

# ***The Partnership for Sepsis and Aging***



***Protecting the Lives and Well Being of Our Nation's  
Older Adults***

December 6, 2024



**Greg Olsen,**

TPSA Chair and Acting Director of  
the New York State Office for the  
Aging (NYSOFA)



# Today's Agenda

- **Welcome and Introduction** – Greg Olsen, TPSA Chair and Acting Director, New York State Office for the Aging (NYSOFA)
- **Sepsis Overview** - Tom Heymann, Sepsis Alliance
- **Public Awareness and Education Resources** - Megan Jones, Sepsis Alliance
- **Healthcare Professional Training Resources** - Megan Jones, Sepsis Alliance
- **Quality Improvement Resources** - Al Cardillo, Home Care Association of New York State (HCA)
- **The role of vaccination in preventing severe outcomes among older adults** - Dr. Pragna Patel, CDC
- **Q&A, Conclusion**



# The Partnership for Sepsis and Aging (TPSA)

*Mission: To improve the health and well-being of the nation's older adults by improving sepsis awareness, prevention, early diagnosis, and treatment, including support for the millions of sepsis survivors who may face significant struggles in their recovery.*

- Sepsis takes the lives of 350,000 adults each year in the U.S.
- Sepsis disproportionately impacts older adults with more than 70% of cases occurring in individuals aged 60 or older.
- Nursing home residents are 6 times more likely to present with sepsis in the emergency department.

**To learn more visit:**

<http://www.agingandsepsis.org/>

To become an organization member,  
scan the QR code below



To learn more about Sepsis and Aging,  
scan the QR code below

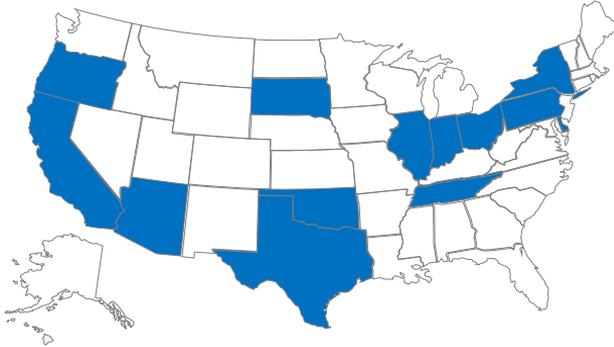


# TPSA Collected Data

- 49 registered TPSA members since March 2024
- Several hundred meeting attendees

## States Represented in TPSA

Arizona  
California  
Illinois  
Indiana  
New York  
Ohio  
Oklahoma  
Pennsylvania  
Rhode Island  
South Dakota  
Tennessee  
Texas  
Washington



## States greatest needs when it comes to sepsis and aging

- Public Awareness and Education
- Healthcare Professional (HCP) Training
- Quality Improvement



# TPSA Resources

- Dedicated website: [agingandsepsis.org/](http://agingandsepsis.org/)

- Quarterly TPSA meetings with subject matter experts

- TIME badges in various languages

- TPSA Toolkit and newsletter\*



The Partnership for Sepsis and Aging (TPSA)

**TPSA Member Quick-Start Promotional Toolkit**

November 2024

\* Coming soon! Will be available for registered TPSA members only



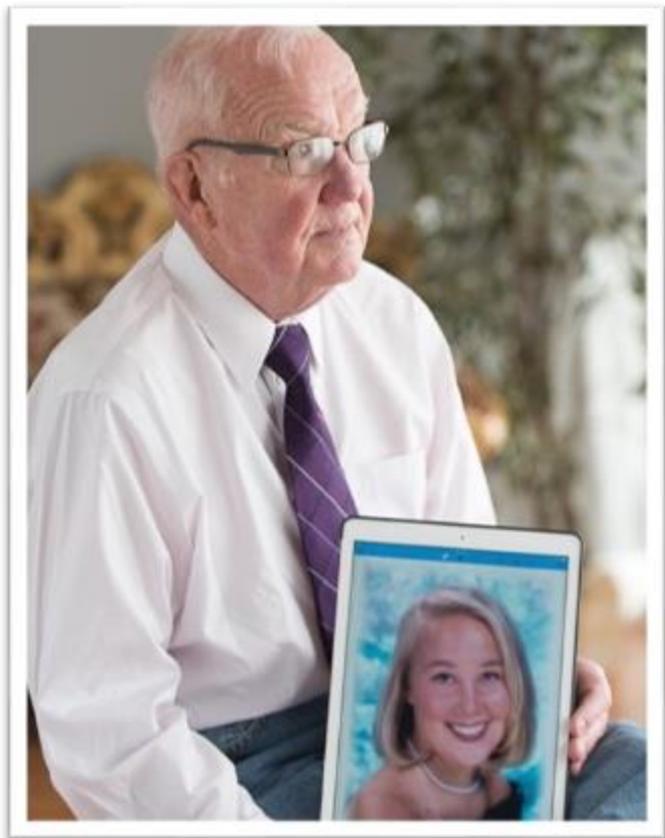
# Housekeeping

- Please submit any questions in the Q&A chat to be answered at the end of the presentation.
- All attendee cameras and audio have been disabled.
- Presentation deck will be emailed after the meeting.





**Tom Heymann,**  
CEO and President, Sepsis Alliance



Sepsis Alliance Founder Carl Flatley, DDS, MSD, with daughter, Erin

# About Sepsis Alliance

**FOUNDED IN 2007**

- Started out of a personal tragedy and national need
- Nation's first and leading sepsis patient advocacy organization
- Co-founded Global Sepsis Alliance 2010
- Serving the needs and interests of sepsis patients and survivors
- Trusted partner to patients, healthcare providers, researchers, government, and industry
- Vision: A world in which nobody is harmed by sepsis.



Sepsis Alliance earns top rankings from Great Nonprofits, Guidestar, and Charity Navigator for transparency and accountability.

Platinum  
Transparency  
2024

Candid.

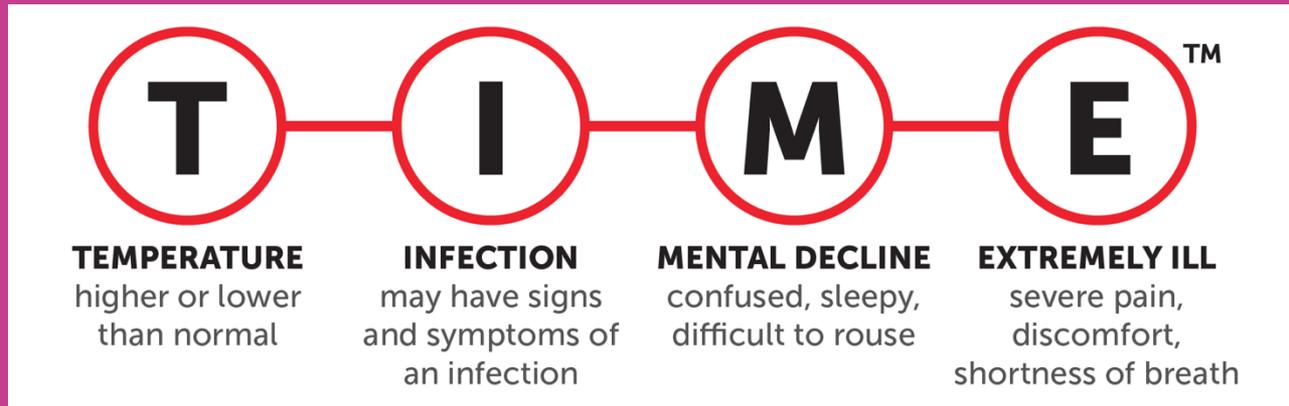
Charity  
Navigator



+ FOUR-STAR +

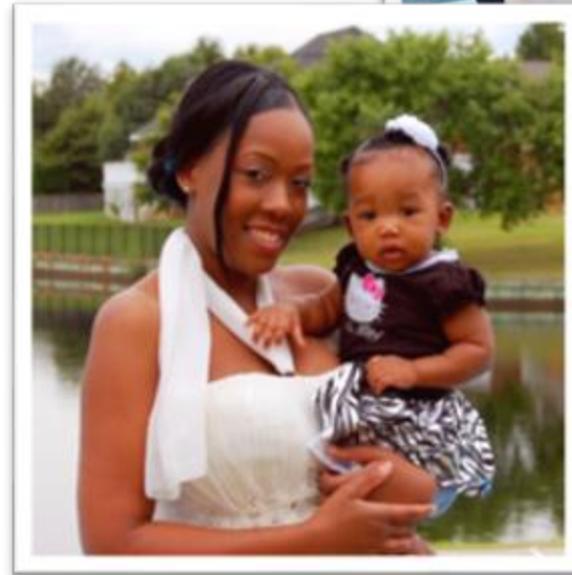
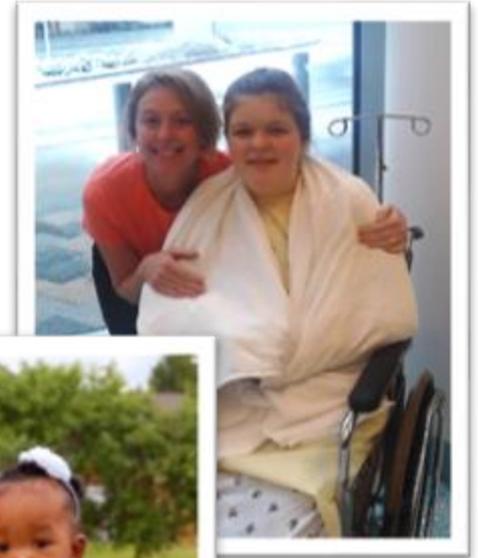
# Sepsis

Is a life-threatening emergency that happens when your body's response to an infection damages vital organs and, often, causes death.



# The Burden of Sepsis in the U.S.

- Sepsis is the **#1** cause of deaths in U.S. hospitals.
- Sepsis is the **#1** cost of hospital and skilled nursing care - **\$62B/year!**
- Sepsis is the **#1** cause of hospital readmissions.
- Yet, **87%** of sepsis originates in home and community, highlighting the urgency of prevention, early identification and treatment, and home health role!
- Sepsis causes **14,000** amputations annually.
- Almost **60%** of sepsis survivors experience worsened cognitive, mental, and/or physical function.
- Maternal sepsis is the **2<sup>nd</sup> leading cause** of maternal death in the U.S.
- Each day more than 200 children are diagnosed with severe sepsis – **75,000** cases per year. 18 die each day.
- Black and "other nonwhite" individuals have nearly twice the incidence of sepsis as white individuals.



# The Burden of Sepsis on Older Adults

- Adults aged 65 and older are **13 times more likely to be hospitalized** with sepsis than people younger than 65.
- Nursing home residents are over **6 times more likely** to present with sepsis in the emergency room than non-nursing home residents.
- Adults aged 65 and older are **less likely to return home** (54%) following their hospital stay.
- Older sepsis survivors (65+) experience on average 1 to 2 **new limitations on activities of daily living** (e.g., bathing, dressing, managing money) after hospitalization.
- Sepsis survivors aged 65 and older experience **more severe long-term cognitive and physical disability**.
- In the United States, **three-fourths of all sepsis deaths** are in patients 65 years of age or older.





**Megan Jones,**  
Senior Community and Content  
Manager, Sepsis Alliance

# Sepsis 911 Community Education Kit

*Sepsis.org --> Get Involved --> Educate Your Community*

<https://www.sepsis.org/education/resources/community-education/>

- Designed for lay people to educate their own communities about sepsis basics, including definitions, symptoms, and actions to take if sepsis is suspected.
- Kit includes:
  - Educational slideshow and script.
  - Sepsis 911 video.
  - Customizable poster and presentation promotion materials and more.

**SEPSIS** 9 1 1  
COMMUNITY EDUCATION PRESENTATION



# Sepsis and Aging

<https://www.sepsis.org/sepsisand/aging/>

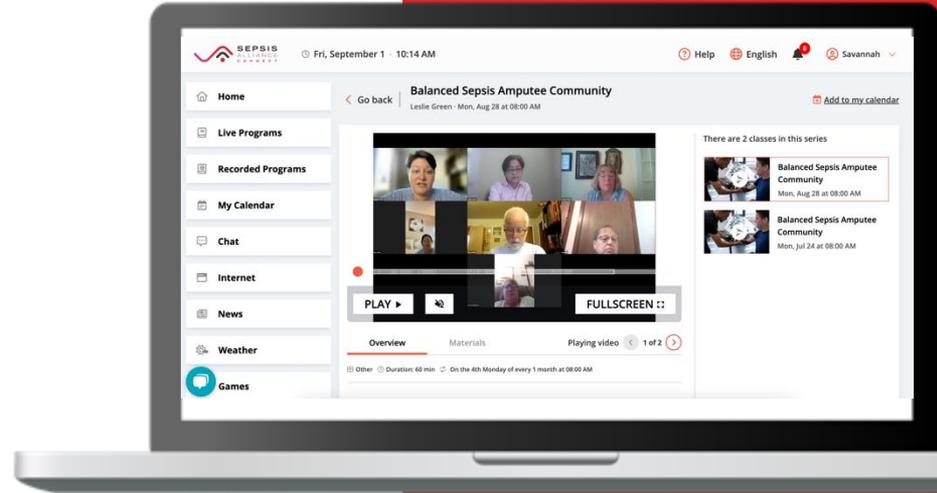
- Sepsis and Aging Information Guide, Trifold, and Fact Sheet.
- Sepsis and Home Care.
- Sepsis and the Immune System.
- Flu Shot resources for older adults.
- Faces of Sepsis™ - real experiences of older adults and sepsis.



# Sepsis Alliance Connect

[SepsisConnect.org](https://SepsisConnect.org)

- Virtual support community designed for the millions of people affected by sepsis annually, including survivors, caregivers, and those who lost a loved one.
- Launched in June 2022 with the support of bioMérieux and LB Charitable Foundation.
- More than 3,000 members to date.



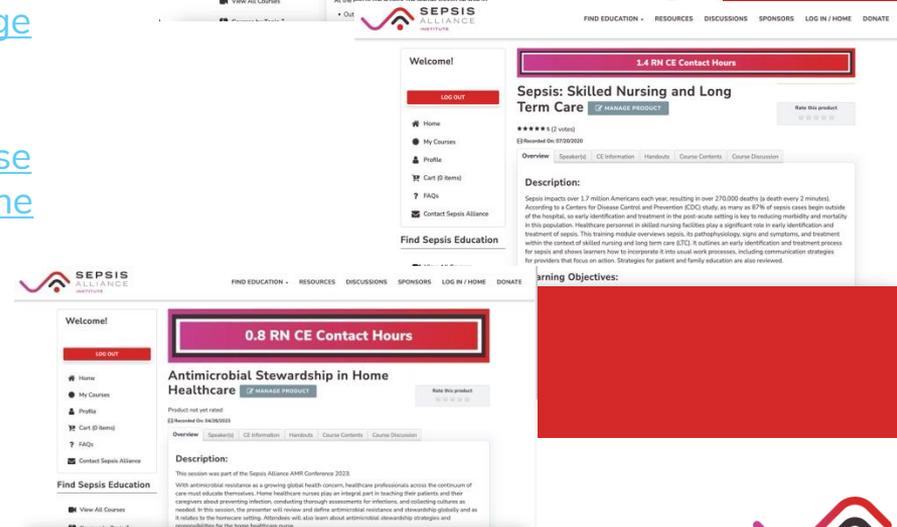
# Sepsis Alliance Institute

[SepsisInstitute.org](https://SepsisInstitute.org)

- More than 55,000 Sepsis Alliance Institute Members

## Sepsis & Aging Resources

- [Sepsis in Older Adults: Are We Up for the Challenge](#)
- [Sepsis and Aging for Case Workers](#)
- [Sepsis: Skilled Nursing and Long Term Care](#)
- [Sepsis in Nursing Homes: Recognition and Response](#)
- [Infection Prevention and Sepsis Recognition in Home Care](#)
- [Sepsis and Home Health Care](#)
- [Antimicrobial Stewardship in Home Health](#)

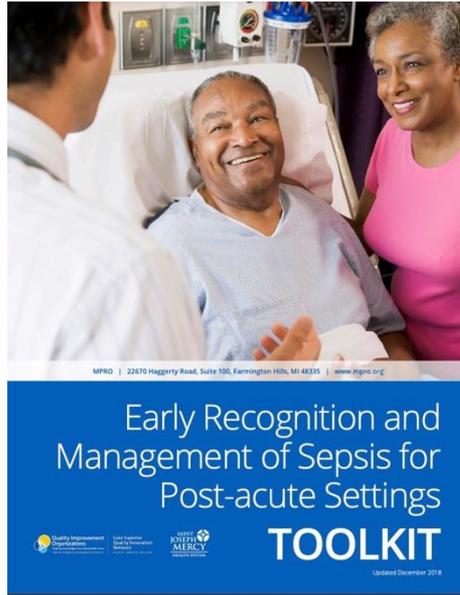




**Al Cardillo,**  
President and CEO of the Home  
Care Association of New York  
State (HCA-NYS)



# Quality Improvement Resources



- Early Recognition and Management of Sepsis for Post-acute Settings Toolkit provided by St. Joseph Mercy Health System & Lake Superior Quality Innovation Network found on Sepsis Alliance Institute [here](#).



## HCA SEPSIS SCREENING TOOL

Screening Tool	Algorithm	Zone Tool	Protocol

**Authorized Use**  
To control for quality and use standards, the authorized access to or use of the HCA pediatric sepsis tool is permitted only via use agreement with HCA. Please note that it is illegal to use, copy, and/or distribute the tool for clinical or business use without the express written permission of the Home Care Association, Inc.

[Stop Sepsis at Home – Home Care Association of NYS](#)



**INFECTION  
PREVENTION**

**IS SEPSIS  
PREVENTION™**

*THE MORE YOU DO TO PREVENT INFECTIONS,  
THE MORE YOU CAN PREVENT SEPSIS.*

**Learn more at [Sepsis.org](https://Sepsis.org)**



**Pragna Patel, MD, MPH,  
DTM&H**

Chief Medical Officer,  
Coronaviruses and Other  
Respiratory Viruses Division  
National Center for Immunizations  
and Respiratory Diseases,  
Centers for Disease Control and  
Prevention (CDC)



# The Role of Vaccination in Preventing Severe Outcomes Among Older Adults

National Center for Immunization and Respiratory Diseases  
December 6, 2024

# Overview of Sepsis

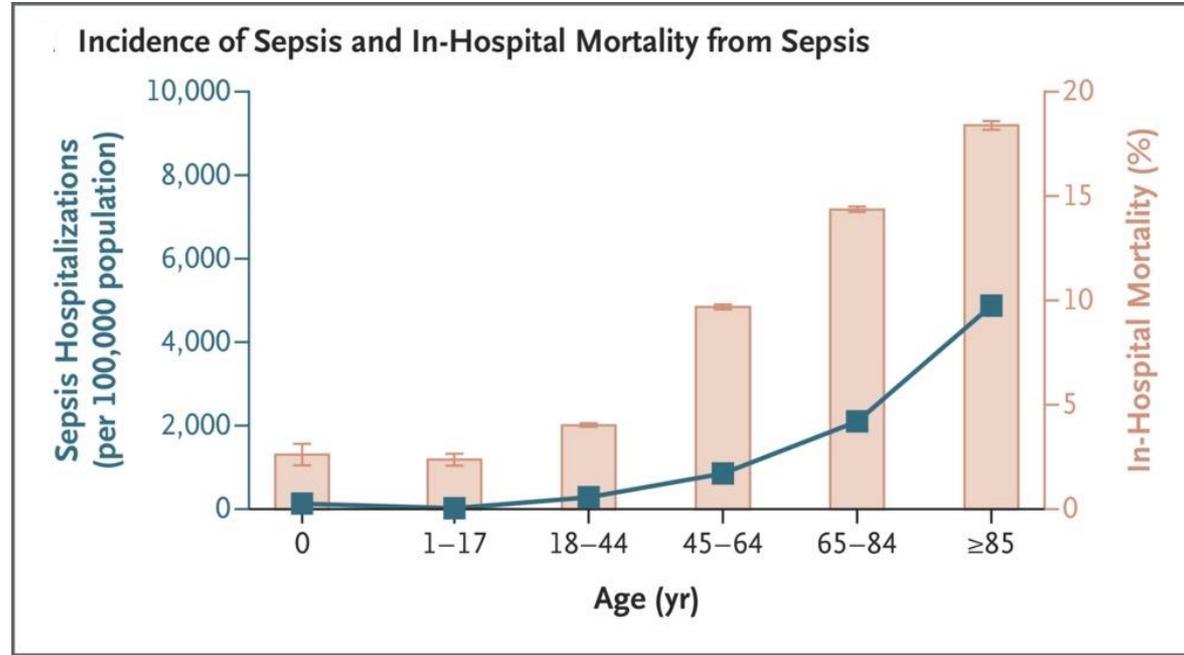
## KEY POINTS

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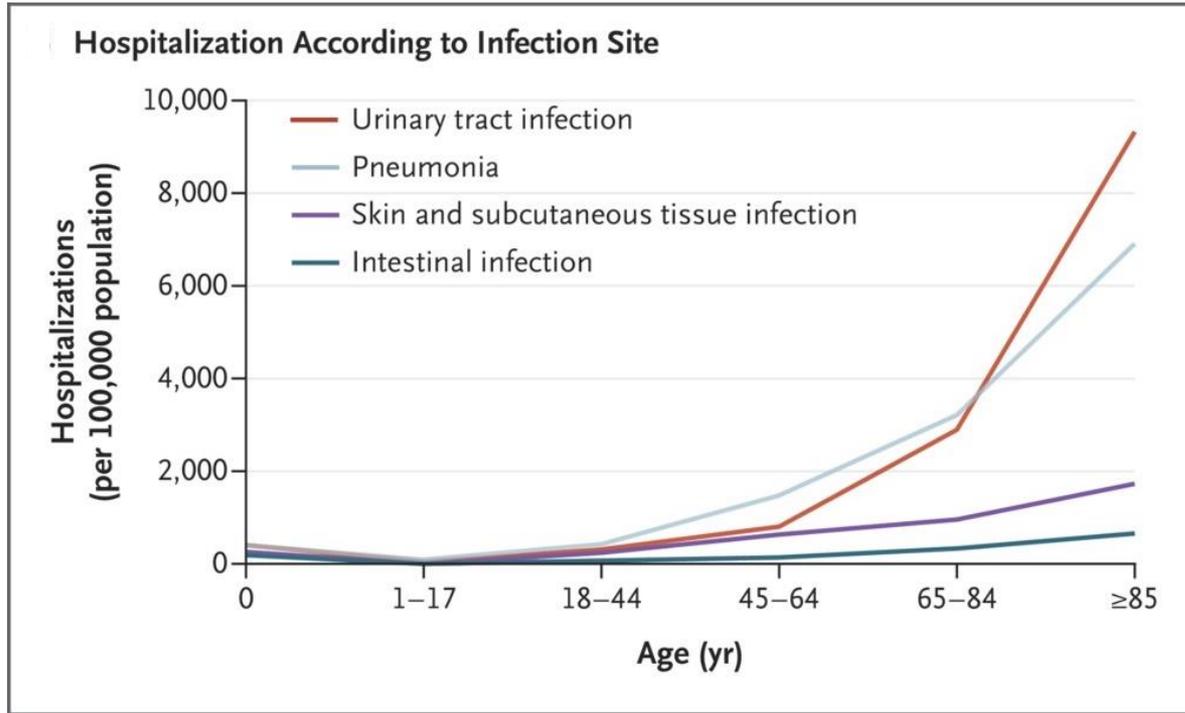
### SEPSIS AND SEPTIC SHOCK

- Sepsis is a syndrome of life-threatening acute organ dysfunction due to bacterial, fungal, parasitic, or viral infection.
- Factors that affect the risk of sepsis include age, immune status, pathogen virulence, and pathogen burden.
- Sepsis is associated with long-term complications among survivors.
- Biologic features of sepsis include dysregulated inflammation, immunosuppression, and vascular injury.
- Management of sepsis focuses on prompt infection control and hemodynamic resuscitation.
- Research is ongoing to determine whether and how to modulate the host immune response in order to improve outcomes.

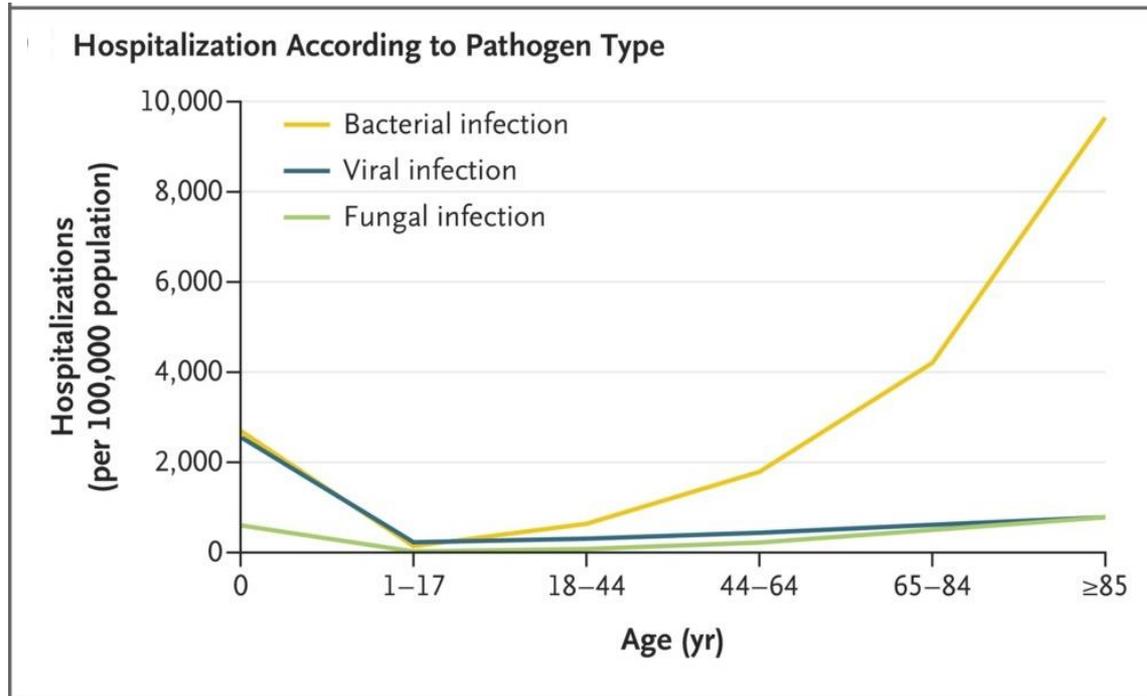
# Burden related to Sepsis by Age Group



# Burden related to Sepsis by Infection Site



# Burden related to Sepsis by Pathogen Type



# Vaccines for Older Adults



# Fall and Winter Immunization Guide

	2024-2025 <b>COVID-19</b> <sup>1</sup>	2024-2025 <b>Influenza</b> <sup>2</sup>	<b>RSV</b> <sup>3</sup>
 <b>Infants &amp; Children</b>	<b>6 months - 17 years</b> Some children 6 months through 4 years <u>may need</u> multiple doses	<b>6 months - 17 years</b> Some children 6 months through 8 years <u>may need</u> two doses $\geq$ 4 weeks apart	<b>All infants &lt;8 months* and children 8 through 19 months with risk factors <u>should get</u> nirsevimab</b> Typically, October through March, *if birthing parent not vaccinated with maternal RSV vaccine
 <b>Pregnant People</b>	<b>All</b>	<b>All</b>	<b>32–36 weeks gestation should get RSV vaccine (Pfizer, Abrysvo only)</b> Typically, September—January
 <b>Adults 18-59 yrs</b>	<b>All</b>	<b>All</b>	See pregnant people
 <b>Adults <math>\geq</math>60+ yrs</b>	<b>All</b> Two doses recommended for adults $\geq$ 65 yrs, 6 months apart	<b>All</b> High-dose, recombinant, or adjuvanted preferred for $\geq$ 65 yrs, if available	<b>All adults <math>\geq</math>75 and adults 60 through 74 years with risk factors <u>should get a single dose of RSV vaccine at this time.</u></b>

<sup>1</sup> People ages 6 months and older with moderate or severe immunocompromise should get 2 doses of 2024-2025 COVID-19 vaccine 6 months (minimum interval 2 months) apart and may also get additional doses of COVID-19 vaccine under shared clinical decision-making. If previously unvaccinated or receiving initial vaccination series, more doses may be needed.

<sup>2</sup> Solid organ transplant recipients ages 18 through 64 yrs on immunosuppressive medications may get high-dose or adjuvanted flu vaccine, if available, without a preference over other age-appropriate inactivated or recombinant influenza vaccines.

<sup>3</sup> All infants should be protected by either maternal RSV vaccine or nirsevimab. Both are not needed for most infants. For infants born during October through March, nirsevimab should be administered in the first week of life—ideally during the birth hospitalization.

# Adults aged 60-74 years at higher risk for RSV should get the RSV vaccine



**Chronic cardiovascular disease**



**Severe obesity**  
(body mass index  $\geq 40$  kg/m<sup>2</sup>)



**Diabetes mellitus**  
complicated by chronic kidney disease, neuropathy, retinopathy or other end-organ damage



**Chronic lung or respiratory disease**



**End stage renal disease/dialysis dependence**



**Chronic hematologic conditions**



**Chronic liver disease**



**Neurological or neuromuscular conditions** causing impaired airway clearance or respiratory muscle weakness



**Residence in a nursing home**



**Moderate or severe immunocompromise**



Other factors that a provider determines would increase risk of severe disease due to viral respiratory infection (e.g., frailty)

# Older adults also need to be protected against other diseases like shingles and pneumococcal disease

## Shingles

- In the U.S., ~1 million people have shingles every year and about 1 in 3 people will have shingles in their lifetime
- Shingles complications increase with age
- **All adults 50+ should get 2 doses of the shingles vaccine separated by 2-6 months**

<https://www.cdc.gov/vaccines/vpd/shingles/hcp/shingrix/recommendations.html>

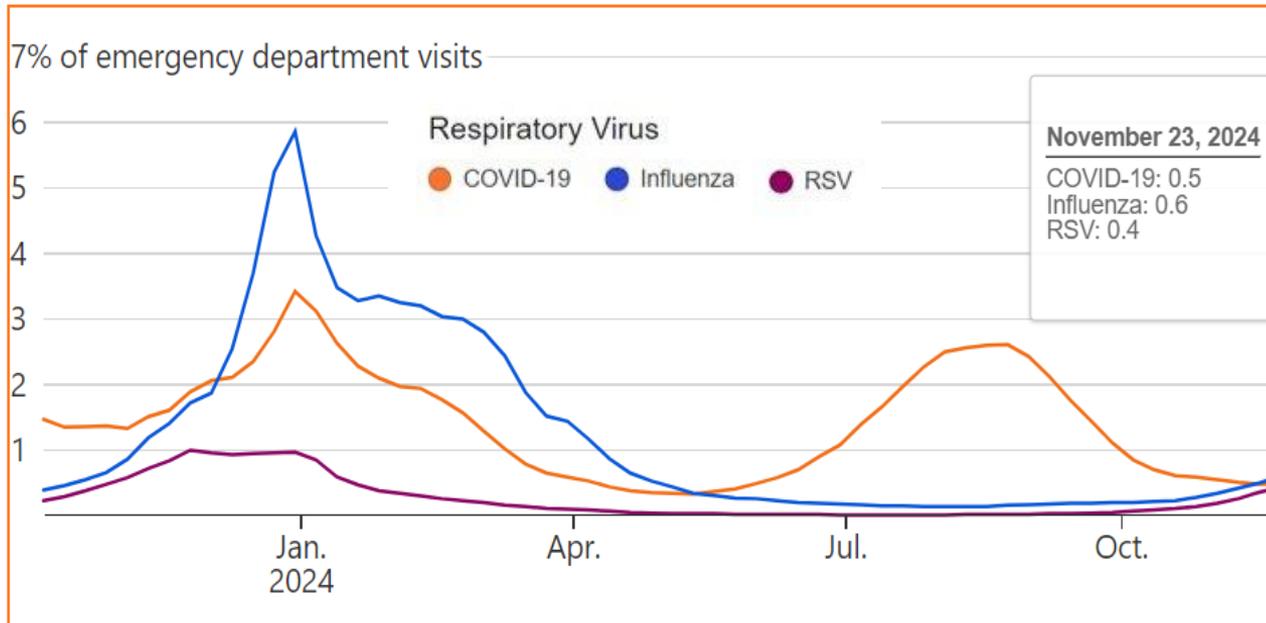
## Pneumococcal Disease

- Pneumococcus is a leading bacterial cause of pneumonia in adults
  - More than 100,000 U.S. adults hospitalized every year
  - In one study, more than one-third of adults aged  $\geq 65$  years died within a year of being hospitalized for community-acquired pneumonia
- Adults with certain medical conditions (e.g. chronic heart, lung, and renal disease) at higher risk
- **All unvaccinated adults 50+ should get pneumococcal conjugated vaccine (e.g., 15-valent, 20-valent, or 21-valent)**

<https://www2a.cdc.gov/vaccines/m/pneumo/pneumo.html>

# CURRENT TRENDS: Flu & COVID-19 activity low or stable; however, emergency room visits due to RSV increasing in the Southeast

## Emergency department visits for viral respiratory illness



SCAN QR CODE  
to access  
dashboards

# WHAT'S HAPPENING IN YOUR COMMUNITY?

## Respiratory Virus Dashboards

### Respiratory Illnesses Data Channel

This site is updated on Fridays. New data and features added throughout the fall.

#### WHAT TO KNOW

- As of September 6, 2024, the amount of respiratory illness (fever plus cough or sore throat) causing people to seek healthcare is low nationally.
- COVID-19 activity remains elevated nationally, but there are continued signs of decline in many areas.



### Your community snapshot

Select your state / territory and your county to receive information on COVID-19, Flu, and RSV in your community

United States  All counties

The CDC may not have data for all states, counties, or territories. [Read more](#)

### Overall respiratory virus activity in the United States

Low

Based on healthcare visits for fever and cough or sore throat. [Read more](#)

### Wastewater viral activity level in the United States



Wastewater (sewage) monitoring may provide an early warning that levels of infections are increasing or decreasing in your community, even when people don't have symptoms. [Read more](#)

\* Flu levels are for Influenza A only

### Emergency department visits in the United States



#### ON THIS PAGE

- Your community snapshot
- Weekly national summary
- Protect yourself and your community
- Continue exploring these data
- Explore related data
- Stay up to date with the CDC bulletin

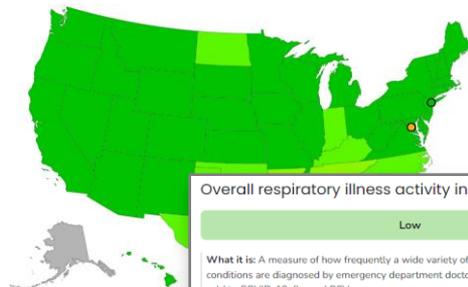
#### RELATED PAGES

- Activity Levels
- Illness Severity
- Emergency Department Visits
- Hospitalizations
- Release Notes & FAQs

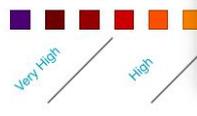
VIEW ALL

### Level of Respiratory Illness Activity

Activity levels determined weekly based on the percentage of visits to enrolled outpatient healthcare providers or emergency departments for fever and cough or sore throat reported to ILINet. Visits can be attributed to a variety of respiratory pathogens that cause these symptoms. Activity levels reflect how the percentage in the most recent week compares to what that jurisdiction typically experiences during low circulation periods. Trend information for the percentages used to calculate activity levels can be found at: [National, Regional, and State Level Outpatient Illness and Viral Surveillance \(cdc.gov\)](#). Refer to [data notes](#) for more details.



Select a level to add or remove it from



### Overall respiratory illness activity in Georgia

Low

**What it is:** A measure of how frequently a wide variety of respiratory symptoms and conditions are diagnosed by emergency department doctors, ranging from the common cold to COVID-19, flu, and RSV.

**Why it matters:** Summarizes the total impact of respiratory illnesses, regardless of which diseases are causing people to get sick.

[See more data](#)  
[Learn about this measurement](#)

### Wastewater viral activity level in Georgia

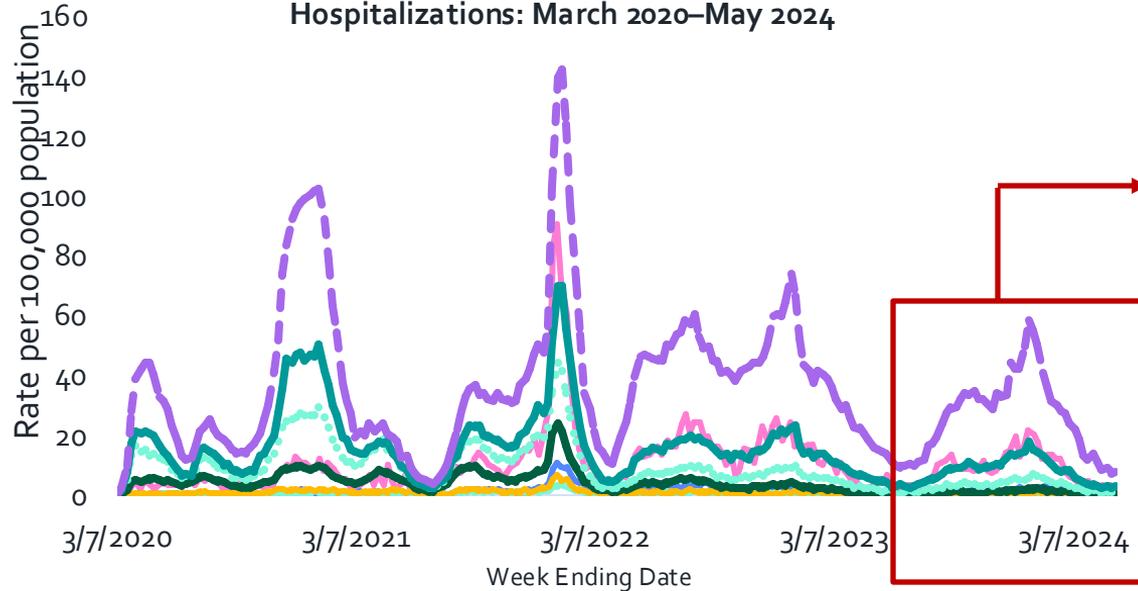


**Evidence**

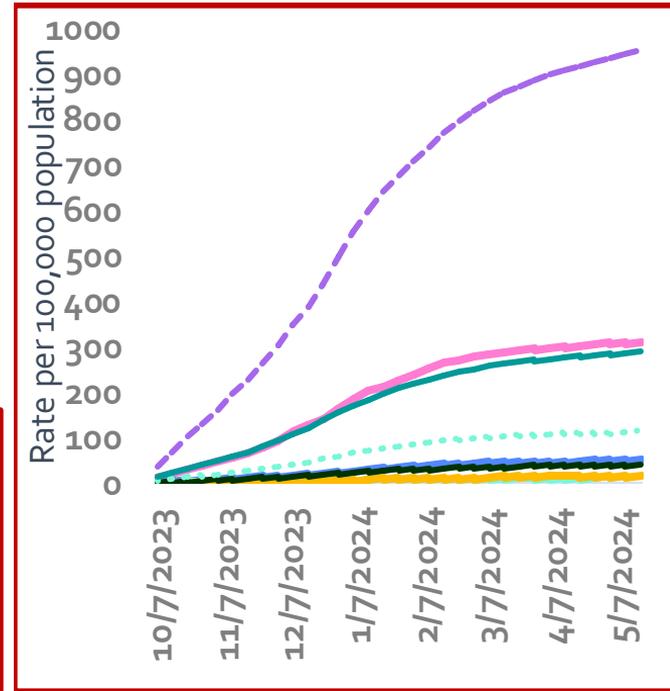
# Why vaccinate against COVID-19?

Adults 75+ at highest risk of being hospitalized for COVID-19 compared with any other age group

Weekly Population-Based Rates of COVID-19-Associated Hospitalizations: March 2020–May 2024



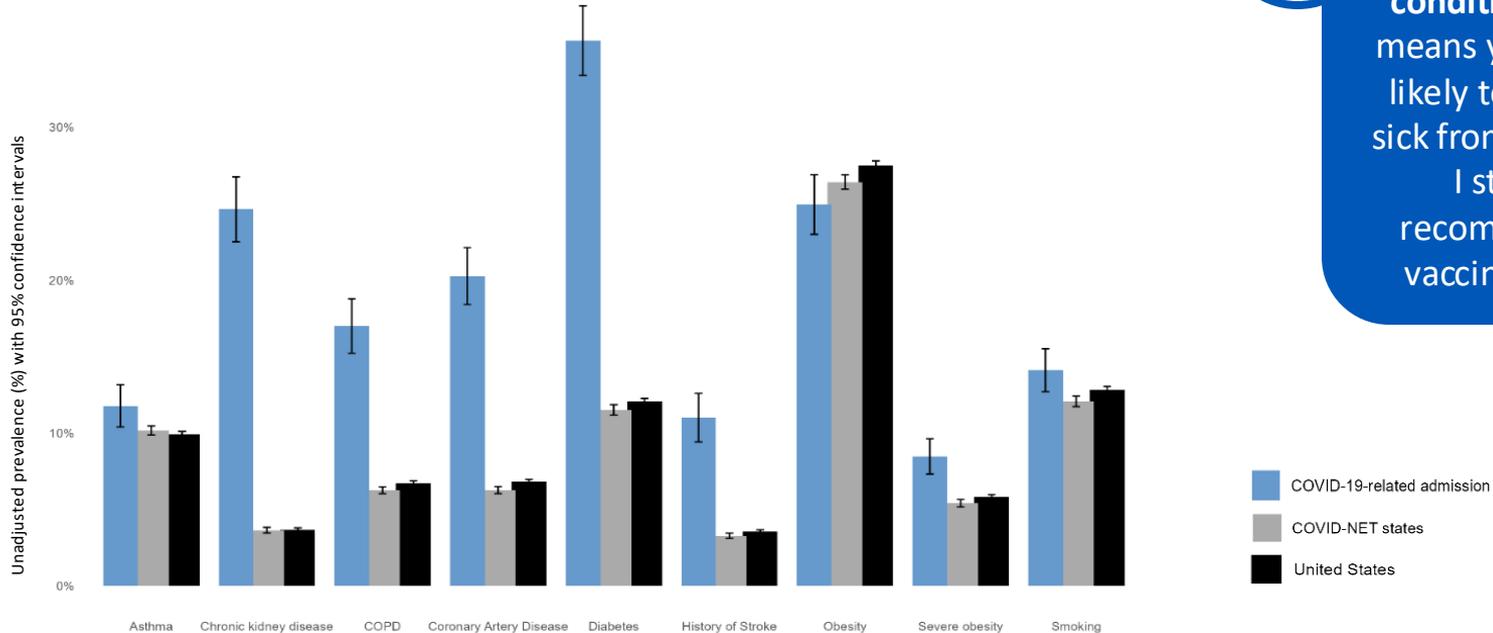
- <6 months
- 6 months–4 years
- 5–11 years
- 12–17 years
- 18–49 years
- 50–64 years
- 65–74 years
- ≥75 years



# Why vaccinate against COVID-19?

Chronic conditions like diabetes and heart disease were commonly seen in patients hospitalized with COVID-19

Prevalence of chronic conditions among hospitalized adults in COVID-NET, adults in COVID-NET states, and adults in the United States aged ≥18 years, 2022



You have [**medical condition**], which means you're more likely to get really sick from COVID-19. I strongly recommend this vaccine for you.

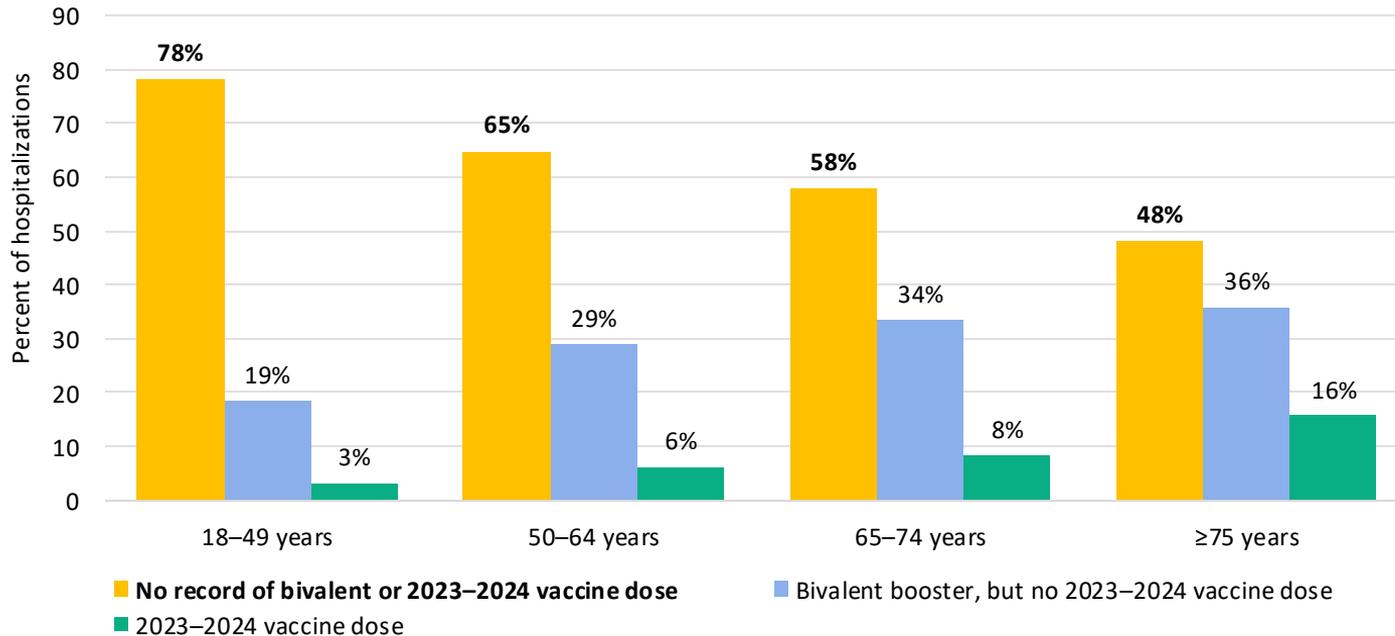
# Why vaccinate against COVID-19?

More than half of adults hospitalized with COVID-19 did not receive a COVID-19 vaccine within the year before they were hospitalized



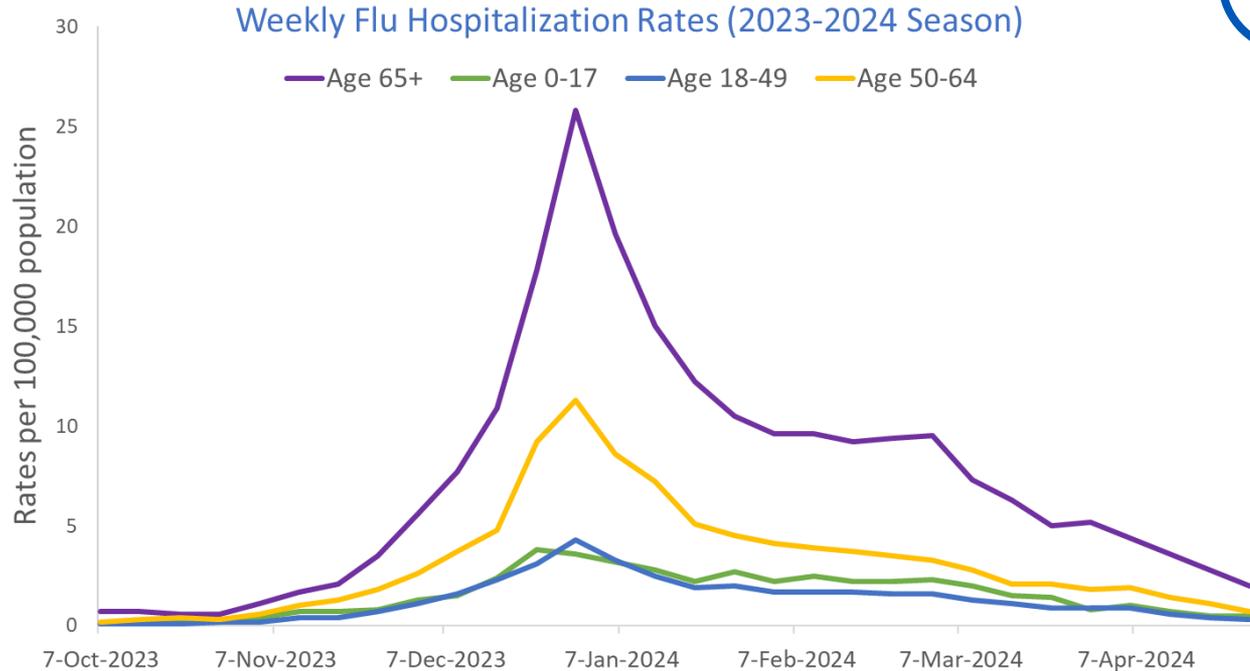
Your age makes you more likely to get really sick from COVID-19. The COVID-19 vaccine cuts your risk of being hospitalized in half.

Vaccination Status among Adults Ages  $\geq 18$  Years with COVID-19 associated Hospitalization, by Age Group— COVID-NET, October 2023–March 2024



# Why vaccinate against influenza?

Influenza hospitalization rates highest in adults 65 years and older



  
Clinical  
Tip

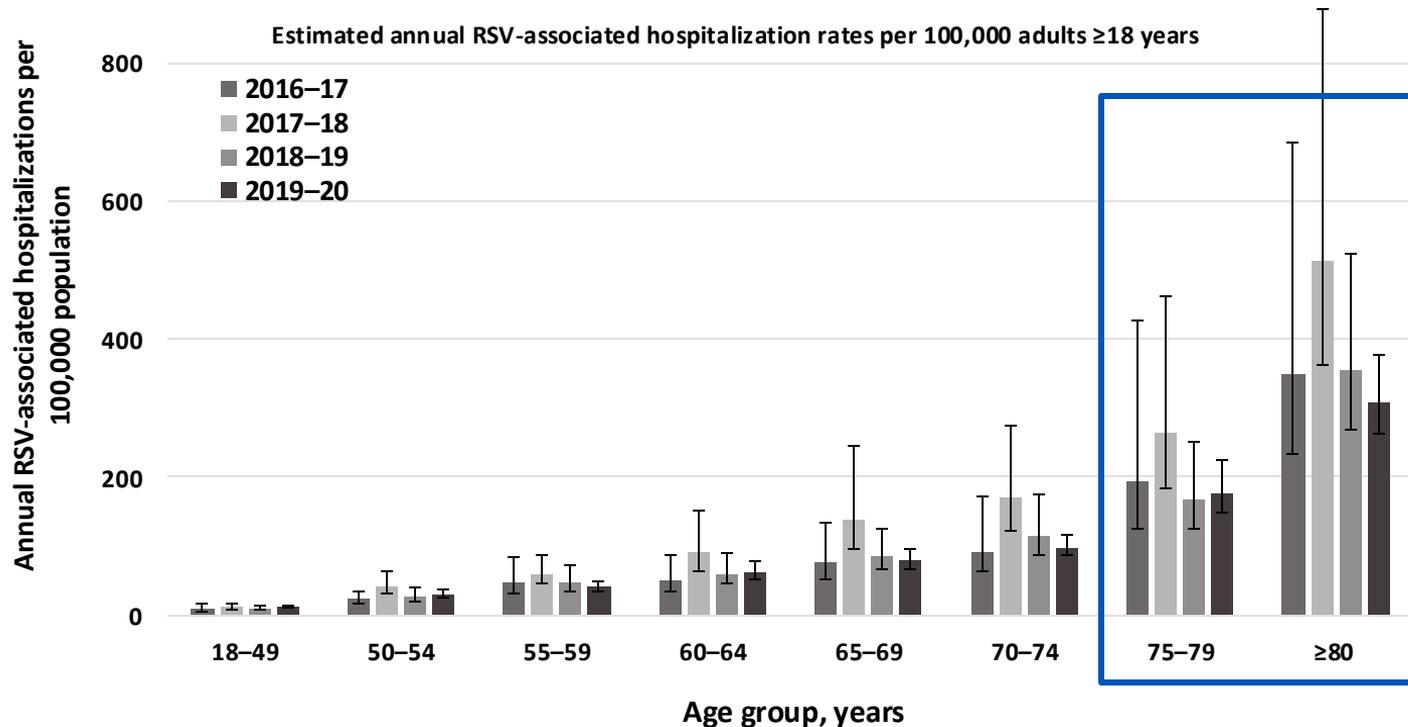
Your age makes it more likely that you could get very sick from the flu, I strongly recommend the flu vaccine for you.

# Why vaccinate older adults against RSV?

RSV hospitalization increases with age, steep rise in adults 75+

Key Patient  
Counseling  
Points

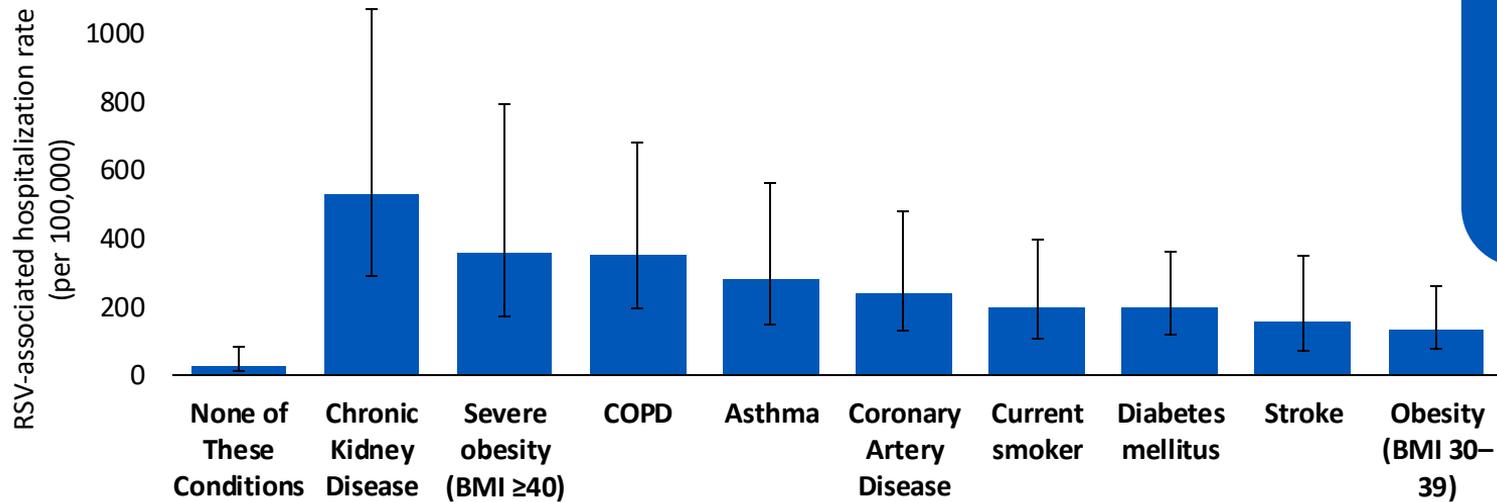
Your age makes you more likely to get really sick from RSV. The RSV vaccine cuts your risk of being hospitalized by more than half.



# Why vaccinate older adults against RSV?

Adults with common conditions like heart and lung disease are at higher risk of being hospitalized than adults without those conditions

RSV-associated hospitalization rates among community-dwelling adults aged 60–74 years, 2017–2018 season



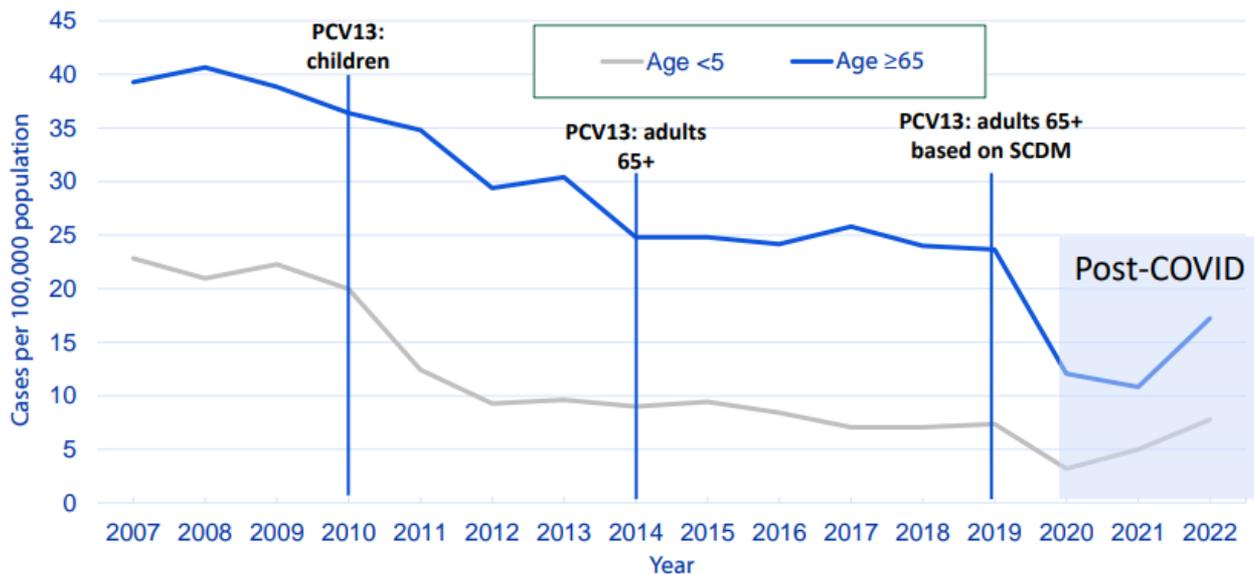
Clinical  
Tip

RSV vaccines are >70% effective in preventing hospitalizations. You have \_\_\_\_, that puts you at higher risk of getting very sick with RSV. I strongly recommend you get your RSV vaccine today.

# Why vaccinate against pneumococcal disease

Older adults are at increased risk for pneumococcal disease

## Invasive pneumococcal disease (IPD) incidence rates, by age group, 2007–2022



SCDM: shared clinical decision-making  
Source: CDC's Active Bacterial Core surveillance

Adapted from Gierke Feb 2024 ACIP meeting presentation



Older adults and adults with risk conditions are at increased risk for invasive pneumococcal disease (meningitis, bloodstream infection) and pneumococcal pneumonia.

# Why vaccinate against pneumococcal disease

Pneumococcal disease is a serious bacterial infection caused by *Streptococcus pneumoniae*



Pneumococcal vaccines help protect adults from **invasive pneumococcal disease** and **pneumococcal pneumonia**.

- CDC recommends pneumococcal vaccination for adults 19–49 years old with risk conditions and adults 50 years or older.

# Why vaccinate long-term care residents?

Long-term care residents have high risk of hospitalization from COVID-19, flu, and RSV

- COVID-19 hospitalization are 8 times higher for nursing home residents
- 17% of hospitalized patients with RSV were long-term care residents
- Adults ages 65 years and older have the highest rates of hospitalization during most flu seasons

## NEW Tools

### Easy Billing Guide

<https://www.cms.gov/files/document/billing-medicare-respiratory-vaccines.pdf>

### Long-term care toolkit

<https://www.cdc.gov/respiratory-viruses/hcp/long-term-care-tools-resources/index.html>

# Treatment with antivirals cuts risk of severe disease from COVID-19 and flu for people at increased risk

People at high risk: older adults, especially 65 years and older, pregnant people, people with weakened immune systems or other medical conditions like heart and lung disease

## COVID-19

### Ritonavir-boosted nirmatrelvir (Paxlovid)

- For people  $\geq 12$  years of age
- No liver function or creatinine testing needed
- Review drug-drug interactions and adjust dosing/stop other meds as needed

### Remdesivir

- For people  $\geq 28$  days of age
- Liver function and prothrombin testing needed
- Requires IV administration

### Alternative: molnupiravir

NOT recommended for pregnant or postpartum persons; people of child-bearing age should use birth control

## Influenza

### Oseltamivir (oral): for all ages

### Baloxavir (oral): $\geq 5$ years (healthy) and $\geq 12$ years of age (high-risk)

NOT recommended for pregnant or postpartum persons

### Zanamivir (inhaled): $\geq 7$ years of age

Contraindicated in people with underlying airway disease

### Peramivir (intravenous): $\geq 6$ months of age

[Influenza Antiviral Medications: Summary for Clinicians | CDC](#)

[Types of COVID-19 Treatment](#)

[COVID-19 Treatment Clinical Care for Outpatients | COVID-19 | CDC](#)

# Offering and Administering Vaccines This Season

# WHY IMMUNIZE:

Best defense against viruses that can cause serious illness

Viruses cause many hospitalizations each respiratory season.

- **Thousands of people are hospitalized** for COVID-19, flu, pneumococcal disease, and RSV

While some people at higher risk, cannot predict who will get severely ill.

- **Adults 65+ are 4–9 times more likely to be hospitalized** for COVID-19, flu and RSV than those under age 65
- Older adults and adults with risk conditions are at increased risk for invasive pneumococcal disease and pneumococcal pneumonia.

Immunizations are our best defense.

- COVID-19 & flu **vaccines cut risk of hospitalization in half** in all ages
- RSV vaccines **>70% effective** in preventing **older adult RSV hospitalizations**
- Pneumococcal vaccines help protect adults from **invasive pneumococcal disease** and pneumococcal pneumonia.

# *Can vaccines be given at the same time?*

## **YES! It's recommended**

- COVID-19, Flu, and RSV vaccines may be co-administered (given at the same visit) with each other and with other routine immunizations, like shingles and pneumococcal vaccines
  - Especially important for patients with risk factors or if there might not be an opportunity to vaccinate the patient in the near future
- Patients may experience more side effects, like fever and fatigue, however, side effects are usually mild/moderate and last 1-2 days
- If the patient prefers to receive these vaccines during different visits, **there is no minimum wait period between these vaccines**

# *Are COVID, flu and RSV immunizations covered by health insurance?*

## **Medicaid:**

- ACIP- recommended vaccines are covered without cost-sharing (\$0 copay)
- CMS issued an updated [Vaccine Toolkit](#) for State Medicaid, CHIP & Basic Health Program in February 2024, and includes coverage information

## **Private Insurance:**

- Most required to cover COVID-19, flu, and RSV vaccines without charging a copayment or coinsurance when given by an in-network provider

## **Medicare:**

- Flu and COVID-19 vaccines covered in Part B
- Adults RSV vaccine covered in Part D
- ACIP-recommended vaccines are covered without cost-sharing (\$0 copay) in Parts B and D
- Remind patients who get vaccines through Medicare Advantage or Part D to get vaccinated at an in-network provider or pharmacy

Thank you

**RISK LESS.**

**DO MORE.**

**Get this season's vaccines**

[www.cdc.gov/risklessdomore](http://www.cdc.gov/risklessdomore).

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



# Discussion and Q & A

Type in the chat your questions

# The Partnership For Sepsis and Aging (TPSA)

## Thank you!

For more information,  
contact [Info@Sepsis.org](mailto:Info@Sepsis.org)

To join TPSA visit: <http://www.agingandsepsis.org/>

To become an  
organization  
member,  
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