

# Illinois Education Association Pediatric COVID Disease

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## Disclosures

- No financial disclosures
- The world has changed and is changing
  - What gets said here today may change based on new data and recommendations
  - Knowledge is moving rapidly, the fastest it has for any pandemic







## Agenda

- Epidemiology
- Schools and COVID
  - Data review
  - Recommendations
- Discussion

What will SCHOOL look like this Fall?



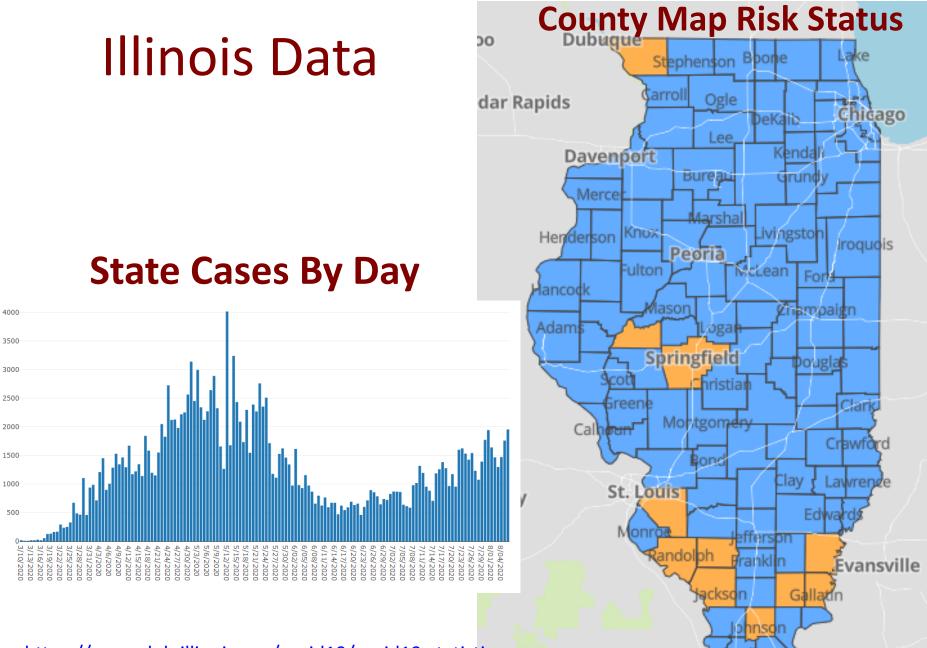




## Epidemiology







https://www.dph.illinois.gov/covid19/covid19-statistics

Paducah



# **Chicago Public Schools...**





## **Schools Elsewhere**





# DAMNED IF YOU DO







# Public Health Risk Either Way

- Open schools means some risk of exposure and spread
  - Must have as much safety as possible for students and staff
- Closed Schools
  - Depression and isolation
  - Lost learning
    - Disproportionately hitting people of color, low populations, and those with disabilities
    - Digital divide
  - Missed abuse and neglect cases
  - Lost wages which translates into poverty, eviction, hunger, food insecurity, and more
    - Maybe even more deaths due to loss of healthcare workforce







## What is new?



#### JAMA | Original Investigation



#### Association Between Statewide School Closure and COVID-19 Incidence and Mortality in the US

Katherine A. Auger, MD, MSc; Samir S. Shah, MD, MSCE; Troy Richardson, PhD; David Hartley, PhD, MPH; Matthew Hall, PhD; Amanda Warniment, MD; Kristen Timmons, MS; Dianna Bosse, BA; Sarah A. Ferris, BA; Patrick W. Brady, MD, MSc; Amanda C. Schondelmeyer, MD, MSc; Joanna E. Thomson, MD, MPH

- CONCLUSIONS AND RELEVANCE (or lack thereof for schools)
  - March 9 May 7, 2020, school closure in the US was temporally associated with decreased COVID incidence and mortality
    - States that closed schools earlier, when cumulative incidence of COVID-19 was low, had the largest relative reduction in incidence and mortality
  - However, some of the reduction may have been related to other concurrent nonpharmaceutical interventions
- CONCLUSIONS AND RELEVANCE : you can reduce spread by using masks, distancing, hand hygiene, closing of businesses
  - The sooner you do it, the better



#### **Research Letter**

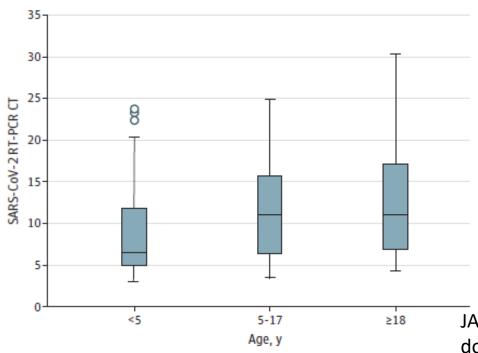
July 30, 2020



#### Age-Related Differences in Nasopharyngeal Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Levels in Patients With Mild to Moderate Coronavirus Disease 2019 (COVID-19)

Taylor Heald-Sargent, MD, PhD<sup>1</sup>; William J. Muller, MD, PhD<sup>1,2</sup>; Xiaotian Zheng, MD, PhD<sup>1,2</sup>; <u>et al</u>

Figure. Distribution of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Reverse Transcriptase–Polymerase Chain Reaction (RT-PCR) Amplification Cycle Threshold (CT) Values From Nasopharyngeal Swabs Collected From Patients With Coronavirus Disease 2019



- Levels measured are not infectious virus
- No relationship of viral level to symptoms
- Spread of SARS-CoV-2 is not related to amount of virus in the nose
- What is it related to?
  - Ability to generate droplets
  - Other???

JAMA Pediatr. Published online July 30, 2020. doi:10.1001/jamapediatrics.2020.3651

# Transmission of SARS-CoV-2 in Australian educational settings: a prospective cohort study

Kristine Macartney, Helen E Quinn, Alexis J Pillsbury, Archana Koirala, Lucy Deng, Noni Winkler, Anthea L Katelaris, Matth Craig Dalton, Nicholas Wood, and the NSW COVID-19 Schools Study Team\*

- Jan 25 to April 10, 2020 school was in session
- The estimated numbers of school staff and students statewide for 2020 were 143,084 and 1,232,367, respectively
- Close contacts were defined as children or staff with face-to face contact for at least 15 min, or who shared a closed indoor space for at least 40 min (generally the same class or lesson, typically consisting of 20–30 students)
  - All close contacts to someone with COVID werequarantined at home for 14 days, had regular text message or telephone call contact to enquire about symptoms, and were instructed to be tested if they developed COVID-19-related symptoms
- There were 27 primary COVID cases identified in 25 schools (15 were staff and 12 were children)
- <u>Secondary</u> transmission occurred in 4 of 25 settings: 3 schools (5 cases), and one early education and care (ECEC) setting (13 cases)
  - 18 secondary cases were identified among the total 1448 close contacts (attack rate 1.2%)
  - ECEC outbreak: 6 staff and 7 children infected (attack rate 35.1%), transmission: adult to adult and adult to child, no child to adult or child to child



Lancet Child Adolesc Health 2020. https://doi.org/10.1016/S2352-4642(20)30251-0

# **Interventions and Implications**

- No details provided about steps taken in the schools/ to reduce risk of transmission except for "guidance for physical distancing, hygiene measures, and educational facility cleaning"; no masking requirement
- Extensive testing, tracing, quarantine of exposed close contacts, and other public health mitigation measures were implemented
  - No specific data on adherence to these measures but strategies were in place to support a high compliance rate
    - Regular wellbeing calls and issuing of fines to people found in breach of isolation during random house calls
- Low incidence of disease in the general at the time 52/100,000

# Successfully prevented spread of COVID in school setting





#### SARS-CoV-2 Transmission and Infection Among Attendees of an Overnight Camp — Georgia, June 2020

- Camp A adopted most components of CDC's Suggestions for Youth and Summer Camps
  - Measures not implemented: cloth masks for campers and opening windows and doors for increased ventilation
  - Cloth masks were required for staff members
  - Relatively large cohorts sleeping in the same cabin
  - Engaging in regular singing and cheering
- Outcome:
  - A total of 597 Georgia residents attended camp
    - Median camper age was 12 years (range = 6–19 years), median age of staff members and trainees was 17 years (range = 14–59 years)
    - Test results of 344 (58%) attendees: 260 (76%) were positive, overall attack rate 44%, 51% for age 6–10 years, 44% for age 11–17 years, and 33% for age 18–21 years, 56% amongst staff
      - Attack rates increased with increasing length of time spent at the camp



MMWR, July 31, 2020. 69

# What The Data Tells Us

- Have families screen at home to limit number of positive children/staff at school
- For the lower grades, opening schools is easier and safer: try to get everyone to physical distance, pod formation, eating in classrooms, masking if possible but may not be essential
- For upper grades need excellent cooperation and clear rules with enforcement of social distancing, pods, and masking
- Respond to potential outbreaks
- Routine testing didn't seem to help
- Amount of community spread is important to successful opening of schools



# Establish A Culture of Health, Safety, And Shared Responsibility

- Provide training to teachers, staff, students, and parents/guardians prior to school opening
- Start each day with a morning message to the entire school reinforcing health messaging
- Create and display signs around the school as reminders of rules, roles, and responsibilities
- Send out weekly reports and reminders to parents and students of their respective roles
- Hold weekly and monthly all-staff meetings on COVID-19 to evaluate control strategies
- Form a COVID-19 response team and plan
- Prioritize staying home when sick

((ЕСНО)))

Reward good behavior



SOP CORO

• Exclusion of ill students/staff

• Hand hygiene

- Face covering
- Social distancing

• Ventilation



### ((((ECHO)) Where Is The Risk Of Getting COVID Greatest?

- Not in elementary schools
  - It is not from children below the age of 10 as they get COVID less often and are less ill than adults
- High schools have a bit higher risk
- In communities
  - Restaurants, bars, work places, stores, homes and socializing events where precautions are not taken

Staff and teachers as adults are more likely to transmit to each other



# Which Child Can Go To School?

((ECHO))

- Case by case assessment best done by parents in cooperation with schools, teachers and medical staff
- Developmental and behavioral readiness to adhere to recommended precautions in the school setting
  - Practice appropriate hand hygiene, wear a face covering at school when appropriate, and physically distance with appropriate prompts/support from school personnel
  - IEPs developed for special needs kids so they too can attend





# Discussion



#### Today

- In-classroom
  - Creating a culture of COVID safety
  - $\circ~$  Managing anxiety
  - Classroom management
  - Elective classes (e.g. band, art, music, drama, gym, etc.)
- Common areas and transportation
- Before/after school activities and extra-curriculars

- Staffing and resources
- Mediation and Communication

### Today

### • In-classroom

- Common areas and transportation
  - o Bathrooms
  - o Cafeteria
  - Hallways and lockers
  - School bus, carpool, waiting for pick up
  - $\circ~$  Library and computer labs
- Before/after school activities and extra-curriculars

- Staffing and resources
- Mediation and Communication

### Today

- In-classroom
- Common areas and transportation
- Before/after school activities and extra-curriculars
  - $\circ$  Sports
  - Morning care/aftercare
  - o Clubs

- Staffing and resources
- Mediation and Communication

### Today

- In-classroom
- Common areas and transportation
- Before/after school activities and extracurriculars

- Staffing and resources
  - $\circ\,$  Testing and sick policies
  - Substitute teachers
  - School nurses
  - $\circ$  Counselors
  - PPE, soap/hand sanitizer, cleaning supplies
  - $\,\circ\,$  Facilities and ventilation
- Mediation and Communication

### Today

- In-classroom
- Common areas and transportation
- Before/after school activities and extracurriculars

### Next Week

### • Staffing and resources

- Mediation and Communication
  - Communicating about outbreak levels within school/community
  - Protocols for when someone tests positive or dies from COVID
  - Communication about exposure and maintaining confidentiality
  - Building a broader culture of COVID safety
  - Maintaining communication/relationships with union, district, administrators, health department

# Thank you!

Resources, slides & recording of the session <u>https://www.echo-chicago.org/resources/covid19/</u> <u>ieanea.org</u> <u>www.iasaedu.org</u>