VCHIP / CHAMP / VDH COVID-19 UPDATES



Wendy Davis, MD FAAP - Vermont Child Health Improvement Program, UVM Breena Holmes, MD FAAP – Director of Maternal & Child Health, Vermont Department of Health August 5, 2020









Technology Notes

1) All participants will be muted upon joining the call.

If you dialed in or out, unmute by pressing #6 to ask a question (and press *6 to mute).

Presenters: Please avoid the use of speakerphone and make sure your computer speaker is muted if you dialed in via phone.

2) To ask or respond to a question using the *Chat* box, type your question and click the *p* icon or press Enter to send.

Chat (Everyone)	≣∗
Everyone	



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WORKING DOGS

- Celebrating (?) "Work Like a Dog Day"
- Reminder: weekly event schedule
 - VCHIP/CHAMP/VDH calls: Mon/Wed/Friday; Governor's Media Briefings Tues/Friday; VMS call with Commissioner Levine Thursday.
- Situation & VDH Updates
- Practice Issues: Update on Pediatric COVID-19 Data
 Drs. Benjamin Lee & Bill Raszka, Pediatric ID, UVM Children's Hosp.
 Q & A, Discussion

[Please note: the COVID-19 situation continues to evolve very rapidly –

VERMONT

so the information we're providing today may change quickly]

August 5, 2020





Situation update



- NEW information (noted following our call today): 147/219 Vermont inmates in MS have now tested positive for SARS-CoV-2.
- Reminder VDH weekly data summary (7/31/20):
 - Overview, case demographics, clinical course, outbreaks, syndromic surveillance
 - https://www.healthvermont.gov/sites/default/ files/documents/pdf/COVID19-Weekly-Data-Summary-7-30-2020.pdf

(No Weekly Spotlight topic this week)



https://www.healthvermont.gov/response/coronavirus-covid-19/current-activity-vermont#dashboard



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Situation update





https://www.healthvermont.gov/response/coronavirus-covid-19/current-activity-vermont#dashboard August 5,

2020

Situation update



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Mother-Baby Care

- Updated FAQs (7/22/20): Management of Infants Born to Mothers with Suspected or Confirmed COVID-19
 - Evidence to date suggests risk of newborn acquiring infection low when precautions (against exposure to maternal respiratory secretions) taken & appears no greater w/rooming-in using infection control measures vs. infant placed in separate room.
 - AAP News article (summary): <u>https://www.aappublications.org/news/2020/07/22/newbornguidance072220</u>
- UVM MC continuously updating their policies
- Dr. Karin Gray (UVM Medical Center/Children's Hospital) supports this updated AAP information on infants rooming-in (w/infection control) w/COVID+ mothers.
- Practice considerations re: lab draw if a baby of a COVID+ mother needs a bilirubin follow up





\square Established by Act 136 to pay eligible employees March 13 – May 15 (28m. appropriation)

- Focused on public health, human services, and public safety employers.
- Program opened at 9 a.m. Tues. 130 applications in progress by 9:15!
- □ First come, first served; covered employers apply & pass funding on to employees. Includes HCPs, dental, HHAs, LTC, FQHCs, RHCs, ambulance services (eligible employees with risk of exposure; base wage ≤ 25 ./hr.)

Web site: https://humanservices.vermont.gov/



August 5, 2020



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Tuesday Media Briefing (August 4, 2020)

- Governor Scott:
- □ Front-Line Employees Hazard Pay Grant Program
- AHS Secretary Mike Smith:



Tuesday Media Briefing (cont'd.)

Commissioner Levine

- Data: minimal new cases (< 5 per day) or signif. changes in media</p>
- "Most outbreaks winding down": VDH continues to follow inmates from Tallahatchie Correctional Facility (MS)
 - Monitoring those remaining in MS and here at Marble Valley.
- Addressed JAMA Peds research letter: new data coming in all the time and "can't cherry pick studies."







Pediatric Testing & Return-to-School Algorithm

Under development

Request your review and feedback

□ Anticipate this will be the focus of our call this *Friday, Aug.* 7

Indications for COVID-19 Testing in School Aged Children

Symptoms	Exposure to known COVID- 19 patient or travel**	PCR Test for COVID- 19	If not PCR tested for COVID-19, child may return to school after
Any symptom of fever, cough, shortness of breath, difficulty preathing, sore throat, runny nose, diarrhea, lack of smell or taste, fatigue	Yes	Yes	 At least 10 days have passed since symptoms first appeared and At least 24 hours have passed since last fever without the use of fever-reducing medications and Symptoms (e.g., cough, shortness of breath) have improved
Fever and cough	No	Yes	Same as above
Cough and shortness of breath not diagnosed with asthma or CAP	No	Yes	Same as above
loss of taste or smell	No	Yes	Same as above
Fever and runny nose	No	Yes	Same as above

High Pre-Test Probability



**Had close contact (within 6 feet of an infected person for at least 15 minutes) with a person with confirmed COVID-19

Traveled to or lived in an area where the local, Tribal, territorial, or state health department is reporting large numbers of COVID



Practice Issues

Update on Pediatric COVID-19 Data

Drs. Benjamin Lee and Bill Raszka and Ben Lee, Pediatric Infectious Diseases UVM Children's Hospital



University of Vermont Children's Hospital







August 5, 2020



Early Release / Vol. 69

Morbidity and Mortality Weekly Report

July 31, 2020

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

AKA, how NOT to reopen a congregate setting

Mitigation strategies (or lack thereof)

- Negative test ≤12 days prior to entry: USELESS!
- Masks not required of campers: DANGEROUS!
- Windows and doors not routinely opened to increase ventilation: PONDEROUS!
- Vigorous daily indoor, outdoor activities, including singing & cheering: PREPOSTEROUS!



- Index case (teenage staff member) presented with symptoms 6/23/20, tested positive the following day
- 260/597 infected (attack rate 44%)
- 136 with evaluable symptom data
 - 26% asymptomatic
 - Fever 65%
 - Headache 61%
 - Sore throat 41%

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, PhD¹; William J. Muller, MD, PhD^{1,2}; Xiaotian Zheng, MD, PhD^{1,2}; <u>et al</u>

> Author Affiliations | Article Information

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

Background

- Real-time PCR uses specific primers coupled with fluorescent probes, enzymes, and other reagents to amplify a specific gene target
- Each cycle of a PCR reaction involves a series of temperature changes of fixed duration, which allows for primers to bind and then enzymes to copy the gene target
- The amount of fluorescence in the reaction is a function of the degree of amplification

SARS-CoV-2 replication cycle



PCR does NOT measure this (Although typically genome copies correlate virions)

https://www.cell.com/trends/immunology/fulltext/S1471-4906(20)30057-0

Typical real-time PCR curves for SARS-CoV-2



Bruce EA et al. 2020. https://www.biorxiv.org/content/10.1101/2020.03.20.001008v2.full.pdf

Children <5 had 10-100 fold higher viral load



Interpretation

- Reported Ct values extraordinarily high
 - Caveat: Ct values are inherently instrument-specific
 - M2000 platform (Abbott) used: typically measures Ct values for SARS-CoV-2 10-15 Cts higher than others
 - ~3.3 Ct values = 10-fold (1 log) difference
- While Ct values typically correlate with infectious virus, Ct values alone do not imply infectiousness/contagiousness
 - If you took a sample of virus and killed it then ran PCR: you would get the same Ct value because the nucleic acid is all still present
- Ct values do not tell how well anyone can transmit, just how much nucleic acid is there

Contact tracing during Phase I of the COVID-19 pandemic in the Province of Trento, Italy: key findings and recommendations

Pirous Fateh-Moghadam (1), Laura Battisti (1), Silvia Molinaro (2), Steno Fontanari (3), Gabriele Dallago (3), Nancy Binkin (4), Mariagrazia Zuccali (2)

https://www.medrxiv.org/content/10.1101/2020.07.16.20127357v1

Background

- Contact tracing during March and April 2020 aided by web-based platform developed by health authorities
- During period of strict lock-down
- 6,690 contacts (non-institutionalized) of 2,813 cases (70% labconfirmed)

Mainly household contact data

Figure 2. Distribution of type of contact by week, Province of Trento, March-April 2020 (n=5,252)



- 890/6,690 developed symptoms and were deemed to be cases
 - 55% lab-confirmed
 - 45% defined as probable cases based on symptoms, epi link
- Secondary attack rate = 13.3%
 - 14.4% among household contacts

Table 1. Percentage of contacts who were became cases, by age, gender, and type of contact. Public Hygiene Services, province of Trento - March-April 2020

Characteristic of contact	#of contacts	# of contacts who became cases	Secondary AR
Age, years (n=6,687)			
0-14	1,024	86	8.4%
25-29	1,372	126	9.2%
30-49	1,646	245	14.9%
50-64	1,712	264	15.4%
65-74	467	79	16.9%
75+	466	88	18.9%
Gender (n= 6,406)			
Women	3,156	426	13.5%
Men	3,250	427	13.1%
Nature of contact with case			
(n=6,255)			
Cohabitant	3 , 546	500	14.1%
Non-cohabiting family or friend	1,596	206	12.9%
Work colleague	499	79	15.8%
Other	614	55	9.0%

Where are the 15-24 year olds?

Table 2. Contagiousness of index cases by age and gender, Province of Trento - March-April 2020.

Characteristic of case	Cases	#of contacts	# of contacts who became cases	Contagiousness
Age, years (n=1,489)				
0-14	14	49	11	22.4%
25-29	118	475	62	13.1%
30-49	446	2,361	250	10.6%
50-64	477	2,222	303	13.6%
65-74	181	559	85	15.2%
75+	253	909	155	17.1%
Gender <mark>(</mark> n= 1,442)				
Women	727	3,427	414	12.1%
Men	715	2,973	416	14.0%

Interpretation

- In this study, children <14 were most likely to transmit
- Completely opposite of all prior studies
- Unclear explanation for this
 - Results may be real
 - If so, would be inconsistent with the global experience to date

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

Methods

- Looked at temporal associations between COVID-19 incidence, mortality and date of school closures
- Attempted to adjust for other nonpharmaceutical interventions
 - Stay-at-home / shelter-in-place
 - Nonessential business closure
 - Restaurant and bar closure
 - Prohibition of gatherings >10 people

- School closures were associated with significant declines in COVID-19 incidence and mortality (-62% adjusted relative change per week)
- Greatest effect in states with lowest cumulative incidence

Limitations

- 39 states employed all 4 additional interventions studied
- Did not evaluate other important interventions, such as masks
- Uptake and adherence to other interventions could not be assessed
- "Completely isolating the effects of any single nonpharmaceutical intervention is impossible..."

My interpretation

- Because so many interventions were enacted in rapid succession, isolating the effect of any one intervention is not possible based on this approach
- The greatest effect of school closure was seen in low cumulative incidence states: this likely means that states where incidence remained lowest are those where measures were enacted most aggressively and had greatest adherence

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, Matthew V N O'Sullivan, Craig Dalton, Nicholas Wood, and the NSW COVID-19 Schools Study Team*

Summary

Background School closures have occurred globally during the COVID-19 pandemic. However, empiric data on
transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) among children and in educational
settings are scarce. In Australia, most schools have remained open during the first epidemic wave, albeit with reducedLancet Child Adol
Published OnlineAugust 3, 2020August 3, 2020

Methods

- Identified COVID-19 children and adults in 25 primary and secondary schools, and early childhood centers through April 10
- All close contacts of these were quarantined at home
 - Offered PCR testing if symptomatic
 - In some settings, PCR and Ab testing in both symptomatic and asymptomatic

Figure: Onset date of total (A) and paediatric (B) confirmed COVID-19 cases in NSW, Jan 13-May 1, 2020, relative to control measures and school attendance Nucleic acid testing used for confirmation of severe acute respiratory syndrome coronavirus 2 infection, and definition of COVID-19 case. If people were asymptomatic, specimen positive date was used. ECEC=early childhood education and care settings. NSW=New South Wales. *Distance (remote) learning recommended, but schools also remained open for face-to-face attendance as required. After school holidays, preference for distance learning continued for 2 weeks before resumption of full face-to-face learning. †Excluding ECEC.

	Secondary attack
All settings, all contacts, including single ECEC outbreak	1.2% (18/1448)
All settings, all contacts, excluding single ECEC outbreak*	0-4% (5/1411)
All settings, all child case to child contacts	0.3% (2/649)
All settings, all child case to staff member contacts	1.0% (1/103)
All settings, all staff member case to child contacts	1.5% (8/536)
All settings, all staff member case to staff member contacts	4-4% (7/160)
All settings, all staff member case to child contact, excluding single ECEC outbreak*	0-2% (1/511)
All settings, all staff member case to staff member contacts, excluding single ECEC outbreak*	0.7% (1/148)
All settings, tested population	2.8% (18/633)
All settings, tested population, excluding single ECEC outbreak	0-8% (5/598)
All schools, all contacts	0.5% (5/914)
All schools, tested population	1.3% (5/375)
Single ECEC outbreak,* all contacts	35.1% (13/37)
Child close contacts	28.0% (7/25)
Staff close contacts	50.0% (6/12)

Data are rate % (n/N). SARS-CoV-2=severe acute respiratory syndrome coronavirus 2. ECEC=early childhood education and care. * This outbreak resulted in at least four generations of infection and there was no evidence of child to child or child to staff transmission (unpublished).

Table 4: Secondary attack rates of SARS-CoV-2 infection by educational setting and testing approach

Conclusions

- Low rate of pediatric disease
- Children are unlikely to initiate, or propagate, outbreaks
- Rapid and effective state and national public health, and community, responses were essential

Limitations

- Majority of close contacts were tested after developing symptoms so infected contacts with no or mild symptoms might have been missed
- Serology used to confirm diagnosis in some
- Variation in close contact definitions used across settings

EMERGING INFECTIOUS DISEASES[®]

EID Journal > Volume 26 > Early Release > Main Article

Disclaimer: Early release articles are not considered as final versions. Any changes will be reflected in the online version in the month the article is officially released.

Volume 26, Number 10—October 2020

Dispatch

Contact Tracing during Coronavirus Disease Outbreak, South Korea, 2020

Methods

• Monitored 59,073 contacts of 5,706 COVID-19 index patients

Table 1

Contacts traced by age group of index coronavirus disease patients, South Korea, January 20–March 27, 2020

Index patient age, y	No. (%) index patients	No. (%) contacts traced	No. contacts traced/index patient	Average time contacts monitored, d
0-9	29 (0.5)	237 (0.4)	8.2	12.5
10-19	124 (2.2)	457 (0.8)	3.7	9.0
20–29	1,695 (29.7)	15,810 (26.8)	9.3	9.8
30-39	668 (11.7)	8,636 (14.6)	12.9	11.1
40-49	807 (14.1)	9,709 (16.4)	12.0	11.0
50-59	1,107 (19.4)	11,353 (19.2)	10.3	9.6
60-69	736 (12.9)	8,490 (14.4)	11.5	8.2
70-79	338 (5.9)	2,389 (4.0)	7.1	8.5
<u>></u> 80	202 (3.5)	1,992 (3.4)	9.9	9.4
Total	5,706	59,073	10.4	9.9

Table 2

Rates of coronavirus disease among household and nonhousehold contacts, South Korea, January 20-March 27, 2020

	Household		Nonhousehold	
Index patient age, y	No. contacts positive/no. contacts traced	% Positive (95% CI)	No. contact positive/no. contacts traced	% Positive (95% Cl)
0-9	3/57	5.3 (1.3–13.7)	2/180	1.1 (0.2–3.6)
10-19	43/231	18.6 (14.0–24.0)	2/226	0.9 (0.1–2.9)
20-29	240/3,417	7.0 (6.2–7.9)	138/12,393	1.1 (0.9–1.3)
30-39	143/1,229	11.6 (9.9–13.5)	70/7,407	0.9 (0.7–1.2)
40-49	206/1,749	11.8 (10.3–13.4)	161/7,960	2.0 (1.7-2.3)
50-59	300/2,045	14.7 (13.2–16.3)	166/9,308	1.8 (1.5–2.1)
60-69	177/1,039	17.0 (14.8–19.4)	215/7,451	2.9 (2.5–3.3)
70-79	86/477	18.0 (14.8–21.7)	92/1,912	4.8 (3.9-5.8)
≥80	50/348	14.4 (11.0–18.4)	75/1,644	4.6 (3.6–5.7)
Total	1,248/10,592	11.8 (11.2-12.4)	921/48,481	1.9 (1.8-2.0)

Conclusions

- Children < 10
 - seem less likely to transmit to household and non-household contacts
- Children 10-19
 - As likely as adults to transmit to household contacts
 - Less likely than adults to transmit to non-household contacts
- Limitations
 - Grouping children 10-19
 - Fewer contact of children 10-19
 - Do not know direction of transmission

Safe and Healthy Schools: What to Expect This Week

- Under review: updated (Vermont-specific) school guidance:
 A Strong and Healthy Start: Safety & Health Guidance for Reopening Schools, Fall 2020
- □ Return to school after illness: working on an algorithm
 - Symptom-based return pathways
 - When to test
 - Medical clearance
 - Thank you, Barb Kennedy, Alicia Veit, Ben Lee, Bill Raszka
- Please continue to help disseminate/explain guidelines and inform implementation in your communities!

CHAMP Surveys Assessing COVID-19 Impact on Practices

Thank you for participating!

- Goal: Identify the impact of COVID-19 on practices and preventive services in order to keep delivering call content that's timely and relevant, to inform advocacy efforts & priority topic areas or the fall learning session and QI project
- □ 2 surveys:
 - Preventive Care During COVID-19, assessing how well visit care is being provided (including telehealth, developmental screening, and issues facing adolescent patients)
 - Practice Impact, including personnel impact, stressors related to care delivery, and opportunity to provide feedback to CHAMP
- □ NOTE **revised** frequency (based on your feedback!):
 - Final set of surveys will go out August 15. There will <u>not</u> be an August 1 Impact Survey.

Reminder: HCP Stabilization Grants (from 7/14/20)

AHS Secretary Mike Smith:

□ Opened Friday, July 17, 2020 (application, FAQs)

- Who: VT-based health care/human service (*billing*) providers operating on/before February 1, 2020
- When: Cycle One online application process open until August 15, 2020, to cover lost revenue/expenses from 3/1/20-6/15/20. Cycle Two: applications starting in October to cover losses from 6/16/20-9/30/20.
- What: submit 2019 & 2020 revenue information, COVID-19 related expenses, data on any financial relief received and org. tax info.
- Where: <u>https://humanservices.vermont.gov/help-and-resources/covid-19-information</u>
- **What else**: NOT first-come, first-served; AHS may need to prioritize 1st cycle.

□ HCPs encouraged to apply even if uncertain re: eligibility

Topics We Are Following

School (K-12), college/university reopening, return to sports guidance

- AAP-VT Task Force on Race and Health Equity
- □ Immunization strategies/policy: catch-up, flu, COVID-19 (?)
- Pediatric health care "restart": how to safely reopen your practices (Ideas? Questions?) – please email: <u>vchip.champ@med.uvm.edu</u>

Federal and state COVID-19 financial relief

- In MIS-C (Multi-System Inflammatory Syndrome in Children)
- Summer camps/other recreational activities
- OneCare Vermont all-payer model adjustments

Questions/Discussion

- □ Q & A Goal: monitor/respond in real time; record/disseminate/revisit later as needed.
- □ For additional questions, please e-mail: <u>vchip.champ@med.uvm.edu</u>
 - What do <u>you</u> need how can we be helpful (specific guidance)?
- VCHIP CHAMP VDH COVID-19 website: <u>https://www.med.uvm.edu/vchip/projects/vchip_champ_vdh_covid-19_updates</u>
- Next CHAMP call: Friday, August 7, 12:15-12:45 (current schedule: Mon/Wed/Friday)
- □ Please tune in to VMS call with Commissioner Levine:

Thursday, August 8, 12:30-1:00 p.m. – Zoom platform & call information:

□ Join *Zoom* Meeting:

https://us02web.zoom.us/j/86726253105?pwd=VkVuNTJ1ZFQ2R3diSVdqdlJ2ZG4yQT09

- Meeting ID: 867 2625 3105 / Password: 540684
- One tap mobile +1 646 876 9923, 86726253105#, 0#, 540684# Dial In- +1 646 876 9923 / Meeting ID: 867 2625 3105 / Password: 540684

