

Healthcare Personnel Vaccination in Michigan's Long Term Care Facilities: A Statewide Survey of Policies and Practices



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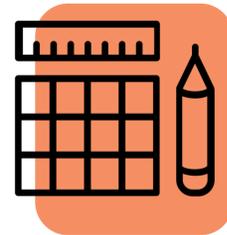
1 Introduction

Healthcare personnel (HCP) in long term care (LTC) facilities have frequent contact with vulnerable populations including older adults, persons living with chronic medical conditions and persons with disabilities.

The Advisory Committee on Immunization Practices (ACIP) recommends that HCP receive vaccines for influenza, hepatitis B, measles, mumps and rubella (MMR), varicella, tetanus, diphtheria and pertussis (Tdap), and meningococcal (HCP in specific job settings) to protect themselves and their patients from potentially serious diseases¹.

HCP in LTC settings have the lowest reported influenza vaccination rates among all HCP, with 69.2 percent coverage in the 2015-2016 influenza season². This falls short of the Healthy People 2020 goal of 90 percent coverage³. HCP also have low Tdap vaccinations rates (42.1 percent) and Hepatitis B vaccination rates (60.7 percent)¹.

There are no national vaccination coverage measures for the remaining HCP recommended vaccines. The Michigan Department of Health and Human Services (MDHHS) surveyed licensed LTC facilities to determine their HCP vaccination policies and practices and identify barriers to HCP vaccination.



3 Results

We received a 28.2 percent response rate (127 respondents for 130 sites). Over half (57.7 percent) of the responding sites reported a corporate affiliation. Respondents reported 25,383 HCP working in the LTC facilities (some did not limit their response specifically to LTC HCP and included all HCP in the facility) and 15,675 residents. There was an average of 201 HCP (range: 1 to 3,500 HCP) and 122 residents (range: 7 to 2,200 residents) per facility.

Thirty-six percent of the LTC facilities (48 of 130) had a mandatory vaccination policy for all HCP that included at least one vaccine. A mandatory annual influenza vaccination policy was the most

frequently reported vaccine requirement at a quarter of Michigan's LTC facilities (33 of 130) (Figure 1).

An additional 10 percent (13 of 130) had a mandatory annual influenza policy only for HCP with direct patient care. Mandatory Hepatitis B and Tdap vaccination policies were the next most frequently reported vaccine requirements for all HCP at 12.3 percent (16 of 130) of the LTC facilities. An additional 8.5 percent (11 of 130) required Hepatitis B and an additional 5.4 percent (7 of 130) required Tdap only for HCP with direct patient care (Figure 1).



Figure 1. Percentage of Michigan Long Term Care Facilities with Mandatory HCP Vaccination Policies by Antigen, 2017

A majority of the LTC facilities strongly encouraged Hepatitis B vaccination (80 percent, or 104 of 130) and annual influenza vaccination (76.2 percent, or 99 of 130), (Table 1). These vaccines were also the most frequently offered on site for HCP with 96.2 percent (125 of 130) offering influenza and 72.3 percent (94 of 130) offering Hepatitis B vaccine.

Annual influenza vaccination was the most frequently tracked vaccine (83.1 percent, or 108 of 130) followed by Hepatitis B (43.1 percent, or 56 of 130) and pneumococcal vaccine (24.6 percent, or 32 of 130) (Table 1). Three quarters of the LTC facilities reported using paper forms to track vaccinations, 31.5 percent used a computer application, 23.8 percent used Michigan's Immunization Information System, the Michigan Care Improvement Registry (MCIR) and 3 percent did not track vaccination status.

	Annual Influenza	Hepatitis B	MMR	Pneumococcal	Tdap	Varicella
Vaccination is strongly encouraged but not required	99 (76.2%)	104 (80%)	24 (18.5%)	44 (33.8%)	28 (21.5%)	25 (19.2%)
Declination forms are available	85 (65.4%)	94 (72.3%)	4 (3.1%)	20 (15.4%)	5 (3.8%)	3 (2.3%)
Vaccine is offered on site for HCP	125 (96.2%)	83 (63.8%)	10 (7.7%)	29 (22.3%)	17 (13.1%)	8 (6.2%)
HCP vaccination rates are tracked	108 (83.1%)	56 (43.1%)	7 (5.4%)	32 (24.6%)	12 (9.2%)	8 (6.2%)

Table 1. Vaccination practices in Michigan LTC facilities by antigen.

Seventy-seven facilities reported their HCP influenza vaccination coverage. Facilities with mandatory influenza vaccination policies for all HCP had higher vaccination coverage than those without a mandatory policy (Table 2). Limited HCP vaccination coverage data were reported for non-influenza vaccinations.

A majority of the facilities (79.2 percent, or 103 of 130) reported staff training or educational programs existed on immunizations. Regardless of the LTC facilities efforts to educate their HCP on the value of vaccinations, many barriers to vaccination persist. Reported barriers to HCP vaccination included:

- Lack of HCP knowledge on the benefits of vaccination
- General vaccine misconceptions (the vaccine makes me sick, side effects, etc.)
- Fear of needles
- Cost of vaccination
- Needing multiple doses in the series (Hepatitis B)
- Barriers specific to influenza vaccinations
 - HCP report the flu vaccination is against their religious beliefs
 - Believe the flu vaccine is not effective

	LTC Facilities	LTC Reporting Rates	Average HCP Flu Coverage
Mandatory Flu Vaccination Policy for all HCP	33 (25.3%)	25 (19.2%)	95.9%
Non-Mandatory Flu Policy	97 (74.6%)	52 (40%)	63.5%

Table 2. HCP influenza vaccination coverage by policy type.



4 Conclusions

Our study describes HCP vaccination policies and practices in Michigan's LTC facilities responding to the survey. HCP vaccination policies and procedures varied greatly among the responding LTC facilities.

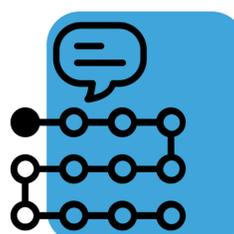
Over half of the facilities represented in the survey have a corporate affiliation; focusing on improving corporate level HCP vaccination policies may have a large impact on LTC facilities in Michigan.

There are minimal HCP vaccine requirements in Michigan's LTC facilities. When a policy was in a place, the primary focus in a majority of facilities was on annual influenza vaccination policies. This was expected, because of longevity and increased awareness of HCP influenza vaccine recommendations.

- Only a quarter of the LTC facilities reported a mandatory HCP influenza vaccination policy for all staff which is consistent with national data (23.4 percent)²
- Mandatory policies for non-influenza vaccinations were reported in 12.3 percent or less of the facilities.
- Hepatitis B was the vaccine most frequently reported as strongly encouraged for HCP.

While a majority of facilities have staff training and immunization educational programs, common vaccination barriers were reported. Focusing on strengthening these programs could result in more HCP immunized for the recommended vaccinations.

Employers and HCP have a shared responsibility to prevent transmission of vaccine-preventable diseases in LTC facilities where many vulnerable persons reside. Regardless, there are few vaccination policies in this setting.



2 Methods

We conducted a web-based survey using the Michigan Department of Licensing and Regulatory Affairs (LARA) directory to identify 461 licensed LTC facilities in Michigan. An initial email was sent to facility administrators on January 9, 2017 and two follow-up emails were sent to non-responders on January 17, 2017 and January 19, 2017.

We asked that one person familiar with the LTC facility's HCP vaccination policy complete the survey. The survey tool allowed the respondent to answer for multiple affiliated facilities. HCP were defined as all paid and unpaid persons working in healthcare settings who have the potential for exposure to patients or to infectious materials, including bodily substances or contaminated medical supplies and equipment, environmental surfaces, and/or air.

In addition to the HCP recommended vaccines (excluding meningococcal) we asked if HCP were required to receive pneumococcal vaccination, which is recommended for adults based on age and risk status.



5 References

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