

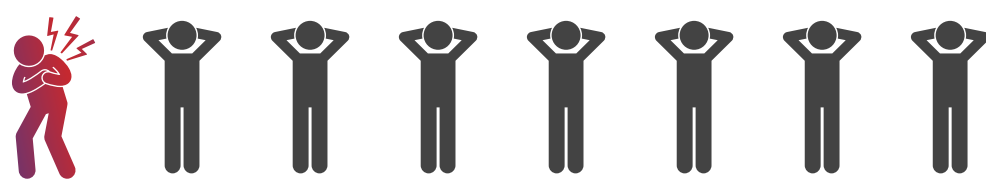
Heart Disease: Risk and Impact of Vaccine-Preventable Diseases

Vaccination is important for heart patients to reduce the risk of vaccine-preventable diseases and their complications¹



Influenza²

In a cross-sectional analysis of >80,000 US adults hospitalized with lab-confirmed influenza,



1 in 8 suffered an **acute CV event**, and **31%** required ICU care

Of patients with underlying CVD, **~21%** had an acute CV event

Shingles⁵

Having CVD was associated with a

34% higher risk of developing HZ infection

according to a large meta-analysis of HZ burden studies (n=16)

COVID-19⁷

An observational study found that, of 8383 patients with heart failure who were hospitalized with COVID-19,

~25% died during hospitalization

Pneumococcal^{3,4}

In a large retrospective cohort study, chronic heart disease was associated with a

4-10x higher risk of **IPD**
~4x

higher risk of PP depending on age, compared with healthy patients

RSV⁶

A prospective, multicenter study in NY across 3 RSV seasons evaluated 1099 adults hospitalized with RSV infection and found that

~49% of patients had a **chronic CV condition**

Patients aged 60+ with CHF were **~4-7x** more likely to require hospitalization

Select ACIP Vaccination Recommendations for Eligible Adults With Heart Diseases^{8,a}



COVID-19, Influenza, Tdap, Pneumococcal

Recommended for all adults who lack documentation of vaccination, OR lack evidence of immunity



RSV,* HZ, Hepatitis B

Not recommended for all adults, but recommended for some adults based on either age OR increased risk for or severe outcomes from disease



LAIV3

Precaution: Might be indicated if benefit of protection outweighs risk of adverse reaction

*Adults 75+ or adults 60 to 74 years who are unvaccinated and at increased risk of severe RSV disease. Note: People can self-attest to the presence of a risk factor. Certain medical and other conditions increase the risk of severe RSV disease, including chronic cardiovascular disease (e.g., heart failure, coronary artery disease, congenital heart disease). Excludes isolated hypertension.

Abbreviations

ACIP = Advisory Committee on Immunization Practices; AHA = American Heart Association; CDC = Centers for Disease Control and Prevention; CHF = congestive heart failure; COVID-19 = coronavirus disease 2019; CV = cardiovascular; CVD = cardiovascular disease; HF = heart failure; HZ = herpes zoster; ICU = intensive care unit; IPD = invasive pneumococcal disease; LAIV = live attenuated influenza vaccine; PP = pneumococcal pneumonia; RSV = respiratory syncytial virus; Td = tetanus and diphtheria; Tdap = tetanus, diphtheria, and acellular pertussis.

Disclaimers

^aThis list is not exhaustive. Please see: Adult Immunization Schedule [Recommended Adult Immunization Schedule for ages 19 years or older; 2025 U.S.] for further information, including recommendations for vaccination in risk groups, shared clinical decision-making, and persons lacking evidence of immunity.

This information is scientific and non-promotional in nature and is not intended for further distribution.

References

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2. Chow EJ, et al. *Ann Intern Med*. 2020;173(8):605-613;
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5. Marra F, et al. *Open Forum Infect Dis*. 2020;7(1):ofaa005;
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8. Recommended adult immunization schedule for ages 19 years or older, United States, 2025. Centers for Disease Control and Prevention. November 21, 2024. Accessed February 14, 2025. <https://www.cdc.gov/vaccines/hcp/imz-schedules/downloads/adult/adult-combined-schedule.pdf>

CDC Adult Immunization Schedule by Medical Condition



AHA Vaccine Recommendations



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