



2010-2011 Massachusetts Healthcare Employees Influenza Vaccination Report

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Presentation Overview

- Background and Regulatory Context
- Results 2010 – 2011 Healthcare Employee Influenza Vaccination
- Next Steps



Context for Healthcare Personnel Vaccination Background

- Healthcare personnel (HCP) may be an important source of transmission of the influenza virus in healthcare settings.
- The most effective method of preventing influenza and its potentially serious complications is annual immunization.
- As well as protecting patients, vaccination of HCP has been shown to reduce absenteeism among healthy workers, resulting in financial savings to healthcare facilities.
- Despite the strong recommendation of major public health agencies, professional societies and healthcare organizations for annual, universal immunization of healthcare workers against influenza, overall rates of immunization among healthcare workers has remained low.



Regulatory Background

- **2008:** Amendment to Massachusetts hospital licensure regulations established requirements for acute care hospitals to begin reporting healthcare associated infection measures including influenza vaccination rates of healthcare personnel
- **2008- 2009:** Acute care hospitals required to report influenza vaccination rates of healthcare employees as a pilot with the results reported to the Lehman Center
- **2009:** Condition of licensure - Influenza regulations expanded to all licensed healthcare facilities
- **2009-2010:** First hospital specific report on seasonal influenza vaccination in Massachusetts acute care hospitals. The average vaccination rate for personnel among acute care hospitals during the 2009 -2010 influenza immunization season was 68.1%.
- **2010:** Reporting requirement expanded to include *all* licensed healthcare facilities



Influenza Reporting Requirements 2010- 2011

No later than April 15, 2011, health facilities were required to report the following to the Department:

- The number of **employees**:
 - immunized for seasonal influenza by the health facility from August 1, 2010 through March 31, 2011;
 - immunized for seasonal influenza outside the health facility from August 1, 2010 through March 31, 2011;
 - The number of **employees** declining seasonal influenza immunization from August 1, 2010 through March 31, 2011 and;
- The total number of health facility **employees** as of December 31, 2010.



Definition: Employee

Individuals, both full-time and part-time, who are on the health facility payroll as of December 31, 2010, whether or not they provide direct patient care.



Calculation of Percent of Healthcare Employees Vaccinated

employees immunized with flu vaccine from August 1,
2010 thru March 31, 2011*

X 100

employees on the payroll as of December 31, 2010

**includes vaccination administered both inside and outside the health facility.*



Massachusetts 2010- 2011 Healthcare Employee Influenza Vaccination Results

	No. Licensed	No. Reporting (%)	% Total Vaccinated	Range (%)
Acute Care Hospital	74	73 (98.6%)	70.8	37.5-96.1
Ambulatory Surgery	65	52 (80%)	68.8	0-100
Clinics	264	146 (55.3%)	58.2	0-114*
Dialysis Centers	73	72 (98.6%)	60.6	15-100
Long-Term Care	436	394 (90.4%)	58.9	12.5-109*
Non-Acute Hospital	52	46 (88.5%)	42.9	31.3-89.7

*Fluctuations in staff may artificially increase or decrease the number of employees counted on a specific day resulting in rates higher than 100%.



Acute Care Hospital 2010- 2011 HealthCare Employee Influenza Vaccination Results

	Mean (%)	Range (%) Minimum - Maximum
Vaccinated	70.8	37.5 – 96.1
Declination Rate	20.1	3.4- 36.4
<u>Location Vaccinated:</u>		
At Hospital of Employment	60.6	36.9 – 85.2
Outside Hospital of Employment	10.2	0.5 – 25.2



2010- 2011 HealthCare Employee Influenza Vaccination Results Acute Care Hospitals by *Teaching Status* and *Bed Size*

Hospital Teaching Status*	Mean (%)	Range (%) Minimum - Maximum
Major Teaching Hospital	73.1	37.5 - 96.1
Non-Teaching Hospital	70.1	46.2 -88.4
Hospital Bed Size		
<=100	71.1	60.5 - 88.4
101- 300	69.8	46.2 - 83
>300	75.3	37.5 - 96.1

*Teaching status was determined by hospital's most recent National Healthcare Safety Network annual hospital survey. Major teaching status is defined as a hospital that is an important part of a medical school teaching program¹⁰ in which the majority of medical students rotate through multiple clinical services.



2010- 2011 HealthCare Employee Influenza Vaccination Results Acute Care Hospitals by Region

Region	n	Mean (%)	Range (%) Minimum- Maximum
Western	12	70.5	48.9 - 88.4
Central	11	70.3	46.2 - 83.9
Northeast	10	71.6	67.7 - 78.2
Metro	13	76.4	60.5 - 96.1
Boston	13	72.6	58.2 - 91.3
Southeast	13	63.3	37.5 - 83.4



Top Performers – Acute Care Hospitals

	2010-2011	2009-2010
Lahey Clinic Medical Center Academic Medical Center, Burlington	96.10%	74%
Children's Hospital Boston Academic Medical Center, Boston	91.20%	53%
Fairview Hospital Critical Access Hospital, Great Barrington	88.30%	88%



Centers for Disease Control and Prevention Study: Influenza Vaccination Coverage Among Healthcare Personnel (HCP), by Selected Characteristics --- United States, 2010--11 influenza season*

Characteristic	Unweighted no.of HCP in sample	% vaccinated**	(95% CI)
Required by employer to be vaccinated			
Yes	230	98.1	(96.5--99.7)
No	1,695	58.3	(54.8--61.9)†

*MMWR August 19, 2011 / 60(32);1073-1077.

**Weighted estimate.

Abbreviation: CI = confidence interval.

† Significantly different from those subject to an employer requirement for vaccination (p<0.05).



2011-2012 Hospital Performance Goal

- Acute care hospitals have had 2 years to implement requirement and report healthcare worker influenza data
- For 2011-2012, the overall goal is for acute care hospital healthcare employee vaccination rates to be greater than 90% and no facility will report a rate less than 73%, which is 2 percentage points above the Massachusetts average rate in 2010-2011.



MDPH Steps to Reach this Achievable Goal

- Letter to hospital CEOs providing facility specific overall percentage of vaccination coverage and aggregate group comparisons
- Identify and make available on the MDPH website best practices that have led to high flu vaccination coverage
- Recognize and promote the achievements of high performers on the MDPH website
- Identify facilities with lower coverage levels to learn more about barriers and challenges to improvement
- In collaboration with our public health organization partners, identify training opportunities to provide ongoing and focused education.



Process for Additional Licensed Facilities

- 2011-2012: MDPH will continue to assist facilities to improve data completeness and accuracy
- 2012-2013: establish specific performance goals



Partnering for Improvement

Continue to work with key partners who share the common goal of improving healthcare personnel influenza vaccination rates:

- Massachusetts Coalition for the Prevention of Medical Errors
- Massachusetts Hospital Association
- Massachusetts Medical Society
- MassPro
- Massachusetts Senior Care Association