

# Adult Immunization in Michigan: Using the Standards to Increase Coverage

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# Disclosure Statements

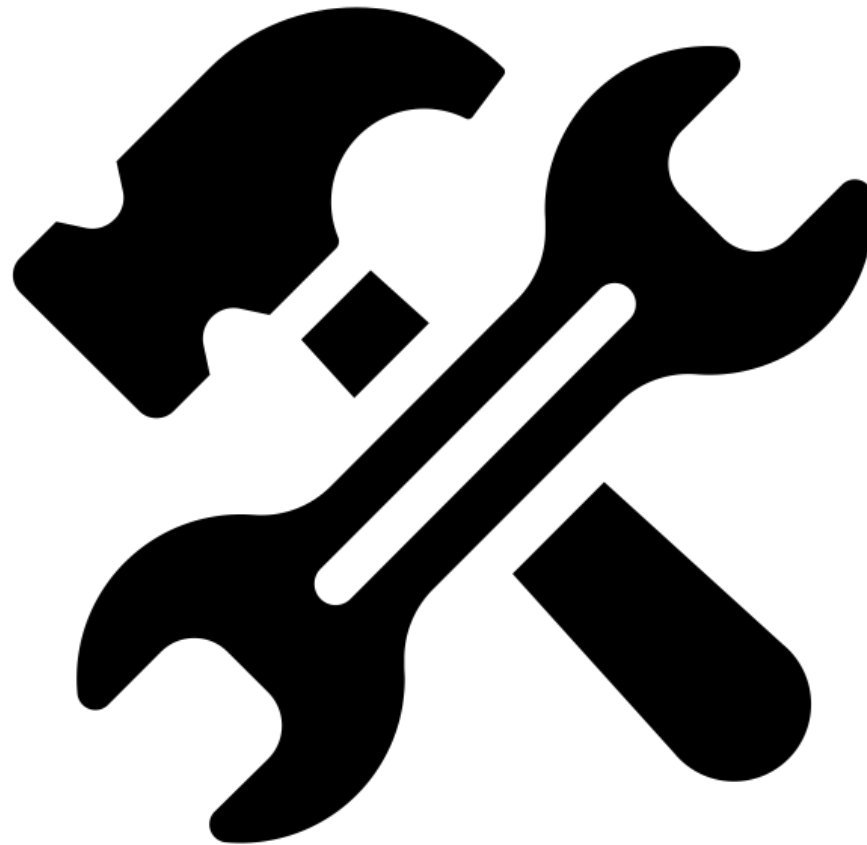
- Presenter has no conflicts to disclose.
- No commercial support was obtained for this activity.
- The presenter will not discuss the use of vaccines in a manner not approved by the U.S. Food and Drug Administration (FDA)
  - Presenter may discuss off-label use of a product that is in accordance with Advisory Committee on Immunization Practices (ACIP) recommendations

# Outline

- Disease Burden and Impact of Vaccination
- Adult Coverage Levels - U.S. and MI
- Immunization Disparities
- Adult Immunization Standards
- Call to Action for Adult Providers

# Tool Icon → Identify Resources Available

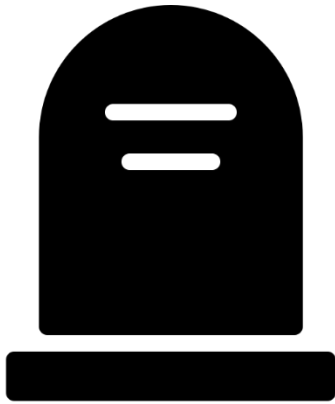
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# Disease Burden & Impact of Vaccination

Vaccine-preventable diseases (VPDs) still exist

# Vaccine-Preventable Diseases in the United States



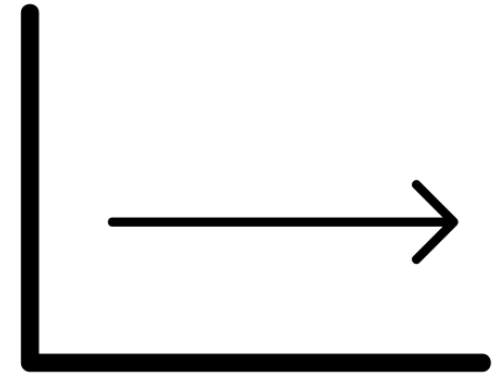
## Preventable Deaths

In the United States, approximately 42,000 adults die each year of vaccine-preventable diseases.<sup>1</sup>



## Large Coverage Gaps

Adult coverage is alarmingly low. For the majority of vaccines, coverage is well below 50 percent.<sup>2</sup>



## Little Improvement

From year to year, modest improvements in rates are made and vaccine disparities persist.<sup>2</sup>

### Sources:

1. <https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases#star>
2. <https://www.cdc.gov/mmwr/volumes/66/ss/pdfs/ss6611.pdf>
3. Icons created through the Noun Project

# Burden of Disease Among U.S. Adults



- Hepatitis A<sup>1</sup>
  - Since 2016, hepatitis A outbreaks have been reported in at least 13 states: **including Michigan**
  - From August 2016 through August 1, 2017, there have been 223 reported adult cases in the city of Detroit, Macomb, Oakland, St. Clair, and Wayne counties, with 9 out of 10 adults hospitalized<sup>2</sup>
- Hepatitis B<sup>3</sup>
  - 2,791 acute cases reported in 2014
- Human Papillomavirus (HPV)<sup>4</sup>
  - Estimated 79 million Americans currently infected
  - 14 million new infections each year in the US
- Zoster (also known as shingles)<sup>5</sup>
  - About 1 million cases of zoster annually U.S.

## Sources:

1. CDC. Hepatitis A Outbreaks. <https://www.cdc.gov/hepatitis/outbreaks/hepatitisaoutbreaks.htm>
2. Michigan State Government News Releases (August 2, 2017). MDHHS issues Annual Viral Hepatitis Surveillance Report, urges vigilance in light of hepatitis A outbreak in Southeast Michigan and growing opioid crisis [Press release]. Retrieved from <http://www.michigan.gov/minewswire/0,4629,7-136-3452-427888--,00.html>
3. CDC. Viral Hepatitis Surveillance United States. [www.cdc.gov/hepatitis/statistics/2014surveillance/pdfs/2014hepsurveillancecrpt.pdf](http://www.cdc.gov/hepatitis/statistics/2014surveillance/pdfs/2014hepsurveillancecrpt.pdf)
4. CDC. Pink Book. <http://www.cdc.gov/vaccines/pubs/pinkbook/hpv.html>
5. CDC. Prevention of Herpes Zoster. MMWR 2008. 57(RR-5): 1-30.

# Burden of Disease Among U.S. Adults



- Pertussis (also known as whooping cough)<sup>1</sup>
  - 20,762 total reported cases in 2015
  - 4,650 among adults 20 years of age and older
- Influenza disease burden varies year to year<sup>2</sup>
  - 140,000-710,000 hospitalizations annually
  - 12,000-56,000 deaths annually
- Invasive pneumococcal disease (IPD)<sup>3</sup>
  - 29,500 total cases and 3,350 total deaths in 2015
  - 91% of cases and nearly all deaths among adults 65 years of age and older

## Sources:

1. CDC. 2015 Final Pertussis Surveillance Report. <http://www.cdc.gov/pertussis/downloads/pertuss-surv-report-2015.pdf>.
2. Rolfes MA, Foppa IM, Garg S, Flannery B, Brammer L, Singleton JA, et al. Estimated Influenza Illnesses, Medical Visits, Hospitalizations, and Deaths Averted by Vaccination in the United States. 2016 Dec 9 [Date Cited]; <https://www.cdc.gov/flu/about/disease/2015-16.htm>
3. CDC. 2015. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Streptococcus pneumoniae, 2015.



# Economic Burden of Disease Among U.S. Adults

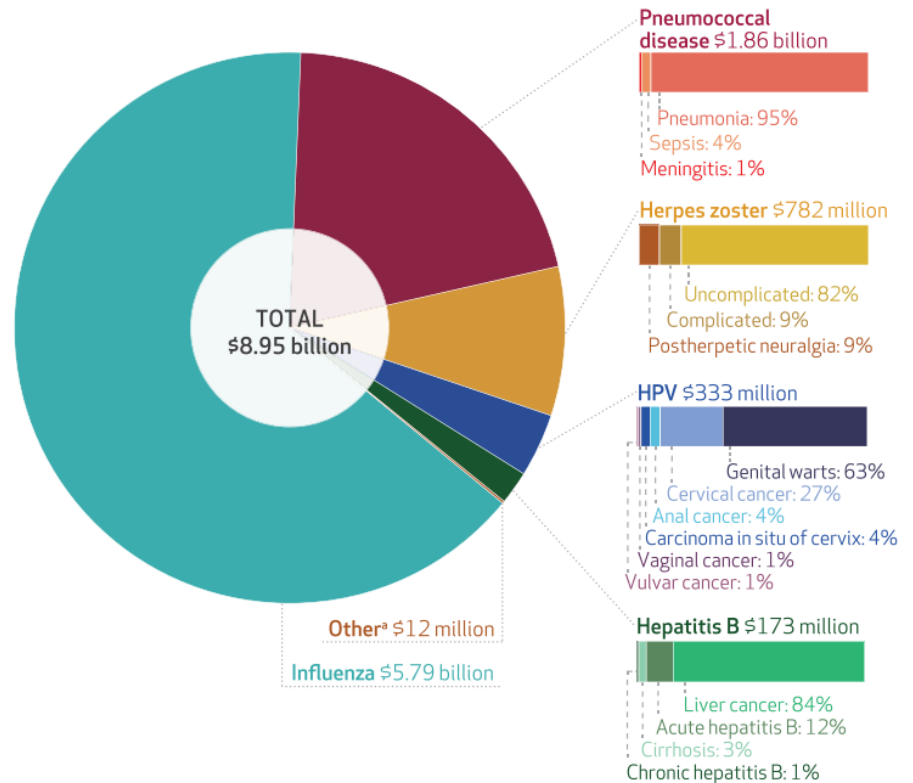
IN A SINGLE YEAR...

Economic burden at **\$8.95 billion** from vaccine-preventable diseases

- Related to ten vaccines recommended for adults ages nineteen and older
- **\$7.1 billion, or 80 percent, of the financial burden attributed to unvaccinated individuals.**

## EXHIBIT 3

Annual economic burden of vaccine-preventable diseases, by pathogen, 2015



**SOURCE** Authors' analysis. **NOTES** All dollar amounts are for all US adults relevant to each vaccine-preventable disease (which target different age groups). The breakdown of results by age is presented in the online Appendix (see Note 7 in text). HPV is human papillomavirus. \*Includes economic burden attributable to diphtheria, hepatitis A, measles, meningococcal disease, mumps, pertussis, rubella, tetanus, and varicella.

# Whole-Person Care: High Risk Case Study



Adults with diabetes (both type 1 & type 2) are at higher risk for serious problems:

- ✓ Influenza can raise blood glucose to dangerously high levels
- ✓ Higher rates of hepatitis B than the rest of the population
  - ✓ Outbreaks of hepatitis B associated with blood glucose monitoring procedures
- ✓ Increased risk for death from pneumonia, bacteremia & meningitis

# Vaccine Effectiveness → Negative Outcomes Averted

## the **benefits** of **flu vaccination** 2015-2016

The estimated number of flu **illnesses prevented** by flu vaccination during the 2015-2016 season:

**5 million**

as many people use Denver International Airport in one month



The estimated number of flu **medical visits prevented** by vaccination during the 2015-2016 season:

**2.5 million**

equal to the population of Portland, Oregon



The estimated number of flu **hospitalizations prevented** by vaccination during the 2015-2016 season:

**71,000**

enough to fill every registered hospital bed in the state of Texas



DATA: Influenza Division program impact report 2015-2016, <https://www.cdc.gov/flu/about/disease/2015-16.htm>.

NCIRDg-607 | 12.06.2016



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get **vaccinated**  
[www.cdc.gov/flu](http://www.cdc.gov/flu)

# Opportunities for Primary Prevention



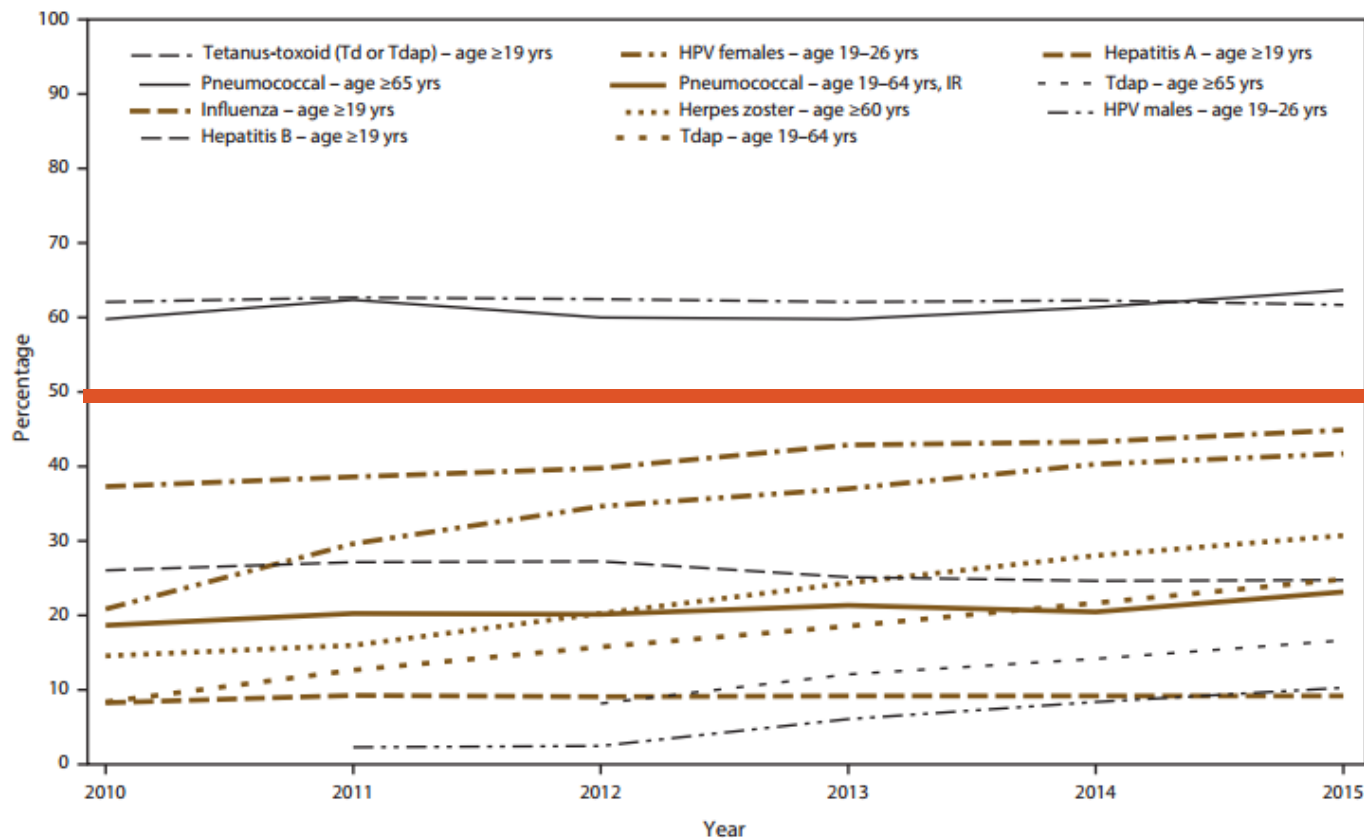
- *Adults are not aware of the vaccines they need...*
  - Yet most patients will accept vaccines if recommended by a **trusted healthcare provider**
- *Healthcare providers for adults are busy and have competing priorities...*
  - Yet healthcare providers think immunizations are **important** for their patients
- *Racial/ethnic disparities persist for recommended adult vaccines...*
  - Yet routine and systematic **offering** of vaccines has been shown to decrease gaps in vaccine disparities.
- *Not all providers stock all vaccines for adults...*
  - Yet **access** to vaccines is increasing
- *Adults frequently see multiple providers and recordkeeping is difficult...*
  - Yet state vaccine registries (MCIR) include adult immunizations – more on this later in the presentation!

# Vaccination Coverage Rates Among Adults

United States and Michigan

# Surveillance of Vaccination Coverage Among Adult Populations — United States, 2015

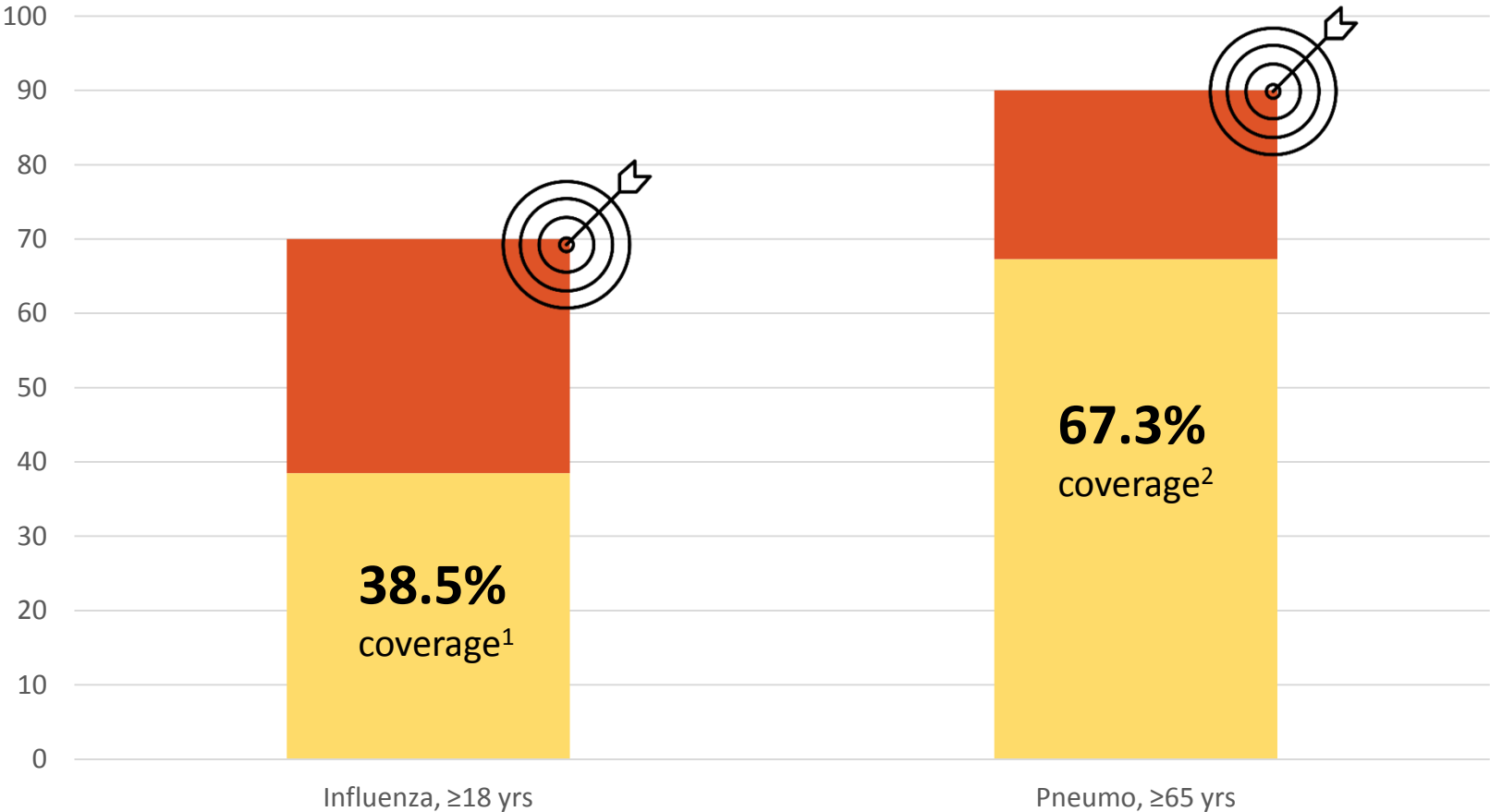
FIGURE. Estimated proportion of adults aged ≥19 years who received selected vaccines,\* by age group and increased risk status† — National Health Interview Survey, United States, 2010–2015



50 Percent


**Source:** Williams WW, Lu P, O’Halloran A, et al. Surveillance of Vaccination Coverage among Adult Populations — United States, 2015. MMWR Surveill Summ 2017;66(No. SS-11):1–28. DOI: <http://dx.doi.org/10.15585/mmwr.ss6611a1>.

# Select Healthy People 2020 Objectives



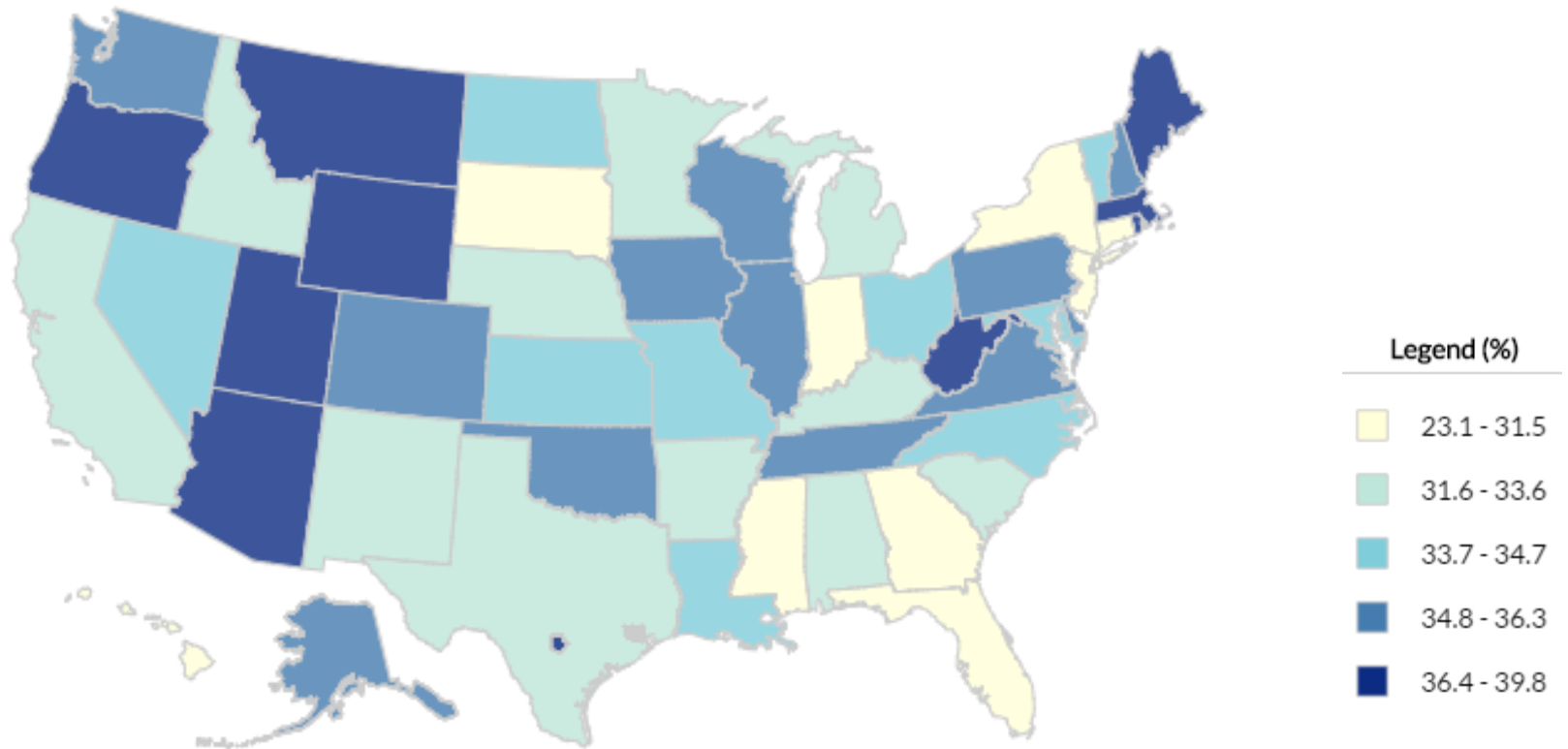
1. Influenza vaccination coverage estimates for persons 6 months and older by State, HHS Region, and the United States, National Immunization Survey-Flu (NIS-Flu) and Behavioral Risk Factor Surveillance System (BRFSS), 2015-16 influenza season. <https://www.cdc.gov/flu/fluview/index.htm>

2. Early Release of Selected Estimates Based on Data From the January–September 2016 National Health Interview Survey. <https://www.cdc.gov/nchs/nhis/releases/released201702.htm#5>

 = Healthy People 2020 target

# Pneumococcal vaccination coverage among adults 18–64 years at increased risk – BRFSS Coverage for 2015

Healthy People 2020 target is **60% for adults at increased risk**



**Michigan is ranked 41<sup>st</sup> lowest in the nation for coverage** (50 states + District of Columbia)

<https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/data-reports/general-population/trend/index.html>



# Zoster Coverage in the Michigan Care Improvement Registry (MCIR)

**As of June 30, 2017<sup>1</sup>**

- 24.3 percent of Michigan adults aged 60 years and older had received the zoster vaccine\*

**The most recent national estimate is 30.6 percent<sup>2</sup>**

**\*Make sure adult vaccines are reported to MCIR**

1. MDHHS County Immunization Report Card. [http://www.michigan.gov/mdhhs/0,5885,7-339-73971\\_4911\\_4914\\_68361-321114--,00.html](http://www.michigan.gov/mdhhs/0,5885,7-339-73971_4911_4914_68361-321114--,00.html)
2. Estimated proportion of adults ≥60 years who received Herpes zoster vaccination, National Health Interview Survey, United States, 2015 <https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/coverage-estimates/2015.html>

# Immunization Disparities

Decrease barriers and missed opportunities

# Racial/Ethnic Vaccination Disparities (influenza coverage)

When compared with non-Hispanic, white adults

- **The table outlines statistically significant disparities in 60% of the flu coverage comparisons**

Vaccination Group 2014–15 season, NHIS	% Vaccinated Whites	Differences, Blacks	Differences, Hispanics	Differences, Asians
Influenza, ≥19 yrs.	<b>48.5</b>	<b>-10.8</b>	<b>-15.5</b>	+0.5
Influenza, 19-49 yrs.	<b>34.6</b>	<b>-5.5</b>	<b>-9.5</b>	+8.5
Influenza, 50-64 yrs.	<b>50.2</b>	<b>-8.3</b>	-5.3	-4.3
Influenza, 65 yrs.	<b>75.1</b>	<b>-10.8</b>	<b>-11.0</b>	+8.4
Influenza, HCP ≥19 yrs.	<b>71.2</b>	<b>-11.4</b>	<b>-11.2</b>	+3.1

Source:  
Williams WW, Lu P, O'Halloran A, et al. Surveillance of Vaccination Coverage among Adult Populations — United States, 2015. MMWR Surveill Summ 2017;66(No. SS-11):1–28. DOI: <http://dx.doi.org/10.15585/mmwr.ss6611a1>

# Racial/Ethnic Vaccination Disparities (non-influenza coverage)

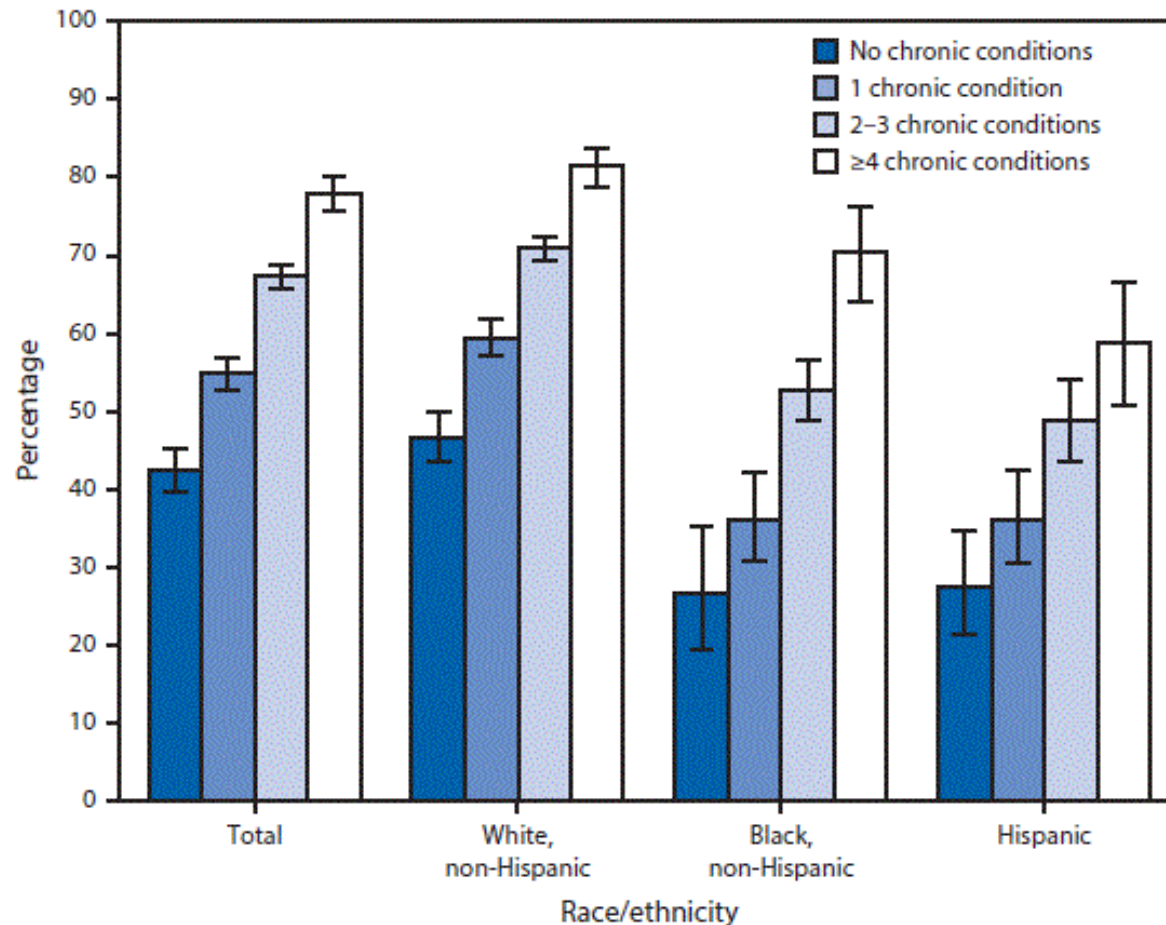
When compared with non-Hispanic, white adults

- The table outlines statistically significant disparities in 79% of the comparisons

Vaccination Group 2015 NHIS	% Vaccinated Whites	Disparity, Blacks	Disparity, Hispanics	Disparity, Asians
Pneumo., HR 19-64 yrs.	24.0	-2.0	-4.6	-2.5
Pneumo., ≥65 yrs.	68.1	-17.9	-26.4	-19.1
Tetanus, 19-49 yrs.	68.5	-15.1	-17.2	-14.4
Tetanus, 50-64 yrs.	68.7	-15.7	-14.3	-23.5
Tetanus, ≥65 yrs.	59.4	-15.6	-8.8	-12.6
Tdap, ≥19 yrs.	27.0	-11.9	-12.8	-7.2
Tdap, 19-64 yrs.	29.7	-13.7	-14.9	-8.9
Tdap, ≥65 yrs.	18.2	-8.5	-9.1	-4.4
Hep A, 19-49 yrs.	12.8	-2.0	-2.4	+5.1
Hep B, 19-49 yrs.	34.9	-5.5	-12.4	+3.4
Herpes Zoster, ≥60 yrs.	34.6	-21.0	-18.6	-8.6
HPV, Females 19-26 yrs.	44.7	-6.7	-9.0	-8.4
Tdap, HCP ≥19 yrs.	49.2	-20.9	-10.5	+0.2
Hep B, HCP ≥19 yrs.	67.8	-11.0	-10.7	-3.6

# Adults Aged $\geq 65$ Years Who Reported Ever Receiving a Pneumococcal Vaccination, by Race/Ethnicity and Chronic Conditions

— NHIS, United States, 2014–2015



<https://www.cdc.gov/mmwr/volumes/65/wr/mm6544a11.htm>

# Disparities In U.S. Adult Immunization Rates

- Lower vaccine coverage among:
  - Hispanics and African Americans compared to non-Hispanic Caucasians
  - Uninsured
  - Lower incomes
- **Improved frequency of provider vaccine assessment and recommendations may help reduce disparities**
  - Address patient concerns and mistrust
  - Open non-judgmental dialogue
  - Reduce structural barriers to preventive care

Sources:

1. Lu, P-J, et al. Racial and Ethnic Disparities in Vaccination Coverage Among Adult Populations in the U.S. *Am J Prev Med* 2015; 49(6):S412–S425
2. Linn, S, et al. Disparities in Influenza Vaccine Coverage in the United States. *J Am Geriatr Soc* 2010; 58(7):1333-1340

# Why we need the Standards



- ✓ Most adults are not aware of the vaccines they need to protect their health
- ✓ Adult vaccination rates are remarkably low
  - ✓ *AND* significant immunization disparities exist
- ✓ Health Care Provider (HCP) recommendation is the strongest predictor of whether patients get vaccinated

# Adult Immunization Standards

Make immunizations a standard of adult patient care in your practice. Make sure ALL of your patients are fully protected!



## Immunizing Adult Patients:

### New Standards for Practice

Your patients trust you to give them the best advice on how to protect their health. Vaccine-preventable diseases can result in serious illness, hospitalization, and even death.

Make adult vaccination a standard of care in your practice.

#### Your patients have probably not received all the vaccines they need.

Even though most insurance plans cover the cost of recommended vaccines, adult vaccination rates in the U.S. are unacceptably low. Each year, tens of thousands of adults needlessly suffer, are hospitalized, and even die as a result of diseases that could be prevented by vaccines.

#### Your patients may not even realize that they need vaccines.

A recent national survey showed that most adults are not aware that they need vaccines throughout their lives to protect against diseases like shingles, pertussis, and hepatitis. Many also report not receiving vaccine recommendations from their healthcare professional.

#### You can make a difference.

Healthcare professionals are the most valued and trusted source of health information for adults. Research shows that most adults believe vaccines are important and that a recommendation from their healthcare professional is a key predictor of patients getting needed vaccines.

#### Make Immunization a Standard of Patient Care In Your Practice:

1. **ASSESS** the immunization status of all your patients at every clinical encounter.
  - Stay informed about the latest CDC recommendations for immunization of adults.
  - Implement protocols in your office to ensure that patients' vaccine needs are routinely reviewed and patients get reminders about vaccines they need.
2. **SHARE** a strong recommendation with your patients for vaccines they need.
  - Address patient questions and concerns in clear and understandable language.
  - Highlight your positive experiences with vaccination (personal or in your practice).
3. **ADMINISTER** needed vaccines or **REFER** your patients to a vaccination provider.
  - For vaccines that you stock, make vaccination services as convenient as possible for your patients.
  - For vaccines that you don't stock, refer patients to providers in the area that offer vaccination services.
4. **DOCUMENT** vaccines received by your patients.
  - Participate in your state's immunization registry to help your office, your patients, and your patients' other providers know which vaccines your patients have had.
  - Follow up to confirm that patients received recommended vaccines that you referred them to get from other immunization providers.

DON'T WAIT.  
VACCINATE!



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# Adult Standards:

1. Assess
2. Recommend
3. Administer or Refer
4. Document

NEW Standards for Adult Immunization Practice emphasize the role of ALL healthcare professionals—whether they provide immunization services or not—in ensuring that adult patients are fully immunized. These standards are published by the National Vaccine Advisory Committee and supported by the Centers for Disease Control and Prevention as well as a number of national medical associations.

[www.cdc.gov/vaccines/hcp/patient-ed/adults/for-practice/standards/](http://www.cdc.gov/vaccines/hcp/patient-ed/adults/for-practice/standards/)

# Step 1: Vaccine Needs Assessment

## 1

### Vaccine Needs Assessment

A Series on Standards for Adult Immunization Practice



Assessment is the critical first step in ensuring that your adult patients get the vaccines they need for protection against serious vaccine-preventable diseases.

As a standard of care—whether you provide vaccines or not—you should assess your patients' immunization status at every clinical encounter and strongly recommend vaccines that they need.

Assessing your patients' vaccination status at every clinical encounter will decrease missed opportunities to vaccinate.<sup>1,2,3</sup>

- Many adults do not schedule annual check-ups or come in for preventive services, therefore it is critical to assess vaccine status whenever they do come in for a visit.
- Some vaccines are indicated for adults based on factors other than age, making it important to assess regularly whether your patients have had lifestyle, health, or occupational changes that may prompt the need for additional vaccines.
- Vaccine recommendations for adults change over time, and your patients may not be up to date with the latest recommendations.

There are simple ways to implement routine vaccine assessment into your office patient flow.

- Give patients a vaccine assessment form at check-in.
- Include standing orders or protocols for nursing staff to assess and administer needed vaccines.
- Integrate vaccine prompts into electronic medical records.

See back for more tips and resources.

Routinely assessing patient vaccination status will make a difference.

Adults think immunization is important, but most are not aware that they need vaccines throughout their lives. Research indicates that your recommendation is the strongest predictor of whether patients get vaccinated.<sup>4</sup> Implement policies to ensure your patients' vaccination needs are routinely reviewed.

For information on insurance coverage of vaccines for adults, visit [www.cdc.gov/vaccines/hcp/adults](http://www.cdc.gov/vaccines/hcp/adults).

Information Series for Healthcare Professionals  
[www.cdc.gov/ncidod/diseases/adults/series](http://www.cdc.gov/ncidod/diseases/adults/series)

U.S. vaccination rates for adults are extremely low.

For example:

- Only 14% of adults 19 years or older have received Tdap vaccination.
- Only 20% of adults 60 years or older have received zoster (shingles) vaccination.
- Only 20% of adults 19 to 64 years old, at high risk, have received pneumococcal vaccination.
- Only 41% of adults 18 years or older had received flu vaccination during the 2012–2013 flu season.

Source: NRES 2012 (MMWR 2014;63(5): 8855-2012-2013) ([www.cdc.gov/flu/season/](http://www.cdc.gov/flu/season/))

For resources and tips on vaccine recommendation, administration, referral, and documentation, visit:

[www.cdc.gov/vaccines/adults/standards](http://www.cdc.gov/vaccines/adults/standards)

DON'T WAIT.  
VACCINATE!



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- Assess immunization status of all patients at every clinical encounter
- Implement protocols and policies
- Ensure patients' vaccine needs are routinely reviewed
- Ensure patients get reminders about vaccines they need



# Implementing Routine Vaccine Assessment

- Use vaccine questionnaires
  - Helps identify vaccine need
  - Grabs patient's attention regarding immunization history
- Screen for vaccines
  - Contraindications & precautions
  - Screening forms can be found at [www.immunize.org](http://www.immunize.org)

YOUR NAME \_\_\_\_\_ DATE OF BIRTH \_\_\_\_/\_\_\_\_/\_\_\_\_ TODAY'S DATE \_\_\_\_/\_\_\_\_/\_\_\_\_  
month / day / year month / day / year

**Do I Need Any Vaccinations Today?**  
*This questionnaire will help you and your healthcare provider determine if you need any vaccinations today. Please check the boxes that apply to you.*

**Screening Checklist for Contraindications to Vaccines for Adults**

PATIENT NAME \_\_\_\_\_  
 DATE OF BIRTH \_\_\_\_/\_\_\_\_/\_\_\_\_  
month / day / year

**For patients:** The following questions will help us determine which vaccines you may be given today. If you answer "yes" to any question, it does not necessarily mean you should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

	yes	no	don't know
1. Are you sick today?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you have allergies to medications, food, a vaccine component, or latex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have you ever had a serious reaction after receiving a vaccination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you have a long-term health problem with heart disease, lung disease, asthma, kidney disease, metabolic disease (e.g., diabetes), anemia, or other blood disorder?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you have cancer, leukemia, HIV/AIDS, or any other immune system problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. In the past 3 months, have you taken medications that affect your immune system, such as prednisone, other steroids, or anticancer drugs; drugs for the treatment of rheumatoid arthritis, Crohn's disease, or psoriasis; or have you had radiation treatments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Have you had a seizure or a brain or other nervous system problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. During the past year, have you received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. For women: Are you pregnant or is there a chance you could become pregnant during the next month?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have you received any vaccinations in the past 4 weeks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FORM COMPLETED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 FORM REVIEWED BY \_\_\_\_\_ DATE \_\_\_\_\_

Did you bring your immunization record card with you?      yes  no

It is important for you to have a personal record of your vaccinations. If you don't have a personal record, ask your healthcare provider to give you one. Keep this record in a safe place and bring it with you every time you seek medical care. Make sure your healthcare provider records all your vaccinations on it.

immunization action coalition  
**IAC**  
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Technical content reviewed by the Centers for Disease Control and Prevention  
 Saint Paul, Minnesota • 651-647-9009 • www.immunize.org • www.vaccineinformation.org  
 www.immunize.org/catg.d/p4065.pdf • Item #P4065 (10/16)



# Implementing Routine Vaccine Assessment

- Implement standing orders and protocols
  - Incorporate assessment and administration of vaccines as you would routine vitals

The Community Preventive Services Task Force recommends standing orders for vaccinations based on strong evidence of effectiveness in improving vaccination rates.

Source: [www.thecommunityguide.org/vaccines/standingorders.html](http://www.thecommunityguide.org/vaccines/standingorders.html)

Standing orders for other vaccines are available at [www.immunize.org/standing-orders](http://www.immunize.org/standing-orders).  
NOTE: This standing orders template may be adapted per a practice's discretion without obtaining permission from IAC. As a courtesy, please acknowledge IAC as its source.

## STANDING ORDERS FOR Administering Hepatitis B Vaccine to Adults

**Purpose**  
To reduce morbidity and mortality from hepatitis B virus (HBV) by vaccinating all adults who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices.

**Policy**  
Where allowed by state law, standing orders enable eligible nurses and other health care professionals (e.g., pharmacists) to assess the need for vaccination and to vaccinate adults who meet any of the criteria below.

**Procedure**

- 1 Assess Adults for Need of Vaccination** against HBV infection according to the following criteria:
  - Any person who wants to be protected from HBV infection
  - Patient with diabetes mellitus (Note: for those age 60 years or older with diabetes mellitus, at the discretion of the treating clinician)
  - Patient with end-stage renal disease, including patients receiving hemodialysis; HIV infection; or chronic liver disease
  - Sexually active and not in a long-term, mutually monogamous relationship (e.g., more than 1 sex partner during the previous 6 months)
  - Seeking evaluation or receiving treatment for a sexually transmitted infection (STI)
  - A male who has sex with males
  - A current or recent injection-drug user
  - At occupational risk of infection through exposure to blood or blood-contaminated body fluids (e.g., health care worker, public safety worker, trainee in a health professional or allied health school)
  - Residents or staff of an institution for persons with developmental disabilities
  - Sex partner or household member of a person who is chronically infected with HBV (HBsAg-positive). (This includes an HBsAg-positive adopted child.)
  - Planned travel to a country with high or intermediate prevalence of endemic HBV infection (for hepatitis B travel information from CDC, go to [wwwnc.cdc.gov/travel/diseases/hepatitis-b](http://wwwnc.cdc.gov/travel/diseases/hepatitis-b))
  - People living in correctional facilities
  - All teenagers ages 18 and younger who are not fully vaccinated (see standing orders for children and teens at [www.immunize.org/catg.d/p3076a.pdf](http://www.immunize.org/catg.d/p3076a.pdf))
- 2 Screen for Contraindications and Precautions**

**Contraindications**  
Do not give hepatitis B vaccine to a person who has experienced a serious systemic or anaphylactic reaction to a prior dose of the vaccine or to any of its components. For a list of vaccine components, refer to the manufacturer's package insert ([www.immunize.org/packageinserts](http://www.immunize.org/packageinserts)) or go to [www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/exipient-table-2.pdf](http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/exipient-table-2.pdf).

**Precautions**  
Moderate or severe acute illness with or without fever

CONTINUED ON THE NEXT PAGE ►

IMMUNIZATION ACTION COALITION Saint Paul, Minnesota • 651-647-9009 • [www.immunize.org](http://www.immunize.org) • [www.vaccineinformation.org](http://www.vaccineinformation.org)  
Technical content reviewed by the Centers for Disease Control and Prevention  
[www.immunize.org/catg.d/p3076.pdf](http://www.immunize.org/catg.d/p3076.pdf) • Item #P3076 (10/15)

<http://www.immunize.org/standing-orders/>



# 10 Steps to Implementing Standing Orders...

## Suggested steps to help you work through this process from the Immunization Action Coalition (IAC)

- Having standing orders in place streamlines practice workflow by eliminating the need to obtain an individual physician's order to vaccinate each patient.

### 10 Steps to Implementing Standing Orders for Immunization in Your Practice Setting

#### Introduction



**Standing orders** are written protocols approved by a physician or other authorized practitioner that allow qualified health care professionals (who are eligible to do so under state law, such as registered nurses or pharmacists) to assess the need for and administer vaccine to patients meeting certain criteria, such as age or underlying medical condition. The qualified health care professionals must also be eligible by state law to administer certain medications, such as epinephrine, under standing orders should a medical emergency (rare event) occur.

Having standing orders in place **streamlines your practice workflow** by eliminating the need to obtain an individual physician's order to vaccinate each patient. Standing orders carried out by nurses or other qualified health care professionals are the most consistently effective means for increasing vaccination rates and reducing missed opportunities for vaccination, which improves the quality of care for patients.

*While this guide focuses on implementing standing orders for influenza vaccination, the basic principles included can be used to implement standing orders for other vaccines and for any age group desired.*

Standing orders are **straightforward to use**. The challenge is to integrate them into the practice setting so they can be used to their full potential. This process requires some preparation up front to assure everyone in the practice understands the reasons why standing orders are being implemented. Suggested steps to help you work through this process are shown below.

#### Phase 1: *Get Ready* – Build Support of Leadership

**STEP 1** Discuss the benefits of implementing standing orders protocols with the leadership (medical director, clinicians, clinic manager, lead nurses) in your medical setting.

Standing orders will:

- Facilitate efficient assessment for and administration of influenza vaccine in your practice.
- Improve influenza vaccination rates in your practice.
- Protect more of your patients from influenza.
- Empower nurses and/or other eligible staff to use standing orders to protect more patients.
- Decrease opportunities for influenza transmission in your health care setting.

It is important to get buy-in from physician and nurse leadership from the start.



# More Tools to Help with Assessment

The Task Force recommends client reminder (due) and recall (overdue) interventions based on strong evidence of effectiveness in improving vaccination rates

- Send patient reminders
  - Utilize Electronic Health Records (EHRs) to distribute patient reminders via postcards, letters, text message or automated phone calls
  - MCIR can be used to send letters to overdue patients
- Use health care provider prompts
  - Next dose reminders may be generated by an EHR
    - E.g., next dose of HPV, HepA, or HepB

# Step 2: Give a Strong Recommendation




## Use the SHARE Tool:

- **Share** tailored reasons why vaccination is right for the patient
- **Highlight** positive experiences
- **Address** questions & concerns
- **Remind** patients that vaccines protect them and their loved ones
- **Explain** the costs of getting sick

## 2 Vaccine Recommendation

A Series on Standards for Adult Immunization Practice



Your recommendation is a critical factor in whether your patients get the vaccines they need.

Routinely assess patient immunization status and strongly recommend vaccines that patients need, whether you stock the vaccines or not.

**Recommending vaccines prompts most patients to get immunized.**

Research indicates that most adults believe that vaccines are important and are likely to get them if recommended by their healthcare professionals.

**For some patients, a clear and strong recommendation may not be enough. You can encourage these patients to make an informed decision about vaccination by sharing critical information.**

**S** **SHARE** the tailored reasons why the recommended vaccine is right for the patient given his or her age, health status, lifestyle, occupation, or other risk factors.

**H** **HIGHLIGHT** positive experiences with vaccines (personal or in your practice), as appropriate, to reinforce the benefits and strengthen confidence in vaccination.

**A** **ADDRESS** patient questions and any concerns about the vaccine, including side effects, safety, and vaccine effectiveness in plain and understandable language.


**R** **REMINDE** patients that vaccines protect them and their loved ones from many common and serious diseases.

**E** **EXPLAIN** the potential costs of getting the disease, including serious health effects, time lost (such as missing work or family obligations), and financial costs.

For tips on answering common patient questions and links to patient education materials, see back.

Information Series for Healthcare Professionals  
[www.cdc.gov/vaccines/adultstandards](http://www.cdc.gov/vaccines/adultstandards)

**DON'T WAIT. VACCINATE!**

 U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

### U.S. vaccination rates for adults are extremely low.

#### For example:

- Only 14% of adults 19 years or older have received Tdap vaccination.
- Only 20% of adults 60 years or older have received zoster (shingles) vaccination.
- Only 20% of adults 19 to 64 years old, at high risk, have received pneumococcal vaccination.
- Only 41% of adults 18 years or older had received flu vaccination during the 2012–2013 flu season.

Sources: NCHS 2012 (MMWR 2014-0415) BRFSS 2012–2013 ([www.cdc.gov/flu](http://www.cdc.gov/flu))  
#vaccines

For resources and tips on vaccine assessment, administration, referral, and documentation, visit:

[www.cdc.gov/vaccines/adultstandards](http://www.cdc.gov/vaccines/adultstandards)

<http://www.cdc.gov/vaccines/hcp/adults/for-practice/standards/recommend.html>

Your recommendation is a critical factor in whether your patients get the vaccines they need

# Provider Side of Messaging



- HCP commonly discuss with their patients:
  - Consequences of not being vaccinated
  - Safety and efficacy
  - Possible side effects
  - Benefits
- HCP believe that vaccination is the adult's choice and are reluctant to be “pushy”

Remember that many adults are not aware of their vaccination needs and cannot make an informed choice about their health if the vaccine recommendations have not been explored.



# Patient Side of Messaging



## Adults:

- Favor simple and to-the-point messages
- React positively to messages that stress prevention or encourage vaccination as a way have control over their health (proactive)
- Prefer empowering messages - ones that provide information that can help them make an informed decision
- Value references to health care providers (HCP) - messages that urge them to talk to their HCP to determine which vaccines are right for them

# Step 3: Vaccine Administration

## 3 Vaccine Administration

A Series on Standards for Adult Immunization Practice



Take steps to improve vaccine administration in your office and better protect your patients from vaccine-preventable diseases.

- 1. Assess patient vaccination status at every visit.**

U.S. vaccination rates are extremely low, and research shows that there are many missed opportunities for vaccination of adult patients during clinical encounters.

Research shows when patients receive a vaccine recommendation and are offered the vaccine at the same time, they are more likely to get vaccinated. For vaccines you don't stock, it is still critical to make the recommendation and then refer to another immunization provider.

*See fact sheet 4 in this series for tips on referral.*
- 2. Recommend and offer vaccines at the same visit.**

Research shows when patients receive a vaccine recommendation and are offered the vaccine at the same time, they are more likely to get vaccinated. For vaccines you don't stock, it is still critical to make the recommendation and then refer to another immunization provider.

*See fact sheet 4 in this series for tips on referral.*
- 3. Train and educate your staff on vaccine administration.**

Building your staff's skills and confidence in vaccine administration can help improve vaccine delivery and ensure patient safety.
- 4. Properly store and handle vaccines.**

This critical step can reduce wastage.
- 5. Distribute Vaccine Information Statements (VIS) to patients.**

Help your patients make informed decisions about vaccinations by providing them with up-to-date information about the benefits and potential risks for each vaccine they need.
- 6. Ensure proper care for patients.**


Minimize potential risks to your patients by following safety protocols such as having your patients sit or lie down while you administer vaccines.
- 7. Follow standard precautions to control infection.**

Minimize the risks of spreading disease when administering vaccines.
- 8. Be aware of and prepared for potential adverse reactions.**

All vaccines have the potential to cause adverse reactions. Most are minor (e.g., itching, soreness) but severe reactions (e.g., anaphylaxis), while rare, can occur. Make sure you and your staff are prepared to handle severe reactions.

Information Series for Healthcare Professionals  
[www.cdc.gov/ncidod/diseases/adultstandards](http://www.cdc.gov/ncidod/diseases/adultstandards)

**DON'T WAIT. VACCINATE!**

 U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

- Have all vaccines available at clinic site
  - Preferred practice
- Stock and offer all vaccines recommended by the ACIP



# Adult Immunization Schedules – 2017

Figures 1 and 2 should be read with the footnotes that contain important general information and considerations for special populations.

Figure 1. Recommended immunization schedule for adults aged 19 years or older by age group, United States, 2017

Vaccine	19–21 years	22–26 years	27–59 years	60–64 years	≥ 65 years
Influenza <sup>1</sup>	1 dose annually				
Td/Tdap <sup>2</sup>	Substitute Tdap for Td once, then Td booster every 10 yrs				
MMR <sup>3</sup>	1 or 2 doses depending on indication				
VAR <sup>4</sup>	2 doses				
HZV <sup>5</sup>				1 dose	
HPV–Female <sup>6</sup>	3 doses				
HPV–Male <sup>6</sup>	3 doses				
PCV13 <sup>7</sup>					1 dose
PPSV23 <sup>7</sup>	1 or 2 doses depending on indication				1 dose
HepA <sup>8</sup>	2 or 3 doses depending on vaccine				
HepB <sup>9</sup>	3 doses				
MenACWY or MPSV4 <sup>10</sup>	1 or more doses depending on indication				
MenB <sup>10</sup>	2 or 3 doses depending on vaccine				
Hib <sup>11</sup>	1 or 3 doses depending on indication				

Recommended for adults who meet the age requirement, lack documentation of vaccination, or lack evidence of past infection
  Recommended for adults with additional medical conditions or other indications
  No recommendation

Recommendations should be read with the footnotes & additional considerations that follow.

[www.cdc.gov/vaccines/schedules/hcp/adult.html](http://www.cdc.gov/vaccines/schedules/hcp/adult.html)



# Adult Immunization Schedules – 2017

Figure 2. Recommended immunization schedule for adults aged 19 years or older by medical condition and other indications, United States, 2017

Vaccine	Pregnancy <sup>1-6,9</sup>	Immuno-compromised (excluding HIV infection) <sup>3,7,11</sup>	HIV infection CD4+ count (cells/ $\mu$ L) <sup>3,7,9,11</sup>		Asplenia, persistent complement deficiencies <sup>7,10,11</sup>	Kidney failure, end-stage renal disease, on hemodialysis <sup>7,9</sup>	Heart or lung disease, chronic alcoholism <sup>7</sup>	Chronic liver disease <sup>7,9</sup>	Diabetes <sup>7,9</sup>	Healthcare personnel <sup>3-4,9</sup>	Men who have sex with men <sup>4,9</sup>	
			< 200	$\geq$ 200								
Influenza <sup>1</sup>												1 dose annually
Td/Tdap <sup>2</sup>	1 dose Tdap each pregnancy											Substitute Tdap for Td once, then Td booster every 10 yrs
MMR <sup>3</sup>		contraindicated										1 or 2 doses depending on indication
VAR <sup>4</sup>		contraindicated										2 doses
HZV <sup>5</sup>		contraindicated										1 dose
HPV-Female <sup>6</sup>												3 doses through age 26 yrs
HPV-Male <sup>6</sup>			3 doses through age 26 yrs			3 doses through age 21 yrs						3 doses through age 26 yrs
PCV13 <sup>7</sup>												1 dose
PPSV23 <sup>7</sup>												1, 2, or 3 doses depending on indication
HepA <sup>8</sup>												2 or 3 doses depending on vaccine
HepB <sup>9</sup>												3 doses
MenACWY or MPSV4 <sup>10</sup>												1 or more doses depending on indication
MenB <sup>10</sup>												2 or 3 doses depending on vaccine
Hib <sup>11</sup>			3 doses post-HSCT recipients only									1 dose

Recommended for adults who meet the age requirement, lack documentation of vaccination, or lack evidence of past infection
  Recommended for adults with additional medical conditions or other indications
  Contraindicated
  No recommendation

Recommendations should be read with the footnotes & additional considerations that follow.

[www.cdc.gov/vaccines/schedules/hcp/adult.html](http://www.cdc.gov/vaccines/schedules/hcp/adult.html)



# Resources for Vaccine Administration

- Quick Looks HCP offer:
  - Vaccine types/brands available
  - Indications for use
  - Recommended schedule and minimum intervals
  - Recommendations for persons at high risk
  - Revaccination guidelines
  - Vaccine administration, including needle length
  - Storage and handling
  - Special situations
  - Contraindications and Precautions
  - Documentation
- Vaccine Information Statement (VIS)

**A Quick Look at Using Herpes Zoster Vaccine (Zostavax®, HZV)**

**Schedule and Indications for Use**  
**Recommended Schedule**

- 1 dose to persons aged 60 years and older

**Indications for use**

- May be given to persons with or without a history of herpes Zoster (shingles) disease

**Vaccine Administration**

- Subcutaneous (SC) injection in the upper arm
- 5/8 inch, 23-25 gauge needle
- Can be given with all other age-appropriate vaccines, including Pneumococcal Polysaccharide Vaccine (PPSV23)
- Use separate sites; space at least 1 inch apart

**A Quick Look at Using Human Papillomavirus (HPV) Vaccine**

Vaccine	HPV Types	For Protection Against	Approved for Ages
9vHPV Gardasil-9® (Merck)	6, 11, 16, 18, 31, 33, 45, 52, 58	Cervical (including precancerous & dysplastic lesions), vulvar, vaginal, anal, penile, and oropharyngeal cancers and genital warts	Females: 9-26 years Males: 9-21 years; 22-26 years if high risk (see "Indications for Use")

**Indications for Use and Schedule**

- Routinely administer to males & females aged 11-12 years
- Vaccination series may start at age 9 years
  - Begin HPV vaccine at age 9 years for children with any history of sexual abuse or assault
- Catch-up: females aged 13-26 years & males aged 13-21 years
- Vaccinate males aged 22-26 years within a high risk group
  - Immunocompromised due to infection (including HIV), disease or medication
  - Men who have sex with men (including those who identify as gay, bisexual, or transgender)
- Consider vaccination for all other males aged 22-26 years

**Vaccine Administration**

- Only administer as an intramuscular (IM) injection in the deltoid of the arm (preferred) or anterolateral thigh
  - If not administered IM, dose must be repeated
- 1-1.5 inch needle; 22-25 gauge
- Use professional judgment when selecting needle length
- Can be given simultaneously with other vaccines

**Recommended Schedule:**

- Initiating HPV vaccination prior to 15<sup>th</sup> birthday
  - Give 2 doses of HPV vaccine separated by 6-12 months
- Initiating HPV vaccination on or after 15<sup>th</sup> birthday
  - Give 3 doses of HPV vaccine (0, 1-2, 6 month schedule)
- Immunocompromised persons aged 9-26 years
  - Give 3 doses of HPV vaccine (0, 1-2, 6 month schedule), see "Additional Vaccine Recommendation Points" for further guidance
- Ensure minimum intervals are met
  - 2-dose schedule: 5 months between dose 1 & 2
  - 3-dose schedule: 4 weeks between dose 1 & 2, 12 weeks between dose 2 & 3, and 5 months between dose 1 & 3

**Storage and Handling**

- Store in a refrigerator unit between 36°-46°F (2°-8°C)
  - Stand-alone storage units preferred
- Do not freeze vaccine
- Keep in the original box
- Shake well before use

**Additional Vaccine Recommendation Points**

- To ensure best protection & benefit from HPV vaccine, persons should complete all doses before sexual activity begins
  - However, sexually active persons aged 9 through 26 years without a complete series should be vaccinated
- ACIP recommends that immunocompromised males and females aged 9 through 26 years get 3 doses of HPV vaccine at 0, 1-2, 6 months because immune response to vaccination may have been attenuated
  - Includes those with primary or secondary immunocompromising conditions that might reduce cell-mediated or humoral immunity such as B lymphocyte antibody deficiencies, T lymphocyte complete or partial defects, HIV infection, malignant neoplasms, transplantation, autoimmune disease, or immunosuppressive therapy
- The recommendation for an immunocompromised person to receive the 3-dose schedule of HPV vaccine does not apply to children aged 9 through 14 years with the following medical indications:
  - Asplenia, asthma, chronic granulomatous disease, chronic liver disease, chronic lung disease, chronic renal disease, central nervous system anatomic barrier defects (e.g., cochlear implant), complement deficiency, diabetes, heart disease, or sickle cell disease

**Additional Information:**

- **Storage and Handling:** Store in the freezer between 15°F (-50°C) to +5°F (-15°C) in the original box; protect from light; constitate using the Merck diluent only; administer within 30 min of reconstituting; if transport is necessary, use a portable freezer unit.
- **neomycin**
- Bone marrow or lymphatic systems
- $4+ T$ -lymphocyte values  $\leq 200$  per mm<sup>3</sup>
- $\geq 20$  mg of prednisone or equivalent (6 months after discontinuation of therapy) efficiency
- (be considered 24 months after transplant)
- (ators, especially the antitumor necrosis factor (on; advised to wait 1 month after discontinuation)
- acyclovir, famciclovir or valacyclovir should discontinue these medications for 14 days post-vaccination.
- (w Fever) should be given on the same day as, or separated & repeated 28 days later.
- (lla vaccine are not recommended to receive Zoster vaccine (Zoster vaccine, do not count the dose, tely detected, administer a dose of Zoster 28 days later, tid to have immunity to chickenpox
- (minister 2 doses of varicella vaccine and no Zoster vaccine (ages 50 years/older & may be administered at the be reimbursed by health plan or Medicaid contracts, e treatments or who have a disease that might lead to inter while their immunity is still intact.
- (ed on provider discretion, Zoster may be administered: moderate doses (i.e., <20 mg/day of prednisone); topical long-term alternate-day treatment with low to moderate
- (loprine (50.3 mg/kg/day) or 6-mercaptopurine arthritis, psoriasis, and inflammatory bowel disease ion about the Michigan Care Improvement Registry at health department.
- (immunization record card
- (the ACIP: MMWR June 6, 2008 <http://www.cdc.gov/vaccines/imz/> January 16, 2014

Rev. June 30, 2017  
Page 1 of 2



# Michigan Vaccine Replacement Program (MI-VRP)


*A safety net program for uninsured adults*

- Public vaccines (purchased by MDHHS) administered through:
  - Federally Qualified Health Centers (FQHCs)
  - Tribal Health Centers
  - Migrant Health Centers
  - Local Health Department (LHD) clinics
- Available to adults ages 19 years and older who have no insurance or who have insurance that doesn't cover any of the cost of the vaccine
- Specific eligibility criteria
- Vaccines offered:
  - Tdap, Td, MMR, HepA, HepB, and Zoster
  - **Added July 2016:** HPV9, PCV13, and PPSV23

# Step 4: Vaccine Referral

## 4 Vaccine Referral

A Series on Standards for Adult Immunization Practice



Even if your practice doesn't stock all or any vaccines, you still have a critical role to play in ensuring your patients are protected from serious diseases.

**Routinely assess your patients' immunization needs, vaccinate with vaccines you do stock, and provide referrals for recommended vaccines you do not stock.**

**Here's why it's important:**

- Each year, thousands of adults in the United States suffer illness, are hospitalized, or even die from diseases that could be prevented by vaccines. Adults believe immunization is important, but most are just not aware that they need vaccines throughout their lives to protect against diseases such as pertussis, hepatitis, and shingles.
- Patients rely on you to give them the best advice on how to protect their health. If you don't tell them about the vaccines they need, your patients are unlikely to get vaccinated.

**Here's what you can do:**

- Refer your patients to other immunization providers for vaccines you don't stock. It may not be possible to stock all vaccines in your practice. But you can still ensure that your patients are getting the vaccines they need by following up your strong recommendation with a referral. There is an expanding network of immunization providers, and it is easier than ever to find providers in your area who offer vaccination services. See back for details.
- Confirm that patients received recommended vaccines by following up at the next visit. Document the vaccines your patients receive, whether you administer them or not, to make sure patients are fully immunized. Simple reminders can help your practice and your patients stay up to date.

**U.S. vaccination rates for adults are extremely low.**


For example:

- Only 14% of adults 19 years or older have received Tdap vaccination.
- Only 20% of adults 60 years or older have received zoster (shingles) vaccination.
- Only 20% of adults 19 to 64 years old, at high risk, have received pneumococcal vaccination.
- Only 41% of adults 18 years or older had received the vaccination during the 2012–2013 flu season.

Source: NRES 2012 (MMWR 2014;61(2))  
RIS-SS 2012–2013 (www.cdc.gov/flu/season/view)

For resources and tips on vaccine assessment, recommendation, administration, and documentation, visit:  
[www.cdc.gov/vaccines/adultstandards](http://www.cdc.gov/vaccines/adultstandards)

**DON'T WAIT. VACCINATE!**

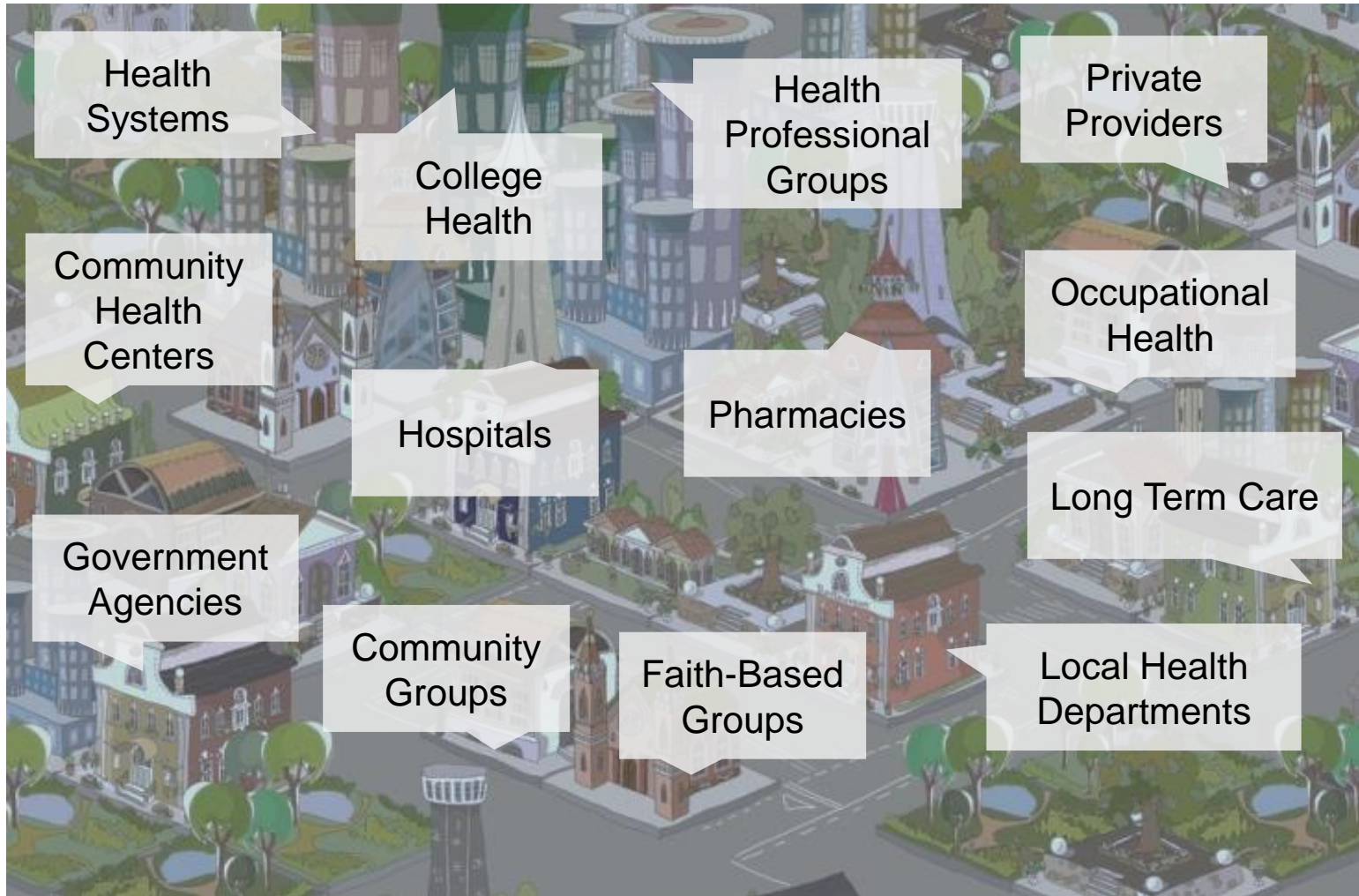


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Information Series for Healthcare Professionals  
[www.cdc.gov/vaccines/adultstandards](http://www.cdc.gov/vaccines/adultstandards)

- Refer patients to providers in the area that offer vaccines not stocked at your clinical site
- Be prepared to give an informed referral for vaccines not stocked
- Follow up
- Confirm vaccines were received

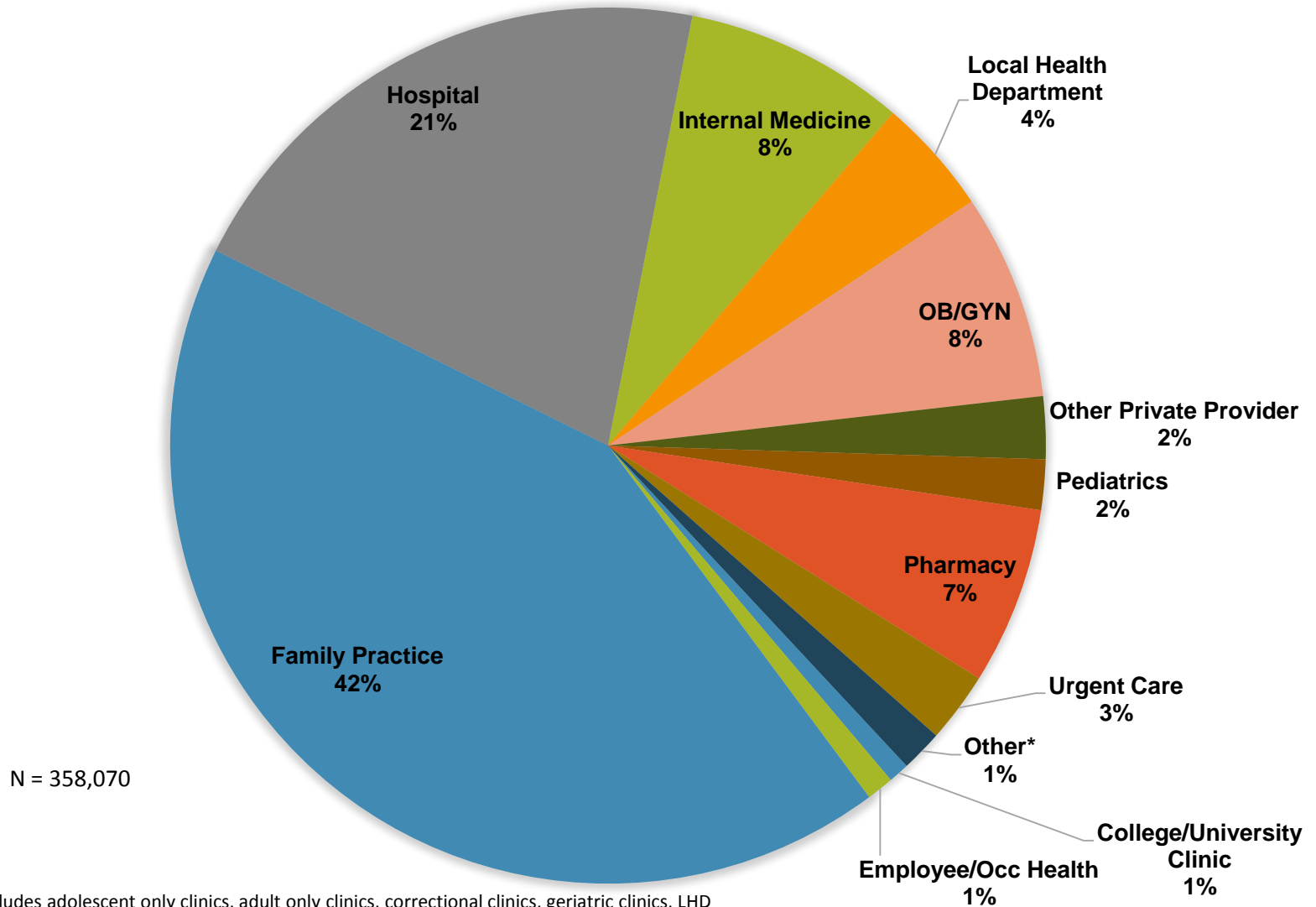
# The Immunization Neighborhood: Partners in Health



**Goal:** To Promote and Increase Adult Immunization Rates

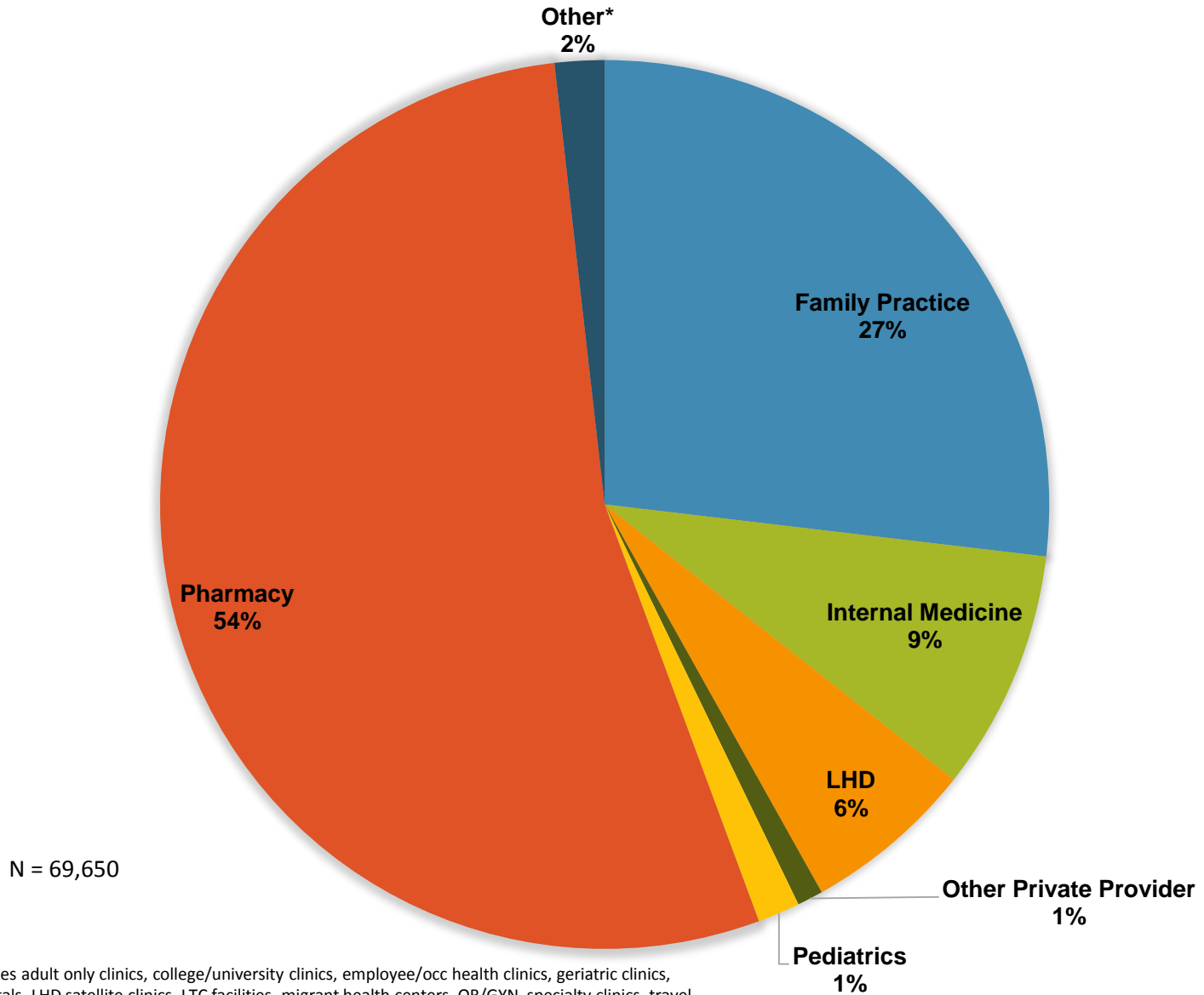


# Tdap Vaccines Administered to Persons 20 and Older and Reported to MCIR by Facility Type, 02/24/2016 to 02/24/2017



\* Other includes adolescent only clinics, adult only clinics, correctional clinics, geriatric clinics, LHD satellite clinics, LTC facilities, mass vaccination clinics, migrant health centers, STD centers, school based health clinics, specialty clinics, teen health centers, travel clinics, tribal health centers

# Zoster Vaccines Administered to Persons 20 and Older and Reported to MCIR by Facility Type, 02/24/2016 to 02/24/2017




\*Other includes adult only clinics, college/university clinics, employee/occ health clinics, geriatric clinics, private hospitals, LHD satellite clinics, LTC facilities, migrant health centers, OB/GYN, specialty clinics, travel clinics, tribal health centers, urgent cares

# Step 5: Vaccine Documentation

## 5 Vaccine Documentation

A Series on Standards for Adult Immunization Practice



Since patients can get their vaccines from many different healthcare professionals, assessing current vaccination status for patients can be challenging but it is very important.

Keep an up-to-date record of the vaccines your patients have received to make sure they have the best protection against vaccine-preventable diseases.

**To ensure patients get the vaccines they need and to prevent unnecessary vaccination, you should:**

- Record vaccination in patients' medical records
- Provide documentation of vaccines received to patients for their personal records
- Document vaccinations in Immunization Information Systems (IIS)

**IIS are confidential, community-wide, computerized databases that record vaccines administered by participating healthcare professionals. Documenting vaccines into IIS can benefit your practice by:**


- Consolidating vaccination records for your patients
- Helping you assess your patients' immunization status
- Making sure your patients have completed necessary vaccine series (for example, all three doses of hepatitis B vaccine)
- Reducing chances for unnecessary doses of vaccine or missed opportunities to provide vaccines
- Facilitating use of reminder and recall notifications to send to patients
- Making calculation of your office's immunization coverage rates easier

For more information on how to access IIS, contact your state coordinator. (See back for details.)

Even if you do not administer vaccines in your office, follow up with your patients to ensure they received the recommended vaccines from another immunization provider.

Information Series for Healthcare Professionals  
[www.cdc.gov/ncidod/diseases/immzstds](http://www.cdc.gov/ncidod/diseases/immzstds)

**DON'T WAIT. VACCINATE!**



U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

- Document all administered & historical vaccine doses into the MCIR
- Help your office, patients, and patients' other providers know which vaccines your patients have received



# MCIR is for adults, too!

- Expanded to include adults in 2006
  - Strongly recommend reporting for adult vaccinations
  - Some private health plans and Medicaid require documentation of adult vaccines in MCIR
- Over 7.1 million adults have a MCIR record\*
  - Over 60 million individual vaccines have been recorded in MCIR for adult patients\*
  - Over 1,400 large chain, small chain and independent pharmacies reported over 725,000 vaccinations to MCIR from July 1, 2015 through June 30, 2016



## Background

Reporting vaccines administered to adults to immunization registries is a top priority in the U.S. and in Michigan. The Michigan Care Improvement Registry (MCIR) includes vaccines given to adults, as well as historical immunization data from childhood. Because adults often receive vaccines in a variety of settings, it is critical that every health care provider report all current and historical vaccines in MCIR.

## [ What MCIR Can Do For You ]

- Provides access to patient vaccination histories
- Helps keep patients up-to-date on needed vaccines
- Saves time and money
- Measures clinic coverage levels
- Accepts electronic data submissions from electronic health record systems

## Did you know?

As of May, 2017, over 7.1 million adults have a MCIR record and over 60 million individual vaccines have been recorded in MCIR for adult patients.

Currently, nearly 6,000 immunization providers report data to MCIR including non-traditional vaccinators. Over 1,400 large chain, small chain and independent pharmacies reported over 725,000 vaccinations to MCIR from July 1, 2015 through June 30, 2016.

## BENEFITS OF USING MCIR FOR ADULTS:

- **Contributes to quality health care**  
Facilitates patient safety, reduces waste
- **Reduces over-immunization**  
When patient history and assessment logs are up-to-date
- **Decreases missed opportunities**  
Pinpoints improvement areas
- **Forecasts for next dose(s)**  
On select vaccine series
- **Identifies gaps in immunization coverage**  
Flags patients at high-risk for flu complications
- **Provides quick and easy-to-print records**  
Improves office flow and patient care
- **Consolidates patient immunization records**  
Allows for sharing immunization records between provider offices

Updated May 28, 2017

Michigan Care Improvement Registry

[www.mcir.org](http://www.mcir.org)

[www.aimtoolkit.org/docs/mcir-adults.pdf](http://www.aimtoolkit.org/docs/mcir-adults.pdf)

\*Data current as of May, 2017

# County Coverage Levels in Michigan

- Child, adolescent, and **adult immunization data from the MCIR**
- Comparison of county, state, and national coverage
- Updated quarterly
- [www.michigan.gov/immunize](http://www.michigan.gov/immunize)
  - Click on “local health departments” and “county immunization report card”
  - Click on map for desired county data

**COUNTY QUARTERLY IMMUNIZATION REPORT CARD**

Data as of: March 31, 2017


Osceola				Michigan is ranked 44th for 4313314 coverage (2015 NIS data)			
<b>Population</b>				<b>Your County Immunization Rank</b>			
	2015 Census	MCIR	Diff.	%	n = 84		
Total	23,058	27,114	-4,056	-17	<b>43133142 Coverage:</b> 9		
Adults (20yrs+)	17,243	20,449	-3,206	-18	<b>1323213 Coverage:</b> 28		
Children (0-19yrs)	5,815	6,665	-850	-14	<b>Waivers:</b> 37		
				<b>Flu Coverage:</b> 30			
				(6 months through 8 yrs, up-to-date)			
<b>Immunization Sites</b>							
				Count	%		
<b>Active MCIR Immunization Sites</b>				11	72		
Reported in the last 6 months				8	72		
<b>Active Vaccines for Children (VFC) Sites</b>				4	100		
Reported in the last 6 months				4	100		
<b>Reg. Reporting Flu Sentinels (% of Total Sites)</b>				2	66		

**How do your Immunization Measures Rank among Michigan's 83 Counties + Detroit (n=84)**

Measure	Osceola (MCIR)	% Diff.†	Central MI (MCIR)	MI Avg (MCIR)	US Average (2015 NIS)	Your County Rank	HP 2020 Goal
<b>19 through 35 months</b>							
Birth Dose Hep B coverage	84.1	0.5	84.6	79.3	72.4	19	85%
4313314 coverage†	78.5	1.4	76.7	75.0	72.2	23	80%
43133142 coverage†	64.5	-0.7	59.6	54.9	-	9	-
2+ Hep A	64.7	-0.8	60.9	56.6	59.6	10	85%
4+ DTap	81.4	1.1	79.6	78.6	84.6	27	90%
4+ PCV	86.2	2.0	84.8	85.0	84.1	35	90%
Rota Complete** (8-24 months)	68.0	-1.6	69.2	71.2	-	58	-
WIC coverage (4313314)	83.5	1.5	81.5	79.1	65.7	23	-
Medicaid coverage (4313314)	83.7	0.3	78.6	75.3	-	7	-
<b>13 through 17 years</b>							
132321 coverage†	84.9	-0.6	81.6	75.5	-	13	-
1323213 coverage†	42.1	8.1	37.9	35.2	-	28	-
1+ Tdap	87.6	-0.6	84.9	79.6	86.4	14	80%**
1+ MenACWY	86.6	-0.7	84.3	79.8	81.3	22	80%**
HPV Complete (Females)	45.3	7.3	41.8	39.8	41.9	39	80%**
HPV Complete (Males)	39.9	9.3	35.4	32.8	28.1	23	-
MenACWY Complete** (17 yrs)	50.9	2.3	41.1	44.9	-	25	-
<b>Adults (Census Denominators)</b>							
1+ Tdap (19-64yrs)	66.8	2.3	38.9	45.0	21.5	3	-
Pneumo Complete (66+ yrs)	13.6	-	5.5	5.6	-	5	-
1+ Zoster (60+ yrs)	37.1	0.9	27.8	24.2	27.9	5	30%
<b>2016-17 MidSeason Flu</b>							
Flu Complete** (6mo-8yrs)	22.3	-3.6	20.5	23.2	-	30	-
1+ Flu (6mos through 17yrs)	23.6	-7.8	20.4	23.6	59.3	5	70%
1+ Flu (18yrs+)	32.7	-1.6	22.2	22.1	41.7	3	70%
<b>School/CC Immunization Reports</b>							
School Completion (Feb '17)	93.4	-2.1	92.8	94.0	-	-	47
Percent Waived (K+7+0)	3.0	-0.1	2.7	3.2	Kindgrtn : 2.6	7 grd : 2.9	37
Child Care Completion (Oct '16)	87.2	-2.9	88.7	87.6	-	-	57
Percent Waived	0.9	0.4	1.1	2.4	-	-	16

\* % difference in the county since the last report card; Flu data shows difference between seasons; School and CC diff. between annual reports  
† 4313314(2): 4 DTap, 3 Polio, 1 MMR, 3 Hib, 3 HepB, 1 Varicella, 4 PCV, (2 HepA)  
\*\*Complete = no additional doses of this vaccine are needed.  
† 132321(3): 1 Tdap, 3 Polio, 2 MMR, 3 HepB, 2 or 3 MenACWY, (2 or 3 HPV doses-Males & Females)  
\*\* The adolescent Healthy People 2020 age group is 13 through 15 yrs  
Reference the FAQs for additional definitions including information on 1-, 2- and 3-.



# Working Toward a Better MCIR for Adults

## Provider Side

- Enter adult immunization data in a timely manner
  - Direct, transfer, HL7 (2-way messaging)
- Review every adult's MCIR record at each encounter
- Update system to comply to HL7 specifications

## MDHHS Side

- Enhance vaccine forecasting for adult vaccines
  - **February 2017:** MCIR has an assessment release for Pneumococcal for adults 65 years of age and older
- Provide staff training on use of MCIR
- Move toward 2-way HL7 interface

# Call to Action

All adult providers

# The Standards (Booster Shot)



Make immunizations a standard of adult care at your institution to ensure ALL of your adults, staff, and communities are fully protected!

**Build those critical relationships with your adults and ensure their preventive needs are discussed!**



# **CALL TO ACTION:** Implement the Standards for Adult Immunization Practice Today!

- Turn missed opportunities for vaccination into vaccination successes:
  - Routinely assess adult immunization status at every visit for every client
  - Implement office protocols and policies to enhance vaccination, like standing orders and vaccine assessment questionnaires
- Be a good neighbor in the immunization community:
  - Document all vaccines administered in MCIR
  - Know your referral partners and neighbors

For questions related to this session, contact:

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Thank you for your participation in today's event!