



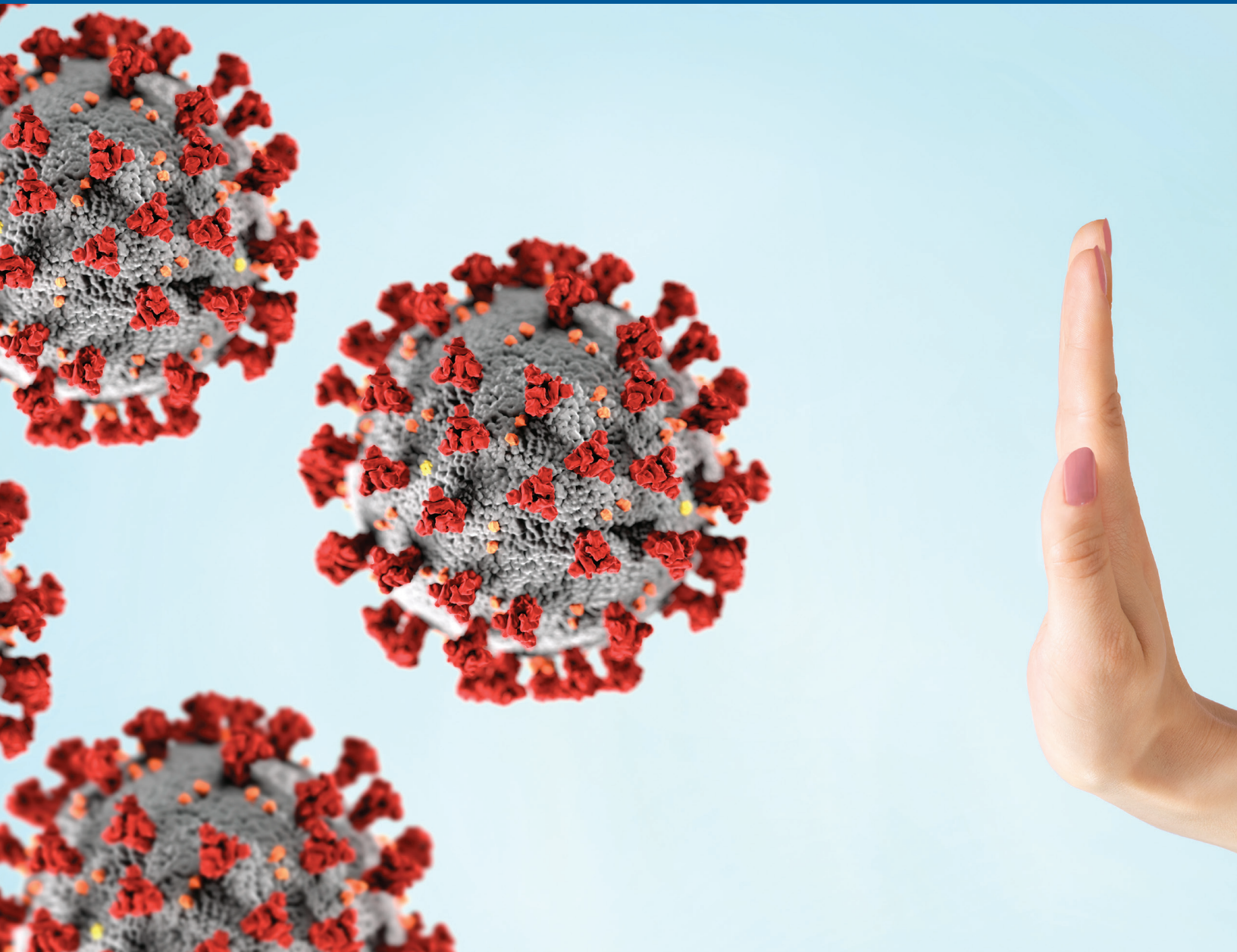
Pharmaceutical Assistance  
Contract for the Elderly



Balanced information for better care

# Blocking preventable disease

Immunizations recommended for older adults



# Vaccination is a powerful and easy way to prevent potentially devastating disease

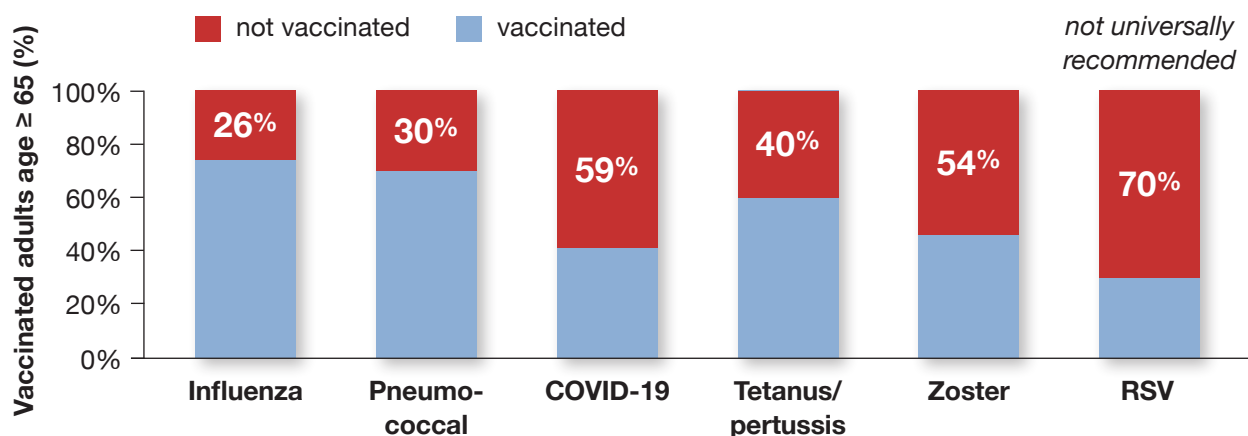
**TABLE 1.** Center for Disease Control and Prevention (CDC)'s 2024 recommendations for vaccinating immunocompetent adults<sup>1</sup>

Vaccine		Age			
		50-59	60-64	65-74	≥ 75
New since 2020	<b>COVID-19</b>	1 dose of the most updated formula*			
	<b>Respiratory syncytial virus (RSV)</b>	Not indicated	1 dose, depending on risk factors**		1 dose
	<b>Pneumococcus<sup>†</sup></b> Pneumococcal conjugate, PCV20 or PCV21	1 dose, depending on risk factors		1 dose	
Unchanged schedule	<b>Influenza</b>	1 dose annually			
	<b>Zoster</b>	2 doses, 2-6 months apart			
	<b>Tetanus / Pertussis</b>	1 dose, then Td or Tdap booster every 10 years			

\*Recommendations here are for Moderna and Pfizer/BioNTech products; one additional dose is required for the Novavax product if unvaccinated. \*\*Risk factors described on page 4. †PCV15 and pneumococcal polysaccharide (PPSV23) can be used as an alternative if PCV20 or PCV21 are unavailable.

## There are opportunities to increase immunizations in older adults.

**FIGURE 1.** Proportion of adults age ≥ 65 who have not received recommended doses.<sup>2-5,‡</sup>



‡Based on CDC recommended immunizations 2023-2024

# COVID-19 vaccination continues to prevent severe disease

The most recent COVID vaccine (updated 2023-2024 formula) prevented infection and reduced hospitalization in adults  $\geq 65$ .

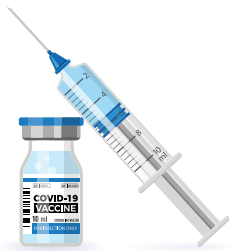


For **2024-2025**, an updated COVID vaccine has been recommended by the CDC that covers the **JN1 strain**.

## Three monovalent vaccine options are available.

- mRNA vaccines from Pfizer-BioNTech and Moderna
- adjuvanted spike protein vaccine from Novavax

## Tips to immunize patients with the latest vaccine



- Immunity to the 2023-2024 vaccine wanes over time.
- All adults should receive at least one dose of the latest 2024-2025 formulation regardless of prior vaccination status.
- Patients hesitant to receive vaccination with the newer mRNA vaccines may be more amenable to a traditionally developed vaccine like Novavax.
- Vaccination should occur before the time of peak infections—e.g., in the fall to prevent infection and hospitalization in the winter.
- COVID vaccine can be given with other vaccines.

# Talking to patients about RSV immunization

All adults  $\geq 75$  should receive one dose of the RSV vaccine. Some aged 60 to 74 may benefit from vaccination to prevent severe infection.

## Medical conditions associated with increased risk for severe RSV disease include:<sup>8</sup>



Chronic lung disease (e.g., COPD and asthma)



Chronic kidney disease (advanced)



Moderate or severe immunocompromise



Chronic cardiovascular disease (e.g., HF and CAD)



Liver disorders



Chronic hematologic disorders



Chronic or progressive neurologic or neuromuscular conditions



Diabetes mellitus (with end organ damage)



Any underlying condition a provider determines might increase the risk of severe RSV disease

HF = heart failure; CAD = coronary artery disease; COPD = chronic obstructive pulmonary disease

## Other factors associated with increased risk for severe RSV disease include:



Frailty or advanced age, as determined by the healthcare provider



Living in a nursing home or long-term care facility

**RSV vaccine trials considered only symptomatic disease. It is not yet known whether the vaccine reduces hospitalization or death.**

## Informing patients about RSV vaccination risk and benefits.

- One vaccine is not currently recommended over the other for any population, so the best RSV vaccine is the one that is available.
- The ideal time to get vaccinated is late summer or early fall.
- Only one dose of RSV vaccine is indicated as of 2024. It is not required annually.
- The RSV vaccine is covered by Medicare Part D; it is given at the pharmacy for Medicare patients.
- It may be administered at the same visit with other vaccines.

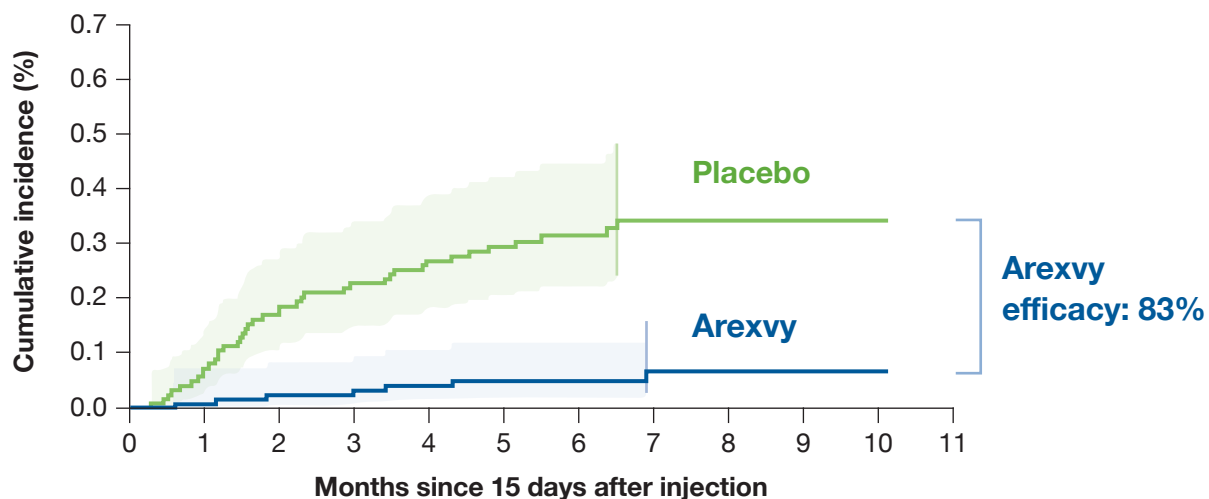
# Options to reduce RSV infection

## Approved options for RSV immunization:

- **Arexvy**, an adjuvanted recombinant vaccine (antigen protein enhanced to promote immune response)
- **Abrysvo**, a non-adjuvanted vaccine (unenhanced antigen protein)
- **mResvia**, an mRNA vaccine

## All vaccines can reduce RSV infection.

**FIGURE 2.** One dose of Arexvy reduced symptomatic laboratory confirmed RSV infection compared to placebo.<sup>9</sup>



## Abrysvo and mResvia also lowered RSV infection rates vs. placebo.<sup>10,11</sup>

Data suggest that a single RSV vaccination is effective over at least two seasons; longer-term effectiveness is not clear.<sup>12</sup> Impact on hospitalization and death are not yet known.

## All three vaccines are safe.



### Rates of mild adverse effects differed between the vaccines.

In the trials of Arexvy and mResvia, patients reported more pain at the injection site, fatigue, headache, and myalgia than placebo.<sup>9,11</sup> For Abrysvo, rates of side effects were similar to placebo.<sup>10</sup>



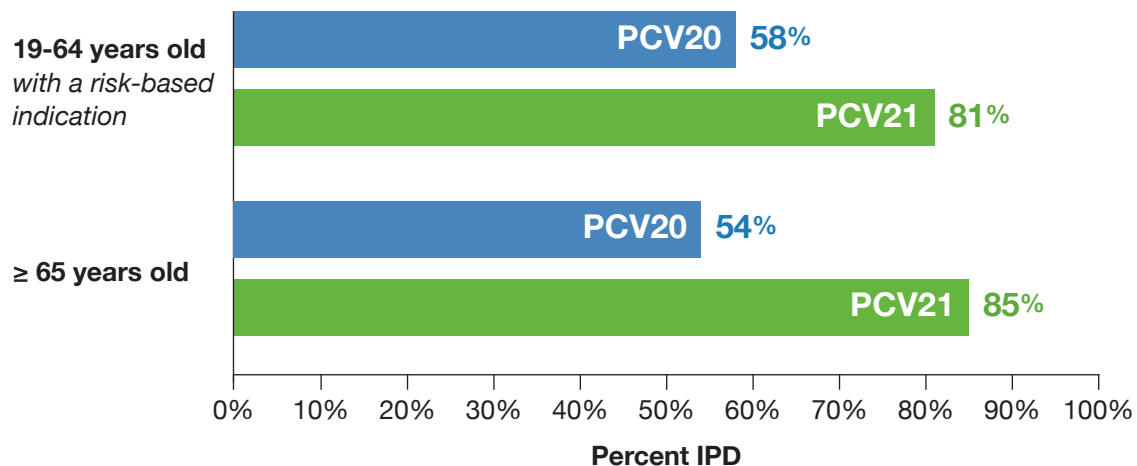
### Neither vaccine had more serious adverse effects than placebo.<sup>9-11</sup>

Guillain-Barre syndrome occurred at a rate of 4.4 and 1.8 cases per million doses administered for Abrysvo and Arexvy, respectively.<sup>13</sup>

# Changing pneumococcal recommendations

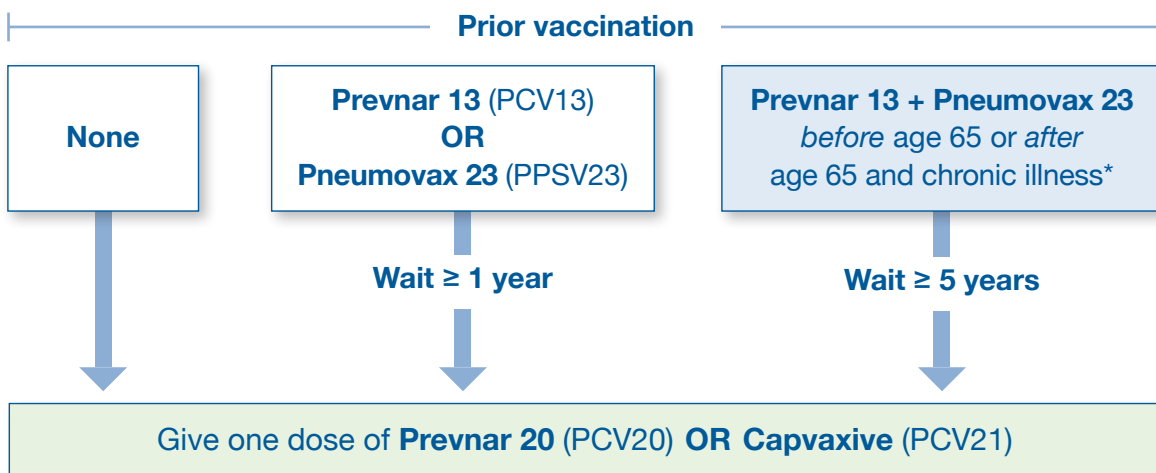
Two different vaccines are recommended for pneumococcal immunization.

**FIGURE 3.** Both vaccines prevent invasive pneumococcal disease (IPD) but cover different commonly circulating serotypes.<sup>14</sup>



One dose prevents pneumococcal pneumonia.

**FIGURE 4.** When to give Prevnar 20 or Capvaxive depends on prior vaccine history and risk factors in adults age  $\geq 65$ .<sup>15,16</sup>



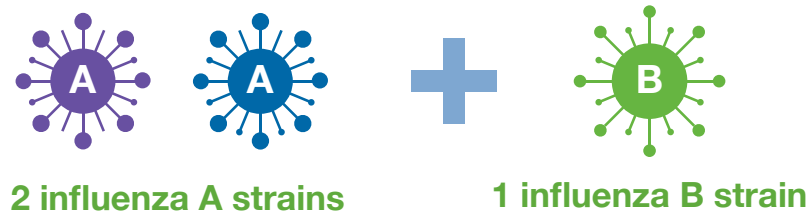
\*Includes chronic heart, liver, and kidney disease, diabetes, living in a nursing home or assisted living, prior pneumonia, use of medications that increase pneumonia (e.g., antipsychotics, opioids, sedatives, proton pump inhibitors)

**If Vaxneuvance (PCV15) and Pneumovax (PPSV23) are given,  
guidance on the schedule can be found at [qrco.de/CDC\\_PC15](https://www.qrco.de/CDC_PC15).**



# Flu vaccines are changing

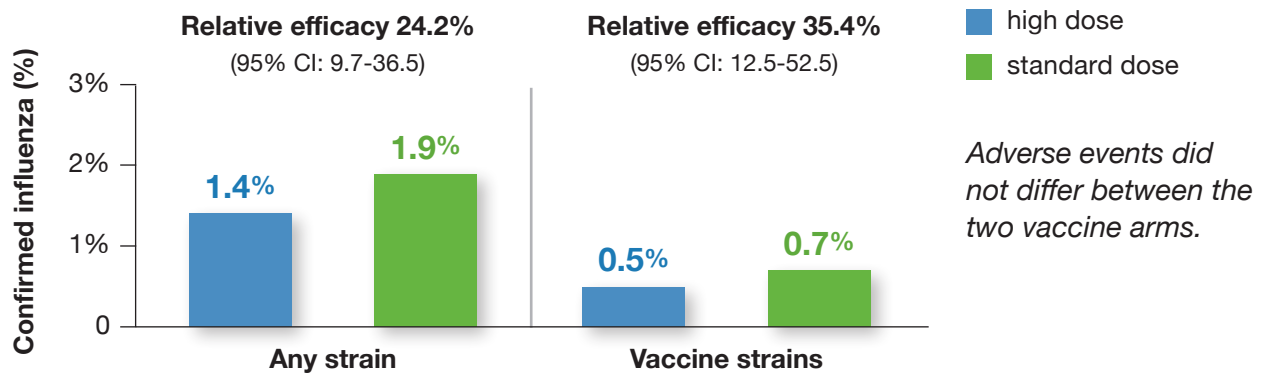
The fall 2024 vaccine covers three influenza strains (trivalent).



## Older adults should get a high dose or adjuvanted vaccine.

Higher dose and adjuvanted formulations produce a more robust immune response and more effectively reduce influenza in older adults vs. standard dose or non-adjuvanted formulations.

**FIGURE 5.** Adults age  $\geq 65$  had fewer influenza infections when given the high dose vaccine compared to the standard dose vaccine.<sup>17</sup>



## Vaccinating older adults for influenza



Adjuvanted or high dose formulations are preferred for patients age  $\geq 65$  whenever available.



Ideally, vaccination should occur in September or October, but it is still useful throughout the influenza season.



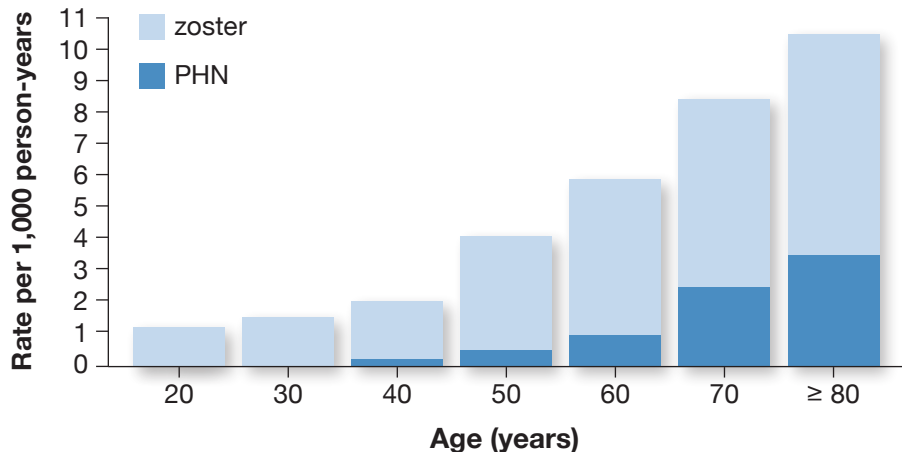
Influenza vaccination may be given:

- at a clinician visit
- at the pharmacy
- at the same time as other immunizations on the same day

# Prevent painful consequences of shingles

Between 20 to 30 percent of adults develop shingles in their lifetime.<sup>18</sup>

**FIGURE 6.** The incidence of zoster and painful post-herpetic neuralgia (PHN) increase greatly with age.<sup>19</sup>



**Shingrix is 90% effective at preventing zoster and painful, disabling PHN.**<sup>20,21</sup>

- **Vaccine side effects are common**, and include fatigue, myalgia, headache, fever, and shivering in half of patients. These reactions may be moderate-to-severe in 1 in 10 patients.<sup>20</sup>
- Shingrix is **two injections given 2 to 6 months apart**.
- **Avoid giving Shingrix at the same time as other vaccines if possible.** While safe, giving Shingrix with influenza vaccine reduces the likelihood that patients will get the next seasonal influenza vaccine.<sup>22</sup>

## Tetanus/Whooping cough

every  
**10**  
years



# Tetanus and pertussis

**A tetanus booster is recommended for all adults every 10 years.**<sup>23</sup>

- Either Td (tetanus, diphtheria) or Tdap (Td + pertussis) can be given every 10 years.
- All patients should receive at least one dose of Tdap at age 11 or older.
- If Tdap vaccination status is unknown, choose Tdap over Td.
- Td and Tdap both result in a similar immune response to tetanus<sup>24</sup> and have similar side effects, most commonly injection site pain.<sup>23</sup>



# Increasing vaccine uptake

Misinformation (false information shared without intent to harm) and disinformation (false information shared with malicious intent) have changed vaccination discussions.

## Talking with patients about vaccination

Prescriber recommendations influence patient vaccination decisions. Using a motivational interviewing framework can help guide the conversation.<sup>25,26</sup>

### 1 Ask permission to talk about vaccination.

*“If it’s ok with you, I would like to spend a few minutes talking to you about \_\_\_\_\_ vaccine(s).”*



### 2 Elicit the patient’s perception about the vaccine.

*“What are your concerns about getting \_\_\_\_\_ vaccine(s)?”*

*“What do you think the benefits are of getting \_\_\_\_\_ vaccine(s)?”*



### 3 Respond to the patient’s questions or concerns.

In cases of misinformation or disinformation, acknowledging the prevalence of incorrect information can facilitate education about the evidence.<sup>27</sup>

Reflect the patient’s position while highlighting the benefit of vaccines.

*“There are a lot of vaccines that are currently recommended for someone in your age group. It can feel like it’s gone too far. However, each vaccine helps your body fight off a different, specific disease. Each one has an important role to play in keeping you healthy.”*



### 4 Use best messaging techniques when reaching out to patients.



Several clinical trials have tested behavioral science interventions that can easily be implemented in primary care settings to increase influenza vaccine uptake.

- Explain to patients that influenza vaccination can prevent heart attacks, especially in patients with heart disease.<sup>28</sup>
- Combine vaccine reminder letters or emails with informational materials highlighting benefits and dispelling myths about influenza vaccination.<sup>29</sup>
- Frame vaccine reminders as the influenza vaccination being “reserved” for the patient.<sup>30</sup>



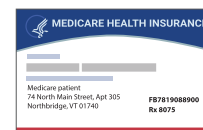
# Where your patients can get vaccinations

**TABLE 2.** Medicare coverage of vaccines impacts where patients can access them.

	Clinician office (Medicare Part B)	Pharmacy (Medicare Part D)
VACCINE		
Influenza	✓	✓
Respiratory syncytial virus (RSV)	✗	✓
Pneumococcal PCV15 PCV20 PCV21 PPSV23	✓	✗
COVID-19	✓	✓
Tetanus / Pertussis	✗	✓
Zoster	✗	✓



Vaccines are typically free to Medicare patients when administered in a covered setting.



Non-Medicare patients eligible for the above vaccinations may receive immunizations in different settings and may be subject to copays.



Newer vaccines may be approved by the FDA and recommended by CDC but may not be immediately covered by insurance, such as Capvaxive and mRESVIA in 2024.

# Key points

- **Review vaccination status with patients** and encourage age-dependent vaccines like pneumococcal, shingles, and tetanus.
- **Recommend seasonal or periodic vaccines** like influenza, COVID, or RSV.
- **Engage patients in discussions about vaccination**, addressing safety concerns and describing the benefits of immunization.

**Visit [AlosaHealth.org/Immunizations](https://AlosaHealth.org/Immunizations)**  
for links to a comprehensive evidence document  
and other resources.

## References:

- (1) Centers for Disease Control and Prevention. Adult Immunization Schedule by Age (Addendum updated June 27, 2024). Nov 16, 2023; [www.cdc.gov/vaccines/schedules/hcp/imz/adult.html](https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html). Accessed July 8, 2024. (2) Centers for Disease Control and Prevention. Influenza vaccination coverage, adults April 12, 2024; [www.cdc.gov/flu/fluview/dashboard/vaccination-adult-coverage.html](https://www.cdc.gov/flu/fluview/dashboard/vaccination-adult-coverage.html). Accessed June 4, 2024. (3) Centers for Disease Control and Prevention. Adult coverage and intent: COVID-19. May 2, 2024; [www.cdc.gov/vaccines/imz-managers/coverage/covidvaxview/interactive/adult-coverage-vaccination.html](https://www.cdc.gov/vaccines/imz-managers/coverage/covidvaxview/interactive/adult-coverage-vaccination.html). Accessed May 21, 2024. (4) Centers for Disease Control and Prevention. RSV Vax View. May 14, 2024; [www.cdc.gov/vaccines/imz-managers/coverage/rsvvaxview/index.html](https://www.cdc.gov/vaccines/imz-managers/coverage/rsvvaxview/index.html). Accessed May 21, 2024. (5) Centers for Disease Control and Prevention. Vaccination coverage among adults. [www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/data-reports/general-population/index.html](https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/data-reports/general-population/index.html). Accessed May 21, 2024. (6) Link-Gelles R, et al. Early Estimates of Updated 2023-2024 (Monovalent XBB.1.5) COVID-19 Vaccine Effectiveness Against Symptomatic SARS-CoV-2 Infection Attributable to Co-Circulating Omicron Variants Among Immunocompetent Adults - Increasing Community Access to Testing Program, United States, September 2023-January 2024. *MMWR Morb Mortal Wkly Rep.* 2024;73(4):77-83. (7) DeCuir J, et al. Interim Effectiveness of Updated 2023-2024 (Monovalent XBB.1.5) COVID-19 Vaccines Against COVID-19-Associated Emergency Department and Urgent Care Encounters and Hospitalization Among Immunocompetent Adults Aged ≥18 Years - VISION and IVY Networks, September 2023-January 2024. *MMWR Morb Mortal Wkly Rep.* 2024;73(8):180-188. (8) Centers for Disease Control and Prevention. RSV vaccination for adults 60 years and older. [www.cdc.gov/vaccines/vpd/rsv/downloads/provider-job-aid-for-older-adults-508.pdf](https://www.cdc.gov/vaccines/vpd/rsv/downloads/provider-job-aid-for-older-adults-508.pdf). Accessed June 24, 2024. (9) Papi A, et al. Respiratory Syncytial Virus Prefusion F Protein Vaccine in Older Adults. *N Engl J Med.* 2023;388(7):595-608. (10) Walsh EE, et al. Efficacy and Safety of a Bivalent RSV Prefusion F Vaccine in Older Adults. *N Engl J Med.* 2023;388(16):1465-1477. (11) Wilson E, et al. Efficacy and Safety of an mRNA-Based RSV PreF Vaccine in Older Adults. *N Engl J Med.* 2023 Dec 14;389(24):2233-2244. (12) Melgar M, et al. Use of Respiratory Syncytial Virus Vaccines in Older Adults: Recommendations of the Advisory Committee on Immunization Practices - United States, 2023. *MMWR Morb Mortal Wkly Rep.* 2023;72(29):793-801. (13) Hause AM, et al. Early Safety Findings Among Persons Aged ≥60 Years Who Received a Respiratory Syncytial Virus Vaccine - United States, May 3, 2023-April 14, 2024. *MMWR Morb Mortal Wkly Rep.* 2024;73(21):489-494. *Erratum:* Vol. 73, No. 21. *MMWR Morb Mortal Wkly Rep.* 2024;73:612. (14) Kobayashi M. Preliminary work group interpretations of EIR and next steps. Feb 29, 2024; [www.cdc.gov/vaccines/acipmeetings/downloads/slides-2024-02-28-29/06-Pneumococcal-Kobayashi-508.pdf](https://www.cdc.gov/vaccines/acipmeetings/downloads/slides-2024-02-28-29/06-Pneumococcal-Kobayashi-508.pdf). Accessed July 15, 2024. (15) Centers for Disease Control and Prevention. Pneumococcal vaccine timing for adults. March 15, 2023; [www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf](https://www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf). Accessed May 21, 2024. (16) Kobayashi M. Summary of Work Group Interpretations of EIR and Policy Option on PCV21 Use in Adults. June 27, 2024. <https://www.cdc.gov/vaccines/acipmeetings/downloads/slides-2024-06-26-28/04-Pneumococcal-Kobayashi-508.pdf>. Accessed July 24, 2024. (17) DiazGranados CA, et al. Efficacy of high-dose versus standard-dose influenza vaccine in older adults. *N Engl J Med.* 2014;371(7):635-645. (18) John AR, Canaday DH. Herpes Zoster in the Older Adult. *Infect Dis Clin North Am.* 2017;31(4):811-826. (19) Harpaz R, et al. Prevention of herpes zoster: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Recomm Rep.* 2008;57(Rr-5):1-30; quiz CE32-34. (20) Cunningham AL, et al. Efficacy of the Herpes Zoster Subunit Vaccine in Adults 70 Years of Age or Older. *N Engl J Med.* 2016;375(11):1019-1032. (21) Lal H, et al. Efficacy of an adjuvanted herpes zoster subunit vaccine in older adults. *N Engl J Med.* 2015;372(22):2087-2096. (22) Rome BN, et al. Influenza Vaccine Uptake in the Year After Concurrent vs Separate Influenza and Zoster Immunization. *JAMA Netw Open.* 2021;4(11):e2135362. (23) Havers FP, et al. Use of Tetanus Toxoid, Reduced Diphtheria Toxoid, and Acellular Pertussis Vaccines: Updated Recommendations of the Advisory Committee on Immunization Practices - United States, 2019. *MMWR Morb Mortal Wkly Rep.* 2020;69(3):77-83. (24) Halperin SA, et al. Randomized Controlled Trial of the Safety and Immunogenicity of Revaccination With Tetanus-Diphtheria-Acellular Pertussis Vaccine (Tdap) in Adults 10 Years After a Previous Dose. *J Pediatric Infect Dis Soc.* 2019;8(2):105-114. (25) Centers for Disease Control and Prevention. Talking with patients about COVID-19 vaccination. Nov 3, 2021; [www.cdc.gov/vaccines/covid-19/hcp/engaging-patients.html](https://www.cdc.gov/vaccines/covid-19/hcp/engaging-patients.html). Accessed June 4, 2024. (26) Sevin AM, et al. Factors influencing adults' immunization practices: a pilot survey study of a diverse, urban community in central Ohio. *BMC Public Health.* 2016;16:424. (27) Centers for Disease Control and Prevention. How to address COVID-19 misinformation. Nov 3, 2021; [www.cdc.gov/vaccines/covid-19/health-departments/addressing-vaccine-misinformation.html](https://www.cdc.gov/vaccines/covid-19/health-departments/addressing-vaccine-misinformation.html). (28) Johansen ND, et al. Electronic nudges to increase influenza vaccination uptake in Denmark: a nationwide, pragmatic, registry-based, randomised implementation trial. *Lancet.* 2023;401(10382):1103-1114. (29) Thomas RE, Lorenzetti DL. Interventions to increase influenza vaccination rates of those 60 years and older in the community. *Cochrane Database Syst Rev.* 2018;5(5):Cd005188. (30) Milkman KL, et al. A megastudy of text-based nudges encouraging patients to get vaccinated at an upcoming doctor's appointment. *Proc Natl Acad Sci USA.* 2021;118(20).

## About this publication

---

**These are general recommendations only; specific clinical decisions should be made by the treating clinician based on an individual patient's clinical condition. More detailed information on this topic is provided in a longer evidence document at [AlosaHealth.org](https://AlosaHealth.org).**

---



This material is provided by **Alosa Health**, a nonprofit organization which accepts no funding from any pharmaceutical company.

This material was produced by Hema Pingali, M.D., Research Fellow; William B. Feldman, M.D., D.Phil., M.P.H., Assistant Professor of Medicine (principal editor); Christopher Worsham, M.D., Assistant Professor of Medicine; Jerry Avorn, M.D., Professor of Medicine; Ellie Grossman, M.D., M.P.H., Instructor in Medicine; Benjamin N. Rome, M.D., M.P.H., Assistant Professor of Medicine; Alex Chaitoff, M.D., Research Fellow; all at Harvard Medical School; and Ellen Dancel, Pharm.D., M.P.H., Director of Clinical Materials Development at Alosa Health. Drs. Avorn, Chaitoff, Feldman, and Rome are physicians at the Brigham and Women's Hospital and Drs. Pingali and Worsham are at Massachusetts General Hospital in Boston. Dr. Grossman practices at the Cambridge Health Alliance. None of the authors accept any personal compensation from any drug company.



Pharmaceutical Assistance  
Contract for the Elderly