Updates on Immunizations for Adults with Diabetes

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Disclaimer

The findings and opinions expressed in this presentation are those of the author and do not necessarily reflect the view of the Indian Health Service.
Overview

Background

Immunization Recommendations
- Adults
- Persons with Diabetes

Improving Immunization Coverage
- Strategies and Practice Standards
- RPMS/EHR Tools
- Resources
Background

Trends in Incidence of Diagnosed Diabetes Among Adults Aged 18 Years or Older, United States, 2001-2019

- **Total**: 37.3 million people have diabetes (11.3% of the US population)
- **Diagnosed**: 28.7 million people, including 28.5 million adults
- **Undiagnosed**: 8.5 million people (23.0% of adults are undiagnosed)

Notes: Rates are age-adjusted to the 2000 US Census standard population. Figure adapted from CDC’s National Diabetes Statistics Report. Data source: National Health Interview Survey, Centers for Disease Control and Prevention.

Background

Percentage of Adults Aged 18 Years or Older with Diagnosed Diabetes, by Racial or Ethnic Group, US 2018-2019

Notes: Percentages are age-adjusted to the 2000 US Census standard population. Figure adapted from CDC's National Diabetes Statistics Report. Data sources: National Health Interview Survey, Centers for Disease Control and Prevention, and the Indian Health Service National Data Warehouse (American Indian or Alaska Native data).

Diabetics have higher risk of complications from illnesses
Example - Influenza, can raise blood glucose to dangerously high levels.
Higher rates of hepatitis B than the rest of the population.
Increased risk for death from pneumonia, bacteremia and meningitis infection
Background

Figure 10. Cumulative Laboratory-Confirmed Hospitalizations Associated With COVID-19, by US Racial or Ethnic Group, March 2020–May 14, 2022

Notes: Figure is adapted from CDC’s Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET), weekly summary of U.S. COVID-19 Hospitalization Data. This figure is a cumulative rate of COVID-19 hospitalization by racial and ethnicity. The Morbidity and Mortality Weekly Report (MMWR) week is the week of the year that local or state health departments use for disease incidence reporting and publishing. Data source: Laboratory-Confirmed COVID-19-Associated Hospitalizations, COVID NET, Centers for Disease Control and Prevention.
Background

- Immunization provides the best protection against vaccine-preventable diseases
  - Vaccines are one of the safest ways to protect your health
ACIP Routine Adult Immunization Recommendations

Table 1: Recommended Adult Immunization Schedule by Age Group, United States, 2022

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>19–20 years</th>
<th>27–49 years</th>
<th>50–64 years</th>
<th>≥65 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza inactivated (BIV4) or influenza recombinant (BIVA)</td>
<td>1 dose annually</td>
<td>1 dose annually</td>
<td>1 dose annually</td>
<td>1 dose annually</td>
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<tr>
<td>Influenza live, attenuated (LAIV)</td>
<td></td>
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<td></td>
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<tr>
<td>Tetanus, diphtheria, pertussis (Tdap or Td)</td>
<td>1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (see notes)</td>
<td>1 dose Tdap, thenTd or Tdap booster every 10 years</td>
<td>1 or 2 doses depending on indication (if born in 1957 or later)</td>
<td>2 doses</td>
</tr>
<tr>
<td>Measles, mumps, rubella (MMR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Varicella (VAP)</td>
<td></td>
<td></td>
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<tr>
<td>Zoster recombinant (HZV)</td>
<td>2 doses (if born in 1980 or later)</td>
<td>2 doses</td>
<td></td>
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<tr>
<td>Human papillomavirus (HPV)</td>
<td></td>
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<tr>
<td>Pneumococcal (PCV15, PCV20, PPSV23)</td>
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<tr>
<td>Hepatitis A (HepA)</td>
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<tr>
<td>Hepatitis B (HepB)</td>
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<tr>
<td>Meningococcal A, C, W, Y (MenACWY)</td>
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<tr>
<td>Meningococcal B (MenB)</td>
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<tr>
<td>Haemophilus influenzae type b (Hib)</td>
<td></td>
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</tr>
</tbody>
</table>

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection

Recommended vaccination for adults with an additional risk factor or another indication

Recommended vaccination based on shared clinical decision making

No recommendation/Not applicable

Source: https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf
# ACIP Recommended Immunizations for Adults with Diabetes

## Table 2: Recommended Adult Immunization Schedule by Medical Condition or Other Indication, United States, 2022

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Pregnancy</th>
<th>Immuno-compromised (excluding HIV infection)</th>
<th>HIV infection CD4 percentage and count</th>
<th>Asplenia, complement deficiencies</th>
<th>End-stage renal disease or on hemodialysis</th>
<th>Heart or lung disease; alcoholism</th>
<th>Chronic liver disease</th>
<th>Diabetes</th>
<th>Health care personnel</th>
<th>Men who have sex with men</th>
</tr>
</thead>
<tbody>
<tr>
<td>III or IV</td>
<td>Contraindicated</td>
<td>Contraindicated</td>
<td>1 dose annually</td>
<td>Precaution</td>
<td>1 dose annually</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>LAIV4</td>
<td></td>
<td>Contraindicated</td>
<td>1 dose annually</td>
<td>Precaution</td>
<td>1 dose annually</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Tdap or Td</td>
<td>1 dose Tdap each pregnancy</td>
<td></td>
<td>1 dose Tdap, then Td or Tdap booster every 10 years</td>
<td></td>
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<tr>
<td>MMR</td>
<td>Contraindicated</td>
<td></td>
<td>1 or 2 doses depending on indication</td>
<td></td>
<td></td>
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<tr>
<td>VAR</td>
<td>Contraindicated</td>
<td></td>
<td>2 doses</td>
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<tr>
<td>RZV</td>
<td></td>
<td></td>
<td>2 doses at age ≥19 years</td>
<td></td>
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<tr>
<td>HPV</td>
<td>Not recommended</td>
<td></td>
<td>2 doses at age ≥50 years</td>
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<tr>
<td>Pneumococcal (PCV15, PCV20, PPSV23)</td>
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<td>HPV</td>
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<td>HIVA</td>
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<td></td>
<td></td>
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<tr>
<td>Hepatitis B (see notes)</td>
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<td></td>
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<tr>
<td>MenACWY</td>
<td>1 or 2 doses depending on indication, see notes for booster recommendations</td>
<td></td>
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<tr>
<td>MenB</td>
<td>Precaution</td>
<td></td>
<td>2 or 3 doses depending on vaccine and indication, see notes for booster recommendations</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Hib</td>
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</tr>
</tbody>
</table>

1. Recommended vaccines for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection.
2. See notes for influenza, hepatitis B, pneumococcal, meningococcal, and varicella vaccines.
3. Vaccination recommended after pregnancy.

Source: [https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf](https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf)
COVID-19 Vaccine

- Recommended for everyone ages 6 months and older
  - AI/AN persons experience higher rates of COVID-19-related hospitalization and death compared with non-Hispanic Whites

- Three vaccines approved by the FDA help protect against COVID-19
  - Pfizer-BioNTech
  - Moderna
  - Janssen

- Preferential recommendation for Pfizer-BioNTech and Moderna over the Janssen COVID-19 Vaccine
COVID-19 Vaccine Recommendations

Pfizer-BioNTech (ages 6 months–4 years)

DOSE 1 (primary) In 3-8 weeks

DOSE 2 (primary) In at least 8 weeks

DOSE 3 (primary)

Pfizer-BioNTech (ages 5 years and older)

DOSE 1 (primary) In 3-8 weeks

DOSE 2 (primary) In at least 5 months

DOSE 3 (booster*) In at least 4 months

DOSE 4 (2nd mRNA booster)* People ages 50 years and older should get a 2nd booster.

Moderna (ages 6 months–5 years)

DOSE 1 (primary) In 4-8 weeks

DOSE 2 (primary)

Moderna (ages 18 years and older)

DOSE 1 (primary) In 4-8 weeks

DOSE 2 (primary) In at least 5 months

DOSE 3 (booster*) In at least 4 months

DOSE 4 (2nd mRNA booster)* People ages 50 years and older should get a 2nd booster.

Janssen (J&J) (ages 18 years and older)*

DOSE 1 (primary) In at least 2 months

DOSE 2 (booster*) In at least 4 months

DOSE 3 (2nd mRNA booster)* People ages 50 years and older who received 2 Janssen doses may get a 2nd booster.

*Age-appropriate mRNA COVID-19 vaccines are preferred over Janssen COVID-19 Vaccine for primary and booster vaccination. Janssen COVID-19 Vaccine should only be used in limited situations. See: https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#considerations-Janssen

*2nd booster dose for some groups

Pneumococcal Vaccine

- CDC recommends pneumococcal vaccination for young children, adults, and others with risk factors
  - Older adults are at greatest risk of serious illness and death
  - Diabetes is a risk factor for invasive pneumococcal disease

- Two vaccines protect against pneumococcal disease
  - Pneumococcal conjugate vaccines (PCV 13, 15, 20)
  - Pneumococcal polysaccharide vaccine (PPSV23)

Updated Pneumococcal Recommendations – Oct 2021

https://www.cdc.gov/pneumococcal/vaccination.html
Updated Recommendations for Adult Pneumococcal Vaccination

SUMMARY OF RECOMMENDATIONS

On October 20, 2021, the Advisory Committee on Immunization Practices (ACIP) simplified adult pneumococcal vaccination recommendations across age and risk groups, now including people 19-64 years who have any of a broader group of chronic medical conditions and incorporating use of either 20-valent (PCV20) or 15-valent (PCV15) pneumococcal conjugate vaccines (PCV). Both PCV15 and PCV20 were licensed in 2021 for adults aged ≥18 years and expanded pneumococcal serogroup coverage for adults. This recommendation does not affect the pneumococcal vaccine schedule for children ≤18 years.

American Indians and Alaska Natives (AIAN) are disproportionately affected by invasive pneumococcal diseases and experience higher levels of disease and outbreaks in Tribal communities.5,41 Adopting the newest ACIP PCV6 recommendations may further prevent an additional 30% of invasive pneumococcal disease cases.4 ACIP outlines two distinct PCV immunization strategies and did not make a preferential recommendation for either among AIAN individuals.

RECOMMENDATIONS FOR VACCINE USE

Dosing, Timing & Administration (Algorithm for PCV15/PPSV23 and PCV20 Pneumococcal Immunization in Appendix B)

Adults aged 19–64 years with certain chronic diseases and immunocompromising conditions and adults aged ≥65 years who have not previously received any PCV or whose vaccination history is unknown should receive 1 dose of either PCV20 or PCV15.

- When PCV15 is used, it should be followed with one dose of PPSV23 at least one year later. A minimum interval of 8 weeks is recommended for adults with an immunocompromising condition.
- When PCV20 is used, no additional pneumococcal vaccines are recommended.

Adults who have previously received PPSV23 and have not received a pneumococcal conjugate vaccine may receive one dose of either PCV20 or PCV15 at least one year after their last PPSV23 dose. When PCV15 is used in those with a history of PPSV23 receipt, it need not be followed by another dose of PPSV23.

Adults who previously received PCV13 should complete the previously recommended series with PPSV23 (with an interval of one year between doses for adults ≥65 years, or 3 weeks between doses for immunocompromised individuals), or one dose of PCV20 may be used if PPSV23 is not available.

Efficacy

The FDA authorized PCV20 based on immunobridging studies involving the shared serotypes between PCV13 and PPSV23. PCV20 was non-inferior to all serotypes in common with PCV13 and 6 of the 7 serotypes that overlap with PPSV23. PCV15 was compared to PCV13 in clinical trials and found to be non-inferior for the 13 shared serotypes. Note that PCV20 protects against serotype 12F, which has been identified as a contributor to invasive pneumococcal disease among AIAN, typically impacting children with 12F, and PCV15 provides coverage against the 12F variant. However, clinicians should assess the risk of waiting one year between doses for individuals if the PCV15 and PPSV23 series strategy is implemented (note: for immunocompromised patients this timeframe can be reduced to 8 weeks).

Administration

In alignment with CDC and ACIP recommendations, simultaneously administering all vaccines for which a person is eligible at the time of a visit increases the probability that an individual will be up to date on vaccinations. Clinicians should adhere to vaccine schedules and observe the appropriate minimum intervals used in series.

Contraindications

Pneumococcal vaccines should not be administered to persons with a history of a severe allergic reaction, such as anaphylaxis, to any component of the vaccines, or to individuals with a previous allergic reaction to a dose of the same formulation of pneumococcal vaccine or diphtheria toxoid (in the case of PCV15).

Precautions

- Vaccination should be delayed for patients experiencing moderate or severe acute illness.
- Immunocompromised individuals may have a diminished immune response to pneumococcal vaccinations.

STORAGE AND HANDLING

All pneumococcal vaccines (PCV15, PCV20, and PPSV23) should be stored in a refrigerator at 2°C to 8°C. PCV15 and PCV20 require reconstitution via vigorous shaking to ensure a homogenous white suspension prior to administration.
Algorithm for PCV15/PPSV23 Pneumococcal Immunization

19-64 Years Old
- Presence of Chronic Diseases:
  - Diabetes
  - Alcoholism
  - Asthma
  - Cigarette Smoking
- Presence of Immuno compromise:
  - HIV
  - Functional & Anatomic Asplenia
  - Solid Organ Transplant
  - OligoNephritic Syndrome
  - Generalized Malignancy
  - Uncontrolled Hypothyroidism
  - Multiple Myeloma
  - Hodgkin Disease
  - Co/Heart Implants
  - CSF Leak
  - Sickle Cell Disease or other Hemoglobinopathies
  - Congenital or Acquired Immunodeficiencies
  - Tumrogenic Immunosuppression
  - Immunocompromise Drugs

≥ 65 Years Old

1 Year Later
- Never Received PPSV23 or PCV15
  - Give 1 Dose PCV15
- Received Only PPSV23
  - Give 1 Dose PCV15
- Received Only PCV13
  - Give 1 Dose PCV13
- Received Both PCV13 and PPSV23

Series Complete

Algorithm for PCV20 Pneumococcal Immunization

19-64 Years Old
- Presence of Chronic Diseases:
  - Chronic Renal Failure or Liver Disease
  - Alcoholism
- Presence of Immuno compromise:
  - HIV
  - Functional & Anatomic Asplenia
  - Solid Organ Transplant
  - OligoNephritic Syndrome
  - Generalized Malignancy
  - Uncontrolled Hypothyroidism
  - Multiple Myeloma
  - Hodgkin Disease
  - Co/Heart Implants
  - CSF Leak
  - Sickle Cell Disease or other Hemoglobinopathies
  - Congenital or Acquired Immunodeficiencies
  - Tumrogenic Immunosuppression
  - Immunocompromise Drugs

≥ 65 Years Old

1 Year Later
- Never Received PPSV23 or PCV20
  - Give 1 Dose PCV20
- Received Only PPSV24
  - Give 1 Dose PCV20
- Received Only PCV13
  - Give 1 Dose PCV20
- Received Both PCV13 and PPSV23

If PPSV23 Not Available, Give 1 Dose PCV20

Series Complete

Hosted under vaccine recommendations - https://www.ihs.gov/epi/immunization-and-vaccine-preventable-diseases/resources-for-providers/
Influenza Vaccine

- CDC recommends annual influenza vaccination for all persons aged 6 months and older who do not have contraindications for prevention of influenza virus.
  - People with diabetes are at higher risk of serious flu complications
- ACIP influenza recommendation – 2022/2023 season
  - Influenza vaccine composition for 2022-23
  - Change in approved age indication for Flucelvax Quadrivalent (ccIV4)
  - Recommendations for influenza vaccination of persons aged ≥65 years
US Influenza Vaccine Composition for 2022-23

- All vaccines will be quadrivalent.
- Influenza A(H3N2) and influenza B/Victoria components updated.

<table>
<thead>
<tr>
<th></th>
<th>2021-22</th>
<th>2022-23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egg-based IIV4s and LAIV4:</td>
<td>A/Victoria/2570/2019 (H1N1)pdm09-like</td>
<td>A/Victoria/2570/2019 (H1N1)pdm09-like</td>
</tr>
<tr>
<td></td>
<td>A/Cambodia/e0826360/2020 (H3N2)-like</td>
<td>A/Darwin/9/2021 (H3N2)-like</td>
</tr>
<tr>
<td></td>
<td>B/Washington/02/2019 (Victoria lineage)-like</td>
<td>B/Austria/1359417/2021 (Victoria lineage)-like</td>
</tr>
<tr>
<td></td>
<td>B/Phuket/3073/2013 (Yamagata lineage)-like</td>
<td>B/Phuket/3073/2013 (Yamagata lineage)-like</td>
</tr>
<tr>
<td>Cell-culture-based IIV4 and RIV4:</td>
<td>A/Wisconsin/588/2019 (H1N1)pdm09-like</td>
<td>A/Wisconsin/588/2019 (H1N1)pdm09-like</td>
</tr>
<tr>
<td></td>
<td>A/Cambodia/e0826360/2020 (H3N2)-like</td>
<td>A/Darwin/6/2021 (H3N2)-like</td>
</tr>
<tr>
<td></td>
<td>B/Washington/02/2019 (Victoria lineage)-like</td>
<td>B/Austria/1359417/2021 (Victoria lineage)-like</td>
</tr>
<tr>
<td></td>
<td>B/Phuket/3073/2013 (Yamagata lineage)-like</td>
<td>B/Phuket/3073/2013 (Yamagata lineage)-like</td>
</tr>
</tbody>
</table>

Red type denotes change compared 2021-22.

Change in Age Indication for Flucelvax Quadrivalent

- Cell-culture based quadrivalent inactivated influenza vaccine (ccIV4).
  - Previously approved for ages ≥4 years; approved in March 2021 for ages ≥2 years.
  - Approved in October 2021 for ages ≥6 months.

- All standard-dose unadjuvanted llV4s now approved for ages ≥6 months.
Influenza Vaccination for Persons Aged $\geq$65 Years

Revised proposed language:

--ACIP recommends that adults aged $\geq$65 years preferentially receive any one of the following higher dose or adjuvanted influenza vaccines: quadrivalent high-dose inactivated influenza vaccine (HD-IIV4), quadrivalent recombinant influenza vaccine (RIV4), or quadrivalent adjuvanted inactivated influenza vaccine (aIIV4).

--If none of these three vaccines is available at an opportunity for vaccine administration, then any other age-appropriate influenza vaccine should be used.
The CDC recommends hepatitis B vaccine for all age groups for prevention of hepatitis B virus that can cause lifelong infections such as cirrhosis of the liver.

<table>
<thead>
<tr>
<th>Cause</th>
<th>AI/AN Rate: 2009-2011</th>
<th>US All Races Rate: 2010</th>
<th>Ratio: AI/AN to US All Races</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic liver disease and cirrhosis</td>
<td>42.9</td>
<td>9.4</td>
<td>4.6</td>
</tr>
</tbody>
</table>

(Age-adjusted mortality rates per 100,000 population)

8th leading cause of death in AI/AN

Source: Mortality Disparity Rates American Indians and Alaska Natives (AI/AN) in the IHS Service Area 2009-2011 and U.S. All Races 2010
Hepatitis B Recommendations

- The following groups **should** receive hepatitis B vaccines
  - All infants [No change]
  - Unvaccinated children aged <19 years [No change]
  - Adults 19 through 59 years of age
  - Adults 60 years of age and older with risk factors for Hepatitis B infection

- The following group **may** receive hepatitis B vaccines
  - Adults ≥60 years without known risk factors for hepatitis B infection
ACIP Approved Hepatitis B Vaccines

- Recombivax-HB (monovalent, aluminum adjuvant)
  - Approved for use at any age
- Engerix-B (monovalent, aluminum adjuvant)
  - Approved for use at any age
- Twinrix (combination HepA + HepB)
  - Approved for use in adults > 18 years
- Heplisav-B (monovalent, 1018 adjuvant) [New in 2018]
  - Approved for use in adults > 18 years, 2-dose series over 1 month
- PreHevbrio (monovalent, aluminium adjuvant) [New in 2022]
  - Approved for use in adults > 18 years, 3-dose series over 6 months
Zoster Vaccine

- CDC recommends Shingrix (recombinant zoster vaccine, or RZV) for the prevention of shingles and related complications

**Summary or recommendations**
- Routine vaccination of adults 50 years and older
  - 2 dose series, 2 to 6 months apart
- Vaccination of immunocompromised adults 19 years and older
  - 2 dose series, 2–6 months after the first.
Zoster Vaccine Resource

Hosted under vaccine recommendations - https://www.ihs.gov/epi/immunization-and-vaccine-preventable-diseases/resources-for-providers/
TDAP Vaccine

- CDC recommends diphtheria, tetanus, and whooping cough (pertussis) vaccination (Tdap) for all adults
  - Adults who have never received Tdap should get 1 dose of Tdap.
  - Subsequently Td vaccine booster or Tdap every 10 years.
Adult Vaccine Coverage Rates

Source: https://www.cdc.gov/mmwr/volumes/70/ss/ss7003a1.htm
Adult Vaccine Coverage Rates

![Figure 6: Adult Vaccines Coverage FY20 Q1 – FY21 Q1, IHS National](image)
Vaccination Challenges

- Transportation issues
- Patients not coming to clinic for care
- Address and phone numbers change frequently
- Vaccine hesitancy and refusals
- Most adults are not aware they need vaccines.
  - Patient may not be aware of the health benefits of vaccines
- Providers not giving a strong recommendation for vaccines
- Missed Opportunities
  - Not routinely assessing vaccination status
Strategies and Standards

Assess
- Provider reminders in the EHR
- Monitor immunization coverage

Recommend
- Make a STRONG recommendation

Vaccinate
- Standing orders
- Expand access – nurse only visits, pharmacy visits, walk-in visits, extended clinic hours
Strategies and Standards

Document

- Reminder/Recall strategies
  - IHS/EHR reminders, reminder/recall notices to patients who are due (letters, phone calls, postcards)
- Ensure patients return for additional vaccine doses if needed
- Document vaccines given in other locations
Vaccine Assessment Tool

Clinical Decision Support for Immunizations

- Shows which vaccines patients are due for
  - Takes into account minimum intervals and ages
  - All routine, AGE-BASED recommendations
- Use RPMS immunization package to identify patients with diabetes
  - RPMS/EHR reminders
  - Lists and Letters in the RPMS Immunization package
  - Only available in the roll and scroll environment (NOT EHR)

IHS RPMS Immunization Package Resources

- [https://www.ihs.gov/epi/immunization-and-vaccine-preventable-diseases/resources-for-providers/](https://www.ihs.gov/epi/immunization-and-vaccine-preventable-diseases/resources-for-providers/)
# Provider Reminders/Forecaster

<table>
<thead>
<tr>
<th>Vaccines Provider</th>
<th>Reminders/Forecaster</th>
<th>2021-2022 Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td>Yes</td>
<td>2021-2022 Season</td>
</tr>
<tr>
<td>PCV15/PCV20 for 65 years+</td>
<td>No</td>
<td>Pending ICE 1.35.1</td>
</tr>
<tr>
<td>PCV15/PCV20 for immunocompromised/risk factors – 19-64yrs</td>
<td>No</td>
<td>Pending ICE 1.35.1</td>
</tr>
<tr>
<td>PPSV23 for adults with high risk condition</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tdap for everyone 19 years +</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Zoster for 50 years +</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hepatitis B for all patients who receive first dose</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B for adults 19-59 years with diabetes</td>
<td>No</td>
<td>Pending ICE 1.35.1</td>
</tr>
<tr>
<td>HPV 19- 26 years</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>HPV 27 -45 years – optional</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Influenza Resources

IHS.gov/flu
- IHS Weekly Surveillance Reports
- Health Care Personnel vaccination policy and FAQ

CDC.gov/flu
- CDC Weekly Surveillance Reports, Flu Activity data
- Influenza related information, education material, flu vaccine recommendations

Immunize.org
- Immunization Action Coalition

Nfid.org/influenza
- National Foundation for Infectious Diseases
Resources for Vaccine Confidence

**Four ways anyone can build vaccine confidence**

1. **Already vaccinated?**
   - Become a vaccine champion!
   - Share your story on social media and encourage others to get vaccinated.

2. **Talk to your friends and family about getting vaccinated**
   - Share the CDC’s resources to help you discuss COVID-19 vaccines.
   - Listen to their concerns and help answer their questions about vaccines.

3. **Address COVID-19 vaccine misinformation**
   - Correct common misconceptions with CDC-provided fact sheets.

4. **Celebrate and share your decision to get vaccinated**
   - Share your COVID-19 vaccination story on social media and use CDC COVID-19 vaccine resources.
   - Share your story on social media and encourage others to get vaccinated.

- **Share your reasons for getting your children vaccinated**
- **Talk to others about vaccines and listen with empathy to concerns**
- **Address misinformation and share facts**
- **Celebrate!**

For more help visit: [www.cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)

CDC Infographic:


Immunization Action Coalition:
https://www.immunize.org
Resources

IHS Immunization Resources:
- https://www.ihs.gov/epi/vaccine/resources/
- https://ww.IHS.gov/flu

CDC Vaccine Resources
- www.cdc.gov/vaccines
- www.cdc.gov/diabetes/vaccines

Immunization Action Coalition
- www.immunize.org

Adult and Influenza Education Materials:
- http://nptec.gptchb.org/infectious-disease/national-vaccination-project/

Association of American Indian Physicians/ASTHO
- Influenza media kit and PSA videos for AI/AN communities
  - https://www.aaip.org/programs/capacity-building-assistance/influenza-vaccination/

National Foundation for Infectious Diseases
- https://www.nfid.org/influenza
Contact Information

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