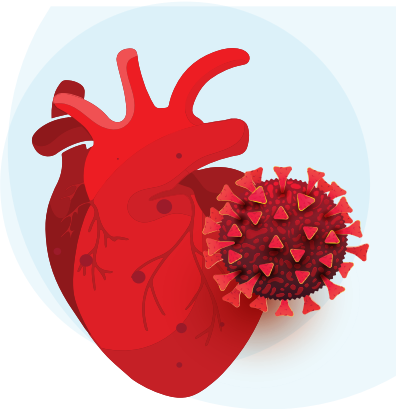
The Link Between Flu and CVD: The Full Story



Fewer than **4 in 10 adults** get a flu shot[1]

1 in 5 Americans gets the flu each year

Lower vaccination rates for adults aged 50-64 years despite underlying conditions

Vaccination rates are consistently only **68%** for adults aged **≥65 years**

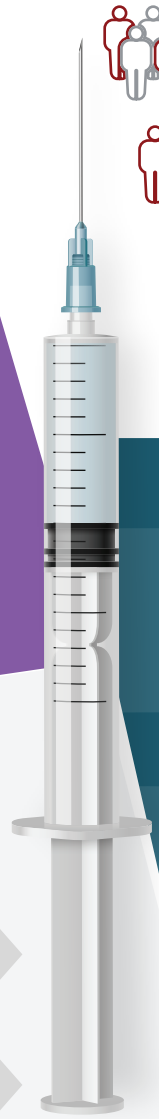
Vaccination

FLU SEASON

October ▶ **March**

For the 2017-2018 flu season, vaccination prevented:[2]

- **7 million** flu illnesses
- Over **100,000** flu-related hospitalizations
- **8,000** flu deaths



A study of nearly 30 million hospital records showed:[1]

Flu shot during hospitalization	▼ **10% Lower heart attack** risk
Annual vaccination **early** in flu season	▼ **Lower mortality** risk

Flu Shots and the Heart

People with CVD:[2]

- **10x** higher risk of MI within 3 days of getting the flu
- **More likely** to have MI even weeks after the flu

Annual Influenza Vaccination

Benefits for CVD Patients:[3]

Lower Risk of **MACE** — ▼ **36%**

Benefits for HF:[3]

- Lower Mortality Risk — ▼ **50% flu season**; ▼ **20% all season**
- Lower CVD-related Hospitalization — ▼ **22%**

The Role of the CV Clinician

Recommend

- **Identify candidates** for vaccination in EMR or during office visits
- Suggest annual vaccination **early in the flu season** (September to October)[4]

Inform

- **Educate patients** on the need and benefits
- Have **ongoing conversations** with patients about the impact of getting vaccinated on their CV health
- **Be proactive** in broadcasting the message to patients outside of clinical visits

Take Action

- Employ protocols and **standing orders** for flu vaccine
- **Add reminders** at check-in, within your EMR, and on patient visit summary documents
- **Provide CV team training** at the start of each flu season

Call To Action Recommend influenza vaccination during regular office visits as a safe and cost-effective CV intervention. For additional resources, visit www.ACC.org/FluVaccine.

Abbreviations: CV : Cardiovascular | EMR : Electronic Medical Record | HF : Heart Failure | MACE : Major Adverse Cardiac Events | MI : Myocardial Infarction.

References: 1. Flu Shot Helps Prevent Heart Attack. CardioSmart News. 03/08/2019. | 2. Flu Shots And Your Heart. CardioSmart. | 3. Getting Flu Vaccine Cuts Risk of Death by Half in People with Heart Failure. ACC.org. | 4. Daniel Modin, et al. Circulation 2019;139:575–86. | 5. Udell JA, et al. JAMA 2013;310:1711-20. | 6. DeVore AD, Bhatt AS. Circulation 2019;139:587- 9. | 7. Vaccination Guidance During a Pandemic. CDC. | 8. Influenza (Flu). CDC. | 9. Smith SC, et al. J Am Coll Cardiol 2006;47:2130-9.

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