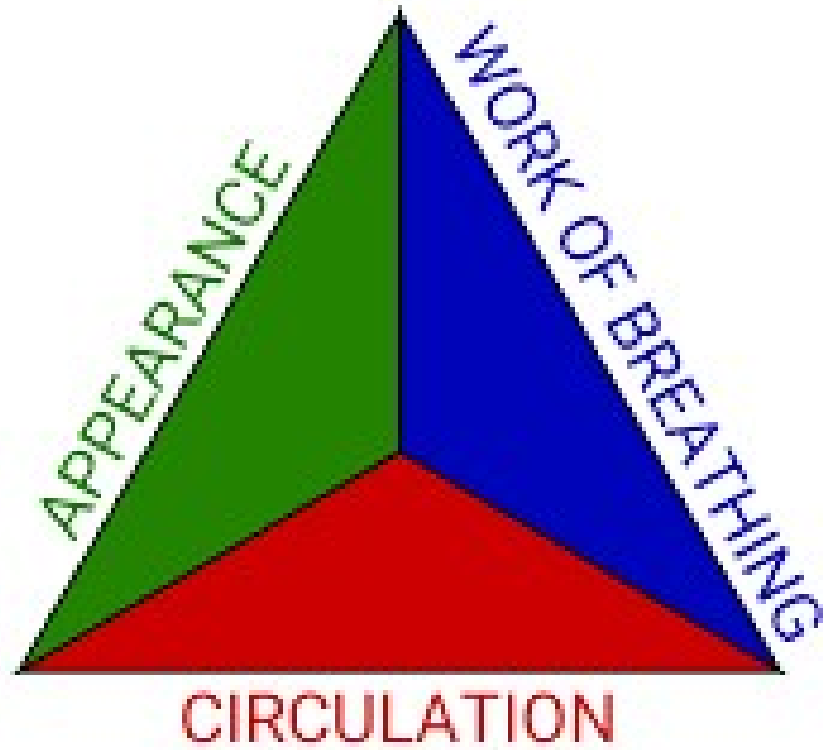




Joining Forces for Little Lungs:
Strengthening Pediatric Respiratory Care
Through Knowledge and Collaboration

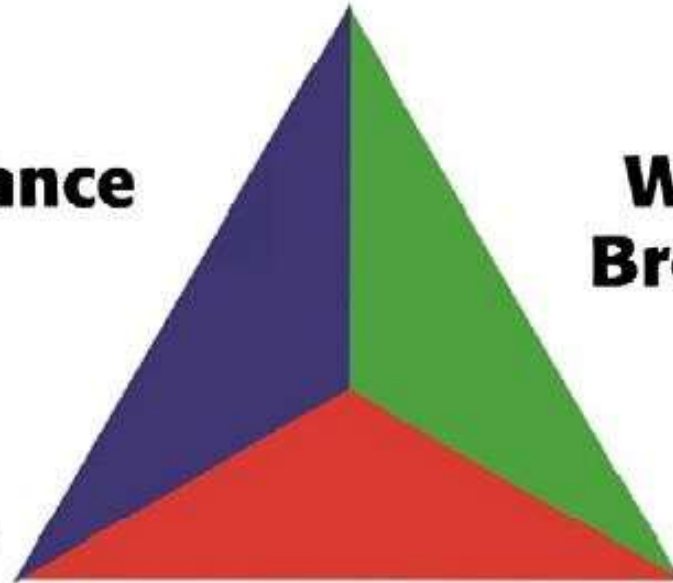
CONFLICT OF INTEREST

- I have no financial disclosure or conflict of interest with the presented material in this presentation



Appearance

Abnormal Tone
↓ Interactiveness
↓ Consolability
Abnormal Look/Gaze
Abnormal Speech/Cry



Work of Breathing

Abnormal Sounds
Abnormal Position
Retractions
Flaring
Apnea/Gasping

Circulation to Skin

Pallor
Mottling
Cyanosis



<https://youtube.com/shorts/nBssBh6e1A0?si=14xmFNQGtPKY1YKL>

-
- https://www.cdc.gov/respiratory-viruses/data/index.html?ACSTrackingID=USCDC_2067-DM136664&ACSTrackingLabel=RSV%20Immunizations%20%E2%80%93%209/26/2024&deliveryName=USCDC_2067-DM136664#:~:text=As%20of%20August%2030
-

Emergency Department

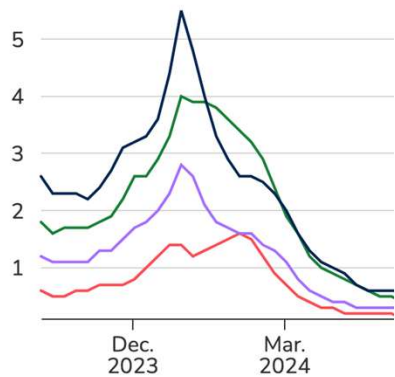
Weekly percent of total emergency department visits associated with COVID-19, influenza, and RSV. Refer to [data notes](#)

Respiratory Illness

Combined COVID-19 Influenza RSV

0-4 years 5-17 years 18-64 years 65+ years

6% of emergency department visits



Data last updated on March 19, 2024. [View this dataset](#) on data.cdc.gov.

Emergency Department Visits by Age

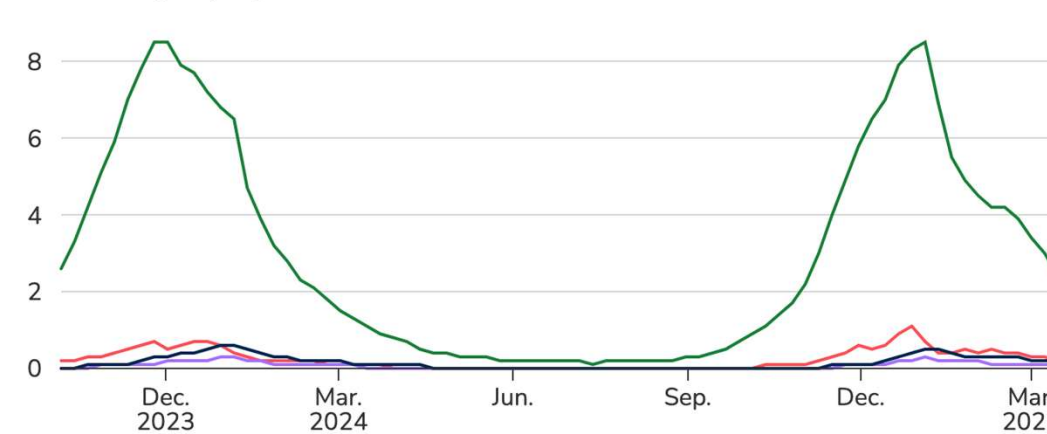
Weekly percent of total emergency department visits associated with COVID-19, influenza, and RSV. Refer to [data notes](#) for more details.

Respiratory Illness

Combined COVID-19 Influenza RSV

0-4 years 5-17 years 18-64 years 65+ years

10% of emergency department visits

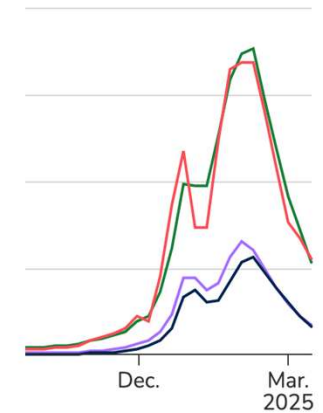


Data last updated on March 19, 2025 and presented through March 15, 2025. [View this dataset](#) on data.cdc.gov.

Emergency Department

Weekly percent of total emergency department visits associated with COVID-19,

ages



Data last updated on March 15, 2025. [View this dataset](#) on data.cdc.gov.

Microsoft

Hospitalization by Age

Weekly hospitalization rates for COVID-19, influenza, and RSV per 100,000 population. Preliminary data are shaded in gray. Refer to [data notes](#) for more details.

Hospitalization by Age

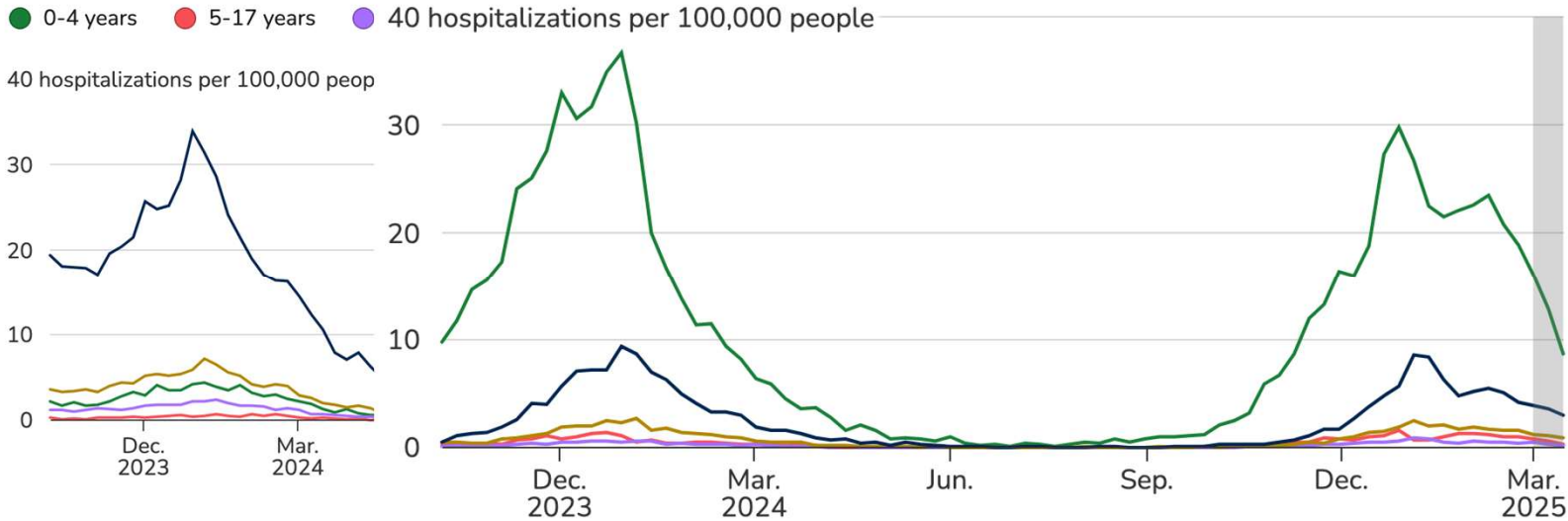
Weekly hospitalization rates for COVID-19, influenza, and RSV per 100,000 population. Preliminary data are shaded in gray.

Respiratory Illness

Combined
 COVID-19
 Influenza
 RSV

Respiratory Illness

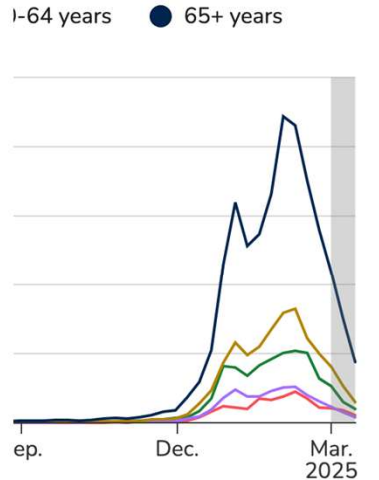
Combined
 COVID-19
 0-4 years
 5-17 years
 18-49 years
 50-64 years
 65+ years



Data last updated on March 20, 2024. [View this dataset](#) on data.cdc.gov.

Data last updated on March 20, 2025 and presented through March 15, 2025. [View this dataset](#) on data.cdc.gov.

Weekly hospitalization rates for COVID-19, influenza, and RSV per 100,000 population. Preliminary data are shaded in gray. Refer to [data notes](#) for more details.



Data last updated on March 20, 2025 and presented through March 15, 2025. [View this dataset](#) on data.cdc.gov.

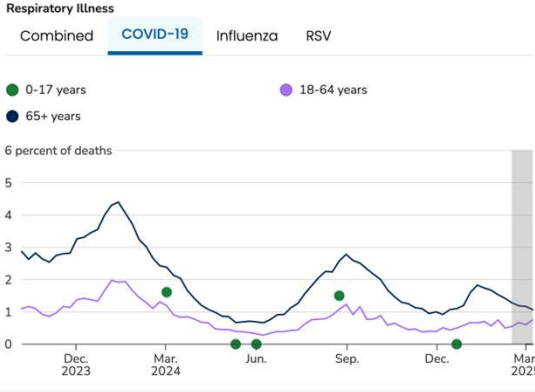


Deaths by Age

Weekly percent of total deaths associated with COVID-19, influenza, and RSV. Preliminary data are shaded in gray. Refer to [data notes](#) for more details.

Deaths by Age

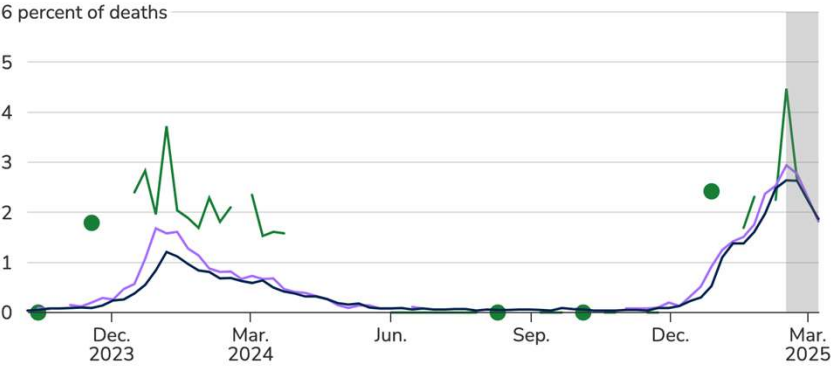
Weekly percent of total deaths associated with COVID-19, influenza, and RSV. Preliminary data are shaded in gray. Refer to [data notes](#) for more details.



Respiratory Illness

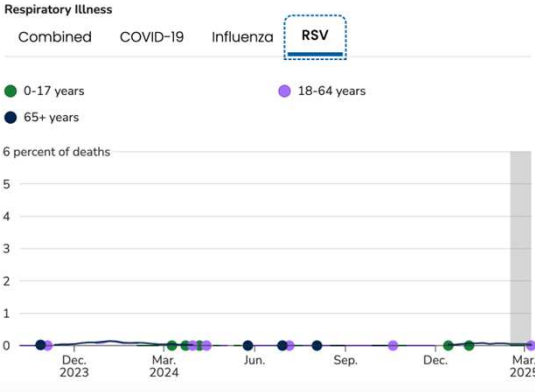
Combined COVID-19 Influenza RSV

- 0-17 years
- 18-64 years
- 65+ years



Deaths by Age

Weekly percent of total deaths associated with COVID-19, influenza, and RSV. Preliminary data are shaded in gray. Refer to [data notes](#) for more details.





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Influenza

RSV

Pertussis

Mycoplasma Pneumonia

Measels



INFLUENZA

Pediatric Deaths

17 influenza-associated deaths
were reported this week for
a total of 151 deaths this season.

<https://www.cdc.gov/fluview/surveillance/2025-week-11.html>

Pulled March 25, 2025. From March 15, 2025

INFLUENZA

- The flu is a respiratory disease, but it can affect the whole body. A child can become suddenly ill with any or all of these symptoms:
 - Fever, which may be as high as 103°F (39.4°C) to 105°F (40.5°C)
 - Body aches, which may be severe
 - Headache
 - Sore throat
 - Cough that gets worse
 - Tiredness
 - Runny or stuffy nose
-

WHY DO KIDS DIE FROM INFLUENZA?

- Viral complications such as
 - Myocarditis (inflammation of the heart)
 - Encephalitis (inflammation of the brain)
 - Rhabdomyolysis (inflammation and breakdown of the muscle)
 - Multi-organ failure
 - Sepsis

Respiratory Syncytial Virus (RSV) +

OVERVIEW

Is a common respiratory virus with symptoms similar to cold.



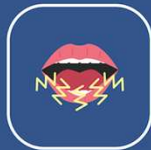
People usually recover within 1-2 weeks.
RSV is very dangerous for babies and elderly.

SYMPTOMS

Symptoms that indicate an infection.



Fever



Coughing



Runny nose

PREVENTION

Keep it clean to prevent infection.



Wear a face mask



Wash your hands



Avoid close contact

CARE

There are currently no drugs to directly treat RSV infection.



See a doctor



Take medicine



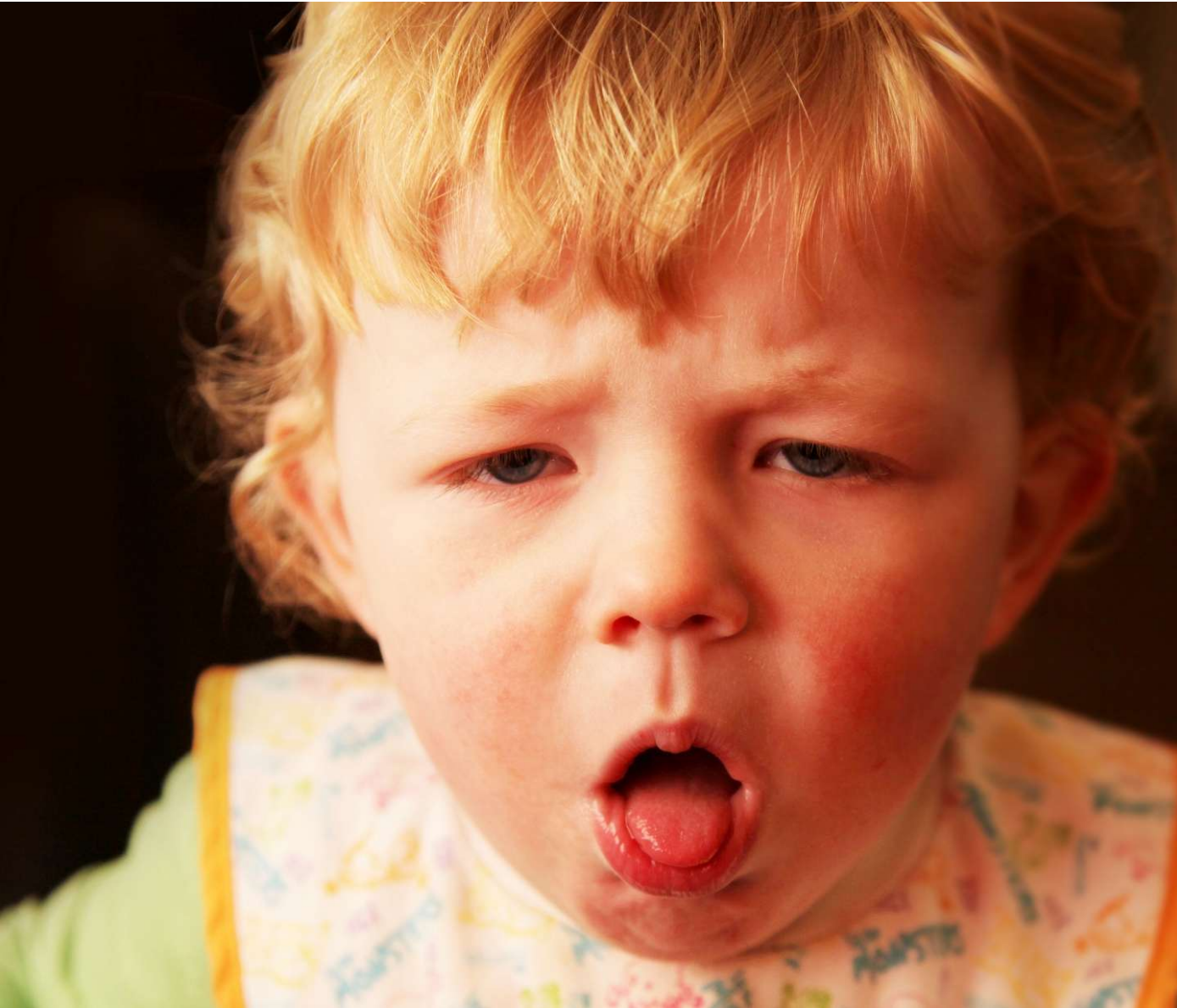
Recuperate

RSV

RSV

- Similar characteristics to that of other respiratory viruses including:
 - Runny nose
 - Coughing
 - Sneezing
 - Fever
 - Decreased appetite
 - Wheezing
 - In very young infants, symptoms may include irritability, decreased activity, and breathing difficulties.
-

-
- children hospitalized secondary to RSV infection usually recover without sequelae. They are discharged in 3 to 4 days. High-risk infants have longer hospitalizations and have higher rates of mechanical ventilation and admission to the intensive care unit.
 - People infected with RSV are contagious for 3 to 8 days. However, some infants, and people with weakened immune systems, can continue to spread the virus even after they stop showing symptoms for as long as 4 weeks
-



PERTUSSIS

PERTUSSIS

- **Early symptoms** can last for 1 to 2 weeks and usually include:
 - Runny or stuffed-up nose
 - Low-grade fever (less than 100.4°F)
 - Mild, occasional cough
 - One to 2 weeks after the first symptoms start, people may develop paroxysms, known as coughing fits. These coughing fits usually last 1 to 6 weeks but can last for up to 10 weeks. The cough generally gets worse and becomes more common as the illness continues.
 - Make a high-pitched "whoop" when they inhale after a coughing fit
 - Vomit during or after coughing fits
 - Feel very tired after the fit, but usually seem well in-between fits
 - Have difficulty sleeping at night
 - Struggle coughing fits can cause people to
 - to breathe
 - Fracture (break) a rib
 - Those who get these coughing fits say it's the worst cough of their lives
-


-
- Serious complications are common
 - About 1 in 3 babies younger than 1 year old who get whooping cough need care in the hospital. The younger the baby, the more likely they'll need hospital treatment.
 - Babies younger than 1 year old who are treated in the hospital can have:
 - **Apnea**: 2 in 3 (68%)
 - **Pneumonia** (lung infection): 1 in 5 (22%)
 - **Convulsions** (violent, uncontrolled shaking): 1 in 50 (2%)
 - **Encephalopathy** (disease of the brain): 1 in 150 (0.6%)
 - One in 100 (1%) will **die** from their complications.
-

People of all ages need **WHOOPING COUGH VACCINES**



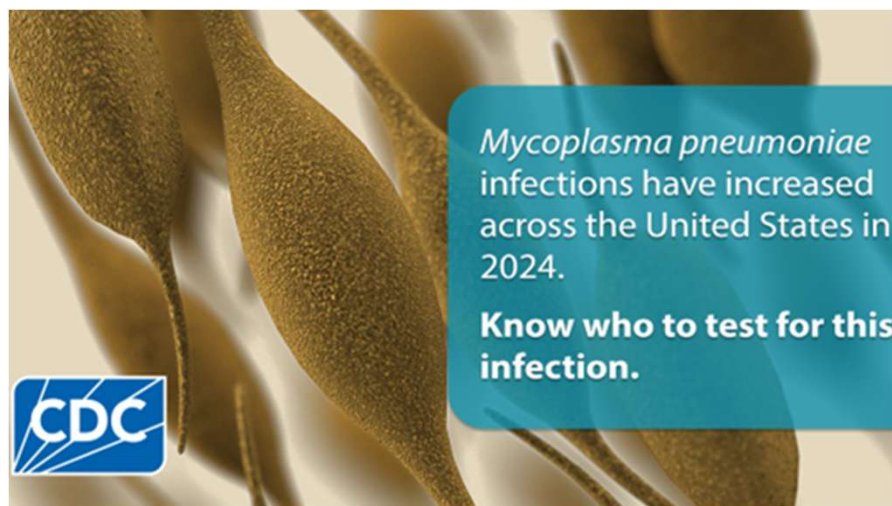
DTaP for young children	Tdap for preteens	Tdap for pregnant women	Tdap for adults
<ul style="list-style-type: none">✓ 2, 4, and 6 months✓ 15 through 18 months✓ 4 through 6 years	<ul style="list-style-type: none">✓ 11 through 12 years	<ul style="list-style-type: none">✓ During the 27-36th week of each pregnancy	<ul style="list-style-type: none">✓ Anytime for those who have never received it

CS356221-A

www.cdc.gov/whoopingcough 

MYCOPLASMA PNEUMONIA





- The *M. pneumoniae* discharge diagnosis data from March 31 through October 5, 2024, show an increase among all age groups across the United States, peaking in August, and remaining high. The increase, however, was highest among children. The percentage grew from 1.0% to 7.2% among children ages 2–4 years and from 3.6% to 7.4% among children ages 5–17 years in that time frame. **The increase in children ages 2–4 years is notable** because *M. pneumoniae* historically hasn't been recognized as a leading cause of pneumonia in this age group.

-
- the [long incubation period](#) of *M. pneumoniae*, which is between one and four weeks;
 - the ability of the bacteria to persist in the respiratory tract for several months; and
 - the prolonged presence of symptoms such as coughing.
 -
-



MEASLES

-
- 2025



483

Age

Under 5 years: **157 (33%)**

5-19 years: **204 (42%)**

20+ years: **111 (23%)**

Age unknown: **11 (2%)**

Vaccination Status

Unvaccinated or Unknown: **97%**

One MMR dose: **1%**

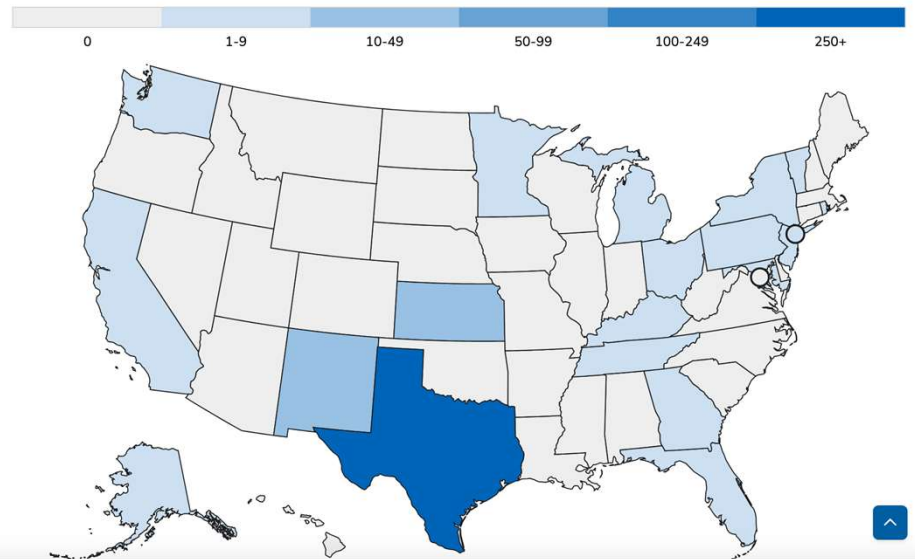
Two MMR doses: **2%**

As of March 27, 2025, a total of 483 confirmed* measles cases were reported by 20 jurisdictions: Alaska, California, Florida, Georgia, Kansas, Kentucky, Maryland, Michigan, Minnesota, New Jersey, New Mexico, New York City, New York State, Ohio, Pennsylvania, Rhode Island, Tennessee, Texas, Vermont, and Washington.

Map of measles cases in 2024 & 2025

as of March 27, 2025

2025 2024



-
- Measles is a highly contagious disease that can lead to serious complications.
 - Symptoms usually begin 7 to 14 days after infection.
 - Measles can be dangerous, especially for babies and young children.
 - 7–14 days after a measles infection: first symptoms show
 - Measles symptoms appear 7 to 14 days after contact with the virus. Measles typically begins with:
 - High fever (may spike to more than 104°)
 - Cough
 - Runny nose (coryza)
 - Red, watery eyes ([conjunctivitis](#))
-

-
- 2–3 days after symptoms begin: Koplik spots
 - Tiny white spots (Koplik spots) may appear inside the mouth two to three days after symptoms begin.
 - 3–5 days after symptoms begin: measles rash
 - Measles rash appears 3 to 5 days after the first symptoms. It usually begins as flat red spots that appear on the face at the hairline. They then spread downward to the neck, trunk, arms, legs, and feet.
 - Small raised bumps may also appear on top of the flat red spots.
 - The spots may become joined together as they spread from the head to the rest of the body.
 - When the rash appears, a person's fever may spike to more than 104° Fahrenheit.
-

PEDIATRIC SURGE





Staff

Space

Stuff

System

slido

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When thinking about Pediatric Surge and staffing...what are some ways to over come this challenge?

① Start presenting to display the poll results on this slide.

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Pediatric Surge and Space.... Suggestions?

① Start presenting to display the poll results on this slide.

slido

Please download and install the Slido app on all computers you use



Do you have pediatric supplies for a surge? Where could you get it?

① Start presenting to display the poll results on this slide.



SYSTEM

- What are some gaps in your region?
 - Any great ideas?
-

REFERENCES

- <https://www.ncbi.nlm.nih.gov/books/NBK459215/>
 - <https://publichealth.jhu.edu/2025/what-to-know-about-measles-and-vaccines>
 - <https://cdc.gov>
-

THANK YOU

