Tennessee Immunization Program Updates

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Tennessee Public Health Association
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Objectives

• Vaccine financing in health departments
• Recent changes in federal recommendations
• Vaccines for healthcare personnel
• Tennessee immunization coverage levels
• Tennessee school/college requirements
• A little about TWIS
• Q and A
Major federal funding cuts impact vaccines available free in local health departments

- Cuts do not affect Vaccines for Children (VFC) Program or any aged 0-6y
  - Age 0-18 AND: (a) Uninsured; (b) TennCare; (c) Native American; or (d) [in HD, FQHC only] Privately insured but plan excludes vaccines (“underinsured”)

- Adult vaccine changes:
  - Routine vaccines limited to uninsured
  - Vaccines given for post-exposure prophylaxis as indicated (outbreak control)

- Childhood vaccine changes:
  - 7 through 18 years, non-VFC [private insurance with vaccine benefits] only vaccines the child needs to meet state school entry requirements
    - Refer elsewhere for meningococcal, hepatitis A, HPV, or any other vaccine recommended but not required for that child

Influenza Vaccine 2011-2012

- 6 months and up
- Vaccination during pregnancy: 2 for 1
- Same vaccine strains as 2010-11
- Protection for at least a year in general
  - It is not too early to vaccinate in August or September
- Children <9 years who had no flu vaccine last season need 2 doses (at least 1 month apart) this season
  - To assure adequate immunity to the 2009 H1N1 strain
  - Generally, 2 doses recommended only for vaccine naïve children or those who got 1 dose in their first season (if the immediately preceding season)
FLUView is a weekly influenza surveillance report prepared by the Influenza Division. It provides data on the percentage of visits for influenza-like illness (ILI) reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) for the past few years.

Influenza viruses circulating are also depicted, showing the number of positive tests reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories for the season 2010-11.
Swine origin influenza viruses:
Key points from CDC’s MMWR, September 9, 2011

• “Clinicians who suspect influenza virus infection in humans with recent exposure to swine should obtain a nasopharyngeal swab from the patient for timely diagnosis at a state public health laboratory and consider empiric neuraminidase inhibitor antiviral treatment to quickly limit potential human transmission.”

• “…no information currently is available regarding the capacity of this virus to transmit efficiently in swine, humans, or between swine and humans.”

Tetanus-diphtheria-acellular pertussis (Tdap)

• Routine at 11-12y, for adults, next tetanus booster, anyone who cares for infants
• No waiting period between last Td and Tdap
• Age 7-10, never completed DTaP? Give Tdap
• Over 65 and never had Tdap? Permissible – and recommended if caring for an infant or HCP
• Pregnant? Tdap Recommended! after 20 weeks
  – Safe, effective. (provisional recommendation published, MMWR pending)
Meningococcal Conjugate Vaccine: 2nd Dose Recommended

- Most important age for protection 16-21y
- Original recommendation: 1 dose at 11-12
  - Belief it would protect about 10 years
  - Protection requires high circulating antibodies, titers dropped off 3-5 years after dose
  - Second dose strongly boosts titers, slower decline
- New recommendations:
  - 1st dose age 11-12 (13-15 if late), 2nd dose at 16y
  - Minimum of 8 weeks between 1st and 2nd doses
  - If already 16 or older at first dose, only 1 dose given
  - See ACIP recommendations for details

Healthcare Personnel Recommendation Review

- Hepatitis B (0, 1m, 6m)
  - If working where routinely exposed to blood, check serology for anti-HBs 1-2 mo after #3
- Influenza annually
- MMR:
  - 2 doses or lab confirmation of immunity if born 1957 or later
  - Consider 2 doses for unvaccinated born before 1957 if no lab evidence of immunity in absence of outbreak
    - Definitely give 2 doses in measles/mumps outbreak
    - 1 dose in rubella outbreak
Healthcare Personnel Recommendation Review

- Varicella: verify immunity
  - History of disease (diagnosed), immunity, 2 doses 1m apart
- Tdap: 1 dose for all who have not had it
  - No waiting period since last Td, no age limit
- Meningococcal? Only to microbiologists that handle *N. meningitidis* cultures

Travel Medicine: [www.cdc.gov/travel](http://www.cdc.gov/travel) and The YELLOW Book
Finding Yellow Fever Vaccination Clinics Near You

Tennessee YFV clinics all provide full travel medicine services and vaccines
2010 Tennessee Annual Survey of On-Time Immunization of 24 Month Old Children

- About 1,500 TN children surveyed annually
- More state detail than CDC’s National Immunization Survey of 19-35 month olds
- Goal: 90% coverage for each of 7 vaccines: DTaP, Polio, MMR, Hepatitis B, Hib, Varicella, PCV (TN reached goal for 5 of 7)
  — 60% for Hepatitis A, 80% for rotavirus (HP 2020)
### 2009 vs. 2010 CDC National Immunization Survey for ages 13-17 years (NIS-Teen)

View original MMWR article at [http://www.cdc.gov/mmwr/pdf/wk/mm6033.pdf](http://www.cdc.gov/mmwr/pdf/wk/mm6033.pdf)

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</thead>
<tbody>
<tr>
<td>1+ Tdap</td>
<td>55.6 (54.3-56.8)</td>
<td>48.0 (42.0-54.0)</td>
<td>68.7 (67.5-69.8)</td>
<td>58.7 (52.4-64.8)</td>
<td>+13.1</td>
<td>+10.7</td>
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<tr>
<td>1+ Men-ACWY</td>
<td>53.6 (52.4-54.9)</td>
<td>52.1 (46.1-58.1)</td>
<td>62.7 (61.5-63.9)</td>
<td>50.6 (44.4-56.8)</td>
<td>+ 9.1</td>
<td>-1.5</td>
</tr>
<tr>
<td>1+ HPV (♀)</td>
<td>44.3 (42.4-46.1)</td>
<td>43.6 (35.4-52.1)</td>
<td>48.7 (46.9-50.5)</td>
<td>33.1 (25.7-41.4)</td>
<td>+ 4.4</td>
<td>-10.5</td>
</tr>
<tr>
<td>3+ HPV (♀)</td>
<td>26.7 (25.2-28.3)</td>
<td>n/a</td>
<td>32.0 (30.3-33.6)</td>
<td>26.3 (19.7-34.2)</td>
<td>+ 5.3</td>
<td>n/a</td>
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*95% confidence intervals in parentheses

*Percentage point difference of point estimates (2010-2009), confidence intervals wide
# National Trends in Teen Vaccine Uptake: HPV Vaccine Falling Off the Curve

![FIGURE](image-url)  

**Abbreviations:** Tdap = tetanus, diphtheria, acellular pertussis vaccine; MenACWY = meningococcal conjugate vaccine; HPV = human papillomavirus vaccine; ≥1 dose; HPV ≥3 = human papillomavirus ≥3 doses.  
* Tdap and MenACWY vaccination recommendations were published in March and October 2006, respectively.  
† HPV vaccination recommendations were published in March 2007.

## Diseases Covered by Tennessee Child Care and School Immunization Requirements (2010 changes in bold, italics)


<table>
<thead>
<tr>
<th>Disease</th>
<th>Child Care</th>
<th>Kindergarten</th>
<th>New students, Grades 1-12</th>
<th>All incoming 7th graders</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>H. influenza type B (Hib)</td>
<td>Up to date/complete</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Pneumococcus (PCV)</strong></td>
<td>Up to date/complete</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Diphtheria, Tetanus, Pertussis</td>
<td>Up to date (no 4y dose)</td>
<td>Complete (incl. 4y dose)</td>
<td>Same as K, Tdap not req'd</td>
<td>Tdap booster</td>
<td>-</td>
</tr>
<tr>
<td>Measles, Mumps, Rubella</td>
<td>1 dose</td>
<td>2 dose</td>
<td>2 dose</td>
<td>-</td>
<td>2 dose</td>
</tr>
<tr>
<td>Polio</td>
<td>Up to date (no 4y dose)</td>
<td>Complete (incl. 4y dose)</td>
<td>Complete (incl. 4y dose)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>Up to date/complete</td>
<td>Complete</td>
<td>Complete</td>
<td>-</td>
<td>If training incl. direct pt. care</td>
</tr>
<tr>
<td><strong>Hepatitis A</strong></td>
<td>1 dose</td>
<td>2 dose</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Varicella (or disease history)</td>
<td>1 dose</td>
<td>2 dose</td>
<td>2 dose</td>
<td>2 dose</td>
<td>2 dose</td>
</tr>
</tbody>
</table>

Vaccines recommended by CDC, but not required for school: rotavirus (infants), influenza (all, annually), meningococcal (adolescent), Human papillomavirus (adolescent). Visit [http://health.state.tn.us/TWIS/requirements.htm](http://health.state.tn.us/TWIS/requirements.htm) or [https://twis.tn.gov](https://twis.tn.gov) for more information or for the Official Certificate.

Last updated by Tennessee Immunization Program: January 2011
Immunization Certificate: Revised May 2011

- Section Numbers (easier navigation)
- Section 1 (school specific)
- Reminder that dates are required for doses of required vaccines (Section 2a)
- Medical exemption signed by MD, DO
  Health Departments only (not PA, APN)
- Section 2b: not required – cannot be factored in the provider assessment
- Section 3, “Provider Assessment” NOT VALID IF BLANK
  - Clarified the categories (no actual changes in eligibility)
- Section 4. Name, address, phone of Qualified provider + signature/stamped signature – NOT VALID IF BLANK!
  - Clarified who is qualified. MD, DO, APN, PA or Health Department. Private practice RNs, office staff may not sign.
- TWIS will pre-print most of this

College Immunization Requirements

Optional form available in TWIS (Secure Area)
If school will not accept a credible history of disease:
  Report to TIP (615-741-7247)
TN Immunization Registry

Demographics from Birth Certificate Data

All TN Health Departments [Through Patient Tracking Billing Management Information System (PTBMIS)]

State Immunization Information System (ISIS)

Tennessee Web Information System (TWIS) web portal

Non-HL7 Flat File (In development)

HL7 2.3.1 Standard Data Trading Partners

https://twis.tn.gov

As of September 1, 2011...

3,692,117 People
30,184,012 Vaccine Doses

https://twis.tn.gov
New TWIS Features 2011: Primarily for the Vaccines for Children (VFC) Program

VFC Vaccine Inventory Management (VIM)
• Accept VFC vaccine shipments online
• Transfer or accept VFC vaccine among VFC providers
• Manage VFC vaccine inventory and orders  
  – Submit VFC Vaccine Doses Accountability Reports
  – Report spoiled or wasted VFC vaccine doses
  – Order vaccine online
• Immunization Requirements College Form (not limited to VFC)

TWIS Features 2012

• Interactive Online User Manual
• Flat File Conversion (upload a batch of patient records without HL7 connection)
• HL7 Batch File Upload  
  – Bidirectional HL7 2.3.1 standards
  – Update only HL7 2.5.1 standards
CMS Meaningful Use Grants:
Must choose 1 public health (PH) objective

The 3 PH objectives are:
• Exchanging *immunization registry* data including queries, responses, and updates*
• Sending electronic laboratory results (ELR) - Hospitals
• Sending syndromic surveillance data to PH agencies

* Tennessee Department of Health (TDH) is exchanging immunization registry data

https://twis.tn.gov

Meaningful Use Continued

Useful Links:
• Office of eHealth- [http://www.tn.gov/ehealth/meaningfuluse/](http://www.tn.gov/ehealth/meaningfuluse/)
• Bureau of TennCare (Medicaid)- [http://www.tn.gov/tenncare/hitech.html](http://www.tn.gov/tenncare/hitech.html)
• Visit the Tennessee Department of Health exhibit for TWIS and Meaningful Use Information
• Contact [Nancy.L.Williams@tn.gov](mailto:Nancy.L.Williams@tn.gov) in the TIP Registry Unit for information

https://twis.tn.gov
Our world without vaccines...?

TN Immunization Program Team

- [Kelly.moore@tn.gov](mailto:Kelly.moore@tn.gov)
- 615-741-7247 or [https://twis.tn.gov](https://twis.tn.gov)