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RESPIRATORY ILLNESS IN LONG-TERM CARE FACILITIES

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10/22/2024

OUR MISSION:

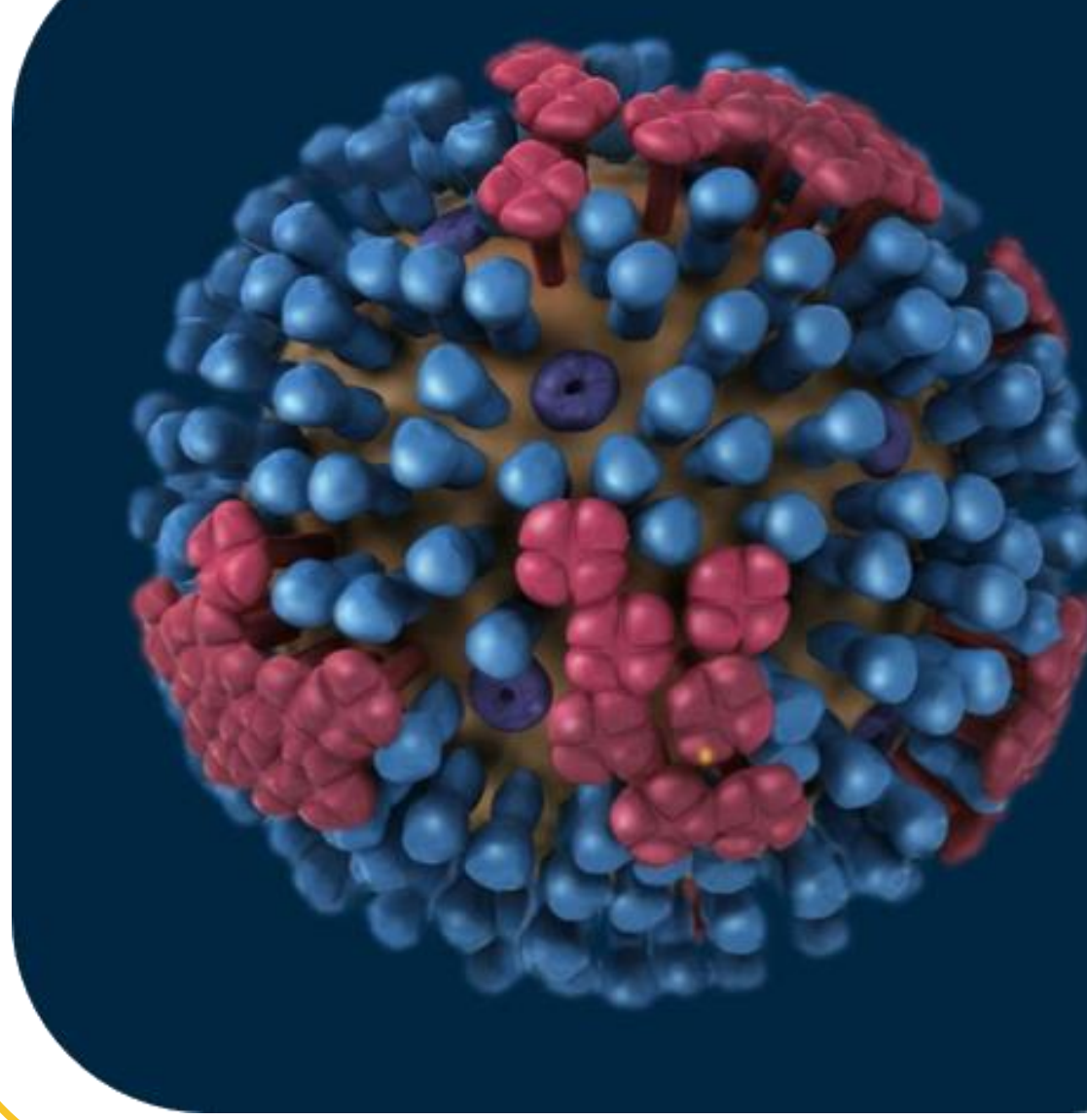
To promote, protect, and improve the health and safety of all Hoosiers.

OUR VISION:

Every Hoosier reaches optimal health regardless of where they live, learn, work, or play.

Presentation Overview

- Epidemiology of COVID-19, Flu, RSV
- General LTCF Outbreaks & Response
- Prevention & Infection Control
- Future Plans



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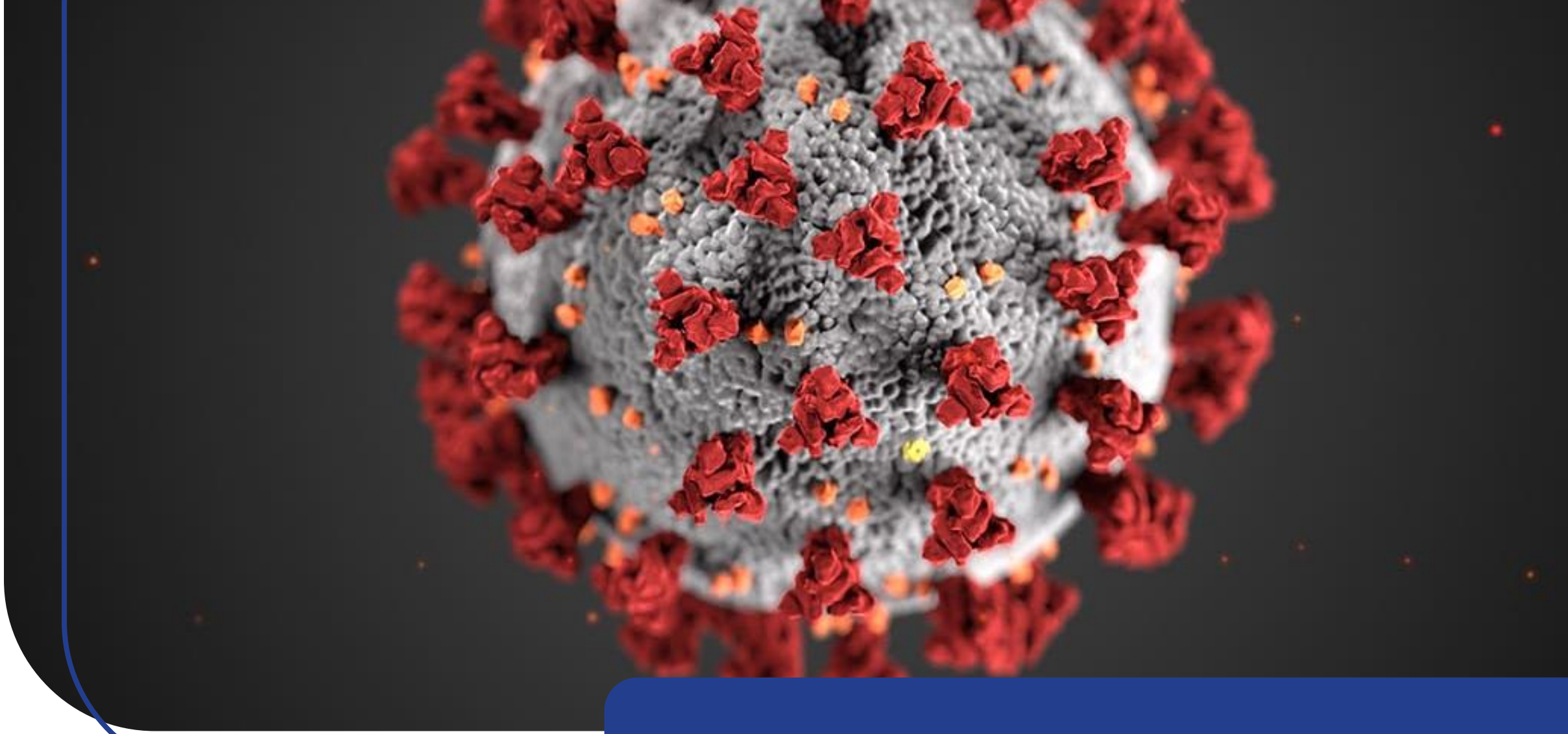

COVID-19

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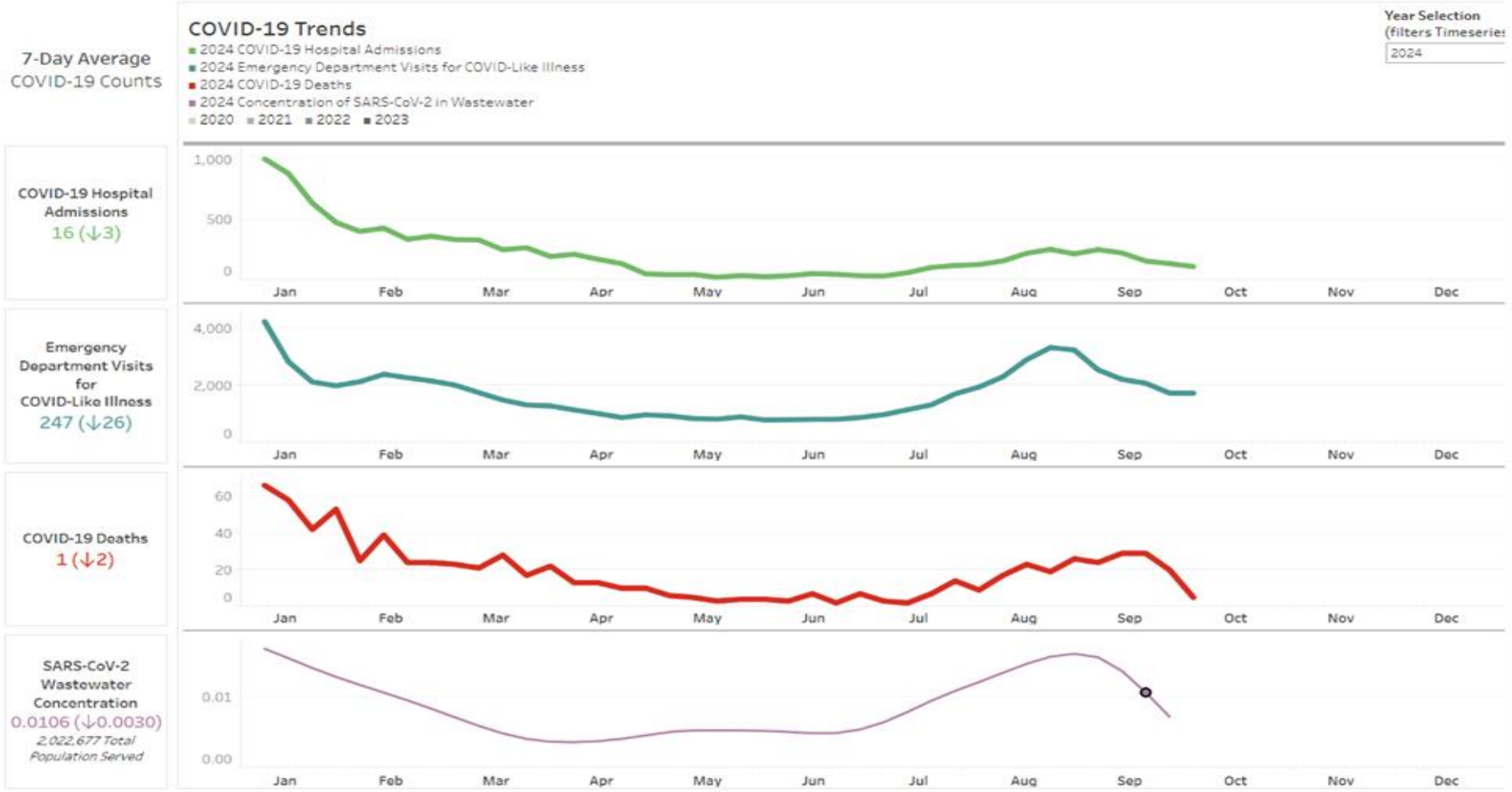
COVID-19 Epidemiology

- COVID-19 (coronavirus disease 2019) is a disease caused by the SARS-CoV-2 virus
- It can be very contagious and can spread quickly
- Transmitted via **droplets**, released into the air. People can breathe in these droplets and particles, or they can land on others' eyes, nose, or mouth. droplets may also contaminate the surfaces
- People who are physically near (within 6 feet) a person with COVID-19 or have direct contact with that person are at greatest risk for infection
- Symptoms may appear **2-14 days** after exposure to the virus
- Infectious period: **1-2 days** before and up to **8-10 days** after symptoms begin

Indiana COVID-19 Home Dashboard

Below results are as of 10/8/2024, 11:59 PM. Dashboard updates by 5 p.m. on Wednesdays.



All numbers are provisional and reflect only those reported to IDOH. Numbers should not be characterized as a comprehensive total and may change as more data is reported.

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COVID KP.3.1.1 Variant

- KP.3.1.1 is now the most widely circulating variant of SARS-CoV-2 in the United States.
- Descended from KP.3, which descended from the Omicron family.
- It is predicted to account for between 31% and 43% of COVID-19 clinical specimens.
- The rise in prevalence of KP.3.1.1 comes as markers of COVID-19 activity, including test positivity, emergency department visits, and hospitalizations, remain elevated, particularly among adults ages 65 years and older and children younger than 2 years.

COVID-19 Vaccines

Source: https://www.cdc.gov/mmwr/volumes/73/wr/mm7337e2.htm

COVID-19 Recommendation

- Advisory Committee on Immunization Practices recommends 2024-2025 COVID-19 formulation for individuals 6 months of age and older
- COVID-19 Hospitalizations
  - 50% of hospitalized children and adolescents have no underlying conditions
  - 2/3 of all COVID-19 associated hospitalizations are in adults 65+
  - 19% of adults 65+ who were hospitalized were residents of a long-term care facility
- COVID-19 Vaccine Effectiveness
  - 53% effective against symptomatic infections in adults
  - 66-71% effective against ED/UC visits among children 9 mo-17yrs

Infection Prevention & Control

- Encourage everyone to remain up-to-date with all recommended COVID-19 vaccine doses.
- Establish a process to identify and manage individuals with suspected or confirmed SARS-CoV-2 infection
- Implement Source control measures
- Optimize the use of engineering controls and indoor air quality
- Perform SARS-CoV-2 testing
- Good hand hygiene with ABHR >60% or soap and water
- Cleaning and disinfecting high touched surfaces with an EPA disinfectant

COVID-19 Long-term Care Reporting Summary

Event	Where and when to report		
	Certified SNF/NF	RCF (Licensed AL)	Assisted Living (Unlicensed)
NEW **Positive COVID-19 — test either by PCR or POC: Resident cases only**	Long-term Care Gateway Application/ Within 24 hours of the result if the number of cases meets the outbreak reporting threshold*	Long-term Care Gateway Application/ Within 24 hours of the result if the number of cases meets the outbreak reporting threshold*	N/A
Positive COVID-19 Point-of-Care test – **Staff or Resident**	NHSN Covid Module / Weekly per CMS instructions	N/A	N/A
Positive COVID-19 Lab Result (PCR Not Point-of-Care) – **Staff or Resident**	NHSN Covid Module / Weekly per CMS instructions	N/A	N/A
COVID-19 Related Death – Staff or Resident	Complete a Confidential Report of Communicable Disease Form. Enter "COVID-19" for the Disease section, fax to 317-234-2812.	Complete a Confidential Report of Communicable Disease Form. Enter "COVID-19" for the Disease section, fax to 317-234-2812	Complete a Confidential Report of Communicable Disease Form. Enter "COVID-19" for the Disease section, fax to 317-234-2812.

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*Outbreak Reporting Threshold: three cases of COVID-19 occur in residents in one defined area (such as hall, unit, neighborhood, street, pod, secured unit, vent unit) in a 48-hour period, or 10% or more of the current building census has COVID-19. **Effective April 4, 2022, reporting of negative results, either individual test results or in aggregate, is optional, but can be reported to NHSN *** Effective July 12, 2023, reporting COVID-19 POC results into the IDOH REDCap is no longer required Long-Term Care Gateway Application: https://gateway.isdh.in.gov/ COVID-19 Death: Complete Confidential Report of Communicable Disease Form (https://forms.in.gov/Download.aspx?id=5082) and fax to: 317-234-2812

Influenza (flu)

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Flu Epidemiology

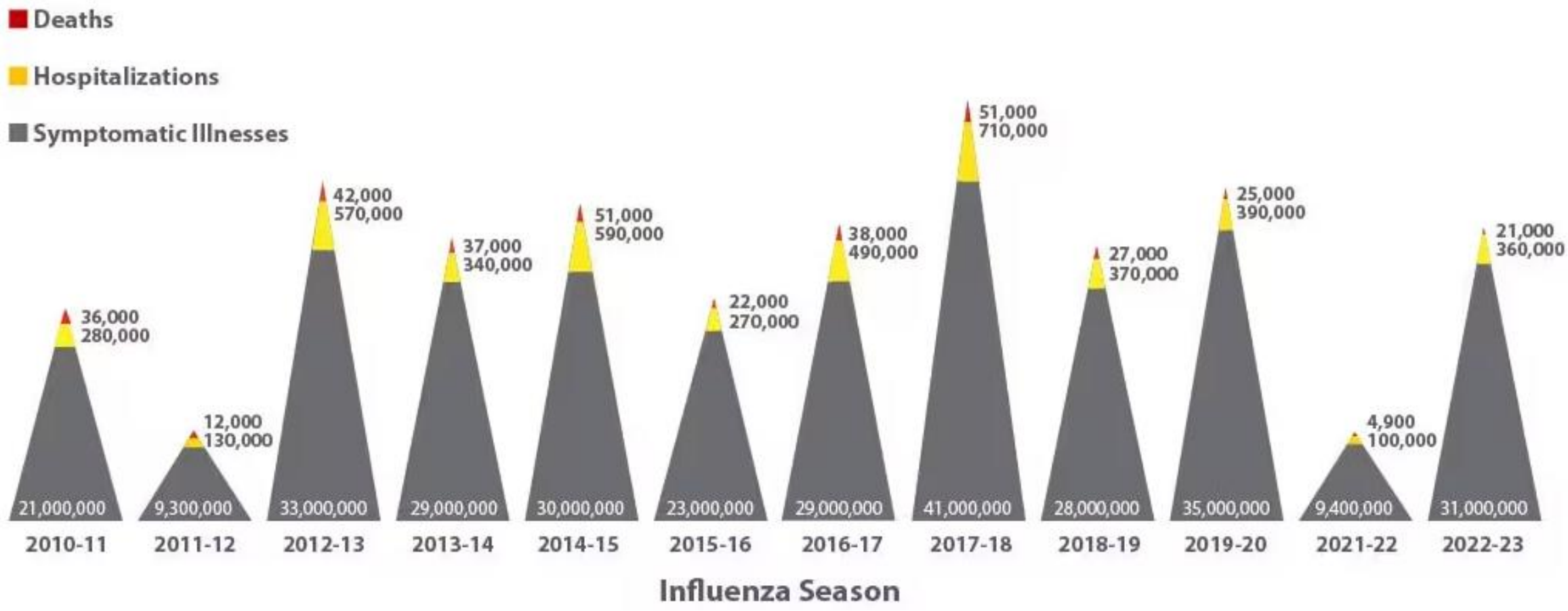
- Influenza (flu) is a contagious respiratory illness caused by the **influenza virus, types A and B**
- Transmitted via **droplets**, released into the air
  - Droplets may remain infectious for minutes to hours, or even days
- Influenza viruses can **infect the nose, throat, and/or lungs** (1-4 days incubation period)
- Illness can range from mild to severe and **can result in hospitalization or even death**
  - Most contagious in the first 3-4 days after illness onset, but can be still spread virus up to 7 days after illness onset
- Flu season runs **October – May in the U.S**., activity typically peaks December - January
- Annual vaccination is the most effective way to reduce the risk of flu infection and complications

Influenza Vaccines

- Everyone 6 months and older should get a flu vaccine every year with rare exceptions.
- Vaccination typically starts during September or October, but as long as flu is circulating you should still get vaccinated.
- The Advisory Committee on Immunization Practices (ACIP) recommends that adults aged 65 and older receive any of the following vaccines for the 2024-2025 season –
  - High-dose inactivated influenza vaccine
  - Recombinant influenza vaccine
  - Adjuvanted inactivated influenza vaccine
- It's important for healthcare providers, caregivers, and contact get vaccinated especially when caring for those who are high risk for more severe outcomes.

All U.S. 2024-2025 influenza vaccines will be trivalent protecting against influenza A/H1N1pdm09, influenza A/H3N2, and influenza B/Victoria.

Estimated US Flu Burden, by Season



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Influenza Surveillance in the United States

There are 5 major components to the U.S. influenza surveillance system

1. *Virologic Surveillance: US WHO Collaborating Laboratories System and National Respiratory & Enteric Virus Surveillance System (NREVSS)
2. *Outpatient Illness Surveillance (ILINet)
3. Long-term Care Facilities: National Healthcare Safety Network (NHSN)
4. Hospitalization Surveillance: Influenza Hospitalization Surveillance Network (FluSurv-NET)
5. Mortality Surveillance: National Center for Health Statistics (NCHS)

Respiratory Syncytial Virus (RSV)

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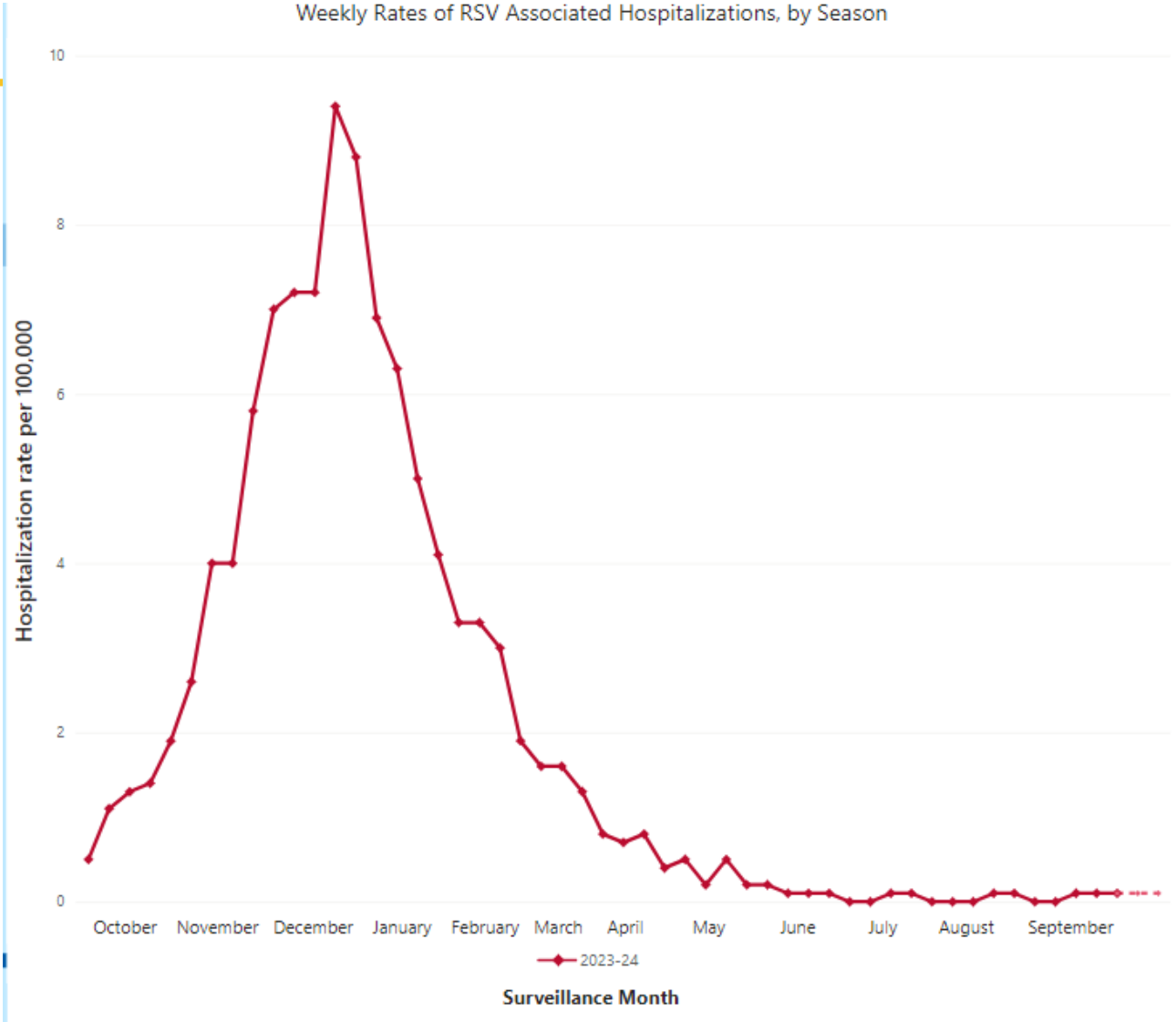
RSV Epidemiology

- Respiratory syncytial virus (RSV) is a common viral infection that causes respiratory illness in people of all ages
  - RSV can cause severe illness, such as bronchiolitis and pneumonia, in people at high risk **(i.e., infants, young children, older adults, those with weakened immune systems)**
- Transmitted via **droplets**, released into the air or by touching objects or surfaces that have germs from the nose or mouth of person with the virus
- Incubation period: **4-6 days** after being exposed
- Infectious period: **3-8 days** after symptom onset

RSV Trends

- **RSV season onset** (indicated by a sustained increase in the percent positivity of RSV tests above a threshold) ranged from mid-September to mid-November
- **RSV season peak** (indicated by the maximum in percent positivity of RSV tests) ranged from late December to mid-February.
- **RSV season offset** (indicated by a sustained decrease in the percent positivity of RSV tests below a threshold) ranged from mid-April to mid-May.

*Florida has an earlier RSV season onset and longer duration than most regions of the country.



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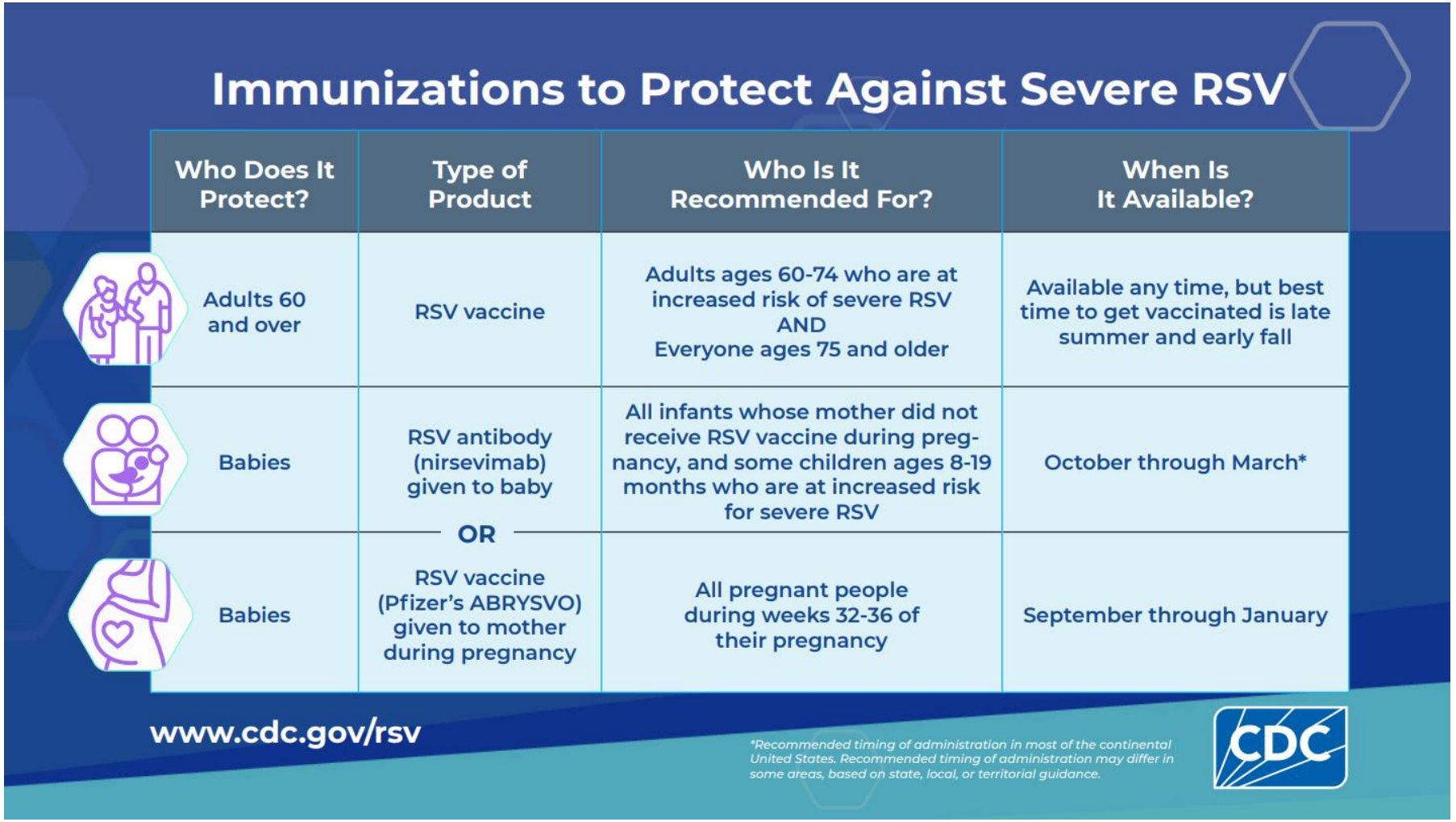
RSV Vaccines



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Source: https://www.cdc.gov/rsv/vaccines/index.html

RSV Vaccine for Ages 60+

Conditions that increase your risk for severe RSV-related illness include:

- Chronic heart or lung disease
- Weakened immune system
- Certain other medical conditions, including some people with diabetes and some people with obesity
- **Living in a nursing home**

For a complete list of chronic health issues that lead to increased risk of severe RSV, see Clinical Overview of RSV.

The RSV vaccine **is not an annual vaccine**, meaning people do not need to get a dose every year. If you have already received an RSV vaccine, you do not need another dose at this time.

Long-Term Care Facility (LTCF)

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LTCF Outbreak Detection

Definition: "At least three (3) residents with the same infection in one defined area (such as hall, unit, neighborhood, street, pod, secured unit, vent unit) in a 48-hour period OR 10% or more of the current building census with the same infection."

– IDOH Long-Term Care Division

- Cases may be lab-confirmed, or meet influenza-like illness (ILI) criteria
  - **ILI** = Fever (>100°F, 37.8°C) AND cough AND/OR sore throat
- Not limited to residents - should include staff, even those who were not tested at facility and are reporting outside results
- Individuals may test negative but still meet ILI criteria and should be included in the outbreak count

LTCF Outbreak Process

1. IDOH notified via LTC Division incident reporting portal; occasionally by local health department (LHD), IDOH field staff, or directly by facility staff.

2. IDOH central office epidemiologist receives information, confirms outbreak, initiates outbreak response, notifies field and IP team.

3. Field team completes outbreak investigation. Investigations housed in IDOH REDCap.

Ex: "*2024OUT-RESP[FLU]-001*"

As a public health agency, **the health department has the authority** to declare outbreaks.

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LTCF Outbreak Response

Investigation:

- IDOH field team interviews facility leadership or clinical staff and collects the following information:
  - Timeline of symptoms
  - Facility description/layout
  - Case counts
  - Clinical and laboratory summary

Control:

- Respiratory pathogen testing (for outbreak purposes) free of charge at IDOH Lab
- IDOH monitors for two (2) incubation periods after last date of symptom onset before closing outbreak

LTCF Outbreak Response cont.

Recommendations:

- Recommendations may include hand hygiene, PPE, transmission-based precautions, room restrictions, restriction of group activities, dining or visitor restrictions, prophylaxis, vaccination, exclusion of ill staff, cohort staff/residents, and/or enhanced environmental cleaning

Resources:

- Field team provides affected facility with Respiratory Outbreak Toolkit and line list
- IDOH IP may provide additional education or resources for infection control practices

LTCF Outbreak Challenges

- **Delays in reporting**
  - Impact recommendations and control measures
- **Initial information may be minimal or non-specific**
  - Ex: “The flu” could also mean stomach bug - different program area
- **Multiple illnesses circulating** = possibility of coinfections
- **Immunocompromised individuals**
- **Etiology may be unknown** – ex: community-acquired pneumonia (CAP), bronchitis
  - May still be unknown following outbreak closure and medical record review

LTCF Outbreak Challenges cont.

Case counts:

- Staff should be included in counts, but may test outside of the facility without reporting results back
- Staff may not initially report symptoms to facility

Outbreak closure:

- Single new case resets incubation period = outbreaks can become lengthy

LTCF conditions:

- Older facilities may have less effective ventilation systems
- Congregate living facilities tend to be more housing-dense, contributing to transmission

Outbreaks are variable!

Infection Control Resources

- Interim Guidance for Influenza Outbreak Management in Long-Term Care and Post-Acute Care Facilities - https://www.cdc.gov/flu/hcp/infection-control/ltc-facility-guidance.html
- Infection Control Guidance: SARS-CoV-2 - https://www.cdc.gov/covid/hcp/infection-control/index.html
- Interim Guidance for the Use of Masks to Control Seasonal Influenza Virus Transmission - https://www.cdc.gov/flu/hcp/infection-control/mask-guidance.html?CDC_AAref_Val=https://www.cdc.gov/flu/professionals/infectioncontrol/maskguidance.htm
- Viral Respiratory Pathogens Toolkit for Nursing Homes - https://www.cdc.gov/long-term-care-facilities/hcp/respiratory-virus-toolkit/index.html
- Preventing Transmission of Viral Respiratory Pathogens in Healthcare Settings - https://www.cdc.gov/infection-control/hcp/viral-respiratory-prevention/
- **Project Firstline** Infection Control Guidance: Respiratory Viruses - https://www.cdc.gov/project-firstline/hcp/infection-control/
- Testing and Management Considerations for Nursing Home Residents - https://www.cdc.gov/flu/hcp/testing-methods/nursing-homes.html?CDC_AAref_Val=https://www.cdc.gov/flu/professionals/diagnosis/testing-management-considerations-nursinghomes.htm
- Healthcare Provider Resources for Respiratory Virus Season - https://www.cdc.gov/respiratory-viruses/hcp/tools-resources/index.html
- Environmental Infection Control Guidelines - https://www.cdc.gov/infection-control/hcp/environmental-control/index.html#toc
- **(Poster)** Infection Control Actions for Respiratory Viruses - https://www.cdc.gov/project-firstline/media/pdfs/respiratory-actions-508.pdf

Future Plans for IDOH Website

- Working on implementing a public pan-respiratory dashboard that will include data for flu, COVID-19, and RSV. The following data will be shared:
  - Hospitalizations
  - Deaths
  - Immunizations
  - Syndromic Surveillance
  - Wastewater Surveillance

**Case data will not be shared as it is not reportable for all three conditions.*

What type of information would you like to see included on this dashboard?

- COVID-19 Dashboard: https://www.coronavirus.in.gov/
- Influenza Dashboard: https://www.in.gov/health/idepd/respiratory-disease/influenza/influenza-dashboard/

Contacts

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