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Responding to Respiratory Illnesses in Long Term Care

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September 10, 2024

The Time Is Now!

Respiratory illnesses are responsible for

- ***millions*** of illnesses
- ***hundreds of thousands*** of hospitalizations
- ***thousands*** of deaths

Anyone can become ill from respiratory illnesses

- ***mild to severe***

Range of ***risk factors*** that increase a person's and or specific populations of becoming severely ill

Let's Talk…

- "Typical" Respiratory Season:
  October 1st - March 31st

- Several types of respiratory viruses that circulate more heavily during Fall and Winter

- Why is that?
  - Sunlight/UV power is weakened
  - Viruses thrive in cooler, dry, low humidity environments
  - Cold temperatures lead to a decline in the immune response
  - Human behavior: more time indoors, large gatherings, crowded travel, Holidays

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How do respiratory viruses spread?

- Respiratory viruses spread from ***person-to- person*** through infectious respiratory droplets
- Ill person breathes, coughs, sneezes; contaminating the air and the environment
- ***Direct Contact***: breathing infectious droplets into lungs; land directly in eyes, nose, mouth
- ***Indirect Contact:*** touching contaminated surfaces, then touching eyes, nose, mouth

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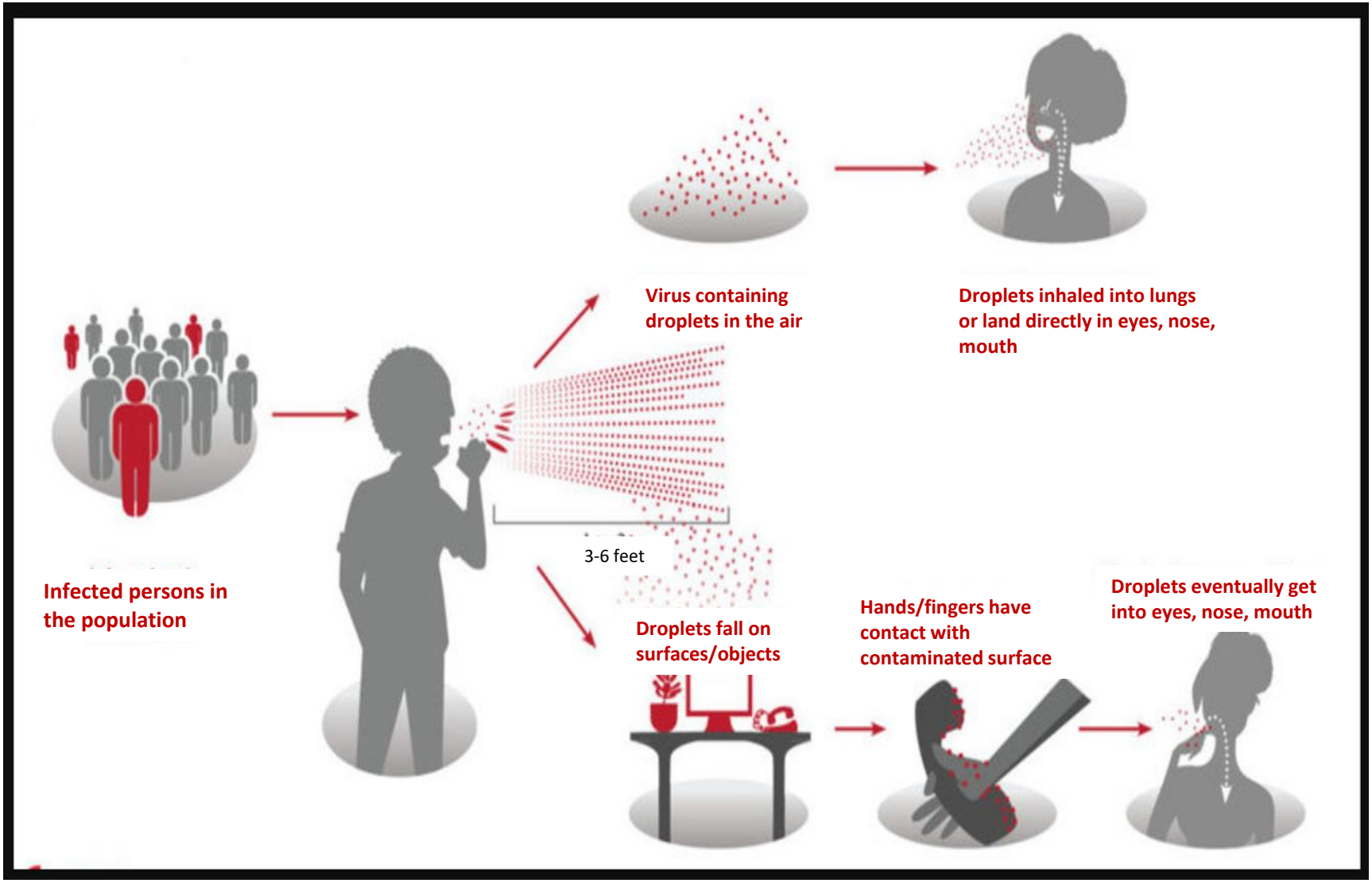

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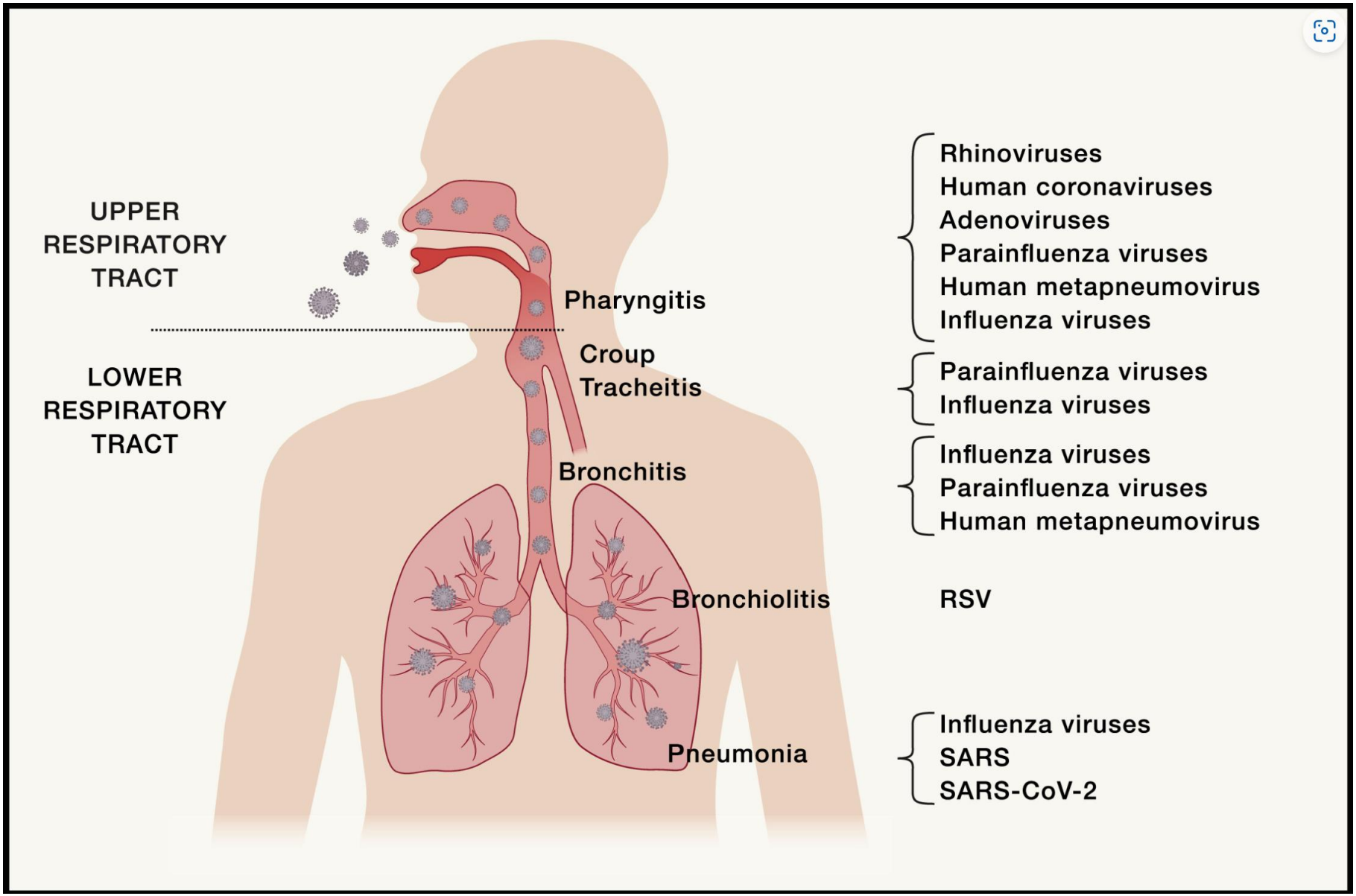

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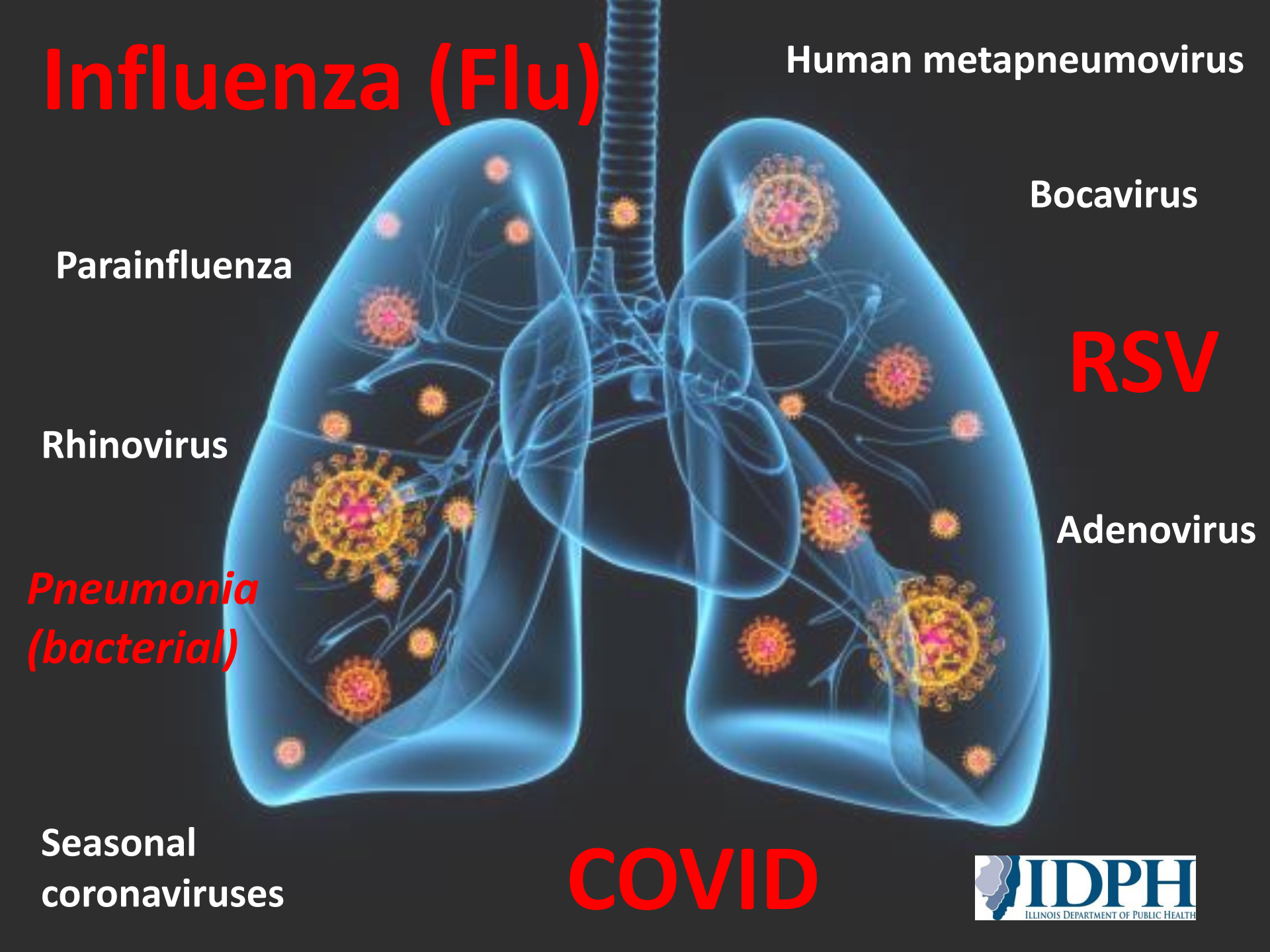
Influenza (Flu)
Human metapneumovirus
Bocavirus
Parainfluenza
RSV
Rhinovirus
Adenovirus
Pneumonia (bacterial)
Seasonal coronaviruses
COVID
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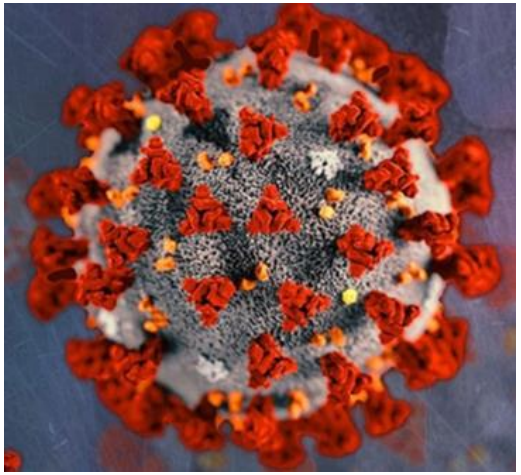
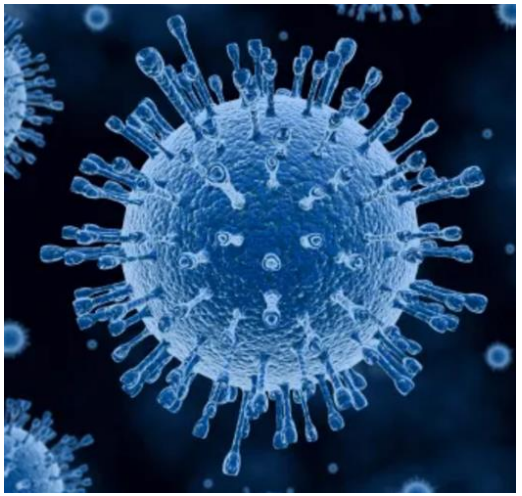
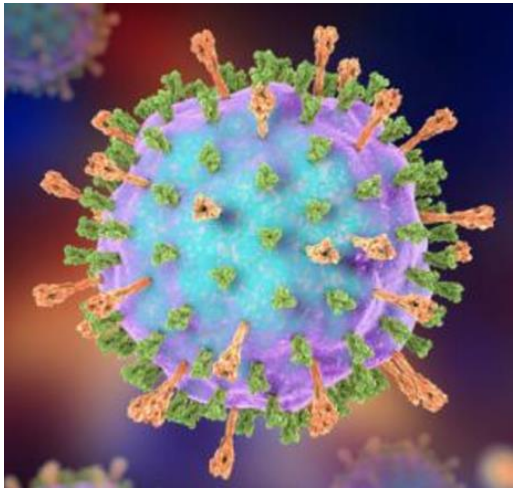
The “Pan-Respiratory” Organisms



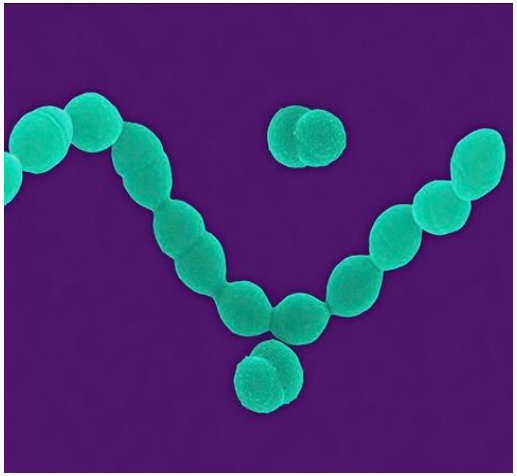
COVID



Influenza (Flu)



RSV



Pneumonia (bacterial)

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Symptoms overlap

Symptoms of COVID-19	Strep Throat	Common Cold	Flu	Asthma	Seasonal Allergies
FEVER 	✓		✓		
COUGH 		✓	✓	✓	✓
SORE THROAT 	✓	✓	✓		✓
SHORTNESS OF BREATH 				✓	
FATIGUE 		✓	✓	✓	✓
DIARRHEA OR VOMITING 	✓		✓		
RUNNY NOSE 		✓	✓		✓
BODY/ MUSCLE ACHES 	✓	✓	✓		

✓ Symptom of illness

CDC

cdc.gov/coronavirus

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Respiratory Viruses and Older Adults

Why prevention is important in older adults (>65yrs)?

- Immune systems do not work as well or are immunocompromised
  - Have lower defenses against infections
  - Their bodies may have a harder time building lasting protection from immunization or prior infection
  - Immunocompromised due to medical condition or receive immunosuppressive medications or treatments
- Multiple underlying health conditions (co-morbidities)
- More likely to live in congregate settings

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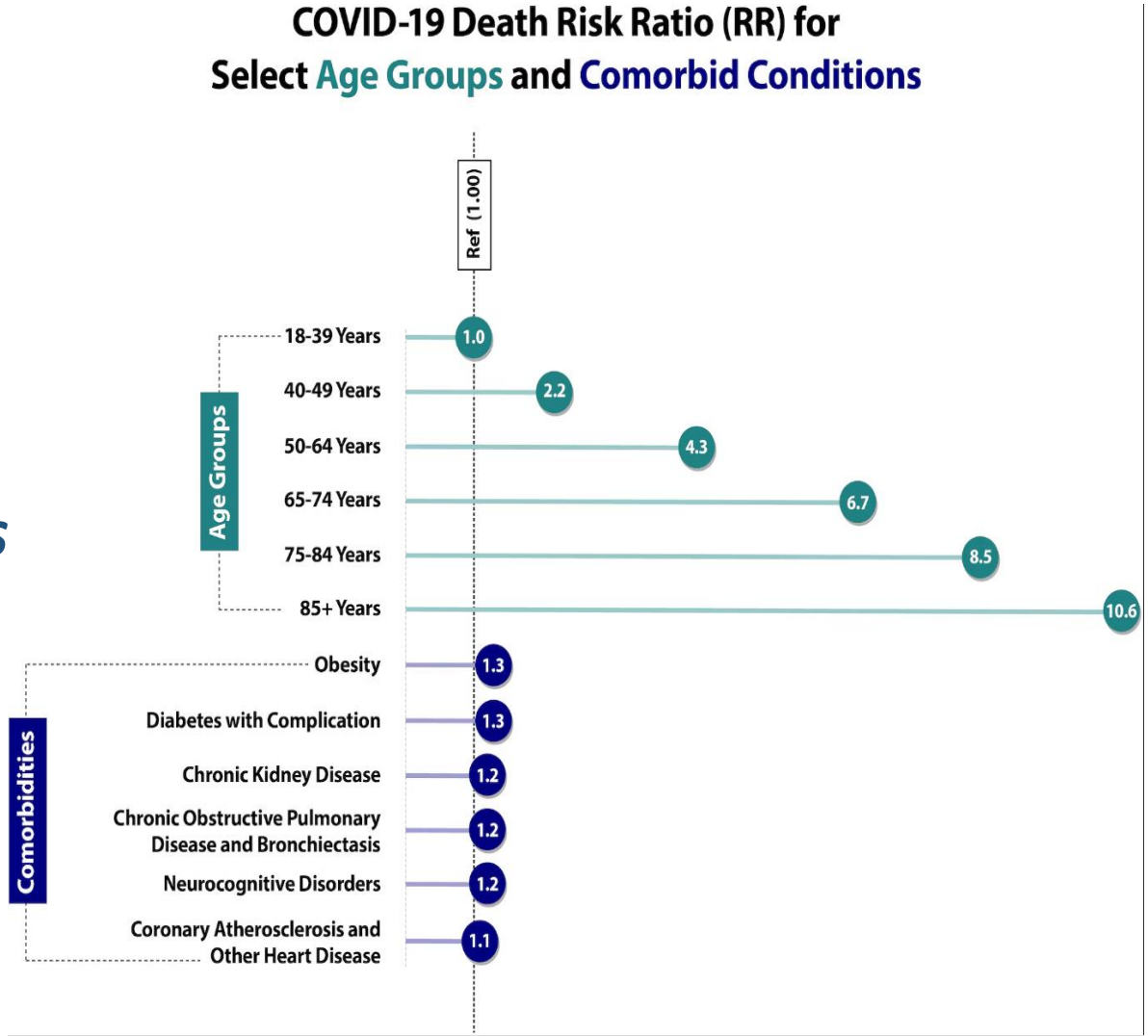
The “Burden of Illness”

Studies have shown that:

- Compared to age group 18-39 years, older adults over 75 years are about 9 times likely to die from ***COVID***
- Over ***95% of adults hospitalized*** in 2023-24 due to COVID had ***NO*** record of latest ***vaccine***



The “Burden of Illness”

People 65 years and older are at higher risk of developing serious complications from ***flu***, compared with young, healthy adults

In recent years in the US, it is estimated:

- Between ***70 and 85%*** of seasonal flu-related ***deaths*** have occurred among people 65 years and older
- Between ***50 and 70%*** of seasonal flu-related **hospitalizations** have occurred among people in this age group

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The "Burden of Illness"

Due to ***RSV*** infection, each year in the US it is estimated:

- ***60,000-160,000*** older adults are ***hospitalized***
- ***6,000-10,000 deaths*** due to RSV-related infections

Adults at highest risk for severe RSV infection

- Adults ages 75 and older
- Adults with chronic heart or lung disease
- Adults with weakened immune systems
- Adults with certain other underlying medical conditions, like severe obesity and severe diabetes
- Adults living in nursing homes or long-term care

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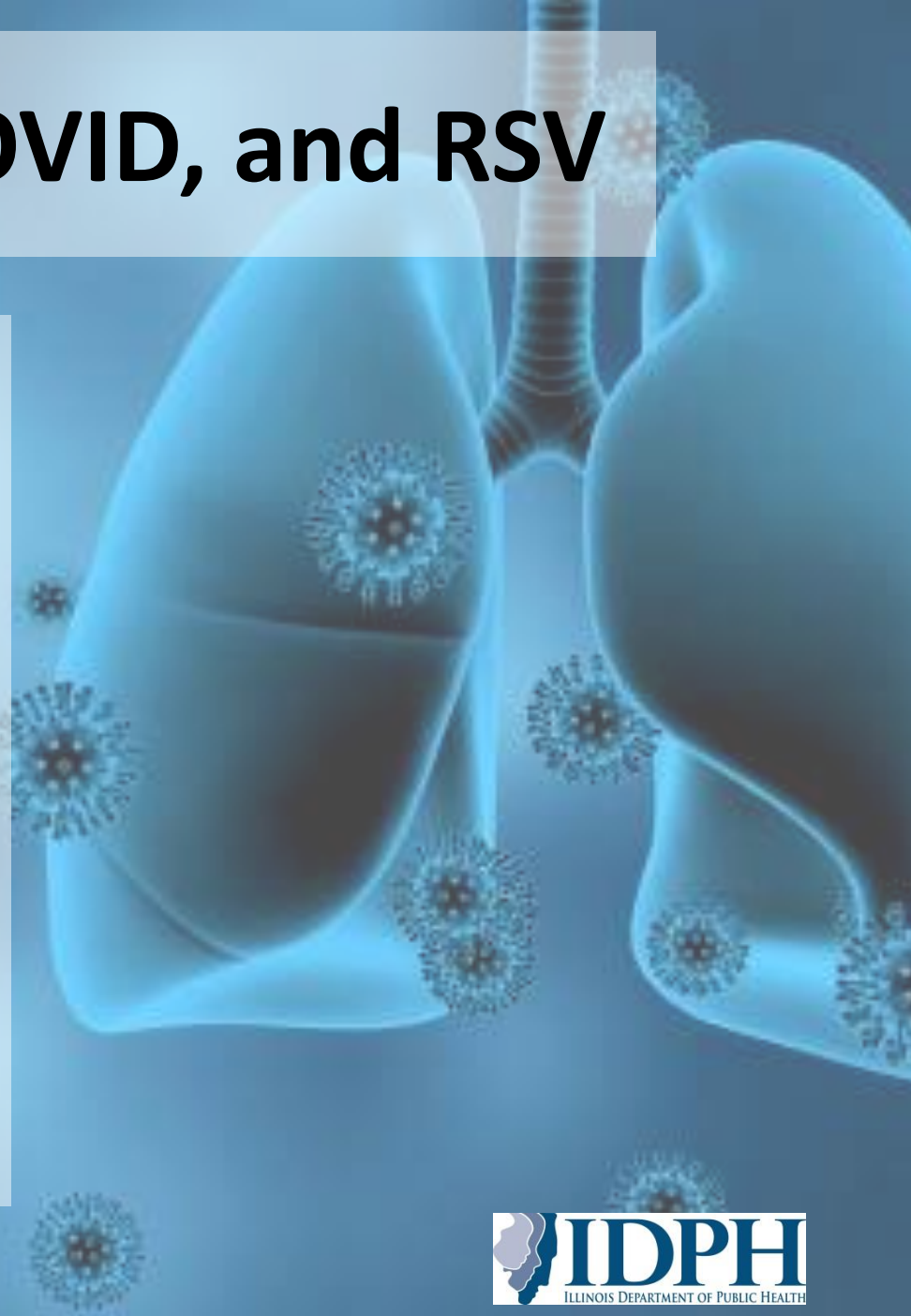
Influenza, COVID, and RSV

- High morbidity and mortality
- Vaccinations available
- Considerations for:
  - Therapeutics
  - Isolation and quarantine



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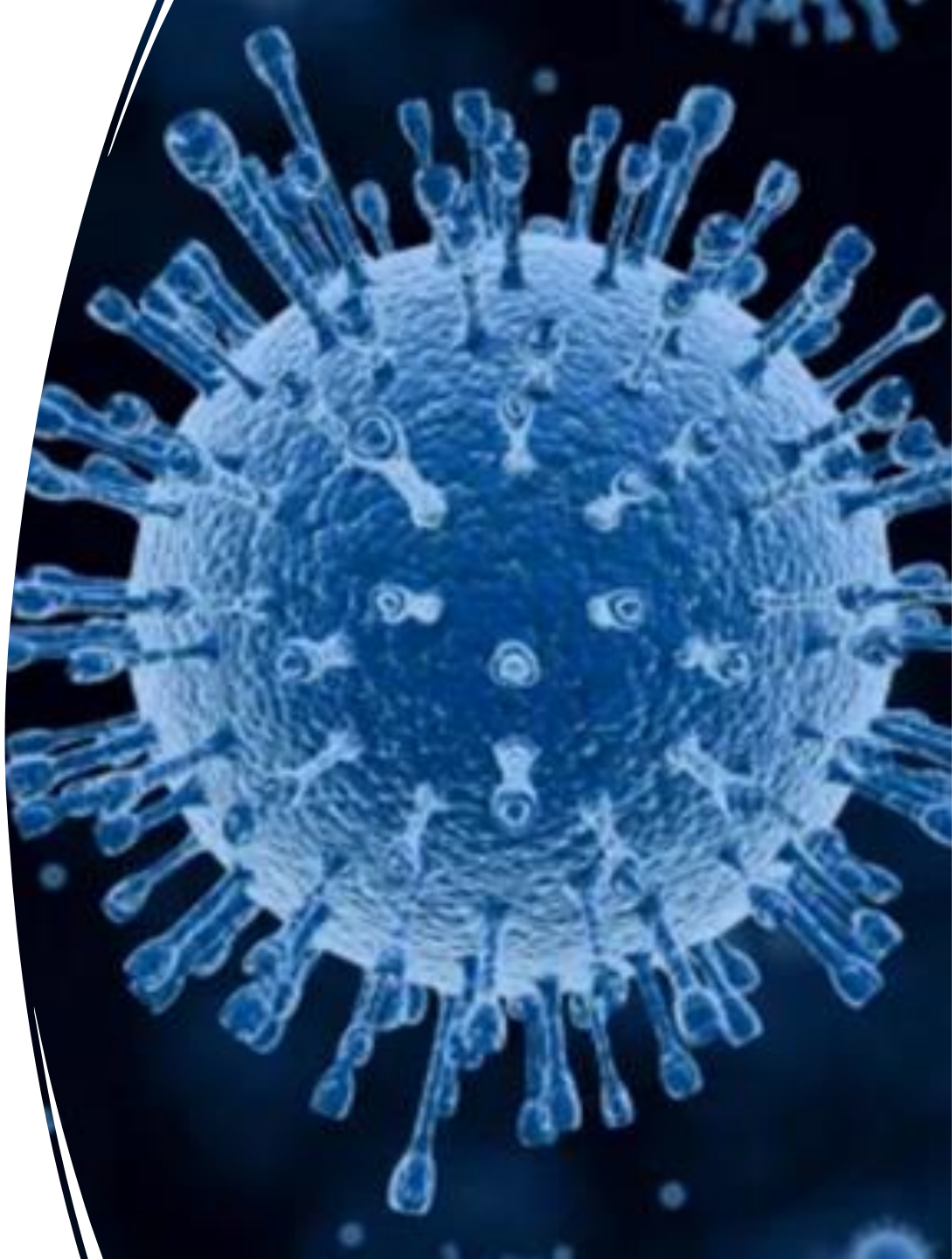
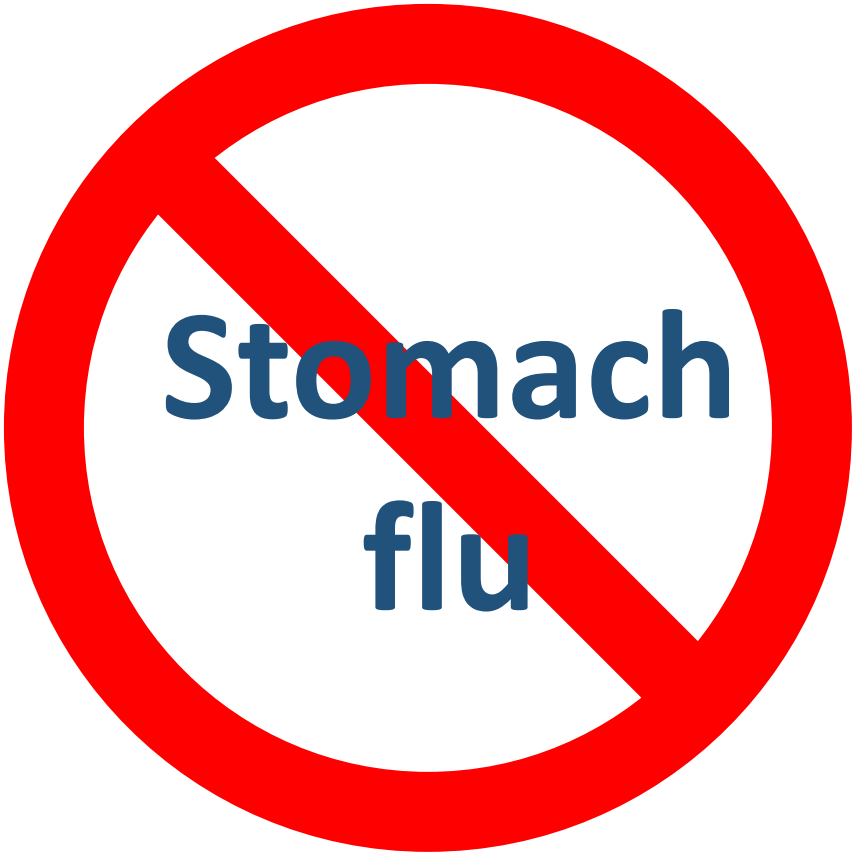
Influenza

- Influenza is a respiratory illness caused by one of the influenza viruses
- It may be mild or severe
- Some people experience complications and even death
- Older people, young children, and people with certain health conditions are at a higher risk for developing a severe illness, including complications





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FLUVIEW interactive

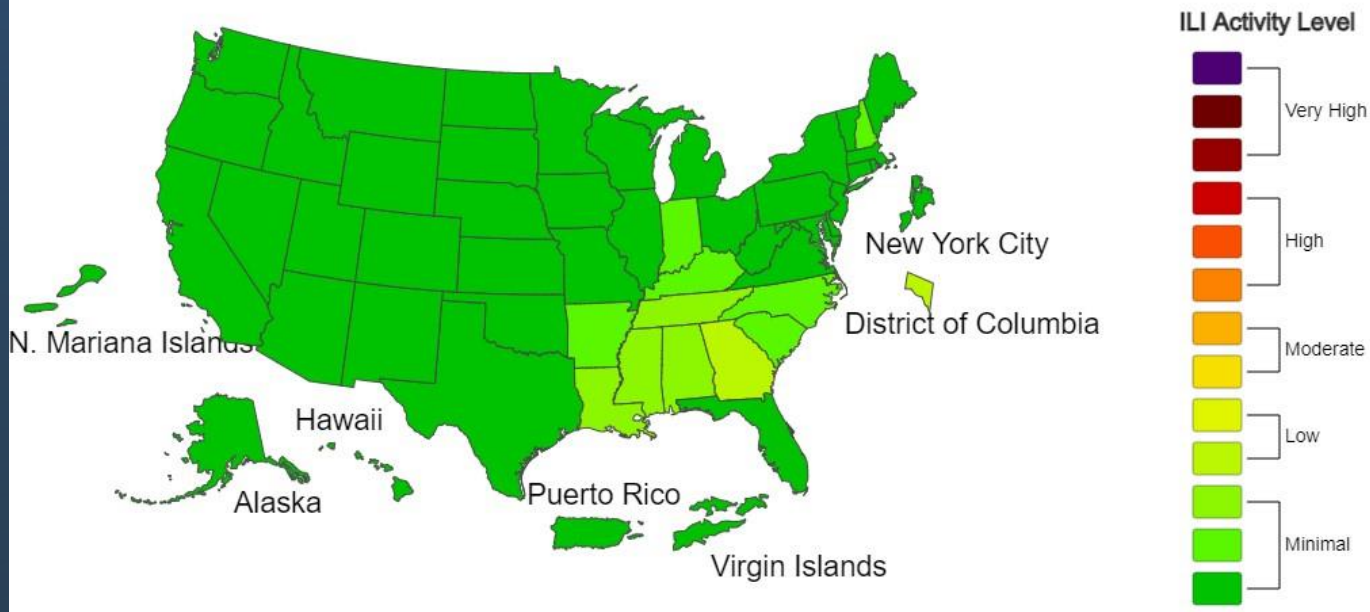
CDC U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Outpatient Respiratory Illness Activity Map Determined by Data Reported to ILINet

This system monitors visits for respiratory illness that includes fever plus a cough or sore throat, also referred to as ILI, not laboratory confirmed influenza and may capture patient visits due to other respiratory pathogens that cause similar symptoms.

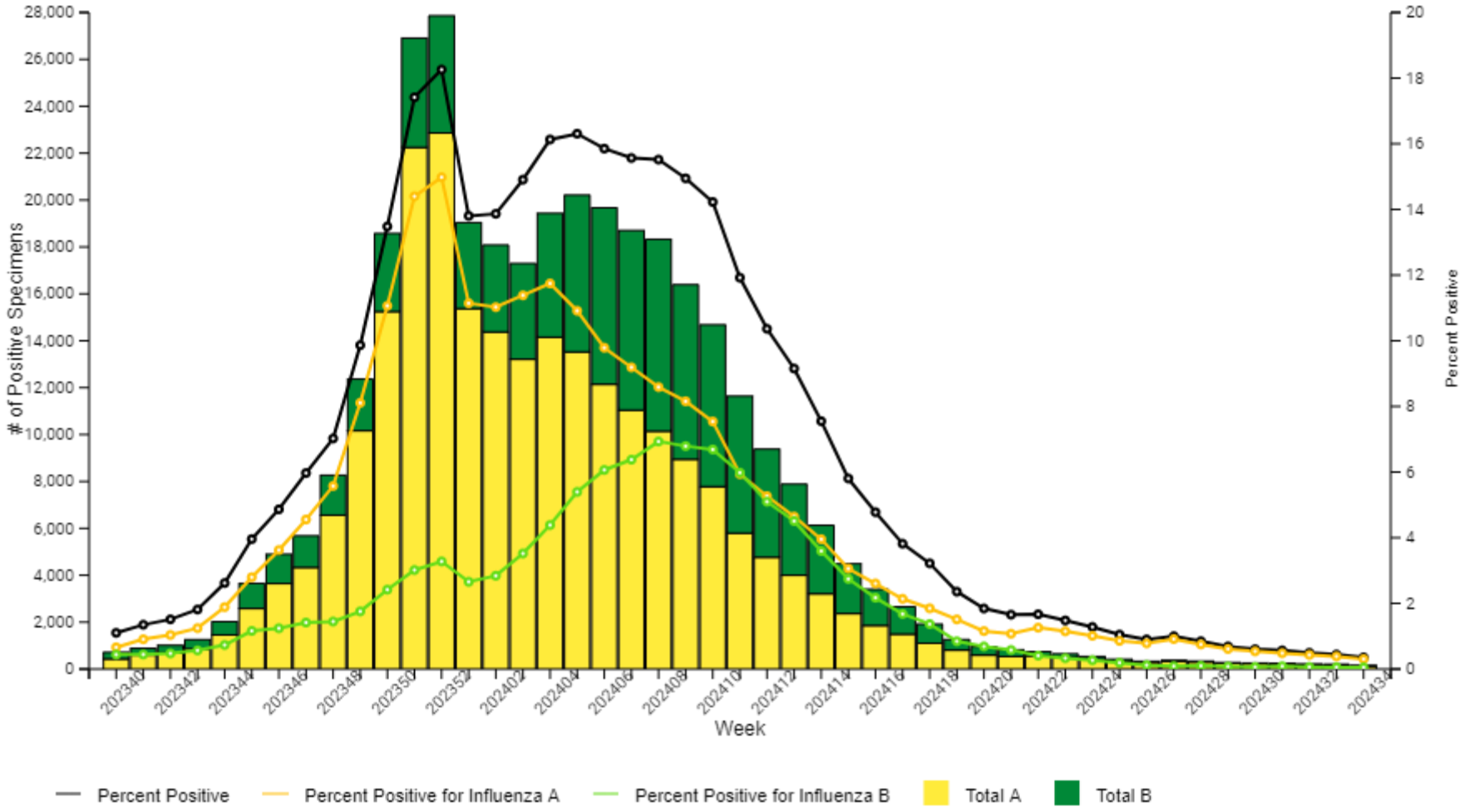
2023-24 Influenza Season Week 34 ending Aug 24, 2024



FLUVIEW interactive

CDC

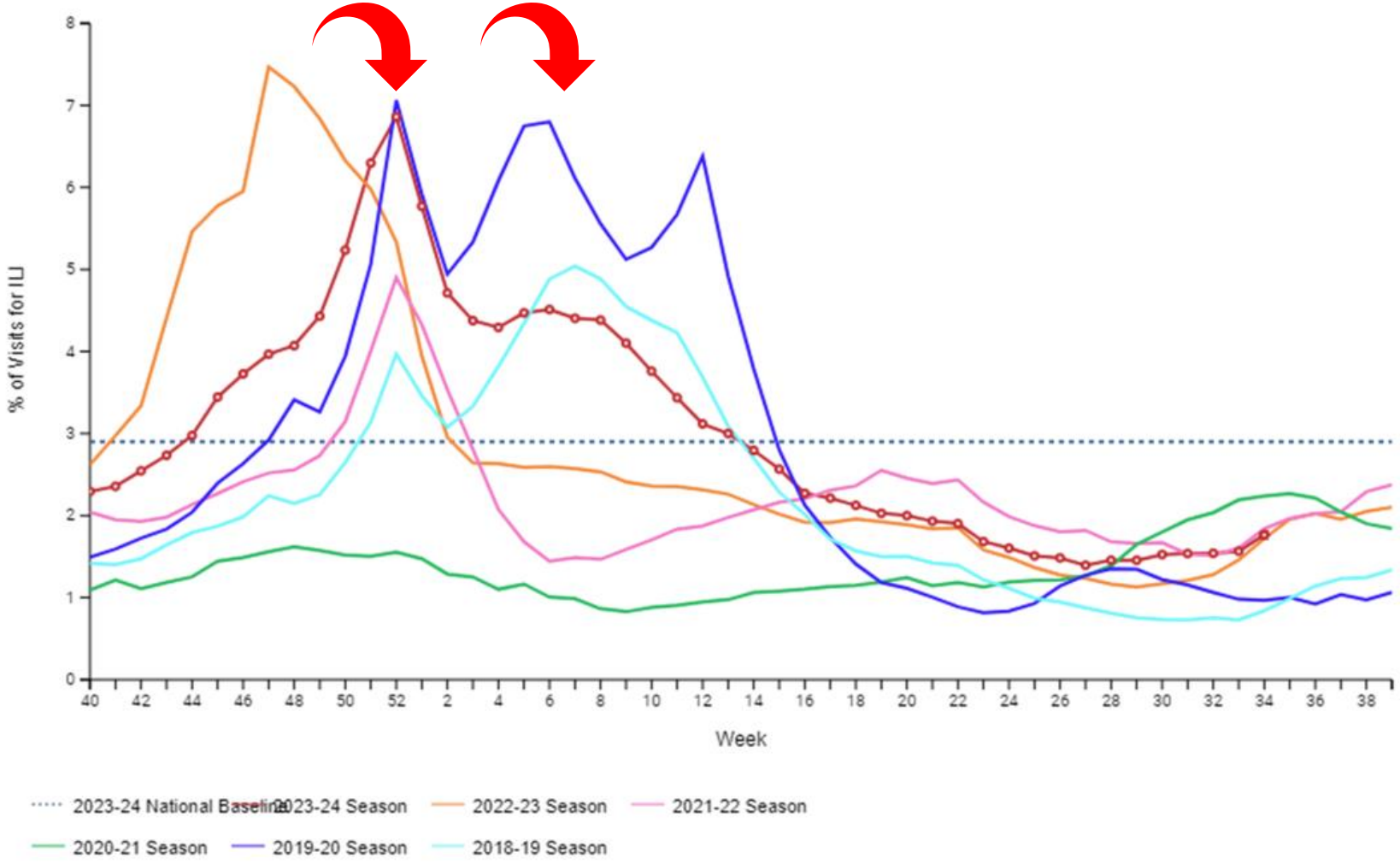
Influenza Positive Tests Reported to CDC by Clinical Laboratories, National Summary, 2023-24 Season, week ending Aug 24, 2024



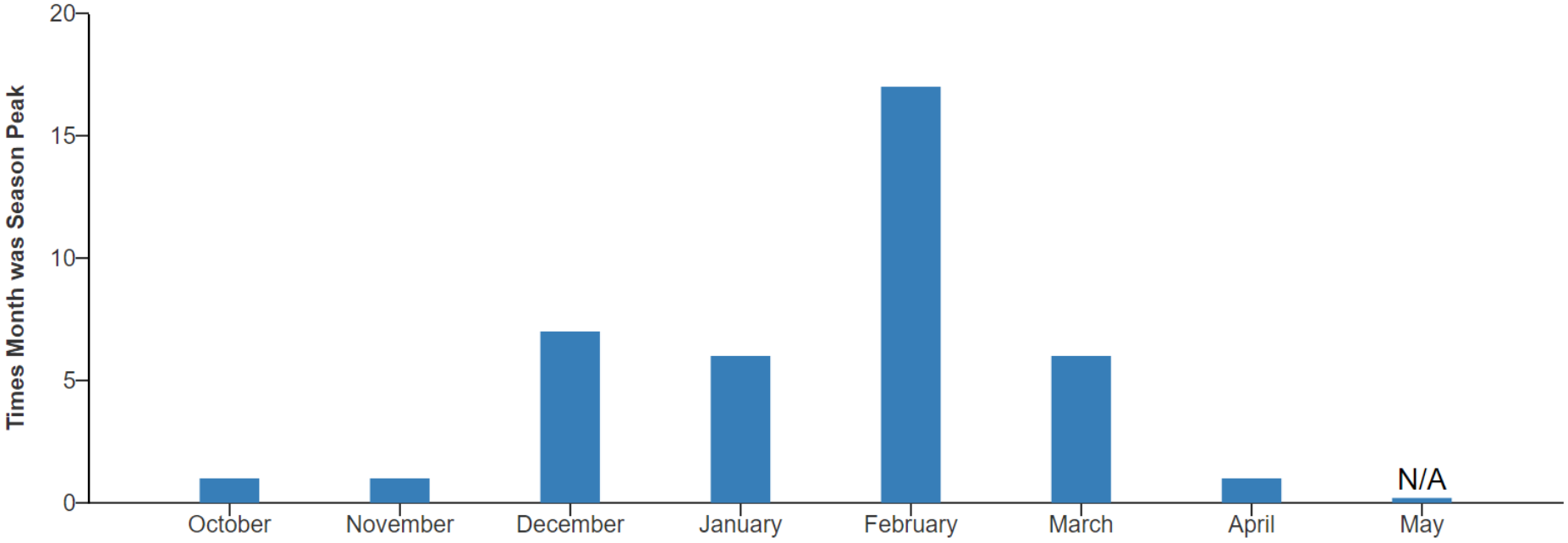
FLUVIEW interactive

CDC

Percentage of Outpatient Visits for Respiratory Illness Reported by The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2023-24 Season and Selected Previous Seasons

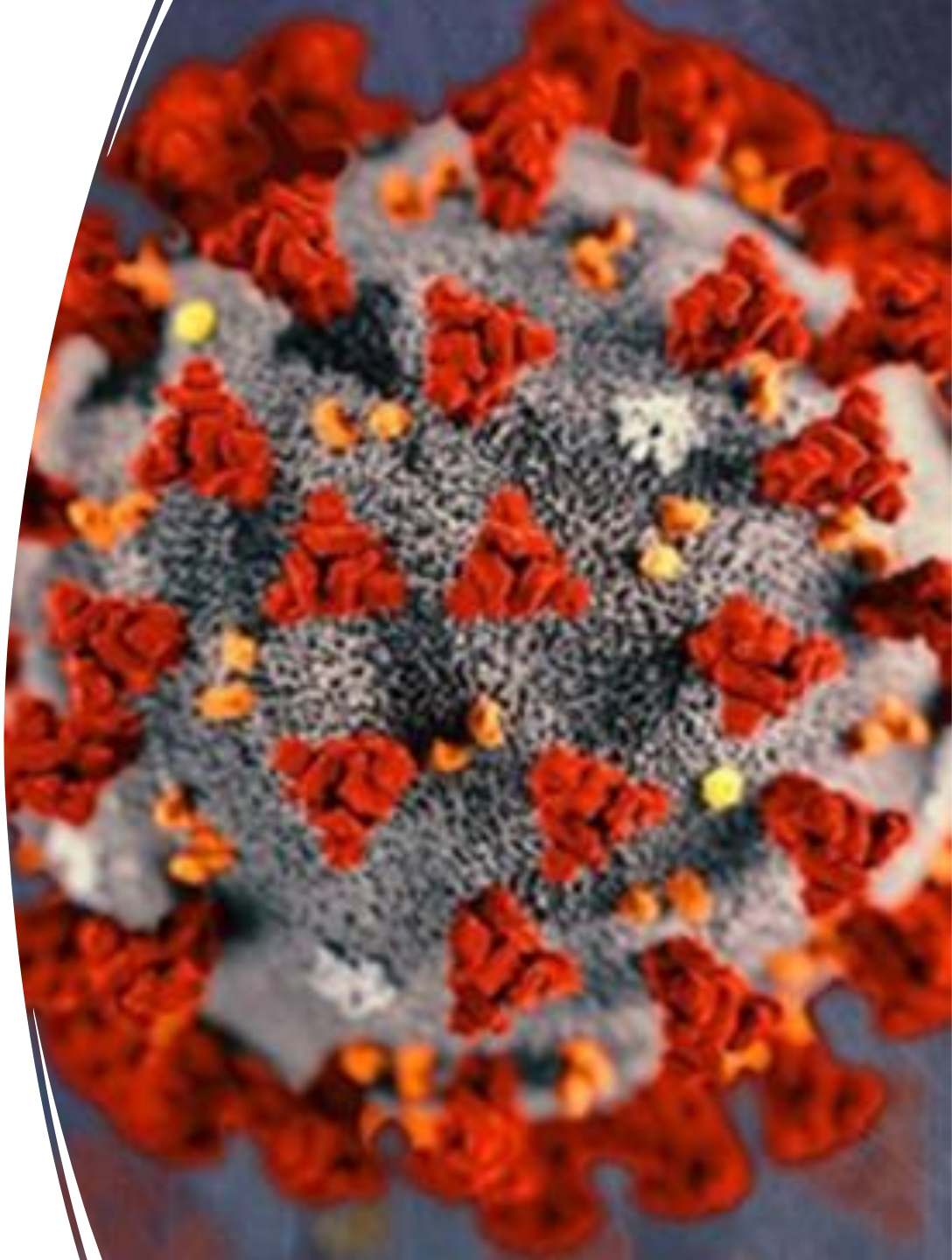


Flu activity peak months in the U.S. from the 1982-1983 through 2021-2022 flu seasons*

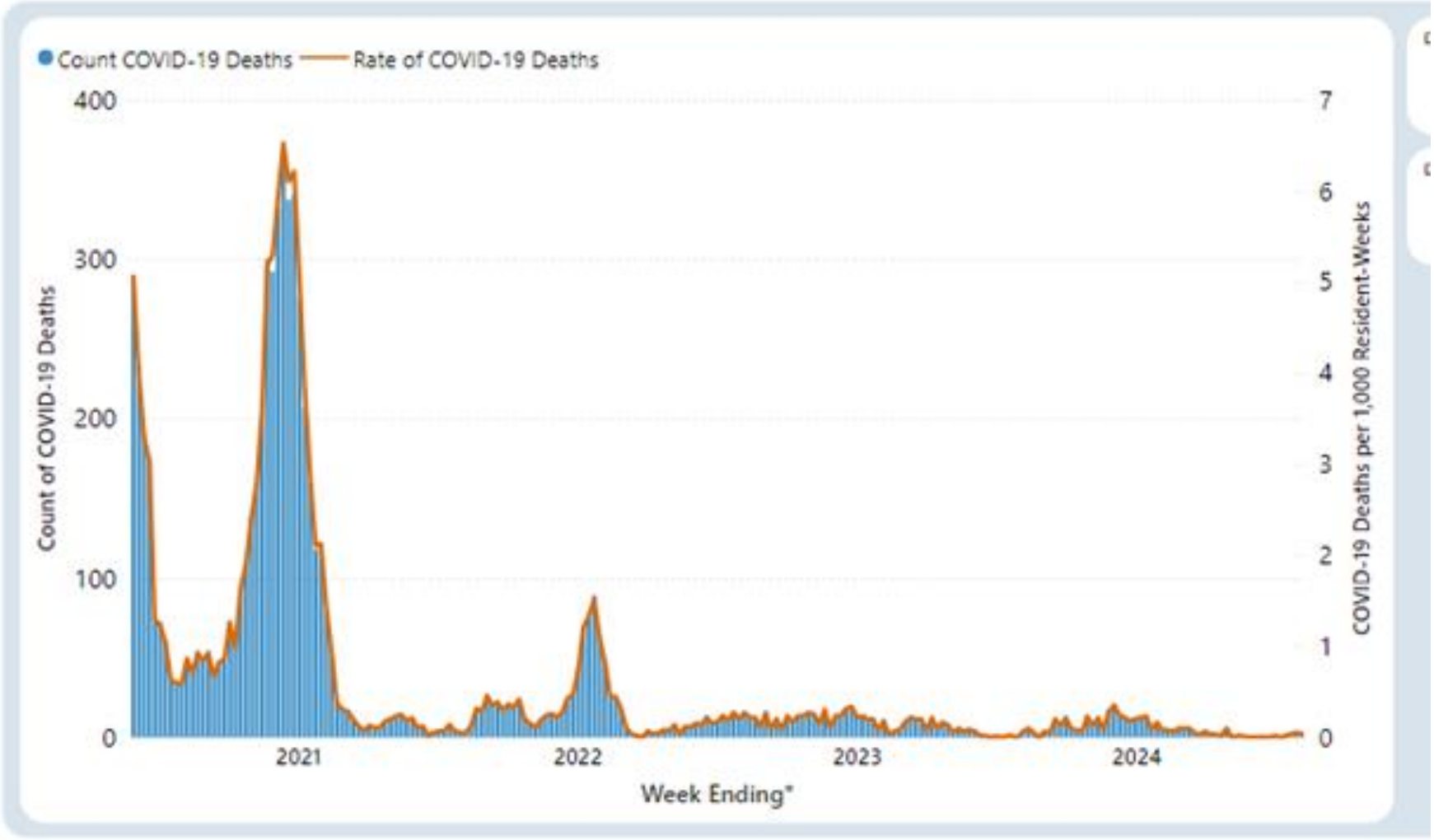


COVID-19

- COVID-19 is a disease caused by the SARS-CoV-2 virus
- Primarily a respiratory virus
- It may be mild or severe
- “Long COVID”
- Older people at a higher risk



COVID-19 Deaths among Residents and Rate per 1,000 Resident-Weeks in Nursing Homes, by



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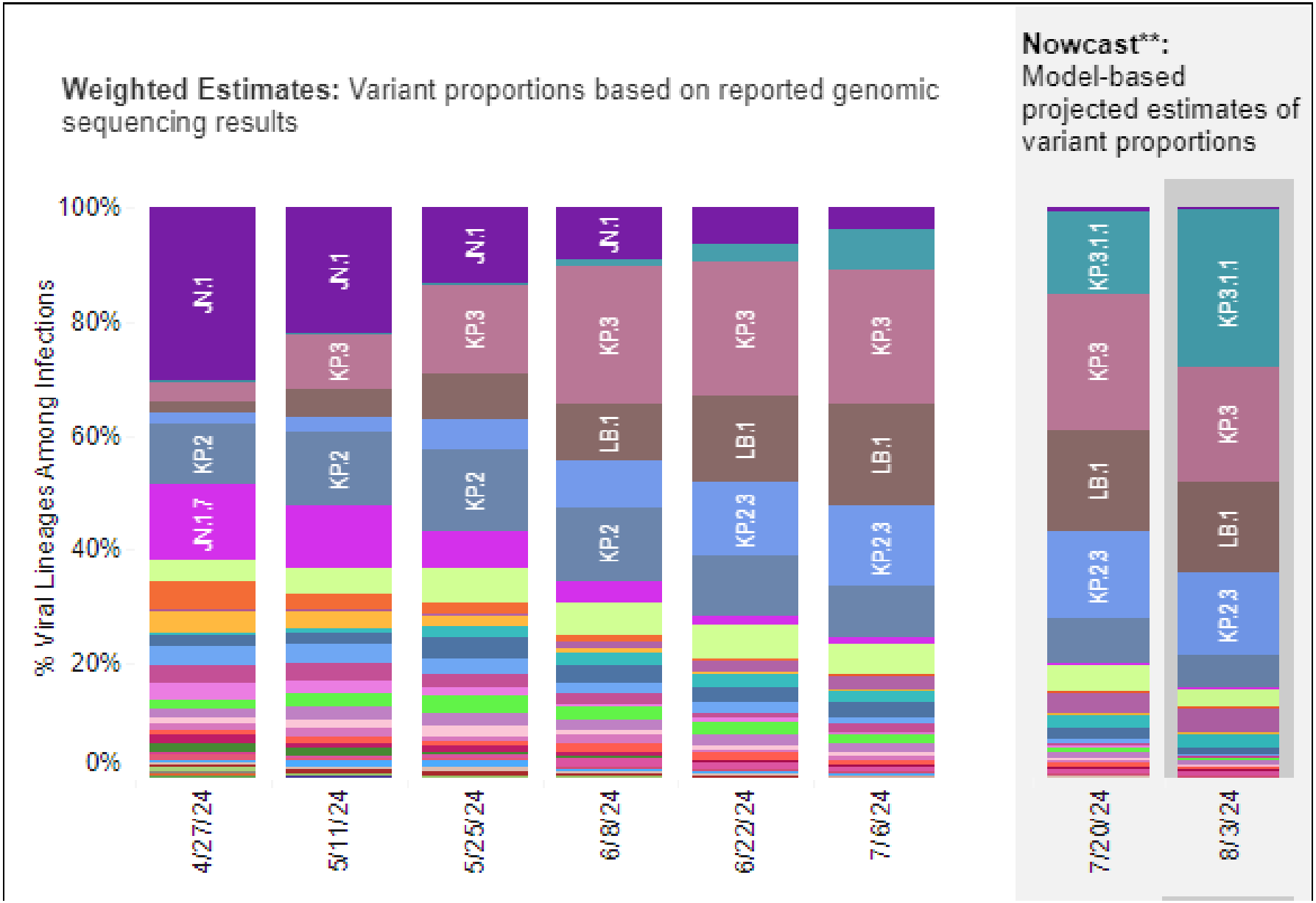

COVID-19: Variants in the U.S.

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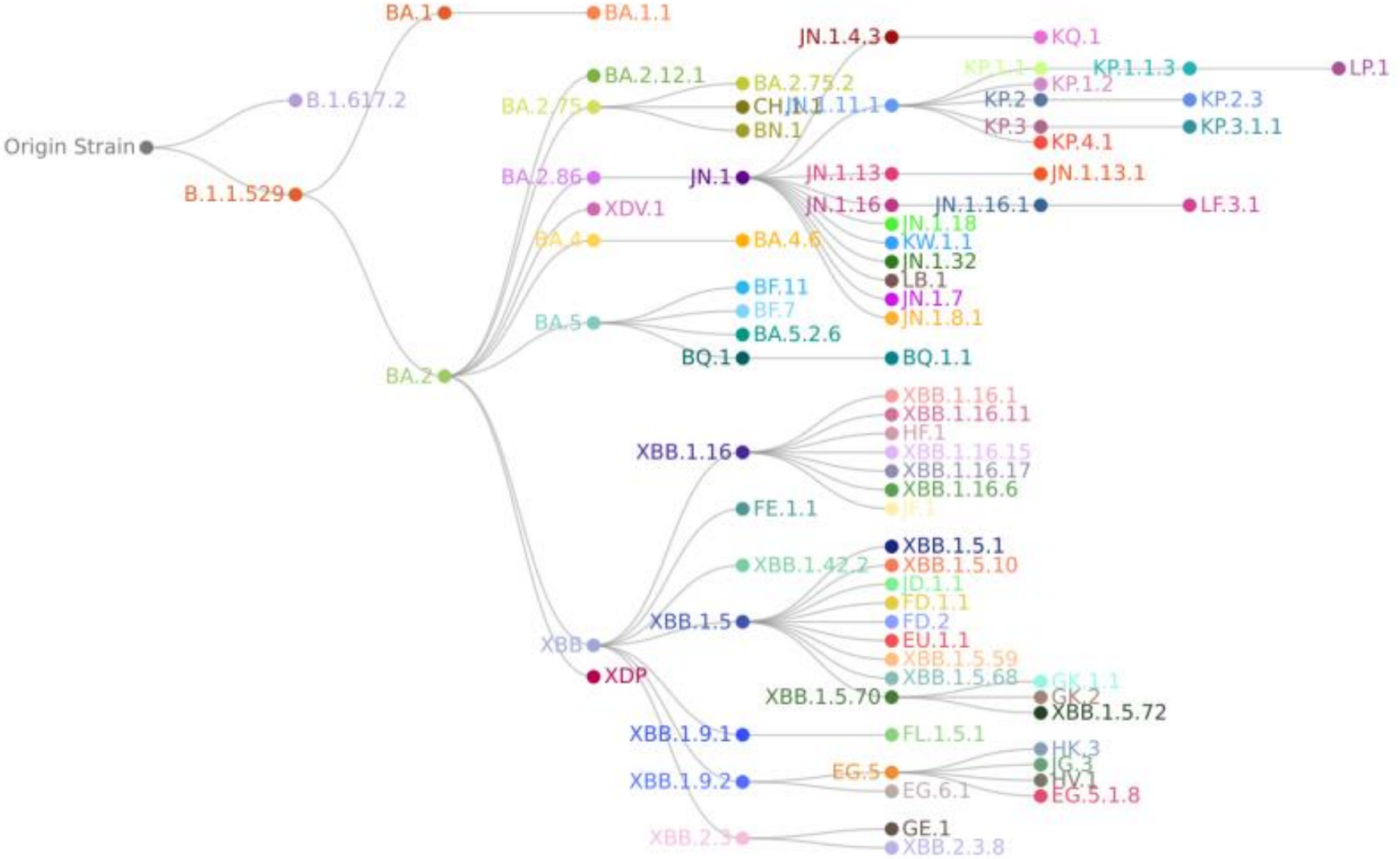

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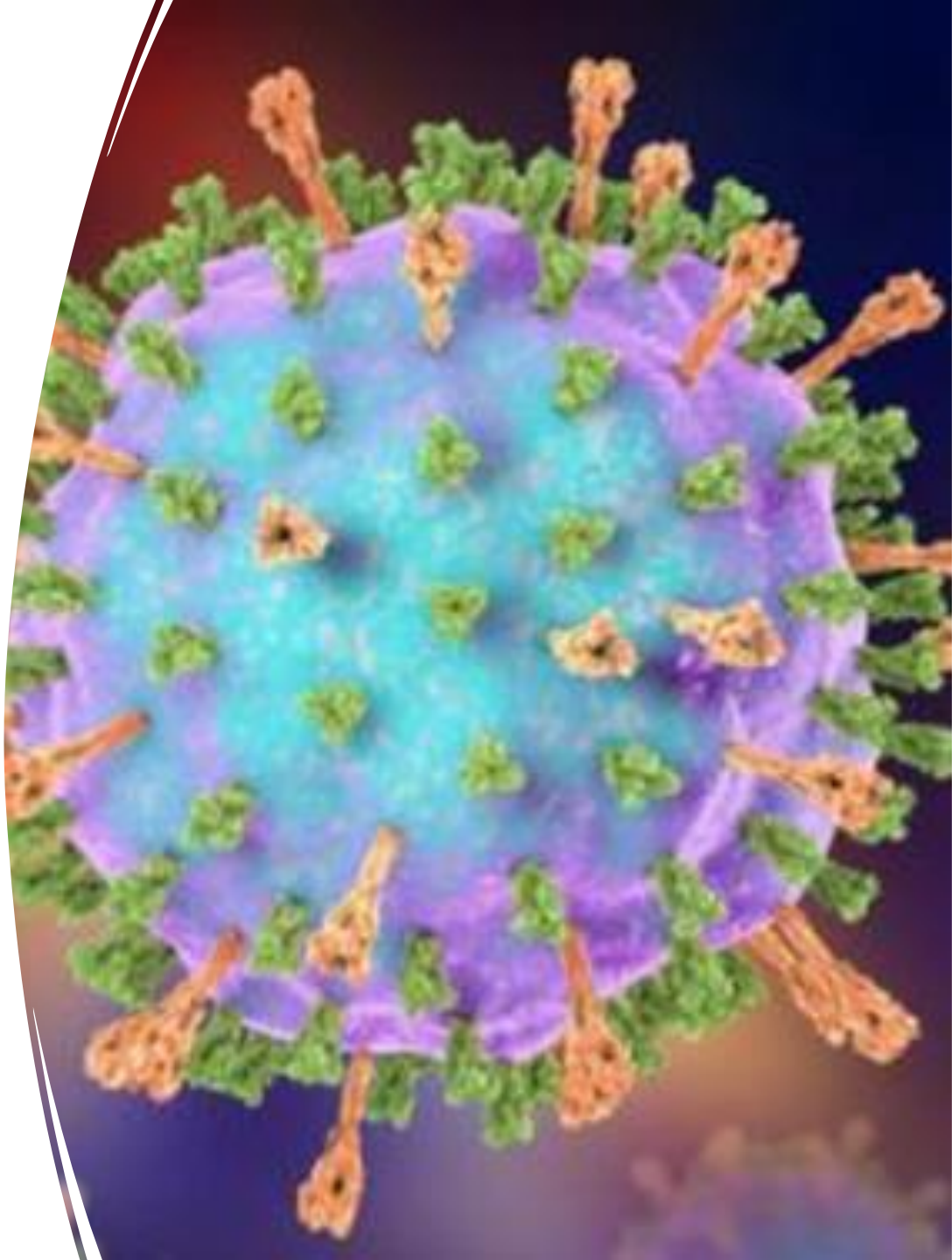
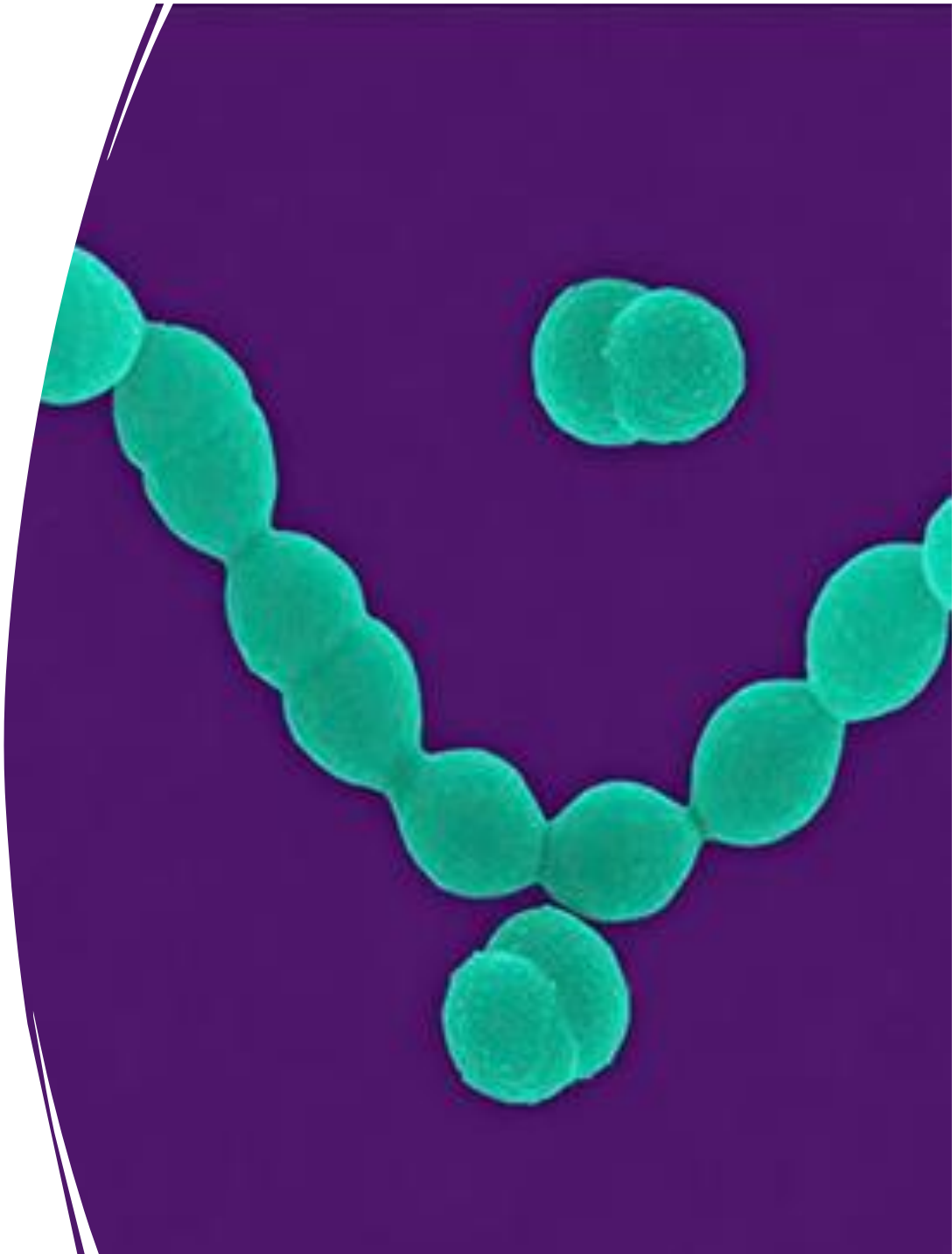
RSV

- Respiratory Syncytial Virus that spreads through aerosolization of respiratory droplets or contact with contaminated surfaces
- RSV produces mild cold-like symptoms
- **This virus is NOT new.**
- In very young children (0-5 years) and older adults RSV causes substantial morbidity and mortality



Pneumonia

- Many different bacteria, fungi, and viruses can cause pneumonia (a lung infection)
- It may be mild or severe
- Some people experience complications and even death



Vaccination

Influenza: 

COVID-19: 

RSV: 

Pneumonia: 

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Vaccines: A core prevention strategy

COVID-19 and Flu 2024-25 Vaccines

Everyone ages 6 months and older

RSV Immunization to Protect Babies

Pregnant people during week 32–36 of pregnancy starting Sept 1 through RSV season (vaccine)

or

Babies entering or born during the RSV season (monoclonal antibodies)

RSV vaccine for Older Adults who haven't gotten an RSV vaccine before

People ages 60-74 at high risk of severe RSV

and

Everyone ages 75 and older

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Pneumococcal Vaccination

CDC recommends pneumococcal vaccination for children younger than 5 years and adults 65 years or older.

Pneumococcal conjugate vaccines (PCVs)

PCV15

PCV20

Pneumococcal polysaccharide vaccine

PPSV23

A resident has a cough and fever… now what?

Infection Prevention and Control Measures

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STOP THE SPREAD OF RESPIRATORY INFECTIONS

Isolation

Contact

Droplet

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Use Personal Protective Equipment (PPE) When Caring for Patients with Confirmed or Suspected COVID-19

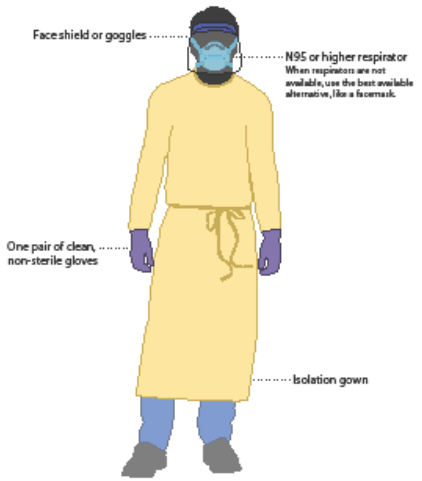
Before caring for patients with confirmed or suspected COVID-19, healthcare personnel (HCP) must:

- **Receive comprehensive training** on when and what PPE is necessary, how to don (put on) and doff (take off) PPE, limitations of PPE, and proper care, maintenance, and disposal of PPE.
- **Demonstrate competency** in performing appropriate infection control practices and procedures.

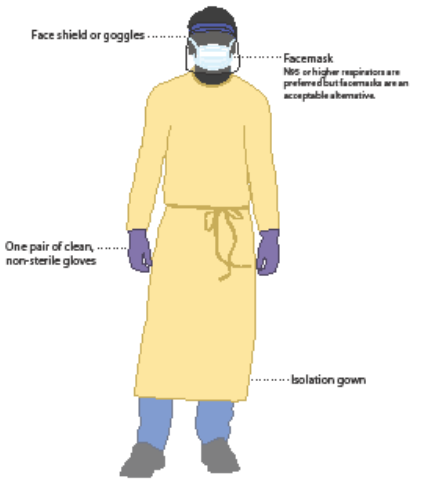
Remember:

- PPE must be donned correctly before entering the patient area (e.g., isolation room, unit if cohorting).
- PPE must remain in place and be worn correctly for the duration of work in potentially contaminated areas. PPE should not be adjusted (e.g., retying gown, adjusting respirator/facemask) during patient care.
- PPE must be removed slowly and deliberately in a sequence that prevents self-contamination. A step-by-step process should be developed and used during training and patient care.

Preferred PPE – Use N95 or Higher Respirator



Acceptable Alternative PPE – Use Facemask



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www.cdc.gov/coronavirus

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Respiratory Protection in Healthcare Settings

1. Visual Alerts – signs
2. Cough Etiquette:
   - Cover mouth and nose when coughing
   - Tissue or upper arm
   - Perform hand hygiene after contact with resp. secretions
3. Masking and empiric isolation

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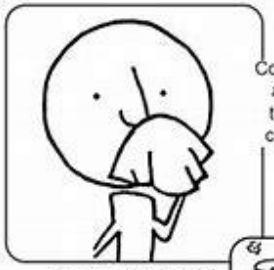
Stop the spread of germs that make you and others sick!

Cover your Cough



Cover your mouth and nose with a tissue when you cough or sneeze

or

cough or sneeze into your upper sleeve, not your hands.

Put your used tissue in the waste basket.

Clean your Hands

after coughing or sneezing.

Wash hands with soap and warm water

or

clean with alcohol-based hand cleaner.

When To Wear a Mask

- Residents & staff on a unit or facility are experiencing a respiratory infection outbreak
- Facility wide during periods of higher-level community transmission (any respiratory virus)
- Persons can choose to mask whenever they feel it necessary (above and beyond what is recommended)

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TEST

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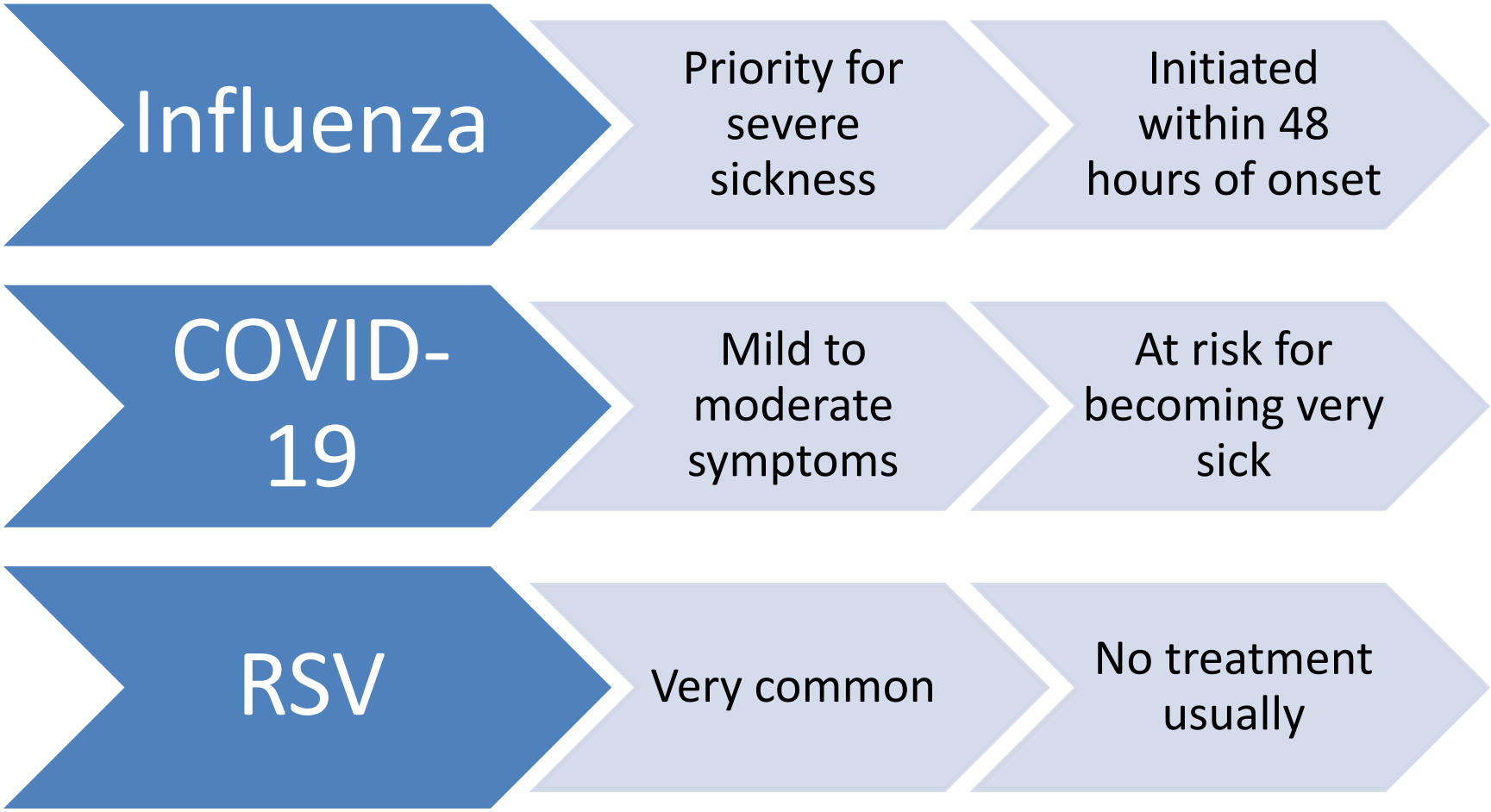
Therapeutics



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Therapeutics: Pneumonia

- Depends on what the organism is that is causing the pneumonia.
- Bacterial will be antibiotics
- Viral – COVID-19 or Flu will be anti-virals

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Stopping the Spread

Recognize symptoms → Institute precautions → Test → **TREAT**

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THANK YOU