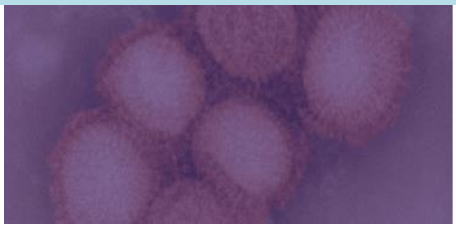
INFLUENZA OUTBREAK
PREVENTION AND CONTROL GUIDELINES FOR SKILLED NURSING FACILITIES





June 2015

http://publichealth.lacounty.gov/acd/Flu.htm

County of Los Angeles
Public Health
Acute Communicable Disease Control

Acronyms and Key Abbreviations

ACDC = Acute Communicable Disease Control Program
ACIP = Advisory Committee on Immunization Practices
AFRI = Acute Febrile Respiratory Infection
CDC = Center for Disease Control and Prevention
CDPH = California Department of Public Health
CHS = Community Health Services
DPH = Department of Public Health
DPHN = District Public Health Nurse
HCF = Healthcare Facility
HCP = Healthcare Personnel
HOO= Health Officer Order
ILI = Influenza-Like Illnesses
LAC = Los Angeles County
LTCF = Long-Term Care Facility
PHC = Public Health Center
SNF(s) = Skilled Nursing Facility (ies)

This publication was supported by Grant or Cooperative Agreement Number, **5U90TP000516-3**, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services. June 2015

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I. INTRODUCTION

Influenza, more commonly known as “the flu,” is typically caused by either a type A or type B influenza virus. These highly contagious respiratory viruses tend to peak in North America during the winter months, but can circulate from fall to spring. Almost every season the genetic structure of the influenza viruses change and a new vaccine must be developed to match the circulating viral strains. Although the risk of infection is high in all unvaccinated age groups, long-term care facility residents, especially those with chronic diseases, are at increased risk for influenza-related complications such as pneumonia, which can lead to death.

These guidelines were developed to provide an effective approach to the prevention and control of influenza. The recommendation and tools in this guideline are intended to assist infection control staff and administrators of SNFs in developing an influenza prevention and control program for their facility. The guidelines are based on best practices, state and federal influenza guidelines, current literature and the extensive experience of Los Angeles County (LAC) Department of Public Health (DPH) Acute Communicable Disease Control Program (ACDC) and Community Health Services (CHS) staff.

The goal of the guidelines is to help SNFs plan and implement a comprehensive and effective program for the prevention and control of influenza and influenza-like illness using available resources as efficiently as possible.

The guidelines provide general information about influenza, a prevention toolkit for SNFs, an outbreak management checklist, line lists for residents and staff, a notification alert template, and health educational materials. Materials are also available on the Acute Communicable Disease Control web site at http://publichealth.lacounty.gov/acd/Flu.htm.

II. GENERAL INFORMATION

WHAT IS INFLUENZA (FLU)?

Influenza (flu) is an infectious respiratory disease caused by viruses, commonly either a type A or type B influenza virus that infects the nose, throat, and lungs. These highly contagious respiratory viruses circulate in North America and tend to peak during the winter but can circulate from fall to spring. Almost every season the genetic structure of the influenza viruses change and a new vaccine must be developed to match the viral strains predicted to circulate that year.

WHAT ARE THE SYMPTOMS OF INFLUENZA?

Symptoms of illness include:

- Fever
- Cough
- Sore throat
- Shortness of breath
- Runny or stuffy nose-sometimes
- Muscle or body aches
- Headaches
- Tiredness

- Many use the term “stomach flu” or “GI flu” to describe vomiting, nausea, or diarrhea.
- However, these symptoms are rarely found with infection by the influenza virus and they are usually caused by other viruses or bacteria.
- The symptoms in elderly persons can be atypical and subtle, such as a change in mental status. Temperature may be normal or below normal. And many residents are unable to reliably report symptoms.
- Many other respiratory illness have similar symptom as flu therefore laboratory testing of ill individuals or of at least several cases during a respiratory disease outbreak is only way to truly know if illness is due to flu.
- In most infected persons the symptoms progressively resolve after 3 to 7 days however, cough and fatigue can last for more than 2 weeks. Complications, especially in unvaccinated long-term care residents, include pneumonia, worsening of chronic health conditions, and dehydration. Deaths that often are attributed to cardiac or other respiratory causes are in fact precipitated by an influenza infection.

HOW DOES INFLUENZA SPREAD?

The flu viruses spread mostly by respiratory droplets that occur when people with the flu cough, sneeze, or talk. Influenza is spread from person-to-person. Occasionally people may be infected by touching something that has a virus on it and then touching their eyes, nose, or mouth.

IS THE INFLUENZA ILLNESS CONTAGIOUS?

Yes, influenza is very contagious and can spread from person-to-person or person-to-object-to-person. Individuals may be able to pass the flu to someone beginning 1 day before showing symptoms until 5 to 7 days after becoming sick with the flu. Individuals are most infectious during the first 3 days of illness. Persons with deficiencies in immune system function may shed virus for longer periods. In addition, infected but asymptomatic or mildly ill persons can also shed viral particles and be infectious to others.

ARE SKILLED NURSING FACILITY RESIDENTS AT RISK FOR INFLUENZA?

Yes, residents at SNFs are vulnerable to influenza because they tend to have poor immune systems, live in close proximity to each other, and may be less rigorous controlling their secretions, which make it easy for influenza to spread. Influenza can be introduced into the facility by new or returning residents, healthcare personnel, and visitors to SNFs.

WHY ARE RESIDENTS AT SKILLED NURSING FACILITIES AT HIGHER RISK FOR INFLUENZA COMPLICATIONS?

Most residents in SNFs have pre-existing health conditions along with weakened immune systems. Thus, they are at higher risk of complications from influenza and they may be able to infect other people for a long period of time. Complications from influenza can result in hospitalization or even death. Between 50-60% of seasonal flu-related hospitalizations in the United States occur in people 65 years and older.

III. INFLUENZA PREVENTION AND CONTROL PROGRAMS

Vaccinating residents and healthcare personnel (HCP) is the only truly effective strategy for influenza control. Although vaccination is not 100% preventative, studies have shown that an effective vaccination program reduces influenza-related illness, complications and deaths. Influenza vaccination should be provided routinely to all residents in SNFs.

Vaccinating HCP also is important to reduce transmission to residents and to reduce HCP absenteeism from flu. HCP refers to all persons, paid and unpaid, working in healthcare settings who have the potential for exposure to residents and/or to infectious materials, including body substances, contaminated medical supplies and equipment, contaminated environmental surfaces, or contaminated air. HCP include, but are not limited to, physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, students and trainees, contractual personnel, home healthcare personnel, and persons not directly involved in patient care (e.g., clerical, dietary, housekeeping, laundry, security, maintenance, billing, chaplains, and volunteers) but potentially exposed to infectious agents that can be transmitted to and from other HCP and residents.

In 2013, a health officer order (HOO) was issued and was designed to protect HCP from influenza and lower the risk of the transmission of influenza to residents. This order currently remains in effect for the duration of the influenza season and all future seasons. To access the LAC DPH HOO, visit http://publichealth.lacounty.gov/ip/Docs/HealthOfficerOrder_10-7-13.pdf and **Appendix A.**

The HOO:

- Mandates that HCP in acute care hospitals, long term care facilities, and intermediate care facilities in LAC be vaccinated against influenza before the influenza season begins, or wear a protective mask during that season.
- Applies to all individuals working in acute care hospitals, long term care facilities, and intermediate care facilities who have direct patient contact or work in patient areas during the influenza season (November 1 through March 31). It excludes facilities in the cities of Long Beach and Pasadena, which are separate health jurisdictions.

LAC DPH ACDC program developed an online toolkit to assist SNFs in developing an influenza prevention and control program at their facility. The toolkit is available on the LAC DPH ACDC Influenza website at http://www.ph.lacounty.gov/acd/SNFToolKit.htm **and in Appendix A**.

NOTE: Resident Vaccination Since October 2005, the Centers for Medicare and Medicaid Services (CMS) has required nursing homes participating in Medicare and Medicaid programs (Medi-Cal is California's Medicaid program) to offer all residents influenza and pneumococcal vaccines and to document the results. According to requirements, each resident is to be vaccinated unless contraindicated medically, the resident or legal representative refuses vaccination, or the vaccine is not available. *Note that the requirement is not for informed consent but rather informed refusal (declination) – unless a resident is contraindicated for vaccination or specifically refuses, they should be vaccinated.*

- For additional information on the use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine Among Adults Aged ≥65 Years Recommendations of the Advisory Committee on Immunization Practices (ACIP), visit http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6337a4.htm.

IV. INFLUENZA DEFINITIONS

The definition of an outbreak of Acute Febrile Respiratory Infection (AFRI), Influenza-Like Illness (ILI) or influenza varies somewhat by setting.

- **AFRI** or **ILI**: Fever (≥100°F or 37.8°C) plus cough and/or sore throat in the absence of a known cause other than influenza.
- **Cluster**: Two of more cases of AFRI occurring within 48-72 hours in residents who are in close proximity to each other.
- **Outbreak in long-term care facility (such as SNF)**
  - A sudden increase of acute febrile respiratory illness cases over the normal background rate; OR
  - At least one case of laboratory-confirmed influenza or other respiratory pathogen in the setting of a cluster (≥2 cases) of ILI http://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm.

V. CONFIRM DIAGNOSIS BY LABORATORY TESTING

Because many other respiratory illness have similar symptom as flu, a true diagnosis of influenza cannot be based on symptoms alone. When a cluster of cases of acute respiratory illness with symptoms suggestive of influenza occurs, it is of critical importance to establish the diagnosis through laboratory testing.

Clinical and epidemiologic histories are required to aid in laboratory test selection.

- **A nasopharyngeal (NP) swab is the optimal upper respiratory tract specimen collection method for influenza testing.** However, many older residents may not allow an NP specimen to be collected. Alternatively, a combined nasal and throat swab specimen or aspirate specimens can provide good influenza virus yield.
- **NP swabs are preferred** because the specimens can be tested for influenza and a variety of other respiratory pathogens using PCR based technology. All other specimens can only be tested for influenza.
- Most sensitive and accurate tests for influenza virus detection are molecular or nucleic acid amplification tests (RT-PCR).
- Rapid influenza diagnostic tests (RIDTs) that detect influenza viral antigens can be useful to more quickly identify influenza, leading to actions to prevent spread to other residents. However, because the sensitivity of these tests can be low, they do not exclude influenza virus infection in residents with signs and symptoms of influenza. A negative test result could be a false negative and should not preclude further diagnostic testing (such as RT-PCR) and starting empiric antiviral treatment.

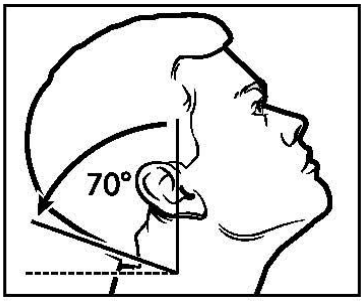
- HCP should wear a surgical mask and gloves at a minimum when collecting a specimen for laboratory testing.
- Samples should be collected within the first 4 days of symptom onset. In an AFRI outbreak, collect specimens from **at least 2 separate and up to 5 symptomatic individuals** who have not yet received antiviral treatment. However, do not delay antiviral treatment in order to collect specimens.

Nasopharyngeal Specimen Collection

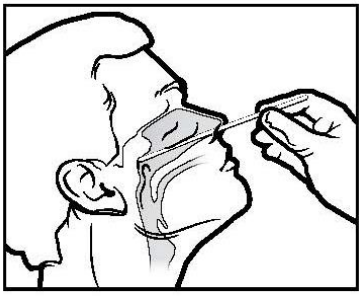
Materials

- Sterile Dacron or Nylon flocked swab, do NOT use wooden swabs
- Viral transport media tube (should contain 1-3 ML of sterile viral transport medium)

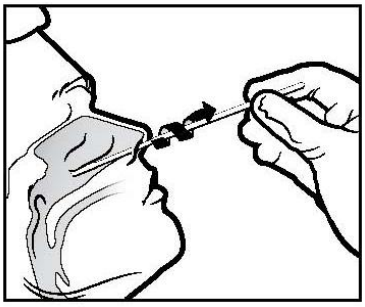
Procedure



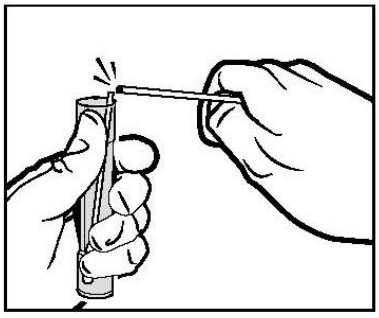
1. Tilt patient's head back 70 degrees.



2. Insert swab into nostril. (Swab should reach depth equal to distance from nostrils to outer opening of the ear.) Leave swab in place for several seconds to absorb secretions.



3. Slowly remove swab while rotating it.



4. Place tip of swab into sterile viral transport media tube and snap/cut off the applicator stick.

Adapted from CDC Influenza Specimen Collection Poster
http://publichealth.lacounty.gov/acd/docs/Flu/SNFToolkit/flu-specimen-collection-poster.pdf

VI. INFLUENZA OUTBREAK MANAGEMENT

If your facility has an Influenza or ILI outbreak, follow the Influenza Outbreak Management Checklist (see Appendix B) for a step-by-step guide to reporting the outbreak and implementing control measures to prevent further transmission in your facility.

NOTE: Once the outbreak in a SNF is reported to LAC DPH, an outbreak investigation will be performed by a LAC DPH Community Health Services (CHS) District Public Health Nurse (DPHN).
The SNF staff should stay in close communication with the DPHN assigned to the facility throughout the outbreak investigation period. The DPHN will discuss surveillance for new cases, make recommendations for control measures, and facilitate laboratory testing, if indicated for identification of the cause of the outbreak.

1. **Reporting of the Outbreak (see Appendix B or Section XI. Contact information)**

   What type of information should I report?
   - How many people are sick? How many staff and how many residents? Approximately how many residents (ill and healthy) are in your facility at this time?
   - What are their symptoms?
   - Has anyone been hospitalized for this illness?
   - Has anyone died from this illness?
   - Has anyone received laboratory testing, and were any infectious agents identified?
   - What, if anything, have you done already to try to stop the spread of infection?
   - Contact information – Staff contact names with job titles, phone number, reporting facility name and address.

2. **Infection Control Measures**

   Work with DPHN assigned to the facility to determine which control measures are most appropriate for your facility.

   General Infection Control
   - Reinforce good hand hygiene and respiratory etiquette, such as washing hands thoroughly and covering coughs and sneezes, among visitors, staff, and residents.
   - **LAC DPH Influenza Health Educational Materials for SNF, visit** http://publichealth.lacounty.gov/acd/HealthEd.htm or **see Appendix F.**
   - **CDC Influenza Health Educational Materials, visit** http://www.cdc.gov/flu/professionals/infectioncontrol/.

- Remind staff that they need to stay home when ill with a respiratory disease until at least 24 hours after they no longer have a fever without the use of fever-reducing medications.
- Every day, look for new cases of respiratory illness among all residents, and staff. Continue until at least one week after the last case became sick. When ill people are identified, take action to reduce spread (see below).
- Implement Enhanced Standard Precautions plus Droplet Recommendations during outbreaks. Recommendations for Enhanced Standard Precautions (ESP) were developed by CDPH specifically to prevent the transmission of infectious agents in California long-term care facilities. ESP integrates and consolidates the CDC recommendations for standard precautions with many of the recommendations for transmission-based precautions (contact or droplet) and Intensified Interventions. This guideline is available electronically at: http://www.cdph.ca.gov/programs/hai/Documents/AFL10-27AttachmentIncluded.pdf.

Reducing Exposures

- Confine the first symptomatic resident and exposed roommate to their room, restrict them from common activities, and serve meals in their rooms, as feasible.
- If one or more additional residents become symptomatic, cancel common activities and serve all meals in resident rooms.
- Limit new admissions, and do not admit new residents to units where residents are ill. If all ill residents are in specific wards, do not move residents to other wards.
- Post signs notifying visitors that adults with respiratory symptoms should not visit for 5 days. If visitation during an outbreak is necessary (e.g., visitation of a dying resident), instruct symptomatic visitors to: (1) wear a surgical or procedure mask over their mouth and nose while in the resident's room; (2) cough and sneeze into a tissue and discard contaminated tissues in a waste receptacle; and (3) sanitize their hands before entering the resident's room, before and after resident contact and upon leaving the resident's room.
- Consider restricting all children from visiting during an outbreak.
- Post 'Respiratory Disease Outbreak Notification Alert' letter **(see Appendix E for a template)** to inform residents, families, and visitors about the outbreak and actions taken to control the outbreak.
- Monitor personnel absenteeism due to respiratory symptoms and exclude those with influenza-like symptoms from resident care until at least 24 hours after they no longer have a fever without the use of fever-reducing medications.

- Restrict personnel movement from areas of the facility having outbreaks to areas without ill residents, if possible.
- Ensure that surfaces, especially those that are frequently touched, are routinely cleaned with an Environmental Protection Agency (EPA)-registered disinfectant. (See http://www.epa.gov/oppad001/influenza-disinfectants.html).

Closure of facility to new and returning residents may be ordered by LAC DPH during the outbreak period.

- **Facility closure** to new/returning admissions may be ordered by the DPHN assigned to the facility. The DPHN also will provide guidance for when the facility can be reopened to admissions.
- If residents need to be transferred to another facility during the outbreak period, communicate information including influenza vaccination history, current respiratory symptoms, and laboratory testing results, if available, to appropriate personnel before transferring symptomatic residents to other departments or facilities.
    - Notify transporting personnel of a suspected or confirmed outbreak prior to transfer.

VII. VACCINATION, ANTIVIRAL TREATMENT AND CHEMOPROPHYLAXIS DURING AN INFLUENZA OUTBREAK

1. Vaccination

- Administer the current season's influenza vaccine to unvaccinated residents and staff per current CDC recommendation unless contraindicated or refused.

2. Antiviral Treatment

- All residents who have **confirmed or suspected** influenza should receive antiviral treatment immediately; treatment should **NOT** be delayed while waiting for laboratory confirmation.
- Treatment works best when started within the first 2 days of symptoms but may still be effective when given more than 48 hours after onset of symptoms.
- Two influenza antiviral drugs, oseltamivir and zanamivir, are currently recommended for use against circulating influenza viruses.
- Amantadine and rimantadine are NOT recommended because of high levels of antiviral resistance.

3. **Antiviral Chemoprophylaxis**

- Antiviral chemoprophylaxis is recommended for all non-ill residents who are not exhibiting ILI but who may be exposed or may have been exposed to an ill person with influenza, to prevent transmission.
- Antiviral chemoprophylaxis is recommended for all non-ill residents, regardless of their influenza vaccination status, in long-term care facilities that are experiencing outbreaks.
- Priority should be given to residents in the same unit/floor as an ill resident.
- Consider providing antiviral chemoprophylaxis to unvaccinated staff who provide care to persons at high risk of influenza complications.
- Chemoprophylaxis can be considered for all staff regardless of vaccination status if the outbreak is caused by a strain of influenza virus that is not well matched with that season's influenza vaccine. This information would be available from the DPHN.
- Chemoprophylaxis can be administered to newly vaccinated staff starting at the time of inactivated influenza vaccination and continuing up to 2 weeks following vaccination until they are protected by the vaccine.
- Persons receiving chemoprophylaxis should not receive live attenuated influenza vaccine (LAIV) and persons receiving LAIV should not receive chemoprophylaxis or antiviral treatment until 14 days after LAIV administration.
- In an outbreak setting, CDC recommends antiviral chemoprophylaxis for a minimum of 2 weeks, and continuing for at least 7 days after the last known case was identified.

The latest CDC antiviral recommendations are available on CDC's influenza antiviral drugs page for health professionals at http://www.cdc.gov/flu/professionals/antivirals.

VIII. APPENDICES

Appendix A: Influenza Vaccination and Masking for Healthcare Personnel Toolkit: Skilled Nursing Facilities (SNFs)

Appendix B: Influenza Outbreak Management Checklist

Appendix C: Environmental Cleaning and Disinfection for Influenza GENERAL FACT SHEET

Appendix D: Influenza-Like-Illness Case/Contact Line-List Forms

Appendix E: Respiratory Disease Outbreak Notification Alert Template

Appendix F: LAC DPH Influenza Health Educational Materials for SNFs

APPENDIX A

Influenza Vaccination and Masking for Healthcare Personnel Toolkit: Skilled Nursing Facilities (SNFs)

This toolkit was developed in an effort to increase flu vaccination among Healthcare Personnel in the Skilled Nursing Facility setting. The toolkit contains the following contents to assist SNFs in complying with the Health Officer Order.

NOTE: You can access resources by clicking the underlined links in the title section below.

Toolkit Table of Contents

Health Officer Order Resources	
Title	**Description**
Los Angeles County Health Officer Order: Influenza Vaccination and Masking for Healthcare Personnel (2013)	The Health Officer Order was issued by the Director of the Los Angeles County Department of Public Health and Health Officer. This order remains in effect for the duration of the current influenza season and all future seasons, unless rescinded.
Influenza Vaccination for Healthcare Personnel Fact Sheet	The fact sheet is a quick reference to the most commonly asked questions about Influenza Vaccinations for healthcare personnel (HCP).
Frequently Asked Questions about Influenza Vaccinations	The FAQ sheet is a quick reference to the most commonly asked questions about Influenza Vaccinations for healthcare personnel (HCP).
Updated Supporting Rationale for Requiring Influenza Vaccination or Masking for Healthcare Personnel (Revised 1-7-14)	This document provides supporting evidence for Los Angeles County (LAC) Health Officer Order.
Continuation of the Los Angeles County Health Officer Order for the 2014-2015 Influenza Season (9-25-14)	This letter is a reminder that the "Health Officer Order for Annual Influenza Vaccination Programs for Healthcare Personnel or Masking of Health

	Care Personnel during the Influenza Season" remains in effect.
Updated Health Officer Order Frequently Asked Questions (Revised 9-24-14)	The FAQ sheet is a quick reference to the most commonly asked questions about Health Officer Order.
Healthcare Personnel Influenza Vaccination Timeline/Checklist	This timeline/checklist offers examples of best practices from successful influenza vaccination campaigns.
Sample Declination of Influenza Vaccination Forms Sample1 Sample2	These sample forms can be customized and used to document declination of influenza vaccination.
Stickers: for Providers (CDC)	These downloadable stickers can be printed on laser and inkjet printers. A sticker may be affixed to the badge of HCP who have received the influenza vaccination.

Influenza Vaccination Information (Immunization Program)
• 2014-2015 Flu Vaccination Clinics and Resources (10/14) • 2014-2015 Influenza Vaccination Recommendations, ACIP • Influenza Vaccination Coverage Among Healthcare Personnel, 2013-14 Influenza Season • Influenza Vaccine Information Statements IIV LAIV • Vaccination Recommendations for Healthcare Personnel, ACIP

Educational Materials	
Title	**Description**
ACDC Influenza Health Education Materials	Link to ACDC Influenza Health Education Materials.
Influenza Vaccination of Health Care Personnel PowerPoint Presentation and Speaker Notes	The presentation was developed as a visual learning instrument to assist administration in Skilled Nursing Facilities in educating their staff on Health Officer Order, overview of Influenza, and preventive strategies to use.
Frequently Asked Questions about Influenza in Skilled Nursing Facilities for HCP and Residents & Visitors	The FAQ sheet is provided as a quick reference to the most commonly asked questions about the Influenza in Skilled Nursing Facilities.
Poster: Customizable Poster Regarding Masking	This poster can be customized and used to remind HCP to get vaccinated or wear a mask.
Poster: Protect Your Residents, Your Co-workers, and Yourself	This poster can be used to educate employees about flu vaccination.

Poster: Visitors Are Welcome But the Flu is Not	This poster can be used to remind visitors not to visit patient/resident when they are sick with flu symptoms.

Influenza Specimen Collection and Infection Control	
Title	**Description**
Influenza Specimen Collection (CDC)Guide Poster	The desk reference guide and poster provide different methods for Influenza testing, packing, storing, shipping, and considerations.
Cover Your Cough Materials (CDC)	Printable formats of "Cover Your Cough" are available in different languages.
Respiratory Hygiene/Cough Etiquette in Healthcare Settings (CDC)	This resource site can be helpful in educating staff, visitors about respiratory hygiene/cough etiquette in health care settings.

Additional Resources	
California Department of Public Health (CDPH)	• The HAI Program and Healthcare Personnel Influenza Vaccination • Influenza Vaccine Information for Healthcare Personnel
Centers for Disease Control and Prevention (CDC)	• Information for Health Professionals • Influenza Vaccination Information for Health Care Worker • Influenza Vaccination for Healthcare Personnel Poster, CDC • Interim Guidance for Influenza Outbreak Management in Long-Term Care Facilities
New York State Department of Health	• Health Care Facility Influenza Immunization Toolkit

APPENDIX B

Influenza Outbreak Management Checklist

Outbreak Interventions				
1. Communication	**N/A**	**Completed**	**Date**	**Signature**
• Facility administration notified.				
• Facility infection control team notified.				
• Meet with key staff to coordinate control measures.				
• Outbreaks are reportable immediately by phone to: Morbidity Unit: (888) 397-3993 or Fax: (888) 397-3778. *****After business hours, outbreaks should be reported through the County of Los Angeles operator at (213) 974-1234.				
• Outbreaks are reportable to California Department of Public Health Licensing & Certification local office– County of Los Angeles Health Facilities Inspection Division http://publichealth.lacounty.gov/hfd/howto.htm.				
• Residents and relatives/visitors notified.				
• Stay in close communication with the **DPHN assigned to the facility** throughout the outbreak.				
• Facility **closed** to new/returning admissions – **consult with the DPHN assigned to the facility.**				
• Facility **reopened** to new/returning admissions- **consult with the DPHN assigned to the facility**.				
2. Investigation and Monitoring	**N/A**	**Completed**	**Date**	**Signature**
• Symptomatic HCP removed from work and referred to Employee Health and/or evaluated by a clinician.				
• Residents evaluated for influenza and placed in droplet isolation.				
• Map cases on facility floor plan.				
• Confirm influenza in symptomatic residents and staff.				
• Use a "Line List" **(Appendix D)** to track symptomatic residents and staff, and contacts.				
○ **Symptomatic Resident** line list completed				
○ Contacts to symptomatic resident line list completed				
○ **Symptomatic Staff** line list completed				
○ Contacts to symptomatic staff line list completed				

• Daily Influenza-Like Illness (ILI) assessments on residents and staff and report all new cases to LAC DPH CHS DPHN assigned to the facility daily using the 'Line List'.				
3. Treatment	**N/A**	**Completed**	**Date**	**Signature**
• Symptomatic residents/staff treated with Influenza antiviral treatment.				
• Chemoprophylaxis offered to residents and staff.				
• Administer the current season's influenza vaccine to unvaccinated residents and staff unless contraindicated or refused.				
4. Specimen Collection (see Section V. CONFIRM DIAGNOSIS BY LABORATORY TESTING)	**N/A**	**Completed**	**Date**	**Signature**
• Respiratory specimens (i.e., nasal swabs, throat swabs, nasopharyngeal swab, or nasopharyngeal or nasal aspirates) should be collected within the first 4 days of onset of symptoms. ○ Collect specimens from at least 2 separate and up to 5 symptomatic individuals who have not yet received antiviral treatment. ○ Nasopharyngeal (NP) swabs are preferred because the specimens can be tested for influenza and a variety of other respiratory pathogens using PCR based technology.				
5. Infection Control	**N/A**	**Completed**	**Date**	**Signature**
• Use standard and droplet precautions.				
• Enhanced environmental cleaning done throughout the outbreak period **(For more details, see Appendix C).** • Antimicrobial Products Registered for Use Against Influenza A Virus on Hard Surfaces http://www.epa.gov/oppad001/influenza-a-product-list.pdf or http://www.epa.gov/oppad001/influenza-disinfectants.html.				
• Respiratory isolation–Symptomatic residents confined to their rooms (cohort ill residents together if possible).				
• Movement of all residents minimized.				
• Emphasize respiratory etiquette (cover cough and sneezes, dispose of tissues properly).				

• Limit staff movement between units. If staff have been exposed to ill residents, consider maintaining work assignment to same unit. • Keep staff from "floating" between floors/units.				
• Identify staff's outside employment status to prevent and control influenza outbreak.				
• Restrict families/visitors visitation to the facility.				
• Post 'Respiratory Disease Outbreak Notification Alert' **(see Appendix E for a template)**.				
6. Education	**N/A**	**Completed**	**Date**	**Signature**
• Provide training to all staff on the signs and symptoms of influenza, hand hygiene, respiratory isolation, and respiratory etiquette.				
• Educate and instruct HCP to report signs and symptoms of possible influenza to supervision.				
• Educate residents, their families, and visitors about influenza as indicated.				

APPENDIX C

Environmental Cleaning and Disinfection for Influenza
GENERAL FACT SHEET

In general, influenza A viruses can survive on environmental surfaces only for short periods of for up to several hours, depending on a number of environmental factors (e.g., temperature, humidity, exposure to sunlight, type of surface.). Human infection can occur through contact with contaminated surfaces and then infecting oneself by touching eyes, nose, or mouth. Therefore, it is important to regularly and routinely disinfect potentially contaminated surfaces to minimize potential spread to others.

Infectious Materials

Depending on the specific type, viruses have the potential to be present in almost all body secretions (including saliva, nasal fluid, blood, cerebrospinal fluid, and feces). Environmental surfaces can harbor viruses when contaminated with a body secretion from infectious persons.

Cleaning and Disinfection

When surfaces are visibly dirty, cleaning with soap or detergent in water is the first step in surface treatment. Cleaning will remove dirt and organic matter that would reduce the effectiveness of the disinfection step. Routine cleaning methods and procedures are effective and should be used. Any commercially available soap or detergent can be used. Water can be cold or warm, or as recommended on the label of the cleaning product used (if a specific temperature is listed).

Suitable Disinfectants

Influenza A viruses can be effectively killed by many common disinfectants including bleach or ammonia based cleaning products. The US Environmental Protection Agency (EPA) maintains a list of commercial disinfecting products that are effective against influenza A viruses on hard non-porous surfaces (http://www.epa.gov/oppad001/influenza-disinfectants.html or http://www.epa.gov/oppad001/influenza-a-product-list.pdf). Follow the manufacturer's recommendations for use, dilution, and contact time.

If an EPA listed product is not available, an effective disinfecting solution can be made using household bleach (sodium hypochlorite). To use chlorine bleach for general surface area disinfection, use a mixture of ¼ cup of household bleach (5.25 percent concentration) with one gallon of water. Apply to surfaces. Leave wet for 2 minutes, then rinse and air dry.

Additional Guidelines for Using Bleach

- Bleach is not effective if surface is covered with blood, stool or other body fluids. Surfaces must be cleaned of these types of fluids before disinfection will be effective.
- Household bleach is commonly sold in 5.25 percent concentration.
- Bleach solutions degrade over time. Solutions should be kept in a closed container away from sunlight and must be made fresh daily.
- Do not mix bleach with other cleaning products.
- Use in a well ventilated area.

General Disinfection/Cleaning Guidance

- Do not spray (fog) rooms with disinfectant or air sanitizers. This is a potentially dangerous practice that has no proven disease control benefit.
- Do not clean using dry dusting or sweeping methods. This practice may move viruses into the air. Use damp cleaning methods such as wet rags or mops.
- Clean floors and other surfaces like window sills, countertops, and shelves.
- Clean frequently touched items such as door knobs, telephones, equipment buttons, faucet handles, etc.
- Change mop heads, rags, and similar items and disinfectant solutions frequently during the decontamination procedure. Consider using disposable cleaning items. Work from areas of light contamination to areas of heavier contamination.
- Use a double bucket method (one bucket for cleaning solution, one for rinsing).
- Clean, disinfect, and dry equipment used for cleaning after each use.

Specific Disinfection/Cleaning Guidance

- **Commonly Touched Surfaces** – Frequent cleaning of surfaces that are often touched by many people is important to reduce the risk of spreading influenza A viruses. Sanitizing wipes can be used to clean things like computer keyboards and handheld electronics.

  <u>Commonly touched surfaces include but are not limited to:</u>
  - Door knobs or handles
  - Hand rails
  - Telephones
  - Faucet handles
  - Remote controls and handheld electronics
  - Shared computer keyboards and mice
  - Shared counters or desks

- **Dishes and Eating Utensils** – Effective decontamination of non-disposable items is achieved by washing in a properly functioning dishwasher at recommended temperatures and quantities of detergent or in the sink with hot water and dish soap and allowing to air dry (do not wipe dry with towels). Disposable items can be discarded as ordinary refuse.
- **Linens and Laundry** – Clothing, bedding and towels should not be shaken or otherwise handled in a manner that may generate aerosols. Laundry may be washed in a standard washing machine using warm water and detergent. Bleach may be added. Wash hands after handling potentially contaminated laundry or consider wearing disposable gloves.
- **Carpeting and Cloth Furnishings** – Carpeting that is soiled with bodily secretions or fluids should be cleaned using the manufacturer's instructions or vacuum using a HEPA filter followed by carpet cleaning using a wet vacuuming method. Consider covering any mattresses or cloth furnishings used by ill persons with plastic or rubber sheets.

Frequency

Visibly soiled areas should be cleaned immediately. Commonly touched surfaces should be cleaned between uses. Areas and items known or likely to be contaminated should be disinfected at least daily.

Adapted from Iowa Department of Public Health

APPENDIX D

Influenza/Influenza-Like-Illness Case/Contact Line-List Forms

1. Line-List Form: Residents

2. Line-List Form: Staff

- **These forms can be used to report all new cases to the LA County Department of Public Health-Community Health Services District Public Health Nurse assigned to the facility daily.**

County of Los Angeles Public Health
Acute Communicable Disease Control Program
313 N. Figueroa St., Rm 212, Los Angeles, CA 90012
213-240-7941 (phone) 213-482-4856 (fax)
www.publichealth.lacounty.gov

Influenza and ILI Outbreak Line List for Healthcare Facilities
RESIDENTS

Facility Name: _____ **Contact Person/Phone No.**: _____

Outbreak Number : _____ **Date**:_____ **Total Number of Residents at time of outbreak**: _____

Resident Information			Resident Location		Vaccination status		Illness Description								Diagnostics							Outcome		
Resident Name	Date of birth or Age	Sex (M/F)	Room #	Unit/Ward	Influenza (Y/N), if yes, provide date	Pneumococcal (Y/N), if yes, provide date	Date of illness onset	Fever (Y/N) or highest temperature (°F)*	Cough (Y/N)	Myalgia/Body Aches (Y/N)	Chills (Y/N)	Sore throat (Y/N)	Shortness of breath (Y/N)	Other (Y/N)	Chest X-ray confirmed pneumonia (Y/N)	Doctor visit (Y/N)	Specimen collected (Y/N)	Specimen Type (NP, Sputum, Other)	Diagnosis/Lab Result	Antivirals (Y/N), Date started/Date ended	Antibiotics (Y/N), Date started/Date ended	Final Diagnosis Influenza/Pnuemonia/Other	Hospitalized (Y/N)	Died (Y/N, if yes, date)
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2.																								
3.																								
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6.																								
7.																								
8.																								
9.																								
10.																								

*Self-reported or highest temperature: measured oral, under armpit or rectal

Revised 5/20/2015

COUNTY OF LOS ANGELES
Public Health
Acute Communicable Disease Control Program
313 N. Figueroa St., Rm 212, Los Angeles, CA 90012
213-240-7941 (phone) 213-482-4856 (fax)
www.publichealth.lacounty.gov

Influenza and ILI Outbreak Line List for Healthcare Facilities

STAFF

Facility Name: _____ **Contact Person/Phone No.**: _____

Outbreak Number : _____ **Date** : _____ **Total Number of Staff at time of outbreak**: _____

Staff Information			Staff Duties			Vaccination status	Illness Description								Diagnostics							Outcome		
Staff Name	Date of birth or Age	Sex (M/F)	Unit/Ward Assigned to	Direct Resident Contact? (Y/N), if yes, job title	Work at multiple sites? (Y/N)	Influenza vaccination (Y/N), if yes, date of vaccination	Date of illness onset	Fever (Y/N) or highest temperature (°F)*	Cough (Y/N)	Myalgia/Body Aches (Y/N)	Chills (Y/N)	Sore throat (Y/N)	Shortness of breath (Y/N)	Other (Y/N)	Chest X-ray confirmed pneumonia (Y/N)	Doctor visit (Y/N)	Specimen collected (Y/N)	Specimen Type (NP, Sputum, Other)	Diagnosis/Lab Result	Antivirals (Y/N), Date started/Date ended	Antibiotics (Y/N), Date started/Date ended	Final Diagnosis Influenza/Pnuemonia/Other	Hospitalized (Y/N)	Died (Y/N, if yes, date)
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*Self-reported or highest temperature: measured oral, under armpit or rectal

Revised 5/20/2015

APPENDIX E

Respiratory Disease Outbreak Notification Alert Template

SNF administrative staff may use or modify this template to alert residents, their families, and visitors of a respiratory outbreak (such as influenza) at their facility.

[*Agency Letterhead*]

[*Date*]

Dear Residents, Families, and Visitors:

Our facility is currently working with the Los Angeles County Department of Public Health to investigate a respiratory outbreak of influenza, or an influenza-like-illness, and to put control measures in place.

- Each year during influenza season approximately 5-20% of the population will become infected.
- Influenza virus is spread by droplets when an infected person coughs, sneezes, or talks and the droplets land in the mouths or noses of nearby people.
- Respiratory outbreaks within skilled nursing facilities and other community settings are frequently reported every influenza season.

We are notifying you in the interest of public awareness and safety.

[*Facility Name*] has already taken the appropriate steps to prevent further transmission and get this outbreak under control. Physicians who care for persons at the facility and resident care staff are aware of the situation. Public Health is working closely with the staff of [*Facility Name*] to investigate the cause of these infections and administer the appropriate treatment or prophylaxis, if appropriate. Staff education and strict hand washing for all staff has been implemented. The strengthened infection control measures that [Facility Name] already has in place can reduce the number of new infections.

For any questions regarding this notification alert, please contact [*enter facility contact person/information*].

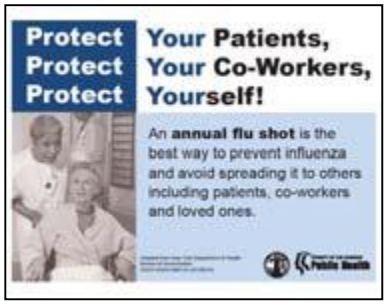
Sincerely,

[*Name, Title*]

APPENDIX F

LAC DPH Influenza Health Educational Materials for SNFs

http://publichealth.lacounty.gov/acd/HealthEd.htm

Frequently Asked Questions about Influenza in Skilled Nursing Facilities for <u>HCP</u> and <u>Residents & Visitors</u>  **English**  **Spanish**  **English**  **Spanish**	The FAQ sheet is provided as a quick reference to the most commonly asked questions about the Influenza in Skilled Nursing Facilities.
<u>Poster: Protect Your Residents, Your Co-workers, and Yourself</u>  **English**  **Spanish**	This poster can be used to educate employees about flu vaccination.

<u>Poster: Visitors Are Welcome But the Flu is Not</u> (English/Spanish)  **English**  **Spanish**	This poster can be used to remind visitors not to visit patient/resident when they are sick with flu symptoms.
<u>Poster: Customizable Poster Regarding Masking</u> (English only)  	This poster can be customized and used to remind HCP to get vaccinated or wear a mask.

IX. REFERENCES

Arizona Department of Health Services Office of Infectious Disease Services. Guidelines for Investigating Outbreaks of Influenza-Like Illness or Respiratory Disease. Created April 2011, Revised November 2013.
http://www.azdhs.gov/phs/oids/pdf/manuals/Arizona_Respiratory_Outbreak_Guidelines.pdf

California Department of Public Health Center for Healthcare Quality Healthcare Associated Infections Program. Recommendation for the Prevention and Control of Influenza California Long-Term Care Facilities. Revised December 2011.
http://www.cdph.ca.gov/programs/hai/Documents/Influenza-Recommendations-LTCF-v.12-11.pdf

Center for Disease Control and Prevention. Interim Guidance for Influenza Outbreak Management in Long-Term Care Facilities.
http://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm

Center for Disease Control and Prevention. Prevention Strategies for Seasonal Influenza in Healthcare Settings.
http://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm

Iowa Department of Public Health. Environmental Cleaning and Disinfection for Influenza General Fact Sheet.
https://www.storycountyiowa.gov/DocumentCenter/Home/View/118

California Department of Public Health. Influenza and Other Respiratory Illness Outbreak Quicksheet. November 2013.
http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPH%20influenza%20and%20resp%20illness%20outbreak%20quicksheet_Nov%202013_11202013.pdf

California Department of Public Health Joint Infection Prevention and Control Guidelines Enhanced Standard Precautions (ESP) California Long-Term Care Facilities. 2010.
http://www.cdph.ca.gov/programs/hai/Documents/ESPforLTCareFacilities_2010.pdf

Office of Pesticide Programs U.S. Environmental Protection Agency Antimicrobials Division Registered Environmental Cleaning Products - Environmental Protection Agency (EPA) list of products registered for use against influenza A. http://www.epa.gov/oppad001/influenza-a-product-list.pdf

Center for Disease Control and Prevention. Influenza Antiviral Medications: Summary for Clinicians
http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm

New York State Department of Health. Health Care Facility Influenza Immunization Toolkit
http://www.health.ny.gov/prevention/immunization/toolkits/hc_personnel_hospital/

X. CONTACT INFORMATION

Your cooperation is vital to prevent and control of influenza outbreak in SNFs. If you have any questions or feedback regarding the guidelines, please call: Karen Young Cho, RN, BSN, LA County Department of Public Health Acute Communicable Disease Control-Skilled Nursing Facility Outreach Program Coordinator, at 213-240-7941 or kycho@ph.lacounty.gov.

- **Reporting Outbreak to LAC DPH:**
  Call Morbidity Unit: (888) 397-3993 or Fax: (888) 397-3778.
  ***After business hours, outbreaks should be reported through the County of Los Angeles operator at (213) 974-1234.

- **Reporting Outbreak to LAC DPH Health Facilities Inspection Division:**
  Outbreaks are reportable to California Department of Public Health Licensing & Certification local office–County of Los Angeles Health Facilities Inspection Division http://publichealth.lacounty.gov/hfd/howto.htm.

- **LAC DPH PUBLIC HEALTH CENTERS:**
  See next page for name, address and telephone number of public health center.
  http://www.publichealth.lacounty.gov/locator.htm#a.

Department of Public Health
PUBLIC HEALTH CENTERS

The Department of Public Health operates 14 health centers in LA County that provide free and low-cost services to those with no insurance or regular health care provider. Rather than general medical care, services provided focus on population-health interventions, such as immunizations and communicable disease testing and treatment.

Antelope Valley
335-B East Avenue K-6
Lancaster, CA 93535
(661) 723-4526

Central
241 N. Figueroa Street
Los Angeles, CA 90012
(213) 240-8204

Curtis R. Tucker
123 W. Manchester Boulevard
Inglewood, CA 90301
(310) 419-5325

Glendale
501 N. Glendale Avenue
Glendale, CA 91206
(818) 500-5750

Hollywood/Wilshire
5205 Melrose Avenue
Los Angeles, CA 90038
(323) 769-7800

Martin Luther King, Jr.
Center for Public Health
11833 South Wilmington Avenue
Los Angeles, CA 90059
(323) 568-8100

Monrovia
330 W. Maple Avenue
Monrovia, CA 91016
(626) 256-1600

North Hollywood
5300 Tujunga Avenue
North Hollywood, CA 91601
(818) 766-3982

Pacoima
13300 Van Nuys Boulevard
Pacoima, CA 91331
(818) 896-1903

Pomona
750 S. Park Avenue
Pomona, CA 91766
(909) 868-0235

Ruth Temple
3834 S. Western Avenue
Los Angeles, CA 90062
(323) 730-3507

Simms/Mann
2509 Pico Boulevard, Room 325
Santa Monica, CA 90405
(310) 998-3203

Torrance
711 Del Amo Boulevard
Torrance, CA 90502
(310) 354-2300

Whittier
7643 S. Painter Avenue
Whittier, CA 90602
(562) 464-5350

County of Los Angeles Public Health
Community Health Services

Los Angeles County Department of Public Health

Cynthia Harding, MPH
Interim Director

Jeffrey Gunzenhauser, MD, MPH
Interim Health Officer

Acute Communicable Disease Control Program

Laurene Mascola, MD, MPH, FAAP
Program Director

Benjamin Schwartz, MD
Deputy Chief

Program Contact Information
Phone: (213) 240-7941
Fax: (213) 482-4856
E-Mail: acdc2@ph.lacounty.gov

Morbidity Unit
Phone: (888) 397-3993
Fax: (888) 397-3778

LAC-DPH website:
http://www.publichealth.lacounty.gov/

ACDC website:
http://publichealth.lacounty.gov/ACD/

COUNTY OF LOS ANGELES
Public Health
Acute Communicable Disease Control