

**California Department of Public Health
Influenza Vaccination among Health Care Personnel in California Hospitals
For the 2013-14 Respiratory 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 [1-2]. Health care personnel (HCP) are a source of transmission of influenza to coworkers and patients in hospitals [1-4]. Influenza vaccination is a simple, safe, and cost effective way to prevent transmission of influenza from HCP to patients [4]. Vaccination of HCP has been shown to reduce worker's illness, absenteeism, staff shortages, and healthcare costs [3].

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 2013-2014 influenza season, specifically for October 1, 2013, through March 31, 2014. This is the sixth published report on HCP influenza vaccination in California hospitals and the second using data submitted by hospitals to the Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN). CDPH implemented measures that increased reporting compliance and significantly improved the completeness and quality of the reported data. An NHSN online survey of influenza vaccination policies and practices completed by 100% of California hospitals found that most hospitals are using strategies recommended by CDC to promote influenza vaccination among HCP.

CDPH implemented a real-time quality assurance process to track and correct errors and omissions on hospital surveillance report forms, which led to an increase in reporting compliance. CDPH calculated vaccination rates for each personnel category by hospital (Table 1). The report presents a new summary analysis of activities used by California hospitals to promote influenza vaccination compared with the same activities reported last year (Table 2). The proportion of hospitals with an overall HCP vaccination percentage that met the Healthy People 2020 target of 90% increased to 18% for 2013-14 from 13% for 2012-13 (Table 3). New in this report are overall hospital-specific vaccination rates with side-by-side comparisons to vaccination rates reported in 2012-2013 and 2011-2012 (Table 4).

Most hospitals reported using recommended strategies to promote influenza vaccination among HCP. Overall, influenza vaccination coverage among HCP in California hospitals is incrementally improving, with coverage of 81% for employees compared with 74% last year, and

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63% for non-employees compared with 59% last year (Table 5). Current statewide reporting mandates have been enhanced by local efforts. For the 2013-2014 influenza season, 23 counties required hospitals to enforce policies requiring HCP who decline vaccination to wear surgical masks during influenza season, 7 more counties than the 2012-2013 reporting period. Such additional mandates by local governments or by hospital policy may be necessary to increase HCP acceptance of annual influenza vaccination and protect California's most vulnerable patients.

Key Findings

- The influenza vaccination surveillance reporting compliance by hospitals for this 2013-14 influenza season was 100%, similar to the 2012-13 season report.
- The 2013-2014 influenza season was the first time the HCP vaccination data were collected for HCP physically working in the acute care hospitals for at least one working day (any number of hours a day counts as a working day) between October 1 through March 31 of an influenza season, regardless of clinical responsibility or patient contact.
- The mean hospital-specific employee vaccination percentage increased by 5%; 81% for 2013-14 compared with 74% in 2012-13. (Table 5).
- Hospital-specific vaccination rates increased 17% for employees and 8% for non-employees since the HCP influenza vaccination report, 2010-11.
- 332 (85%) of California hospitals achieved the 2010 Healthy People goal of 60% vaccination of employees, compared with 273 (71%) reported last year, a 14% increase. Seventy-two (18%) hospitals reached the Healthy People 2020 target of 90% for employee influenza vaccination, compared with 50 (13%) reported last year, a 5% increase (Table 3).
- More hospitals achieved the Healthy People 2020 target of 90% vaccination for employees (n=82) than for non-employees (n=68).

Hospital participation in a comprehensive online survey of influenza vaccination policies and practices increased to 390 (99%) for 2013-14 from 362 (94%) for 2012-13. Results are as follows (Table 2):

- 360 (92%) of hospitals in 2013-2014 required HCP to provide documentation if they received their influenza vaccination at another site other than the reporting hospital, compared with 286 (79%) hospitals in 2012-13.
- Over 73% of respondent hospitals required HCP who received off-site influenza

**California Department of Public Health
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For the 2013-14 Respiratory Season**

vaccination to provide a receipt and 49% required the signature of HCP on a standard facility form attesting to vaccination status, compared with 54% and 44%, respectively, for 2012-13.

- 100% of respondent hospitals included full-time employees in the annual influenza vaccination campaign. Only 41% of respondent hospitals included other personnel groups in the annual influenza vaccination campaign.
- 91% of respondent hospitals offered influenza vaccination during all work shifts, including nights and weekends. 91% offered vaccination in conferences, meetings, cafeteria, and 81% via mobile carts.
- To promote HCP influenza vaccination, 89% of respondent hospitals sent reminder mail or emails, and over 94% of respondents provided education on the benefits and risks of vaccination.
- Survey results showed that most hospitals implemented recommended strategies for improving influenza vaccination among HCP, such as comprehensive influenza vaccination campaigns, multiple vaccination opportunities during all shifts, education on influenza and vaccination, and inclusion of all personnel in vaccination promotion strategies and vaccination opportunities.
- 89% of respondent hospitals used mail, email, and or paper reminders to promote/enhance healthcare personnel influenza vaccination.
- 83% of respondent hospitals required a signed computer form from healthcare personnel who refused influenza vaccination compared to 17% of hospitals that used a paper-based form requiring manual distribution.

Public Health Actions

In follow-up to this report, CDPH will:

- Continue tracking and reporting annual compliance with HCP influenza vaccination, including data collection of vaccination coverage and the methods and systems used by hospitals to promote vaccination and document the vaccination status of all HCP.

CDPH recommends all hospitals should:

- Take reasonable and timely actions to review the vaccination coverage data reported by the hospital for 2013-14, evaluate the current influenza vaccination program and policies, and develop an action plan to significantly improve influenza vaccination coverage of HCP to achieve the Healthy People 2020 target of 90% vaccination.

California Department of Public Health
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For the 2013-14 Respiratory Season

- Ensure that influenza vaccination status is a component of all contracts with physician groups, registry organizations, fellowships, and student training programs.
- 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, their friends and families, and patients.

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). Such discussions can reinforce the patient safety aspect of vaccination and can emphasize professional responsibility to protect patients through vaccination.

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