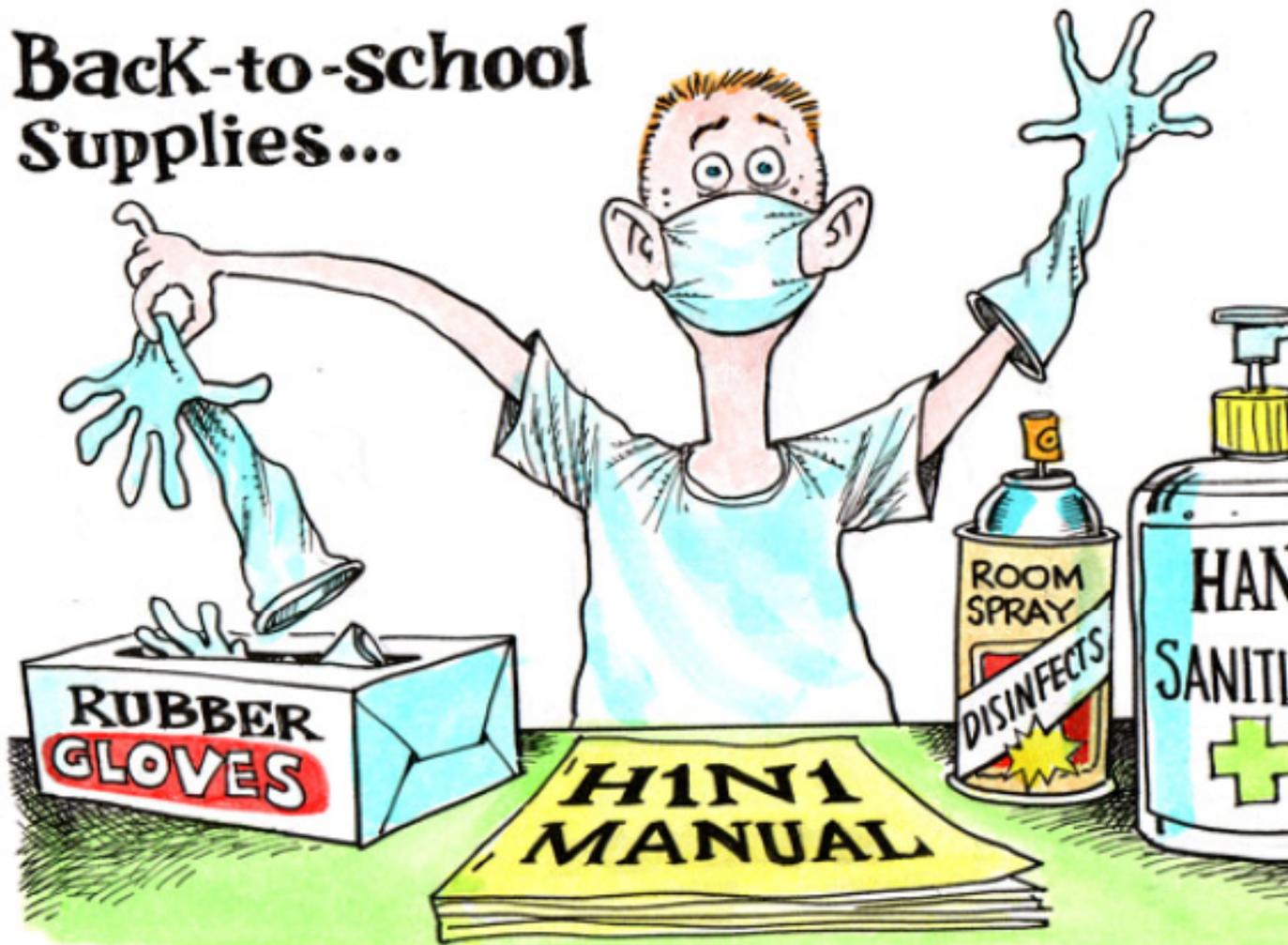


# OBJECTIVE

**To provide training on how to appropriately and effectively administer influenza vaccine**



# Back-to-school Supplies...



DAVE GRANLUND © [www.davegranlund.com](http://www.davegranlund.com)

**Vaccines are the  
most powerful public health  
tool for control of influenza**



# **2009 H1N1 Influenza Vaccines**

**The H1N1 Vaccines are made to protect against 2009 H1N1 influenza.**

**They are produced just like the seasonal flu vaccine.**



# **2009 H1N1 Influenza Vaccines**

**The vaccines will not prevent “flu-like” illnesses caused by other viruses.**

**They will not prevent seasonal flu. Persons should be encouraged to get seasonal influenza vaccine, if recommended.**

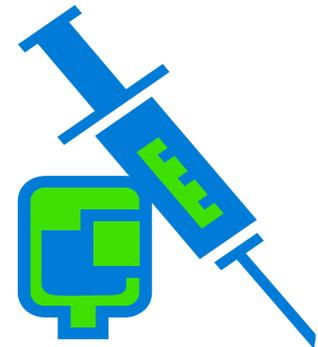


# 2009 H1N1 Influenza

## **INACTIVATED VACCINE**

**Inactivated (killed) vaccine is injected into the muscle, like the seasonal flu vaccine.**

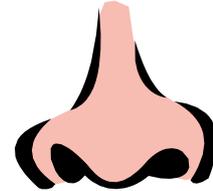
**Some inactivated vaccine contains thimerosal (a preservative). Thimerosal – free vaccine is also available.**



# 2009 H1N1 Influenza

## **LIVE, ATTENUATED INTRANASAL VACCINE (LAIV)**

**LAIV is sprayed in the nose.**



**It does not contain thimerosal (preservative) or other preservatives. It is licensed for persons 2 through 49 years of age.**

**The vaccine is attenuated (weakened) so it will not cause illness.**

# **PRIORITY GROUP JUSTIFICATION**

**CDC's Advisory Committee on Immunization Practices(ACIP) recommend that certain groups of the population receive the 2009 H1N1 vaccine based upon several factors, including:**

- Those at greatest risk for severe illness and complications during the novel H1N1 outbreak**
- Those who contribute to the overall burden of severe illness**
- Protection of health care system functions**
- Reduction of societal impact**
- Potential for indirect protection of more vulnerable contacts**

# ACIP PRIORITY GROUPS

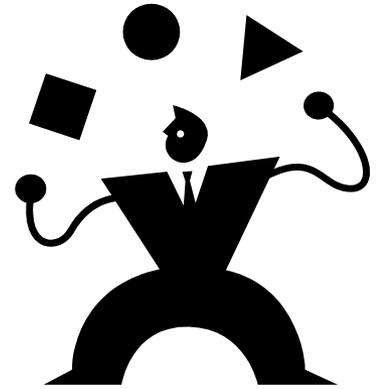
**Pregnant women**

**Children and young adults ages 6 months through 24 years of age**

**Workers in health care settings**

**Household contacts and caregivers for children younger than 6 months of age**

**Adults age 25-64 years with underlying medical conditions**



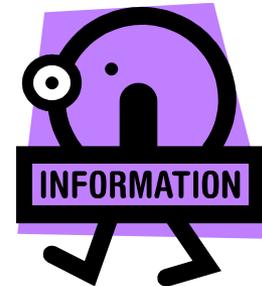
# **Vaccine Information Statement (VIS)**

**Who, What, When, Where, Why**

# Vaccine Information Statement (VIS)

## What is the VIS?

An information sheet that explains to Vaccine recipients, their parents, or their Legal representatives both the **benefits and risks** of the vaccine.



# Vaccine Information Statements

**Federal law** requires that VISs be handed out whenever (before each dose) the influenza vaccination is given.



# Who must give out VISs?

**All providers of vaccines, both public and private sector.**



# Why must VISs be used?

It is a **requirement** of the National Childhood Vaccine Injury Act of 1986. Their **purpose** is to inform vaccine recipients, or parents of children getting vaccines, about the **benefits and risks of vaccines.**

# When must VISs be given out?

They must be given out at the time of each (not just with the first dose) vaccination — **prior to administration** of the vaccine.

# All H1N1 Vaccine Providers Will:

1. Give the appropriate VIS to the recipient / parent / legal representative with each dose of vaccine;
2. Give it prior to administration of the vaccine;
3. Give it each time the vaccine is given (not just with the first dose); and
4. Record information in the patient's record in LINKS.



# **Inactivated 2009 H1N1 Vaccine Contraindications (The Injection)**

**Persons with severe allergies to eggs, or any other substance in the vaccines;**

**Those who have had a life-threatening allergic reaction after a dose of the seasonal flu;**

**Persons with Guillain-Barré Syndrome  
(a severe paralytic illness)**



# **Inactivated 2009 H1N1 Vaccine Contraindications (The Injection)**

**Moderately or severely ill individuals may be advised to wait until they recover before getting the vaccine.**

**The 2009 H1N1 vaccine may be given at the same time as other vaccines, including seasonal flu vaccine.**

**\*Please NOTE: Pregnant women **can** receive **inactivated** 2009 H1N1 influenza vaccine.**

# **Live 2009 H1N1 Vaccine**

## **Contraindications (Intranasal Spray)**

**Persons with severe allergies to eggs, or any other substance in the vaccines;**

**Those who have had a life-threatening allergic reaction after a dose of the seasonal flu;**

**Persons with Guillain-Barré Syndrome  
(a severe paralytic illness)**



# **Live 2009 H1N1 Vaccine Contraindications (continued)**

**Children < 2 and adults 50 years and older;**

**Pregnant women;**



**Immunocompromised individuals;**

**Persons with long-term health problems;**

# **Live 2009 H1N1 Vaccine**

## **Contraindications (Intranasal Spray)**

**Children < 5 years with asthma or one or more episodes of wheezing during the past year;**

**Persons with muscle/ nerve disorders that can lead to breathing or swallowing difficulty;**

**Persons in close contact with a person with a severely weakened immune system (requiring care in a protected environment);**



# Live 2009 H1N1 Vaccine

## Contraindications (Intranasal Spray)

Children or adolescents on long-term aspirin therapy;

Moderately or severely ill individuals may be advised to wait until they recover before getting the vaccine.

The 2009 H1N1 vaccine may be given at the same time as most vaccines. **H1N1 LAIV and seasonal LAIV should not be given together.**



# VACCINE STORAGE AND HANDLING

All 2009 H1N1 vaccine should be refrigerated at 2° to 8° (35° to 46°). DO NOT FREEZE.



Between uses, multi-dose vials should be stored at 2° to 8° (35° to 46°).

Do not use vaccine after the expiration date shown on the label.



# VACCINE ADMINISTRATION TECHNIQUES



# BE PREPARED

- **Control infection transmission**
  - Use universal precautions
  - Proper cleaning and disposal of waste
- **Anticipate adverse effects**
- **Assure patient safety**
  - Know your equipment
  - Establish quality procedures
  - Practice good technique

# Protect Yourself

## Use Universal Precautions

( Infection control guidelines are designed to protect workers from exposure to diseases spread by blood and certain body fluids)

**Assume all patients to be infectious for blood-borne diseases.**

# UNIVERSAL PRECAUTIONS

- Universal Precautions Apply To:  
**Blood**

Universal precautions should be applied to all body fluids when it is difficult to identify the specific body fluid or when body fluids are visibly contaminated with blood.

## Standard Interpretations

### 09/01/1992 - Using gloves in administering routine injections

Clarification concerning the use of gloves in administering routine injections under the Occupational Safety and Health Administration (OSHA) regulation, 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

The personal protective equipment requirements of the standard are performance oriented. .. At a minimum, gloves must be used where there is reasonable anticipation of employee hand contact with blood, other potentially infectious material, mucous membranes, or non-intact skin; when performing vascular access procedures; or when handling or touching contaminated surfaces or items.

In general, OSHA agrees ...that **gloves are not necessary when giving routine injections as long as hand contact with blood or other potentially infectious material is not anticipated.** If bleeding is anticipated and the employee is required to clean the site following injection, then gloves must be worn. Additionally, if the patient's skin is abraded, gloves would be required.

# Universal Precautions

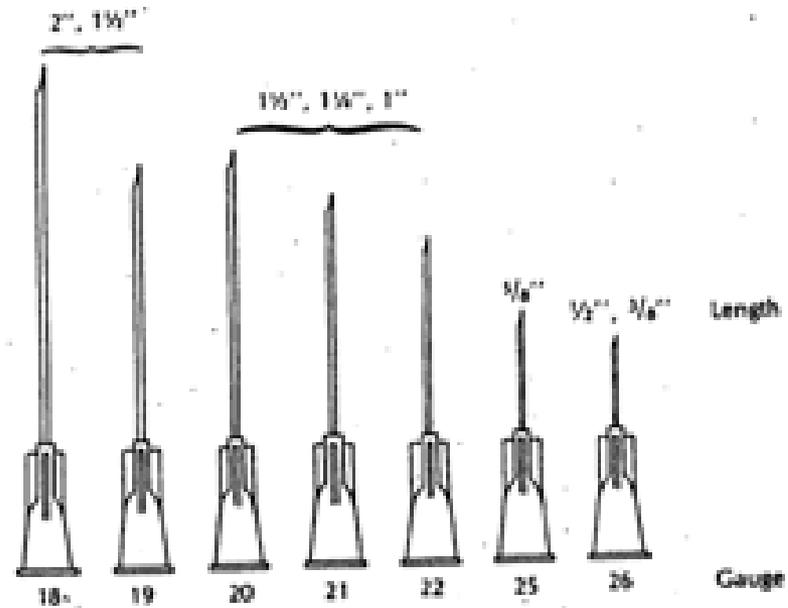
- **Place needles in special containers (Sharps Container)**
- **Place soiled articles in plastic bag for disposal**

# Immunization Procedures

- **Be prepared and organized**
- **Screening Questions**
  - **How do you feel today?**
  - **Do you have drug/food allergies? Eggs?**
  - **Have you had this vaccination before?**
  - **Have you ever had a reaction to any vaccine?**
  - **Is it possible that you could be pregnant?**  
**Breastfeeding?**
  - **Do you have any chronic diseases?**
  - **Have you had any medications or vaccines within the past thirty days?**

# NEEDLES AND GAUGES

Various needle lengths and gauges



# **Intramuscular (IM) Injection**

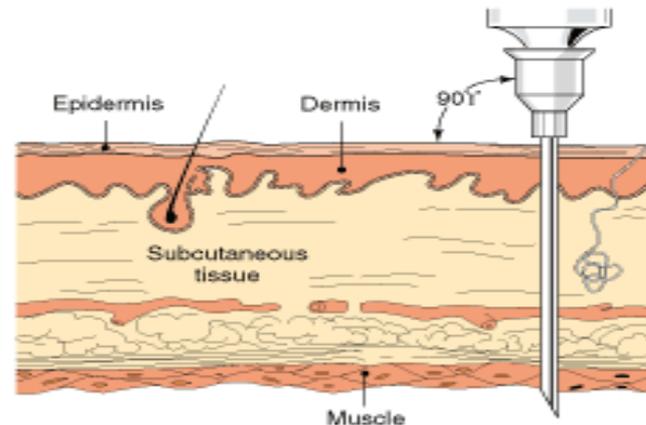
- **Check for drug allergies.**
- **Wash hands.**
- **Use appropriate syringe and needle (refer to Reference Manual for specifications). Use a longer needle with obese client to ensure that medication is injected into a muscle.**

# **Intramuscular (IM) Injection** (continued)

- **Position client, and locate site using appropriate anatomical landmarks.**
- **Wipe site with alcohol in a circular motion to cleanse. Allow to dry.**
- **Spread skin taut (adults) or bunch (infants), and insert needle at 90° angle with quick, dart-like action.**

# Intramuscular (IM) Injection (continued)

- Aspirate, and observe for blood. (If blood appears, remove and discard needle).
- Inject medication slowly, remove needle quickly, and gently apply pressure to site with dry, sterile 2 x 2 gauze. Do not massage injection site.

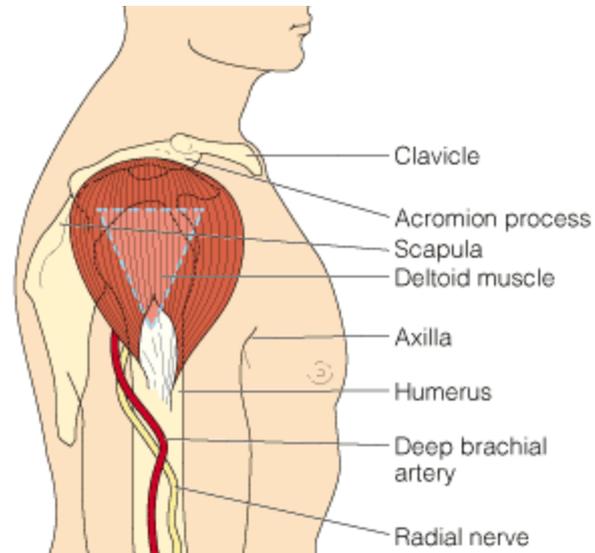


# ***Deltoid (Upper Arm)***

- **Locate site by measuring 2 - 3 fingerbreadths below the acromion process on the lateral midline of the arm.**
- **Administer in non-dominant arm when possible.**



# Deltoid (Upper Arm)



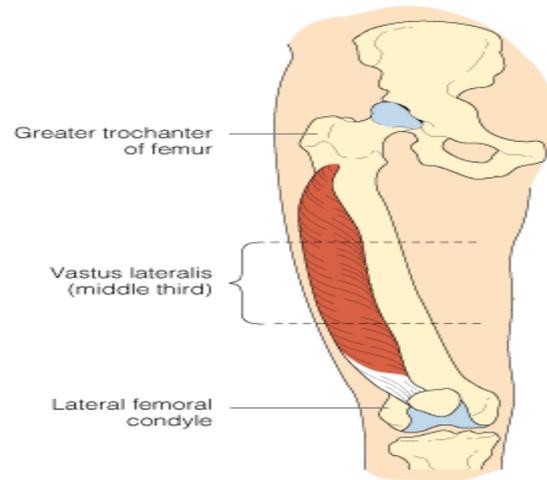
The deltoid muscle of the upper arm, used for intramuscular injections.

*Source:* Kozier et al., 2000, p. 785.

# ***Anterolateral Thigh (Vastus Lateralis)***

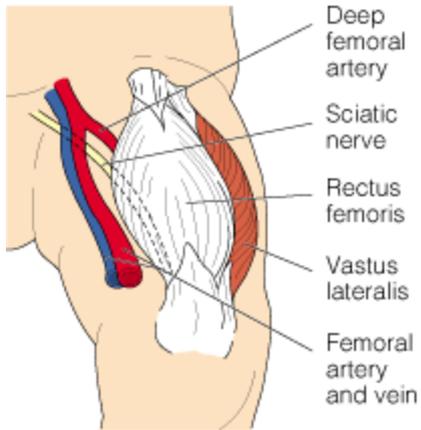
- **Use 22 - 25 gauge, 5/8 - 1 inch needle.**
- **This is the preferred intramuscular site for infants and toddlers < 3 years of age. Use of the anterolateral thigh is dependent upon body mass. The deltoid may be utilized as an alternate site if body mass is adequate.**
- **Position client in supine or sitting position.**
- **Locate by identifying the greater trochanter and lateral femoral condyle. Injection site is the middle third and anterior lateral aspect of the thigh.**

# Anterolateral Thigh (Vastus Lateralis)



The vastus lateralis site of the right thigh, used for intramuscular injections.  
*Source:* Kozier et al., 2000, p. 785.

# Anterolateral Thigh (Vastus Lateralis)

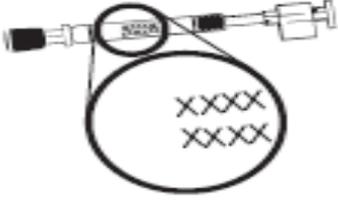


# After You Inject .....

- Do not recap needle
- Apply pressure to injection site with a cotton ball
- Apply adhesive bandage
- Record all necessary information
- Have patient remain under surveillance for ~15 minutes, if possible

# INTRANASAL ADMINISTRATION TECHNIQUE

**1**



**Check expiration date.**  
Product must be used before the date on sprayer label.

**2**



Remove rubber tip protector. Do not remove dose-divider clip at the other end of the sprayer.

**3**



With the patient in an upright position, place the tip just inside the nostril to ensure FluMist is delivered into the nose.

**4**



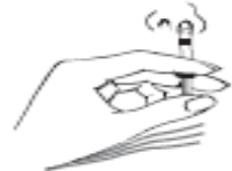
With a single motion, depress plunger **as rapidly as possible** until the dose-divider clip prevents you from going further.

**5**



Pinch and remove the dose-divider clip from plunger.

**6**



Place the tip just inside the other nostril and with a single motion, depress plunger **as rapidly as possible** to deliver remaining vaccine.

 **DO NOT INJECT. DO NOT USE A NEEDLE.**

**Note:** Active inhalation (i.e., sniffing) is not required by the patient during FluMist administration



# **POSSIBLE ADVERSE REACTIONS TO VACCINATION**



# Adverse Reactions

## Vasovagal Syncope (Fainting)

- Be aware of patient behavior
- Have patient sit before administration
- Lay patient down if necessary
- Check airway, breathing and vital signs



# Anaphylaxis

- Rare but potentially fatal
- Occurs within 15 minutes
- Call 911
- Lay patient down, check airway, breathing, vital signs
- Be prepared and ready to administer epinephrine (Epipen)



# Delayed Adverse Reactions

- Child – fever, fussy, crying, injection site discomfort
- Adult – injection site discomfort
- Symptomatic relief
  - Fluids
  - Pain medications
    - No aspirin for children
    - Acetaminophen (Tylenol)
    - Ibuprofen (Advil, Motrin)



# Reporting Adverse Reactions

## Vaccine Adverse Event Reporting System

### **(VAERS) data is used to:**

- Detect new, unusual, or rare vaccine adverse events
- Monitor increases in known adverse events
- Identify potential patient risk factors for particular types of adverse events
- Identify vaccine lots with increased numbers or types of reported adverse events
- Assess the safety of newly licensed vaccines

# Emergency Plan



- Access to Emergency Medical Services (EMS) – phone on hand
- Be prepared for adverse reactions
  - CPR trained staff
  - Necessary medications on hand
  - Have patient remain under surveillance after administration

# Emergency Plan

- Refer to the Office of Public Health Policy Memorandum 119 (located in the Strike Team Reference Manual) for Standing Orders for emergency management of adverse events.
- A copy of the Strike Team Reference Manual shall be present at every event site for ready reference.

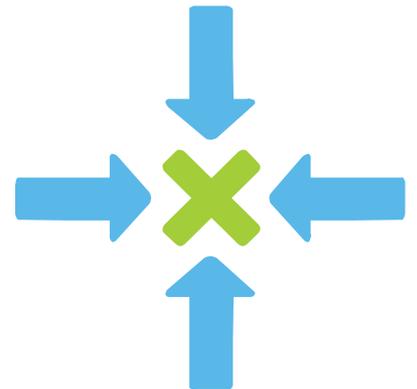


# ***Louisiana Immunization Network for Kids (LINKS)***

**Refer to the LINKS H1N1 MI Training module:**

**<https://linksweb.opd.dhh.louisiana.gov/linksweb/main.jsp>**

**for instruction on required H1N1 vaccination documentation**



# PUBLIC EDUCATION

## INFORM EVERYONE TO:

- Cover their nose and mouth with a tissue when they cough or sneeze. Throw the tissue in the trash after using it.



# PUBLIC EDUCATION

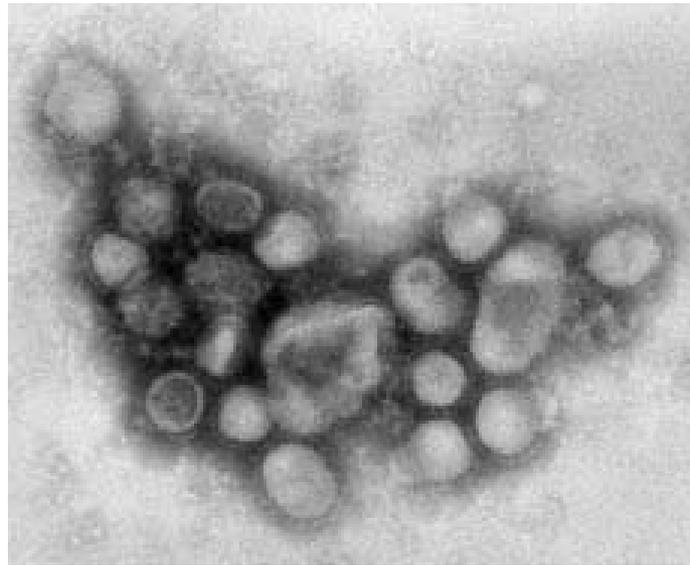
- **Wash their hands often with soap and water, especially after they cough or sneeze.**

**If soap and water are not available, they can use an alcohol-based hand rub.**



# PUBLIC EDUCATION

- **Avoid touching their eyes, nose or mouth. Germs spread that way.**



# PUBLIC EDUCATION

- **Stay home from school and / or work if they get sick. They should limit contact with others to keep from infecting them.**

