

Influenza Vaccination Rates Among Connecticut Hospital Health Care Personnel, 2007–2008

Annual influenza vaccination is the most effective method to prevent influenza infection and its complications. Health care personnel (HCP) are at increased risk of acquiring and spreading influenza due to their exposure to ill patients; these patients are often at highest risk of infection-related complications. Despite influenza immunization recommendations since 1981 by the Centers for Disease Control and Prevention and the Association for Professionals in Infection Control, vaccination rates remain low among HCP (i.e., <50%) (1). Even among hospitals with targeted employee influenza vaccination campaigns, 30–50% of HCP remained unvaccinated (2).

The Advisory Committee on Immunization Practices and the Healthcare Infection Control Practices Advisory Committee published its *Influenza Vaccination of Health-Care Personnel* in 2006 (3). Summary recommendations included educating HCP on the benefits of influenza immunization and health consequences of influenza infection, offering influenza vaccine annually on site and at no cost to all HCP, obtaining a signed declination from all vaccination refusers, monitoring vaccination rates among staff, and providing feedback to HCP by unit-, ward-, or specialty-specific rates. The summary recommendations are based on previous studies that examined effective means to increasing influenza immunization rates among HCP.

During August–November 2008, the Department of Public Health conducted a survey of the birthing hospitals of Connecticut to examine the influenza immunization rates among HCP at each facility and discuss hospital efforts to increase uptake of the vaccine, including adoption of the summary recommendations during the 2007–2008 influenza season. Health care personnel were defined as all medical and non-medical personnel in contact with patients, including volunteer and part-time staff; however, not all hospitals included volunteers in

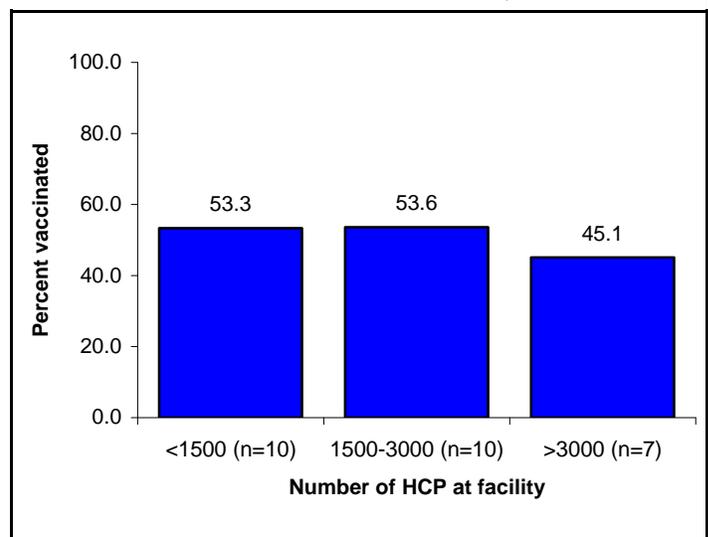
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their HCP counts. Health care personnel who were ineligible to receive influenza vaccination, either due to medical or religious exemptions, were removed from the denominator when determining the overall immunization rate. Surveys were conducted via face to face interview with hospital employee health, infection control, and/or occupational health department personnel using a standardized questionnaire.

A total of 27 (96%) hospitals participated in the survey. The mean influenza immunization rate for HCP was 51.3%, with a median of 51% and a range of 22–80%. Influenza immunization rates did not vary significantly with the number of HCP employed by facilities (Figure 1). All 27 (100%) hospitals reported providing annual employee education

Figure 1. Number of hospital health care personnel and mean influenza immunization rate, 2007–2008.



regarding the benefits of influenza immunization and the consequences of illness, offering vaccine annually to all eligible HCP on site, and offering vaccine during all employee shifts. Thirteen hospitals (48%) reported using a refusal form to record signatures from HCP who declined influenza vaccine. A single hospital reported mandating vaccine refusers sign a declination form; the hospital reported an influenza rate of 54%. Reported hospital influenza immunization-related activities are summarized in Table 1. Mean influenza immunization rates did not vary significantly with respect to specific reported activities.

Reported by: K. Kudish, DVM, MSPH, Immunization Program, Connecticut Department of Public Health.

Editorial:

The mean influenza immunization rate for HCP in the state of Connecticut of 51.3% was above the national average of 42% for the 2005–2006 season (4), but below the Healthy People 2010 objective of 60% (5). Survey analysis of the relationship between influenza immunization-related hospital activities and the mean immunization rates did not achieve statistical significance; however, this may be explained in part by data limitations including the cross-sectional survey design and questions pertaining to only the preceding influenza season.

Numerous resources exist to aid health care organizations in the goal of achieving high influenza coverage rates among their HCP, including the U.S. Department of Health and Human Services toolkit (5). The toolkit is comprised of links to several web sites, a presentation, journal articles, fact sheets, and posters to be used for promotion and education about influenza vaccination. Influenza campaign efforts should continue throughout the influenza

season into December, January, and possibly later. Achieving and sustaining high vaccination coverage among HCP will help to protect staff and their patients, and reduce disease burden and health-care costs (3).

References:

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2. Sartor C, Tissot-Dupont H, Zandotti C, et al. Use of a mobile cart influenza program for vaccination of hospital employees. Infect Control Hosp Epidemiol 2004;25:918–22.
3. CDC. Influenza Vaccination of Health-Care Personnel: Recommendations of the Healthcare Infection Control Practices Advisory Committee (HICPAC) and the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55;1–16.
4. CDC. Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2008. MMWR;57:1–60.
5. Available at: <http://www.hhs.gov/ophs/programs/initiatives/vacctoolkit/index.html>

HIV Genotype Testing – a Survey of Infectious Disease Specialists

During the early and mid 1990’s, HIV-infected patients were treated with a mono-therapy modality. When patients developed resistance to treatment, clinicians typically continued therapy by switching to a different class of medications (1,2). Increasingly, patients presented with resistant strains of HIV. Numerous studies have shown that HIV infected patients have a better response to antiretroviral therapy (ART) when the physician uses drug resistance data for clinical management (3,4).

In 2008, the Centers for Disease Control and Prevention (CDC) funded the Connecticut Department of Public Health (DPH), and ten other

Table 1. Influenza immunization-related hospital activities

Statement	Number (%)
Hospital mandates HCP who refuse vaccine sign declination forms	1/27 (4)
Hospital follows up with HCP that refuse vaccine	9/27 (33)
Hospital provides employee incentives for those accepting influenza vaccine	16/27 (59)
Hospital tracks influenza vaccination coverage by ward or unit and provides feedback to staff	19/27 (70)
Hospital uses computerized databases to track HCP influenza vaccination status	20/27 (74)
Hospital uses a refusal form for HCP who decline vaccine	13/27 (48)
Hospital tracks reasons for refusal through use of a database	9/13 (69)

states or city health departments, to conduct Variant, Atypical and Resistant HIV surveillance (VARHS). The objectives of VARHS are to incorporate surveillance of transmitted strains of variant, atypical, and resistant HIV-1 into routine HIV surveillance activities and to provide data on HIV-1 drug resistance, subtypes, and factors associated with resistance to assist local HIV prevention and treatment program planning and evaluation.

To characterize the use of HIV drug-resistance testing among infectious disease physicians in Connecticut, the DPH conducted a survey asking whether the test is used prior to treatment and to determine possible barriers to testing.

In February 2008, the DPH sent surveys to licensed clinicians practicing in Connecticut who were board eligible or certified in infectious disease. Providers were identified through the *Connecticut & Rhode Island Folio Physician Directory*, the DPH licensing section, and on-line physician profile directories (5). Surveys were sent to 124 providers who met the eligibility criteria. Eighty-seven responses were received. Of those, 54 (44%) providers indicated they treated HIV patients during 2007.

The data obtained through the 54 responses were analyzed further and showed that 69% (n=37) of providers treated HIV patients at hospitals, followed by private practice (41%, n=22), Community Health Centers (30%, n=16), and other clinical settings (24%, n=13) (long-term care facilities, community van, Department of Corrections, HIV clinics).

Participants were asked to estimate the percentage of patients for whom HIV genotype or phenotype test results were available before initiating ART. Of the 52 participants responding to this question, 54% indicated that the genotype result was always available before initiating ART. In addition, 80% of providers indicated that the genotype result was available for at least 75% of their newly diagnosed HIV patients. HIV genotype testing was used more frequently than phenotype with 65% of respondents not ordering phenotype testing for their patients.

Respondents for whom at least some patients start ART without genotype results available were asked to rank several potential reasons why ART might be initiated in the absence of the genotype results, or provide a reason. Reasons ranked in the top three included: a) patient not insured or underinsured

(n=17); b) HIV drug resistance genotype test result pending (n=14); and, c) patient illness prompted immediate initiation of ART (n=12).

The turnaround time of laboratory results back to the ordering physician differed between the HIV confirmatory test and the resistance test. On average, Western blot confirmatory results were returned in 5.7 (\pm 3.0) days. Depending on the type of HIV drug-resistance test, results were obtained in 14.3 (\pm 6.6) days for genotype and 19.8 (\pm 7.8) days for phenotype.

Reported by: R. Angulo, A. Roome, HIV/AIDS Surveillance Program, Connecticut Department of Public Health.

Editorial:

Although the response rate for the survey was 70%, only 44% treated HIV patients in 2007 and were included in the analysis. Because of this, the results of the survey are limited and should not be generalized to all infectious disease specialists in the state. The International AIDS Society-USA panel (IAS-USA) and the United States Department of Health and Human Services recommend resistance testing for newly diagnosed HIV patients (6,7). The results of this survey indicate that one of the reasons for delay or failure to use the genotype test with newly diagnosed HIV patients is inadequate health insurance. Notably, many of these patients may be eligible for Ryan White Care Act services, which include funding for HIV drug-resistance testing.

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7. Department of Health and Human Services. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. January 29, 2008; 1-128

Routine HIV Testing Recommended in Healthcare Settings

The Center for Disease Control and Prevention (CDC) estimates that approximately 25% of people with HIV don't know they are infected. In an effort to increase testing in this population and detect new HIV infections as early as possible, the CDC recommends the following: a) routine HIV screening for patients aged 13 to 64 years in all health-care settings after the patient is notified that testing will be performed unless the patient declines (opt-out screening); b) persons at high risk for HIV infection should be tested for HIV at least once annually; c) A separate HIV screening written consent is not recommended because the general consent for medical care should incorporate HIV screening; and, d) prevention counseling should not be required with HIV diagnostic testing or as part of HIV screening programs in health-care settings (1).

Reported by: R. Pino, AIDS and Chronic Diseases Section, Connecticut Department of Public Health.

Editorial:

In September 2007, Connecticut was among 26 jurisdictions to receive CDC funding to begin pilot projects implementing routine HIV testing into selected health care settings. The objective of the Connecticut initiative is to increase HIV testing opportunities for populations at disproportionate HIV infection risk. Initially, the project will be incorporated into selected Community Health Centers and Emergency Departments, and in 2009, will be expanded to outpatient clinics. To align with CDC's recommendations and facilitate routine testing in clinical settings, the DPH is proposing changes to Connecticut's current HIV testing consent law.

References:

1. CDC. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. MMWR. 2006. 55(RR-14): 1-17.

Evaluating HIV/AIDS Reporting

Connecticut's reportable disease regulations require laboratories and physicians to report HIV/AIDS cases to the Department of Public Health (DPH). The number of reported cases has been used by Health Resources and Services Administration to allocate Ryan White Care Act funds. These funds are used to provide various health care services to eligible HIV/AIDS patients. To ensure that all HIV/AIDS cases are being reported, the HIV/AIDS Surveillance Program evaluated reporting by hospitals and community health centers (CHC). Facilities were requested to provide lists of clients with HIV/AIDS-specific discharge diagnosis codes (ICD9 codes: 042, V08). Hospitals were asked to provide lists for a 12-24 month period depending on the date of the previous request. Community health centers were asked to provide lists of all active and inactive HIV clients. Lists were checked against the HIV/AIDS Surveillance registry and unmatched cases were investigated to confirm the HIV/AIDS case definition. Percentages of reported cases ranged from 88.9% to 100% with an overall reporting rate of 98.7%.

Reported by: S. Langer and A. Roome. HIV/AIDS Surveillance Program, Connecticut Department of Public Health.

Editorial:

The results of this evaluation indicate that almost all of the HIV/AIDS cases that have received services at the hospitals or CHC under evaluation have been reported. Implementation of HIV reporting (2002) and HIV viral load (2006) reporting requirements has resulted in reporting of prevalent HIV cases that were diagnosed in years when HIV was not reportable. This method has also been applied to clinics and other agencies that provide care or prevention services to HIV/AIDS patients. Physicians and other health care providers who wish to confirm their HIV/AIDS patients have been reported to the DPH should contact the HIV/AIDS Surveillance Program at (860) 509-7900.

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