

**California Department of Public Health  
Influenza Vaccination among Healthcare Personnel in California Hospitals  
For the 2015-16 Influenza Season**

**Key Findings and Public Health Actions**

Influenza is the eighth leading cause of death in the United States, with the majority of influenza-related illnesses and deaths occurring among vulnerable members of the population, such as patients in hospitals and other inpatient healthcare facilities [1-2]. Healthcare personnel (HCP) are a source of transmission of influenza to coworkers and patients [1-4]. Influenza vaccination is a simple, safe, and cost effective way to prevent transmission of influenza from HCP to patients [3]. Vaccination of HCP has been shown to reduce worker's illness, absenteeism, staff shortages, and healthcare costs [4].

Since 2008, California acute care hospitals must offer the influenza vaccine free of charge to HCP and require HCP to receive the vaccine or sign a declination form if they choose not to be vaccinated (Health and Safety Code section 1288.7). Hospitals must report HCP vaccination rates to the California Department of Public Health (CDPH), including the percentage of HCP (employees and non-employee personnel) vaccinated. CDPH is required to make this information public on an annual basis (Health and Safety Code section 1288.8). Hospitals collect and report data for all HCP physically working in the acute care hospitals for at least one working day during influenza season, regardless of clinical responsibility or patient contact. CDPH reports data separately for employees, non-employee licensed independent practitioners, and adult students/trainees and volunteers.

This report presents data for the 2015-2016 influenza season, specifically October 1, 2015, through March 31, 2016. CDPH has published an annual report on HCP influenza vaccination in California hospitals since 2009. Hospitals have been reporting influenza vaccination data using the National Healthcare Safety Network (NHSN) since 2013.

Table 1 presents hospital influenza vaccination rates by county, stratifying by those counties with local health department orders requiring mandatory masking for HCP who refuse vaccination and those counties that do not have such a health order. For the 2015-2016 influenza season, 34 counties required hospitals to implement and enforce policies requiring HCP who decline vaccination to wear surgical masks during influenza season; this represents an increase of three additional counties with masking orders since the 2014-2015 influenza season. Local public health policy may be influencing vaccination coverage in California hospitals. The statewide hospital HCP vaccination rate was 82% for the 34 counties that require a mask and 79% for 20 counties that do not require a mask. Two counties are excluded from this report; Alpine County has a mask policy but no acute care hospital and Sierra County has no mask policy and no acute care hospital.

Table 2 presents the hospital-specific vaccination rates for each personnel category: employees, non-employee licensed independent practitioners, and adult students, trainees, and volunteers.

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Table 3 presents data from the NHSN online annual survey of influenza vaccination policies and practices, which 80% of California hospitals completed this year. The survey revealed that most hospitals continue to use a variety of strategies recommended by the Centers for Disease Control and Prevention (CDC) to promote influenza vaccination among HCP. The table presents the interventions used by California hospitals to promote influenza vaccination compared with the same interventions reported last year.

Table 4 presents HCP vaccination percentages for employee HCP and non-employee HCP combined. HCP influenza vaccination percentage is an indicator of a successful vaccination campaign. The national Healthy People 2010 goal for HCP influenza vaccination was 60%; the Healthy People 2020 goal is 90%. To achieve 90% vaccination by 2020, hospitals should be increasing their annual vaccination percentage by at least 3% per year since 2010. Hospitals that achieved the 60% vaccination goal in 2010 should have a vaccination percentage of at least 78% in 2016 to demonstrate incremental improvement necessary to reach the 90% goal by 2020. Overall 65% of hospitals (253/389) reached 78% vaccination for HCP influenza vaccination in 2015-2016. The proportion of hospitals that have already achieved the Healthy People goal of 90% HCP influenza vaccination increased from 23% in 2014-2015 to 24% in 2015-2016. Hospitals that did not reach 78% vaccination by 2016 should identify the obstacles in their HCP influenza vaccination program and determine what additional interventions are needed.

Table 5 presents 2015-2016 hospital-specific vaccination rates with side-by-side comparisons with vaccination rates reported in 2014-2015, 2013-2014, 2012-2013 and 2011-2012.. Table 6 demonstrates that overall, influenza vaccination coverage among HCP in California hospitals is improving incrementally. Hospital-specific vaccination rates have increased by 21% for employee HCP and 11% for non-employee HCP since 2010-2011.

The influenza vaccination reporting compliance by hospitals for this 2015-2016 influenza season was 98%. Table 7 displays the six hospitals that did not report data, resulting in a deficiency citation from the CDPH Licensing & Certification Program.

### **Key Findings**

- More hospitals have achieved the Healthy People 2020 target of 90% vaccination for employee HCP (n=154, 40%) than for non-employee HCP (n=92, 24%). This was similar to last year (employee HCP, n=154, 40% and non-employee HCP, n=109, 28%).
- Thirty of 34 (88%) counties with local health department mandatory masking orders achieved HCP influenza vaccination of 78%, the expected percentage in 2016 to be on-track for meeting the 90% Healthy People goal by 2020. Thirteen of 20 (65%) counties that do not have such a health order reached 78% vaccination. (Table 1).
- More hospitals achieved 78% vaccination for employee HCP (n=321, 83%) than for non-employee HCP (n=158, 41%).

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- Three hundred sixteen hospitals (80%) participated in a comprehensive annual survey of influenza vaccination policies and practices for 2015-2016 (Table 3). Results from the respondent hospitals include:
  - 305 (97%) of hospitals required HCP to provide documentation if they received their influenza vaccination at another site other than the reporting hospital.
  - 100% of hospitals included full-time employees in the annual influenza vaccination campaign. Only 8% of respondent hospitals included non-employee HCP in the annual influenza vaccination campaign.
  - 92% of hospitals offered influenza vaccination during all work shifts, including nights and weekends.
  - 92% of hospitals offered vaccination in conferences, meetings, and cafeterias, and 79% via mobile carts.
  - 95% of hospitals provided education on the benefits and risks of annual influenza vaccination.
  - 86% of hospitals used mail, email, and/or paper reminders to promote/enhance healthcare personnel influenza vaccination.
  - 84% of hospitals required a signed computer form from HCP who refused influenza vaccination
  - 96% of hospitals required mask/personal protective equipment (PPE) use for HCP who refuse influenza vaccination.

**Public Health Actions**

In follow-up to this report, CDPH will:

- Continue to track and report annual compliance with HCP influenza vaccination, including data collection of vaccination coverage and the methods and systems hospitals use to promote vaccination and document vaccination status.
- Collaborate with local public health departments to ensure accuracy of and details related to local policy regarding HCP influenza vaccination and mandatory masking, and encourage additional health departments to adopt such policies.
- Discuss these findings with local public health officials, and encourage evaluation and enforcement of local masking policies.
- Interview personnel in hospitals with >90% influenza vaccination coverage to identify best practices and use findings to educate other California hospitals.

CDPH recommends all hospitals should:

- Review the vaccination coverage data reported by the hospital for 2015-2016.
- Evaluate the current influenza vaccination program and policies and develop an action plan to improve influenza vaccination coverage of HCP to achieve the Healthy People 2020 target of 90% vaccination.

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- Ensure that all contracts with physician groups, registry organizations, fellowships, and student training programs include influenza vaccination requirements consistent with state law, local public health mandates, and/or hospital policy.
- Implement robust data collection and management systems to document the vaccination status of all HCP.
- Monitor and investigate all cases of suspected healthcare-associated influenza.
- Promote educational programs on influenza prevention and the importance of influenza vaccination for HCP, volunteers, friends and families, and patients.
- Implement environmental infection control measures to reduce the likelihood of influenza transmission.
- Ensure HCP consistently adhere to standard precautions by:
  - Performing proper hand hygiene before and after all patient contact, including before and after wearing gloves.
  - Wearing gloves when there is potential contact with blood (e.g., during phlebotomy), body fluids, mucous membranes, nonintact skin, or contaminated equipment.
  - Not washing gloves for the purpose of reuse.
  - Not wearing the same pair of gloves for care of more than one patient.
  - Wearing a gown to protect skin and clothing during procedures or activities where contact with blood or body fluids is anticipated.
  - Wearing a facemask when there is potential contact with respiratory secretions and sprays of blood or body fluids
  - Wearing eye protection for potential splash or spray of blood, respiratory secretions, or other body fluids.
- Manage visitor access and movement within the facility by:
  - Screening visitors for symptoms of acute respiratory illness.
  - Providing instructions on proper hand hygiene.
  - Limiting surfaces touched.
  - Using PPE.

The public should:

- Discuss the risk of influenza for themselves and their families with their HCP.
- Ask about the prevention strategies used by the HCP or healthcare facility to keep patients safe from influenza (e.g., hand hygiene, vaccination programs, staff education).
- Ask about patient safety and protecting patients through HCP influenza vaccination.

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