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Agreement with employer influenza vaccination requirements among U.S. health care personnel during the 2016–17 season

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To the Editor:

Annual vaccination of HCP is a high priority for reducing influenza-associated morbidity in healthcare settings.¹ Although the percentage of HCP nationwide who reported receiving influenza vaccination was 78.6% in the 2016–17 season, coverage remains incomplete, placing HCP and patients at risk of influenza.^{1,2} Employer influenza vaccination requirements are associated with higher coverage rates, and, though controversial, mandatory influenza vaccination is supported by multiple healthcare professional societies.^{3,4} We explored agreement with employer influenza vaccination requirements among HCP nationwide.

Methods:

We used data from the opt-in Internet panel survey of HCP for the 2016–17 influenza season conducted during March 28–April 19, 2017. Similar surveys have been conducted using 2 national opt-in Internet sources since the 2010–11 influenza season to provide estimates of influenza vaccination coverage among HCP.²

In addition to questions about influenza vaccination coverage, occupation type, and healthcare setting, the survey included the statement “Health care workers should be

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required to be vaccinated for flu.” Respondents were asked to rate their agreement with the statement using a 4-point scale. Responses of strongly agree and agree were combined and categorized as expressed agreement. Responses of strongly disagree and disagree were combined and categorized as expressed disagreement.

We weighted responses to the U.S. HCP population by age, sex, race/ethnicity, work setting, and census region based on Bureau of Labor Statistics and U.S. Census Bureau data. We calculated the number and weighted percentage of HCP who expressed agreement or disagreement with the vaccination requirement statement by occupation type, healthcare setting, vaccination status, and employer promotion efforts. Additional statistical analyses were not performed since this was an opt-in sample and not a random sample.

Results:

Overall, 72.9% of 2,438 respondents expressed agreement with the vaccination requirement statement. In total, 78.6% of respondents reported receiving an influenza vaccination during the 2016–17 season, and 42.3% of respondents reported working in a setting with employer influenza vaccination requirements.² Table 1 shows the weighted percentage of respondents who expressed agreement with the statement by occupation type, healthcare setting, vaccination status, and employer promotion efforts. By healthcare setting, the weighted percentage of respondents who expressed agreement ranged from 70.9% (ambulatory care settings) to 77.2% (hospitals). By occupation, the weighted percentage of respondents who expressed agreement ranged from 67.4% (other clinical HCP) to 85.7% (physicians).

By influenza vaccination status, the weighted percentage of respondents who expressed agreement with the vaccination requirement statement was 83.5% for those who received the vaccine and 33.9% for those who did not. Of those who agreed with the vaccination requirement statement yet did not receive it, the most common main reasons given for not getting it were “I haven’t gotten around to it (18.0%), “I just don’t want the vaccine (15.7%), and “My employer didn’t require me to have a vaccination (14.1%). By workplace vaccination promotion, the weighted percentage of respondents who expressed agreement ranged from 56.4% for those with no employer requirement, onsite vaccination, or promotion to 81.6% for those with an employer vaccination requirement.

Discussion:

Mandatory influenza vaccination is increasingly common in healthcare settings, and multiple states have established influenza vaccination requirements for hospital HCP.⁵ However, concerns have been raised related to the variable effectiveness of the vaccine and the ethical and legal impact of these policies.^{5,6} The duty of a HCP to protect the health of individual patients and the public competes with their right to personal autonomy. Mandates also invoke legal issues, including the applicability of state and federal constitutional laws and statutes.^{5,7}

Nevertheless, in our study, most (72.9%) HCP from all occupational groups and healthcare settings agreed with employer vaccination requirements. These findings suggest an increase when compared with a 2010 online research panel of HCP nationwide, showing that 57.4%

of HCP agreed with influenza vaccination requirements.⁴ Implementation of employer vaccination requirements is becoming more common (11.1% of respondents in 2010 compared with 42.3% in our study).⁴ This is similar to other nationally representative samples among hospitals (43%–44%).^{8,9}

In our study, employees in hospitals, ambulatory care, and long-term care settings had similar agreement with employer vaccination requirements (70.9%–77.2%). However, physicians, pharmacists, and nurse practitioners/physician assistants had the highest agreement with employer vaccination requirements (all >80%), and other clinical HCP (67.4%) and assistants/aides (69.9%) had the lowest agreement.

Nearly 1/3 of HCP not vaccinated agreed with the employer influenza vaccination requirement statement. Also, 56.4% of HCP working in settings where there was no requirement, onsite vaccination, or promotion efforts agreed with vaccination requirements. These findings suggest that employer vaccination requirements, particularly in long-term care settings, could increase influenza vaccination coverage.

It is important to note that the survey question lacked details on what “required” vaccination entails. However, vaccine requirement is generally defined as any institutional policy that requires HCP to receive influenza vaccine or decline to receive one, with or without consequences for vaccine refusal.¹⁰ Examples of consequences include termination, mask-wearing, and restriction from patient care duties. Exploring the consequences was outside the scope of this study.

The majority of HCP from all occupational groups and healthcare settings agreed with vaccination requirements, including 33.9% of those not vaccinated. Wider adoption of employer vaccination requirements in all healthcare settings has support, can increase HCP influenza vaccination, and may reduce influenza transmission in healthcare settings. Interventions known to improve coverage, such as educating workers and offering vaccine on-site, at no cost, and during work hours should be implemented.

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TABLE 1.

Percentage of health care personnel (HCP) who expressed agreement with the statement “Health care workers should be required to be vaccinated for flu” — Internet panel survey. United States, 2016–17 influenza season

	No. who expressed agreement (weighted % [*])
Overall	1,810 (72.9%)
Healthcare setting [†]	
Hospital	925 (77.2)
Ambulatory care	718 (70.9)
Long-term care	549 (71.0)
Other setting [§]	604 (73.4)
Occupation	
Physician	251 (85.7)
Nurse practitioner/Physician assistant	154 (81.0)
Nurse	167 (73.7)
Pharmacist	307 (80.6)
Assistant/aide	641 (69.9)
Other clinical HCP [¶]	572 (67.4)
Non-clinical HCP ^{**}	315 (75.7)
Influenza vaccination receipt	
Received influenza vaccination	1,989 (83.5)
Did not receive influenza vaccination	449 (33.9)
Workplace vaccination promotion	
Employer vaccination requirement ^{††}	983 (81.6)
Onsite vaccination ^{§§}	795 (70.1)
Other vaccination promotion ^{¶¶}	206 (78.6)
No requirement, onsite vaccination, or promotion	454 (56.4)

^{*} Weights were calculated based on each occupation type, by age, sex, race/ethnicity, healthcare setting, and U.S. Census region to represent the U.S. population of HCP.

[†] Respondents could choose more than one setting.

[§] Dentist office or dental clinic, pharmacy, laboratory, public health setting, emergency medical services setting, or other setting where clinical care or related services was provided to patients.

[¶] Allied health professional, technician, or technologist.

^{**} Administrative support staff members or manager and nonclinical support staff members (including food service workers, laundry workers, janitors, and members of the housekeeping and maintenance staff).

^{††} Includes all respondents who indicated that their employer required them to be vaccinated for influenza.

^{§§} Employer made influenza vaccination available on-site for at least one day during the influenza season at no cost to employees. Restricted to respondents without an employer requirement for vaccination.

¶¶ Influenza vaccination was promoted among employees through public identification of vaccinated persons, financial incentives or rewards to individuals or groups of employees, competition between units or care areas, free or subsidized cost of vaccination, personal reminders to be vaccinated, publicizing the number or percentage of employees receiving vaccination, or making vaccination available at special events organized on site. Restricted to respondents without an employer requirement for vaccination or on-site vaccination.

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