TURNING KNOWLEDGE INTO ACTION: WHERE ARE WE GOING? HOW DO WE GET THERE?

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Immunization Outreach Coordinator
Adult Immunization Conference
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I, Rebecca Vanucci, have been asked to disclose any significant relationships with commercial entities that are either providing financial support for this program or whose products or services are mentioned during my presentations.

- I have no relationships to disclose.

I may/will discuss the use of vaccines in a manner not approved by the U.S. Food and Drug Administration.

- But in accordance with ACIP recommendations.
ROADMAP

Where are we?

Are we there yet?

How are we going to get there?

We made it!
WHERE ARE WE?
IMMUNIZATION RATES

Know where you are before you plan what to do next
# MA ADULT VACCINATION RATES

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Tdap ≥18 yrs</strong></td>
<td>41%</td>
<td>35%</td>
<td>39%</td>
<td>27%†</td>
</tr>
<tr>
<td><strong>Zoster ≥60 yrs</strong></td>
<td>39%</td>
<td>44%</td>
<td>44%</td>
<td>33%</td>
</tr>
<tr>
<td><strong>HPV females 18-26 yrs (1+ doses)</strong></td>
<td>64%</td>
<td>71%</td>
<td>60%</td>
<td>49%§</td>
</tr>
<tr>
<td><strong>HPV females 18-26 yrs (3+ doses)</strong></td>
<td>79%*</td>
<td>78%*</td>
<td>84%*</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>HPV males 18-26 yrs (1+ doses)</strong></td>
<td>38%</td>
<td>38%</td>
<td>27%</td>
<td>14%§</td>
</tr>
<tr>
<td><strong>HPV males 18-26 yrs (3+ doses)</strong></td>
<td>N/A</td>
<td>47%*</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Influenza vaccine ≥65 yrs</strong></td>
<td>58%</td>
<td>61%</td>
<td>57%</td>
<td>70%</td>
</tr>
<tr>
<td><strong>Pneumococcal vaccine ≥65 yrs</strong></td>
<td>72%</td>
<td>73%</td>
<td>76%</td>
<td>67%</td>
</tr>
</tbody>
</table>

*Percent of those who received at least 1 dose.
†US NHIS data for Tdap is for adults ≥19 years old.
§US NHIS data for HPV (at least 1 dose) is for adults 19-26 years old.

Source: MA Data: MA BRFSS, US Data: NHIS
## MA FLU VACCINATION RATES

<table>
<thead>
<tr>
<th>Category</th>
<th>MA 2015-16</th>
<th>MA 2016-17</th>
<th>US 2016-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyone 6 mos+</td>
<td>50%</td>
<td>50%</td>
<td>47%</td>
</tr>
<tr>
<td>Children 6 mos – 17 yrs</td>
<td>75%</td>
<td>72%</td>
<td>59%</td>
</tr>
<tr>
<td>o Children 6 mos – 4 yrs</td>
<td>85%</td>
<td>82%</td>
<td>70%</td>
</tr>
<tr>
<td>o Children 5 – 12 yrs</td>
<td>79%</td>
<td>71%*</td>
<td>60%</td>
</tr>
<tr>
<td>o Adolescents 13 – 17 yrs</td>
<td>63%</td>
<td>65%</td>
<td>49%</td>
</tr>
<tr>
<td>Adults 18 +</td>
<td>44%</td>
<td>45%</td>
<td>43%</td>
</tr>
<tr>
<td>o Adults 18 – 64 yrs</td>
<td>40%</td>
<td>41%</td>
<td>38%</td>
</tr>
<tr>
<td>o Adults HR 18 – 64 yrs</td>
<td>48%</td>
<td>49%</td>
<td>46%</td>
</tr>
<tr>
<td>o Adults 50 – 64 yrs</td>
<td>46%</td>
<td>47%</td>
<td>45%</td>
</tr>
<tr>
<td>o Adults 65+</td>
<td>60%</td>
<td>59%</td>
<td>65%</td>
</tr>
</tbody>
</table>

*Statistically significant

Source: 2015-16 and 2016-17 National Immunization Survey (NIS) – Flu, and BRFSS
INFLUENZA VACCINATION, PRAMS, 2012-2015

Survey Year | Percent of Women with a Live Birth
---|---
2012 | 66.3
2013 | 71.3
2014 | 72.1
2015 | 75.6
INFLUENZA VACCINATION BY RACE/ HISPANIC ETHNICITY, PRAMS, 2012-2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White, non-Hispanic</td>
<td>68.8</td>
<td>73.7</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>64.5</td>
<td>70.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>71</td>
<td>74.8</td>
</tr>
<tr>
<td>Asian, non-Hispanic</td>
<td>75.6</td>
<td>76.1</td>
</tr>
</tbody>
</table>
If you don't know where you are going, you'll end up someplace else.

Yogi Berra

HOW ARE WE GOING TO GET THERE?
PROJECTS AND PARTNERS
Immunization Program
Goal
HEALTHY COMMUNITIES
FULLY VACCINATED TO REDUCE VPD MORBIDITY AND MORTALITY

It Takes a Village to Vaccinate!
HOW ARE WE DOING THIS?

You!

Conferences

Advisories

Emails

Online Presence

Partnerships
MA ADULT IMMUNIZATION COALITION (MAIC)

MAIC is a collaborative partnership dedicated to increasing adult immunization through education, networking, and sharing innovative and best practices.

There are currently over 200 members representing:
- Local and state public health organizations
- Community health centers
- Health insurance plans
- Pharmacies
- Physicians
- Vaccine manufacturers
- Long-term-care and senior service organizations
- Consumer advocacy groups
- Hospitals
- Home health
- College health services

Next meeting!
Monday, June 4th 1:30pm at Massachusetts Medical Society

Sign up at the MMS table today or learn more at http://maic.jsi.com/
2011
Total Sites: 9
Total Patients: 3,902
Total Shots: 69,505

2013
Total Sites: 341
Total Patients: 1,539,629
Total Shots: 7,303,293

2015
Total Sites: 1,121
Total Patients: 4,427,623
Total Shots: 33,334,571

March 2018
Total Sites: 2,280
Total Patients: 6,413,949
Total Shots: 48,668,309
MIIS IMMUNIZATION DATA BY PROVIDER TYPE

- Internal Medicine: 4%
- Commercial Pharmacy: 5%
- Family Practice: 5%
- Hospital: 8%
- Community Health Center: 15%
- Pediatric: 15%
- Multi-Specialty: 20%

ADULT IMMUNIZATION CONFERENCE
ADULT STANDARDS

Call to action for healthcare professionals for evidence-based activities

• Assess immunization status of all patients in every clinical encounter.

• Strongly recommend vaccines that patients need.

• Administer needed vaccines or refer to a vaccinating provider and confirm receipt

• Document vaccines received by patients, including entering immunizations into immunization registries.

For 10% fee, CHCF at Commonwealth Medicine electronically bills the participating plans and distributes payments to public providers
  • 10 private health plans and MassHealth participate

Cities and towns can bill contracted plans for the:
  • Administration of all state-supplied vaccine to individuals ages 6 months and older
  • Cost of purchasing and administering all recommended vaccines to adults for private health plans
  • Cost of purchasing and administering influenza and pneumococcal vaccines to Medicare Part B
  • 175 public sector providers across the state participate, representing 214 out of 351 towns in MA

> $2.5 million reimbursed to communities last flu season
Health plans agree to cover administration costs for the H1N1 vaccine administered in public settings.

Health plans reimburse the cost of privately purchased vaccines.

MassHealth agrees to reimburse Public Providers for influenza vaccine.

Additional reimbursement of all ACIP recommended vaccines for adults & Medicare B billing services.

Reimbursement available for the administration of all state supplied ACIP recommended pediatric vaccines.
HPV INITIATIVE

A Case Study of Using Data to Inform Projects
ESTIMATED VACCINATION COVERAGE WITH TDAP, MCV4, AND HPV AMONG ADOLESCENTS 13-17 YEARS, MA 2008 – 2016

*Tdap

97% (+3%)
90% (-1%)  

90% (-1%)
78% (+3%)
75% (+2%)
66% (+3%)
55% (+2%)  

55% (+2%)  

44% (+9%)
62%  

62%  

*HPV UTD: 2 doses if the first dose given before the 15th birthday and doses were separated by five months, otherwise, 3 doses

NIS Data, CDC
ESTIMATED VACCINATION COVERAGE WITH HPV AMONG ADOLESCENTS 13-17 YEARS OF AGE, MASSACHUSETTS, NIS 2015 VS 2016

<table>
<thead>
<tr>
<th></th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>1+ HPV</td>
<td>74%</td>
<td>78%  (+4%)</td>
</tr>
<tr>
<td>2+ HPV</td>
<td>63%</td>
<td>68%  (+5%)</td>
</tr>
<tr>
<td>3+ HPV</td>
<td>53%</td>
<td>55%  (+2%)</td>
</tr>
<tr>
<td>HPV UTD*</td>
<td>N/A</td>
<td>62%</td>
</tr>
</tbody>
</table>

*2 doses if the first dose given before the 15th birthday and doses were separated by five months, otherwise, 3 doses

National Immunization Survey (NIS) Data, CDC
## CANCERS ATTRIBUTABLE HPV PER YEAR, U.S., 2010—2014

<table>
<thead>
<tr>
<th>Cancer site</th>
<th>Percentage of HPV cancers attributable to HPV</th>
<th>Number of HPV cancers attributable to HPV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>Cervix</td>
<td>91%</td>
<td>10,600</td>
</tr>
<tr>
<td>Vagina</td>
<td>75%</td>
<td>600</td>
</tr>
<tr>
<td>Vulva</td>
<td>69%</td>
<td>2,600</td>
</tr>
<tr>
<td>Penis</td>
<td>63%</td>
<td>0</td>
</tr>
<tr>
<td>Anus*</td>
<td>91%</td>
<td>3,800</td>
</tr>
<tr>
<td>Oropharynx</td>
<td>70%</td>
<td>2,100</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>19,700</td>
</tr>
</tbody>
</table>

*Includes anal and rectal squamous cell carcinomas

Increase HPV vaccination rates

Decrease HPV-related cancer

HPV vaccine is cancer prevention.

www.mass.gov/dph/HPVvax
HPV-RELATED OROPHARYNGEAL CANCER

12,200 cases annually, 10,100 in men Has surpassed cervical cancer as the most common HPV related cancer

HPV-related cancers increased by 225% in the past 20 years

Rise in incidence and changing patient demographics due to HPV

No screening test
- No endpoint in clinical trial
- Late stage diagnosis

http://www.ghorayeb.com/OropharyngealCarcinoma.html

CDC, National Program of Cancer Registries and the NCI Surveillance, Epidemiology and End Results Program, https://www.cdc.gov/cancer/hpv/statistics/cases.htm
MASSACHUSETTS HPV CANCER INCIDENCE COMPARED TO US HPV CANCER INCIDENCE

Oropharyngeal Cancer
MA – 7.85
US – 8.0

Oropharyngeal Cancer
MA – 1.91
US – 1.7

Cervical Cancer
MA – 5.46
US – 7.2

Oral HPV Prevention Taskforce
Dept. of Public Health
Immunization Program
Dept. of Public Health Comp. Cancer
Advocacy Organizations
MA Chapter of AAP
Dental Professionals
Widow/Advocate

Download free dental materials for HPV related cancer prevention education at www.teammaureen.org
Meeting today!

After the conference in Westborough Room. All are welcome!
Vaccine information for adults

The need for vaccinations does not end in childhood. Vaccines are an important step in protecting adults against several serious and sometimes deadly diseases.

You may not realize that you need vaccines throughout your life. Adults need to keep their vaccinations up to date because immunity from childhood vaccines can wear off over time. You are also at risk for different diseases as an adult. Vaccination is one of the most convenient and safest preventive care measures available.

All adults need:

- **Influenza (flu)** vaccine every year
- **Td** or **Tdap** vaccine

https://www.mass.gov/immunization-program
IMMUNIZATION ACTION COALITION’S NEW GUIDE

Comprehensive “How-To” guide with current information and resources

http://www.immunize.org/guide/
ASTHO GUIDE FOR VACCINATING UNINSURED ADULTS

Guide to assist state and local immunization programs and their partners in identifying and vaccinating uninsured and underinsured adults.

Massachusetts was featured in the guide

- Immunization Program
- Kitty Mahoney of Framingham
CDC created an online toolkit (https://www.cdc.gov/vaccines/pregnancy/hcp-toolkit/index.html) to help prenatal care providers increase the rates of maternal immunization.

1. Why Maternal Vaccines are Important
2. Implementation Resources
3. Maternal Vaccination Information

MDPH continues to collaborate with ACOG on their 3 year grant to increase immunization rates for pregnant and non-pregnant women in CA and MA.

1. Utilization of MIIS
2. Connection to Adult Vaccination Resources
3. Newsletters and Trainings
NEW HPV MATERIALS FROM NATIONAL HPV ROUNDTABLE
HTTP://HPVROUNDTABLE.ORG/ACTION-GUIDES/

Cancer Prevention
Through HPV Vaccination:
An Action Guide for Small Private Practices

Cancer Prevention
Through HPV Vaccination:
An Action Guide for Health Care Administrators

Cancer Prevention
Through HPV Vaccination:
An Action Guide for Nurses and Physicians

Cancer Prevention
Through HPV Vaccination:
An Action Guide for Physicians and Nurses
QUESTIONS?

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