

COVID-19

The view from Anchorage – do I see storm clouds on the horizon?

6/10/2020

Why worry?

6/9/2020: 288 cases in Anchorage; at least 30 are health care workers.

- 5/24: A health care worker with likely work-related exposure has cough, muscle aches, and runny nose. Within 1 week, 15 of 16 people in a large family unit, including 7 kids ages 4 months to 14 years test positive for SARS-CoV-2
- 6/1: 4-month-old baby seen for a well child visit has a runny nose and is sneezing during the visit. Health care provider is wearing a mask but no eye protection. Abbott ID Now test is negative. The test sample is sent to the state lab and comes back positive. The baby is in day care.
- 6/1: An asymptomatic teen having wisdom teeth extracted has pre-op testing 3 days before the procedure. The test result is not back on the day of the procedure, so a rapid test is done and is negative. After the procedure the first test is reported positive for SARS-CoV-2. And the patient has become symptomatic
- 6/2: A asymptomatic teen is transferred from a residential treatment facility to a congregate care facility, where testing on arrival is positive for SARS-CoV-2.

Why worry?

Providence Transitional Care Center:

- Mid March – closed to all visitors, heightened cleaning, staff wearing masks and gloves
- 5/29: TCC patient identified with COVID-19 in ED.
- 6/9: 16 residents, 27 caregivers, and 1 PEC caregiver Covid +. 1 resident has died.

Why worry?

- New travel mandate -- 'We want this to be easy': Alaska health officials offer advice on how to comply with the state's COVID-19 travel policy. 3,000 incoming travelers per day
- 6/4 Alaska Public Media – “11 workers at Whittier seafood plant test positive for COVID”
 - “The individuals, who worked at Whittier Seafood, were immediately isolated and have been transported to Anchorage, where they are being monitored under quarantine.”
- Never enough staff, testing supplies, PPE
 - AHD – small team of esteemed PHNs and recruited school nurses investigating 18 new cases, monitoring 72 active cases, 159 contacts

Why worry?

COVID-19 cases in Alaska involving non-residents, by date reported

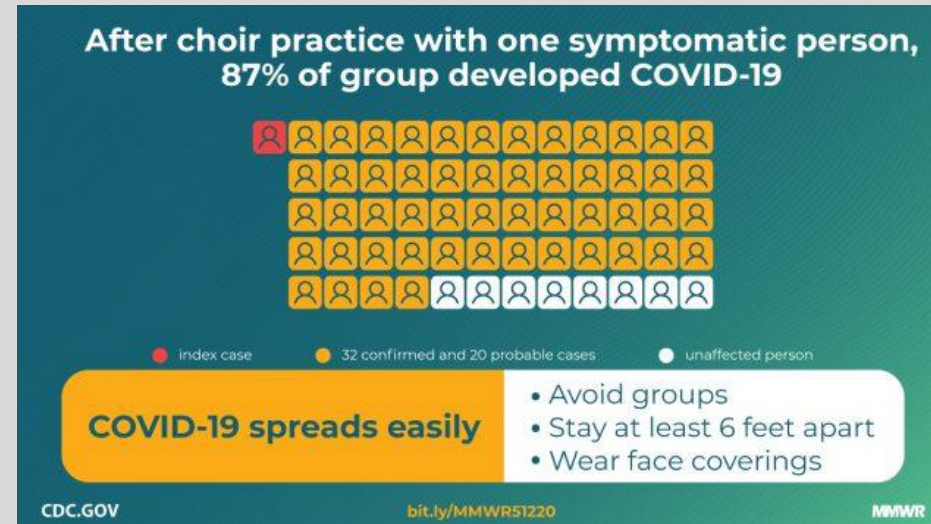
As of noon Thursday, June 4

Total confirmed cases: **41** Change from previous day: **+18**

<i>Reported</i>	<i>Borough or census area</i>	<i>Industry</i>
Mar. 12	Anchorage Municipality	Pilot
April 4	Fairbanks North Star Borough	Visitor
April 8	Anchorage Municipality	Pilot
April 10	Anchorage Municipality	Seafood
April 15	Southeast Fairbanks Census Area	Mining
May 6	Valdez-Cordova Census Area	Seafood
May 11	Anchorage Municipality	Visitor
May 14	Anchorage Municipality	Seafood
May 15	Dillingham Census Area	Seafood
May 16	Anchorage Municipality	Seafood
May 19	Anchorage Municipality	Seafood
May 19	Anchorage Municipality	Seafood
May 22	Valdez-Cordova Census Area	Seafood
May 24	Kenai Peninsula Borough	Seafood
May 24	Kenai Peninsula Borough	Seafood
May 25	Anchorage Municipality	Seafood
May 25	Anchorage Municipality	Seafood
May 28	Kenai Peninsula Borough	Visitor
May 29	Bristol Bay plus Lake and Peninsula	Visitor
May 29	Kenai Peninsula Borough	Visitor
May 30	Bristol Bay plus Lake and Peninsula	Visitor

<i>Reported</i>	<i>Borough or census area</i>	<i>Industry</i>
June 1	Valdez-Cordova Census Area	Seafood
June 2	Anchorage Municipality	Seafood
June 3	Aleutians West Census Area	Seafood
June 3	Aleutians West Census Area	Seafood
June 3	Aleutians West Census Area	Seafood
June 3	Kenai Peninsula Borough	Seafood
June 3	Kodiak Island Borough	Seafood
June 3	Municipality of Anchorage	Seafood
June 3	Valdez-Cordova Census Area	Seafood
June 3	Valdez-Cordova Census Area	Seafood
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June 3	Valdez-Cordova Census Area	Seafood
June 3	Valdez-Cordova Census Area	Seafood
June 3	Sitka City and Borough	Other

High SARS-CoV-2 Attack Rate Following Exposure at a Choir Practice — Skagit County, Washington, March 2020



Following a 2.5-hour choir practice attended by 61 persons, including a symptomatic index patient, 32 confirmed and 20 probable secondary COVID-19 cases occurred (attack rate = 53.3% to 86.7%); three patients were hospitalized, and two died. Transmission was likely facilitated by close proximity (within 6 feet) during practice and augmented by the act of singing.

The potential for superspreader events underscores the importance of physical distancing, including avoiding gathering in large groups, to control spread of COVID-19. Enhancing community awareness can encourage symptomatic persons and contacts of ill persons to isolate or self-quarantine to prevent ongoing transmission.

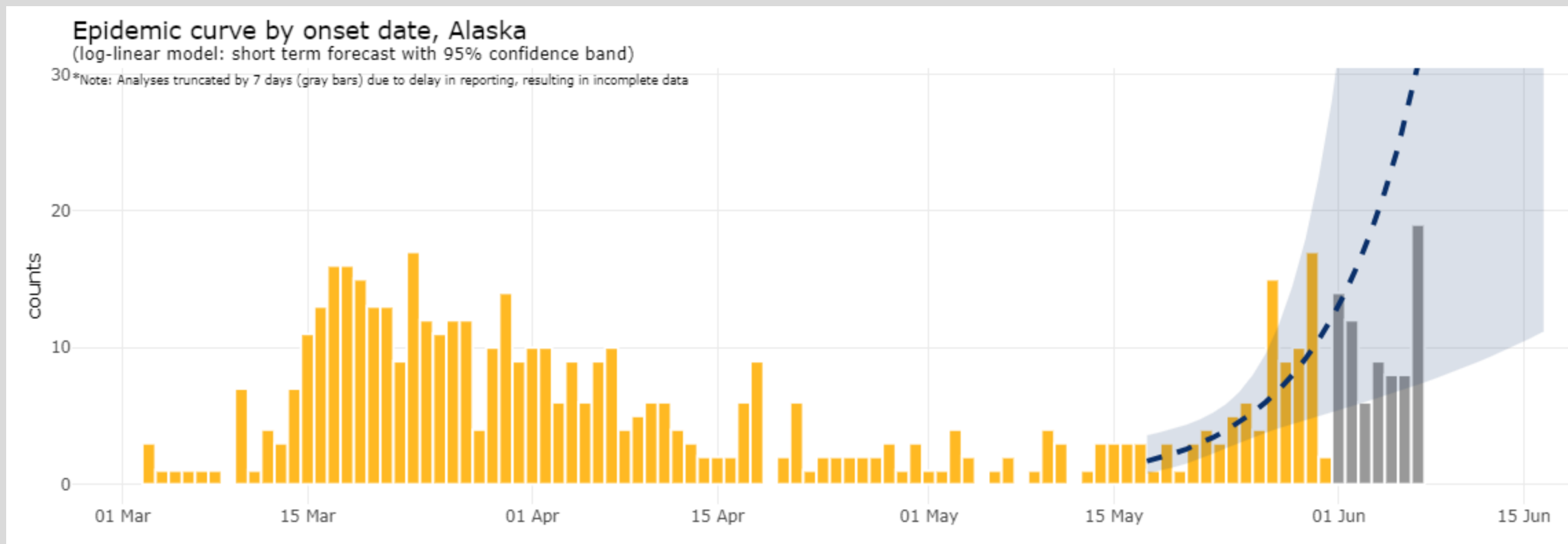
Why worry?

Tidbits from the

Navajo Times
DIKE BINAALTSOOD

- March 18: It has been confirmed that a 46-year-old Navajo man has tested positive for COVID-19.
- March 21: Nation ordered to shelter in place.
- March 23: COVID cases now at 29; people not heeding stay-at-home warning
- June 4: 5,808 COVID-19 cases on the Navajo Nation and 269 deaths

Why worry?



Interim U.S. Guidance for Risk Assessment and Work Restrictions for Healthcare Personnel with Potential Exposure to COVID-19

Definitions:

Prolonged exposure -- exposure of 15 minutes or more, or exposure of any duration during performance of an [aerosol generating procedure](#).

Close contact:

- a) being within 6 feet of a person with confirmed COVID-19 or
- b) having unprotected direct contact with infectious secretions or excretions of the person with confirmed COVID-19.

Infectious period:

2 days before symptom onset until 10 days after symptom onset and 3 days after resolution of fever

For asymptomatic people,

2 days before positive test until 10 days after positive test for persons who are asymptomatic

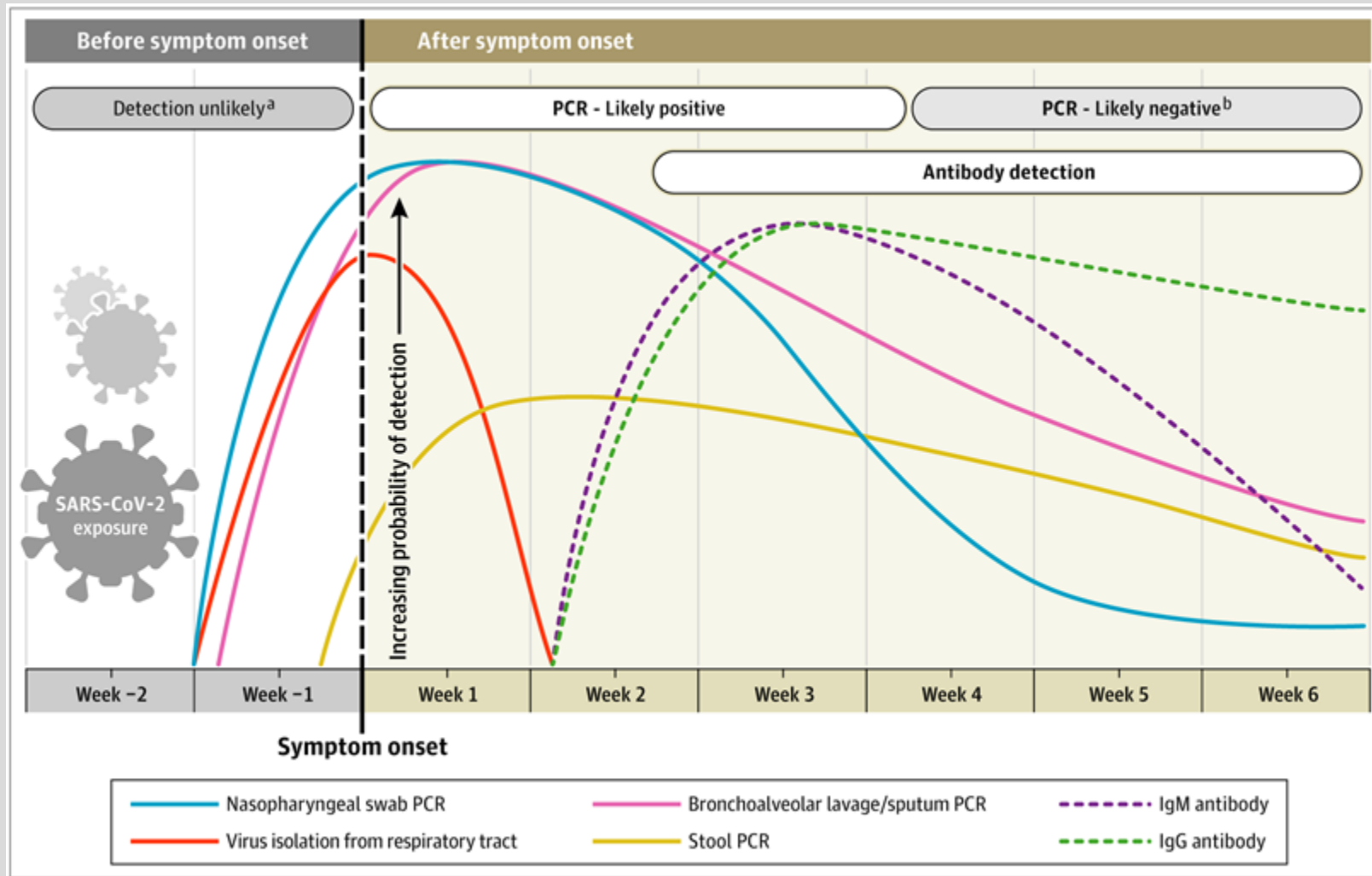
Interim U.S. Guidance for Risk Assessment and Work Restrictions for Healthcare Personnel with Potential Exposure to COVID-19

Exposure	Personal Protective Equipment Used	Work Restrictions
<p>HCP who had prolonged¹ close contact² with a patient, visitor, or HCP with confirmed COVID-19³</p>	<ul style="list-style-type: none">• HCP not wearing a respirator or facemask⁴• 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 procedure¹	<ul style="list-style-type: none">• Exclude from work for 14 days after last exposure⁵• Advise HCP to monitor themselves for fever or symptoms consistent with COVID-19⁶• Any HCP who develop fever or symptoms consistent with COVID-19⁶ should immediately contact their established point of contact (e.g., occupational health program) to arrange for medical evaluation and testing.

Interim U.S. Guidance for Risk Assessment and Work Restrictions for Healthcare Personnel with Potential Exposure to COVID-19

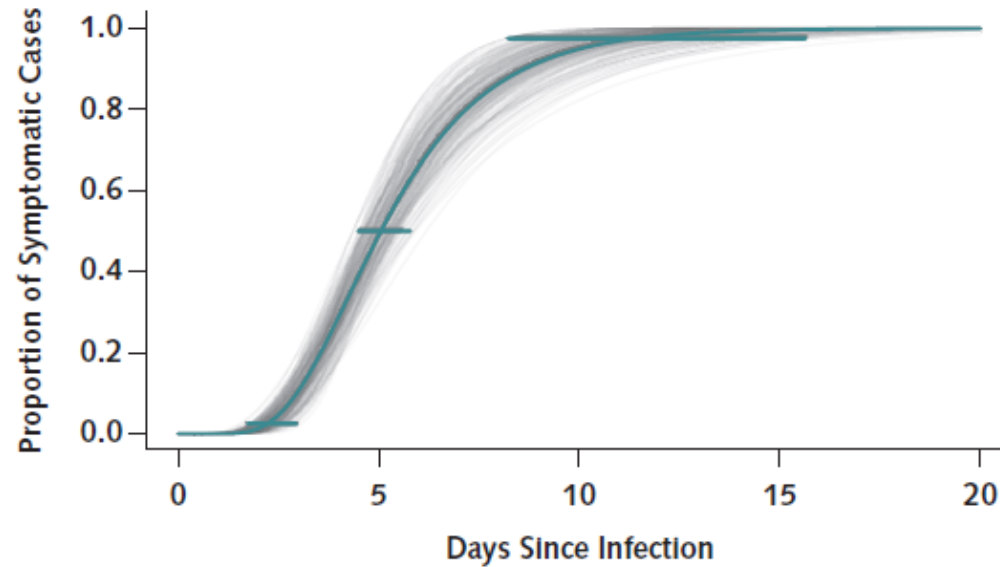
<p>HCP other than those with exposure risk described above</p>	<ul style="list-style-type: none">• N/A	<ul style="list-style-type: none">• No work restrictions• Follow all recommended infection prevention and control practices, including wearing a facemask for source control while at work, monitoring themselves for fever or symptoms consistent with COVID-19⁶ and not reporting to work when ill, and undergoing active screening for fever or symptoms consistent with COVID-19⁶ at the beginning of their shift.• Any HCP who develop fever or symptoms consistent with COVID-19⁶ should immediately self-isolate and contact their established point of contact (e.g., occupational health program) to arrange for medical evaluation and testing.
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Interpreting Diagnostic Tests for SARS-CoV-2



<https://jamanetwork.com/journals/jama/fullarticle/2765837>

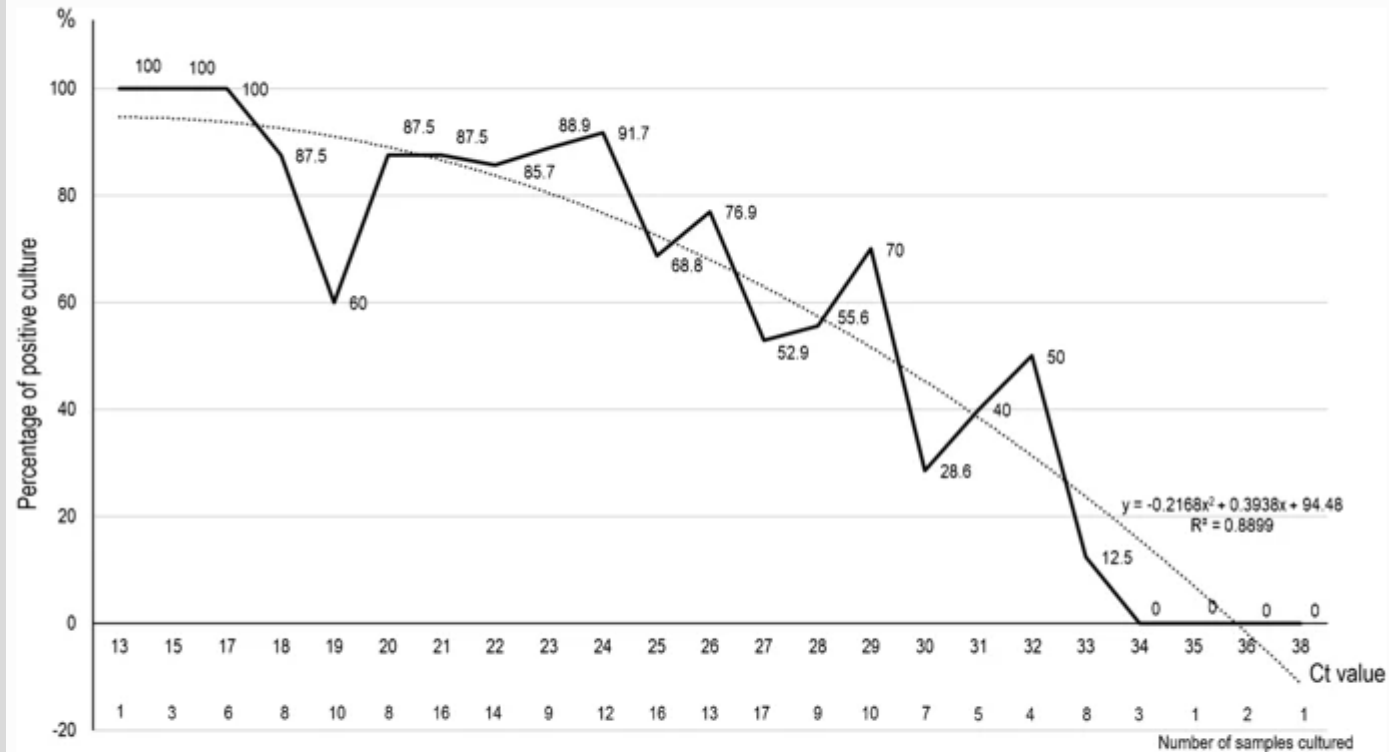
Figure 2. Cumulative distribution function of the COVID-19 incubation period estimate from the log-normal model.



The estimated median incubation period of COVID-19 was 5.1 days (CI, 4.5 to 5.8 days). We estimated that fewer than 2.5% of infected persons will display symptoms within 2.2 days (CI, 1.8 to 2.9 days) of exposure, whereas symptom onset will occur within 11.5 days (CI, 8.2 to 15.6 days) for 97.5% of infected persons. Horizontal bars represent the 95% CIs of the 2.5th, 50th, and 97.5th percentiles of the incubation period distribution. The estimate of the dispersion parameter is 1.52 (CI, 1.32 to 1.72). COVID-19 = coronavirus disease 2019.

Is a person with a positive SARS-CoV-2 PCR test infectious?

Fig. 1



Percentage of positive viral culture of SARS-CoV-2 PCR-positive nasopharyngeal samples from Covid-19 patients, according to Ct value (plain line). The dashed curve indicates the polynomial regression curve

“Viral RNA load as determined by cell culture as a management tool for discharge of SARS-CoV-2 patients from infectious disease wards” [Eur J Clin Microbiol Infect Dis](#). 2020; 39(6): 1059–1061.

For initial diagnostic testing for SARS-CoV-2, CDC recommends collecting and testing an upper respiratory specimen. The following are acceptable specimens:

- A nasopharyngeal (NP) specimen collected by a healthcare provider; or
- An oropharyngeal (OP) specimen collected by a healthcare provider; or
- A nasal mid-turbinate swab collected by a healthcare provider or by a supervised onsite self-collection (using a flocked tapered swab); or
- An anterior nares (nasal swab) specimen collected by a healthcare provider or by onsite or home self-collection (using a flocked or spun polyester swab); or
- Nasopharyngeal wash/aspirate or nasal wash/aspirate (NW) specimen collected by a healthcare provider.

Testing recommendations from Alaska Section of Epidemiology

Test Anybody in Alaska Who is Experiencing Symptoms of COVID-19

- Symptoms of COVID-19 may include any of the following: fever, cough, shortness of breath, difficulty breathing, chills, decreased appetite, diminished sense of taste or smell, diarrhea, fatigue, headache, muscle/joint aches, nausea, rash, rigors, runny nose, sore throat, or sputum production.
- Have a low threshold to test any patient with new, unexplained symptoms that may be clinically compatible with COVID-19.

Targeted Testing for Asymptomatic Persons

- Per [Mandate 10 or 17](#) or as required per local communities
 - Upon admission to a health care facility
 - For patients undergoing urgent/emergent procedures that put health care personnel at high exposure risk
- Other settings where asymptomatic testing may be considered
 - [All close contacts of confirmed COVID-19 patients](#)
 - Health care workers in hospitals and congregate living settings
 - Residents in congregate living settings (see the [Alaska DPH guidance](#) on this)
 - Other high-consequence settings (e.g., people coming in to remote communities from areas where COVID-19 is circulating)
 - People involved in discrete outbreaks (in consultation with public health)

Performance of the rapid Nucleic Acid Amplification by Abbott ID NOW COVID-19 in nasopharyngeal swabs transported in viral media and dry nasal swabs, in a New York City academic institution

“Regardless of method of collection and sample type, Abbot ID NOW COVID-19 missed a third of the samples detected positive by Cepheid Xpert Xpress when using NP swabs in VTM and over 48% when using dry nasal swabs.”

Alaska Section of Epidemiology (SOE) Guidance for Coronavirus Disease 2019 (COVID-19) Testing in Alaska *June 8, 2020*

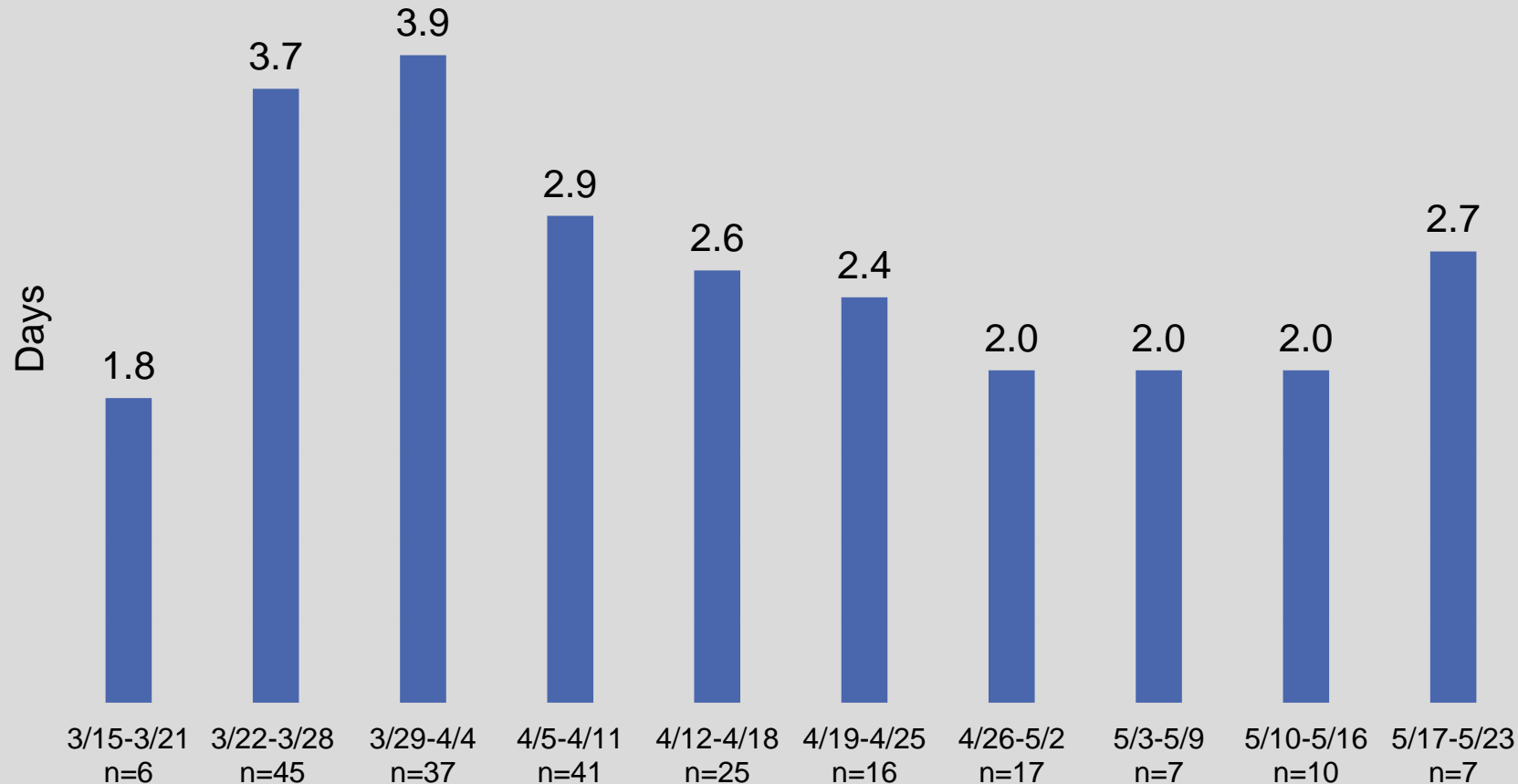
Key Points

- **On June 1, 2020, FDA issued an amendment for the Abbott ID NOW COVID-19 assay to include the following:**
 - **Negative results should be treated as presumptive and, if inconsistent with clinical signs and symptoms or necessary for patient management, should be tested with different authorized or cleared molecular tests.**

<https://www.biorxiv.org/content/10.1101/2020.05.11.089896v1.full.pdf>

<http://dhss.alaska.gov/dph/Epi/id/SiteAssets/Pages/HumanCoV/AKCOVIDTestingGuidance.pdf>

The average number of days from date of test to date of test result is 3.0.



Note: In week 8, there two cases where results took significantly longer, 28 and 42 days. These cases were removed from the analysis as outliers. Cases where data missing are also removed (2) in Week 10.

Discontinuation of Transmission-Based Precautions and Disposition of Patients with COVID-19 in Healthcare Settings (Interim Guidance)

Symptomatic patients with COVID-19 should remain in Transmission-Based Precautions until **either**:

Symptom-based strategy

At least 3 days (72 hours) have passed *since recovery* defined as resolution of fever without the use of fever-reducing medications **and** improvement in respiratory symptoms (e.g., cough, shortness of breath); **and**,

At least 10 days have passed *since symptoms first appeared*

Test-based strategy

Resolution of fever without the use of fever-reducing medications **and**

Improvement in respiratory symptoms (e.g., cough, shortness of breath), **and**

Negative results of an FDA Emergency Use Authorized COVID-19 molecular assay for detection of SARS-CoV-2 RNA from at least two consecutive respiratory specimens collected ≥ 24 hours apart (total of two negative specimens)

Discontinuation of Transmission-Based Precautions and Disposition of Patients with COVID-19 in Healthcare Settings (Interim Guidance)

Patients with laboratory-confirmed COVID-19 who have not had any symptoms should remain in Transmission-Based Precautions until **either**:

Time-based strategy

10 days have passed since the date of their first positive COVID-19 diagnostic test, assuming they have not subsequently developed symptoms since their positive test. Note, because symptoms cannot be used to gauge where these individuals are in the course of their illness, it is possible that the duration of viral shedding could be longer or shorter than 10 days after their first positive test.

Test-based strategy

Negative results of an FDA Emergency Use Authorized COVID-19 molecular assay for detection of SARS-CoV-2 RNA from at least two consecutive respiratory specimens collected ≥ 24 hours apart (total of two negative specimens). Note, because of the absence of symptoms, it is not possible to gauge where these individuals are in the course of their illness. There have been reports of prolonged detection of RNA without direct correlation to viral culture.

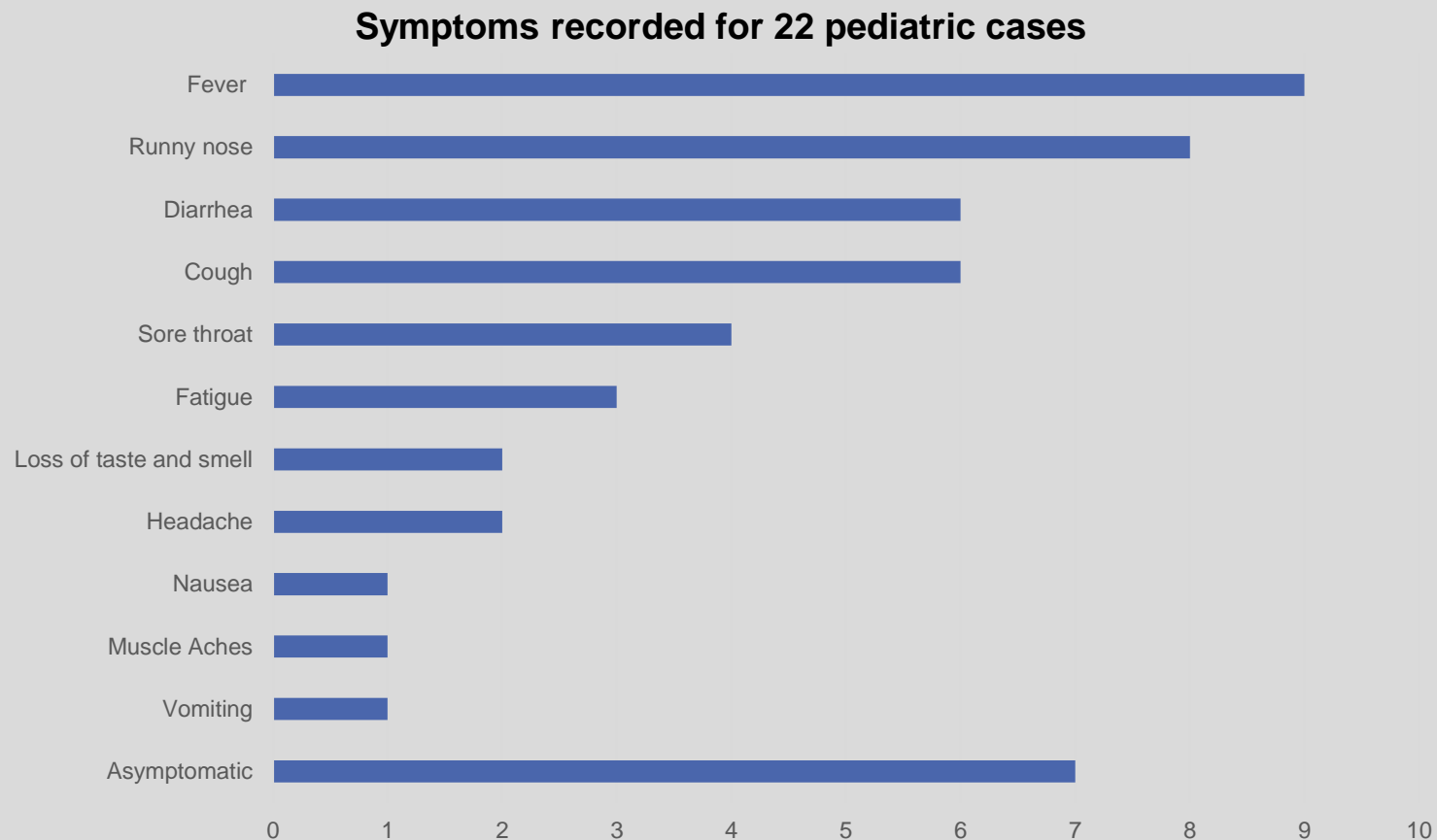
Data recorded for 34 Anchorage pediatric cases ages 0 to 19 years as of 6/4/2020

Age	
0-9 years	12
10-19 years	14

Sex	
Female	20
Male	14

Race	
White	13
Alaska Native	7
Asian	8
Black	2
Multiple	2
Hispanic	1

Source of infection	
Family contact	21
Work contact	1
Travel	1
Unknown	4



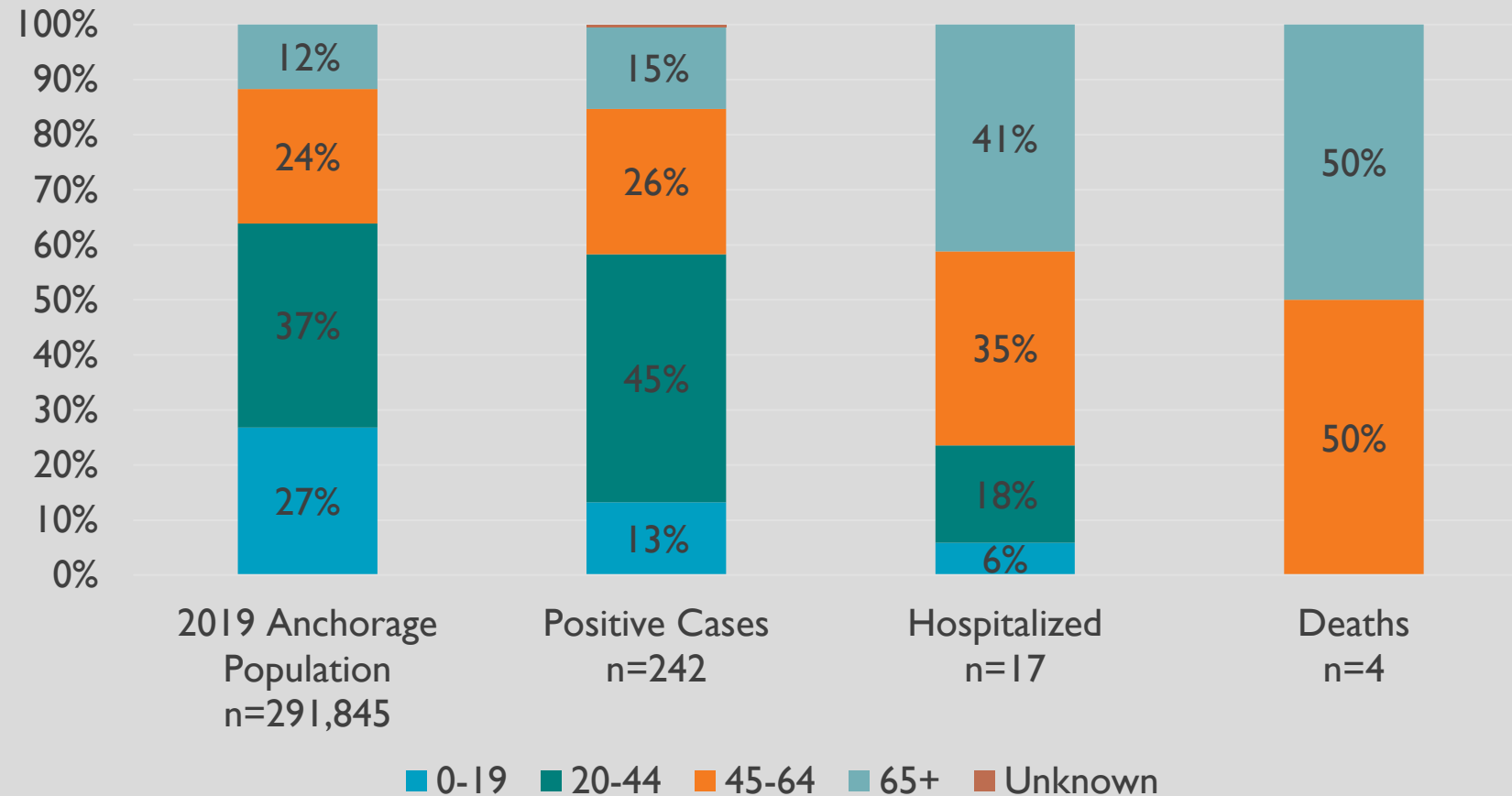
COVID-19 symptoms in kids

TABLE. Signs and symptoms among 291 pediatric (age <18 years) and 10,944 adult (age 18–64 years) patients* with laboratory-confirmed COVID-19 — United States, February 12–April 2, 2020

Sign/Symptom	No. (%) with sign/symptom	
	Pediatric	Adult
Fever, cough, or shortness of breath [†]	213 (73)	10,167 (93)
Fever [§]	163 (56)	7,794 (71)
Cough	158 (54)	8,775 (80)
Shortness of breath	39 (13)	4,674 (43)
Myalgia	66 (23)	6,713 (61)
Runny nose [¶]	21 (7.2)	757 (6.9)
Sore throat	71 (24)	3,795 (35)
Headache	81 (28)	6,335 (58)
Nausea/Vomiting	31 (11)	1,746 (16)
Abdominal pain [¶]	17 (5.8)	1,329 (12)
Diarrhea	37 (13)	3,353 (31)

Disease Burden by Age

Updated monthly, last updated through May 31, 2020, n=242

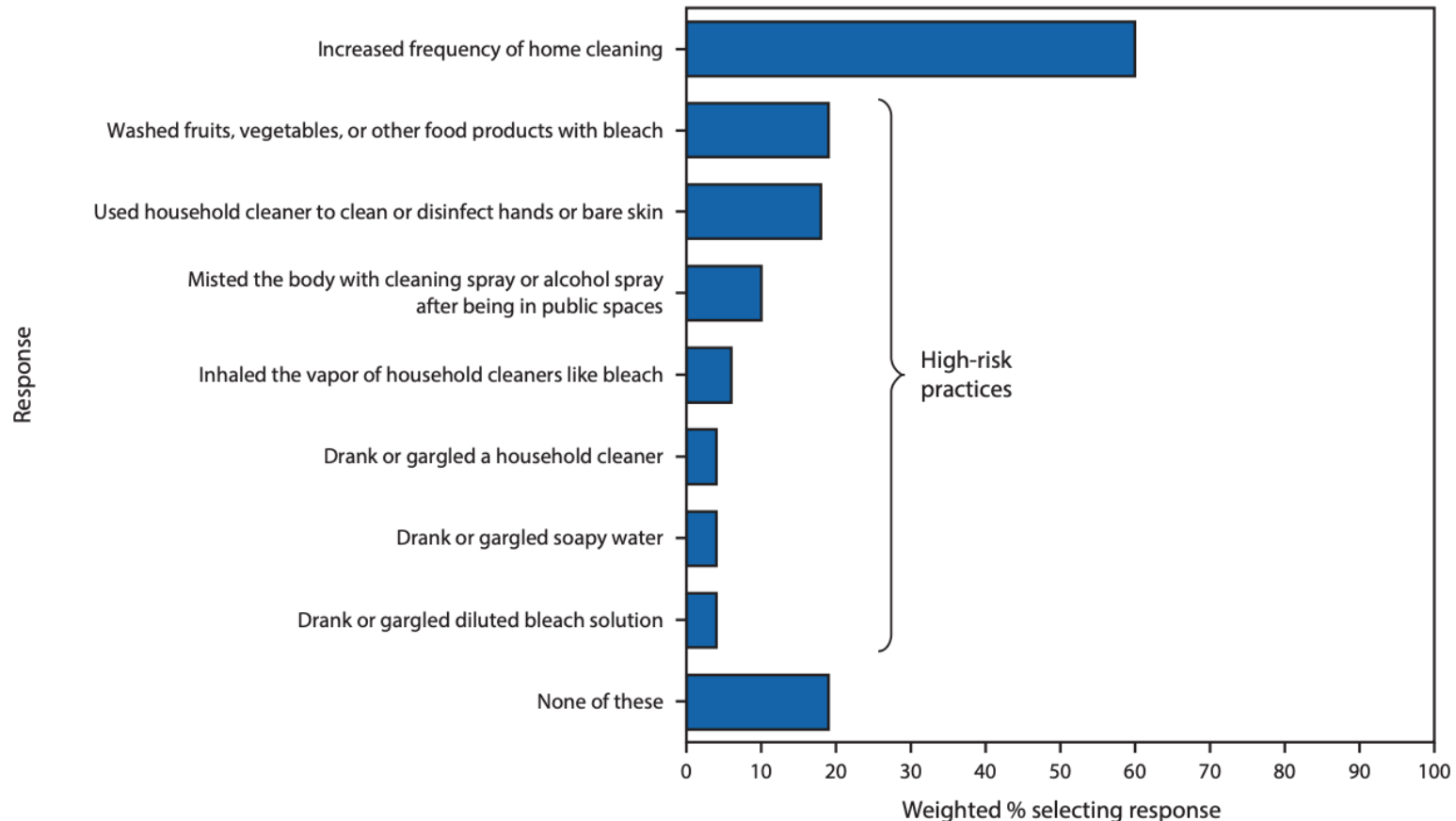


Anchorage Population by Age Source: Alaska Department of Labor and Workforce Development, July 2019
Case Source: COVID Case and Contact Log, March 17, 2020 – May 31, 2020

"Knowledge and Practices Regarding Safe Household Cleaning and Disinfection for COVID-19 Prevention — United States, May 2020" MMWR early release June 5, 2020

[Thank you Mr. President!]

FIGURE 2. Cleaning and disinfection practices in the previous month with the intent of preventing SARS-CoV-2 infection,^{*,†} based on responses to an opt-in Internet panel survey[§] (N = 502 respondents) — United States, May 2020



* In response to the question "In the past month, which of the following cleaning behaviors have you or a household member engaged in to prevent coronavirus?"

† In survey questions, the term "cleaning" referred to using a cleaner or disinfectant on surfaces or objects.

§ Survey administered by Porter Novelli Public Services through PN View: 360; respondents could select multiple responses to the question (nine of 11 possible response options shown). Selection of the response "none of these" was exclusive (i.e., respondents could not select this response option in addition to other responses).

Keep Vaccinating



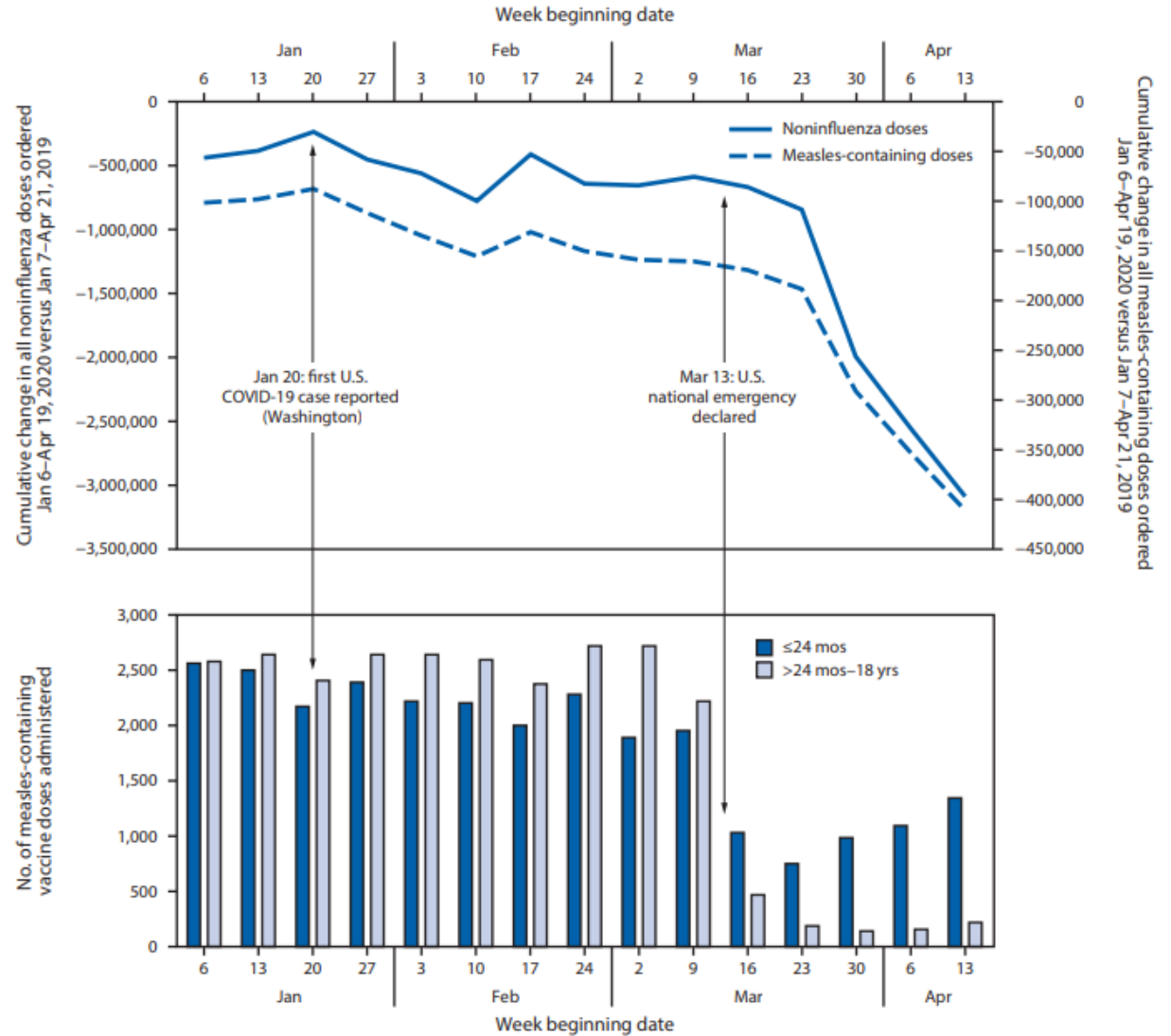
Fewer childhood vaccines have been given during the COVID-19 pandemic*

To avoid outbreaks of vaccine-preventable diseases and keep children protected, **vaccinations and well-child visits are essential**

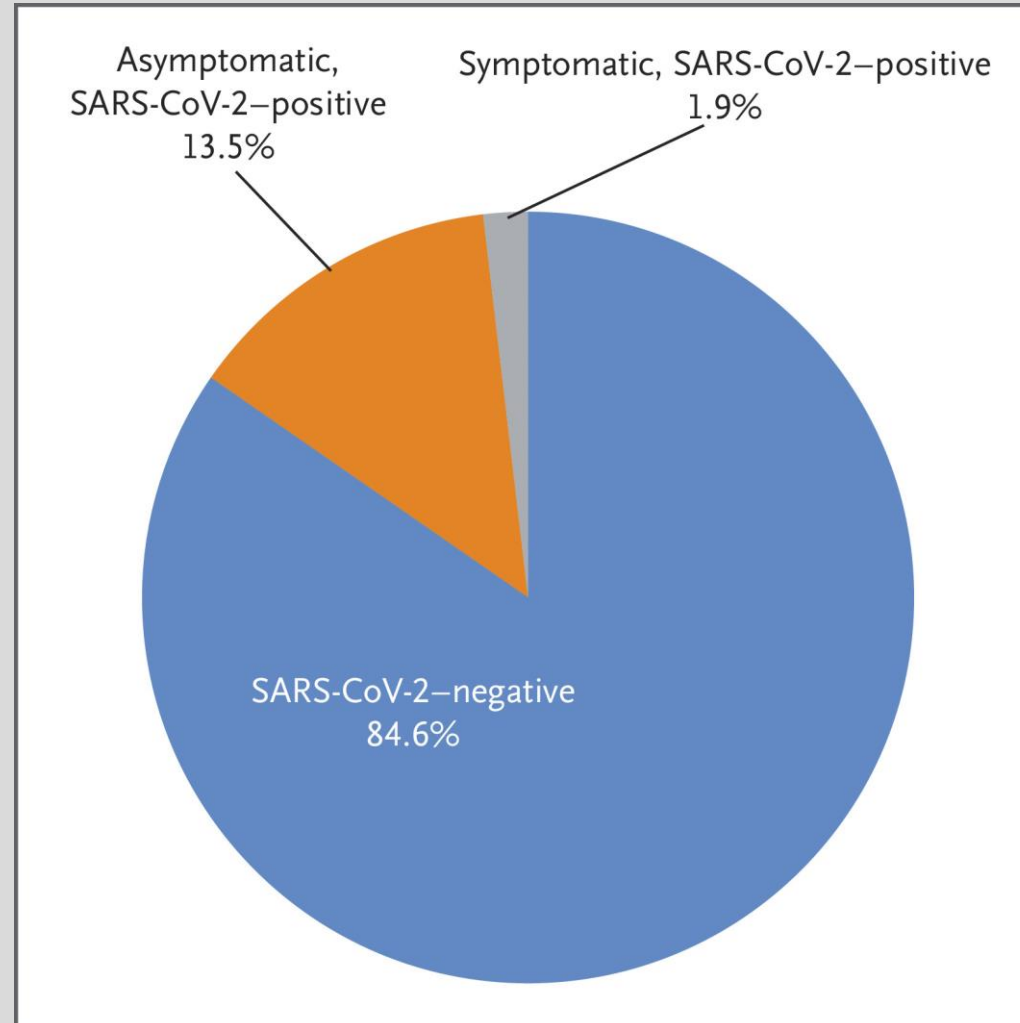
*Compared with January-April, 2019

CDC.GOV bit.ly/MMWR5820 MMWR

FIGURE. Weekly changes in Vaccines for Children Program (VFC) provider orders* and Vaccine Safety Datalink (VSD) doses administered† for routine pediatric vaccines — United States, January 6–April 19, 2020



Symptom Status and SARS-CoV-2 Test Results among 215 Obstetrical Patients Presenting for Delivery, New York–Presbyterian Allen Hospital and Columbia University Irving Medical Center, March 22 to April 4, 2020.



Universal Screening for SARS-CoV-2 in Women Admitted for Delivery, NEJM, 5/28/2020

<https://www.nejm.org/doi/10.1056/NEJMc2009316>

AAP Initial Guidance – Management of Infants Born to Mothers with COVID-19

KEY POINTS

- Current evidence is consistent with low rates of peripartum transmission and is inconclusive about in utero transmission of SARS-CoV-2 from mothers with COVID-19 to their newborns.
- Neonates can acquire SARS-CoV-2 after birth. Their immature immune system leaves newborns vulnerable to other serious respiratory viral infections, raising concern that SARS-CoV-2 may cause severe disease among neonates.
- Airborne, Droplet, and Contact Precautions should be utilized when attending deliveries from women with COVID-19 due to the increased likelihood of maternal virus aerosols and the potential need to administer newborn resuscitation to infants with COVID-19 infection that can generate virus aerosol
- When the physical environment allows, newborns should be separated at birth from mothers with COVID-19. Families who choose to have their infants room in with the mother should be educated on the potential risk to the newborn of developing COVID-19.

AAP Initial Guidance – Management of Infants Born to Mothers with COVID-19

KEY POINTS

- SARS-CoV-2 has not been detected in breast milk to date. Mothers with COVID-19 can express breast milk to be fed to their infants by uninfected caregivers until specific maternal criteria are met.
- Infants born to mothers with COVID-19 should be tested for SARS-CoV-2 at 24 hours and, if still in the birth facility, at 48 hours after birth. Centers with limited resources for testing may make individual risk/benefit decisions regarding testing.
- A newborn who has a documented SARS-CoV-2 infection (or who remains at risk for postnatal acquisition of COVID-19 due to inability to test the infant) requires frequent outpatient follow-up via telephone, telemedicine, or in-person assessments through 14 days after discharge.
- After hospital discharge, a mother with COVID-19 is advised to maintain a distance of at least 6 feet from the newborn, and when in closer proximity use a mask and hand-hygiene for newborn care until (a) she is afebrile for 72 hours without use of antipyretics, and (b) at least 10 days have passed since symptoms first appeared.

AAP Initial Guidance – Management of Infants Born to Mothers with COVID-19

KEY POINTS

- Newborn birth hospital discharge: Well newborns should receive all indicated care, including circumcision if requested. Well newborns should be discharged from the birth hospital based on the center's normal criteria.

American College of Cardiology's Sports & Exercise Cardiology Council, May 13, 2020

Acute cardiac injury, defined as troponin levels more than the 99th percentile, electrocardiographic and/or echocardiographic abnormalities, occur in up to 22% of hospitalized patients with COVID-19

For athletes who remain asymptomatic and are negative for COVID-19, return to exercise training is permissible without additional testing.

Asymptomatic athletes who test positive for COVID-19 antigen (active infection) should refrain from exercise training for at least 2 weeks from the date of positive test result and follow strict isolation guidelines. If athletes remain asymptomatic, slow resumption of activity should be guided under direction from their medical professional.

Myocarditis from myocyte invasion by the virus could result in cardiac dysfunction, arrhythmias, and death. In the acute phase, exercise could result in accelerated viral replication, increased inflammation and cellular necrosis, and a proarrhythmic myocardial substrate.

CDC Case Definition for Multisystem Inflammatory Syndrome in Children (MIS-C)

5/14/2020

- An individual aged <21 years presenting with
- Fever $\geq 38.0^{\circ}\text{C}$ for ≥ 24 hours, or report of subjective fever lasting ≥ 24 hours; AND
- Laboratory evidence of inflammation -- elevated C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), fibrinogen, procalcitonin, d-dimer, ferritin, lactic acid dehydrogenase (LDH), or interleukin 6 (IL-6), elevated neutrophils, reduced lymphocytes and low albumin
- Severe illness requiring hospitalization
- Multisystem (≥ 2) organ involvement 2 or more organ systems
- No alternative plausible diagnoses; AND
- Positive for current or recent SARS-CoV-2 infection by RT-PCR, serology, or antigen test; or COVID-19 exposure within the 4 weeks prior to the onset of symptoms

https://emergency.cdc.gov/han/2020/han00432.asp?deliveryName=USCDC_511-DM28431

Six ways to stay safe



Keep your
distance
in public



Practice
good health
hygiene



Use face
coverings
in public



Stay home
especially
when sick



Monitor
your health
& symptoms



Use credible
sources of
information



Anchorage
Health
Department

www.muni.org/COVID-19

Please be careful.

Thanks for all you are doing.