Optimizing

IMMUNIZATION PRACTICES:

Your Role, Your Impact

Overview of Adult Vaccinations

Why Is Continued Vigilance for Vaccine Preventable Diseases Necessary?

- Immunity can wane over time thereby increasing the risk of infection and spread of diseases. Immunosenescence, the gradual decline in the function and efficiency of the immune system as a person ages, is a natural process.[1]
- Comorbidities increase the disease burden from preventable diseases for patients and health systems. For instance, the CDC calculated that approximately 14.7% of the US adult population (> 18 years) has diabetes as of 2021.[2] This cohort has a weakened immune system that makes them susceptible to viral upper respiratory infections that can quickly progress to pneumonia, which could lead to increased hospitalizations.
- Low vaccination rates can reduce population immunity, facilitating spread of infectious diseases resulting in outbreaks
- Patients develop increased risk for infections when they are under treatment for cancer or are taking immunosuppressive treatments for rheumatological and autoimmune conditions. They must be vaccinated before they begin these treatments or may have specific recommendations for vaccinations after and while they are on treatment.

What Are the Current Rates of Vaccination Among Adults in the US?

TARGET VACCINE RATES

- The percent of the population that must be vaccinated to establish community immunity depends on how contagious a disease is. For example, it is about 95% for measles and 70% for influenza.[3,4]

ACTUAL VACCINE RATES

The actual vaccine rates are much lower. Data from the CDC shows the following as of 2022 for adults (≥ 19 years):[5]

- Pneumonia vaccine, 23%
- COVID-19, 80%
- Shingles, 34%
- Tdap and Td, 59%

Moreover, the HPV vaccination rate in females 19-26 years was 58%, while in males of the same age it was only 35%

Likewise, as of February 2025, only 47% of adults 75 and older and 37% of adults 60 to 74 years of age had received the RSV vaccine[6]

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What Is the Recommended Vaccination Schedule for Adults?

Vaccination schedule for ages 19 and older[7]

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
COVID–19	1 or more doses of 2024–2025 vaccine (See Notes)			2 or more doses of 2024-2025 vaccine (See Notes)
Influenza inactivated (IIV3, ccIIV3) **Influenza recombinant** (RIV3)	1 dose annually			1 dose annually (HD–IIV3, RIV3, or aIIV3 preferred)
Influenza inactivated (aIIV3; HD–IIV3) **Influenza recombinant** (RIV3)	Solid organ transplant (See Notes)			
Influenza live, attenuated (LAIV3)	1 dose annually			
Respiratory syncytial virus (RSV)	Seasonal administration during pregnancy (See Notes)		60 through 74 years (See Notes)	≥75 years
Tetanus, diphtheria, pertussis (Tdap or Td)	1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (See Notes)			
	1 dose Tdap, then Td or Tdap booster every 10 years			
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)			For health care personnel (See Notes)
Varicella (VAR)	2 doses (if born in 1980 or later)		2 doses	
Zoster recombinant (RZV)	2 doses for immunocompromising conditions (See Notes)		2 doses	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal (PCV15, PCV20, PCV21, PPSV23)			See Notes	See Notes
Hepatitis A (HepA)	2, 3, or 4 doses depending on vaccine			
Hepatitis B (HepB)	2, 3, or 4 doses depending on vaccine or condition			
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication (See Notes for booster recommendations)			
Meningococcal B (MenB)	19 through 23 years	2 or 3 doses depending on vaccine and indication (See Notes for booster recommendations)		
***Haemophilus influenzae* type b** (Hib)	1 or 3 doses depending on indication			
Mpox	2 doses			
Inactivated poliovirus (IPV)	Complete 3-dose series if incompletely vaccinated. Self–report of previous doses acceptable (See Notes)			

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

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

Recommended vaccination based on shared clinical decision–making

No Guidance/ Not Applicable

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Recommedations

- **Chronic conditions** can lead to an immunocompromised state for many patients. Ask patients about conditions being managed by other providers and medications prescribed by other providers.
- **Ask adults about childhood vaccinations** and provide catch-up immunizations for any they may have missed
- **For people in long-term care facilities**, consider annual flu and COVID-19 vaccines as well as RSV and TdaP per schedule
- **Asplenia:** Consider pneumonia, meningococcal, and Haemophilus influenzae type b (HiB) vaccines.

  The spleen plays a critical role in the immune system, particularly in fighting off certain types of bacteria, especially encapsulated bacteria. Without a spleen, there's a significantly increased risk of serious and rapidly progressing infections from these bacteria. Individuals can vaccinate 2 weeks before a planned splenectomy or as soon as possible if the splenectomy is unplanned.
- **For pregnant patients**, provide COVID-19, flu, and Tdap, which will protect both the adult and the fetus

What Resources Are Available to Clinicians for Use in Clinic or to Stay Current?

- CDC
- Immunize.org
- Resources on AAPA.org
- Other professional societies

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Current as of February 28, 2025

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Key Takeaways

- As the disease burden increases, preventable infections among our vulnerable populations will overwhelm our health system, unless we do something about it
- The evolving landscape of infectious diseases will continue to pose significant threats to adults, especially those with chronic diseases, anyone who is immunocompromised, and older adults
- PAs are uniquely positioned to impact the vaccination rates with every patient encounter, from an annual visit to a follow up for chronic diseases or acute care appointments
- Consider a vaccine card for your patients. It will be particularly helpful for those who are seen less often (age 15-45 years) and older adults. Immunize.org has a **sample record for adults**.

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