

The Importance of Promoting Hospital Worker Influenza Vaccination



Commissioner John Auerbach
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Context for Improving Influenza Vaccine Hospital Worker Coverage



- Hospital employee influenza vaccination is a critical patient safety standard of care.
- Prevention through vaccination is simple, safe and cost effective.
- Reducing the unintended transmission of influenza is a top national and Massachusetts priority.
- Current efforts to immunize hospital employees have been insufficient

Regulatory Background

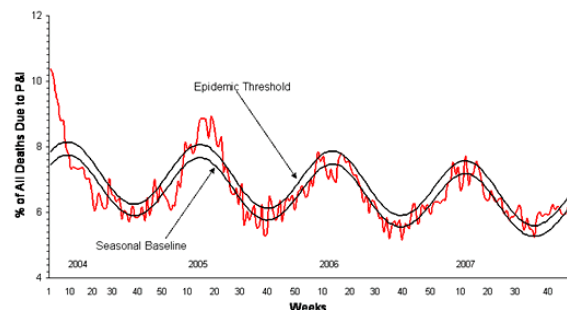
- **2008** - Hospital licensure regulations amended to require 1) reporting to DPH/public of influenza vaccination rates of healthcare personnel and 2) requiring hospitals offer flu vaccines to all employees with documentation of those who accept and those who decline
- **2009-2010** - First hospital specific report on seasonal influenza vaccination in Massachusetts acute care hospitals.
- **2010-2011** – Second hospital specific report on seasonal influenza vaccination in Massachusetts acute care hospitals



Seasonal Influenza Represents a Serious Health Problem

- Annual average of 24,000 influenza-related deaths in US (480 in Mass.)
 - ~90% among 65 and older
 - ~2,400 deaths annually among 19-64 year olds (48 in Mass.)
- Annual average of 220,000 hospitalizations (4,400 hospitalizations in Mass.)
 - ~50% in 65 and older
- 70 million missed work days
- 38 million missed school days
- \$3-15 billion in direct and indirect costs

Pneumonia and Influenza Mortality
for 122 U.S. Cities
Week Ending 12/22/2007



There are Multiple Benefits of Influenza Vaccination for Healthcare Personnel

1. Prevents illness
2. Keeps them and colleagues at work
3. Keeps your patients healthier
4. Keeps their families healthier
5. Saves costs for you and the health care system
6. Provides a good example

There are Minimal Side Effects Associated with Inactivated Flu Vaccine



Nichol, et al. Arch Intern Med 1996; 156: 1546 (n=849)

| | Vaccine | Placebo |
|--------------------|---------|---------|
| Systemic complaint | 34.1% | 35.2% |
| Arm soreness | 63.8% | 24.1% |



Massachusetts Healthcare Employee Influenza Vaccination Results Are Uneven and Too Low

| | 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 program in which the majority of medical students rotate through multiple clinical services. 9

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 |

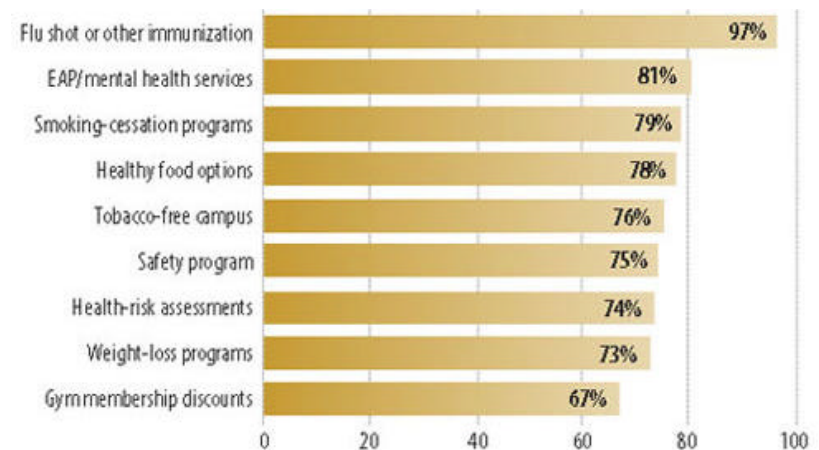
DPH and Public Health Council Proposals

- For 2011-2012, DPH set a goal of 90% hospital employee vaccination rates overall with no facility less than 73% (2% pts above latest average).
- At its October meeting the Public Health Council voted support for the adoption of more aggressive policies by hospitals
- Council members agreed to consideration of regulatory change if rates did not rise to the new goal



There are Evidence-Based Approaches to Maximize Personnel Influenza Vaccination Rates

- Education and Campaigns
- Improved Access
- Measurement and Feedback
- Legislation and Regulation
- Leadership Commitment



Recommended Action Steps by Hospital Leadership

- Clearly communicate to all employees the importance of the vaccination effort
- Establish performance goals for each unit
- Offer training, distribute tools and provide resources needed to meet goals
- Reduce or eliminate barriers
- Conduct ongoing review of performance data

