




# Northwest Region Healthcare Coalition

## Clinical Considerations and Forecasting 2023-2024 Respiratory Illness Season

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# What we will discuss today...



- Hospital respiratory admissions and bed capacity update
  - URI Hospital admission trends
  - URI ED visit trends
  - Tripledemic; Concurrent viral waves
  - COVID-19 Variant of Interest
  - Pediatric Care Resources
  - CDC Vaccine Program Ends
  - 2023-2024 Viral Respiratory Vaccinations
  - Education and Training
  - Clinical Advisor Update
- 

# Admissions Status as of 10/11/23 (updated every Wednesday)



**Colorado flu season is between October 1st and May 18th of each year.**

EMResource Bed Capacity as of 10/13/23:

NICU beds available = 30%

PICU beds available = 26%

ICU beds available = 15%

Acute care beds available = 19%

4

Statewide flu hospital  
admissions  
since 10/1/2023

76

Statewide COVID-19 hospital  
admissions  
since 10/1/2023

[Please click here for the statewide COVID-19 data dashboard](#)

8

Statewide RSV hospital  
admissions  
since 10/1/2023

# Mandatory Flu Vaccines

## CODE OF COLORADO REGULATIONS Health Facilities and Emergency Medical Services Division

## 6 CCR 1011-1 Chapter 2

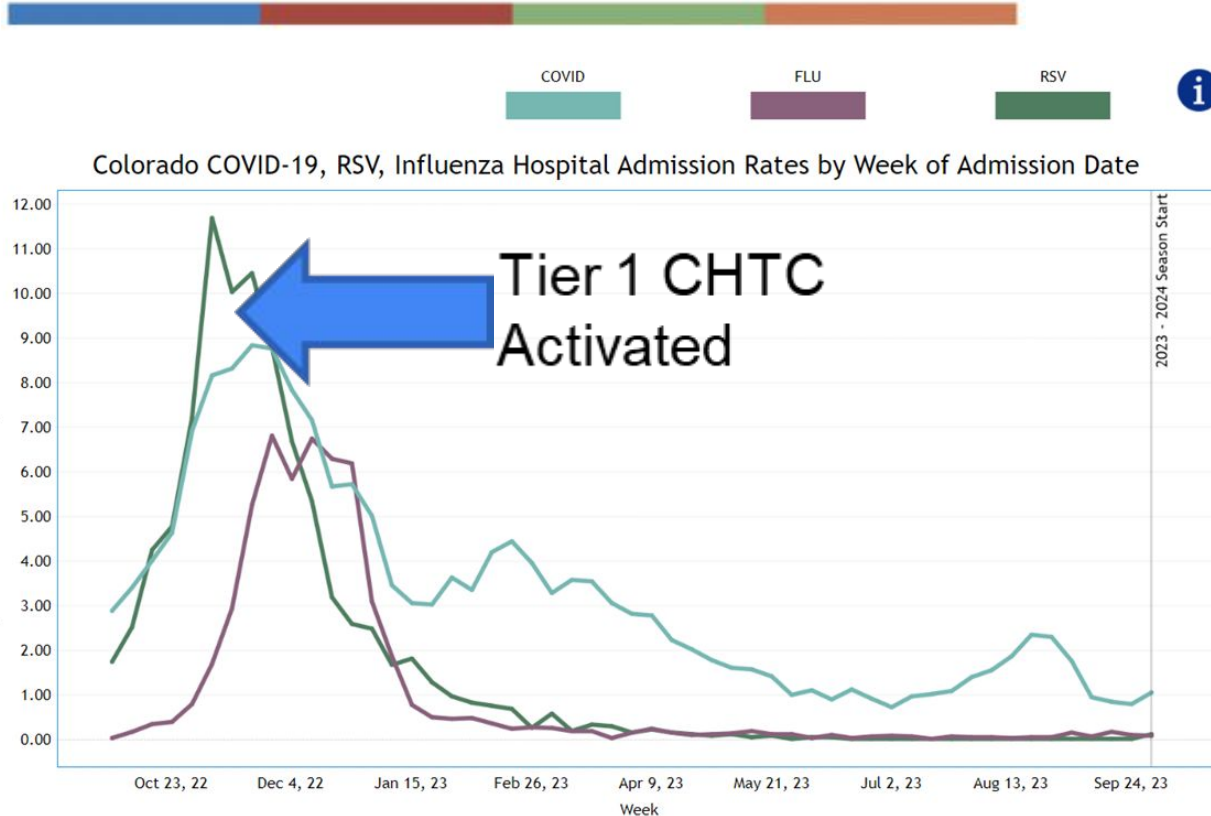
- 11.2.3 Facilities and agencies shall ensure that ninety percent (90%) of employees and direct contractors have received the influenza vaccine during a given influenza season. In order to demonstrate that the ninety percent (90%) rate has been met, facilities and agencies shall:
- (A) By May 15th of every year, report to the Department, in the form and manner specified by the Department, the vaccination rate for employees and direct contractors for the most recent influenza season.
  - (B) Have defined procedures to prevent the spread of influenza from unvaccinated healthcare workers.
  - (C) Maintain for three (3) years the following documentation that may be examined by the Department in a random audit process:
    - (1) [Emergency rule expired 12/28/2021]
    - (2) A medical exemption signed by a physician, physician assistant, advanced practice nurse, or certified nurse midwife licensed in the State of Colorado stating that the influenza vaccination for the employee or direct contractor is medically contraindicated as described in the product labeling approved by the FDA.

## CODE OF COLORADO REGULATIONS Health Facilities and Emergency Medical Services Division

## 6 CCR 1011-1 Chapter 2

- 11.2.4 Licensed hospitals, hospital units, ambulatory surgical centers, and nursing facilities shall provide or make available an annual influenza vaccine for employees and direct contractors when the influenza vaccine is readily available.
- (A) All other facilities and agencies shall ensure that employees and direct contractors are offered the opportunity to receive an annual influenza immunization.
- 11.3 Requirements for Hospitals, Hospital Units, Ambulatory Surgical Centers, and Nursing Facilities that Fail to Meet Vaccination Rate
- 11.3.1 Each licensed hospital, hospital unit, ambulatory surgical center, and nursing facility that fails to meet the ninety percent (90%) vaccination rate for any given influenza season shall review its current written policy regarding the annual influenza immunization of employees and direct contractors to ensure that it addresses the following criteria, or create a written policy, if none exists:
- (A) Ensuring that the facility or agency has either of the following for employees and direct contractors:
    - (1) Proof of immunization, or
    - (2) A medical exemption signed by a physician, physician's assistant, advanced practice nurse or certified nurse midwife licensed in the State of Colorado stating that the influenza vaccination for that individual is medically contraindicated as described in the product labeling approved by the FDA.
  - (B) Ensuring that any employee or direct contractor who does not have proof of immunization wears a surgical or procedure mask during influenza season when in direct contact with clients and in common areas, as specified by the licensee's policy. Such masks shall be in addition to other standard personal protective equipment.

# 2022-2023 URI Season Hospital Admission Trends



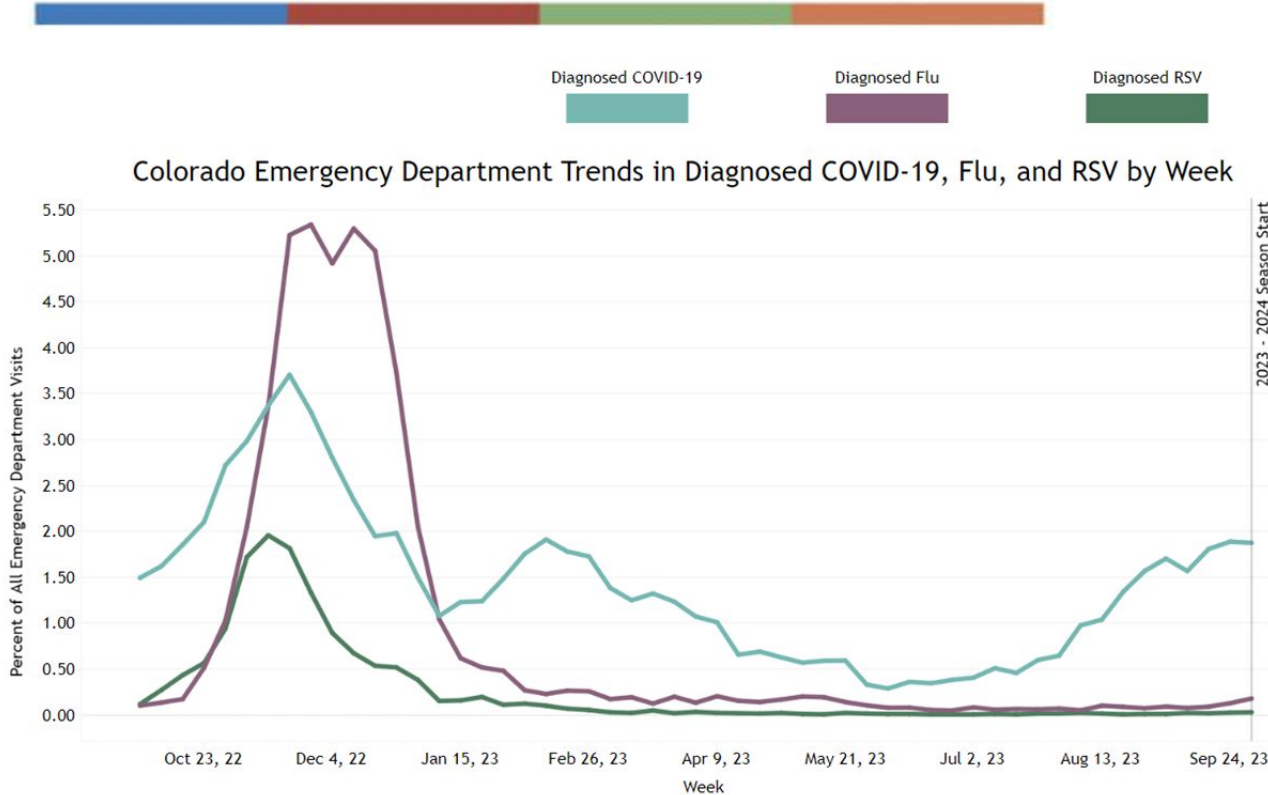
- Viral trifecta noted between October 2022 through mid January 2023

- First week of November 2022 we noted the following rates of infection per 100,000:
  - COVID: 8.14%
  - FLU: 1.68%
  - RSV: 11.67

- A second COVID wave occurred in February 2023 with the highest rate of 4.43

- CHTC was activated 11/9 while all three were at their peak

# 2022-2023 URI Syndromic ED Data



- Diagnosed influenza accounted for the majority of respiratory related ED visits 2022-2023

- The last week of November 2022 infection rates for ED visits:

- COVID: 3.29%
- FLU:5.33%
- RSV:1.33%

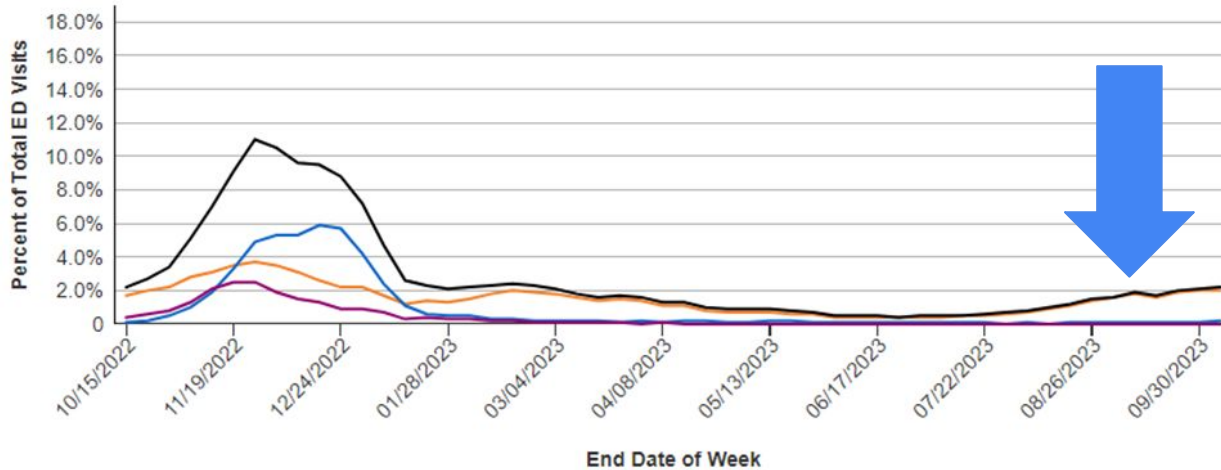
- 2023-2024 respiratory season has seen its start with an early peak of COVID mid August

# “The year of the Tripledemic...again?”

## Respiratory Virus Activity

Select your state or territory:

Colorado



COVID-19 Influenza RSV Combined

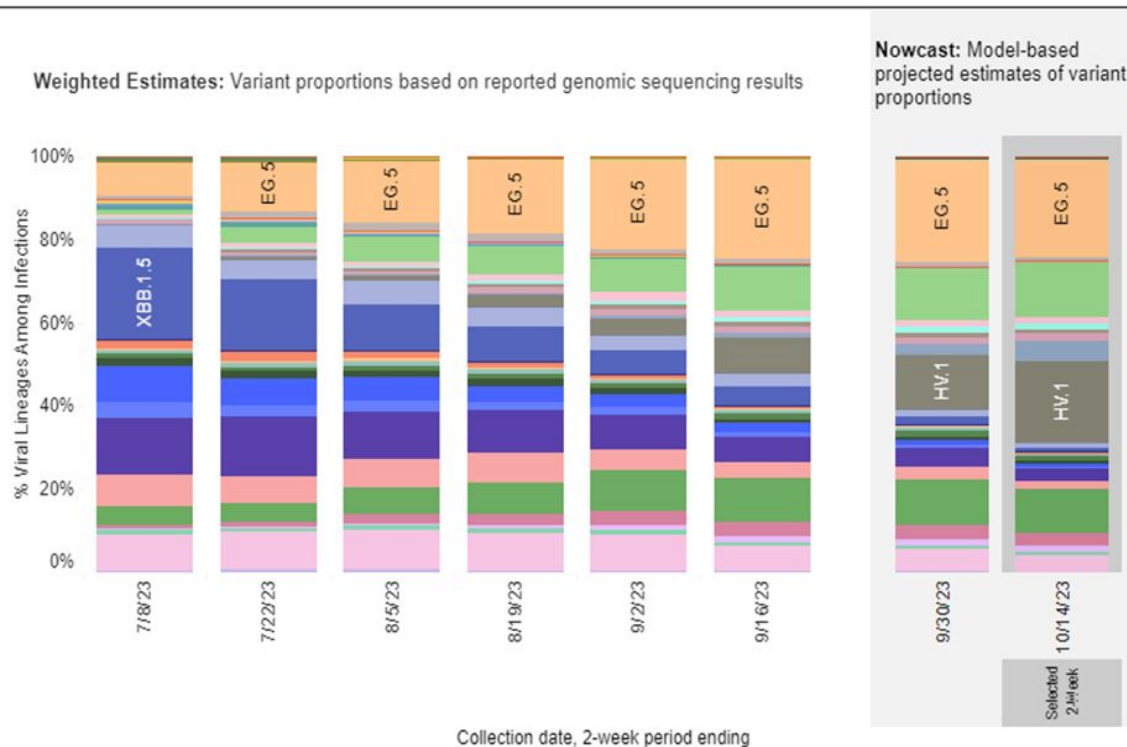
- Concerns
  - Surge capacity
  - PPE
  - Medication Shortages
    - Racemic Epi
    - Amoxicillin (oral suspension)
    - Cephalosporins
    - Nebulized albuterol
    - Parenteral IV fluids of all presentations
    - Oral suspension Ibuprofen
    - Tamiflu
    - IM/IV Solumedrol
    - Toradol
    - [ASHP Drug Shortages](#)
  - Transfer ability
  - Staffing

# COVID-19: Latest & Not Greatest

Surge ability  
Immune Escape  
Spike P. Variations

Weighted and Nowcast Estimates in United States for 2-Week Periods in 6/25/2023 – 10/14/2023

Hover over (or tap in mobile) any lineage of interest to see the amount of uncertainty in that lineage's estimate.



Nowcast Estimates in United States for 10/1/2023 – 10/14/2023

USA				
WHO label	Lineage #	US Class	%Total	95%PI
Omicron	EG.5	23.6%	21.2-26.3%	
	HV.1	19.5%	16.8-22.6%	
	FL.1.5.1	13.5%	10.8-16.7%	
	XBB.1.16.6	10.3%	9.1-11.8%	
	HK.3	4.9%	3.6-6.7%	
	XBB.2.3	4.1%	3.4-4.9%	
	XBB.1.16.11	3.1%	2.5-3.9%	
	XBB.1.16	2.8%	2.4-3.3%	
	XBB.1.16.1	2.2%	1.7-2.7%	
	XBB.1.16.15	1.8%	1.3-2.4%	
	HF.1	1.7%	1.2-2.4%	
	GK.1.1	1.6%	1.3-2.1%	
	XBB	1.4%	1.2-1.7%	
	GE.1	1.4%	1.0-1.9%	
	XBB.1.5.70	1.2%	0.8-1.8%	
	GK.2	0.9%	0.7-1.2%	
	XBB.1.5	0.9%	0.7-1.0%	
	EG.6.1	0.8%	0.6-1.2%	
	XBB.1.9.1	0.8%	0.6-1.0%	
	XBB.1.5.72	0.6%	0.4-0.8%	
	XBB.1.5.68	0.5%	0.3-0.8%	
	XBB.1.9.2	0.5%	0.4-0.7%	
	XBB.1.42.2	0.5%	0.3-0.8%	
	BA.2	0.3%	0.1-0.8%	
	XBB.1.5.10	0.3%	0.2-0.4%	
	CH.1.1	0.2%	0.1-0.3%	
	XBB.2.3.8	0.2%	0.1-0.3%	
	XBB.1.5.59	0.1%	0.1-0.2%	
	FD.1.1	0.1%	0.1-0.1%	
	FE.1.1	0.1%	0.0-0.1%	
	XBB.1.5.1	0.0%	0.0-0.0%	
	EU.1.1	0.0%	0.0-0.0%	
	B.1.1.529	0.0%	0.0-0.0%	
	BQ.1	0.0%	0.0-0.0%	
	FD.2	0.0%	0.0-0.0%	
Other	Other	0.0%	0.0-0.1%	



# WRAP-EM Pediatric Respiratory Virus Clinical Pathways

- Clinical guidance for respiratory care
- Just in time education and decision trees
- Evidence based pathways:
  - Pediatric ED Respiratory Triage
  - ED Heated Humidified High Flow Care Pathway
  - BVM for pediatrics
  - Pediatric Intubation Review and special considerations
  - Pediatrics RSI Medications

[Just-in-Time Basic Clinical Guidance for Pediatric Respiratory Care](#)

**WRAP-EM**

Western Regional Alliance for  
Pediatric Emergency Management



# WRAP-EM



Western Regional Alliance for  
Pediatric Emergency  
Management

ASPR Pediatric Center of  
Excellence

## Part I: Assessing The Pediatric Patient

Title
<a href="#">Useful Pediatric Apps</a> ★
<a href="#">Pediatric Vital Signs</a>
<a href="#">Multi-Victim Triage Methods</a>
<a href="#">Physical Examination</a>
<a href="#">Developmental Milestones</a>
<a href="#">Features of a Vulnerable Population</a>
<a href="#">Special Populations within Pediatrics</a>

## Part II: Managing the Pediatric Patient

Title
<a href="#">Procedures in Pediatrics</a>
<a href="#">Respiratory Management</a>
<a href="#">Vascular Cannulation</a>
<a href="#">Pediatric Fluid Management</a>
<a href="#">Management of Anxiety and Acute Pain in Pediatric Patients</a>
<a href="#">Pediatric Pain Management</a>

<a href="#">Pharmacologic Analgesia and Anxiolysis in the Acute Setting</a>
<a href="#">Psychosocial Aspects of Pediatric Care</a>
<a href="#">Palliative and End of Life Care</a>
<a href="#">Provider Self-Care</a>
<a href="#">Quick References</a>
I. <a href="#">Weight-based Dosage Chart</a>
II. <a href="#">Commonly Used Medications/ Dosages</a>
III. <a href="#">Oral Airway Chart</a>
IV. <a href="#">Medical Calculators</a>
V. <a href="#">Manual Drip Primer</a>

# CDC COVID19 Vax Program has Ended

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- 10-6-23: CDC no longer distributing CDC COVID vax cards
- Ongoing requirement to report vaccinations into CIIS
- No longer CDPHE standing administration orders
- Johnson & Johnson is no longer authorized in the U.S.
- Vaccines are ordered directly from manufacturers and company reps
  - Distribution barriers
  - Limited access from private offices
  - Limited shelf life
  - Order backlogs
  - EXPENSIVE
    - Moderna, Novavax & Pfizer \$115-130 per dose, does not include administration fee/provider visit

# 3-24 Respiratory Vaccine Resources



## COVID-19

- Moderna: 6mos-11yrs
  - SPIKEVAX 12yrs and older
- Novavax: 12 yrs and older
- Pfizer: 6mos-11yrs
  - Comirnaty: 12yrs and older

## Influenza

- Typical presentations, all are four strains

## RSV

- Adults 60+: one dose – Arexvy or Abrysvo
- Pregnant People: 1 dose during weeks 32-36 – Abrysvo only
- Infants/Young Children: 1 dose for all infant <8 mos born during RSV season
  - 1 dose for children 8-19 mos who are at increased risk for severe RSV disease - Beyfortus (not a vaccine but monoclonal antibody)

# Upcoming Education



CDC Project Firstline Partners – Online IP and EP training with CEU's

WRAP-EM: Just in Time Pediatric Reference Guide for Adult Healthcare Providers

EMTs On the GO – Weekly email from the EMS and Trauma branch at CDPHE: webinars, certification courses, skills training, pediatric focus trainings ([sign up form](#))

Best Practices for Caring for Children and Adolescents During the 2023-24 Respiratory Season

12-1:30PM THURSDAY 10/19, hosted by CHA, Children's, ACEP ([register here](#))



# Clinical Advisor Resource & Update

- Offer clinical perspective on what is happening real time with hospital and emergency preparedness
- Clinical perspective for development of policies and procedures for state, local and regional level emergency preparedness
- Participate in educational opportunities and promote coalition efforts
- Clinical liaison between coalition partners and CDPHE
- Reviewing and updating our regions Burn Surge Annex in preparation for a statewide facilitated burn surg TTX in early December



# Reach Out!

Email us!

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