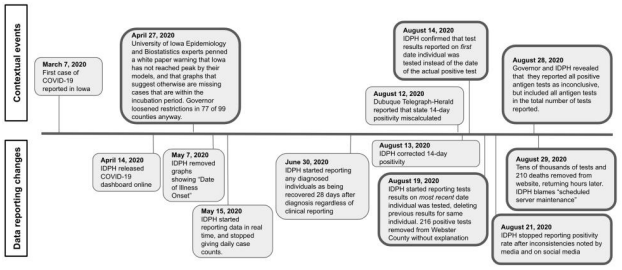
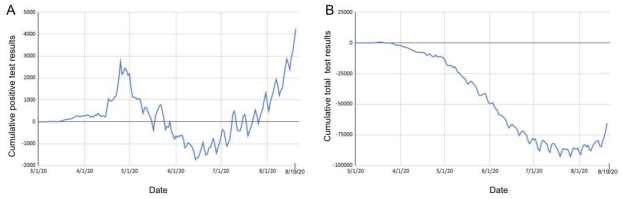
networks). Data include: number and type of tests, results, hospitalizations, intensive care unit admissions, and deaths at state/county levels.

Results. Discrepancies were identified between IDPH and non-IDPH data, with at least two confirmed by IDPH: (1) The backdating of test results identified on May 28, 2020. IDPH labeled results as occurring up to four months before the actual test date. IDPH confirmed that if a person previously tested for SARS-CoV-2, a new test result was attributed to the initial test's date. Corrections on August 19, 2020 increased positivity rates in 31 counties, but decreased the state's overall rate (9.1% to 7.5%). (2) The selective exclusion of antigen test results noted on August 20, 2020. Antigen testing was included in the total number of tests reported in metric denominators, but their results were being excluded from their respective numerators. Thus, positive antigen results were interpreted as de facto negative tests, artificially lowering positivity rates. Corrections increased Iowa's positivity rate (5.0% to 14.2%). In July 2020, the Iowa Department of Education mandated in-person K-12 learning for counties with < 15% positivity. These data changes occurred during critical decision-making, altering return-to-learn plans in seven counties. The Center for Medicare and Medicaid Services' requirements also caused nursing homes to urgently revise testing strategies.



Timeline of changes to Iowa state COVID-19 testing through the end of August 2020.



Change in positive and overall test results due to IDPH data corrections. These graphs represent the difference in cumulative total reported test results when pulled from the IDPH website on September 29, 2020 compared to data for the same dates when pulled on August 19, 2020 before the announced adjustment. The adjustment and subsequent daily changes in reported data amount to a dramatic change in the number of reported positive cases (A) with an increase of nearly 3,000 cases by April 25, as well as the loss of tens of thousands of data points when tracking total resulted tests (B).

Conclusion. Data availability, quality, and transparency vary widely across the US, hindering science-based policymaking. Independent audit and curations of data can contribute to better public health policies. We urge all states to increase the availability and transparency of public health data.

Disclosures. **All Authors**: No reported disclosures

382. Vitamin D Supplementation and Covid 19: Results from the U.S. N3C Data Enclave

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Session: P-16. COVID-19 Epidemiology and Screening

Background. It is estimated that 18% of adults in the U.S. take Vitamin D supplements. Some observational studies suggest that vitamin D supplementation activates the innate immune system and reduces the incidence and severity of viral infections. During the SARS-CoV-2 pandemic, vitamin D supplements were touted as a potential therapy to prevent the disease and/or complications. However, supportive evidence is lacking.

Methods. The National COVID Cohort Collaborative (N3C) enclave is the largest COVID-19 data base with nearly 1.4 million positive patients at 56 sites in the U.S. We performed a retrospective analysis of vitamin D supplementation, either prescribed before or during hospitalization for SARS-CoV-2.

Results. 137,399 people took vitamin D supplements out of 1.4 million. Females prescribed vitamin D outnumbered males by almost 2:1, whereas in non-users there were no sex differences. Most supplement users were older than 50. African Americans constituted 13% of the non-users, but 23% of those prescribed vitamin D. Infected individuals with any vitamin D supplementation, pre-Covid, post-Covid or both, had a 6.66% mortality rate vs 2% mortality in non-users. Similarly, nearly a third of the supplement users were hospitalized compared to 11% in the non-users. The Charlson Co-Morbidity Index was 3.0±3 (SD) in users vs 1.0±2 (SD) in non-users.

Conclusion. 10% of SARS-CoV-2 infected patients were taking vitamin D. They tended to be older, more likely to be African American and have significant co-morbidities. Hospitalization and mortality were higher among those taking Vitamin D in this cohort. Vitamin D is widely used to prevent and treat SARS-CoV-2 but without evidence of efficacy.

Disclosures. **Sally L. Hodder, M.D., Gilead** (Advisor or Review Panel member)**Merck** (Grant/Research Support, Advisor or Review Panel member)**Viiv Healthcare** (Grant/Research Support, Advisor or Review Panel member)

383. Feasibility of Specimen Self-collection in Young Children Undergoing SARS-CoV-2 Surveillance for In-person Learning

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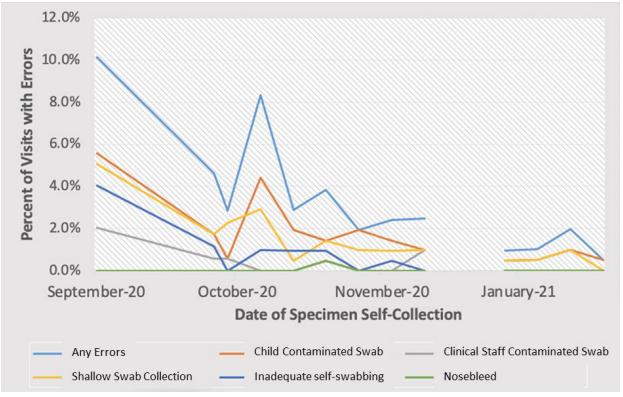
Session: P-16. COVID-19 Epidemiology and Screening

Background. While pediatric cases of COVID-19 are at low risk for adverse events, schoolchildren should be considered for surveillance as they can become infected at school and serve as sources of household or community transmission. Our team assessed the feasibility of young children self-collecting SARS-CoV-2 samples for surveillance testing in an educational setting.

Methods. Students at a K-8 school were tested weekly for SARS-CoV-2 from September 2020 - June 2021. Error rates were collected from September 2020 - January 2021. Clinical staff provided all students with instructions for anterior nares specimen self-collection and then observed them to ensure proper technique. Instructions included holding the sterile swab while making sure not to touch the tip, inserting the swab into their nostril until they start to feel resistance, and rubbing the swab in four circles before repeating the process in their other nostril. An independent observer timed random sample self-collections from April - June 2021.

Results. 2,590 samples were collected from 209 students during the study period when data on error rates were collected. Errors occurred in 3.3% of all student encounters (n=87). Error rates over time are shown in Figure 1, with the highest rate occurring on the first day of testing (n=20/197, 10.2%) and the lowest in January 2021 (n=1/202, 0.5%). 2,574 visits for sample self-collection occurred during the study period when independent timing data was collected (April - June 2021). Of those visits, 7.5% (n=193) were timed. The average duration of each visit was 70 seconds.

Figure 1. Swab Error Rates Over Time



Conclusion. Pediatric self-collected lower nasal swabs are a viable and easily tolerated specimen collection method for SARS-CoV-2 surveillance in school settings, as evidenced by the low error rate and short time window of sample self-collection during testing. School administrators should expect errors to drop quickly after implementing testing.

Disclosures. **All Authors**: No reported disclosures

384. SARS-CoV-2 Surveillance Testing Patterns among Hospitalized Pediatric Patients in a Single Academic Medical Center

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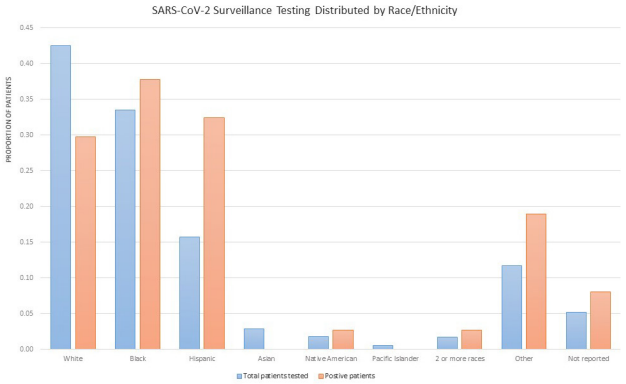
Session: P-16. COVID-19 Epidemiology and Screening

Background. Children infected with SARS-CoV-2 often have mild or no symptoms, making symptom screening an ineffective tool for determining isolation precautions. As an infection control measure, universal pre-procedural and admission SARS-CoV-2 testing for pediatric patients was implemented in April and August 2020, respectively. Limited data exist on the utility screening programs in the pediatric population.

Methods. We performed a retrospective cohort study of pediatric patients (birth to 18 years) admitted to a tertiary care academic medical center from April 2020 to May 2021 that had one or more SARS-CoV-2 point-of-care or polymerase chain reaction tests performed. We describe demographic data, positivity rates and repeat testing trends observed in our cohort.

Results. A total of 2,579 SARS-CoV-2 tests were performed among 1,027 pediatric inpatients. Of these, 51 tests (2%) from 45 patients (4.3%) resulted positive. Community infection rates ranged from 4.5-60 cases/100,000 persons/day during the study period. Hispanic patients comprised 16% of the total children tested, but were disproportionately overrepresented (40%) among those testing positive (Figure1). Of 654 children with repeated tests, 7 (0.1%) converted to positive from a prior negative result. Median days between repeat tests was 12 (IQR 6-45), not necessarily performed during the same hospital stay. Five of these 7 patients had tests repeated < 3 days from a negative result, of which only 2 had no history of recent infection by testing performed at an outside facility. Pre-procedural tests accounted for 35% of repeat testing, of which 0.9% were positive. Repeated tests were most frequently ordered for patients in hematology/oncology (35%) and solid organ transplant/surgical (33%) wards, each with < 3% positive conversion rate. Notably, no hematopoietic stem cell transplant patients tested positive for SARS-CoV-2 during the study period.

Pediatric SARS-CoV-2 Testing Distributed by Race/Ethnicity



Conclusion. The positivity rate of universal pre-procedural and admission SARS-CoV-2 testing in pediatric patients was low in our inpatient cohort. Tests repeated < 3 days from a negative result were especially low yield, suggesting limited utility of this practice. Diagnostic testing stewardship in certain populations may be useful, especially as community infection rates decline.

Disclosures. **Michael J. Smith, MD, M.S.C.E, Merck** (Grant/Research Support)**Pfizer** (Grant/Research Support) **Rebekah W. Moehring, MD, MPH, UpToDate, Inc.** (Other Financial or Material Support, Author Royalties)

385. SARS-CoV-2 Infections Among Military Personnel Deployed on the USNS COMFORT to New York City During the COVID-19 Pandemic and One-Year Follow-Up

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Session: P-16. COVID-19 Epidemiology and Screening

Background. The USNS COMFORT deployed to New York City to augment the inpatient health care capacity in March 2020. The aim of this study was to determine the prevalence of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) infection among US Navy personnel upon return from deployment, and to identify incident cases of SARS-CoV-2 infection during 1 year of follow-up.

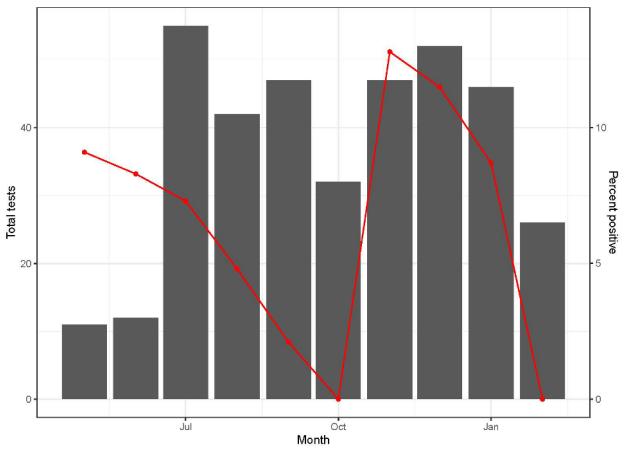
Methods. Crewmembers, the majority of whom were health care workers (HCW), were enrolled following deployment, in May 2020. PCR results from symptomatic crewmembers during deployment, and Day 0 and Day 14 post-deployment screening swabs conducted on all crewmembers, per military order, were abstracted. A questionnaire and serum were collected on Day 14 post-deployment. SARS-CoV-2 infection was defined as a positive SARS-CoV-2 spike glycoprotein immunoglobulin G antibody (IgG) or PCR. COVID-19 related medical encounters, PCR and antibody testing results within 1 year following deployment were abstracted from the Military Health System Data Repository (MDR). There was adequate provision of personal protective equipment (PPE) in the hospital and the COVID-19 vaccine roll-out for HCW began in December 2020.

Results. Of the 1200 crewmembers, 449 were enrolled and completed the questionnaire and screening swabs, and 432 (96.2%) completed the Day 14 blood draw (Table 1). The cumulative prevalence of SARS-CoV-2 infection was 3.01% (13/432; 95% CI, 1.61%–5.09%). One of 17 subjects did not complete the blood draw and was PCR positive on Day 14. 433/449 (96.4%) had a PCR performed during the follow-up period (i.e. after the Day 14 post-deployment visit until Feb 2021), for HCW screening or symptomatic illness (median number of tests: 2 [IQR: 1, 2; range: 1,6]). 25 of 433 (5.8%) were PCR positive (Fig 1). 19 (76.0%) occurred in corpsmen, 23 (92.0%) were symptomatic and none were hospitalized. One asymptomatic re-infection occurred in a crewmember who was PCR negative and IgG positive at Day 14 post-deployment.

Table 1. Characteristics of the overall cohort and by SARS-CoV-2 infection

	Overall (n=449)	SARS-CoV-2 positive during or post-deployment[a] (N=14)	SARS-CoV-2 PCR positive during at 1-year follow-up (n=25)
Age			
18-29 years	219 (50.9%)	8 (57.1%)	17 (68.0%)
30-39 years	122 (28.2%)	3 (21.4%)	3 (12.0%)
40+ years	108 (25.0%)	3 (21.4%)	5 (20.0%)
Female Gender	222 (51.4%)	9 (64.3%)	11 (44.0%)
Race			
White	258 (59.7%)	7 (50.0%)	14 (56.0%)
Black	61(14.1%)	2 (14.3%)	4 (16.0%)
Hispanic	42 (9.7%)	1 (7.1%)	4 (16.0%)
Other	88 (20.4%)	4 (28.6%)	3 (12.0%)
Clinical role			
Non-clinical		1 (7.1%)	1 (4.0%)
Corpsman	197 (45.6%)	5 (35.7%)	19 (76.0%)
Nurse	118 (27.3%)	7 (50.0%)	3 (12.0%)
Physician/medical assistant	41 (9.5%)	1 (7.1%)	2 (8.0%)
Lab Diagnosis			
PCR positive[b]	34 (7.6%)	9[b] (64.3%)	25[b]
Serology positive[c]	N/A	12[c] (85.7%)	0[c]
Symptomatic infection	31	8 (57%)	23 (92.0%)

Figure 1. Number of PCR tests (bar graph) and positivity rate (red line) by month in 449 USNS COMFORT crewmembers during 1-year follow-up after return from deployment



Conclusion. The post-deployment prevalence of SARS-CoV-2 infection was low. A high proportion of HCW underwent PCR testing during 1-year follow-up but a low incidence of infection was observed. This was likely from community transmission as nosocomial transmission was mitigated by adequate PPE and vaccine roll-out.

Disclosures. **All Authors**: No reported disclosures

386. A Systematic Review of COVID-19 Transmission Dynamics and Clinical Response on Cruise Ships Globally Between January and October 2020

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