# Children's National and the Pediatric Health Network

Special Update on Tripledemic PHN Grand Rounds November 2, 2022





### Introduction and Welcome

Claire Boogaard, M.D., M.P.H.
Medical Director
Pediatric Health Network





## Notes About Today's Town Hall and Grand Rounds:

- All lines are muted throughout the presentation.
- Please use the Q&A to ask questions or make comments.
- We will be recording the session.
- Today's recordings and materials will be posted to the Children's National website and the Pediatric Health Network website following the presentation.
  - --ChildrensNational.org
  - --PediatricHealthNetwork.org





## Children's National Update: Tripledemic Update November 2, 2022

Roberta DeBiasi, M.D., M.S. Division Chief, Infectious Disease

Joelle Simpson, M.D. Division Chief, Emergency Medicine

Marc DiFazio, M.D. Vice President, Ambulatory Services





### AGENDA

- 1. Dr. DeBiasi update on surging viruses
- 2. Dr. Simpson presenting information on the surge nationally and the national/regional response
- 3. Dr. DiFazio on CNH access during the surge





# LAB-CONFIRMED SEASONAL RESPIRATORY VIRAL INFECTIONS, WEEK ENDING 10/29/2022

Xiaoyan Song, PhD, MBBS, CIC Chief Infection Control Officer, Children's National Hospital Professor of Pediatrics, George Washington University School of Medicine and Health Science





# Summary (week ending 10/29/2022)

#### FLU

- Continued to rise sharply, with 204 patients testing positive vs. 82 in the previous week
  - ❖ In the last 3 weeks, the number of patients testing positive increased from 15 to 82 to 204
- If it follows the same pattern as before the pandemic, it could continue rising before peaking

#### **RSV**

Very small increase with 219 patients testing positive last week, vs. 212 in the week before

#### COVID-19

• Had remained stable with 33 patients testing positive last week vs. 31 in the previous week

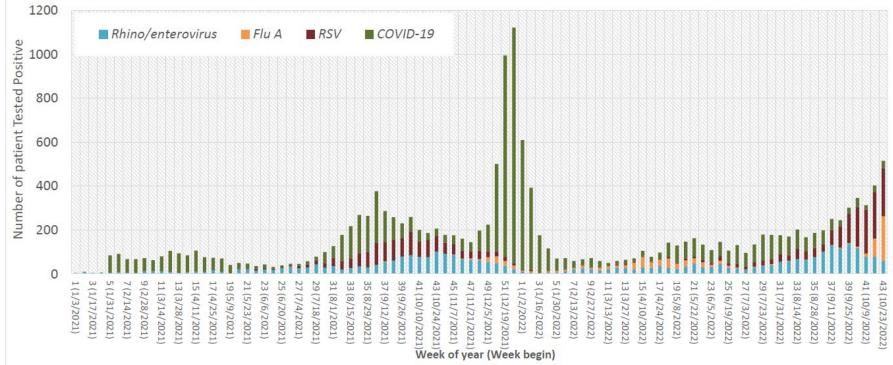
### Rhino/enterovirus

• Had continued to decline, with 61 patients testing positive vs. 78 in the previous week





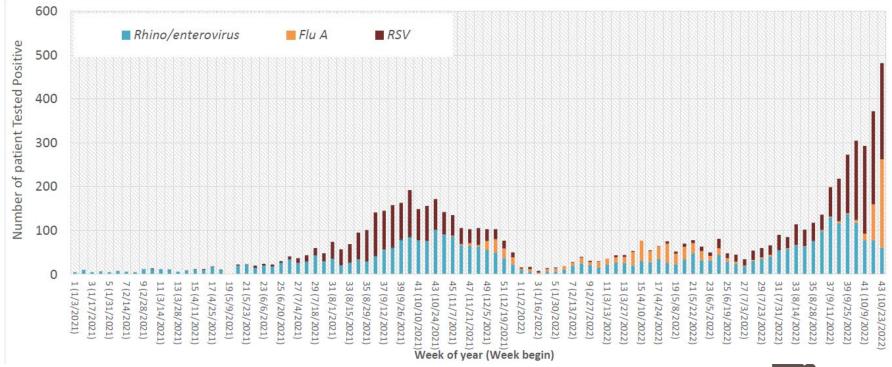
# CNH Lab-confirmed Seasonal Respiratory Viral Infections and COVID-19, 1/3/2021 – 10/29/2022







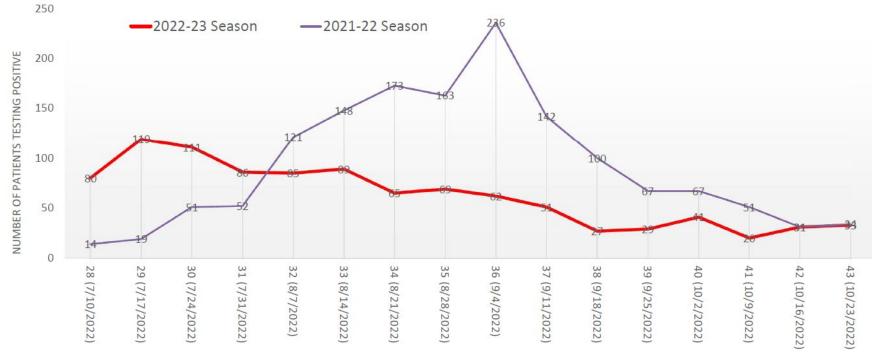
# CNH Lab-confirmed Seasonal Respiratory Viral Infections, without COVID-19, 1/3/2021 – 10/29/2022







# CNH Lab-confirmed <u>COVID-19</u>, 2022-23 Season (7/10/2022-10/29/2022) vs. 2021-22 Season







## CNH Lab-confirmed <u>Rhino/enterovirus</u>, 2022-23 Season (7/10/2022-10/29/2022) vs. 2021-22 Season







# CNH Lab-confirmed <u>RSV</u>, 2022–23 Season (7/10/2022–10/29/2022) vs. 2021–22 Season

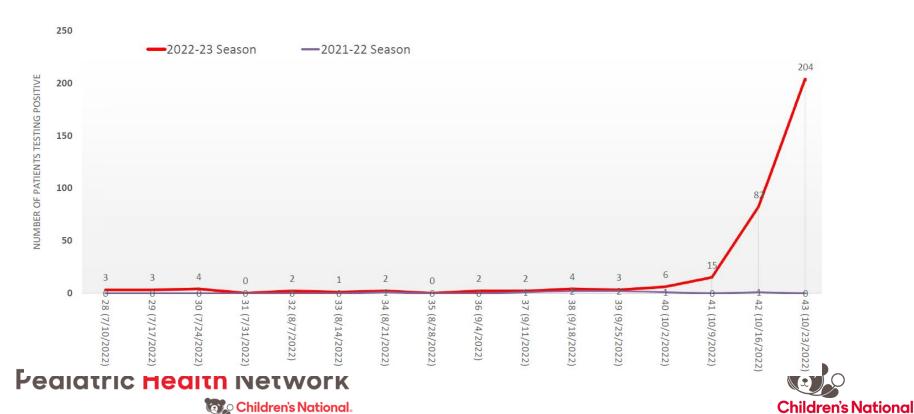








# CNH Lab-confirmed <u>Flu</u>, 2022–23 Season (7/10/2022–10/29/2022) vs. 2021–22 Season



### Additional Resources

CDC Situation Update: Summary of Weekly FluView

For Children's employees, visit the Infection Control page on Sharepoint

#### Infection Control Plan

The Infection Control Plan provides a description of the Infection Control team's efforts to support the organization to be preeminent in providing pediatric healthcare services that enhance the health and well-being of children regionally, nationally and internationally. The Infection Control and Epidemiology Risk Assessment is a component of

the Infection Control Plan that facilitates prioritization of focus areas for the Epidemiology/Infection Control program. The plan and risk assessment are reviewed at least annually and/or whenever significant changes occur in elements that affect risk.



Information related to COVID-19 can be found on the COVID-19 Hub.

#### Monkeypox

Monkeypox FAQs

Infection Control Recommendations for Managing Patients with Suspected or Confirmed Monkeypox

Clinical Support **Flu & Norovirus** COVID-19

#### **Housewide Infection Control Report**

The Housewide Infection Control Report provides data about the current state of hand hygiene and personal protective equipment compliance in inpatient and ambulatory care settings.

#### Lab-Confirmed Respiratory Virus Data

The Lab-Confirmed Respiratory Viral Infections Report provides data about the current state of the current state of respiratory viral infections both in the hospital and in the community.

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# CALL IF YOU NEED ASSISTANCE WITH ADMISSION, ED OR SPECIALTY REFERRAL



- p.m.

  Hospital Operators. Call 202-476-5000

  Monday, Friday from 5 p.m., 8 a.m.
- Hospital Operators. Call 202-476-5000
   Monday Friday from 5 p.m. 8 a.m.
   Available all day Saturday and Sunday.

**Physician Access Line.** Call 202-476-4880, Monday - Friday from 8 a.m. - 5

- Emergency Department Transfer Center/Direct Admit. Call 202-476-LIFE (5433).
- Physician Referral Line. Call 202-476-4418

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## We've updated our **Provider Portal** – on **childrensnational.org**







# "Avoidable" Emergency Department Visits: Challenges & Opportunities

Jay Pershad, M.D., M.M.M.
Clinical Chief, Emergency Department
Professor, Pediatrics and Emergency Medicine
George Washington School of Medicine and Health Sciences





# Value Proposition

<u>Higher Quality</u> Lower Cost **Patient** 

**Parent** 

Payer





Case 1: 7 month old healthy infant with URI for 4 days and 1 day wheezing. Smiling. Mild subcostal retractions with RR 62. SpO2 97%. Nasal congestion

Appropriate intervention(s) for this condition are,

A. Deep nasal suction

B. Albuterol inhaled

C. Prednisone

D. Racemic Epinephrine

E. Chest Radiograph

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### Clinical Guidance for Case 1

### PEDIATRICS<sup>®</sup>

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#### Volume 134, Issue 5

November 2014



FROM THE AMERICAN ACADEMY OF PEDIATRICS | CLINICAL PRACTICE GUIDELINE | NOVEMBER 01 2014

# Clinical Practice Guideline: The Diagnosis, Management, and Prevention of Bronchiolitis ⊘

Shawn L. Ralston, MD; Allan S. Lieberthal, MD; H. Cody Meissner, MD; Brian K. Alverson, MD; Jill E. Baley, MD;
Anne M. Gadomski, MD; David W. Johnson, MD; Michael J. Light, MD; Nizar F. Maraqa, MD; Eneida A. Mendonca, MD;
Kieran J. Phelan, MD; Joseph J. Zorc, MD; Danette Stanko-Lopp, MA; Mark A. Brown, MD; Ian Nathanson, MD;
Elizabeth Rosenblum, MD; Stephen Sayles, III, MD; Sinsi Hernandez-Cancio, JD; Shawn L. Ralston, MD; Allan S. Lieberthal, MD;
H. Cody Maisener, MD; Priza K. Alverson, MD; Iii F. Paley, MD; Anna M. Gadomski, MD; David W. Jahasan, MD; Michael J. Light, MD;

Shawn L. Ralston, et al. <u>Clinical Practice Guideline: The Diagnosis, Management, and Prevention of Bronchiolitis</u>. *Pediatrics* November 2014; 134 (5): e1474–e1502.





Case 2 45 day old. FT/NSVD. T = 38.3 C, Mild URI. Well appearing. Cath. UA LEST 3+, Nitrites + RSV (+). UC sent.

Refer to ED for Sepsis Work-up

Obtain CBC, Blood Culture Procalcitonin (PCT)

Antibiotics & follow up next day

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# Diagnostic Evaluation (1)

Pantell et al. "Evaluation and Management of the Well Appearing Febrile Infant 8-60 day old." *Pediatrics*. Aug-2021

	8-21 days	22-28 days	29-60 days
UA	Υ	Υ	Υ
Urine Culture	Υ	If UA+	If UA+
<b>Blood Culture</b>	Υ	Υ	Υ
Inflammatory Markers	Maybe <sup>W</sup>	Υ	Υ
CSF	Υ	Y if any inflammatory marker abnormal or if desired	Y if any inflammatory marker if abnormal

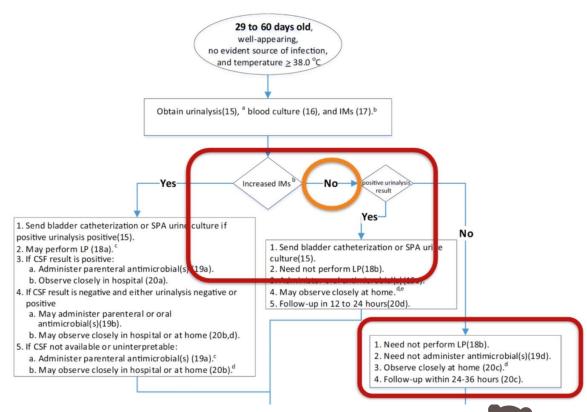
Abnormal inflammatory marker = PCT >0.5 ng/mL (**preferred**); CRP >20 mg/dL; ANC >4,000; or temperature >38.5°C





### **UA+** and the Decision to Perform an LP

- Inflammatory markers can inform decision making
- Procalcitonin (preferred) or
- ANC & CRP & temperature



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Case 3: 2 yr. old with shoulder pain after falling from bunk bed. Radiologist confirms Midshaft Clavicle Fracture

Pediatric Health Network Children's National A. Figure of 8 **Immobilizer** 

B. Sling and Swathe

C. Sling



D. Orthopedic Referral



# Case 4: A 5 yr. old with fall on outstretched hand - point tender over distal radius; radiologist confirms **Distal** Radial Buckle Fracture

A. Refer to the ED for Immobilization

B. Velcro wrist splint, Orthopedics in 3 wks.

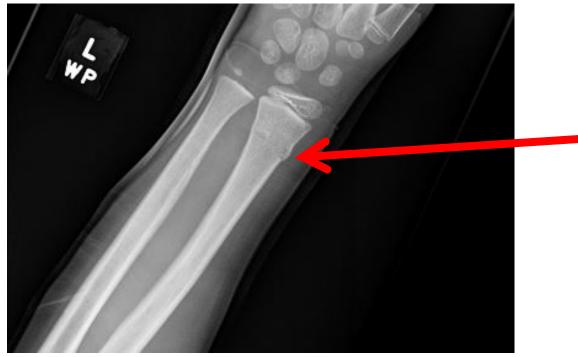


C. Sugar tong splint





## Distal Radial Buckle Fracture







Fracture Type	Immobilization in Office	Orthopedic F	7/U	
				CPT 99205
Non-displaced, non- angulated torus (buckle) fx of distal radius or ulna	Velcro wrist splint	3-week	CPT 25600 (RVU 2.78)	Off Visit New (RVU 3.5) CPT 99215 Off Visit Est
Toddler fracture (incomplete fx, small "crack")	Can consider no immobilization if comfortable; CAM boot	7-10 days		(RVU 2.8)
Non-displaced torus fx of distal tibia	CAM boot	1-2 weeks	CPT 27750	
Clavicle fx without skin tenting or NV compromise	Sling	1-2 weeks	(RVU 3.37)	
Closed non-displaced, phalangeal or metatarsal fx	Hard soled shoe	1-2 weeks (If open or n laceration, r		
Elbow hemarthrosis (post fat pad) without obvious fx line (Type 1 SC Fx)	Long arm splint	5-7 days		
ediatric Health Nety	vork			

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**CAM Boot** 





Case 5: Toddler fell from bunk bed 24 hrs. prior and sustained nasal injury. Minor epistaxis that is controlled. Moderate swelling, ecchymosis and tenderness, over nasal bridge

A. To ED for evaluation

B. Radiographs of face

C. CT maxillofacial series

D. Plastic Surgery follow up in 3-5 days





Case 6: 3 yrs. old with a beadin the left nose

The removal

technique most likely to be successful is..

A. Katz nasal extractor (balloon tipped catheter)

B. Gentle Irrigation

C. Alligator forceps

Pediatric Health Network Children's National. D. Parent "Kiss" or Ambu Bag

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# Enhanced comfort and control

- Smooth advancement
   Domed insertion tip to provide atraumatic advancement in delicate tissues.
- Thoughtful design
  The one-piece molded catheter is
  flexible and designed to offer catheter
  column strength for stability and
  control.
- 3 Balloon
  The syringe is pre-filled with 1 ml/1 cc
  of air to achieve easy balloon inflation
  and prevent over-inflation.
- Control

  The finger grip offers increased control when holding the syringe.

Katz Nasal Extractor





# Ear Foreign Body Removal

## Irrigation

- Syringe + 20G IV catheter + body temperature water
- Contraindication Perforated TM, Organic FB
- Perform otoscopy post irrigation
- · Expect to find pink TM!

Right Angled or Hooked Probe

Alligator or Bayonet Forceps

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# The Contents

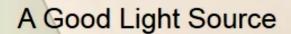








The Right Tools





Case 7 Term (39 wks.), breast fed, 60 hrs. old with no risk factors. Exam normal, except for jaundice. TSB= 17 mg/dl

A. Refer family to ED

B. Follow up in AM for repeat serum bilirubin

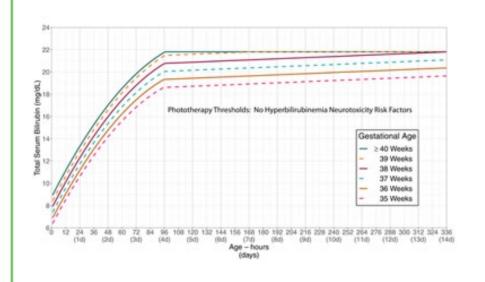
C. Direct admission to NICU for phototherapy

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### Hyperbilirubinemia Neurotoxicity Risk Factors

- Gestational age < 38 weeks</li>
- Albumin <3.0 g/dL</li>
- Isoimmune hemolytic disease, G6PD deficiency, or other hemolytic condition
- Sepsis
- Significant clinical instability in the previous 24 hours



Clinical Practice Guidelines, AAP, Pediatrics Sept-22

https://bilitool.org/





# Minor Lacerations

## Tap Water = Sterile Saline

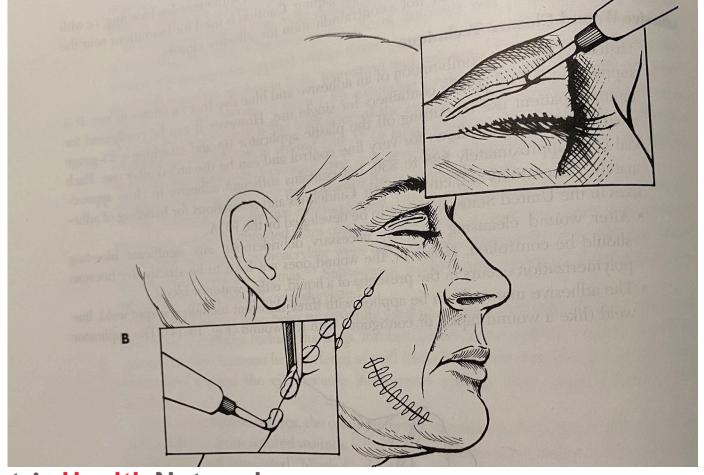
(non contaminated lacerations)

# Tissue Cyanoacrylate Adhesive (*Dermabond*)

- Scalp, Face, Extremities
- < 5 cm</p>
- < 0.5 cm wound edge separation</li>
- Low tension
- Does not cross joint
- Non contaminated







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We welcome your questions, feedback, suggestions:

phn@childrensnational.org

THANK YOU for your partnership in optimizing Emergency Department referrals!





## Resources







# Bacterial co-infection with documented viral infection

- 2,945 infants ≤60 days of age with viral testing performed (~2/3 of all infants evaluated) at 26 EDs via PECARN
- IBI in
  - 1.2% if Virus+
  - 3.7% if Virus-
  - 1.8% if No Virus testing

Infection	Virus	Virus	Risk
	Positive	Negative	Ratio
Any SBI	3.7%	12.7%	3.5
	(2.7-4.9)	(11.2-14.4)	(2.5-4.8)
UTI	2.8%	10.7%	3.9
	(1.9-3.8)	(9.2-12.2)	(2.7-5.6)
Bacteremia	0.8%	2.9%	3.8
	(0.3-1.4)	(2.1-3.8)	(1.9-7.7)
Meningitis	0.4%	0.8%	1.9
	(0.1-1.0)	(0.4-1.3)	(0.7-5.3)

<sup>\*</sup>Numbers in parentheses = 95% confidence intervals



	ANC <4×10 <sup>3</sup> cells/mm <sup>3</sup>		ANC ≥4 × 10 <sup>3</sup> cells/mm <sup>3</sup>	
	PCT <0.5 ng/mL	PCT ≥0.5 ng/mL	PCT <0.5 ng/mL	PCT ≥0.5 ng/mL
Bacteremia	0/148 (0.0%)	1/32 (3.1%)	3/135 (2.2%)	23/325 (7.1%)
≤28 d	0/37 (0.0%)	1/13 (7.7%)	1/40 (2.5%)	13/121 (10.7%)
>28 d	0/111 (0.0%)	0/19 (0.0%)	2/95 (2.1%)	10/204 (4.9%)
Bacterial meningitis	0/148 (0.0%)	0/32 (0.0%)	0/135 (0.0%)	1/158 (0.6%)
≤28 d	0/37 (0.0%)	0/13 (0.0%)	0/40 (0.0%)	1/68 (1.5%)
>28 d	0/111 (0.0%)	0/19 (0.0%)	0/95 (0.0%)	0/90 (0.0%)



