



Influenza Vaccination in Skilled Nursing Facilities

County of Los Angeles
Department of Public Health





Overview

- Influenza Facts
- Basics of Influenza Prevention and Infection Control Strategies in Skilled Nursing Facilities (SNFs)
- Influenza Vaccination Mandate for Healthcare Personnel (HCP) in Los Angeles County
- Vaccination and What to do with Decliners



Learning Objectives

1. Provide facts about influenza
2. Review the basics of influenza prevention strategies in SNFs
3. Provide an overview of the influenza vaccination mandate
4. Address strategies in promoting vaccination among decliners in SNFs



Influenza Facts





Influenza Facts

- Annually, influenza causes severe illness and deaths in the United States
 - ✓ 6th leading cause of death among US adults¹
 - ✓ Accounts for 23,000 deaths
 - ✓ More than 200,000 hospitalizations per year
- The Centers for Disease Control and Prevention (CDC) estimates that each year on average 5-20% of the population will get the flu

1. <http://www.cdc.gov/flu/about/disease/index.htm>



Influenza Facts

- Influenza or “flu,” is a contagious respiratory illness caused by influenza viruses.
- Spread to others by droplets when people with the flu talk, sneeze, or cough.
- Symptoms include:
 - fever ($\geq 100^{\circ}\text{F}$ or 38°C)
 - dry cough
 - headache
 - sore throat
 - extreme tiredness
 - runny or stuffy nose and muscle aches



Influenza Facts

- May infect others from 1 day before getting sick to 5-7 days after
- Supportive care and antiviral medication may reduce duration of symptoms, severity, and contagiousness
- The **best way to prevent the flu** in SNFs is annual vaccination among HCP and residents/patients.

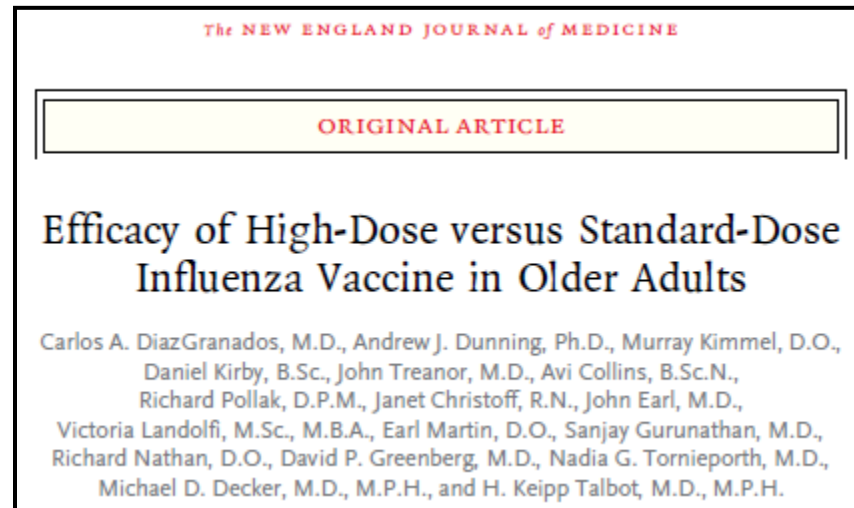


The Flu in Skilled Nursing Facilities

Challenges:

- Elderly are at higher risk for complications
- Atypical flu symptoms
- Vaccination may be less effective in the patients age ≥ 65
- Less access to diagnostic tests

Patients age ≥ 65 Vaccination



- Randomized, double-blind trial in patients age ≥ 65
- High-dose (4x) influenza vaccine provided improved protection against lab-confirmed influenza illness, compared to standard-dose vaccine (relative efficacy 24%, 95%CI 9.7-36.5%)

NEJM 2014; 371: 635-45



Influenza Prevention Strategies





Influenza Prevention Strategies

1. Influenza Vaccination of HCP and among Residents
2. Education/Awareness and Early Recognition of Influenza-like Illness (ILI)
3. Infection Control and Exposure Management

Influenza Vaccination of HCP and among Patients

- Effective in reducing influenza among HCP and residents/patients
- Decreased morbidity and mortality among residents/patients
- Reduction in staff illness and illness-related absenteeism.
- Increased productivity



Prompt Recognition of Influenza-Like Illness (ILI)

- Active screening
- Isolation
- Testing
- Treatment
- Restrictions for sick healthcare workers and visitors
- Encourage reporting
- Involve patients and families

Respiratory Etiquette & Educational Signage

Why do we wear masks?



FOR EVERYONE

Wearing a mask keeps us from catching or spreading germs. Keeping everyone healthy during flu season means...

- Our team gets a flu shot or wears a mask
- If you are a visitor or a patient and you feel sick, like when you have a fever, chills, cough, sore throat, body aches, runny or stuffy nose—tell a healthcare professional on our team.

WE HELP EACH OTHER STAY HEALTHY!

[Insert your logo here]

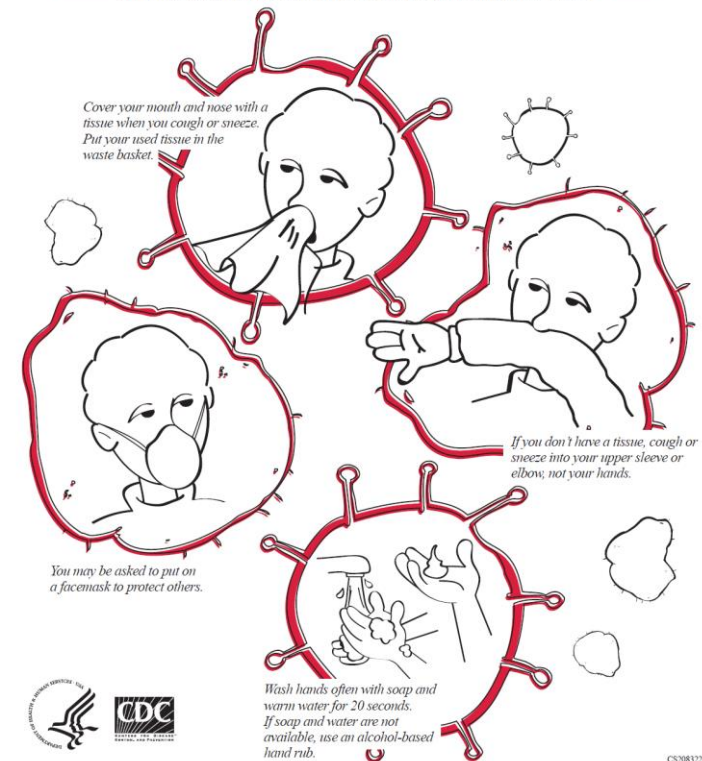
For more information, contact:

[Insert contact name]
[Insert contact number or email]

Rev: 12/16/2013

Cover your Cough

— Stop the spread of germs that can make you and others sick! —



CS208322



Infection Control

- Standard precautions
- Droplet isolation
- Hand hygiene and isolation supplies
- Single room
- Duration of isolation
- Exposure investigations
- Antiviral Prophylaxis
- Cohorting (grouping) as necessary

Influenza Outbreaks or Clusters in SNF

- **Health care institutions** associated with long term health care (i.e., skilled nursing facilities, intermediate care facility, and intermediate care for developmentally disabled):

At least one case of laboratory-confirmed influenza in the setting of a cluster (2 or more) of ILI within a 72-hour period



Reporting Diseases and Consulting with ACDC

- **To report a case or outbreaks of any disease or reportable condition, contact:**
By telephone (888)-397-3993, or fax (888)397-3778
Online: publichealth.lacounty.gov/acd/cdrs.htm
- **For diseases that require medical consultation, call:**
ACDC (213) 240-7941
After hours, call (213) 974-1234
Online: publichealth.lacounty.gov/acd/



Mandatory Influenza Vaccination for Healthcare Personnel in LAC





Healthcare Personnel (HCP) Vaccination Mandates Nationwide: A growing trend

- >300 facilities nationwide enforce mandatory HCP vaccination
- Professional societies support mandatory HCP vaccination:
 - Infectious Diseases Society of America
 - Association for Professionals in Infection Control and Epidemiology
 - Society for Healthcare Epidemiology of America
 - American Academy of Family Physicians
 - American College of Physicians
 - American Hospital Association
 - American Public Health Association



Mandatory Flu Vaccination for Healthcare Personnel in LAC

- On Oct 2, 2013, LAC Health Officer County issued the following health order:

“Pursuant to my authority under §120175 of the California Health and Safety Code, I hereby order every licensed acute care hospital, skilled nursing facility, and intermediate care facility within the County of Los Angeles public health jurisdiction to implement a program under which **healthcare personnel at such facility receive an annual influenza vaccination for the current season or wear a mask** for the duration of the influenza season while in contact with patients or working in patient-care areas.”

- Applies to all persons, including paid and unpaid employees, contractors, students, and volunteers
- Effective annually from Nov 1 – Mar 31 (Flu season)

Rationale for the Mandate

- Many HCW (23%) are infected with influenza each season¹
- Those with influenza may shed virus 1 day prior to symptoms²
- Many HCW (46%) continue to work with active flu-like symptoms³

¹Elder AG et al, BMJ 1996; 313: 1241-2

²Suess T et al, PLOS One 2012; 12: e51653

³Esbenshade JC et al, ICHE 2013; 34: 373-8



Rationale for the Mandate (continued)

- Influenza vaccination reduces the incidence of laboratory-confirmed influenza, particularly in young, otherwise healthy adults⁴
- Reduce doctor visits by 42% and sick days by 32%⁵
- Nosocomial transmission of influenza is well described⁶, and has been linked to low rates of vaccinated HCW⁷

⁴MMWR 20 Sep 2013

⁵Bridges CB et al, JAMA 2000; 284: 1655-63

⁶Stott DJ et al, Occup Med 2002; 52: 249-53

⁷Salgado CD et al, ICHE 2004; 25: 923-8



LAC Survey of Acute Care Facilities Evaluating the Impact of 2013 Health Officer Order

- LAC DPH ACDC Hospital Outreach Unit surveyed facilities to evaluate the impact of the health officer order
- Inclusion criteria: 94 LAC acute care facilities (excluding Pasadena and Long Beach)
 - 2 seasons pre-order (2011-2012 & 2012-2013)
 - 1 season post-order (2013-2014)
- Data collected:
 - Direct laboratory influenza testing results
 - Survey data from Infection Preventionists (IPs)
 - Absenteeism data from HR directors / staff on employee sick leave



Preliminary Results

- 49 IP surveys completed
- 44 IP line lists completed of cases identified as nosocomial influenza
- 30 Lab Director line lists completed of positive flu test obtained > 72 hours from admit
- 29 Absenteeism forms completed



Preliminary Results

Comparison of 2012-2013 and 2013-2014 seasons:

- Decreased absenteeism: average missed days per employee decreased from 5.5 to 12.7
- Increased vaccination of employees: percentage of employees vaccinated increased from 75.2% (in 2012-2013) to 86.2% (in 2013-2014)



Common Concerns about Influenza Vaccination...





“I always get sick after the flu shot”

- It is biologically impossible to get influenza infection **via** the flu shot
- The flu shot does not protect against other (non-influenza) viruses that circulate during flu season
- It is possible to get the flu **after** vaccination
 - ✓ Those infected before or immediately after vaccination may still get the flu (immunity may not develop until 2 weeks after vaccination)
 - ✓ Circulating flu strains may not match the vaccine strain
 - ✓ The vaccine is not 100% effective (though may still reduce severity of infection)



“I never get the flu”

- Influenza infects 5-20% of the US population each year (including HCW)
- HCW work with sick patients
 - ✓ Additional responsibility
- Most patients who died from the flu never had it before.



“I don’t want toxins injected into me”

- **Thimerosal** is used as a preservative to prevent contamination.
 - ✓ Removed from single-dose vaccines
 - ✓ Multi-dose vials = 25 micrograms per dose
- **Formaldehyde**
 - ✓ Trace amounts present during manufacturing process (~0.02 micrograms per dose)
 - ✓ A pear contains ~10 mg per pear

“I am allergic to egg.”

- An evaluation of 513 patients with severe egg allergy found **NO** cases of anaphylaxis reported after vaccination (a few mild allergic reactions were observed)¹
- Those who experience only **hives** or a **severe** reaction after eating eggs may receive
 - Recombinant vaccine (FluBlok®)
 - Inactivated vaccine in the presence of a physician with experience in the management of severe allergic conditions

¹Des Roches et al. J Allergy Clin Immunol 2012;130:1213–6.e1.



Contra-indications

- History of severe allergic reaction to any component of the vaccine or after previous dose of influenza vaccine
- Live-Attenuated Influenza Vaccine (Flu Mist)
Not recommended for:
 - ✓ age <2 years **or** >49 years
 - ✓ pregnant women, **or**
 - ✓ persons with chronic illnesses



Precautions

- History of Guillain-Barre Syndrome within 6 weeks of receipt of influenza vaccine
 - ✓ Risk of Guillain-Barre following¹
 - Influenza vaccination: 1 per 1 million doses
 - Influenza infection: 17 per 1 million infections
- Moderate or severe acute illness with or without a fever
- Asthma in persons \geq 5 years of age (LAIV)

¹Kwong JC et al, Lancet Infect Dis 2013; 13: 769-76)



What to do when HCP decline to get vaccinated?

- Education about influenza
- Dispelling Myths/Misconceptions about Influenza Vaccination
- Address the common concerns about Influenza Vaccination



In Summary...

Strategy	Take Home Points	Suggested Action Items
Vaccination	<ul style="list-style-type: none">• The best way to prevent the flu in SNFs is annual vaccination among HCP and patients/residents• HCP vaccination is protective to patients and a critical component of flu prevention efforts	<ul style="list-style-type: none">• Identify strategies to promote vaccinations among HCP and patients/residents• Promote compliance with LA County Health Order
Education and ILI Recognition	<ul style="list-style-type: none">• Employees, patients, and visitors should be educated on flu symptoms, transmission, and respiratory etiquette• Sick visitors and healthcare workers are an important source of influenza in SNF• Improper collection of flu specimens is common and can lead to false-negative results	<ul style="list-style-type: none">• Provide signage and educational materials for patients and visitors• Respiratory etiquette• Establish and enforce policies for visitor screening and sick healthcare workers (designate ILI ambassador)• Conduct daily active screening for ILI symptoms during peak flu season
Infection Control	<ul style="list-style-type: none">• Heighten staff awareness around standard and droplet precautions• Promote hand hygiene compliance• Many free resources through LAC DPH, CDPH, and CDC• Involve the Public Health Department early with any influenza case in SNF	<ul style="list-style-type: none">• Educate staff on proper isolation procedures• Have hand hygiene and isolation supplies readily available• Monitor and feedback compliance with isolation and hand hygiene



Specific Guidance for LTCF



The Los Angeles County Department of Public Health Acute Communicable Disease Control



RECOMMENDATIONS FOR THE PREVENTION AND CONTROL OF INFLUENZA CALIFORNIA LONG-TERM CARE FACILITIES

DEPARTMENT OF PUBLIC HEALTH
CENTER FOR HEALTHCARE QUALITY
HEALTHCARE ASSOCIATED INFECTIONS PROGRAM

CDC Home
Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™

A-Z Index A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #

Seasonal Influenza (Flu)

Seasonal Influenza (Flu) > Health Professionals > Infection Control

2013-2014 Flu Season
Influenza - Flu Basics
Prevention - Flu Vaccine
Treatment - Antiviral Drugs
Specific Groups
Health Professionals
ACIP Recommendations
Vaccination
Antiviral Drugs
Infection Control

Prevention Strategies for Seasonal Influenza in Healthcare Settings
Interim Guidance for Influenza Outbreak Management in Long-Term Care Facilities
 Settings Where High-Risk Persons & Their Contacts May Be Targeted For Vaccination
 Prevention & Control of Influenza in the Peri- and Postpartum Settings
 Interim Guidance for the Use of Masks to Control Influenza Transmission
 Respiratory Hygiene/Cough Etiquette
 Clinical Description & Lab Diagnosis
 International Influenza
 Training
 References & Resources
 Communications to Health Care Providers
 Information For Partners
 Flu Activity & Surveillance

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Interim Guidance for Influenza Outbreak Management in Long-Term Care Facilities

Long-term care facilities may be defined as institutions, such as nursing homes and skilled nursing facilities that provide health care to people (including children) who are unable to manage independently in the community. This care may represent custodial or chronic care management or short-term rehabilitative services.

Influenza can be introduced into a long-term care facility by newly admitted residents, health care workers and by visitors. Spread of influenza can occur between and among residents, health care providers, and visitors. Residents of long-term care facilities can experience severe and fatal illness during influenza outbreaks.

Preventing transmission of influenza viruses and other infectious agents within health care settings, including in long-term care facilities, requires a multi-faceted approach that includes the following:

1. Vaccination
2. Testing
3. Infection Control
4. Antiviral Treatment
5. Antiviral Chemoprophylaxis

Before an Outbreak Occurs

Influenza vaccination should be provided routinely to all residents and health care workers of long-term care facilities.

Residents
If possible, all residents should receive trivalent inactivated influenza vaccine (TIV) annually before influenza season. In the majority of seasons, TIV will become available to long-term care facilities beginning in September, and [influenza vaccination](#) should commence as soon as vaccine is available. Informed consent is required to implement a standing order for vaccination, but this does not necessarily mean a signed consent must be present.

In the event that a new patient or resident is admitted after the influenza vaccination program has concluded in the facility, the benefits of vaccination should be discussed, educational materials should be provided, and an opportunity for vaccination should be offered to the new resident as soon as possible after admission to the facility. Since October 2005, the Centers for Medicare and Medicaid Services (CMS) has required nursing homes participating in Medicare and Medicaid programs to offer all residents influenza and pneumococcal vaccines and to document

On This Page

- Before an Outbreak Occurs
- When there is a confirmed or suspected influenza outbreak
- Resources

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Fact:
Flu viruses circulate all year, even in summer.
Think you know about the flu?
Test your Flu IQ!
www.cdc.gov/flu

Contact Us:
Centers for Disease Control and Prevention
1600 Clifton Rd
Atlanta, GA 30333
800-CDC-INFO (800-232-4636)
TTY: (888) 232-6348
Contact CDC-INFO



Other Valuable Resources (1)

- **County of Los Angeles Department of Public Health (DPH)**
 - **Acute Communicable Disease Control Program**
 - **Influenza Vaccination for HCP Toolkit for SNFs:**
<http://www.ph.lacounty.gov/acd/Flu.htm>
 - **Immunization Program:** <http://www.ph.lacounty.gov/ip/flu/index.htm>
- **California Department of Public Health (CDPH):**
 - **The HAI Program and Healthcare Personnel Influenza Vaccination**
<http://www.cdph.ca.gov/programs/hai/Pages/InfluenzaVaccination.aspx>
 - **Influenza Vaccination and Respiratory Disease Prevention Educational Materials** <http://eziz.org/resources/flu-promo-materials/>



Other Valuable Resources (2)

- **Centers for Disease Control and Prevention- Influenza Vaccination Information for Health Care Workers**

<http://www.cdc.gov/flu/healthcareworkers.htm>

- **New York State Department of Health: Resources and Guidance – HCP Vaccination**

http://www.health.ny.gov/prevention/immunization/toolkits/hc_personnel_hospital/



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