Navigating the COVID-19 Pandemic in New Hampshire

K-12 School Re-Opening

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NH DIVISION OF
Public Health Services
Department of Health and Human Services

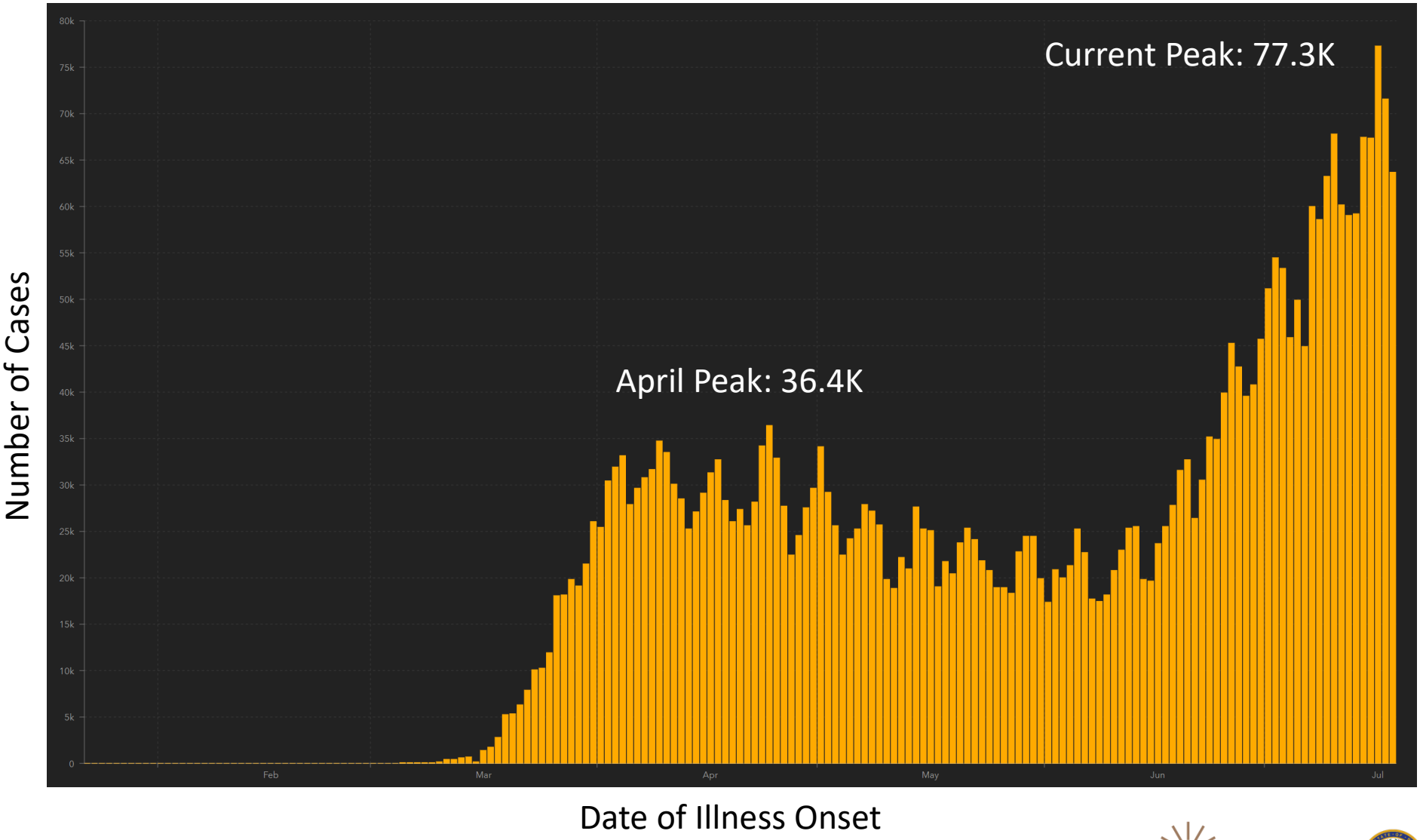
Purpose of This Call

- You are on the front lines of assessing and managing students with symptoms, and we want to support you
- School nurses help to relay important public health information/recommendations and local concerns/issues
- Investigating cases of COVID-19 in schools will involve school nurse participation and coordination

Goal of School Re-Opening

- Maximize the in-person educational experience
- Minimize risks of COVID-19 to students and staff
- Build in flexibility to allow multiple learning options and movement between learning models
- Continue to provide important community and social supports to families

Epidemic Curve for COVID-19 in the U.S.



https://coronavirus.jhu.edu/map.html, Data through 7/18/20

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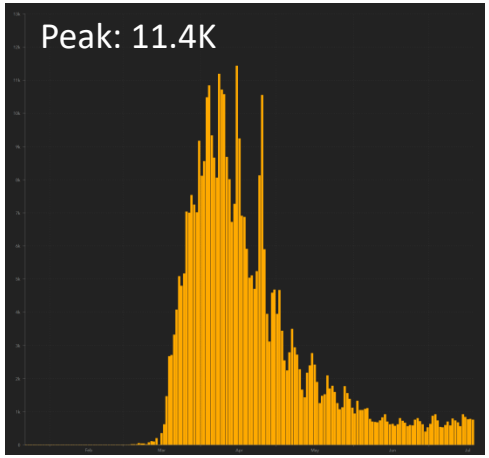
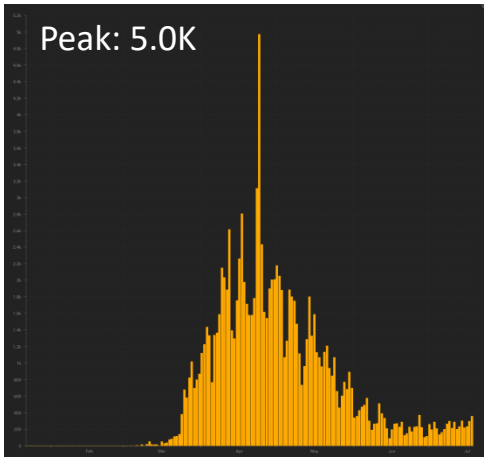
Epidemic Curve for Select U.S. States

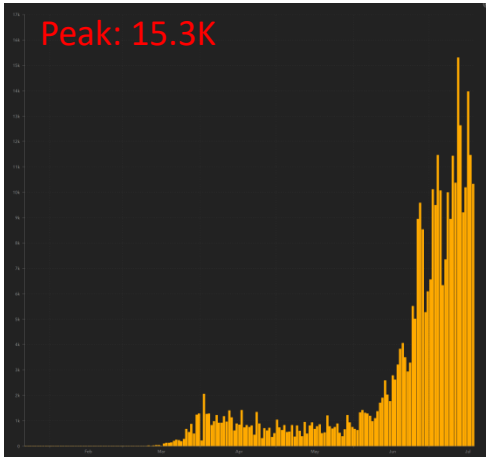
New York State



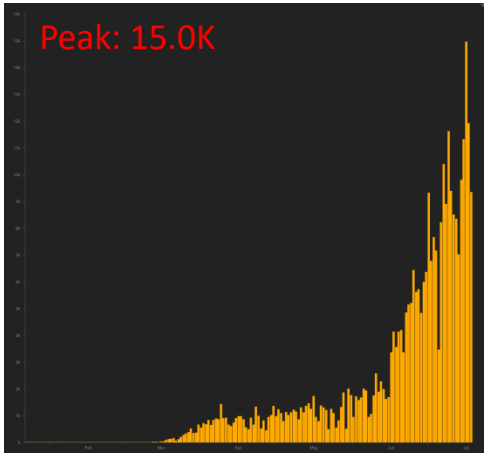
Massachusetts



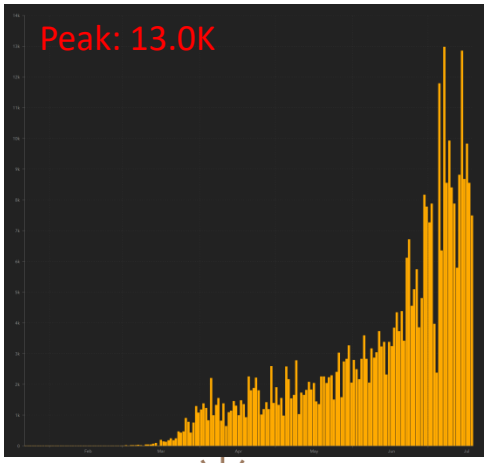
Florida



Texas



California



https://coronavirus.jhu.edu/map.html, Data through 7/18/20

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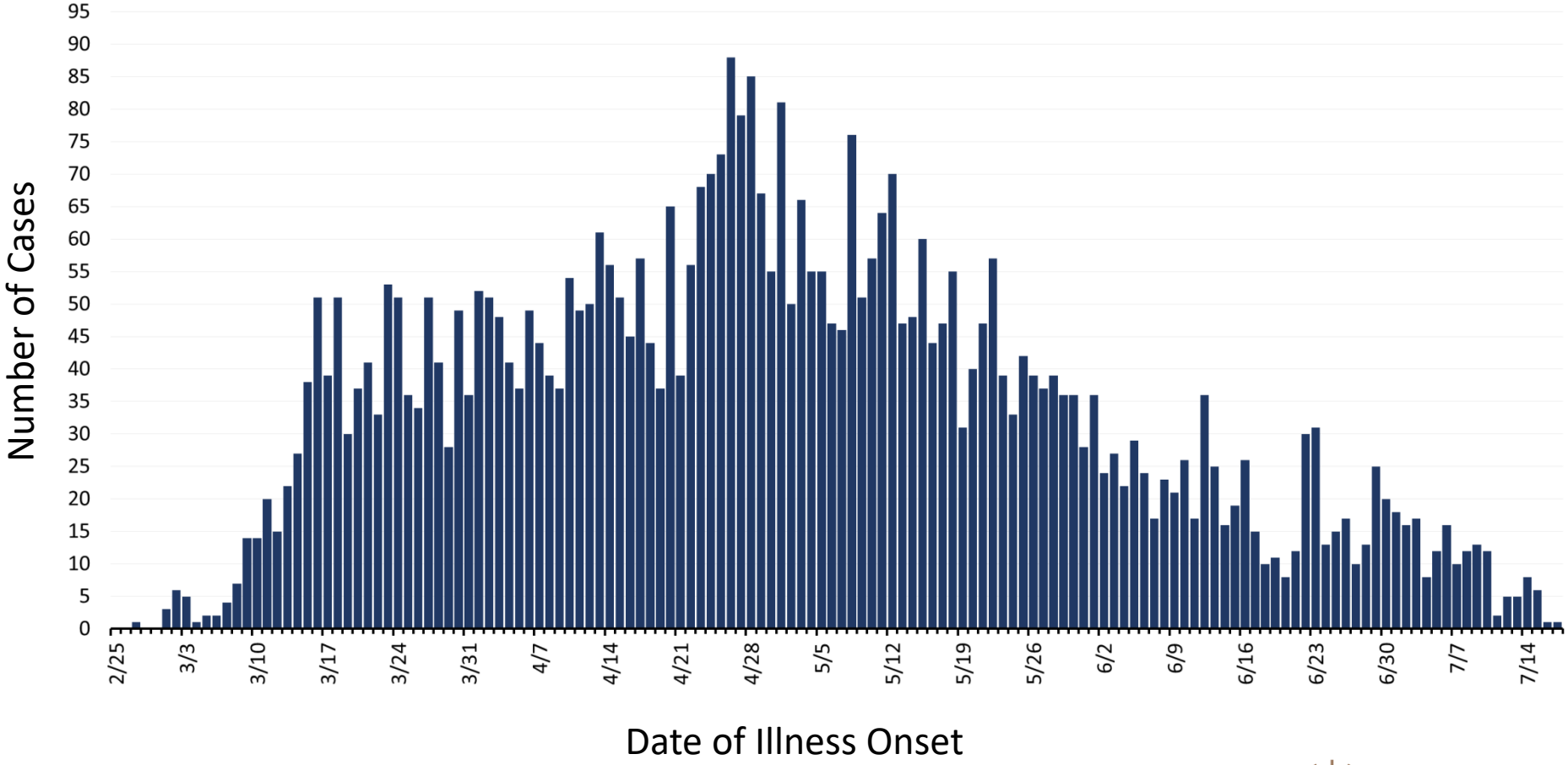
Epidemic Curve for Confirmed COVID-19 Cases in New Hampshire



https://www.nh.gov/covid19/dashboard/summary.htm

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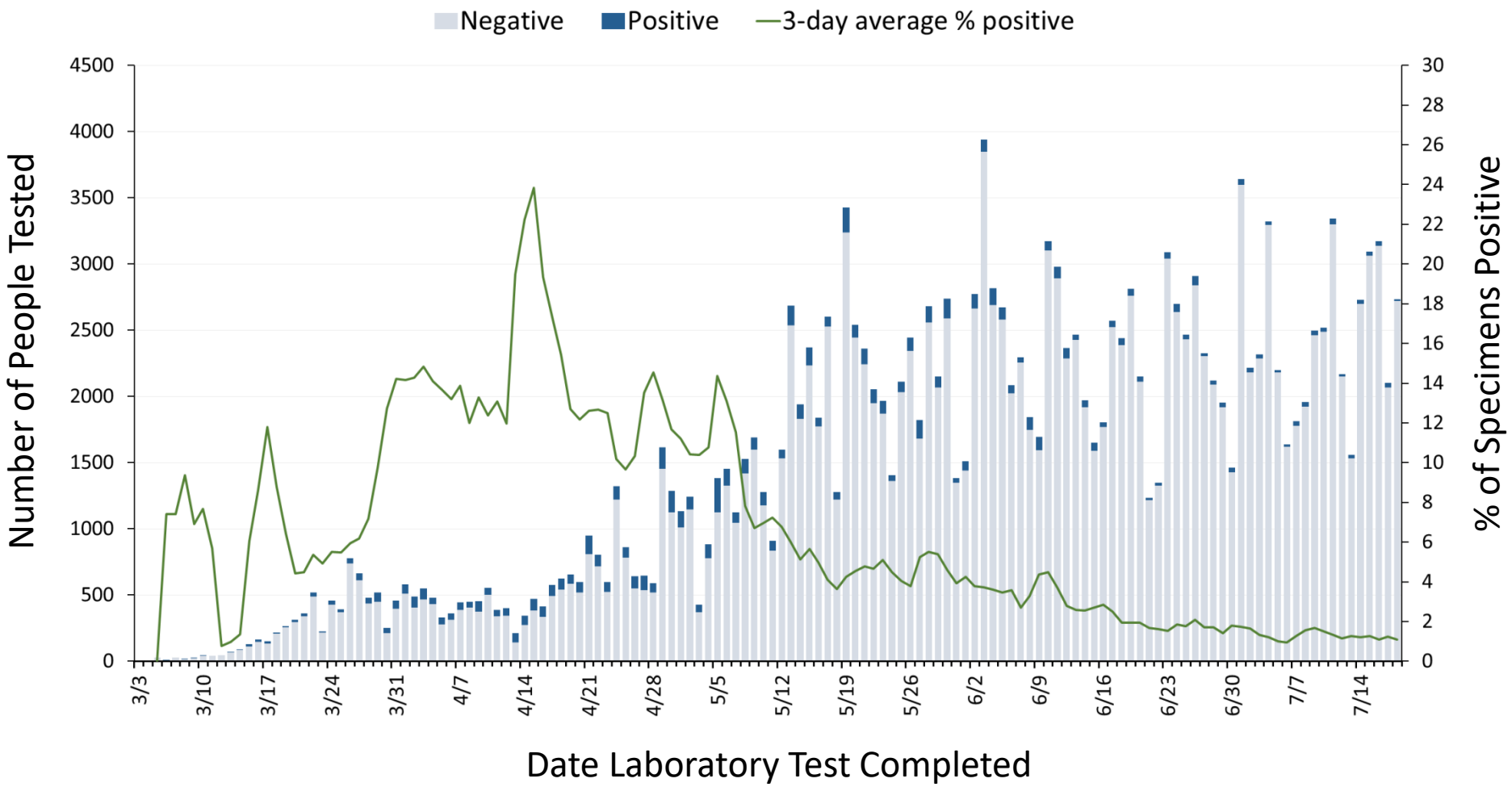
Number Tested for COVID-19 by PCR Test Result



https://www.nh.gov/covid19/news/updates.htm

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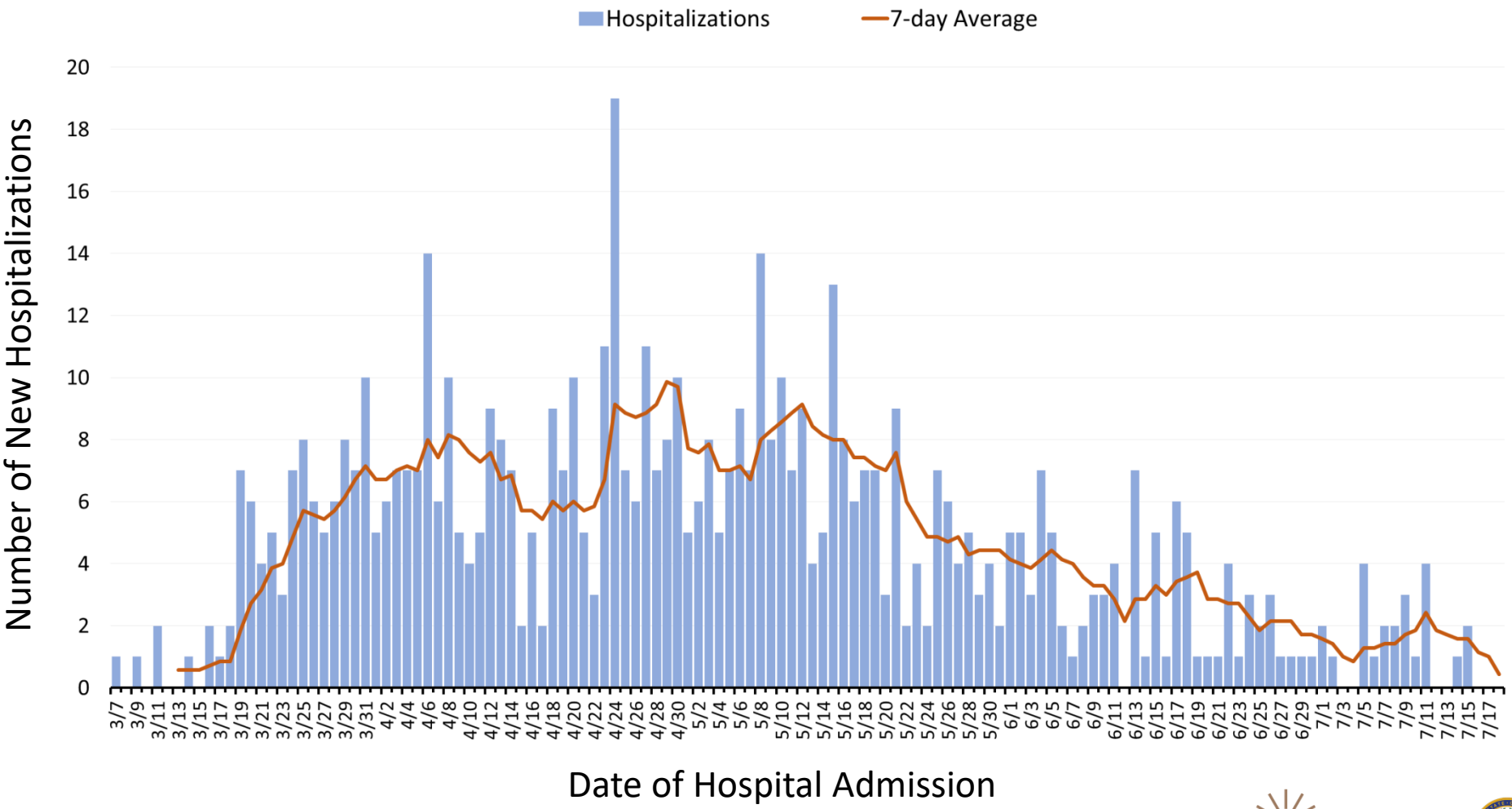
New COVID-19 Hospitalizations by Date of Admission



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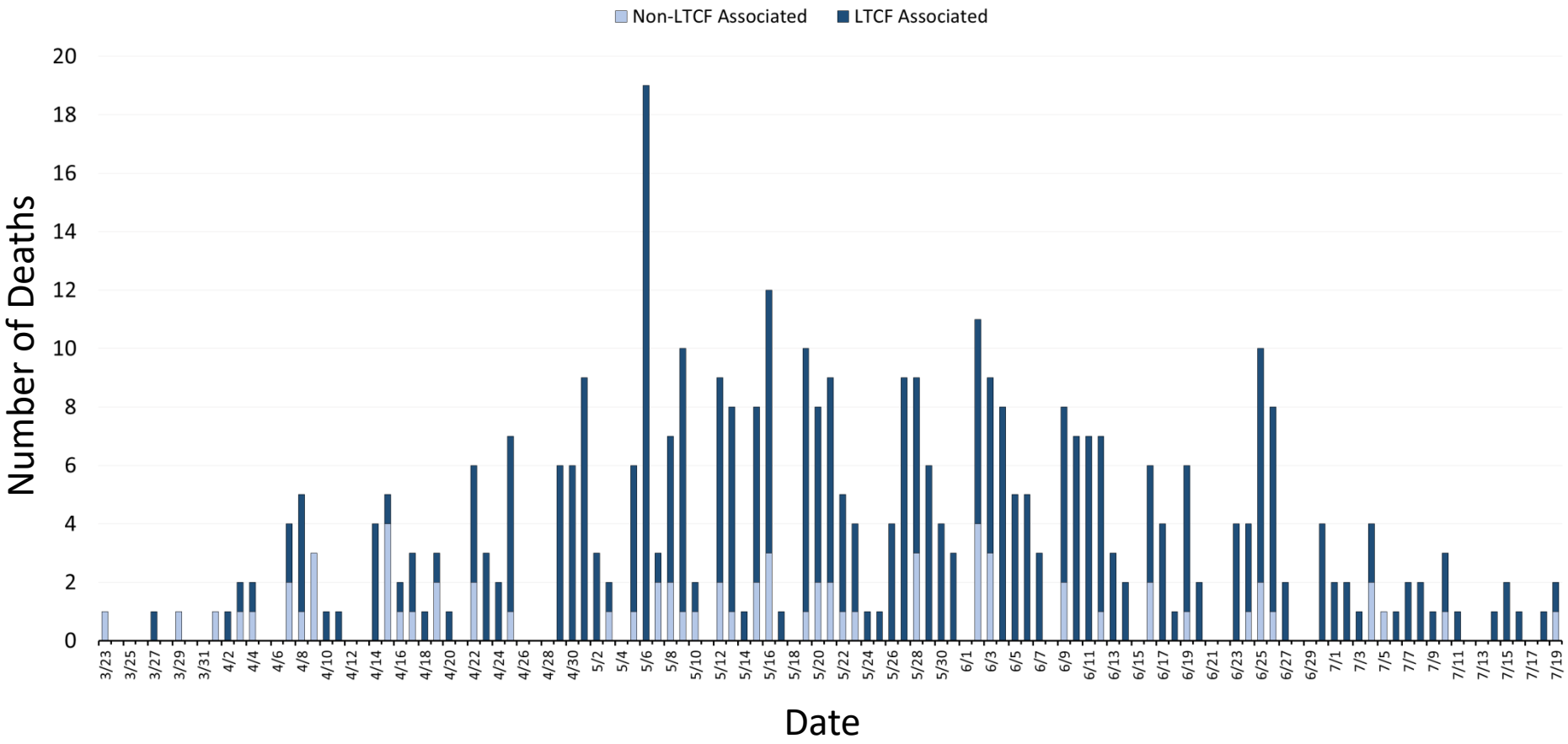
Number of COVID-19 Deaths by Date of Public Health Report Out



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Symptoms of COVID-19

- Fever or chills (including subjective fever)
- Cough
- Shortness of breath or difficulty breathing
- Sore throat
- Nasal congestion or runny nose
- Fatigue
- Muscle or body aches
- Headache
- New loss of taste or smell
- Nausea or vomiting
- Diarrhea

https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html

How COVID-19 is Transmitted

- Person-to-person: respiratory droplets (primary)
  - Close physical proximity (within 6 feet highest risk)
  - Prolonged duration of contact (longer duration increases risk)
  - From a person who is symptomatic or asymptomatic

- Person-to-person: aerosols (airborne spread)
  - Not the primary means of spread
  - Certain circumstances can increase risk:
    - Aerosol-generating procedure (airway suctioning, intubation, high-flow oxygen, nebulizer administration)
    - Symptom status?
    - Singing? Gyms? Band/wind instruments practices?

https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html

How COVID-19 is Transmitted

- Fomites (contaminated surfaces)
  - Not thought to be the main way the virus spreads
  - In laboratory controlled conditions, SARS-CoV-2 has been found to be able to survive for up to 72 hours on plastic & stainless steel. No survivable virus found after 24 hours on cardboard.
    - Median half-life: steel (5.6 hours), plastic (6.8 hours)
    - Reference: https://pubmed.ncbi.nlm.nih.gov/32511427/

- Animals-to-people?
  - Person-to-animal transmission has been documented (cats, dogs, tigers, mink, etc.)
  - Animal-to-person transmission still being studied

Isolation Recommendations for Symptomatic Individuals

- Symptomatic individual MUST wear a facemask
- Place in a single-person room with the door closed (if safe to do so)
- Airborne Infection Isolation Rooms (AIIRs) not necessary
- Persons should have a dedicated bathroom, if possible
- Limit transport and movement of the person
- Clean and disinfect the room the person was in after they leave

https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html

Personal Protective Equipment (PPE) Recommendations

- Review CDC's Infection Prevention and Control Recommendations for Healthcare Personnel
- Review and following NH public health guidance (see NH DPHS HAN, update #18):
  - Outpatients: surgical face mask, gown, gloves, eye protection
    - Consider an N95 instead of a surgical face mask if person is known to have COVID-19, or person has significant symptoms that increase risk of aerosolizing respiratory droplets (e.g., sneezing, coughing, etc.)
  - Inpatients (hospitalized): N95 or higher level respirator, gown, gloves, eye protection

https://www.dhhs.nh.gov/dphs/cdcs/alerts/documents/covid-19-update18.pdf

Face Masks Work!

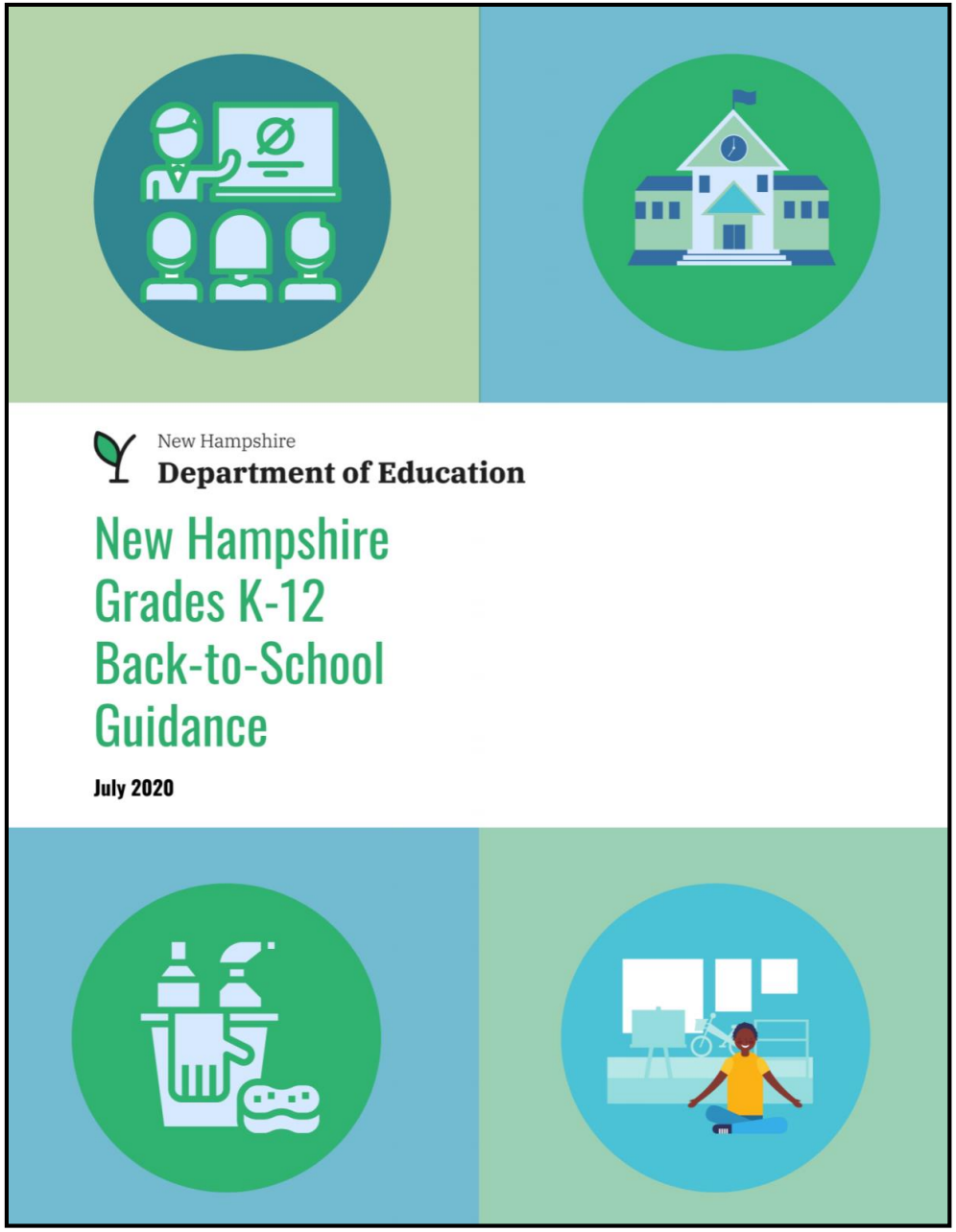
Morbidity and Mortality Weekly Report

Absence of Apparent Transmission of SARS-CoV-2 from Two Stylists After Exposure at a Hair Salon with a Universal Face Covering Policy — Springfield, Missouri, May 2020

M. Joshua Hendrix, MD[1]; Charles Walde, MD[2]; Kendra Findley, MS[3]; Robin Trotman, DO[4]

- Two hair stylists in Missouri developed respiratory symptoms and were subsequently diagnosed with COVID-19, but continued to work for 8 days (stylist A) and 5 days (stylist B) after developing symptoms
- Stylists worked for a combined 17 days while considered infectious; Exposed 139 clients
- Very high compliance with face mask use by stylists and clients
- Zero people developed COVID-19 (tested about 48% of exposed clients)

https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6928e2-H.pdf



New Hampshire Grades K-12 Back-to-School Guidance

https://www.covidguidance.nh.gov/

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Layers of Public Health Protection

- Symptom and temperature screening of students & staff
- Social distancing
- Cloth face coverings/masks
- Hand hygiene
- Limit group sizes and avoiding congregating (large common areas)
- Cohorting (grouping) students & staff
- Frequent cleaning and disinfection

Social Distancing in Classrooms

- Arrange classrooms to maximize physical distance between students
- Individual chairs/desks should be arranged so that students are spaced at least **three feet** apart with a goal of attempting to get chairs/desks **six feet** apart (six feet apart is preferred but may not be achievable)
- A study in The Lancet found that physical distancing of at least one meter was effective and "associated with a large reduction in infection," although greater distances may be more effective
- All desks should face toward the front of the class
- Assigned seating

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31142-9/fulltext

Cloth Face Coverings – General Info

- Who should NOT wear cloth face coverings (CDC guidance): children < 2 years of age, or anyone who has trouble breathing, is unconscious, incapacitated, or otherwise unable to remove the mask without assistance
- "Source control" – cloth face coverings prevent dispersal of exhaled respiratory droplets from a person who may be infected with COVID-19 (symptomatic or asymptomatic)
- Cloth face coverings are NOT personal protective equipment (PPE) – while they may offer some protection, they have not been evaluated for effectiveness as PPE

Cloth Face Coverings – Classrooms

- Use of cloth face coverings in classrooms is left to the decision of local school districts:
  - Younger children (2 years of age or older) may have difficultly consistently and correctly wearing cloth face coverings
  - Work with younger children to get compliance
  - Older students can be expected to wear cloth face coverings more consistently
- Consider cloth face coverings in the context of other layers of protection and ability to social distance, cohort students, limit mixing between students, etc.
- Students and staff who can consistently wear cloth face coverings should

Cloth Face Coverings – Other School Settings

- Students should wear cloth face coverings in circumstances where they may come in close contact with others in uncontrolled settings (i.e., when moving around or interacting in groups):
  - School buses (at all times)
  - Entering or exiting the school building
  - Transiting in hallways and between classes
  - Arriving to/leaving a classroom
  - Engaged in group activities

First Line of Defense: Keep Symptomatic People Out of the Facility

- Develop a process for screening staff, students, and visitors daily for symptoms of COVID-19 or risk factors for exposure prior to entering the educational facility.
  - For staff and visitors, screening should occur on educational facility grounds just prior to, or upon entry of, the educational facility.
  - For students, the parents/guardians should be asked to screen their children for symptoms or risk factors daily before allowing the child to travel to school. A checklist of symptoms and risk factor screening questions should be provided to the parents/guardians.
  - Recommend educational facilities also consider implementing a second screening process for students (focused on asking about symptoms of COVID-19) at the facility (e.g., upon entry to the facility, or conducted by a teacher/aide as students arrive to their first class of the day).

Screening for Symptoms and Risk Factors

- COVID-19 symptom and risk factor screening should involve asking if the individual:
  - Has any symptoms of COVID-19 (list individual symptoms)?
  - Has had close contact with someone who is suspected or confirmed to have COVID-19 in the prior 14 days?
  - Traveled in the prior 14 days outside of New England (outside of NH, VT, ME, MA, CT, RI)?
    - See NH DPHS General Travel and Quarantine Guidance for most updated travel screening and quarantine guidance: https://www.dhhs.nh.gov/dphs/cdcs/covid19/documents/employee-travel-guidance.pdf.

Who to Exclude from School

- Anybody with new or unexplained symptoms, even if only mild symptoms
- Anybody who reports close contact with a person suspected or confirmed to have COVID-19
- Anybody who has traveled outside of New England (NH, VT, ME, MA, CT, RI) in the prior 14 days.

Who to Exclude from School – Examples

- Temperature of 100.4 F – Exclude & test
- Temperature 100.0 F – Exclude & test
- No fever, but person feels chilled and is having some body aches – Exclude & test
- New runny nose or nasal congestion – Exclude & test
- A person with new diarrhea in the last 24 hours – Exclude & test
- A person with a history of migraine headaches who reports a typical headache yesterday and all symptoms have since resolved – Monitor, no need to exclude
- A person with allergies who reports typical mild sore throat, sneezing, runny nose, etc. that has improved with an antihistamine – ???, suggest testing

How Long Does A Person Need to Stay Out of School For?

- Symptomatic and confirmed with COVID-19: See CDC's "symptom-based strategy"
  1. At least 10 days have passed since symptoms first appeared, **AND**
  2. At least 24 hours have passed since last fever (off fever-reducing meds), **AND**
  3. Symptoms have improved
- Symptomatic but person refuses testing for COVID-19: Same as if confirmed with COVID-19
- Asymptomatic but tests positive: 10 days (assuming person remains asymptomatic, if person develops symptoms see above recs)
- Exposed to someone suspected or confirmed to have COVID-19: 14 days (assuming person remains asymptomatic)
  - Person cannot "test-out" of 14 day quarantine
- Traveled outside of New England: 14 days (from last day of travel)

https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html

What's Needed for Symptomatic Student/Staff to Return to School?

- Negative test results and student feeling better (general return to school rules apply)
- Positive test result or No test results: allow back once student has met CDC's symptom-based criteria for removal from isolation

How Should You Manage a Student/Staff Who Has Symptoms of COVID-19?

- Mask the symptomatic person (covering nose and mouth)
- Place the symptomatic person in a private room with the door closed if safe to do so (at a minimum they should be separated from others)
- Record the symptomatic person's temperature
- Perform a brief assessment of the person's complaints or symptoms
- Keep any assessment brief and stay at least 6 feet away, to the extent possible
- If in the same room as the person, the nurse should wear a **surgical face mask**. Also wear **eye protection** (googles or face shield) if within 6 feet or if the person is unable to wear a face mask
- If physical contact or prolonged close contact (within 6 feet of the person) is anticipated (including contact with the persons secretions/excretions), then wear all appropriate PPE: surgical face mask, disposable gown, gloves, and eye protection
- Send the symptomatic person home by private transportation

What Happens to Healthcare Personnel (HCP) Exposed to Someone with COVID-19?

Exposure	Personal Protective Equipment Used	Work Restrictions
HCP who had prolonged[1] close contact[2] with a patient, visitor, or HCP with confirmed COVID-19[3]	• HCP not wearing a respirator or facemask[4] • HCP not wearing eye protection if the person with COVID-19 was not wearing a cloth face covering or facemask • HCP not wearing all recommended PPE (i.e., gown, gloves, eye protection, respirator) while performing an aerosol-generating procedure[1]	• Exclude from work for 14 days after last exposure[5] • Advise HCP to monitor themselves for fever or symptoms consistent with COVID-19[6] • Any HCP who develop fever or symptoms consistent with COVID-19[6] should immediately contact their established point of contact (e.g., occupational health program) to arrange for medical evaluation and testing.
HCP other than those with exposure risk described above	• N/A	• No work restrictions • Follow all recommended infection prevention and control practices, including wearing a facemask for source control while at work, monitoring themselves for fever or symptoms consistent with COVID-19[6] and not reporting to work when ill, and undergoing active screening for fever or symptoms consistent with COVID-19[6] at the beginning of their shift. • Any HCP who develop fever or symptoms consistent with COVID-19[6] should immediately self-isolate and contact their established point of contact (e.g., occupational health program) to arrange for medical evaluation and testing.

https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

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What if you have multiple symptomatic students you're managing at once?

- General principle: keep symptomatic people separate from other students and staff (separate rooms)
- If students are awaiting pick-up, look for monitored outdoor locations where students can wait separate from others
- Plan for how to expand nursing office capacity (both physical space and personnel)
- Any movement of a symptomatic person through the facility should be limited and person must be masked

Confirmed COVID-19 and Public Health Investigations – Who Gets Quarantined?

- People who have been in close contact to an individual with confirmed COVID-19 require a 14 day quarantine
- This will vary by classroom situation
  - In older age groups with consistent assigned seating, it may just be the 2-4 individuals seated around the person
  - In younger age groups where more classroom mingling occurs, it could be the entire classroom
- We (NH DPHS) will work with schools to notify and inform parents/guardians, students, and other staff

When Do You Call Public Health?

- Any questions, concerns, or need for additional guidance: 603-271-4496 (after-hours call 603-271-5300 and ask for the public health nurse on-call)
- Report any person who has been at your facility with suspected or confirmed COVID-19 (we will work with you and the school to collect “line lists” of potential exposed)
- Help drafting communications and messaging

Is It Safe to Conduct Extra-Curricular Activities?

- Depends on the extra-curricular activity, location (e.g., indoors vs. outdoors), and ability to maintain physical distancing
- There should be no physical contact (at this stage in the pandemic)
- Avoid high-risk crowded situations (e.g., locker rooms)
- Anything that requires forced breathing (e.g., playing a wind instrument) or vocal cord vibration (e.g., singing) may need additional precautions

Other Guidance That May Apply

- Amateur & Youth Sports: https://www.covidguidance.nh.gov/sites/g/files/ehbemt381/files/inline-documents/2020-05/guidance-amateur-youth-sports.pdf
- Health & Fitness: https://www.covidguidance.nh.gov/sites/g/files/ehbemt381/files/inline-documents/2020-05/guidance-health-fitness.pdf
- Libraries: https://www.covidguidance.nh.gov/sites/g/files/ehbemt381/files/files/inline-documents/guidance-libraries.pdf
- Community Arts & Music Education: https://www.covidguidance.nh.gov/sites/g/files/ehbemt381/files/files/inline-documents/guidance-arts-music-education.pdf
- Performing Arts: https://www.covidguidance.nh.gov/sites/g/files/ehbemt381/files/files/inline-documents/guidance-performing-arts-venues.pdf
- Massage: https://www.covidguidance.nh.gov/sites/g/files/ehbemt381/files/inline-documents/2020-05/guidance-massage.pdf

Educational Models

- In-person learning: physically bring as many students back to the classroom environment as possible
- Hybrid learning models: Some students are in-person and others are remote (limits class sizes, increases physical distancing, help to cohort)
  - Some families may self-select for full-time remote learning (e.g., students at higher risk for severe illness) even while in-person classes are conducted
  - Students alternate between in-person and remote instruction on a rotating/periodic basis (by day or week)
- Remote learning model: full-time instruction from home
- There is a need to maintain capacity for both in-person and remote learning
  - Rapidly changing pandemic
  - Students/families may not comfortable in the classroom
  - Students on quarantine need to continue learning

Additional Questions:

- Can fans be used in the classroom?
- How should siblings of students who are symptomatic be handled? Should they be excluded from school as well while awaiting test results?
- Is testing going to be offered for students and staff?
  - Mobile testing team at public health to respond to outbreaks and offer testing to exposed individuals
  - Otherwise, see available community testing options: https://www.dhhs.nh.gov/dphs/cdcs/covid19/documents/covid-testing-options.pdf
- When do you close a school because of COVID-19 and move back to remote-learning? Any metrics?

Questions & Answers