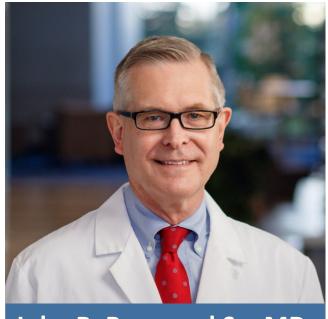
Health Topics In the News – November 8, 2022





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Medical College of Wisconsin

FACING A "TRIPLEDEMIC":
TRIPLE THREAT VIRAL
SURGES IN LATE 2022:
RSV, INFLUENZA A - H3N2,
AND COVID-19

"TRIPLEDEMIC" OR TRIPLE THREAT



RSV	INFLUENZA	COVID-19
Caused by Respiratory Syncytial Virus (RSV)	Caused by influenza virus strains A or B	Caused by SARS-CoV-2 coronavirus
Symptoms include fever and wheezing - typically mild except symptoms can be more severe in infants and elderly	Fever, chills, headache, cough, fatigue, muscle soreness, vomiting, diarrhea, shortness of breath, runny nose, sore throat	Similar symptoms to flu except may include loss of taste and smell
Highly contagious, spreads fall and winter	Easily spread during winter months	Spread year-round
A and B strains	Many variants	New variants emerging
Vaccines under development	Annual vaccine available	Vaccines available



RSV CAUSES PNEUMONIA, PREDOMINANTLY AFFECTING THE BRONCHIOLES THAT BRANCH OFF FROM BRONCHI

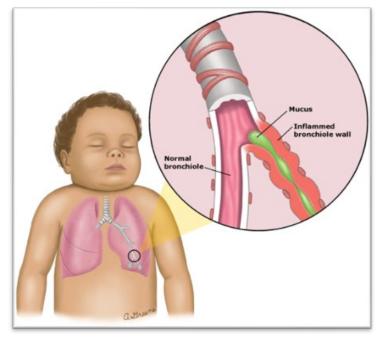
• Elderly and children are particularly vulnerable

Adults:

- Over 150,000 hospitalizations; 14,000 deaths annually

• Kids:

- 50,000 hospitalizations; 500 deaths per year
- 2.1 million outpatient visits
- 16x more likely to be hospitalized with RSV than flu; number one cause of hospitalizations in infants under 12 months
- Children's Hospitals concerned about winter months, with many filling up now



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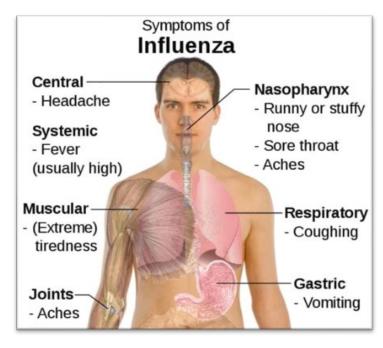


INFLUENZA – A and B STRAINS CAUSE SEASONAL INFECTIONS

• Elderly and children are particularly vulnerable

• INFLUENZA:

- 9-40 million cases annually
- 140,000 710,000 hospitalizations annually
- 12,000 52,000 deaths per year
- 37 1,200 pediatric/adolescent deaths annually
- H3N2 influenza A is the predominant circulating strain
- H3N2 is more likely to cause hospitalizations in children than other strains
- 2022/2023 Influenza season is strongest in 13 years.
- One third of hospitalizations for flu in 2022 have been in children under 18

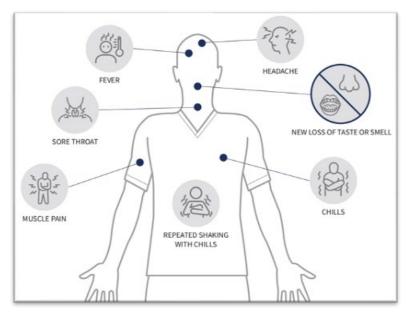


dailyjournalonline.com



COVID-19 IN LATE 2022

- BA.4 and BA.5 omicron subvariants are waning
- ALPHABET SOUP of NEW "SCRABBLE" VARIANTS:
 - New variants continue to arise
 - BA.2.75, BA.2.75.2, BF.7, BA.4.6, BQ.1, BQ.1.1, XBB
 - Convergent evolutionary themes and recombination
 - Continuing increases in transmissibility
 - Continuing concerns about escape from vaccine or postinfection immunity
 - Boosters continue to provide robust immune responses
 - Is the ratio of infections *vs* hospitalizations "re-coupling"?
 - Continuing monitoring of vaccine effectiveness, severity of illness, immune escape



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MITIGATION STRATEGIES FOR TRIPLEDEMIC

Avoid contact with individuals who are ill

Avoid "presenteeism" if you are ill

Social distancing

Hand and surface hygiene

Masks if in close contact with an infected individual

Masks in high density,
prolonged, high
intensity, close proximity
contact with others who
might be infected

Vaccines for COVID-19 and influenza. RSV being developed

Environmental mitigations (HVAC, disinfection, etc.)