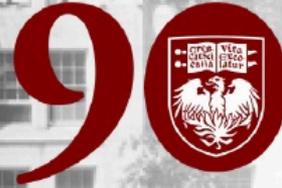




THE UNIVERSITY OF
CHICAGO



Department
of Pediatrics
Established 1930

Illinois Education Association Pediatric COVID Disease

July 30, 2020

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(ICAAP)



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

- Review
- Schools and COVID
 - Data to date
 - Ideal approach
- Q&A/Discussion

What will
SCHOOL
look like
this Fall?

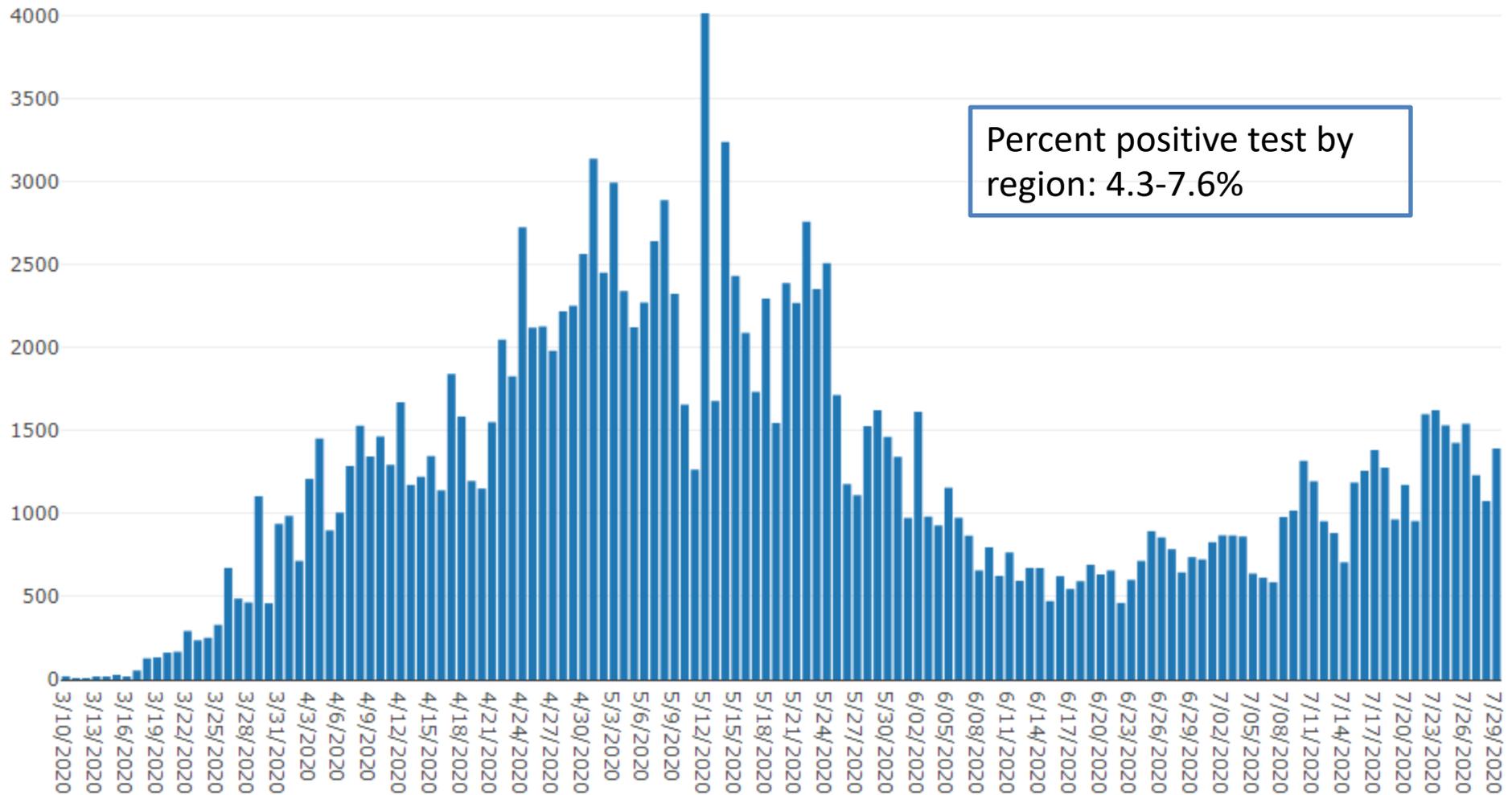


Epidemiology



Illinois

<https://www.dph.illinois.gov/>



Emily Oster's COVID Childcare Database

June 29, 2020

Open access, crowd sourced voluntary database so may not be representative

<https://explaincovid.org/kids/covid-19-and-children-our-crowd-sourced-data>



Child Care Survey

All Locations

Number of Centers	841
Total Students Served During Pandemic	20,424
Count of Covid-19 Cases in Students	44
Confirmed Case Rate, Students	0.22%
Total Staff During Pandemic	7,154
Count of Covid-19 Cases in Staff	86
Confirmed Case Rate, Staff	1.20%

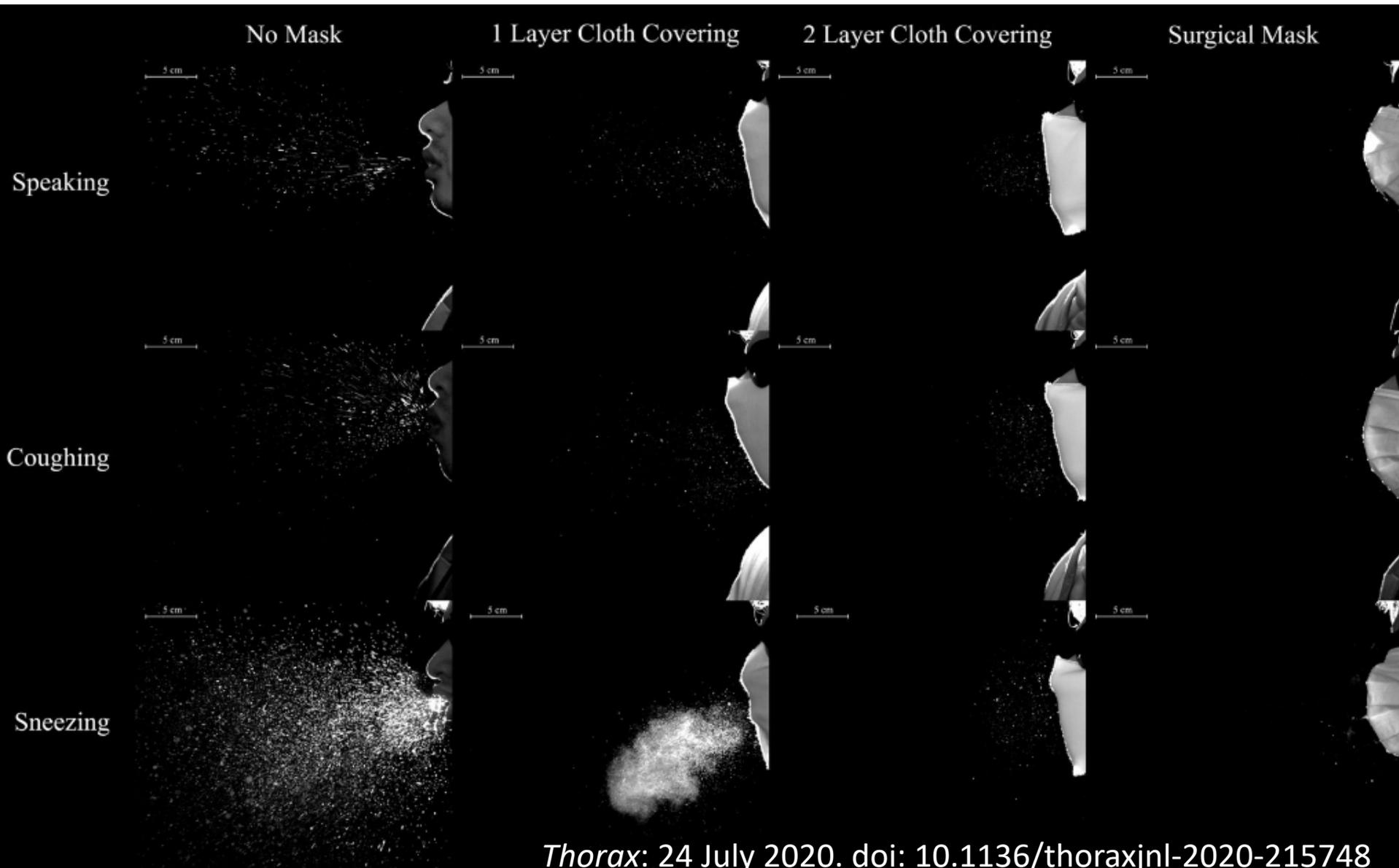
Epidemiology Take Home Points

- Cases are rising in our country
 - Our state is doing better than most others
- SARS-CoV-2 spreads mainly by droplet, less so by surfaces and even less by aerosol
- Children under 10 years old rarely spread the infection to adults or even each other
 - Those over 10 years old spread similar to adults
- People spread the infection before they are symptomatic
- Spread in daycare settings appears to be very small

Prevention



Two Layers Is Better Than One!



Prevention Take Home Points

- Isolate infected people
- Distance
 - ≥ 6 feet is the goal, 3 feet works well
- Masking
 - Cloth works to protect others, two layers is best e.g., cotton–silk, cotton–chiffon, cotton–flannel work best
 - Fit is important- need it tight against the face with few gaps if it is to protect the wearer
- Face shields
 - Works almost as well as mask to protect others
 - Works almost as well as mask to protect the wearer from droplets, less so from aerosol
- Hand hygiene with soap and water for 20 seconds or with 60% alcohol based hand sanitizer gel
- Ventilation
 - Open windows, open doors, fresh air
 - Do not have fans blowing horizontally

Schools



DAMNED IF YOU DO



DAMNED IF YOU DON'T

makeameme.org

(((ECHO)))
CHICAGO



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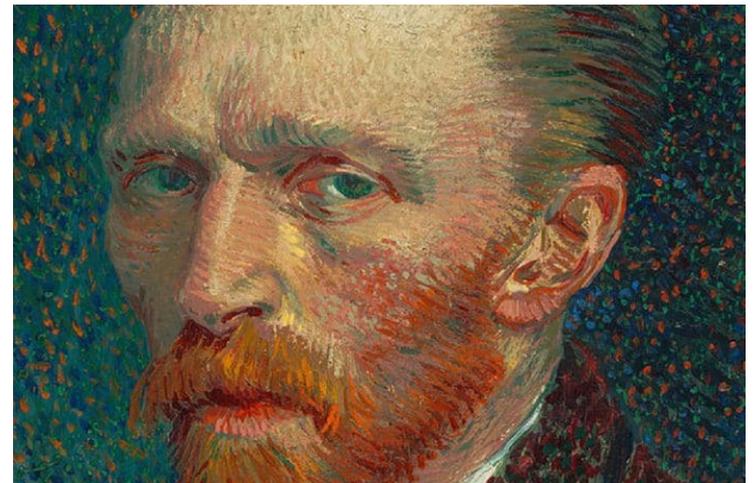
Public Health Risk Either Way

- Open schools means some risk of exposure and spread
- Close Schools
 - Lost learning
 - Disproportionately hitting people of color, low income populations, and those with disabilities
 - Missed abuse and neglect cases
 - Lost wages which translates into poverty, eviction, hunger, food insecurity, and more

There Is No True Safe Harbor

- “The fishermen know that the sea is dangerous and the storm terrible, but they have never found these dangers sufficient reason for remaining ashore”

Vincent van Gogh



Lessons Learned?

Schools and COVID-19: How To?

Denmark re-opened schools for children under 11 years of age on April 15, 2020

- Primary schools were the first to reopen with “Micro-groups” of students
 - 12 students/group which is the maximum number of students that could occupy a room while maintaining social distancing
 - Arrive at a separate time, eat lunch separately, stay in their own zones in the playground and play only in their small groups, and are taught by one teacher
 - Students are assigned their own desks spaced 6 feet apart
 - Handwashing and sanitization hourly
- Students and staff are not asked to wear face masks
- In the context of low community transmission, school re-opening in Denmark has not resulted in a significant increase in the growth rate of COVID-19 cases



Similar experience in Norway, Taiwan



• https://globalhealth.washington.edu/sites/default/files/COVID-19%20Schools%20Summary%20%282%29.pdf?mkt_tok=eyJpIjoiWVdRMVpqWmlNek16WldReSlInQiOiJpVUE4Uk1ScjBpT1JqVWp1eFM4WTlzaTVzWURTeWpOT2liZUxCeHdNREdvc3Zxano4Z0FWWlk4Mms3S3IJeTNIbEFQVWFUT3d5V3cWdVc3R3RCVfVxRldIVnBlakgwa3dxWnFKMjk3RHltMORYVmc3Qmt0ZzF5OXVGVWVvaXppZiJ9

• MedRxiv - <https://doi.org/10.1101/2020.06.24.20139634>

School Exposures



- Students exposed in preschool setting (Singapore)
 - No transmission despite exposure in one school to 16 infected adults (77 students, age range of 3-6 years old)
 - No transmission despite exposure in classroom to one infected 5 year old (34 students, age range of 2.8–6.2 years old)
- Students exposed in lower school (France)
 - No transmission despite exposure in 3 schools to a 9 year old (61 high risk exposed students and teachers and 30 low risk exposed students and teachers)
- Broad outbreak in a community including school (Chile)
 - 9.9% of children and 16.6% of adults in school infected
 - Impossible to know source points for transmission or where transmission occurred (community and/or school)
 - No precautions taken until community quarantined
 - Adult to adult spread was common



What Is Our Goal?

- Schools will eventually need to reopen
- Keeping schools closed comes with massive, long-term individual and societal costs
 - Many children cannot effectively learn, grow, engage, socialize, be active, eat healthy food, or get support until schools reopen.
 - Parents and caregivers cannot go back to work until children go back to school
- **Reduce risk of COVID-19 transmission**
 - There is no such thing as ‘zero risk’, in anything we do, and certainly not during a pandemic

Source Control



Wear masks

- Have students wear face masks as much as possible
 - Face shields are an alternative
- Train students and staff on how to wear and care for masks
- Two layer masks
- Try to create time when students can take off their masks
 - Outside and physically distant (>6 feet) and no hollering or singing
- Allow teachers to wear transparent face shields when teaching at the front of the room
 - Face masks when working more closely with students or in proximity of each other
- Make lunch as short as possible and limit talking
 - Focus on the food!
 - Eat in the classroom

Source Control

Handwashing

- Gel or water
- Build handwashing into the schedule of the day
 - When leaving home, touching one's face, and leaving school and arriving at home
 - Arriving at school, entering or leaving classroom, eating, finishing lunch, touching shared objects, using the bathroom, coughing, sneezing, and blowing one's nose
 - Hourly when in the classroom
 - Gel at the desk if possible



Source Control

Physical distancing (preferred language than social distancing)

- De-densify the school
 - Minimize visitors
 - Repurpose spaces in the school as temporary classrooms (e.g., auditorium, gym, lunch room)
- Keep at least 6 feet between individuals, as much as possible, for as long as possible
- Student should all face in the same direction
- Move class outdoors, if possible, weather permitting
- Walking past someone is low risk but if continuous then problematic
- Manage transition times and locations
 - Stagger school arrival and departure times, class transitions, and locker access
 - Set up separate entrances and exits for different groups of students
 - Use well-marked lines on the floor to encourage physical distancing and indicate direction of travel

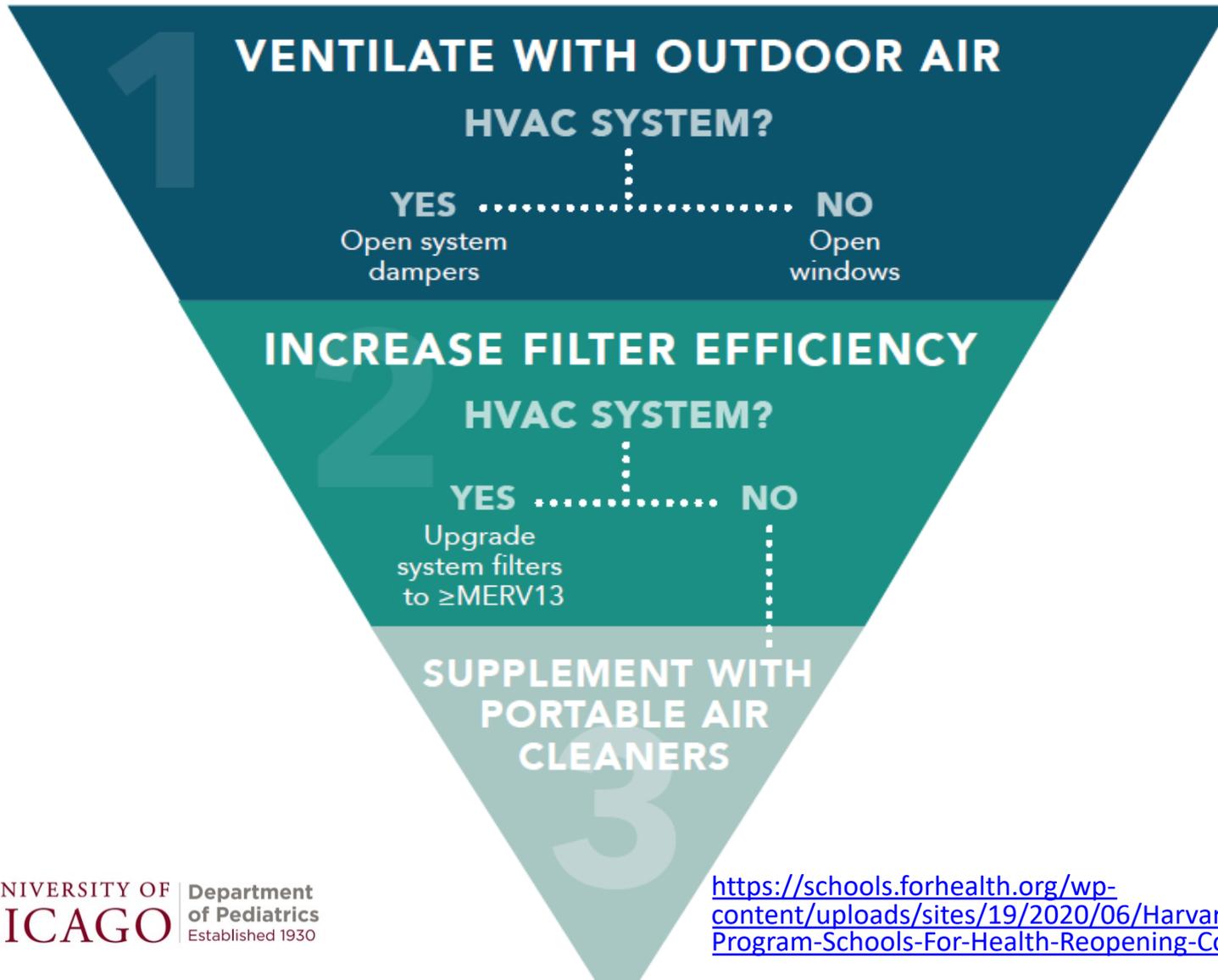


Source Control

Pod (cohorting) formation

- Keep class groups as distinct and separate as possible
- Limit students moving between different classrooms
- Avoid large groups and gatherings, both in and outside of school

Ventilation



Cleaning

Cleaning Frequency	Examples
Daily	<ul style="list-style-type: none"> • Classroom desks, tables, and chairs • Shared spaces
Multiple times per day	<ul style="list-style-type: none"> • Door handles • Light switches • Handrails • Drinking fountains • Sink handles • Restroom surfaces • Cafeteria surfaces • Elevator buttons
Between uses	<ul style="list-style-type: none"> • Toys, games, art supplies, instructional materials • Keyboards, phones, printers, copy machines • Seats on bus

<https://schools.forhealth.org/wp-content/uploads/sites/19/2020/06/Harvard-Healthy-Buildings-Program-Schools-For-Health-Reopening-Covid19-June2020.pdf>

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
- Hold weekly and monthly all-staff meetings on COVID-19 to evaluate control strategies
- Send out weekly reports and reminders to parents and students of their respective roles
- Reward good behavior
- Form a COVID-19 response team and plan
- Prioritize staying home when sick

What To Do If Symptoms Appears at School

- Any individual who shows symptoms should be immediately separated from the rest of the school population
 - Designate a safe area to quarantine any individuals who are experiencing COVID-19-like symptoms and may be awaiting pickup/evaluation
 - Students should never be left alone and must always be supervised while maintaining necessary precautions.
- School community members who are sick should not return to school until they have met criteria to return.
 - Schools may wish to consider a symptom checklist for families and staff to use to determine if they are well enough to attend that day

School Opening

- For the lower grades, seems with steps of social distancing, screening, pod formation, and eating in classrooms, possible to open schools safely
 - Not clear that masking necessary
- Amount of community spread may be important to successful opening of schools

The Facts

- Risks to students and staff can be kept low if schools adhere to strict control measures and respond to potential outbreaks
- There is no perfect plan to reopen schools
- There is no 'one size fits all' strategy that works for every school
 - Schools have limited budgets and student and staff compliance will be imperfect
- Schools may need to reclose unexpectedly depending on local conditions
 - No one knows with certainty what the fall will bring in terms of this pandemic

School Recommendations

- Hand hygiene



- Face covering



- Social distancing



- Ventilation



Reference

SCHOOLS FOR HEALTH

Risk Reduction Strategies
for Reopening Schools

June, 2020

COVID-19

<https://schools.forhealth.org/wp-content/uploads/sites/19/2020/06/Harvard-Healthy-Buildings-Program-Schools-For-Health-Reopening-Covid19-June2020.pdf>

- **Albert Camus' *The Plague*, Dr. Rieux:** “It may seem a ridiculous idea, but the only way to fight the plague is with decency.”



THE PLAGUE

ALBERT CAMUS



Questions

Thank you!

Resources, slides & recording of the session

<https://www.echo-chicago.org/resources/covid19/>

[ieanea.org](https://www.ieanea.org/)

www.iasaedu.org