

Importance of Adult Vaccinations

Every year, a significant number of people get a vaccine-preventable disease (VPD)[1]

VPDs impose a significant strain on community healthcare resources.[2]

A 2017 population-based modeling study projects $653 billion in direct treatment costs for flu, pertussis, shingles, and pneumococcal disease in adults ≥50 years of age over a 30-year period.[2]

Vaccines are especially important for older adults and patients with chronic conditions.[3,4]

Both age-related decline in immune function and chronic comorbidities (eg, COPD, diabetes, heart disease) markedly **increase the risk of severe outcomes** from certain VPDs, such as the flu.

Conversation starter:

"Vaccines can help protect you when age or comorbidity leave you at greater risk of severe outcomes from certain vaccine-preventable diseases."

Don't miss an opportunity to talk to your patients about vaccination.[5,6]

Many adults remain unprotected against VPDs, which can lead to **illness, hospitalization, disability**, and even **death**. There were an estimated 28,000 flu deaths in the US during the 2023-2024 season alone.

Conversation starter:

"Let's take a look at your vaccination history and see if you're missing any recommended vaccines."

COPD=chronic obstructive pulmonary disease; NFID=National Foundation for Infectious Diseases.

Certain VPDs can have severe complications, especially for unvaccinated older adults[7]

Examples of Vaccine-Preventable Diseases for Older Adults[8,*]



Respiratory Syncytial Virus (RSV)[9-11]

- Recovery from RSV typically takes 1 to 2 weeks, but for some, it can be serious, causing shortness of breath
- Older adults are at high risk for severe illness from RSV, including those with chronic heart or lung disease, those with weakened immune systems, or those living in nursing homes or long-term care facilities
- RSV can cause exacerbations of existing conditions, such as asthma, COPD, or congestive heart failure
- RSV in older adults may lead to hospitalization and even death. Each year in the US, RSV leads to approximately 177,000 hospitalizations and an estimated 14,000 deaths in adults 65 years of age and older



Herpes Zoster (Shingles)[12,13]

- 1 in 3 people will develop shingles in their lifetime. A person's risk for shingles and related complications sharply increases after 50 years of age
- The shingles rash is painful, is usually accompanied by blisters, and can cause fever, headache, chills, or an upset stomach
- About 10% to 18% of people with shingles develop postherpetic neuralgia (PHN), a painful complication that can last for months or even years after the rash clears. The risk of PHN increases with age



Influenza (Flu)[14-17]

- Anyone can become infected with the flu, but people 65 years and older are at higher risk of developing serious flu complications than young, healthy adults. This increased risk is due in part to changes in immune defenses with increasing age
- During the 2023–2024 season, adults 65 and older accounted for 51% of flu-related hospitalizations and 68% of flu-related deaths in the US
- Adults with certain chronic conditions, such as asthma, heart disease or history of stroke, diabetes, and chronic kidney disease, as well as pregnant women, are also at higher risk
- The flu can cause complications from sinus and ear infections, potentially leading to pneumonia, sepsis, and death. It can also worsen other chronic conditions (eg, cardiovascular, respiratory)

CDC=Centers for Disease Control and Prevention; COPD=chronic obstructive pulmonary disease.

*Please refer to the Adult Immunization Schedule on the CDC website for the complete list of vaccines.

Examples of Vaccine-Preventable Diseases for Older Adults[8,*] (continued)



Pertussis (Whooping Cough)[18-21]

- In earlier stages, whooping cough appears to be similar in severity to the common cold, so it can be difficult to diagnose until more severe symptoms occur
- 1 to 2 weeks later, symptoms may include paroxysms—rapid, violent, and uncontrolled coughing fits that usually last 1-6 weeks but can last up to 10 weeks
- Some of the most common complications in adults with pertussis are weight loss, urinary incontinence, syncope, and rib fractures from severe coughing
- The number of reported pertussis cases in 2024 (35,435) was more than 6 times the number reported in 2023 (7,063), marking a return to pre-pandemic levels



Hepatitis B (HBV)[22-24]

- Hepatitis B often has no symptoms at first, but can lead to chronic infection and serious outcomes like cirrhosis, liver failure, or liver cancer
- While anyone can get hepatitis B, adults who are on dialysis or have hepatitis C, HIV, diabetes, or liver disease are at higher risk
- Chronic infection adds heavy liver-disease burden; 15% to 25% of patients will die prematurely from cirrhosis or liver cancer
- In 2023, HBV led to an estimated 14,400 acute infections and 1,769 deaths nationwide



COVID-19[25-28]

- Anyone infected with COVID-19 can spread the disease, even if they do not present with any symptoms
- Older adults aged 50 and above are more likely to need hospitalization, intensive care, or a ventilator to help them breathe. COVID-19 can also be deadly in some patients
- Individuals at higher risk of serious illness from COVID-19 include those who are unvaccinated or have a disability, a weakened immune system, or one or more certain medical conditions, including, among others, cardiovascular, lung, kidney, neurologic, liver, or metabolic disease and obesity
- Adults 65 years and older accounted for more than 44,000 COVID-19 deaths in the US during 2023, nearly 90% of all COVID-19 hospitalized deaths that year



Pneumococcal Disease[29-33]

- Anyone can acquire pneumococcal disease through direct contact with respiratory secretions like saliva or mucus
- Some patients at increased risk include adults 65 years and older, those who are immunocompromised, and those with health conditions such as diabetes or chronic heart, kidney, liver, or lung disease
- *Streptococcus pneumoniae* can cause infections in various locations of the body, resulting in pneumonia, meningitis, bacteremia, sinusitis, or middle ear infection. Sometimes pneumonia, meningitis, or bacteremia can lead to death
- Pneumonia is the most common manifestation of pneumococcal disease in adults, causing about 150,000 hospitalizations each year and accounting for an estimated 10% to 30% of adult community-acquired pneumonia cases in the US

CDC=Centers for Disease Control and Prevention; HIV=human immunodeficiency virus.
*Please refer to the Adult Immunization Schedule on the CDC website for the complete list of vaccines.

According to the CDC, vaccines are effective, yet many adults remain unvaccinated

Preventable Disease	Vaccination Rates*,†,‡
Respiratory Syncytial Virus[34]	Only 47.5% of adults ≥75 years and 38.1% of high-risk adults aged 60–74 years reported ever receiving an RSV vaccine (2025)§
Herpes Zoster (Shingles)[5,†]	Only 36.0% in adults ≥50 years (2022)
Influenza (Flu)[35,‡]	Only 44.9% in adults (2023–2024 flu season)‖
Pertussis (Whooping Cough)[5,†]	Only 28.6% of adults ≥19 years received Tdap (2022)
Hepatitis B[36,†]	Only 34.2% of adults ≥19 years received at least 1 dose of the HBV vaccine (2021)
COVID-19[5,37,‖]	Only 44.0% of adults ≥65 years had at least 2 doses of the 2024-2025 formulation (March 2025)
Pneumococcal Disease[4,†]	64.0% in adults ≥65 years (at least 1 dose)

CDC=Centers for Disease Control and Prevention; EMR=electronic medical record; IIS=immunization information system; NHIS=National Health Interview Survey; RZV=recombinant zoster vaccine; Tdap=tetanus, diphtheria, and acellular pertussis.

*Sample sizes: Herpes zoster, N=15,306; pertussis, N=20,572; pneumococcal, N=8470; COVID-19, N=8658.

†Vaccination questions included in the 2022 NHIS were as follows: Influenza - influenza shot or nasal spray during the preceding 12 months; Pneumococcal - ever had a pneumonia shot; Herpes zoster - ever had a shingles vaccine and, if yes, was it RZV and what was series compliance; Td/Tdap pertussis-containing vaccine in the past 10 years, and, if yes, did most recent shot include pertussis.

‡Weighted data were used to produce national vaccination coverage point estimates. To better assess season-specific influenza vaccination, the Kaplan-Meier survival analysis was used. 95% confidence intervals for point estimates are not shown in table. Data source: Behavioral Risk Factor Surveillance System for 2023-2024 influenza season.

§Data source: Weekly RSV Vaccination Dashboard 2024-2025 respiratory season (includes surveys, HCP claims, EMR, and IIS data). Respondent self-reported data based on whether ever received RSV vaccine.

‖Based on data from CDC's National Immunization Survey—Adult COVID Module. Estimates of vaccination coverage are based on respondent self-report as of April 26, 2025.

Encourage your adult patients to consider vaccination by educating them about these diseases and potential complications

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