

## Infection Prevention and Control Roundtable with Acute Care Facilities in Chicago

03-31-23





Important Updates Maria Campos Bovee & Maggie Li | CDPH

Project Firstline Alison VanDine | CDPH

Covid-19 I-NEDSS Reporting
 Lori Saathoff-Huber | IDPH

**Special Topics** 

Norovirus Cluster
 Ardiana Huseini & Sonali Shet | Advocate Illinois Masonic Medical

Center

Group A Strep Karrie-Ann Toews | CDC

Dr. Ami Patel & Riley Moore | Lurie Children's Hospital

Tiffany Kuo | Northwestern Memorial Hospital

Discussion and Q&A All

Note: The final presentation, which will be distributed, will contain additional slides on COVID-19 data and MDROs reporting. Please review these slides as you wish but we will not go over them during the meeting.



## **Who is at the Roundtable today?**

In the chat, please share your name and facility name



- CDPH is hiring five IP positions:
  - Two for SNF/AL
  - One for acute care/outpatient facilities
  - One for cross-cutting healthcare
  - One for non-healthcare congregate settings (e.g., shelters/correctional facilities)
- Salary starts at \$89k with regular pay increases
- Must live within the Chicago city limits within 90 days of start date
- Work from home one day a week
- Regular and predictable hours (no weekends, no on call)
- Great benefits
- To apply, scan the QR code
- Deadline to apply: April 11<sup>th</sup> 2023



CHICAGO DEPARTMENT OF PUBLIC HEALTH

#### JOB OPPORTUNITY

MISSION: CDPH works with communities and partners to create an equitable, safe, resilient and Healthy Chicago.

#### SPECIALIST

#### \$89,076

#### **ROLE SUMMARY**

As part of the CDPH Disease Control Bureau, the Infection Prevention Specialist functions as a specialized technical advisor managing infection prevention and control activities. Depending on the position, the Infection Prevention Specialist will support either healthcare partners (e.g., skilled nursing facilities, acute care hospitals, dialysis centers) or congregate living facilities (e.g., shelters, corrections, behavioral health) by providing guidance, training, and technical support in implementing appropriate infection prevention and control measures.

#### MINIMUM QUALIFICATIONS

**SALARY:** 

#### Education

 Bachelor's degree in Public Health, Nursing,
 Epidemiology, Medical or Clinical Laboratory Science or a directly related field

#### Experience

 Four years of work experience in infection prevention and control management, or an equivalent combination of education, training, and experience

#### Licensure or Certifications

- Certification in Infection Prevention and Control (CIC) is required within six (6) months of hire
- · A valid State of Illinois driver's license

#### **WORK LOCATION**

1340 S. Damen Ave, Chicago, IL 60608

HOURS: Monday - Friday 8:30am - 4:30pm



SCAN THE QR CODE or APPLY AT THE LINK BELOW:

https://chicago.taleo.net/careersection/200/jobdetail.ftl?job=3405-cdph-2023

Job Number: 3405-CDPH-2023

Deadline for application April 11, 2023



### **X** Important Updates

- 02/01/2023: HAN alert Outbreak of Extensively Drug-resistant *Pseudomonas aeruginosa* Associated with Artificial Tears (Health Alert Network (HAN) 00485 | Outbreak of Extensively Drug-resistant Pseudomonas aeruginosa Associated with Artificial Tears (cdc.gov).
  - Thirty-seven patients were linked to four healthcare facility clusters. (68 cases thus far in the country, 16 states, including IL)
- 03/21/23: SHEA/IDSA/APIC released an update to the Compendium of Strategies to Prevent HAIs through Hand Hygiene (SHEA/IDSA/APIC Practice Recommendation: Strategies to prevent healthcare-associated infections through hand hygiene: 2022 Update | Infection Control & Hospital Epidemiology | Cambridge Core)
  - See table 1 for a summary of recommendations to prevent HAIs through HH! GREAT summary, easy read!
  - Includes approaches that should not be considered part of routine hand hygiene
  - "Clearly there is room for improving adherence and ensuring that hand hygiene programs result in optimal adherence remains a critical element for preventing HAI"
- 3/23/23: HAN alert sent regarding Chicago *Candida auris* data summary (Candida auris Data Summary March 21, 2023).
  - CDC: Increasing Threat of Spread of Antimicrobial-resistant Fungus in Healthcare Facilities | CDC Online Newsroom |

## **X** Our Outlook Group!

- Comprises the CDPH Healthcare Settings Team and IPs at acute care facilities
- Purposes are to:
  - Disseminate information
  - Facilitate communication
  - Share documents
  - DO NOT share any PHI with the group
- IMPORTANT: Please continue to report outbreaks by calling the CDPH HAI general number (312-744-1100) or emailing the general mailbox (cdphhaiar@cityofchicago.org)
- Optional: Please fill out your name and contact information in the Roundtable Outlook Group Directory (excel file)
- Please reach out to Maggie at <u>maggie.li@cityofchicago.org</u> if you have trouble accessing the group



### **Emailing the Group**

#### Maggie Li added you to the CDPH Healthcare Settings Team and Acute Care Facilities group Welcome to the CDPH Healthcare Settings Team and Acute Care Facilities group Private group with guests This group comprises CDPH Healthcare Settings Team and Infection Preventionists at acute care facilities in Chicago. We envision this group to be able to 1) share information relevant to our practice, 2) share slides from previous i This message will be sent to 92 recipients.) Show details meetings, and 3) email any members in the group with questions . maggie.li@chicagogov.onmicrosoft.com maggie.li@chicagogov.onmicrosoft.com < maggie.li@chicagogov.onmicrosoft.com > X To How to participate Cc As a guest, you're invited to take part in group conversations, share the latest ideas saved in the group files and notebook, and manage group tasks. Add a subject Email the group Go to SharePoint For easy access, add Discover documents and maggie.li@chicagogov.onmicros photos shared by group oft.com to your contacts and members in the dedicated save this message in your inbox so you can refer back to it. Go to the shared notebook Remember your group Save this email to get back Read and add to the latest notes from group members. to everything your group has to offer.



### **\*** Emailing Individual IP/Facility

SharePoint

Home

Conversations

Documents

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#### How to participate

As a guest, you're invited to take part in group conversations, share the latest ideas saved in the group files and notebook, and manage group tasks.

#### **Email the group**

For easy access, add maggie.li@chicagogov.onmicrosc ft.com to your contacts and save this message in your inbox so you can refer back to it.

#### Go to the shared notebook

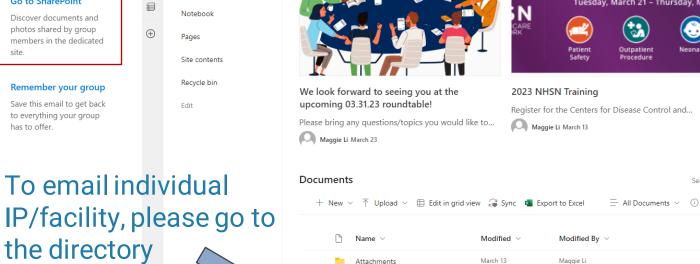
Read and add to the latest notes from group members.

#### Go to SharePoint

Discover documents and photos shared by group members in the dedicated

#### Remember your group

Save this email to get back to everything your group has to offer.



Previous Roundtable Agenda and...

30 minutes ago

Roundtable Outlook Group Direct... March 23

**CDPH Healthcare Settings Team and Acute Care Facilities** 

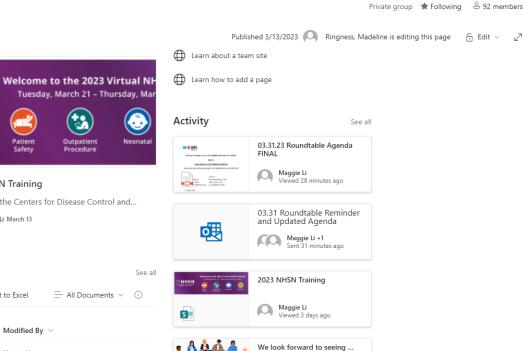
+ New V S Page details Analytics

Search this site

Maggie Li

Maggie Li

Barajas, Grace



coming 03.31.23 roundtable!

Viewed 7 days ago

Roundtable Outlook Group

Maggie Li



## **Project Firstline**

Alison VanDine, MPH, CIC

**Infection Prevention Specialist | Project Firstline Lead** 

**Healthcare Settings Program** 



## CDPH's Project Firstline: IPC Essentials 2023 Newsletter

- As a CDC Project Firstline Partner, the Chicago Department of Public Health is excited to share <u>IPC educational resources and</u> <u>training materials</u>.
- Stay up to date on the latest Project Firstline resources and register today to receive the 2023 Infection Prevention Essentials Newsletter!
  - Highlights new, free IPC resources to train your frontline staff.
- Please contact the PFL-Chicago team at projectfirstline@cityofchicago.org:
  - To meet our education specialists
  - To schedule an onsite training tailored to your facility
  - To learn more about CDC's <u>Project Firstline!</u>











#### **COVID-19** Reporting

March 31, 2023

Lori Saathoff-Huber, MPH CD General Epidemiologist

## **COVID-19 Reporting in I-NEDSS by Hospitals**

### Fields to report/update:

- Demographic (including deceased information)
- General Illness (onset, hospitalization, admission/discharge date questions only)
- Clinical (comorbid conditions questions only)
- Treatment and Immunization (COVID-specific treatment, ICU and ventilator questions only)
- Vaccination Information
- Laboratory Tests (test results only)
- Reporting Source



## **COVID-19 Reporting in I-NEDSS by Hospitals**

#### **Reinfection Cases**

- New lab results > 90 days from initial positive specimen collection date OR
- A case with SARS-CoV-2 sequencing results with a different lineage
- If a case meets the reinfection criteria, enter a new disease case report
  - <u>Do not</u> update a previously reported disease case report with the new laboratory test information if it meets the reinfection criteria.



## **COVID-19 Reporting in I-NEDSS by Hospitals**

### Applies to:

- Hospitalized cases
- Cases seen in the E.D.
- Ambulatory setting should ensure cases are being reported via ELR

#### **IDPH Communicable Disease Rules:**

- Proposed changes
- No details to share yet



## Norovirus in a Behavioral Health Setting

Illinois Masonic Medical Center

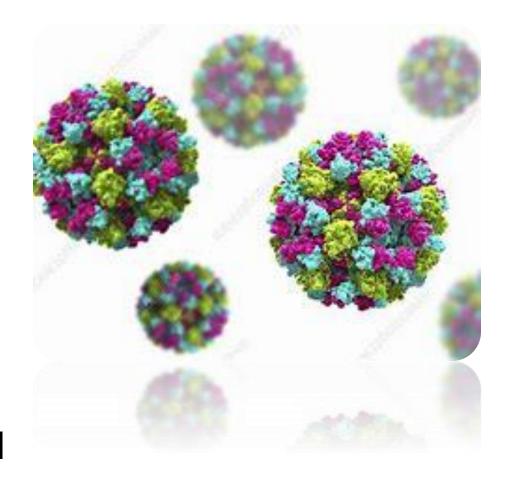


Now part of ADVOCATEHEALTH

3/30/2023 | Ardiana Huseini, MPH, CIC & Sonali Shet, BSN, RN

### **Situation Overview**

- In February Advocate Illinois Masonic Hospital experienced a cluster of Norovirus cases on the Behavioral Health Unit
- The unexpected onset of these cases in addition to increasing team member call-ins raised concern of the possibility of the virus being transmitted throughout the hospital
- The IMMC IP team helped lead the hospital wide effort to successfully contain the cluster and prevent hospital wide transmission



## **Timeline of Events**

#### Monday 2/20/23

- IP team first notified by Behavioral Health (BH) Unit staff
  - 6 Patients presenting with new onset GI symptoms
  - 4 teammates sent home due to GI symptoms

#### ✓ Tuesday 2/21/23

- 2 additional patient's on BH Unit now reporting similar GI symptoms
- One of the original 6 patients confirmed positive for Norovirus
  - Decision made to treat all cases in cluster as presumptively positive and gear management of situation on containing virus and preventing hospital transmission

#### ✓ Wednesday 2/22/23 - Friday 2/24/23

- More team members call-ins for GI related symptoms
- Noted hospital wide increase in patients being admitted with GI symptoms

### Norovirus

#### Signs and Symptoms:

- Diarrhea, Nausea, Vomiting, Abdominal pain/cramping
  - Resolves within 1-3 days; 4-6 days in vulnerable population

**Transmission:** Fecal → Oral Route

- Highly Contagious
  - Handwashing only effective method to prevent transmission
  - Bleach Solution required to fully disinfect surfaces

Incubation Period: 12 – 48 hours

**Testing:** Gastrointestinal Pathogen Panel (Stool Testing)

Updated Norovirus Outbreak Management and Disease Prevention Guidelines (cdc.gov)

## **Behavioral Health Unit**

- ✓ Congregate Based Unit
  - Group sessions and communal meals
  - Utilization of Shared Spaces (dayroom)
  - Shared Laundry
- ✓ Vulnerable/High Risk Patient Population
  - Unique safety concerns
- ✓ BH Staff unfamiliar with managing isolated patients
  - Only medically stable patients admitted to BH Unit
- ✓ Layout of Unit
  - Minimal handwashing sinks
  - Non-Alcohol sanitizers only (patient safety risk)
  - Unit cannot have PPE and trash cans in hallways (safety risk)
- ✓ Shares Physician staff with other hospital units
  - Concern that Physicians who saw patients on BH Unit could potentially transmit virus to other units

## **Actions Taken**

- ✓ Immediately notified CDPH, Hospital Leadership, and IP Chair Physician
- ✓ Isolated symptomatic patients and ordered appropriate testing
  - Isolation: Contact + Special Precautions (handwashing/bleach)
  - Creation of Makeshift Isolation Wing on BH Unit
    - Utilized unique layout of unit to separate symptomatic patients
    - Patients would otherwise have had to transfer to medical floors
- Employee Health Notification
- ✓ Creation of Patient Line List
- ✓ Increased Rounding and Unit Education to team members
- Incident Command Activation
  - Helped communicate/coordinate efforts with hospital departments
  - Developed guidelines and recommendations for team members to mitigate transmission



## **IMMC Mitigation Efforts**

- ✓ Strict enforcement of AAH Sick Team Member and Hand Hygiene Policy
- ✓ Prompt isolation/testing of patient's being admitted with GI symptoms
  - Emergency Department
- ✓ Increased availability of Sporicidal Disinfectant (Orange Top) throughout hospital
  - Partnered with Supply chain department
- ✓ Increased High-touch surface cleaning hospital wide by EVS
- ✓ Temporary stop to group events
  - Luncheons in physician lounge paused
  - N95 Fit Testing Fair scheduled for following week cancelled/postponed



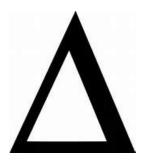
## Successful Mitigation!

- ✓ No further occurrences of patients developing GI symptoms on BH Unit
- ✓ By the following week:
  - Decrease in patient's being admitted to hospital with GI symptoms
    - Patient admitted with GI symptoms continued to be promptly isolated/tested
  - No significant increase in team member call-ins for GI symptoms
- ✓ Team members continued to demonstrate good understanding of the situation and remained compliant with the mitigation guidelines



#### Challenges

- Time management
- BH staff knowledge gaps
- Contact tracing/line list
- Quick incubation period
- Stool collection/orders



#### What Worked Well

- CDPH Partnership
- Incident Command Activation
- Real time unit education (IP rounding)
- Transparency with Team Members
- Hospital wide Collaboration/Teamwork
- AAH IP Support



## Questions?



# Invasive group A Streptococcal case burden; Chicago, Jan-Mar 2023

March 31st, 2023

Karrie-Ann Toews, MPH

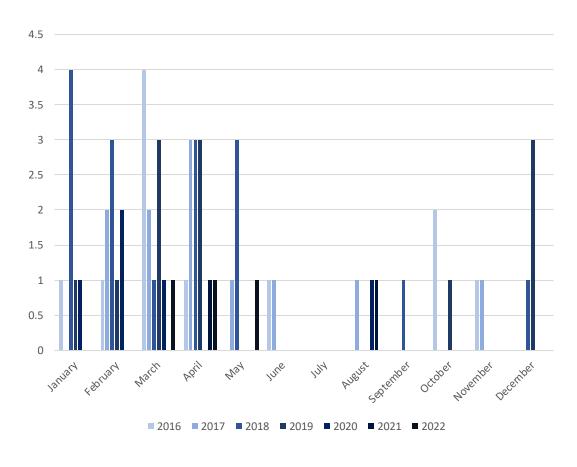


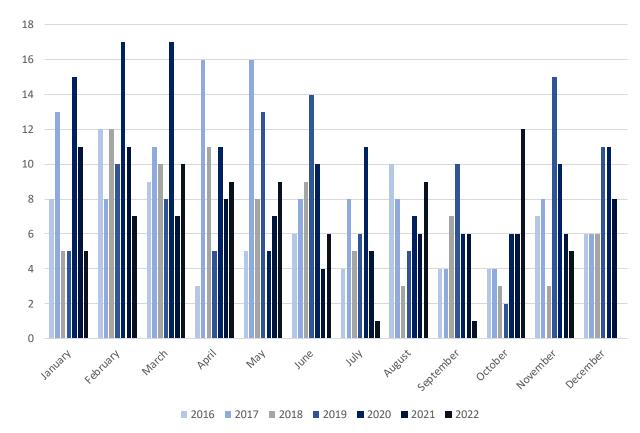
## Global increases in pediatric case burden; Q4 2022/Q1 2023

- Increased rates of iGAS and scarlet fever in Europe since Fall 2022.
  - Concerns about antibiotic supply
  - WHO: children under 10 are the most affected age group
    - Increase may reflect early start to the GAS season coinciding with an increase in the circulation of respiratory viruses and possible viral co-infection, leading to iGAS
    - Reported cases not caused by newly circulating emm type
    - No reports of increased antibiotic resistance
- Reports of increased GAS infection in Australia
- CDC: preliminary 2023 data
  - iGAS infections have remained high in children in some states even after respiratory virus decreased in those areas
  - Some states have also seen an increase in iGAS infections in adults, especially 65+

## \*

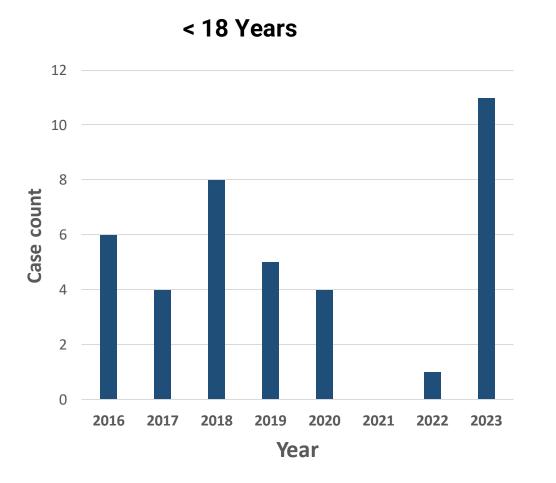
## Seasonality of disease is similar between adults and children

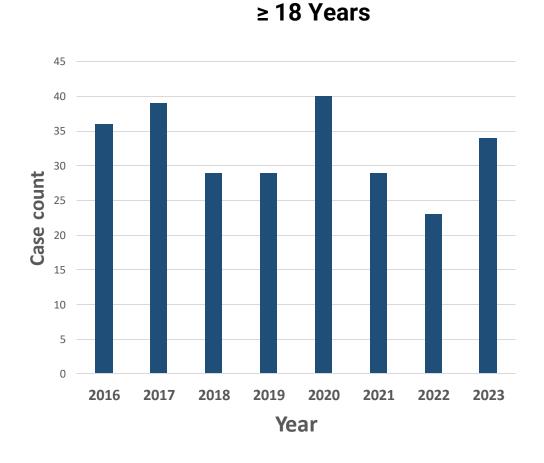






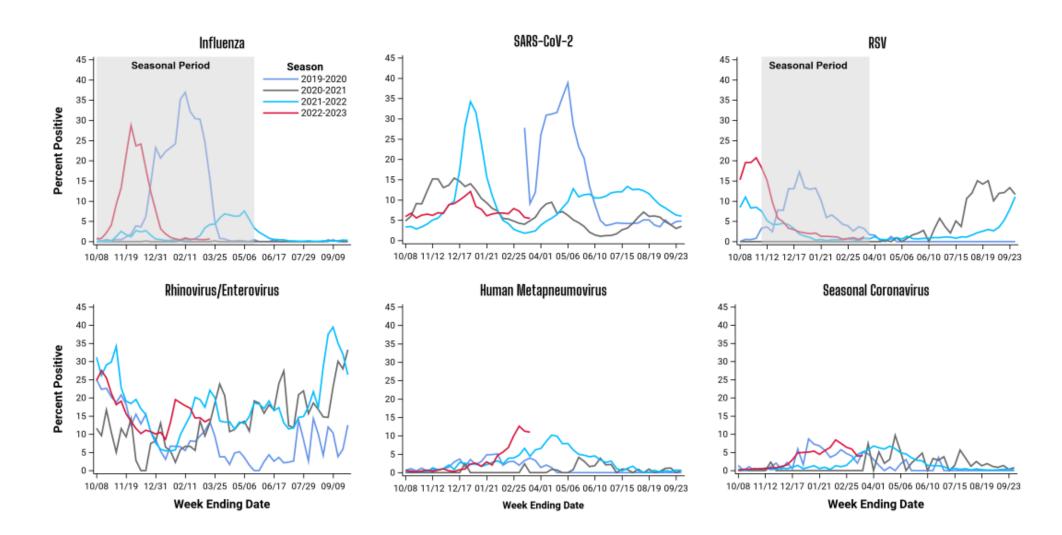
### **\*** iGAS cases; Chicago, Q1 2016-2023







### **X** Recent trends in respiratory viral surveillance





## Pediatric iGAS case characteristics, Chicago, Q1

Age range	Count (%)
< 1 year	0 (0)
1-4 years	3 (27)
5-9 years	6 (55)
10-14 years	1 (9)
15-18 years	1 (9)
Total	11 (100)
Race	
White	7 (64)
Black	3 (27)
Other/Missing	1 (9)

Ethnicity	Count (%)
Non Hispanic	7 (64)
Hispanic	4 (36)
Other/Missing	0 (0)
Sex	
Female	6 (55)
Male	6 (45)



## Pediatric iGAS outcomes, Chicago Q1 2023 (n=11)

	Case count (%)
Hospitalization	11 (100)
Death*	0 (0)
Amputation*	0 (0)
Debridement*	0 (0)

Length of stay: Median: 2 days Range: 1-5 days\*

<sup>\*</sup> Potential for missing data entry esp. discharge date (n=5) and possibly death due to limited follow-up post investigation



## Pediatric iGAS clinical characteristics, Chicago Q1 2023 (n=11)

Clinical syndrome (infection type)	Case count (%)
Abscess (not skin)*	5 (45)
Bacteremia w/o focus**	2 (18)
Pneumonia	2 (18)
Septic arthritis	1 (9)
Sepsis	1 (9)
III HH members	1 (9)

<sup>\*4</sup> of 5 presenting with submandibular/neck swelling

<sup>\*\*</sup> Both presenting with fever and rash

## Group A Streptococcus

## Ann & Robert H Lurie Children's Hospital of Chicago

Ami Patel, MD MPH and Riley Moore, MPH

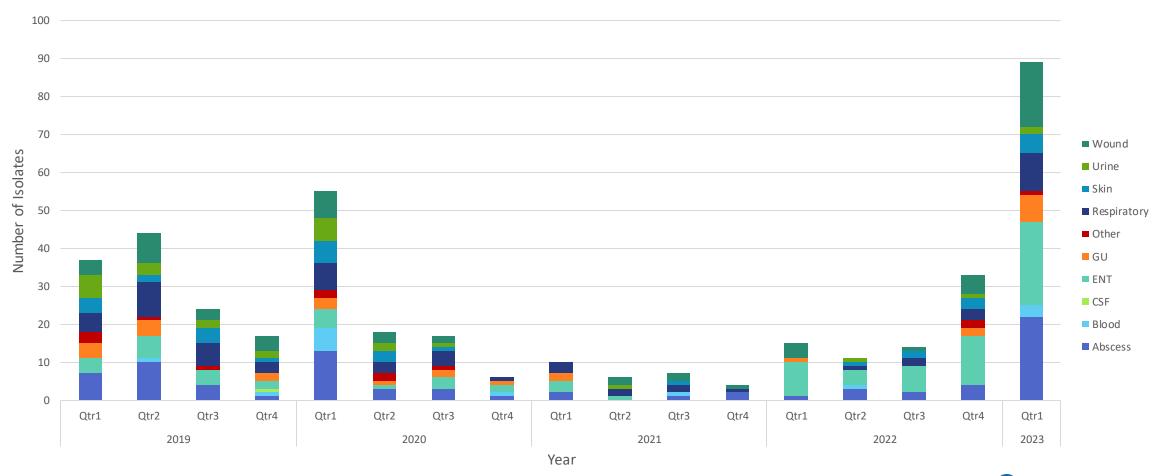






## Infection Prevention & Control

#### **All Pediatric GAS Isolates**

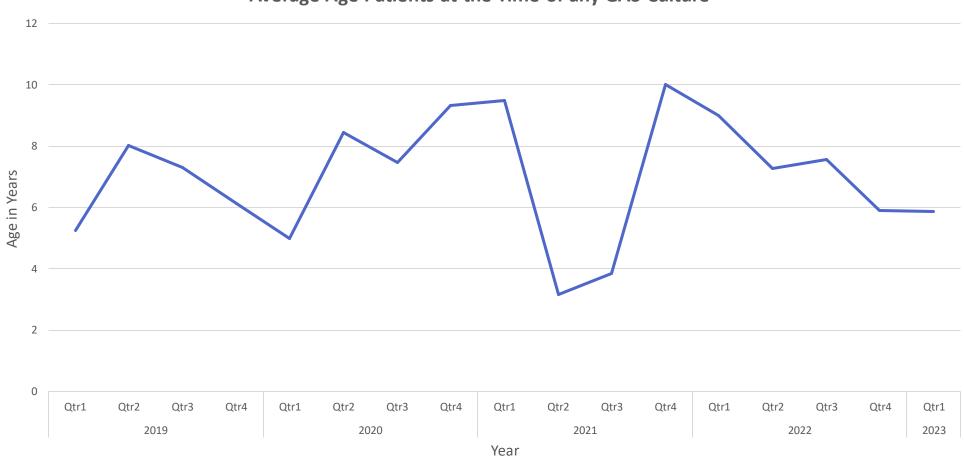






## Infection Prevention & Control

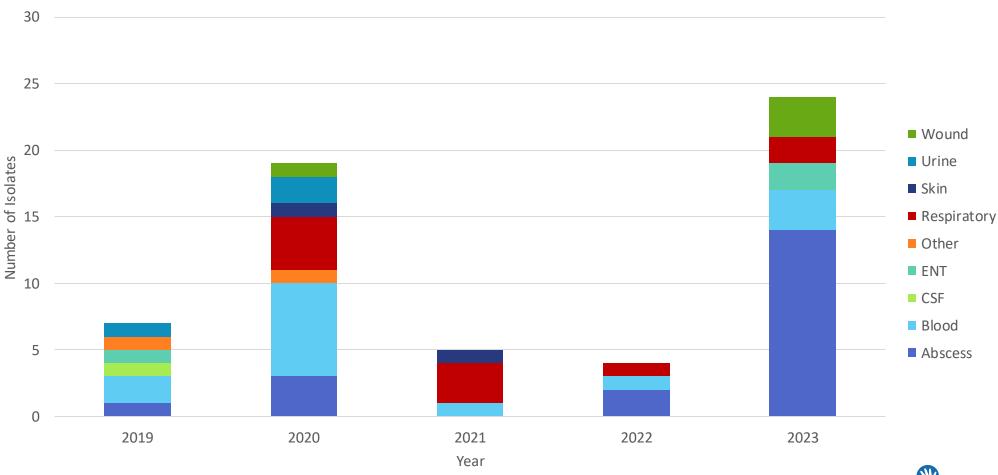
#### Average Age Patients at the Time of any GAS Culture





## Infection Prevention & Control

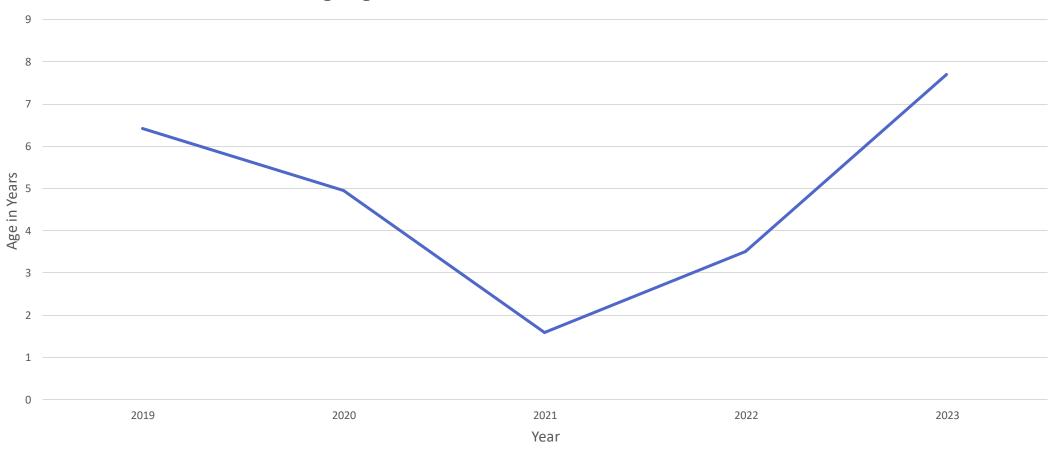
#### **Pediatric Invasive GAS Isolates**







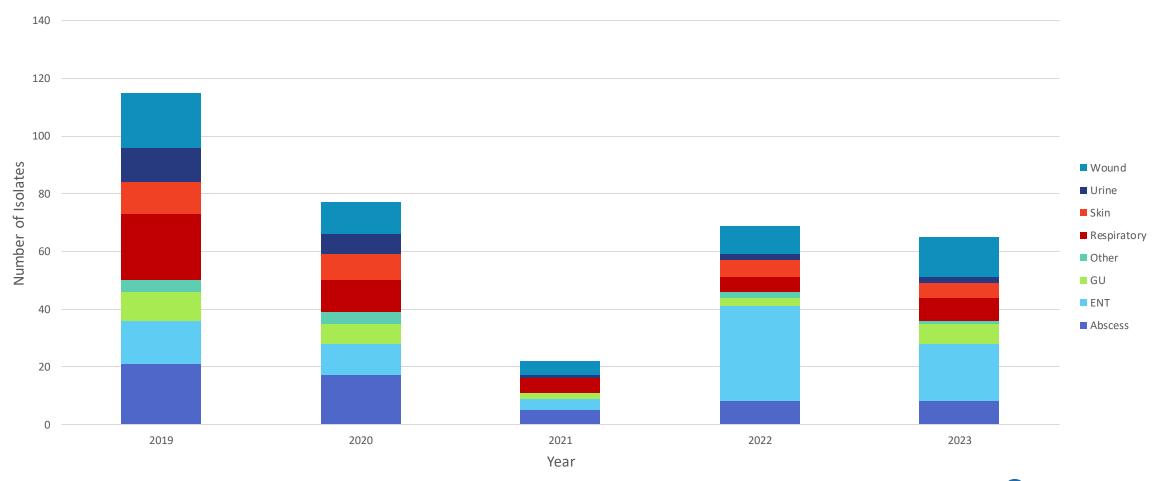
#### Average Age of Patients at the Time Invasive GAS Culture







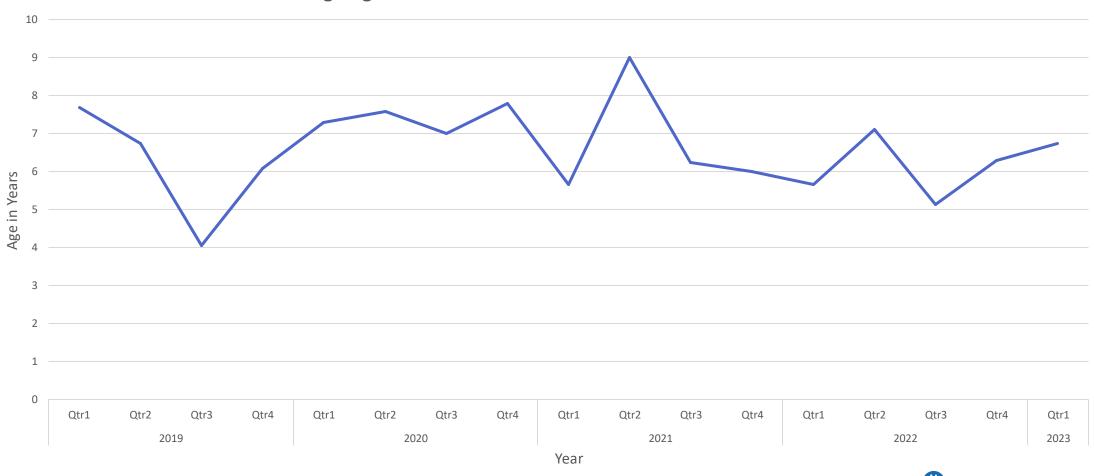
#### **Pediatric Non-Invasive GAS Isolates**







#### Average Age of Patients at the Time non-Invasive GAS Culture





### Summary

- Overall increase in GAS cases since the beginning of 2023
- Shift in invasive cases from Respiratory and Blood to Head/Neck Abscess in 2023





# Increase in Community Onset Group A Strep cases at NMH

Tiffany Kuo, MPH, H(ASCP)<sup>CM</sup>M<sup>CM</sup>BB<sup>CM</sup>, CIC

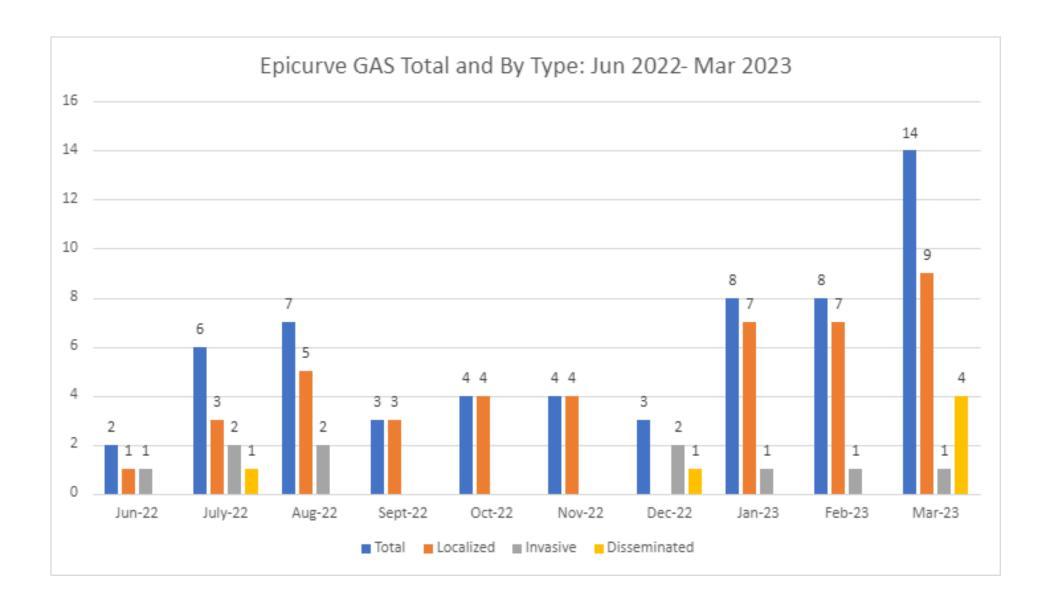
Northwestern Memorial Hospital

#### Background

#### Increase in Group A streptococcal infections

- In early March, we noticed an upsurge in adults hospitalized at NMH with group A *Streptococcus* (i.e., GAS, *Streptococcus pyogenes*) infections.
- Since 2/24/23, we have detected 6 cases of GAS infections in adults.
  - All infections are considered to be community onset.
  - No commonalities noted (i.e., between patients or healthcare facilities).
  - 3 of the 6 cases had exposure to sick children prior to illness onset. However, the children were not explicitly diagnosed with GAS infections.
- Molecular subtyping for 4 of the 6 cases revealed no similarities.











# Open Forum for Questions and Comments

- Our general number: 312-744-1100
- cdphhaiar@cityofchicago.org





# Thank you for participating! Next Roundtable: 4/28/2023



# Additional Slides/Resources

# **X** Our Team

- Medical Directors:
  - Dr. Do Young Kim
  - Dr. Stephanie Black
- Project Administrator: Shane Zelencik
- Project Manager: Maria Bovee
- Infection Preventionists:
  - Alison VanDine
  - Kim Goitia
  - Val Cela
- Public Health Administrator:
  - Maggie Li
- General number for our team: 312-744-1100
- <a href="mailto:cdphhaiar@cityofchicago.org">cdphhaiar@cityofchicago.org</a>





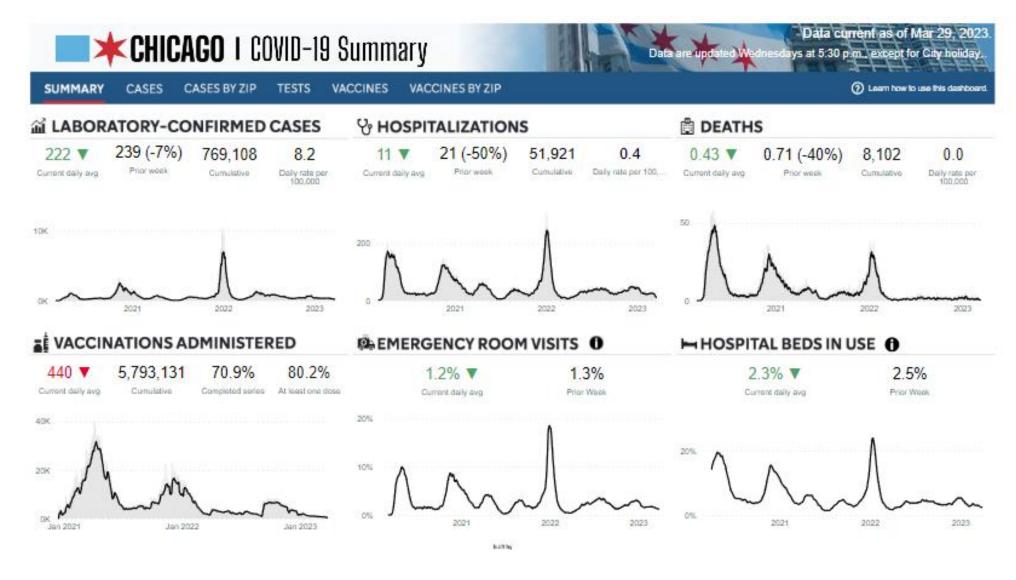
### **X** Our Team, Our Services

Our team consists of Infection Prevention Specialists, Epidemiologists, a Project Manager, a Project Administrator, and Medical Directors who provide the following assistance:

- **IP&C** Guidance and training
- Infection Control Assessments and Responses (ICARs)
- **Epidemiology Support**
- **IP&C** Roundtable
- Our partnerships and site visits are meant to be educational, constructive, non-regulatory, and non-punitive
  - We work with you to resolve any identified opportunities
  - These services are not in response to citations or complaints

### **Chicago Dashboard**





### **COVID-19 Variant Proportions**

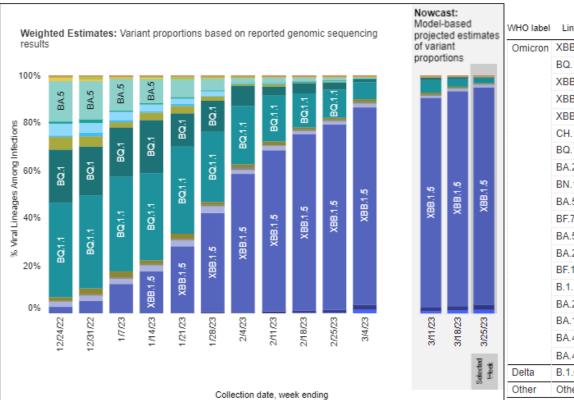


Weighted and Nowcast Estimates in HHS Region 5 for Weeks of 12/18/2022 – 3/25/2023

Nowcast Estimates in HHS Region 5 for 3/19/2023 – 3/25/2023

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



Region 5 - Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin

WHO label	Lineage #	US CI	ass %To	tal 95%PI
Omicron	XBB.1.5	VOC	91.4%	89.5-93.0%
	BQ.1.1	VOC	2.3%	2.0-2.7%
	XBB.1.5.1	VOC	2.3%	1.7-3.1%
	XBB.1.9.1	VOC	1.5%	0.7-3.0%
	XBB	VOC	1.3%	0.6-2.7%
	CH.1.1	VOC	0.5%	0.4-0.7%
	BQ.1	VOC	0.5%	0.4-0.5%
	BA.2	VOC	0.1%	0.0-0.2%
	BN.1	VOC	0.1%	0.1-0.1%
	BA.5	VOC	0.0%	0.0-0.0%
	BF.7	VOC	0.0%	0.0-0.0%
	BA.5.2.6	VOC	0.0%	0.0-0.0%
	BA.2.75	VOC	0.0%	0.0-0.0%
	BF.11	VOC	0.0%	0.0-0.0%
	B.1.1.529	VOC	0.0%	0.0-0.0%
	BA.2.75.2	VOC	0.0%	0.0-0.0%
	BA.1.1	VOC	0.0%	0.0-0.0%
	BA.4.6	VOC	0.0%	0.0-0.0%
	BA.4	VOC	0.0%	0.0-0.0%
Delta	B.1.617.2	VBM	0.0%	0.0-0.1%
Other	Other*		0.1%	0.0-0.1%

<sup>\*</sup> Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.

<sup>#</sup> BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. Except BA.2.12.1, BA.2.75, XBB and their sublineages, BA.2 sublineages are aggregated with BA.2. Except BA.2.75.2, CH.1.1 and BN.1, BA.2.75 sublineages are aggregated with BA.2.75. Except BA.4.6, sublineages of BA.4 are aggregated to BA.4. Except BF.7, BF.11, BA.5.2.6, BQ.1 and BQ.1.1, sublineages of BA.5 are aggregated to BA.5. Except XBB.1.5.1, sublineages, sublineages of XBB are aggregated to XBB. Except XBB.1.5.1, sublineages of XBB.1.5 are aggregated to XBB.1.5. For all the other lineages listed, their sublineages are aggregated to the listed parental lineages respectively. Previously, XBB.1.9.1 was aggregated to XBB. Lineages BA.2.75.2, XBB, XBB.1.5, XBB.1.5.1, XBB.1.9.1, BN.1, BA.4.6, BF.7, BF.11, BA.5.2.6 and BQ.1.1 contain the spike substitution R346T.



Reminder: CDC COVID Data Tracker

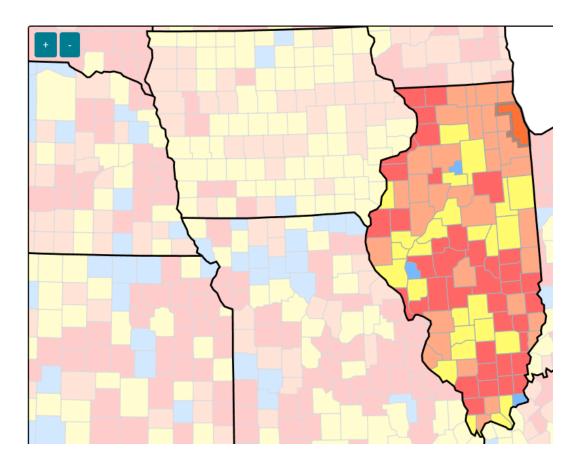
Indicator - If the two indicators suggest different transmission levels, the higher level is selected	Low Transmission Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
Total new cases per 100,000 persons in the past 7 days	0-9.99	10-49.99	50-99.99	≥100
Percentage of NAATs <sup>1</sup> that are positive during the past 7 days	0-4.99%	5-7.99%	8-9.99%	≥10.0%

**Note:** Community transmission levels will now be updated weekly

# CDC COVID Data Tracker: Cook County



Data Type:	Map Metri	c:
Community Transmission	✓ Commun	ity Transmission



# \*

# Chicago Respiratory Virus Surveillance Report – Current Week & Cumulative

	Week Ending March 18, 2023		Since October 2, 2022	
Respiratory Pathogen	# Tested	% Positive	# Tested	% Positive
Influenza*	3,827	0.7	129,951	9.4
RSV*	2,559	1.2	97,555	6.6
SARS-CoV-2*	4,443	5.5	160,875	7.4
Parainfluenza	1,480	2.7	41,030	2.7
Rhinovirus/Enterovirus	973	14.2	28,953	15.8
Adenovirus	973	4.3	28,656	3.6
Human Metapneumovirus	973	11.0	29,043	3.0
Seasonal Coronaviruses <sup>†</sup>	1,478	4.1	41,452	3.2

<sup>\*</sup>Represents both dualplex and multiplex PCR data. All other data represents only multiplex panels that include the specified pathogens;† Four seasonal coronavirus strains include 229E, NL63, OC43, and HKU1.



# Reporting Case Report (CRF) Forms

CDPH requires additional epidemiologic information for certain cases in addition to the reporting requirement. By providing this information to CDPH, it allows us to have a better understanding of this patient and how to limit the spread of further transmission for certain multidrug resistant organisms.

For MDRO Reporting training (have a new IP? need a refresher?) questions and CRF completion requirements, please contact:

cecilia.pigozzi@cityofchicago.org