MORE Initiative

Maternal Opioid Recovery Effort

Opioid Webinar Series

Welcome!

PLEASE ENTER YOUR AUDIO PIN ON YOUR PHONE SO WE ARE ABLE TO UN-MUTE YOU FOR DISCUSSION.

IF YOU HAVE A QUESTION, PLEASE ENTER IT IN THE QUESTION BOX OR RAISE YOUR HAND TO BE UN-MUTED.

Welcome!

THIS WEBINAR IS BEING RECORDED.

PLEASE PROVIDE FEEDBACK ON OUR POST-WEBINAR SURVEY.

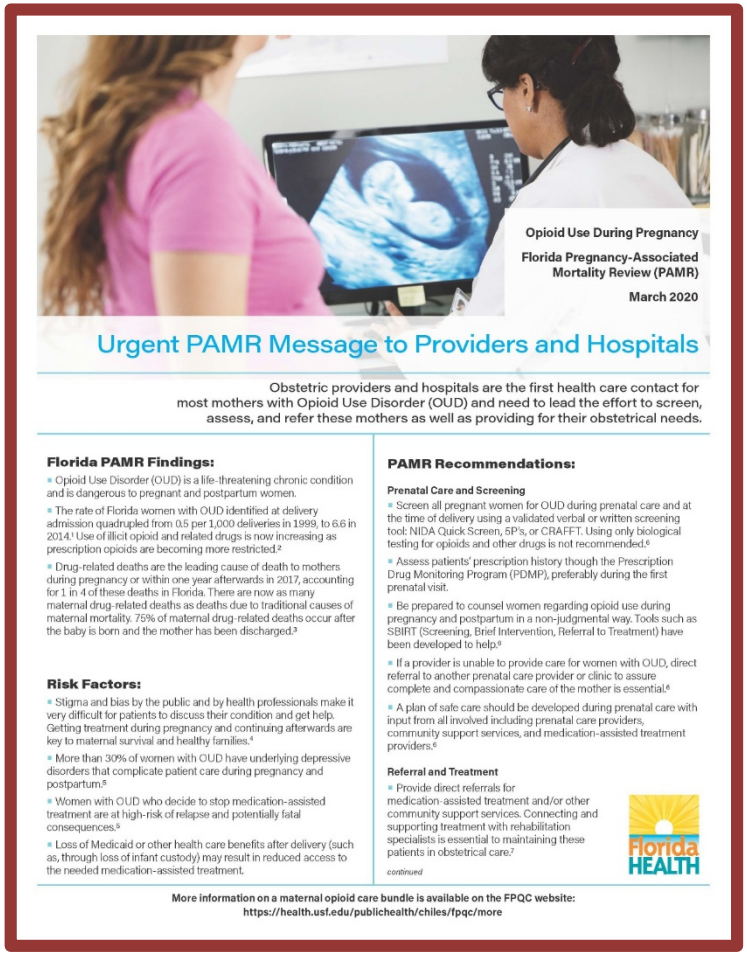
FPQC & MORE Initiative Update
"Maternal Opioid Recovery Effort"

William M. Sappenfield, MD, MPH, CPH
Professor and Director
Florida Perinatal Quality Collaborative
USF College of Public Health

Chiles Center
Women, Children & Families

Help Spread the Word!

"Obstetric providers and hospitals are the first health care contact for most mothers with Opioid Use Disorder (OUD) and need to lead the effort to screen, assess, and refer these mothers as well as provide for their obstetrical needs."



Opioid Use During Pregnancy

Florida Pregnancy-Associated Mortality Review (PAMR)

March 2020

Urgent PAMR Message to Providers and Hospitals

Obstetric providers and hospitals are the first health care contact for most mothers with Opioid Use Disorder (OUD) and need to lead the effort to screen, assess, and refer these mothers as well as providing for their obstetrical needs.

Florida PAMR Findings:

- Opioid Use Disorder (OUD) is a life-threatening chronic condition and is dangerous to pregnant and postpartum women.
- The rate of Florida women with OUD identified at delivery admission quadrupled from 0.5 per 1,000 deliveries in 1999, to 6.6 in 2014.[1] Use of illicit opioid and related drugs is now increasing as prescription opioids are becoming more restricted.[2]
- Drug-related deaths are the leading cause of death to mothers during pregnancy or within one year afterwards in 2017, accounting for 1 in 4 of these deaths in Florida. There are now as many maternal drug-related deaths as deaths due to traditional causes of maternal mortality. 75% of maternal drug-related deaths occur after the baby is born and the mother has been discharged.[3]

Risk Factors:

- Stigma and bias by the public and by health professionals make it very difficult for patients to discuss their condition and get help. Getting treatment during pregnancy and continuing afterwards are key to maternal survival and healthy families.[4]
- More than 30% of women with OUD have underlying depressive disorders that complicate patient care during pregnancy and postpartum.[5]
- Women with OUD who decide to stop medication-assisted treatment are at high-risk of relapse and potentially fatal consequences.[5]
- Loss of Medicaid or other health care benefits after delivery (such as, through loss of infant custody) may result in reduced access to the needed medication-assisted treatment.

PAMR Recommendations:

Prenatal Care and Screening

- Screen all pregnant women for OUD during prenatal care and at the time of delivery using a validated verbal or written screening tool: NIDA Quick Screen, 5P's, or CRAFFT. Using only biological testing for opioids and other drugs is not recommended.[6]
- Assess patients' prescription history though the Prescription Drug Monitoring Program (PDMP), preferably during the first prenatal visit.
- Be prepared to counsel women regarding opioid use during pregnancy and postpartum in a non-judgmental way. Tools such as SBIRT (Screening, Brief Intervention, Referral to Treatment) have been developed to help.[6]
- If a provider is unable to provide care for women with OUD, direct referral to another prenatal care provider or clinic to assure complete and compassionate care of the mother is essential.[6]
- A plan of safe care should be developed during prenatal care with input from all involved including prenatal care providers, community support services, and medication-assisted treatment providers.[6]

Referral and Treatment

- Provide direct referrals for medication-assisted treatment and/or other community support services. Connecting and supporting treatment with rehabilitation specialists is essential to maintaining these patients in obstetrical care.[7]

continued

Florida HEALTH

More information on a maternal opioid care bundle is available on the FPQC website:
https://health.usf.edu/publichealth/chiles/fpqc/more

MORE Update

Urgent Maternal Mortality Message

- Drug-related deaths are the leading cause of death to mothers during pregnancy & within one year of birth.
- Drug-related deaths account for 1 in 4 of these deaths
- Most deaths (75%) occur after the baby is born and mother has been discharged.

Related Issues

- Stigma and bias by professionals make it difficult for patients to discuss their condition and get help.
- More than 30% of women with OUD have underlying depressive issues that complicate care.
- Women with OUD who stop medication-assisted therapy without other support services are at high risk of relapse.

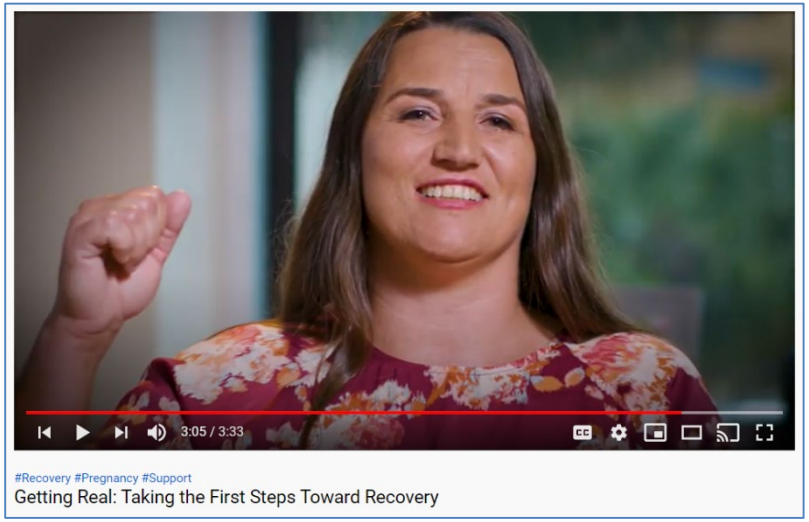
Recommendations

- Screen *all* pregnant women for substance use.
- Assess patient's prescription history through PDMP.
- If unable to provide care, provide direct referral to another OB provider for compassionate and comprehensive care.
- A plan of safe care should be developed with others.
- Provide direct referral to medication-assisted treatment.
- Women with OUD should receive a prescription and education on Naloxone.
- Coordinate care and care plan with Pediatric team.

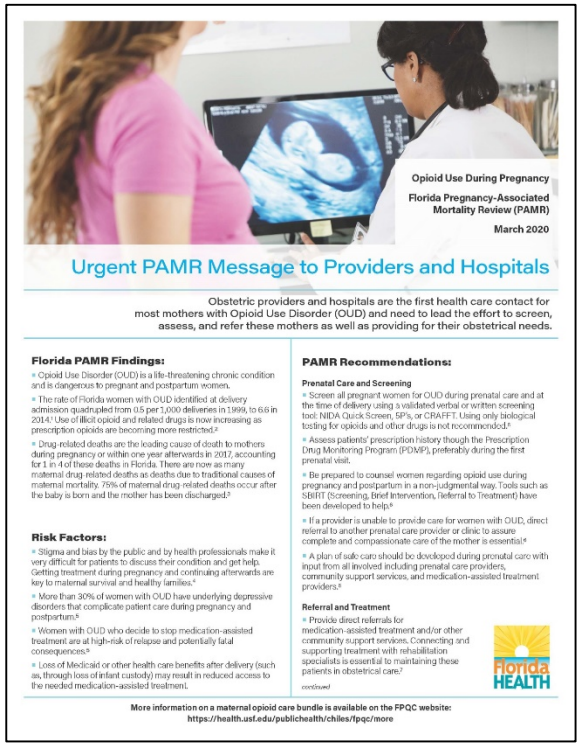
FLORIDA PERINATAL QUALITY COLLABORATIVE
MATERNAL OPIOID RECOVERY EFFORT
FOUR-PART VIDEO SERIES

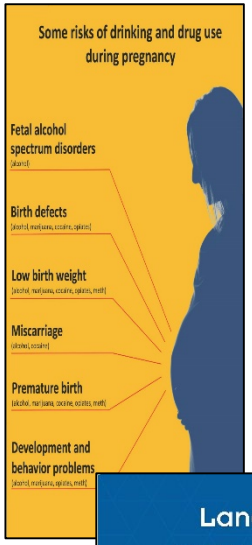
New at http://fpqc.org/morevideos!!

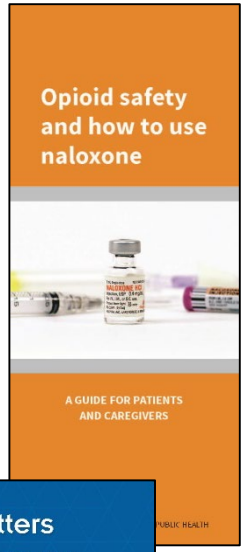
- Screening, Brief Intervention, and Referral to Treatment (SBIRT): A Universal Tool for Pregnant Women
- Linking Mothers & Babies to Services: Plans of Safe Care (POSC)
- Getting Real: Taking the First Steps Toward Recovery
- From Judgment to Healing: The Impact of Stigma

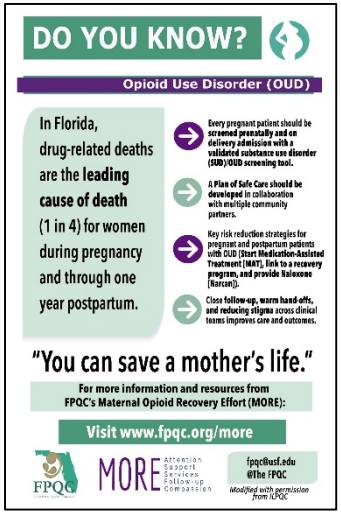


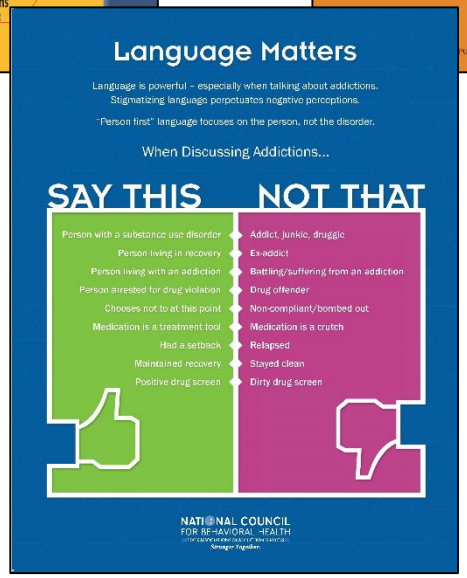
Available Education Materials

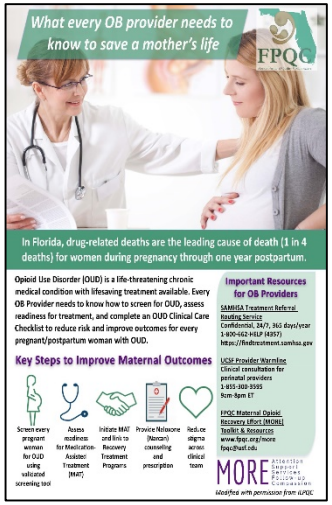




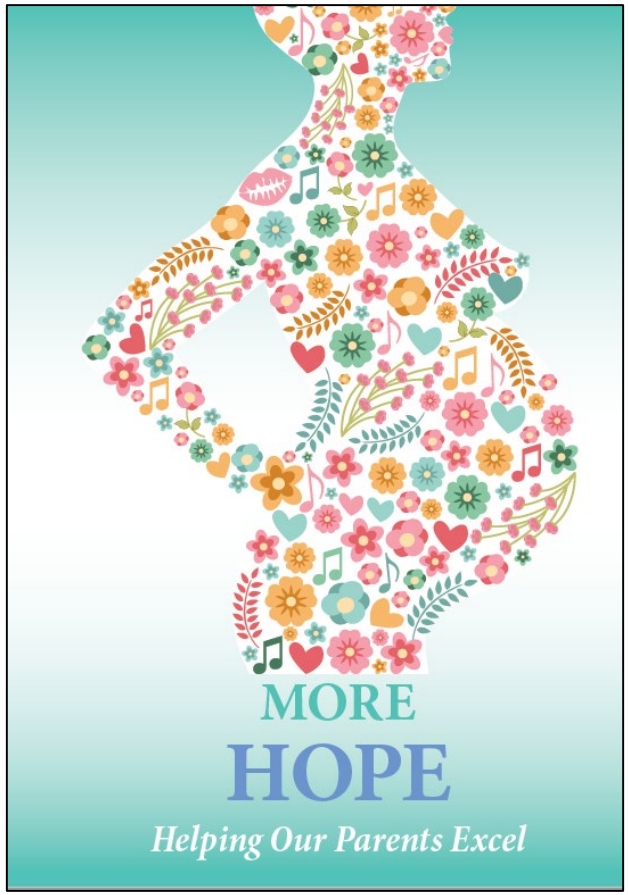








A Book of Hope for Moms with OUD



Now available at FPQC.org/opioids

Co-Sponsors


Florida
HEALTH


Florida Association of
Healthy Start
COALITIONS, INC.
Every baby deserves a healthy start

Engaging Women with OUD in the COVID-19 Crisis: Tools and Principles

Mishka Terplan, MD, MPH
Senior Researcher, Friends Research Institute
Consultant, National Center on Substance Abuse and Child Welfare (NCSACW)

Engaging Women With Opioid Use Disorder in the COVID-19 Crisis: Tools and Principles

Mishka Terplan MD MPH FACOG DFASAM
Associate Medical Director, Friends Research Institute
Adjunct Faculty, UCSF, National Clinical Consultation Center
Addiction Medicine Specialist, Virginia Medicaid
@Do_Less_Harm

FPQC June 2020

Brief History of SARS-CoV-2/COVID-19

- Novel corona virus identified December 2019 as cause of pneumonia cluster in Wuhan – led to rapid outbreak in China
- Designated severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) – February 2020 WHO designated the disease COVID-19 (coronavirus disease 2019)
- WHO Pandemic early March

- Mode of transmission: respiratory droplets (direct or indirect – from infected surfaces)
- Household attack rates 10%, healthcare and community <1%
- Reproduction number Ro=2-3
- Incubation Period - 14 days
- Symptoms – Cough, Fever, SOB, Chills, Muscle Pain, Sore Throat, New Loss of Taste or Smell
- Illness Spectrum
  - 81% Mild (mild or no pneumonia)
  - 14% Severe (dyspnea, hypoxia, or >50% lung involvement)
  - 5% Critical (respiratory failure, shock)
  - Death Rate – 3.4% globally (range 0.6 South Korea -12% Wuhan time delay analysis)
- Risk Factors: Age and underlying medical comorbidities (pulmonary)
  - However 20% of hospitalizations are adults 20-44

Key Summary Points

The likelihood that approximately 40% to 45% of those infected with SARS-CoV-2 will remain asymptomatic suggests that the virus might have greater potential than previously estimated to spread silently and deeply through human populations.

Asymptomatic persons can transmit SARS-CoV-2 to others for an extended period, perhaps longer than 14 days.

The absence of COVID-19 symptoms in persons infected with SARS-CoV-2 might not necessarily imply an absence of harm. More research is needed to determine the significance of subclinical lung changes visible on computed tomography scans.

The focus of testing programs for SARS-CoV-2 should be substantially broadened to include persons who do not have symptoms of COVID-19.

Annals of Internal Medicine REVIEW

Prevalence of Asymptomatic SARS-CoV-2 Infection

A Narrative Review

Daniel P. Oran, AM, and Eric J. Topol, MD

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has spread rapidly throughout the world since the first cases of coronavirus disease 2019 (COVID-19) were observed in December 2019 in Wuhan, China. It has been suspected that infected persons who remain asymptomatic play a significant role in the ongoing pandemic, but their relative number and effect have been uncertain. The authors sought to review and synthesize the available evidence on asymptomatic SARS-CoV-2 infection. Asymptomatic persons seem to account for approximately 40% to 45% of SARS-CoV-2 infections, and they can transmit the virus to others for an extended period, perhaps longer than 14 days. Asymptomatic infection may be associated with subclinical lung abnormalities, as detected by computed tomography. Because of the high risk for silent spread by asymptomatic persons, it is imperative that testing programs include those without symptoms. To supplement conventional diagnostic testing, which is constrained by capacity, cost, and its one-off nature, innovative tactics for public health surveillance, such as crowdsourcing digital wearable data and monitoring sewage sludge, might be helpful.

Ann Intern Med. doi:10.7326/M20-3012 **Annals.org**
For author, article, and disclosure information, see end of text.
This article was published at Annals.org on 3 June 2020.

Table. Summary of SARS-CoV-2 Testing Studies

Cohort	Tested, *n*	SARS-CoV-2 Positive, *n* (%)	Positive but Asymptomatic, *n* (%)
Iceland residents (6)	13 080	100 (0.8)	43 (43.0)
Vo', Italy, residents (7)	5155	102 (2.0)	43 (42.2)
Diamond Princess cruise ship passengers and crew (8)	3711	712 (19.2)	331 (46.5)
Boston homeless shelter occupants (9)	408	147 (36.0)	129 (87.8)
New York City obstetric patients (11)	214	33 (15.4)	29 (87.9)
U.S.S. *Theodore Roosevelt* aircraft carrier crew (12)	4954	856 (17.3)	~500 (58.4)
Japanese citizens evacuated from Wuhan, China (2)	565	13 (2.3)	4 (30.8)
Greek citizens evacuated from the United Kingdom, Spain, and Turkey (14)†	783	40 (5.1)	35 (87.5)
Charles de Gaulle aircraft carrier crew (13)	1760	1046 (59.4)	~500 (47.8)
Los Angeles homeless shelter occupants (10)	178	43 (24.2)	27 (62.8)
King County, Washington, nursing facility residents (15)	76	48 (63.2)	3 (6.3)
Arkansas, North Carolina, Ohio, and Virginia inmates (16)	4693	3277 (69.8)	3146 (96.0)
New Jersey university and hospital employees (17)	829	41 (4.9)	27 (65.9)
Indiana residents (18)	4611	78 (1.7)	35 (44.8)
Argentine cruise ship passengers and crew (19)	217	128 (59.0)	104 (81.3)
San Francisco residents (29)	4160	74 (1.8)	39 (52.7)

What makes this virus so dangerous

- Novel – Information still evolving
- Virus is stable in aerosols for hours
- Highly transmissible – average infection > 2 people
- Resource intensive (for serious illness 2-3 week ICU admission)
- Limited prevention and no treatment (supportive care only)

- Therefore: Social Distancing, Face Masks, and Hand washing

Letters

RESEARCH LETTER

Association of Stay-at-Home Orders With COVID-19 Hospitalizations in 4 States

In analyses of the effectiveness of response measures to the outbreak of coronavirus disease 2019 (COVID-19), most studies have used the number of confirmed cases or deaths. However, case count is a conservative estimate of the actual number of infected individuals in the absence of community-wide serologic testing. Death count is a lagging metric and insufficient for proactive hospital capacity planning. A more valuable metric for assessing the effects of public health interventions on the health care infrastructure is hospitalizations.[1] As of April 18, 2020, governors in 42 states had issued statewide executive "stay-at-home" orders to help mitigate the risk that COVID-19 hospitalizations would overwhelm their state's health care infrastructure. This study assessed the association between these orders and hospitalization trends.

Methods | In March 2020, we began collecting data on cumulative confirmed COVID-19 hospitalizations from each state's department of health website on a daily basis.[2] Among states issuing a statewide stay-at-home order, we identified states with at least 7 consecutive days of cumulative hospitalization data for COVID-19 (including patients currently hospitalized and those discharged) before the stay-at-home order date and at least 17 days following the order date. Because the median incubation period of COVID-19 was reported to be 4 to 5.1 days[3,4] and the median time from first symptom to hospitalization was found to be 7 days,[5] we hypothesized that any association between stay-at-home orders and hospitalization rates would become evident after 12 days (median effective date). States included in this sample were Colorado, Minnesota, Ohio, and Virginia. Among the 4 states meeting the inclusion criteria, the earliest date with data on hospitalizations was March 10. All states were observed through April 28. We fit the best exponential growth function to cumulative hospitalization data in each state for dates up to and including the median effective date of that state's stay-at-home order. We computed 95% prediction bands on the exponential fit line to determine if the observed number of hospitalizations fell within the interval. We then examined whether the observed cumulative hospitalizations for dates after the median effective date deviated from the projected exponential growth in cumulative hospitalizations. In an additional analysis, a linear growth function was fit to cumulative hospitalization data for dates up to and including the median effective date, and goodness of fit was assessed with an R^2 comparison. All analyses were performed using Microsoft Excel version 14.1.

Results | In all 4 states, cumulative hospitalizations up to and including the median effective date of a stay-at-home order closely fit and favored an exponential function over a linear fit (R^2 = 0.973 vs 0.695 in Colorado; 0.965 vs 0.865 in Minnesota; 0.98 vs 0.803 in Ohio; 0.994 vs 0.775 in Virginia) (**Table**). However, after the median effective date, observed hospitalization growth rates deviated from projected exponential growth rates with slower growth in all 4 states. Observed hospitalizations consistently fell outside of the 95% prediction bands of the projected exponential growth curve (**Figure**).

For example, Minnesota's residents were mandated to stay at home starting March 28. On April 13, 5 days after the median effective date, the cumulative projected hospitalizations were 988 and the actual hospitalizations were 361. In Virginia, projected hospitalizations 5 days after the median effective date were 2335 and actual hospitalizations were 1048.

Discussion | In 4 states with stay-at-home orders, cumulative hospitalizations for COVID-19 deviated from projected best-fit exponential growth rates after these orders became effective. The deviation started 2 to 4 days sooner than the median effective date of each state's order and may reflect the use of a median incubation period for symptom onset and time to hospitalization to establish this date. Other factors that potentially decreased the rate of virus spread and subsequent hospitalizations include school closures, social distancing guidelines, and general pandemic awareness. In addition, economic insecurity and loss of health insurance during the pandemic may have also decreased hospital utilization. Limitations of the study include that these other factors could not be modeled in the analysis and that data on only 4 states were available.

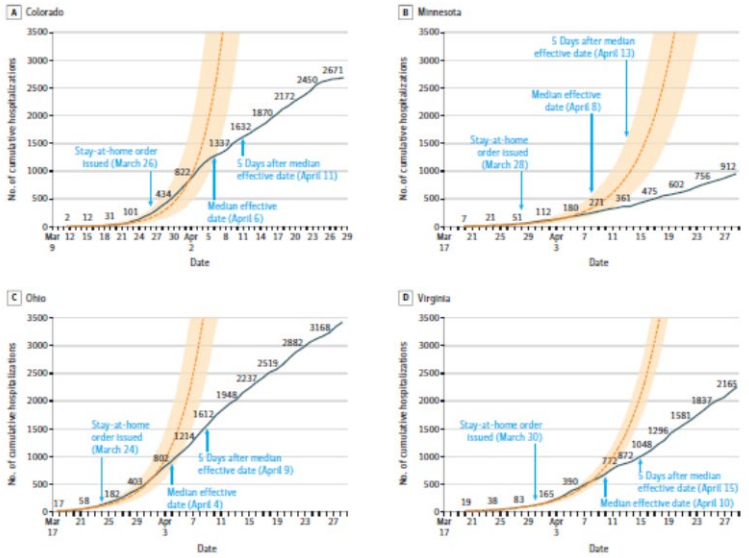
Table. Cumulative Hospitalizations Due to COVID-19 in Colorado, Minnesota, Ohio, and Virginia, March 10 Through April 28, 2020

State	Fitting period[a]	Stay-at-home issue date	Median effective date	Cumulative hospitalizations		Best exponential fit: ln(y) = ln(a) + bt			Linear fit: y = ct	
				On first day of reporting	On April 28	ln(a) (95% CI)	b (95% CI)	R^2	c (95% CI)	R^2
Colorado	March 10-April 6	March 26	April 6	2	2671	1.28 (1.02-1.54)	0.24 (0.22-0.25)	0.973	30.89 (25.28-36.5)	0.695
Minnesota	March 19-April 8	March 28	April 8	7	912	2.02 (1.8-2.24)	0.19 (0.17-0.21)	0.965	9.993 (8.86-11.12)	0.865
Ohio	March 17-April 4	March 24	April 4	17	3340	2.94 (2.75-3.13)	0.23 (0.21-0.24)	0.98	38.23 (32.78-43.67)	0.803
Virginia	March 19-April 10	March 30	April 10	19	2165	2.77 (2.69-2.85)	0.178 (0.172-0.184)	0.994	23.31 (19.74-26.9)	0.775

Abbreviation: COVID-19, coronavirus disease 2019.

[a] Fitting period consists of observed data from the first day of reporting up to and including the median effective date of the state's stay-at-home order.

Figure. Projected vs Observed COVID-19 Hospitalizations Before and After Stay-at-Home Orders, March 10 Through April 28, 2020



Blue lines indicate observed cumulative hospitalizations (including those currently hospitalized and those discharged) up to each day; select values are displayed for clarity. Dashed red lines begin on the first day of available reporting by each state and are the best-fit exponential curves for cumulative hospitalizations for the fitting period: first day of reporting up to and including the median effective date (panel A: $y = 3.5829\exp(0.2359t)$, $R^2 = 0.9734$; B: $y = 7.521\exp(0.1876t)$, $R^2 = 0.9644$; C: $y = 18.8482\exp(0.2268t)$, $R^2 = 0.9798$; D: $y = 15.932\exp(0.1397t)$, $R^2 = 0.9944$). Shaded regions indicate the 95% prediction bands of the exponential growth curves. Because the median incubation period of coronavirus disease 2019 (COVID-19) was reported to be 4 to 5.1 days[3,4] and the median time from first symptom to hospitalization was found to be 7 days,[5] it was hypothesized that any association between stay-at-home orders and hospitalization rates would become evident after 12 days (median effective date).

Soumya Sen, PhD
Pinar Karaca-Mandic, PhD
Archelle Georgiou, MD

Author Affiliations: Department of Information and Decision Sciences, University of Minnesota Carlson School of Management, Minneapolis (Sen); Department of Finance, University of Minnesota Carlson School of Management, Minneapolis (Karaca-Mandic); Starkey Hearing Technologies, Eden Prairie, Minnesota (Georgiou).

Corresponding Author: Pinar Karaca-Mandic, PhD, University of Minnesota Carlson School of Management, 321 19th Ave S, Minneapolis, MN 55455 (pkmandic@umn.edu).

Accepted for Publication: May 13, 2020.

Published Online: May 27, 2020. doi:10.1001/jama.2020.9176

Author Contributions: Drs Sen and Karaca-Mandic had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.
Concept and design: All authors.
Acquisition, analysis, or interpretation of data: All authors.
Drafting of the manuscript: All authors.
Critical revision of the manuscript for important intellectual content: All authors.
Statistical analysis: All authors.
Obtained funding: Sen, Karaca-Mandic.
Administrative, technical, or material support: Georgiou.

Conflict of Interest Disclosures: Dr Karaca-Mandic reported receiving personal fees from Tactile Medical, Precision Health Economics, and Sempre Health and grants from the Agency for Healthcare Research and Quality, the American Cancer Society, the National Institute for Health Care Management, the National Institute on Drug Abuse, and the National Institutes of Health. Dr Georgiou

Identifying airborne transmission as the dominant route for the spread of COVID-19

Renyi Zhang[a,b,1], Yixin Li[b], Annie L. Zhang[c], Yuan Wang[d], and Mario J. Molina[a,1]

[a]Department of Atmospheric Sciences, Texas A&M University, College Station, TX 77843; [b]Department of Chemistry, Texas A&M University, College Station, TX 77843; [c]Department of Chemistry, College of Natural Sciences, The University of Texas at Austin, Austin, TX 78712; [d]Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA 91125; and [e]Department of Chemistry and Biochemistry, University of California San Diego, La Jolla, CA 92093

Contributed by Mario J. Molina, May 16, 2020 (sent for review May 14, 2020; reviewed by Manish Shrivastava and Tong Zhu)

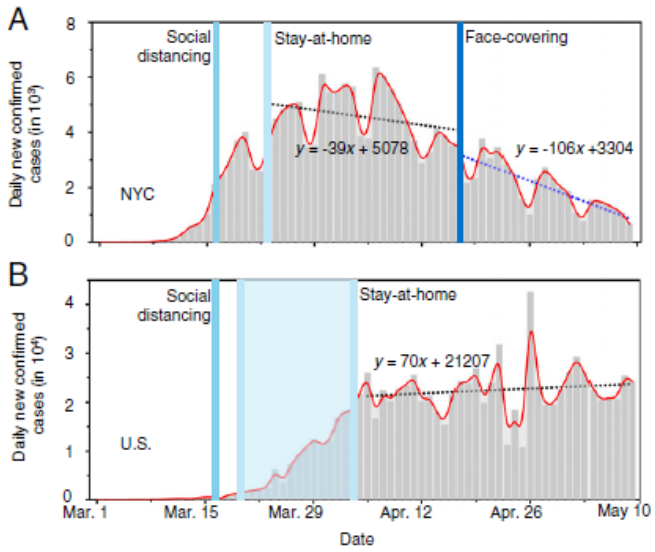


Fig. 3. Contrasting the trends of new infections between NYC and the United States. Daily new confirmed infections in (*A*) NYC and (*B*) the United States. The dotted lines represent linear fitting to the data between April 17 and May 9 in NYC and between April 4 and May 9 in the United States. In *B*, the number in NYC was subtracted from that in the United States. The vertical lines label the dates for social distancing, stay-at-home orders, and mandated face-covering.

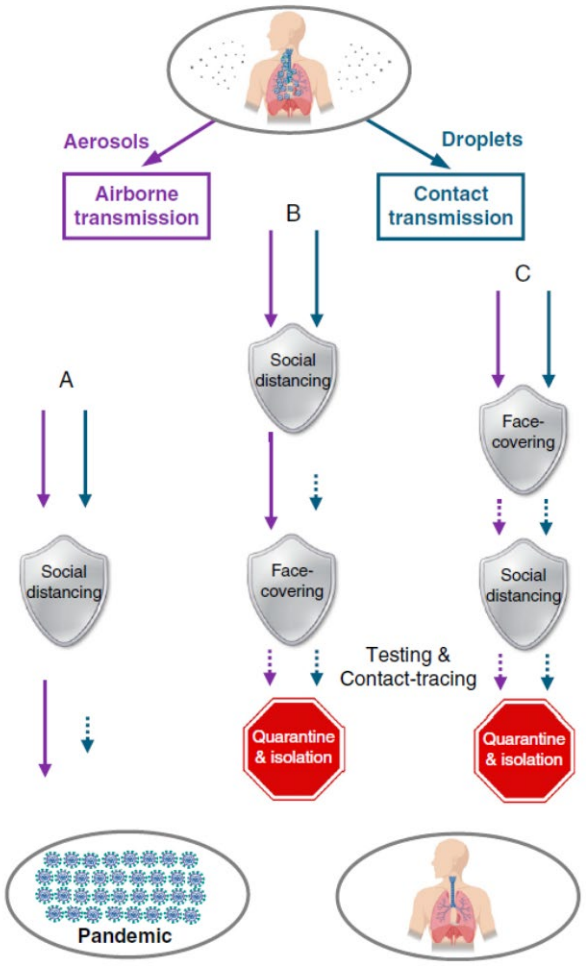


Fig. 5. Mitigation paradigm. Scenarios of virus transmission under the distancing/quarantine/isolation measure only (path a), the measures with distancing/quarantine/isolation followed by face covering (path b), and the measures with simultaneous face covering and distancing/quarantine/isolation (path c). The short-dashed arrows label possible remnants of virus transmission due to circumstances when the measure is not possible or disobeyed and/or imperfection of the measure.

COVID-19

By Wei Lyu and George L. Wehby

Community Use Of Face Masks And COVID-19: Evidence From A Natural Experiment Of State Mandates In The US

DOI: 10.1377/hlthaff.2020.00818
HEALTH AFFAIRS 39,
NO. 8 (2020): 1–7

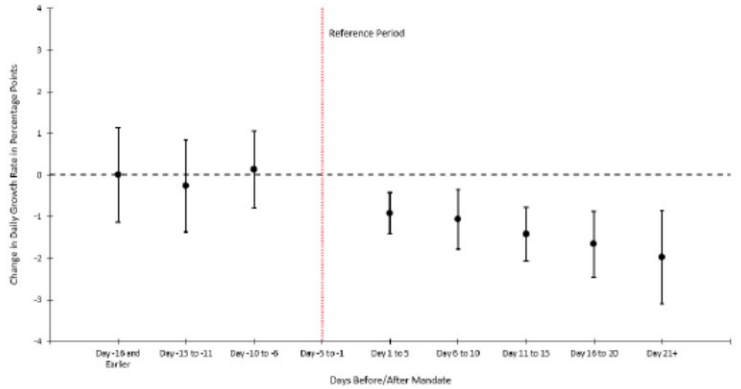
ABSTRACT State policies mandating public or community use of face masks or covers in mitigating novel coronavirus disease (COVID-19) spread are hotly contested. This study provides evidence from a natural experiment on effects of state government mandates in the US for face mask use in public issued by 15 states plus DC between April 8 and May 15. The research design is an event study examining changes in the daily county-level COVID-19 growth rates between March 31, 2020 and May 22, 2020. Mandating face mask use in public is associated with a decline in the daily COVID-19 growth rate by 0.9, 1.1, 1.4, 1.7, and 2.0 percentage-points in 1–5, 6–10, 11–15, 16–20, and 21+ days after signing, respectively. Estimates suggest as many as 230,000–450,000 COVID-19 cases possibly averted By May 22, 2020 by these mandates. The findings suggest that requiring face mask use in public might help in mitigating COVID-19 spread. [*Editor's Note: This Fast Track Ahead Of Print article is the accepted version of the peer-reviewed manuscript. The final edited version will appear in an upcoming issue of* Health Affairs.]

Wei Lyu is a research associate in the Department of Health Management and Policy, College of Public Health, University of Iowa, in Iowa City, Iowa.

George L. Wehby (george-wehby@uiowa.edu) is a professor in the Department of Health Management and Policy, College of Public Health, University of Iowa, and a research associate at the National Bureau of Economic Research.

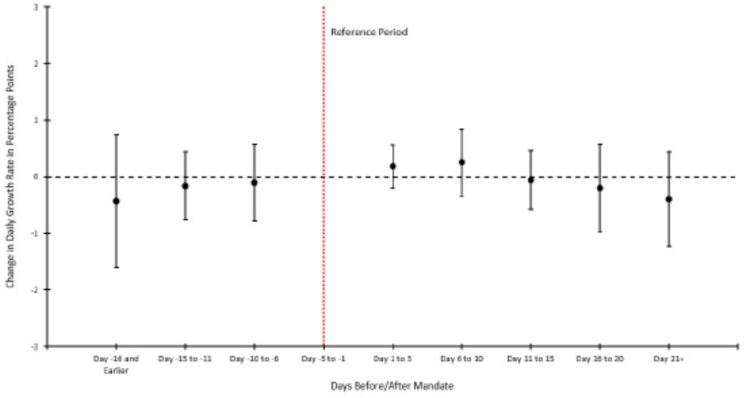
SUPPLEMENTAL EXHIBIT 1

Event Study Estimates of Effects of States Mandating Face Mask Use in Public on Daily County-Level Growth Rate of COVID-19 Cases.

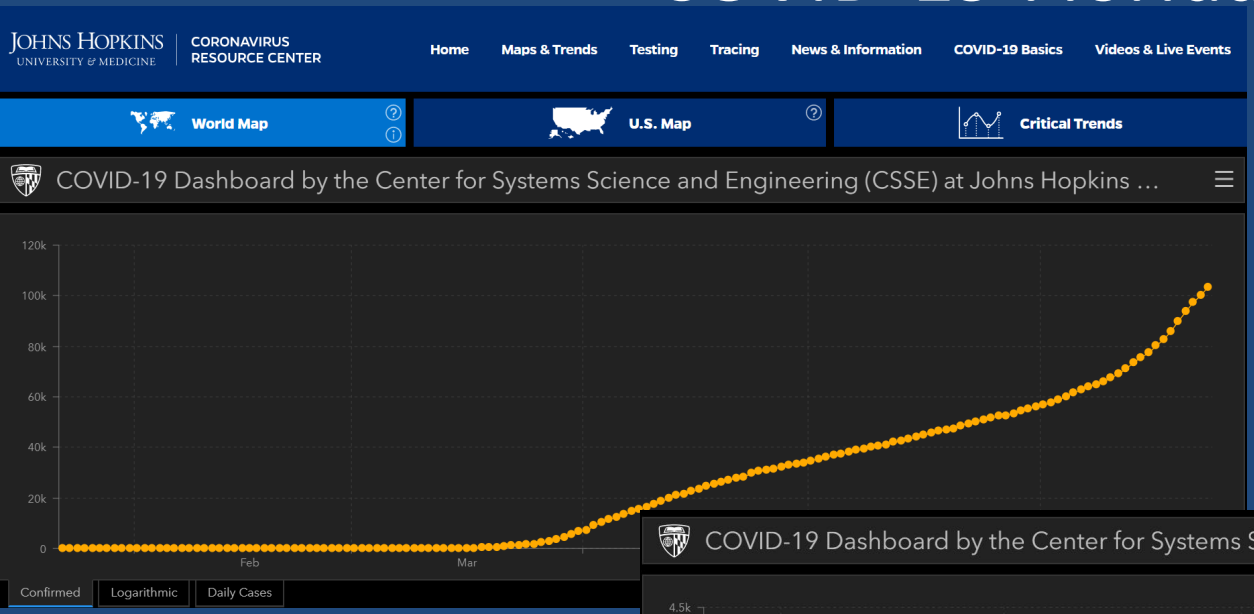


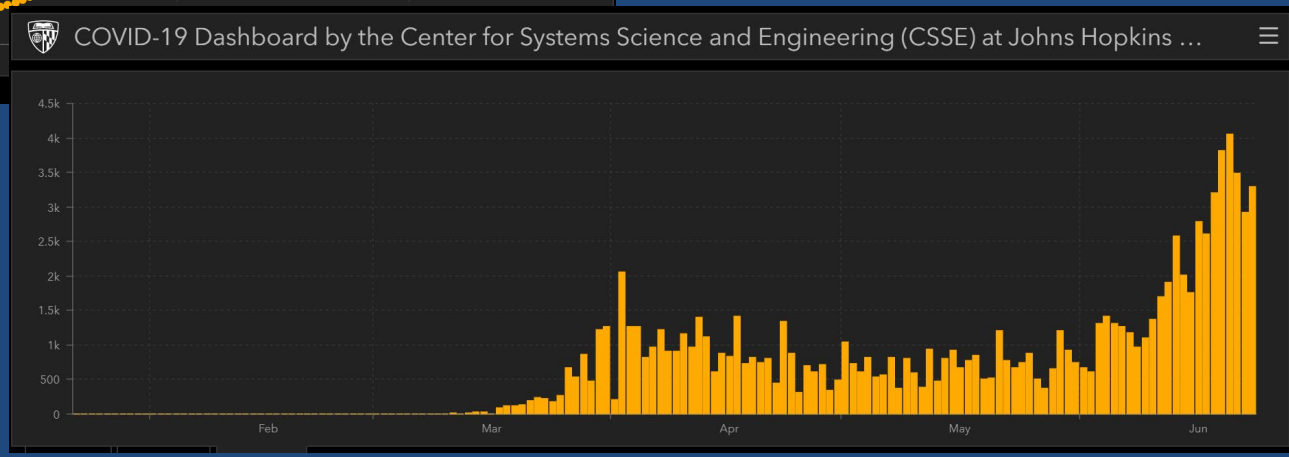
SUPPLEMENTAL EXHIBIT 2

Event Study Estimates of Effects of States Mandating Only Employee Use of Face Masks during Working Time on Daily County-Level Growth Rate of COVID-19 Cases.



COVID-19 Florida





Retrieved 6/24/20

COVID-19 Considerations for People with OUD

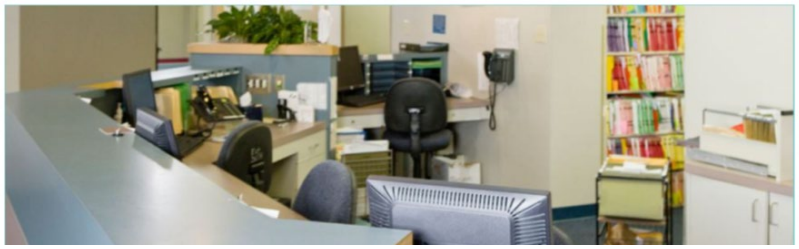
- High risk of co-morbidities that may increase severity of COVID-19
  - COPD, Cirrhosis, HIV
  - Smoking
- Overlap between symptoms of opioid withdrawal and COVID-19 infection
- Risk of drug overdose due to social distancing/isolation, drug supply disruption, reduced access to community-based naloxone distribution
- Increase in other substance use including alcohol
- Barriers to accessing treatment due to illness, quarantine, and financial resources for both patients and providers

The Commonwealth Fund

What Impact Has COVID-19 Had on Outpatient Visits?

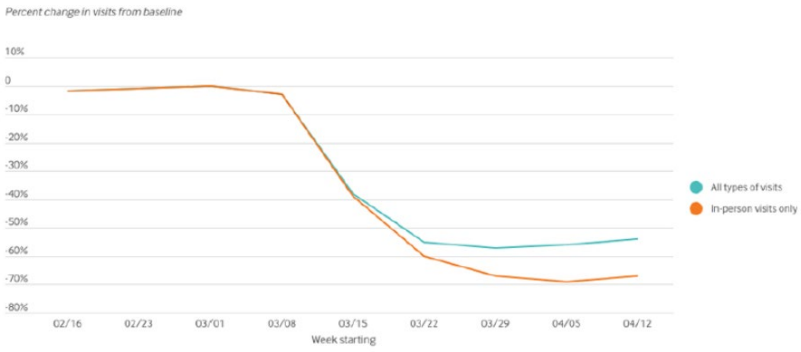
April 23, 2020

| Ateev Mehrotra, Michael Chernew, David Linetsky, Hilary Hatch, and David Cutler

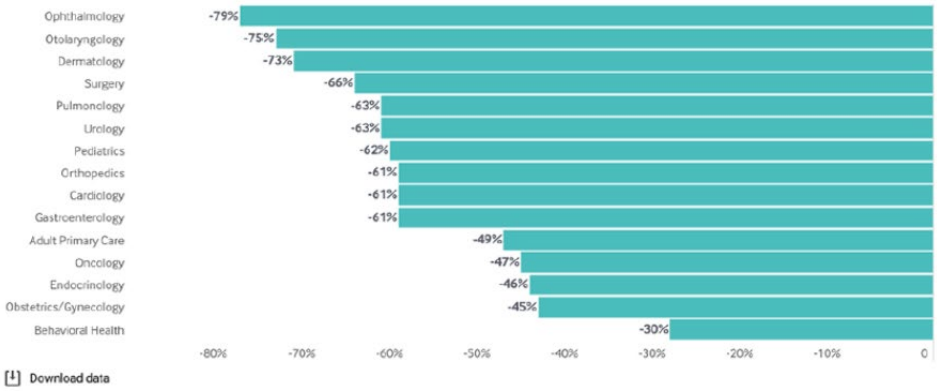


As the number of in-person visits dropped, telehealth visits increased. But the increase in telehealth visits only partially offset the drop in in-person visits.

The decline among in-person visits is steeper than the decline among visits of any type (telemedicine and in-person).



The decline in visits was generally larger among surgical and procedural specialties and smaller in other specialties such as adult primary care, obstetrics/gynecology, oncology, and behavioral health.



Download data

RESEARCH LETTER

Prescription Fill Patterns for Commonly Used Drugs During the COVID-19 Pandemic in the United States

Conflicting information regarding the benefits of hydroxychloroquine/chloroquine and azithromycin in coronavirus disease 2019 (COVID-19) treatment and hypothetical concerns for drugs, such as angiotensin-converting enzyme (ACE) inhibitors and angiotensin receptor blockers (ARBs), have challenged care during the pandemic.[1] However, limited data are available about how prescription of these therapies has changed. The objective of this exploratory analysis was to evaluate prescription patterns of these therapies, along with other commonly used drugs for reference, in the United States during the COVID-19 pandemic. We hypothesized that the prescription of hydroxychloroquine/chloroquine and azithromycin would exceed historical estimates while ACE inhibitor/ARB use would be reduced.

Methods | Trends in mean weekly prescriptions dispensed between February 16 and April 25, 2020, of hydroxychloroquine/chloroquine, azithromycin, and the top 10 drugs based on total claims in 2019, which included the most common ACE inhibitor (lisinopril) and ARB (losartan), were compared with mean weekly prescriptions dispensed from February 17 to April 27, 2019 (**Table**). We used all-payer US pharmacy data from 58 332 chain, independent, and mail-order pharmacies across 14 421 zip codes in 50 states, reflecting approximately 17 million deidentified claims.[2] Prescriptions of hydroxychloroquine/chloroquine were also examined based on fill quantity (<28 tablets, 28-60 tablets, or >60 tablets). Pharmacy claims were assigned weights to match prescription data from the Medical

Table. Estimates of Total Weekly Fills and Relative Percentage Change From 2019 Estimates of Commonly Prescribed Drugs, Azithromycin, and Hydroxychloroquine/Chloroquine[a]

Drug	February 16-22	February 23-29	March 1-7	March 8-14	March 15-21	March 22-28	March 29-Apr 4	April 5-11	April 12-18	April 19-25
Amlodipine										
Change from 2019, % (95% CI)	3.9 (2.4 to 5.4)	9.1 (7.0 to 11.5)	13.2 (10.9 to 15.9)	19.4 (15.0 to 25.2)	32.3 (23.7 to 43.7)	4.3 (−2.3 to 13.3)	−3.7 (−9.3 to 3.6)	−7.4 (−13.4 to 0.1)	−8.0 (−14.2 to 0.2)	−9.2 (−15.5 to −1.3)
Weekly fill volume[b]	1 795 987	1 885 745	1 956 234	2 064 406	2 286 352	1 802 359	1 664 743	1 599 726	1 590 300	1 568 986
Amoxicillin										
Change from 2019, % (95% CI)	0.2 (−1.6 to 2.1)	−0.5 (−2.3 to 1.3)	−2.8 (−4.4 to −1.1)	−5.0 (−6.8 to −3.2)	−20.2 (−22.6 to −17.6)	−44.5 (−46.6 to −42.0)	−54.7 (−56.6 to −52.3)	−61.9 (−63.4 to −60.0)	−63.3 (−64.7 to −61.7)	−64.4 (−65.8 to −63.0)
Weekly fill volume[b]	750 589	745 429	728 587	711 556	597 551	415 937	339 287	285 352	275 002	266 455
Atorvastatin										
Change from 2019, % (95% CI)	1.4 (0.0 to 3.0)	7.0 (4.6 to 9.5)	11.2 (8.7 to 14.1)	17.0 (12.4 to 22.4)	30.9 (19.4 to 46.0)	4.7 (−5.2 to 18.1)	−5.3 (−11.9 to 2.2)	−8.1 (−14.8 to −0.2)	−8.0 (−15.0 to 0.2)	−9.1 (−16.0 to −0.9)
Weekly fill volume[b]	2 450 791	2 583 872	2 686 683	2 826 689	3 161 659	2 529 696	2 286 659	2 219 255	2 223 731	2 195 951
Azithromycin										
Change from 2019, % (95% CI)	1.3 (−0.7 to 3.6)	3.3 (1.4 to 5.6)	3.0 (0.9 to 5.0)	5.1 (3.2 to 7.3)	8.7 (5.7 to 12.3)	−12.0 (−14.6 to −8.7)	−31.5 (−34.0 to −28.2)	−47.9 (−49.8 to −45.5)	−57.6 (−59.0 to −56.0)	−62.7 (−63.8 to −61.3)
Weekly fill volume[b]	373 638	380 949	379 756	387 598	400 781	324 522	252 534	192 014	156 166	137 642
Gabapentin										
Change from 2019, % (95% CI)	−0.9 (−2.5 to 0.9)	3.6 (1.6 to 6.0)	6.5 (4.6 to 8.7)	7.8 (4.6 to 12.0)	15.0 (9.2 to 23.3)	−0.6 (−6.2 to 7.1)	−5.8 (−10.4 to 0.2)	−7.3 (−12.5 to −0.5)	−5.9 (−10.8 to 0.6)	−7.9 (−12.5 to −1.7)
Weekly fill volume[b]	1 189 617	1 242 901	1 278 137	1 293 476	1 379 772	1 192 865	1 130 251	1 111 808	1 129 336	1 105 475
Hydrocodone-acetaminophen										
Change from 2019, % (95% CI)	−0.3 (−2.2 to 1.6)	0.1 (−2.0 to 2.4)	4.0 (1.8 to 6.1)	1.5 (−0.5 to 3.5)	−5.0 (−7.1 to −2.9)	−20.0 (−22.4 to −17.8)	−23.1 (−25.5 to −20.6)	−23.4 (−25.9 to −20.9)	−22.0 (−24.6 to −19.4)	−21.8 (−24.6 to −19.1)
Weekly fill volume[b]	668 493	671 374	697 461	680 318	637 300	536 497	515 708	513 472	523 161	524 289
Hydroxychloroquine/chloroquine										
Change from 2019, % (95% CI)	4.2 (0.8 to 7.8)	8.7 (5.2 to 11.9)	14.6 (11.1 to 18.0)	30.9 (26.0 to 36.0)	214.1 (205.0 to 224.5)	70.3 (53.0 to 84.1)	16.1 (3.8 to 25.9)	15.9 (4.2 to 26.0)	14.6 (2.9 to 24.4)	23.9 (15.7 to 32.2)
Weekly fill volume[b]	121 865	127 059	134 008	153 119	367 297	199 157	135 746	135 528	133 972	144 921

(continued)

Table. Estimates of Total Weekly Fills and Relative Percentage Change From 2019 Estimates of Commonly Prescribed Drugs, Azithromycin, and Hydroxychloroquine/Chloroquine[a] (continued)

Drug	February 16-22	February 23-29	March 1-7	March 8-14	March 15-21	March 22-28	March 29-Apr 4	April 5-11	April 12-18	April 19-25
Levothyroxine										
Change from 2019, % (95% CI)	−3.6 (−6.0 to −1.2)	1.7 (−1.8 to 6.2)	4.9 (1.2 to 9.3)	13.9 (7.5 to 22.0)	26.5 (15.4 to 40.5)	−4.2 (−12.5 to 5.7)	−13.4 (−20.1 to −5.9)	−17.2 (−23.9 to −9.7)	−18.4 (−25.6 to −10.0)	−20.0 (−26.8 to −11.8)
Weekly fill volume[b]	2 152 395	2 270 747	2 343 272	2 543 319	2 824 392	2 138 545	1 933 865	1 849 352	1 821 221	1 785 567
Lisinopril										
Change from 2019, % (95% CI)	−2.8 (−4.5 to −1.0)	1.3 (−0.9 to 4.0)	5.0 (2.6 to 7.7)	12.1 (8.0 to 17.4)	23.2 (15.1 to 33.8)	−3.1 (−9.5 to 4.9)	−11.4 (−17.0 to −4.6)	−14.6 (−20.3 to −7.7)	−14.2 (−19.8 to −7.4)	−15.3 (−21.4 to −7.7)
Weekly fill volume[b]	2 159 871	2 252 153	2 333 755	2 491 220	2 739 128	2 152 981	1 968 396	1 897 783	1 906 602	1 883 315
Losartan										
Change from 2019, % (95% CI)	10.9 (9.3 to 12.5)	16.5 (14.5 to 18.6)	22.4 (20.1 to 24.8)	32.1 (28.6 to 36.7)	48.8 (39.2 to 60.9)	16.4 (7.6 to 27.3)	4.8 (−0.4 to 11.5)	5.1 (−2.0 to 13.9)	4.4 (−0.6 to 10.5)	1.7 (−3.8 to 8.7)
Weekly fill volume[b]	1 352 577	1 419 968	1 492 463	1 610 414	1 813 521	1 419 037	1 278 113	1 281 056	1 273 222	1 240 067
Omeprazole										
Change from 2019, % (95% CI)	2.0 (−0.2 to 4.2)	5.4 (3.3 to 7.5)	8.8 (6.6 to 11.0)	11.9 (8.4 to 15.8)	18.8 (12.7 to 27.3)	−0.8 (−6.0 to 6.2)	−5.7 (−10.6 to 0.2)	−7.8 (−12.9 to −1.2)	−5.8 (−11.1 to 1.0)	−8.2 (−12.9 to −2.2)
Weekly fill volume[b]	1 215 299	1 256 402	1 296 361	1 333 007	1 416 179	1 182 500	1 123 370	1 099 150	1 122 857	1 093 923
Sertraline										
Change from 2019, % (95% CI)	2.8 (0.9 to 5.0)	5.8 (3.1 to 9.0)	8.9 (6.2 to 11.8)	16.2 (11.2 to 23.0)	26.2 (16.8 to 38.6)	2.2 (−5.3 to 12.2)	−5.0 (−12.0 to 3.7)	−4.5 (−11.2 to 4.0)	−6.1 (−12.4 to 2.2)	−8.4 (−14.9 to 0.2)
Weekly fill volume[b]	920 698	947 224	974 883	1 040 632	1 130 214	915 002	850 676	855 155	840 862	820 444

[a] Volume of prescriptions during study period (February 16 to April 25, 2020) were compared with February 17 to April 27, 2019.

[b] Estimated absolute volume of national weekly fills in 2020.

Muthiah Vaduganathan, MD, MPH
Jeroen van Meijgaard, PhD
Mandeep R. Mehra, MD, MSc
Jacob Joseph, MD
Christopher J. O'Donnell, MD, MPH
Haider J. Warraich, MD

Letters

RESEARCH LETTER

Psychological Distress and Loneliness Reported by US Adults in 2018 and April 2020

Coronavirus disease 2019 (COVID-19) introduced stressors to mental health, including loneliness stemming from social isolation, fear of contracting the disease, economic strain, and uncertainty about the future. We fielded a national survey measuring symptoms of psychological distress and loneliness among US adults in April 2020 and compared results with national data from 2018.

Methods | We fielded the Johns Hopkins COVID-19 Civic Life and Public Health Survey from April 7 to April 13, 2020, using NORC's AmeriSpeak Panel. AmeriSpeak is a probability-based panel designed to be representative of the US adult population. The panel is sourced from NORC's area probability sample and from a US Postal Service address-based sample covering 97% of US households.[1] The panel has a recruitment rate of 34% and includes approximately 35 000 members. The sample for the Johns Hopkins survey was drawn from this panel and the survey was administered online. NORC obtains informed consent prior to enrolling individuals in the panel. The Johns Hopkins Bloomberg School of Public Health institutional review board deemed this study not human participants research and waived informed consent.

We measured the prevalence of symptoms of serious psychological distress in the overall sample and among demographic subgroups using the Kessler 6 Psychological Distress Scale, with the validated measure of serious distress defined as a score of 13 or higher on the 0- to 24-point scale.[2] We also measured the proportion of respondents who reported that they always or often feel lonely in response to the item "How often do you feel lonely?" with response options always, often, sometimes, rarely, and never.

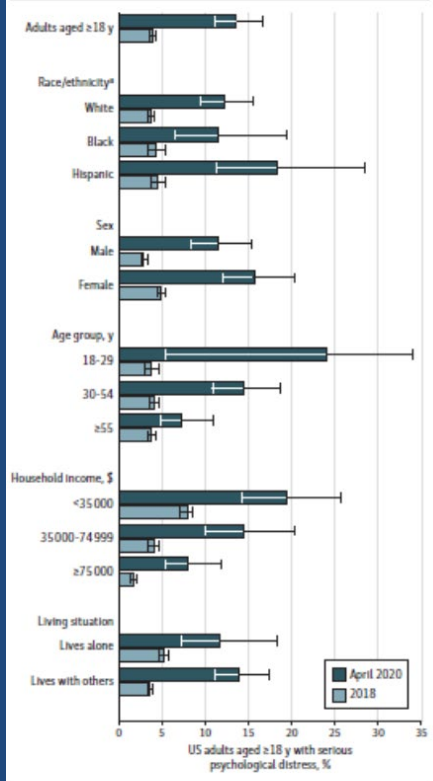
We compared the prevalence of symptoms of serious psychological distress in April 2020 with an identical measure from the 2018 National Health Interview Survey (NHIS), which used the Kessler 6 scale among 25 417 adults aged 18 years or older in household interviews. The 2018 NHIS response rate was 64.2%.[3]

For each measure, we calculated proportions and 95% CIs using Stata version 15 (StataCorp). The Johns Hopkins and NHIS survey data were analyzed separately. Analyses of both data sets incorporated survey sampling weights to generate nationally representative estimates.

Results | The survey response rate was 70.4%, with a final sample of 1468 adults aged 18 years or older.

In April 2020, 13.6% (95% CI, 11.1%-16.5%) of US adults reported symptoms of serious psychological distress, relative to 3.9% (95% CI, 3.6%-4.2%) in 2018 (**Figure**). Among the subgroups examined, in April 2020, symptoms of psychological

Figure. Psychological Distress Among US Adults Aged 18 Years or Older Overall and by Subgroup, April 2020 vs 2018



April 2020 measures are from wave 1 of the Johns Hopkins COVID-19 Civic Life and Public Health Survey, fielded April 7-13, 2020 (N = 1468 adults aged ≥18 years). 2018 Measures of psychological distress are from the 2018 National Health Interview Survey (N = 25 417 adults aged ≥18 years). Psychological distress was measured using the Kessler 6 Psychological Distress Scale, with scores of 13 or higher indicating serious psychological distress. The error bars indicate 95% CIs.

[a] Race/ethnicity was collected as part of the demographic profile in both the April 2020 Johns Hopkins survey and the 2018 National Health Interview Survey. In both surveys, the options were defined by the study investigators, and participants classified their own race/ethnicity.

The corresponding prevalence estimates for these 3 groups in 2018 were 3.7% (95% CI, 3.0%-4.6%), 7.9% (95% CI, 7.1%-8.6%), and 4.4% (95% CI, 3.7%-5.4%), respectively. The lowest prevalence of serious psychological distress among the subgroups examined in April 2020 was observed in adults aged 55 years or older (7.3% [95% CI, 4.8%-10.9%]). In April 2020, 13.8% (95% CI, 11.4%-16.6%) of US adults reported that they always or often felt lonely.

Discussion | The prevalence of reported symptoms of psychological distress among US adults was higher in 2020 during the COVID-19 pandemic than in 2018. This finding builds on prior research documenting psychological distress among health care workers responding to COVID-19.[4]

The measure of serious psychological distress derived from the Kessler 6 scale has been shown to accurately predict serious mental illness,[2] suggesting acute distress during COVID-19 may transfer to longer-term psychiatric disorders. In April 2020, 13.8% of US adults reported that they always or often felt lonely. In comparison, a national survey using an identical measure of loneliness found that 11% of US adults reported always or often feeling lonely in April and May 2018.[5] Because loneliness increased only slightly from 2018 to 2020, other factors may be driving psychological distress during the COVID-19 pandemic.

The NORC AmeriSpeak panel used probability-based recruitment consistent with best-practice standards for survey research,[6] but results may be vulnerable to sampling biases. The degree to which US adults classified as essential workers during the COVID-19 pandemic were represented in the survey sample is unknown. While both surveys are designed to be nationally representative of US adults, the sampling and recruitment methods and mode of administration varied in the Johns Hopkins April 2020 and NHIS 2018 surveys. There is a potential for selection bias if individuals were more likely to respond to a survey about psychological distress in April 2020 vs 2018.

Emma E. McGinty, PhD
Rachel Presskreischer, MS
Hahrie Han, PhD
Colleen L. Barry, PhD

Author Affiliations: Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland (McGinty, Presskreischer, Barry); Department of Political Science, Johns Hopkins University, Baltimore, Maryland (Han).

Corresponding Author: Emma E. McGinty, PhD, Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, 624 N Broadway, Room 359, Baltimore, MD 21205 (bmcginty@jhu.edu).

Accepted for Publication: May 19, 2020.

Published Online: June 3, 2020. doi:10.1001/jama.2020.9740

Author Contributions: Dr McGinty had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.
Concept and design: McGinty, Han, Barry.
Acquisition, analysis, or interpretation of data: All authors.
Drafting of the manuscript: McGinty.
Critical revision of the manuscript for important intellectual content: All authors.
Statistical analysis: McGinty, Presskreischer.
Obtained funding: McGinty, Han, Barry.
Administrative, technical, or material support: Barry.
Supervision: McGinty, Han, Barry.

Conflict of Interest Disclosures: None reported.

Funding/Support: Dr McGinty reported receiving a Faculty Innovation Award from Johns Hopkins University. Dr Han reported receiving a grant from the Robert Wood Johnson Foundation. Dr Barry reported receiving endowment funds from the Johns Hopkins Bloomberg School of Public Health.

Role of the Funder/Sponsor: The funders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

1. Dennis JM. *Technical Overview of the AmeriSpeak Panel NORC's Probability-Based Household Panel*. NORC at the University of Chicago; 2019.

2. Kessler RC, Barker PR, Colpe LJ, et al. Screening for serious mental illness in the general population. *Arch Gen Psychiatry*. 2003;60(2):184-189. doi:10.1001/archpsyc.60.2.184

3. Centers for Disease Control and Prevention. National Center for Health Statistics. data, questionnaires, and related documentation. Accessed May 13, 2020. https://www.cdc.gov/nchs/nhis/data-questionnaires-documentation.htm

4. Lai J, Ma S, Wang Y, et al. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Network Open*. 2020;3(3):e203976-e.

5. Kaiser Family Foundation; The Economist. Survey on Loneliness and Social Isolation in the United States, the United Kingdom, and Japan. Published 2018. Accessed May 13, 2020. http://files.kff.org/attachment/Topline-Kaiser-Family-Foundation-The-Economist-Survey-on-Loneliness-and-Social-Isolation-in-the-United-States-the-United-Kingdom-and-Japan

6. American Association for Public Opinion Research. Report on online panels. Published June 2010. Accessed May 14, 2020. https://www.aapor.org/Education-Resources/Reports/Report-on-Online-Panels.aspx

Changes in federal regulations

- **HIPAA - Enforcement discretion for telehealth** https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html
  - "The Office for Civil Rights will exercise its enforcement discretion and will not impose penalties for noncompliance with the regulatory requirements under the HIPAA Rules against covered health care providers in connection with the good faith provision of telehealth during the COVID-19 nationwide public health emergency. "
- **42 CFR Part 2** - https://www.samhsa.gov/sites/default/files/covid-19-42-cfr-part-2-guidance-03192020.pdf
  - "We emphasize that, under the medical emergency exception, providers make their own determinations whether a bona fide medical emergency exists for purposes of providing needed treatment to patients."
- **Ryan Haight Act** - https://www.deadiversion.usdoj.gov/coronavirus.html
  - "Accordingly, as of March 16, 2020, and continuing for as long as the Secretary's designation of a public health emergency remains in effect, DEA-registered practitioners in all areas of the United States may issue prescriptions for all schedule II-V controlled substances to patients for whom they have not conducted an in-person medical evaluation, provided all of the following conditions are met:
    - The prescription is issued for a legitimate medical purpose by a practitioner acting in the usual course of his/her professional practice;
    - ~~The telemedicine communication is conducted using an audio-visual, real-time, two-way interactive communication system; and~~

    March 31, 2020 guidance: DEA will allow waivered physicians to initiate buprenorphine using telephonic (audio-only) communication

    The practitioner is acting in accordance with applicable Federal and State laws."

COVID-19 General Response(s)

- Primary Response:
  - Provision of continuing care via (primarily) remote/tele services
- Under-emphasized:
  - Considerations for people with untreated addiction
  - Providers need to see new patients (either virtually or in-person)
- Lacking attention to “Special Populations”:
  - Women
  - Pregnant people – for whom some in-person visits are essential (ie for prenatal care)
  - People with SUD/OUD – how they are experiencing the pandemic, social isolation, the in-person clinic experience

- Public Health/Public Policy: Balance staff safety and support of remote services with person-centered care

COVID19 Public Health Response

- Regulations eased in support of telehealth services
- Addiction Providers: decrease in volume (extended prescriptions, decreased hours) leads to decrease income
- Prenatal Care Providers: slight decrease in volume (spaced out visits) with no change in clinic income (bundled payment)
- What about co-located services?

- Increased attention to racial inequities (COVID-19 and Birth)

Universal Screening for SARS-CoV-2 in Women Admitted for Delivery

TO THE EDITOR: In recent weeks, Covid-19 has rapidly spread throughout New York City. The obstetrical population presents a unique challenge during this pandemic, since these patients afebrile on admission. Nasopharyngeal swabs were obtained from 210 of the 211 women (99.5%) who did not have symptoms of Covid-19; of these women, 29 (13.7%) were positive for SARS-CoV-2.

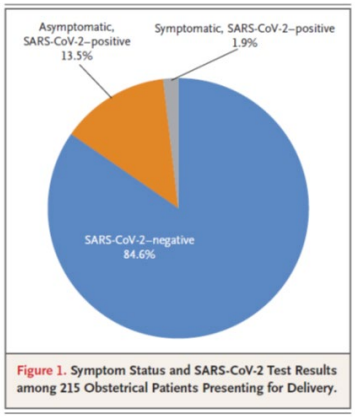


Figure 1. Symptom Status and SARS-CoV-2 Test Results among 215 Obstetrical Patients Presenting for Delivery.

this prevalence has limited generalizability to geographic regions with lower rates of infection, it underscores the risk of Covid-19 among asymptomatic obstetrical patients. Moreover, the true prevalence of infection may be underreported because of false negative results of tests to detect SARS-CoV-2.[3]

The potential benefits of a universal testing approach include the ability to use Covid-19 status to determine hospital isolation practices and bed assignments, inform neonatal care, and guide the use of personal protective equipment. Access to such clinical data provides an important opportunity to protect mothers, babies, and health care teams during these challenging times.

Desmond Sutton, M.D.
Karin Fuchs, M.D., M.H.A.
Mary D'Alton, M.D.
Dena Goffman, M.D.

Columbia University Irving Medical Center
New York, NY
dg2018@cumc.columbia.edu

Original Research

Testing of Patients and Support Persons for Coronavirus Disease 2019 (COVID-19) Infection Before Scheduled Deliveries

Angela Bianco, MD, Ayisha B. Buckley, MD, Jessica Overbey, DrPh, Scott Smilen, MD, Brian Wagner, MD, Cheryl Dinglas, MD, Holly Loudon, MD, Alan Garely, MD, Michael Brodman, MD, and Joanne Stone, MD

OBJECTIVE: To evaluate the rate of coronavirus disease 2019 (COVID-19) infection with the use of universal testing in our obstetric population presenting for scheduled deliveries, as well as the concordance or discordance rate among their support persons during the initial 2-week period of testing. Additionally, we assessed the utility of a screening tool in predicting severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) testing results in our cohort.

METHODS: This was an observational study in which all women who were scheduled for a planned delivery within the Mount Sinai Health system from April 4 to April 15, 2020, were contacted and provided with an appointment for themselves as well as their support persons to undergo COVID-19 testing 1 day before their scheduled delivery. Both the patients and the support persons were administered a standardized screen specific for COVID-19 infection by telephone interview. Those support persons who screened positive were not permitted to attend the birth. All patients and screen-negative support persons underwent SARS-CoV-2 testing.

RESULTS: During the study period, 155 patients and 146 support persons underwent SARS-CoV-2 testing. The prevalence of asymptomatic COVID-19 infection was 15.5% (CI 9.8–21.2%) and 9.6% (CI 4.8–14.4%) among patients and support persons, respectively. The rate of discordance among tested pairs was 7.5%. Among patients with COVID-19 infection, 58% of their support persons also had infection; in patients without infection, fewer than 3.0% of their support persons had infection.

CONCLUSION: We found that more than 15% of asymptomatic maternity patients tested positive for SARS-CoV-2 infection despite having screened negative with the use of a telephone screening tool. Additionally, 58% of their asymptomatic, screen-negative support persons also tested positive for SARS-CoV-2 infection. Alternatively, testing of the support persons of women who had tested negative for COVID-19 infection had a low yield for positive results. This has important implications for obstetric and newborn care practices as well as for health care professionals.

(Obstet Gynecol 2020;00:1–5)
DOI: 10.1097/AOG.0000000000003985

The coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus has been declared a pandemic by the World Health Organization as of March

Box 1. Telephone Screening Tool

All patients must answer these questions.
1. Do you have a fever or feel hot?
2. Do you have a cough, shortness of breath, or a sore throat?
3. Are you vomiting, or do you have diarrhea?
4. Do you have a rash?

RESEARCH LETTER

Prevalence of SARS-CoV-2 Among Patients Admitted for Childbirth in Southern Connecticut

Developing an approach to care for pregnancy and childbirth during the coronavirus disease 2019 (COVID-19) crisis is a priority to (1) provide safe care to pregnant women and newborns; and (2) protect health care workers from infection. A study conducted in New York City reported a 13.5% prevalence of asymptomatic infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in women presenting for childbirth.[1] On March 30, 2020, an initially asymptomatic woman admitted to the Yale New Haven Health system developed cough and fever soon after childbirth; testing confirmed SARS-CoV-2 infection. This event prompted the development of a SARS-CoV-2 screening and testing program of patients presenting for childbirth; we report the prevalence detected in the first weeks of the program.

Methods | From April 2, 2020, to April 29, 2020, screening and testing of patients admitted for childbirth was initiated at 3 Yale New Haven Health hospitals in southern Connecticut. Screening consisted of questions related to travel, contacts, and symptoms of COVID-19. All patients without a prior diagnosis of COVID-19 underwent SARS-CoV-2 polymerase chain reaction (PCR) testing of nasopharyngeal swabs, with rapid testing available. Patients scheduled for cesarean birth were screened and tested at preoperative visits.

Hospital policies recommended universal mask use on clinical units by clinicians, patients, and support persons and limited each patient to 1 support person visitor for childbirth. For patients with symptoms of COVID-19, clinicians wore N95 respirators and appropriate personal protective equipment (PPE) until results returned, continuing use for patients with positive test results. For patients without symptoms of COVID-19, clinicians followed usual precautions including wearing masks. For the second stage of labor and cesarean or vaginal birth, clinicians wore full PPE and N95 respirators for patients without test results or with positive tests. Excluded from universal testing were patients already diagnosed with COVID-19 and patients not admitted for childbirth. The numbers of positive PCR tests in patients with and without symptoms of COVID-19 were assessed over time. This quality improvement project does not meet the definition of human subjects research; review by the institutional review board was not required.

Results | Seven hundred eighty-two patients presenting for childbirth were screened; 1.5% (12/782) were previously diagnosed with COVID-19. The remaining 770 patients were tested at admission (Table 1) and 30 of 770 (3.9%) tested positive for SARS-CoV-2 (Table 2). Twenty-two of the 30 who tested positive for SARS-CoV-2 (73.3%) were asymptomatic.

Table 1. Demographics and Characteristics of Patients Tested for SARS-CoV-2 on Admission for Childbirth[a]

Characteristics	SARS-CoV-2 PCR result	
	Positive (n = 30)	Negative (n = 740)
Age, y		
<30	14 (46.7)	199 (26.9)
30-34	10 (33.3)	310 (41.9)
≥35	6 (20.0)	231 (31.2)
Nulliparity	16 (53.3)	323 (43.7)
Site of hospital		
Greenwich	8 (26.7)	204 (27.6)
Bridgeport	11 (36.7)	129 (17.4)
New Haven	11 (36.7)	407 (55.0)
Gestation <37 weeks at birth	0	62 (8.4)
Cesarean delivery[b]	10 (33.3)	275 (37.2)
APGAR score		
<7 At 1 minute	0	40 (5.4)
<7 At 5 minutes	0	12 (1.6)
Neonatal birth weight, mean (SD), g	3370 (621)	3331 (568)
Neonatal SARS-CoV-2 positive test result[c]	0	

Abbreviations: COVID-19, coronavirus disease 2019; PCR, polymerase chain reaction; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

[a] Data are expressed as No. (%) of participants unless otherwise indicated. Excludes patients diagnosed with COVID-19 prior to admission, including those considered recovered (defined as ≥14 days from onset of symptoms and ≥72 hours afebrile).

[b] Mode of birth was determined by routine obstetric indications.

[c] Neonatal testing by PCR of nasopharyngeal swabs was performed at 24 hours of age.

The overall prevalence of positive test results among asymptomatic patients was 2.9% (22/756). Prevalence of positive test results among asymptomatic patients increased from 0.6% (2/355) to 5% (20/401) from the first 2 weeks (April 2-15, 2020) to the second 2 weeks (April 16-29, 2020), though the prevalence of symptomatic patients who tested positive in the total population admitted for childbirth decreased from 1.4% (5/365) to 0.7% (3/405) (Table 2). Fifty-seven percent (8/14) of patients with symptoms tested positive. No asymptomatic patients who tested negative developed symptoms or required further testing. No health care workers on the obstetric units were removed from work due to SARS-CoV-2 exposure or disease from transmission from a known or possible contact with a patient.

Discussion | These findings suggest a low (<3%) prevalence of positive SARS-CoV-2 test results among asymptomatic patients in a pregnant population outside of the highly endemic region of New York City. During this time period, these hospitals, with approximately 2200 licensed beds, experienced a peak (April 21, 2020) of 759 patients admitted for COVID-19, and among US states, Connecticut had the 3rd highest death rate per capita from COVID-19, indicating a substantially affected region.[2] The increasing prevalence of positive SARS-CoV-2 test results in the asymptomatic population, while the prevalence of symptomatic infections decreased, may indicate that universal testing identifies patients in a convalescent period, in addition to those with subclinical active infection. Although performed in mixed community and academic hospital settings, limitations of the findings include a short duration and a single geographic region.

Approaches to care that balance screening and testing of patients combined with a rationalized approach to use of PPE should be considered for obstetric units.

Table 2. SARS-CoV-2 Test Results for Patients Tested at Admission for Childbirth, Stratified by Symptoms[a]

Screening characteristic	SARS-CoV-2 PCR result	Patients screened, No. (%)[b]		
		April 2-15, 2020 (n = 365)	April 16-29, 2020 (n = 405)	Total (n = 770)
Asymptomatic	Positive	2 (0.5)	20 (4.9)	22 (2.9)
	Negative	353 (96.7)	381 (94.1)	734 (95.3)
Symptomatic[c]	Positive	5 (1.4)	3 (0.7)	8 (1.0)
	Negative	5 (1.4)	1 (0.2)	6 (0.8)

Abbreviations: COVID-19, coronavirus disease 2019; PCR, polymerase chain reaction; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

[a] Excludes patients diagnosed with COVID-19 prior to admission, including those considered recovered (defined as ≥14 days from onset of symptoms and ≥72 hours afebrile).

[b] Percentage is expressed as percentage of total patients tested during the time period.

[c] Signs and symptoms of COVID-19 in patients with positive SARS-CoV-2 test results were mild in 7 patients, including fever, headache, rhinorrhea, sore throat, myalgias, congestion, cough, anosmia/ageusia. One patient had severe symptoms, including fever, myalgias, malaise, congestion, and shortness of breath. No mildly symptomatic patients developed COVID-19-related complications. The severely symptomatic patient recovered from respiratory insufficiency with critical care and oxygen support via nonrebreather mask.

Katherine H. Campbell, MD, MPH
Jean M. Tornatore, MD
Kirsten E. Lawrence, MD
Jessica L. Illuzzi, MD
L. Scott Sussman, MD
Heather S. Lipkind, MD
Christian M. Pettker, MD

Author Affiliations: Department of Obstetrics, Gynecology, and Reproductive Sciences, Yale School of Medicine, New Haven, Connecticut (Campbell, Lawrence, Illuzzi, Lipkind, Pettker); Department of Obstetrics and Gynecology, Bridgeport Hospital, Bridgeport, Connecticut (Tornatore); Clinical Redesign, Yale New Haven Health, New Haven, Connecticut (Sussman).

Corresponding Author: Katherine H. Campbell, MD, MPH, Department of Obstetrics, Gynecology, and Reproductive Sciences, Yale School of Medicine, 330 Cedar St, FMB 302, New Haven, CT 06520-8063 (katherine.campbell@yale.edu).

Accepted for Publication: May 11, 2020.

Published Online: May 26, 2020. doi:10.1001/jama.2020.8904

Author Contributions: Dr Campbell had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.
Concept and design: Campbell, Illuzzi, Sussman, Lipkind, Pettker.
Acquisition, analysis, or interpretation of data: Campbell, Tornatore, Lawrence, Illuzzi, Lipkind, Pettker.
Drafting of the manuscript: Campbell, Illuzzi, Lipkind, Pettker.
Critical revision of the manuscript for important intellectual content: All authors.
Statistical analysis: Illuzzi, Lipkind, Pettker.
Administrative, technical, or material support: Tornatore, Pettker.
Supervision: Lawrence, Lipkind, Pettker.

Conflict of Interest Disclosures: None reported.

1. Sutton D, Fuchs K, D'Alton M, Goffman D. Universal screening for SARS-CoV-2 in women admitted for delivery. *N Engl J Med*. Published online April 13, 2020. doi:10.1056/NEJMc2009316

2. Connecticut coronavirus map and case count. *New York Times*. Published April 16, 2020 (updated daily). Accessed April 16, 2020. https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html

COVID-19 Considerations for Pregnant People

- There appears to be nothing pregnancy specific for COVID19
  - Maternal risk does not seem greater than general population (this is not H1N1)
  - Fetal/newborn risk does not seem greater (this is not Zika)
  - Not transmitted in breast milk
- Health Care Provider Safety – limited PPE and staffing

ACOG Statement on COVID-19 and Pregnancy

ACOG Statement on COVID-19 and Pregnancy

Washington, D.C. – *The following is a statement from Christopher M. Zahn, MD, FACOG, vice president of practice activities for the American College of Obstetricians and Gynecologists (ACOG):*

"New information from the Centers for Disease Control and Prevention (CDC) suggests that pregnant patients may be at increased risk for certain manifestations of severe illness due to COVID-19, such as intensive care unit admission and mechanical ventilation. Importantly, the available data also suggest that the overall risk of these clinical interventions remains low, and that pregnant patients do not appear to be at increased risk of death associated with COVID-19 compared with nonpregnant patients in the same age group.

"During this public health crisis, it is critical that medical care be informed by evidence and data. The COVID-19 pandemic continues to be a rapidly evolving situation, and as new research and data become available, clinical care recommendations should be refined to reflect the most current information.

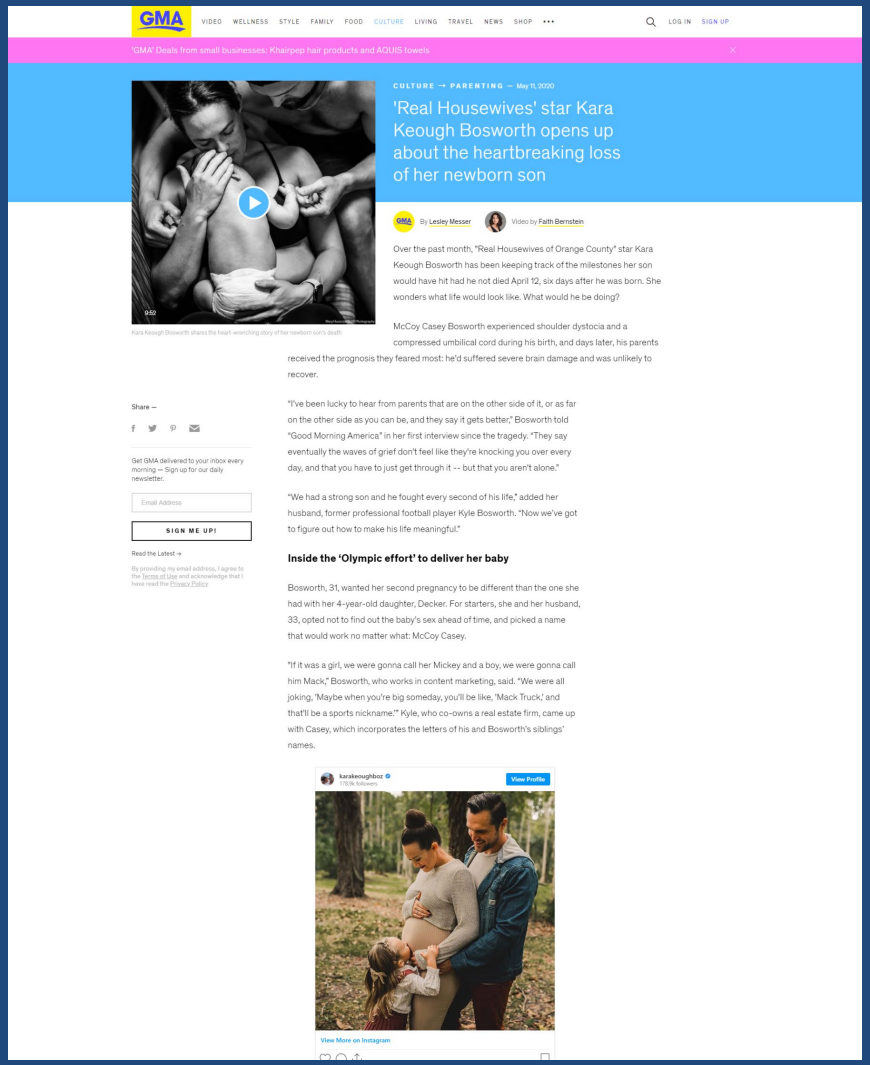
"The new data released today suggest a different level of risk for pregnant patients than was previously indicated by earlier data. In keeping with our evidence-based approach, ACOG is reviewing all of our clinical materials and patient resources related to COVID-19 in light of newly available information and will make any necessary revisions to recommendations.

"We understand that pregnant individuals are experiencing increased concern due to COVID-19, and we appreciate that these are unsettling times. While the data are being reviewed and modifications to clinical guidance considered, ACOG members and other clinicians providing care to patients who are pregnant or seeking to become pregnant should:

- Counsel patients about the potential increased risk of severe illness requiring intensive care unit admission and mechanical ventilation associated with COVID-19 infection during pregnancy
- Emphasize the importance of taking precautions to prevent infection when counseling pregnant patients and their families, with particular attention to advocating for protection measures for individuals with increased risk of exposure and infection due to occupation

"As the pandemic continues, ACOG urges its members to encourage pregnant patients who test positive for COVID-19 to consider enrolling in an appropriate COVID-19 registry, such as the COVID-19 PREGNANCY Registry, to help the medical community better understand the impact of COVID-19 on pregnancy outcomes.

"In light of this new information from the CDC regarding the risk to pregnant patients, it is even more concerning that pregnant and lactating patients have been excluded from clinical trials for a coronavirus vaccine. The new information from the CDC highlights the importance of pregnant patients being prioritized for a coronavirus vaccine once it becomes available. ACOG again urges the federal government to use its resources to ensure the safe inclusion of pregnant and lactating patients, including patients of color, in trials for vaccines and therapeutics to ensure that all populations are included in the search for ways to prevent and treat COVID-19."



Policies of Isolation:

Unintended Consequences

COVID-19 Considerations for Pregnant People

- Policies of Isolation
  - Limiting number of people in delivery room, postpartum and NICU
  - Limiting number of transits per person per day
  - *People with OUD may need more support*
- Policies of Separation
  - Maternal/newborn separation following delivery
  - Limited “rooming in”
  - Limited breast feeding
  - *People with OUD may suffer sequelae of separation more*
  - Child Welfare concerns
- We have prioritized unknown risks of COVID-19 over known harms of isolation and separation

JAMA Insights

Caring for Women Who Are Planning a Pregnancy, Pregnant, or Postpartum During the COVID-19 Pandemic

Sonja A. Rasmussen, MD, MS; Denise J. Jamieson, MD, MPH

Since its recognition in China in December 2019, coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has rapidly spread throughout the world and become a pandemic. Although considerable data on COVID-19 are available, much remains to be learned about its effects on pregnant women and newborns.

No data are currently available to assess whether pregnant women are more susceptible to COVID-19. Pregnant women are at risk for severe disease associated with other respiratory illnesses (eg, 2009 H1N1 influenza),[1] but thus far, pregnant women with COVID-19 do not appear to be at increased risk for severe disease compared with the general population. Data from China showed that among 147 pregnant women, 8% had severe disease and 1% had critical illness, which are lower rates than observed in the nonpregnant population (14% with severe disease and 6% with critical illness).[2] Case series from China consisting primarily of women with third-trimester infection have shown that clinical findings in pregnant women are similar to those seen in the general population.[1] Conversely, a small Swedish study reported that pregnant and postpartum women with COVID-19 were 5 times more likely to be admitted to an intensive care unit compared with nonpregnant women of similar age.[3]

Data on pregnant women with COVID-19 in the US are beginning to accumulate. For example, a recent report included 43 pregnant women with COVID-19 who presented for care at 2 hospitals in New York City.[4] Although this case series did not include a nonpregnant control group, the proportion of pregnant women with severe disease was similar to that described in nonpregnant adults with COVID-19.[4] More information is needed about the effect of pregnancy and comorbidities to understand how they affect clinical outcomes of COVID-19. The US experience might differ from other countries because of the high frequency of comorbidities among pregnant women in the US.

The effects of COVID-19 during pregnancy on the neonate are not well understood. Nearly all infections reported from China were during the third or late-second trimester, so whether first-trimester SARS-CoV-2 infection might cause birth defects or pregnancy loss is unknown. Some newborns born to mothers with COVID-19 during pregnancy were born preterm or of low birth weight, but whether these outcomes were COVID-19–related is unclear. SARS-CoV-2 transmission from a mother to her newborn could occur prenatally, perinatally, or postnatally. In most newborns tested after birth, results have been negative for SARS-CoV-2.[1] However, symptomatic newborns born to mothers with COVID-19 have been reported to have SARS-CoV-2 infection at a few days of life[5]; whether this was due to prenatal, perinatal, or postnatal transmission is unknown. Recently, a probable case of congenital infection was reported in a newborn born to a woman with familial neutropenia who was diagnosed with COVID-19 before delivery. A neonatal nasopharyngeal swab collected on the day of birth prior to skin-to-skin maternal contact was positive.[6] The presence of IgM and IgG antibodies in 3 infants born to mothers with COVID-19 during pregnancy was recently reported.[7] IgG antibodies freely cross the placenta; however, IgM antibodies do not typically cross the placenta, suggesting the possibility of prenatal transmission of SARS-CoV-2. However, these studies do not provide definitive evidence for intrauterine transmission because cross-reactivity and false-positive IgM test results can occur.[7] Whether transmission can occur through breastfeeding is unknown. SARS-CoV-2 RNA has been detected in breastmilk samples from a single woman with COVID-19, and her infant tested positive for SARS-CoV-2, but whether the infant was infected through breastfeeding is unclear.[8] Given the benefits of breast milk, when feasible, breast milk should be fed to infants regardless of maternal COVID-19 status.

Based on experiences with other infections (eg, influenza), adverse effects on the fetus or newborn related to prenatal infection might occur even without intrauterine transmission. For example, severe maternal illness with influenza requiring intensive care unit admission was associated with increased risks for preterm birth, low birth weight, and low Apgar scores.[9] Whether an increased risk for adverse outcomes among newborns born to women with COVID-19 will be seen is unknown.

Given the limited data, recommendations for caring for women who are planning a pregnancy, pregnant, or have given birth during the COVID-19 pandemic are based on expert opinion. Women planning a pregnancy in the time of COVID-19 might ask whether they should delay pregnancy until after the pandemic. Based on limited data, there does not seem to be a compelling reason to recommend delaying pregnancy. For women who are pregnant, the primary recommendation is to avoid becoming infected with SARS CoV-2 through hygiene and social distancing measures. Early recognition of COVID-19 in a pregnant patient admitted to a labor and delivery unit is necessary so appropriate infection control practices can be instituted. Given that some women with COVID-19 might be asymptomatic or presymptomatic, health care facilities may consider polymerase chain reaction testing for SARS-CoV-2 at the time of admission.

Guidelines for the care of pregnant women known or suspected to have COVID-19 admitted for delivery have been developed by the Centers for Disease Control and Prevention (CDC) and several professional organizations (**Box**). On presentation, a mask should be placed on the woman and she should be isolated in a single-patient room with the door closed, with an airborne isolation room used for aerosol-generating procedures. Clinical care of a pregnant woman with COVID-19 should be based on illness severity; diagnostic measures and treatments should not be withheld based on pregnancy status. Given the risks of maternal respiratory depression, consideration should be given to limiting the use of magnesium sulfate for seizure prophylaxis and fetal neuroprotection. Given concerns about potential harm from corticosteroid use in patients with COVID-19, antenatal corticosteroid use for fetal maturation should be carefully considered and should depend on the gestational age. Early epidural analgesia should be considered to mitigate the risks associated with general anesthesia in the setting of an urgent cesarean delivery.

Box. Recommendations for Care of Pregnant Women Confirmed or Suspected to Have Coronavirus Disease 2019 (COVID-19)

Recommendations

- Place a mask on the patient on presentation and isolate in a single-person room with the door closed. Airborne isolation rooms should be used for aerosolizing procedures (ACOG, CDC, SMFM, SOAP).
- Consider separating patients with COVID-19 in one area of the obstetric unit and using a designated team of trained clinicians in these areas (SMFM, SOAP).
- Weigh benefits and risks of magnesium sulfate for fetal neuroprotection or for preeclampsia/intrapartum seizure prophylaxis given potential maternal respiratory depression (SMFM, SOAP).
- Consider adjusting antenatal corticosteroid use for fetal maturation, given the risk of worsening patient outcomes with corticosteroid use in patients with COVID-19 (eg, offer antenatal steroids for patients <34 weeks' gestation, weigh risks and benefits and individualize decisions for ≥34 weeks' gestation) (ACOG, SMFM, SOAP).
- Consider early epidural analgesia to mitigate the risks associated with general anesthesia in the setting of an urgent cesarean delivery (SMFM, SOAP).
- Do not alter delivery timing or mode (eg, cesarean delivery, operative vaginal delivery) due to patients' COVID-19 infection status. However, for women with COVID-19 in the third trimester, it may be reasonable to attempt to postpone delivery to decrease risk of neonatal transmission (ACOG).
- Consider temporary separation of mothers with confirmed COVID-19 from their newborns (ACOG, AAP, CDC).
- Determination of whether to temporarily separate a mother with known or suspected COVID-19 should be made on a case-by-case basis, using shared decision-making (ACOG, CDC).
- If temporary separation is chosen, mothers who intend to breastfeed should practice hand and breast hygiene and express their milk. Expressed milk can be fed to the newborn by a healthy caregiver (ACOG, AAP, CDC, SMFM, SOAP).
- If separation is not chosen, use other measures to reduce risk of infection, such as physical barriers and face mask use by the mother (AAP, CDC).
- Mothers who choose to feed at the breast should wear a face mask and practice hand and breast hygiene before each feeding (AAP, ACOG, CDC, SMFM, SOAP).
- Newborns born to mothers with confirmed COVID-19 at the time of delivery should be considered to have suspected COVID-19 and be isolated from healthy newborns (AAP, ACOG, CDC).
- Newborns born to mothers with confirmed or suspected COVID-19 at the time of delivery should be tested 24 hours after birth for SARS-CoV-2 and, if negative, again at approximately 48 hours if testing capacity is available (AAP, CDC).

Professional Organization Resources

American Academy of Pediatrics (AAP) initial guidance and FAQs

American College of Obstetricians and Gynecologists (ACOG) practice advisory and FAQs

Centers for Disease Control and Prevention (CDC)

Society for Maternal-Fetal Medicine (SMFM) and Society for Obstetric Anesthesia and Perinatology (SOAP)

https://covidtracking.com/race

The COVID Tracking Project | Our Data | How t

The Atlantic

The COVID Racial Data Tr

About | Racial Data Dashboard | Complete Dataset (C

COVID-19 is affecting people of color the most. We're tracking the data in real time.

The COVID Racial Data Tracker is a collaboration between the COVID Tracking Project and the Antiracist Research & Policy Center. Together, we're gathering the most complete race and ethnicity data on COVID-19 in the United States.

Júlia Ledur / COVID Tracking Project

We've lost at least 23,253 Black lives to COVID-19 to date.

Black people account for:

13% of the US population

vs.

21% of deaths where race is known

This means Black people are dying at a rate **more than 1.5 times higher** than their population share.

We've asked every state to report complete race and ethnicity data. Our Racial Data Dashboard has the latest.

Race and ethnicity data by state

Type a state's name to jump to it: Florida

Florida

Florida has reported race data for:

77% CASES

97% DEATHS

The following tables reflect only those cases and deaths where race is known and reported by Florida. If this state's reporting percentages are low, interpret with caution.

Cases and deaths by race

▶ Racial/ethnic disparity likely. See why ↓ ● Should not be compared with percentage of population. See why ↓

Race	Percentage of population	Percentage of cases	Percentage of deaths
Black or African American alone	16%	22% ▶	21%
Asian alone	3%	0% [1] ●	0% [1] ●
Native Hawaiian and Pacific Islander alone	0%	0% [1] ●	0% [1] ●
American Indian or Alaska Native alone	0%	0% [1] ●	0% [1] ●
Two or more races	3%	0% [1] ●	0% [1] ●
White alone	75%	30%	50%
Some other race alone	3%	5% [1] ●	3% [1] ●

Florida has reported ethnicity data for:

73% CASES

94% DEATHS

The following tables reflect only those cases and deaths where ethnicity is known and reported by Florida. If this state's reporting percentages are low, interpret with caution.

Cases and deaths by ethnicity

▶ Racial/ethnic disparity likely. See why ↓ ● Should not be compared with percentage of population. See why ↓

Ethnicity	Percentage of population	Percentage of cases	Percentage of deaths
Hispanic or Latino	26%	46% ▶	27%
Not Hispanic or Latino	74%	54%	73%

The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

Hospitalization and Mortality among Black Patients and White Patients with Covid-19

Eboni G. Price-Haywood, M.D., M.P.H., Jeffrey Burton, Ph.D., Daniel Fort, Ph.D., and Leonardo Seoane, M.D.

ABSTRACT

BACKGROUND

Many reports on coronavirus disease 2019 (Covid-19) have highlighted age- and sex-related differences in health outcomes. More information is needed about racial and ethnic differences in outcomes from Covid-19.

METHODS

In this retrospective cohort study, we analyzed data from patients seen within an integrated-delivery health system (Ochsner Health) in Louisiana between March 1 and April 11, 2020, who tested positive for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2, the virus that causes Covid-19) on qualitative polymerase-chain-reaction assay. The Ochsner Health population is 31% black non-Hispanic and 65% white non-Hispanic. The primary outcomes were hospitalization and in-hospital death.

RESULTS

A total of 3626 patients tested positive, of whom 145 were excluded (84 had missing data on race or ethnic group, 9 were Hispanic, and 52 were Asian or of another race or ethnic group). Of the 3481 Covid-19–positive patients included in our analyses, 60.0% were female, 70.4% were black non-Hispanic, and 29.6% were white non-Hispanic. Black patients had higher prevalences of obesity, diabetes, hypertension, and chronic kidney disease than white patients. A total of 39.7% of Covid-19–positive patients (1382 patients) were hospitalized, 76.9% of whom were black. In multivariable analyses, black race, increasing age, a higher score on the Charlson Comorbidity Index (indicating a greater burden of illness), public insurance (Medicare or Medicaid), residence in a low-income area, and obesity were associated with increased odds of hospital admission. Among the 326 patients who died from Covid-19, 70.6% were black. In adjusted time-to-event analyses, variables that were associated with higher in-hospital mortality were increasing age and presentation with an elevated respiratory rate; elevated levels of venous lactate, creatinine, or procalcitonin; or low platelet or lymphocyte counts. However, black race was not independently associated with higher mortality (hazard ratio for death vs. white race, 0.89; 95% confidence interval, 0.68 to 1.17).

CONCLUSIONS

In a large cohort in Louisiana, 76.9% of the patients who were hospitalized with Covid-19 and 70.6% of those who died were black, whereas blacks comprise only 31% of the Ochsner Health population. Black race was not associated with higher in-hospital mortality than white race, after adjustment for differences in socio-demographic and clinical characteristics on admission.

Table 1. (Continued)

Characteristic	White Non-Hispanic (N=1030)	Black Non-Hispanic (N=2451)
Location of testing — no. (%)		
Primary care	222 (21.6)	337 (13.7)
Urgent care	196 (19.0)	215 (8.8)
Emergency department	391 (38.0)	1601 (65.3)
Inpatient	27 (2.6)	77 (3.1)
Other or unknown service area	194 (18.8)	221 (9.0)

Table 2. Clinical Characteristics of 1382 Covid-19–Positive Patients Hospitalized between March 1 and April 11, 2020.*

Characteristic	White Non-Hispanic (N=319)	Black Non-Hispanic (N=1063)
Age — yr	69.2±16.6	60.5±14.8
Female sex — no. (%)	127 (39.8)	578 (54.4)
Charlson Comorbidity Index score	1.0±1.8	1.3±2.2
Insurance — no. (%)		
Commercial	89 (27.9)	417 (39.2)
Medicare	178 (55.8)	458 (43.1)
Medicaid	18 (5.6)	124 (11.7)
Self-pay or other	34 (10.7)	64 (6.0)
Residence in low-income area — no. (%)	108 (33.9)	643 (60.5)

JAMA Network Open

JAMA Network Open. 2020;3(6):e2012403. doi:10.1001/jamanetworkopen.2020.12403

Original Investigation | Health Policy

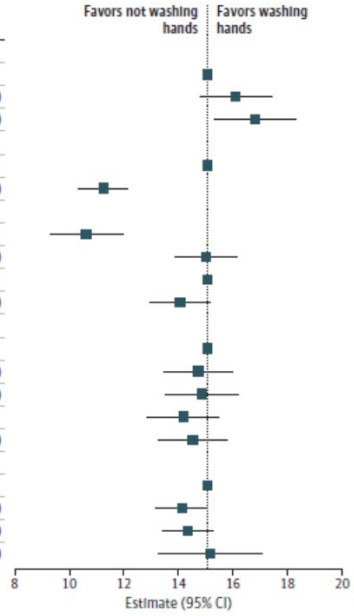
Disparities in Coronavirus 2019 Reported Incidence, Knowledge, and Behavior Among US Adults

Marcella Alsan, MD, MPH, PhD; Stefanie Stantcheva, PhD; David Yang, PhD; David Cutler, PhD

Figure 3. Factors Associated With Handwashing and Leaving the House

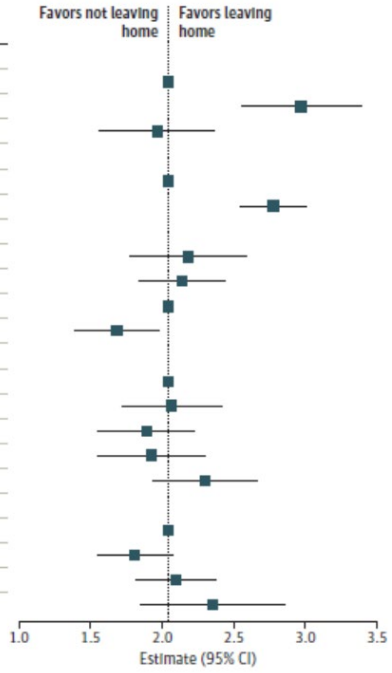
A Times washed hands in last 24 h

Factor	Estimate (95% CI)
Race/ethnicity	
White	15.0507 [Reference]
Black	16.0969 (14.8163 to 17.3775)
Hispanic	16.8147 (15.3337 to 18.2957)
Sex	
Female	15.0507 [Reference]
Male	11.2508 (10.4476 to 12.0541)
Age, y	
18-29	10.6261 (9.368 to 11.8843)
30-54	15.0176 (13.9014 to 16.1337)
55-64	15.0507 [Reference]
≥65	14.0587 (12.9573 to 15.1601)
Income, $	
<25 000	15.0507 [Reference]
25 000 to 49 999	14.7218 (13.4802 to 15.9634)
50 000 to 74 999	14.8622 (13.5215 to 16.2029)
75 000 to 99 999	14.1876 (12.9032 to 15.472)
≥100 000	14.5245 (13.2705 to 15.7785)
Political affiliation	
Independent or nonaffiliated	15.0507 [Reference]
Democrat	14.1264 (13.1763 to 15.0765)
Republican	14.3348 (13.3969 to 15.2727)
Hotspot	15.1723 (13.2648 to 17.0798)



B Times left home in last 3 d

Factor	Estimate (95% CI)
Race/ethnicity	
White	2.0403 [Reference]
Black	2.9709 (2.551 to 3.3909)
Hispanic	1.9664 (1.5658 to 2.367)
Sex	
Female	2.0403 [Reference]
Male	2.7754 (2.5406 to 3.0101)
Age, y	
18-29	2.1829 (1.7795 to 2.5863)
30-54	2.1359 (1.8391 to 2.4327)
55-64	2.0403 [Reference]
≥65	1.6828 (1.3861 to 1.9794)
Income, $	
<25 000	2.0403 [Reference]
25 000 to 49 999	2.0662 (1.7162 to 2.4162)
50 000 to 74 999	1.8884 (1.5526 to 2.2242)
75 000 to 99 999	1.9233 (1.5447 to 2.3019)
≥100 000	2.2973 (1.9338 to 2.6609)
Political affiliation	
Independent or nonaffiliated	2.0403 [Reference]
Democrat	1.8084 (1.544 to 2.0727)
Republican	2.0956 (1.8143 to 2.377)
Hotspot	2.3541 (1.8525 to 2.8557)



RESEARCH LETTER

SARS-CoV-2 Positivity Rate for Latinos in the Baltimore-Washington, DC Region

The black community has been disproportionally affected by the coronavirus disease 2019 (COVID-19) pandemic in the US.[1] Emerging data highlight sharp increases in cases within the Latino community.[1,2] We analyzed temporal trends in positivity rates for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the Baltimore-Washington, DC region by race/ethnicity.

Methods | Samples were collected between March 11, 2020, and May 25, 2020, from 5 hospitals, including emergency departments, and 30 outpatient clinics that are part of the Johns Hopkins Health System (JHHS). SARS-CoV-2 testing inclusion criteria broadened over time (ie, initially high-risk individuals only and then all symptomatic patients) as local capacity increased but was standardized across JHHS sites. Samples collected via nasopharyngeal swabs were analyzed using SARS-CoV-2 reverse transcriptase-polymerase chain reaction. Data on patient demographics, comorbidities, SARS-CoV-2 status, and hospitalization were extracted from the integrated electronic health record system.

Related articles

Patients self-identified race/ethnicity from fixed categories. Racial/ethnic groups were considered mutually exclusive; ie, Latinos were excluded from other groups (white, black, other) regardless of reported race. Those who self-reported American Indian, Alaska Native, Asian American, Native Hawaiian, Pacific Islander, or multiracial were grouped as "other."

Temporal trends in daily positivity rates (7-day moving average; number positive/number tested over the date and preceding 6 days) and testing volumes stratified by race/ethnicity were evaluated. Total rates of SARS-CoV-2 positivity, hospitalization, and categorical patient characteristics were compared between Latinos and each racial/ethnic group using the χ^2 test. Analysis of variance (ANOVA) was used to compare trends in positivity rates between groups. An omnibus ANOVA comparison with significance set at $P < .05$ was performed, followed by pairwise comparisons using the Latino group as reference, with correction for multiple comparisons (Tukey test). All analyses were performed with R version 3.6.2; a 2-sided $P < .05$ determined statistical significance. This work was deemed exempt by the Johns Hopkins Institutional Review Board, meeting criteria for quality improvement.

Results | A total of 6162 (16.3% [95% CI, 16.0%-16.7%]) of 37 727 patients tested positive for SARS-CoV-2. The positivity rate for Latino patients was 42.6% (95% CI, 41.1%-44.1%), significantly higher than the rate for white patients (8.8% [95% CI, 8.4%-9.2%]), black patients (17.6%; 95% CI, 16.6%-18.3%), or those of other race/ethnicity (17.2% [95% CI, 16.2%-18.3%]) ($P < .001$ for each pairwise comparison) (Table).

The daily positivity rate was higher for Latino patients than patients in the other racial/ethnic groups ($P < .001$ for each pairwise comparison, Figure, A). Moving average trends in positivity rate peaked later for Latino patients at 53.4% (95% CI, 49.6%-57.3%) on May 10, 2020, compared with white patients (16.1% [95% CI, 14.1%-18.3%]) on April 16, 2020, and black patients (29.6% [95% CI, 26.9%-32.6%]) on April 19, 2020. As testing volume increased over time for all racial/ethnic groups (Figure, B, C, D, and E), positivity rates declined (Figure, A).

Among those who tested positive, 2212 (35.9% [95% CI, 34.7%-37.1%]) patients were admitted to a JHHS hospital. The admission rate was lower for Latino patients (29.1% [95% CI, 27.0%-31.2%]) than for white patients (40.1% [95% CI, 37.6%-42.5%]) or black patients (41.7% [95% CI, 39.5%-43.8%]) ($P < .001$ for each pairwise comparison) (Table). Hospitalized Latino patients were younger (a greater proportion aged 18-44 years), more likely to be male, and had lower rates of hypertension, congestive heart failure, pulmonary disease, and chronic obstructive pulmonary disease than white or black patients ($P < .001$ for each pairwise comparison) (Table).

Discussion | More than 40% of Latinos in the Baltimore-Washington, DC metropolitan region who were tested for SARS-CoV-2 were positive, a much higher proportion than for any other racial/ethnic group. While SARS-CoV-2 testing inclusion criteria were standardized, differential access to testing may have contributed to higher rates of positivity; Latino patients have historically demonstrated lower rates of insurance and health care utilization.[3] However, an alternative explanation may be higher disease prevalence, with the spread of infection among Latinos driven by decreased opportunity for social distancing in the setting of dense housing and continued work engagement due to essential worker status and economic necessity.[1,4,5]

This study was limited to patients visiting JHHS, excluding those tested for SARS-CoV-2 elsewhere in the region. In addition, this study cannot determine whether differences in Latino patient SARS-CoV-2 positivity represent a higher disease prevalence, differences in access to health care (eg, reluctance in seeking care), or both.

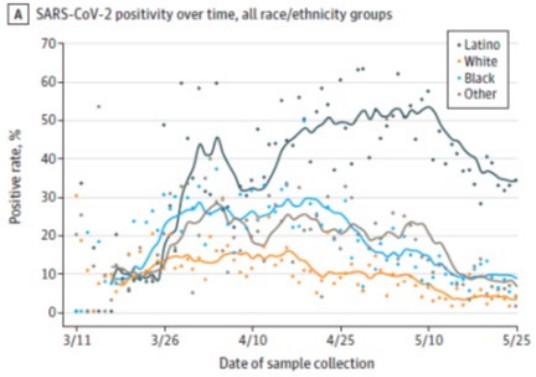
Addressing the unique needs of the Latino community may help mitigate the spread of SARS-CoV-2 infection and prevent COVID-19 disease.

Diego A. Martinez, PhD
Jeremiah S. Hinson, MD, PhD
Eili Y. Klein, PhD
Nathan A. Irvin, MD
Mustapha Saheed, MD
Kathleen R. Page, MD
Scott R. Levin, PhD

Table. Demographics of Patients Tested for SARS-CoV-2 at the Johns Hopkins Health System[a]

	Latino patients	White patients	*P* value[b]	Black patients	*P* value[b]	Patients of other race/ethnicity	*P* value[b]
Overall							
Tested, No.	4169	17 113		11 639		4806	
Positive, No.	1776	1508		2050		828	
% of tested (95% CI)	42.6 (41.1-44.1)	8.8 (8.4-9.2)	<.001	17.6 (16.6-18.3)	<.001	17.2 (16.2-18.3)	<.001
Female sex, No.	821	762		1100		424	
% of positive (95% CI)	46.2 (43.9-48.6)	50.5 (48.0-53.0)	.02	53.7 (51.5-55.8)	<.001	51.2 (47.8-54.6)	.02
Age, y							
<18, No.	97	25		44		26	
% of positive (95% CI)	5.5 (4.5-6.6)	1.7 (1.1-2.4)	<.001	2.1 (1.6-2.9)	<.001	3.1 (2.2-4.6)	.01
18-44, No.	1092	422		586		323	
% of positive (95% CI)	61.5 (59.2-63.7)	28.0 (25.8-30.3)	<.001	28.6 (26.7-30.6)	<.001	39.0 (35.7-42.4)	<.001
45-64, No.	487	443		855		243	
% of positive (95% CI)	27.4 (25.4-29.5)	29.4 (27.1-31.7)	.23	41.7 (39.6-43.9)	<.001	29.3 (26.3-32.5)	.33
65-74, No.	70	264		334		101	
% of positive (95% CI)	3.9 (3.1-5.0)	17.5 (15.7-19.5)	<.001	16.3 (14.8-18.0)	<.001	12.2 (10.1-14.6)	<.001
>74, No.	30	354		231		135	
% of positive (95% CI)	1.7 (1.2-2.4)	23.5 (21.4-25.7)	<.001	11.3 (10.0-12.7)	<.001	16.3 (13.9-19.0)	<.001
Admitted to the hospital							
Patients, No.	516	604		854		238	
% of positive (95% CI)	29.1 (27.0-31.2)	40.1 (37.6-42.5)	<.001	41.7 (39.5-43.8)	<.001	28.7 (25.8-31.9)	.91
Female sex, No.	181	274		385		115	
% of admitted (95% CI)	35.1 (31.1-39.3)	45.4 (41.4-49.4)	<.001	45.1 (41.8-48.4)	<.001	48.3 (42.0-54.6)	<.001

Figure. SARS-CoV-2 Positivity Rate by Racial/Ethnic Groups in the Baltimore-Washington, DC Region, March 11 to May 25, 2020



RESEARCH LETTER

Associations Between Built Environment, Neighborhood Socioeconomic Status, and SARS-CoV-2 Infection Among Pregnant Women in New York City

Ukachi N. Emeruwa, MD, MPH
Samsiya Ona, MD
Jeffrey L. Shaman, PhD
Amy Turitz, MD
Jason D. Wright, MD
Cynthia Gyamfi-Bannerman, MD, MSc
Alexander Melamed, MD, MPH

Author Affiliations: Department of Obstetrics and Gynecology, Columbia University College of Physicians and Surgeons, New York, New York (Emeruwa, Ona, Turitz, Wright, Gyamfi-Bannerman, Melamed); Department of Environmental Health Sciences, Columbia University Mailman School of Public Health, New York, New York (Shaman).

Corresponding Author: Alexander Melamed, MD, MPH, Division of Gynecologic Oncology, Vagelos College of Physicians and Surgeons, Columbia University, 161 Ft Washington Ave, New York, NY 10032 (am5195@cumc.columbia.edu).

Published Online: June 18, 2020. doi:10.1001/jama.2020.11370

Related articles

The built environment is associated with infectious disease dynamics, particularly in diseases transmitted by contact, aerosols, or droplets.[1,2] A recent study of the ongoing severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) epidemic in New York revealed significant differences in hospitalization and death rates among the city's boroughs, with the highest rates in Queens and the Bronx.[3] To our knowledge, no studies have investigated associations between the built environment, markers of neighborhood socioeconomic status, and SARS-CoV-2 transmission. We leveraged a universal testing program for SARS-CoV-2 in pregnant women to examine associations between these factors and SARS-CoV-2 prevalence.

Methods | We conducted a cross-sectional study of New York City residents delivering at NewYork-Presbyterian/Columbia University Irving Medical Center or Allen Hospital after implementation of universal SARS-CoV-2 nasopharyngeal quantitative reverse transcriptase–polymerase chain reaction testing at the time of admission to the labor and delivery unit from March 22 through April 21, 2020. We linked patients to demographic and socioeconomic data from the US Census Bureau's American Community Survey,[4] a national survey with detailed demographic, socioeconomic, and housing data, and to real estate tax data from New York's Department of City Planning.[5] We abstracted building-level variables, including number of residential units per building and mean assessed value (per square foot), and neighborhood-level variables, including median household income, poverty rate, unemployment rate, population density, household membership (persons per household), and household crowding (percentage of households with >1 person per room). Neighborhood was defined using New York City neighborhood tabulation areas, which divide the city into 195 districts, with at least 15 000 residents each.[4]

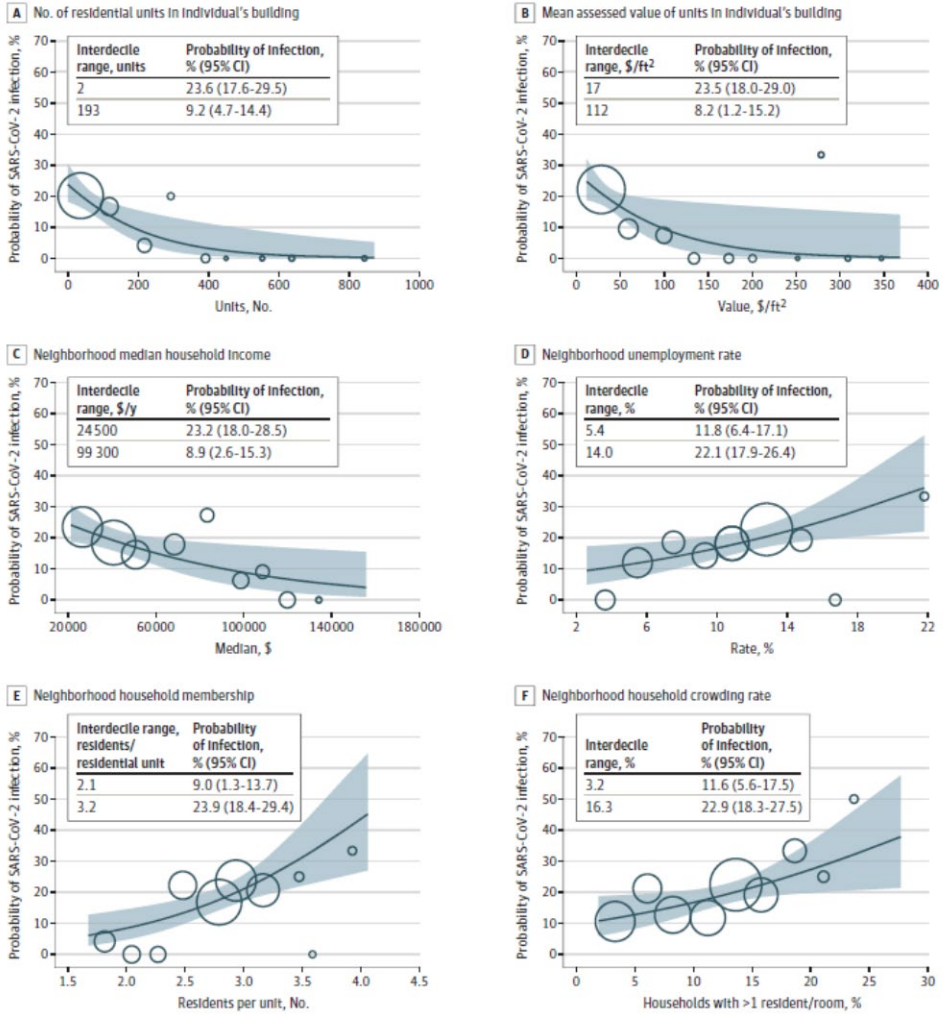
Results | We identified 434 New York City residents who were tested for SARS-CoV-2. Of the 396 patients (91%) linked to buildings and neighborhoods in the city, 71 (17.9%) were infected with SARS-CoV-2. Cohort characteristics are tabulated in the **Table**. The likelihood of SARS-CoV-2 varied substantially across measures of built environment and neighborhood socioeconomic status (**Figure**). The lowest probability of infection was estimated for women living in buildings with very high assessed values (8.2% [95% CI, 1.2%-15.2%]) and the highest was for those residing in neighborhoods with high household membership (23.9% [95% CI, 18.4%-29.4%]). Odds of infection were lower among women living in buildings with more residential units (interdecile OR, 0.34 [95% CI, 0.16-0.72]) and higher assessed values (interdecile OR, 0.29 [95% CI, 0.10-0.89]) and in neighborhoods with higher median incomes (interdecile OR, 0.32 [95% CI, 0.12-0.83]). Odds of infection were higher among women residing in neighborhoods with high unemployment rates (interdecile OR, 2.13 [95 CI, 1.18-3.83]), large household membership (interdecile OR, 3.16 [95% CI, 1.58-6.37]), and greater household crowding (interdecile OR, 2.27 [95% CI, 1.12-4.61]). There was no statistically significant association between SARS-CoV-2 infection and population density (interdecile OR, 0.70 [95% CI, 0.32-1.51]) or poverty rate (interdecile OR, 2.03 [95% CI, 0.97-4.25]).

Table. Cohort Characteristics

	SARS-CoV-2 status		
	Negative (n = 325)	Positive (n = 71)	*P* value
Maternal age, median (IQR), y	31.0 (27.0-35.0)	27.0 (24.0-32.0)	<.001[a]
Gestational age, median (IQR), wk	39.0 (38.1-39.7)	39.0 (37.4-39.7)	.63[a]
Gravidity (IQR)	2 (1-4)	2 (1-3)	.04[a]
Parity (IQR)	1 (0-1)	0 (0-1)	.37[a]
Hypertension, No. (%)[b]	26 (8.0)	7 (9.9)	.61[c]
Diabetes, No. (%)[b]	18 (5.5)	2 (2.8)	.34[c]

Abbreviations: IQR, interquartile range; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.
[a] *P* value based on linear regression with cluster robust standard errors.
[b] Both pregestational and gestational conditions included.
[c] *P* value based on logistic regression with cluster robust standard errors.

Figure. Built Environment and Neighborhood Socioeconomic Factors Associated With SARS-CoV-2 Infection Among Pregnant Women



BLACK MATERNAL HEALTH

Covid-19 Restrictions on Birth & Breastfeeding: Disproportionately Harming Black and Native Women

By: **Kimberly Seals Allers** | March 27, 2020

Observations
| Opinion

COVID-19 Is No Reason to Abandon Pregnant People

New rules prohibiting spouses or doulas during labor and delivery in many New York City hospitals are putting vulnerable populations at greater risk

By Monica R. McLemore on March 26, 2020

National Advocates for Pregnant Women
N A P W

National Advocates for Pregnant Women
What We Can Learn From Hospital Restrictions on Birth Support During the Coronavirus Pandemic

The coronavirus pandemic, and our country's lack of preparedness for it, give us an opportunity to make important observations and learn (or relearn) key lessons. Foundational issues including severe income inequality, lack of a national health care system, and corporatization of public goods and services are being exposed during this pandemic. Also exposed are the Trump Administration's totally inadequate, often misleading and counterproductive responses to the coronavirus that have put all of us at risk.

For example, as Dr. Anne-Marie Slaughter explained in a New York Times op-ed, South Korea mobilized health care companies to make coronavirus tests in late January, when the country had only four cases. Soon, 10,000 Koreans a day were being tested, and now new infections are dropping. The first cases in the United States were identified in January, too, and yet we still don't have enough tests.

COVID19, Women, Pregnancy and OUD: Opportunities for Positive Practice Change But also Increasing Latitude of Harm

Home- versus office-based
Observed versus unobserved BUP inductions

- Home-based unobserved BUP induction and office-based observed induction are equally effective (Home induction not inferior)
- In-person is not essential to initiate BUP for OUD
- COVID-19 Response: can initiate via telephone (in addition to HIPAA-approved telehealth platforms)
- Hence pandemic response is not inferior care

ELSEVIER

Journal of Substance Abuse Treatment 38 (2010) 153–159

Journal of Substance Abuse Treatment

Regular article

Home- versus office-based buprenorphine inductions for opioid-dependent patients

Nancy L. Sohler, (Ph.D., M.P.H.)[a,b,c,*], Xuan Li, (M.S.)[d], Hillary V. Kunins, (M.D., M.P.H., M.S.)[c,d], Galit Sacajiu, (M.D., M.P.H.)[c,d], Angela Giovanniello, (PharmD.)[c], Susan Whitley, (M.D.)[c], Chinazo O. Cunningham, (M.D., M.S.)[c,d]

[a]*Sophie Davis School of Biomedical Education, Community Health and Social Medicine, City College of the City University of New York, NY 10031, USA*
[b]*Montefiore Medical Center and the Albert Einstein College of Medicine, Department of Epidemiology and Population Health, Bronx, NY 10467, USA*
[c]*Montefiore Medical Center and the Albert Einstein College of Medicine, Department of Family and Social Medicine, Bronx, NY 10467, USA*
[d]*Montefiore Medical Center and the Albert Einstein College of Medicine, Division of General Internal Medicine, Bronx, NY 10467, USA*
[e]*Bellevue Hospital Center, Opioid Addiction Treatment Program, New York, NY 10016, USA*

Received 12 May 2009; received in revised form 31 July 2009; accepted 4 August 2009

Abstract

Recent legislation permits the treatment of opioid-dependent patie
the development of new treatment models for opioid dependence. W
patient self-management by giving patients the opportunity to choos
We examined whether patients who had home-based inductions achi
based inductions in a study of 115 opioid-dependent patients treated
(78.1%) in office-based group versus 40 (78.4%) in home-based
choosing office- versus home-based inductions, which likely infl
successfully managed in the primary care setting. Approaches that en
beneficial. © 2010 Elsevier Inc. All rights reserved.

Keywords: Buprenorphine treatment; Buprenorphine induction; Opioid depen

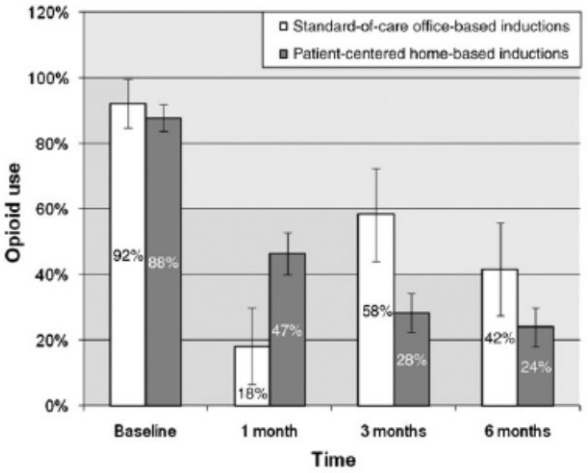


Fig. 1. Opioid use over time by induction strategy.

ELSEVIER

Journal of Substance Abuse Treatment 40 (2011) 349–356

Journal of Substance Abuse Treatment

Regular article

A comparison of buprenorphine induction strategies: Patient-centered home-based inductions versus standard-of-care office-based inductions

Chinazo O. Cunningham, (M.D., M.S.)[a,b,*], Angela Giovanniello, (Pharm.D.)[a,b], Xuan Li, (M.S.)[b], Hillary V. Kunins, (M.D., M.P.H., M.S.)[a,b], Robert J. Roose, (M.D., M.P.H.)[a,b], Nancy L. Sohler, (Ph.D., M.P.H.)[a,b,c]

[a]*Albert Einstein College of Medicine, Bronx, NY, 10461, USA*
[b]*Montefiore Medical Center, Bronx, NY, 10467, USA*
[c]*Sophie Davis School of Biomedical Education, City College of the City University of New York, NY 10027, USA*

Received 6 August 2010; received in revised form 9 December 2010; accepted 24 December 2010

Abstract

Although novel buprenorphine induction strategies are emerging, they have been inadequately studied. To examine our newly developed patient-centered home-based inductions, we conducted a subgroup analysis of 79 opioid-dependent individuals who had buprenorphine inductions at an urban community health center. Participants chose their induction strategy. Standard-of-care office-based inductions were physician driven, with multiple assessments, and observed, and the patient-centered home-based inductions emphasized patient self-management and included a "kit" for induction at home. We conducted interviews and extracted medical records. Using mixed nonlinear models, we examined associations between induction strategy and opioid use and any drug use. Compared with those with standard-of-care office-based inductions, participants with patient-centered home-based inductions had no significant differences in opioid use (adjusted odds ratio [AOR] = 0.63, 95% confidence interval [CI] = 0.13–2.97) but greater reductions in any drug use (AOR = 0.05, 95% CI = 0.01–0.37). Taking into account the limitations of our observational cohort study design, we conclude that participants with patient-centered home-based inductions had similar reductions in opioid use and greater reductions in any drug use than those with standard-of-care office-based inductions. It is essential that new induction strategies be based on existing models or theories and be well studied. © 2011 Elsevier Inc. All rights reserved.

Keywords: Buprenorphine; Buprenorphine induction; Opioid; Opioid addiction treatment; Drug use; Primary care

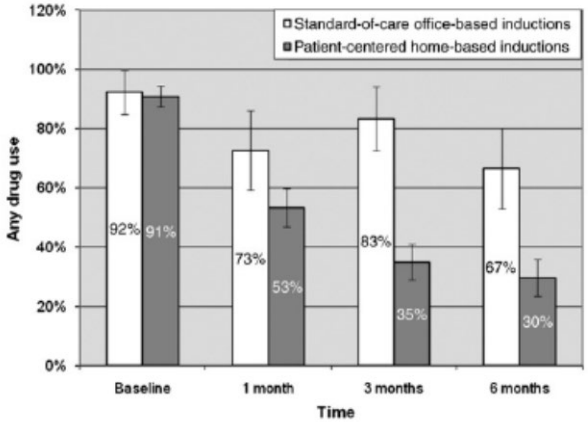


Fig. 2. Any drug use over time by induction strategy.

Remote Assessment for New Patients

- Establish Diagnosis (DSM-5)
- Review PMP
- History of recent drug use, withdrawal symptoms, etc
- Naloxone co-prescribing
- Consider symptomatic medications for withdrawal

- Drug testing (urine, saliva, etc) not essential
- Pregnancy test – not needed for medication initiation for OUD

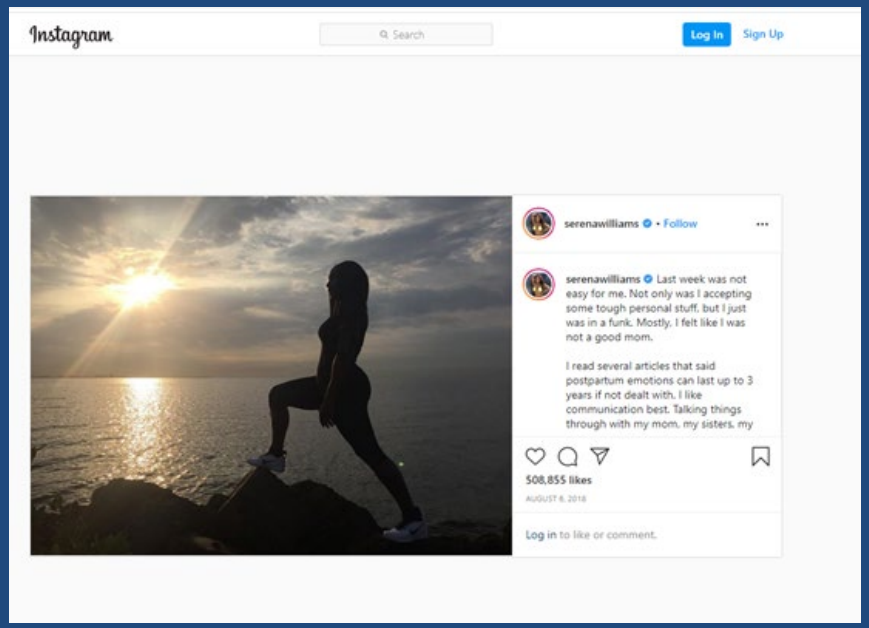
Urine Drug Testing: Opportunity for Positive Practice Change

- Increase in tele-services decrease urine drug testing
- Urine drug testing not recommended for assessment of substance use disorder in pregnancy
- Urine testing at time of delivery – problematic

- Addiction Medicine response to COVID-19: Opportunity to rethink role of urine drug testing in prenatal and addiction care

The 4th Trimester - Postpartum

- Critical Period
  - Newborn care, breastfeeding, maternal/infant bonding
  - Mood changes, sleep disturbances, physiologic changes
  - Cultural norms, “the ideal mother” in conflict with what it is actually like to have a newborn
  - Insurance and welfare realignment
- Neglected Period
  - Care shifts from frequent to infrequent
  - From Mom-focused (PNC provider) to Baby-focused (Pediatrician)
  - From “medical” to “social” (WIC)
  - Continuity of Care: Addiction Provider



Drug and Alcohol Dependence 149 (2015) 225–231

Contents lists available at ScienceDirect

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep

Medication assisted treatment discontinuation in pregnant and postpartum women with opioid use disorder

Christine Wilder[a,b,*], Daniel Lewis[a], Theresa Winhusen[a]

[a] Addiction Sciences Division, Department of Psychiatry and Behavioral Neuroscience, University of Cincinnati College of Medicine, 3131 Harvey Avenue, Cincinnati, OH 45229, USA

[b] Department of Veterans Affairs Medical Center, 3200 Vine Street, Cincinnati, OH 45220, USA

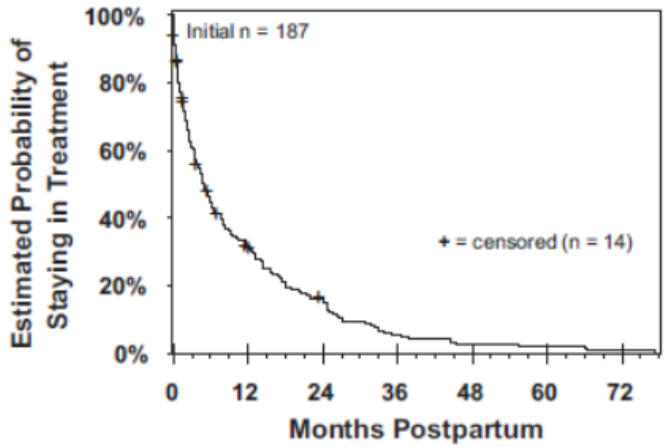


Fig. 1. Kaplan–Meier estimates for remaining in methadone treatment after pregnancy.

Table 1
Studies reporting treatment retention results for MAT in pregnant women.

	Location	Sample size	Mean age	Racial composition	Mean EGA (wks) at study entry[a]	MAT medication and dosage information	Discontinuation rates and other treatment attendance results
Randomized controlled trials							
Tuten et al. (2012)	Johns Hopkins Center for Addiction and Pregnancy, Baltimore, MD	n = 133	30.0	71.4% African American, 26.3% Caucasian, 2.3% Biracial	16.1	Methadone, mean dose at delivery = 81.3 mg	Overall: 23% (discontinuation prior to delivery)
Jones et al. (2010)	4 US cities, 2 US rural sites, and Vienna, Austria	n = 175 (methadone = 89, buprenorphine = 86)	28.9	83% Caucasian, 14% African American, 3% Other	18.7	Methadone (51%), mean dose at delivery = 82.9 mg Buprenorphine (49%), mean dose at delivery = 17.2 mg	Overall: 25% (discontinuation prior to delivery) Methadone group: 18% (n = 16) Buprenorphine group: 33% (n = 28)
Jones et al. (2005)	Johns Hopkins Center for Addiction and Pregnancy, Baltimore, MD	n = 30 (methadone = 15, buprenorphine = 15)	30	75% African American, 20% Caucasian, 5% Other	23.2	Methadone (50%), mean dose at delivery = 79.1 mg Buprenorphine (50%), mean dose at delivery = 18.7 mg	Overall: 33% (discontinuation prior to delivery) Methadone group: 27% (n = 4) Buprenorphine group 40% (n = 6)
Jones et al. (2001)		n = 85 (intervention = 47; control = 38)	28	76% African American	23.4	Methadone, mean dose = 42 mg	Overall: 6% (discontinuation within 14 days) Intervention group: 6.4% (n = 3) Control group: 5.3% (n = 2) Among individuals who did not drop out, the intervention group attended a mean of 12.1 days versus the control group which attended a mean of 10.6 days ($p < 0.05$)
Silverman et al. (2001)		n = 40 (intervention = 20, control = 20)	31.8	83% African American, 17% Caucasian	NR	Methadone, mean dose = 55.5 mg	Overall: 53% (discontinuation within 6 months) Intervention group: 45% Control group: 60% Mean treatment duration was 18.6 wks for intervention group and 15.1 wks for control group ($p = 0.17$)
Svikis et al. (1997)[b]		n = 66 randomized among 4 treatment groups[c]	28.3	80.3% African American	22.5	Methadone, dosing NR	MAT participants: 13.6% (discontinuation within 30 days)
Cohort studies							
Peles and Adelson (2006)	Tel Aviv, Israel	n = 45 pregnant women (out of total n = 470 for entire cohort)	31.5	78.3% Israeli, 21.7% Immigrant	NR	Methadone, mean dose at end of study period = 141.1	Pregnant women: 22.2% (discontinuation within 1 year; this was not significantly different from the dropout rate of non-pregnant women or of men)
McCarthy et al. (2005)	Sacramento, CA	n = 94	32	64% Caucasian, 25% Hispanic, 6% African American, 4% Asian, 1% Other	NR	Methadone, mean dose at delivery = 101 mg	Overall 4% (discontinuation prior to delivery) 2% had unavailable outcome information
Laken et al. (1997)[b]	Eleonore Hutzel Recovery Program, Detroit, MI	n = 40	29.7	88% African American	26.2	Methadone, dosing NR	24.4% attended 4–7 treatment visits; 23.2% attended 8–14, 25.6% attended 15–26, and 26.8% attended 27–96.
Laken and Ager (1996)[b]		n = 55	29.6	88% African American	26.1	Methadone, dosing NR	44.0% of participants attended no treatment visits; 18.8% attended 1–5 treatment visits; 17.8% attended 6–12 visits, and 20.4% attended 13–62 visits
DePetrillo and Rice (1995)	Location not identified	n = 45	29.3	78% Caucasian, 22% Latin or African American	10.6	Methadone, mean dose at delivery = 52 mg	Overall 0% (discontinuation prior to delivery)
Chappel and Senay (1973)	Special Treatment Unit, Illinois Drug Abuse Program, Chicago, IL	n = 11	NR	NR	NR	Methadone, dosing NR	Overall: 63.6% (discontinuation within 2 years)
Case control studies							
Crandall et al. (2004)	Hennepin Faculty Associates Addiction Medicine Program, Minneapolis, MN	n = 102 (pregnant cases = 51, non-pregnant controls = 51)	29.9	51% Caucasian, 45% African American, 4% Other	NR	Methadone, dosing NR	Pregnant women: 25.5% (discontinuation within 9 months) Average length of participation was 7.7 months out of a maximum of 9 months which was not significantly different from the control group of non-pregnant women
Observational studies							
Fitzsimons et al. (2007)	Johns Hopkins Center for Addiction and Pregnancy, Baltimore, MD	n = 106	30.6	78% African American, 22% Caucasian	14.7	Methadone, mean dose at treatment day 30 = 64 mg	Average number of days that counseling sessions were attended was 57 for individuals with co-occurring anxiety disorder versus 45 for individuals with either a co-occurring mood disorder or no co-occurring disorder, out of a maximum of 84 days ($p < 0.01$)
Fischer et al. (1998)	University of Vienna Drug Addiction Outpatient Clinic, Vienna, Austria	n = 98	NR	NR	20.1	Methadone (52%), mean dose at delivery = 45 mg Slow release methadone (35%), mean dose at delivery = 259.4 mg Buprenorphine (12%), mean dose at delivery = 6.6 mg	Overall: 0% (discontinuation prior to termination of pregnancy or delivery)

Opioids: *Original Research*

Fatal and Nonfatal Overdose Among Pregnant and Postpartum Women in Massachusetts

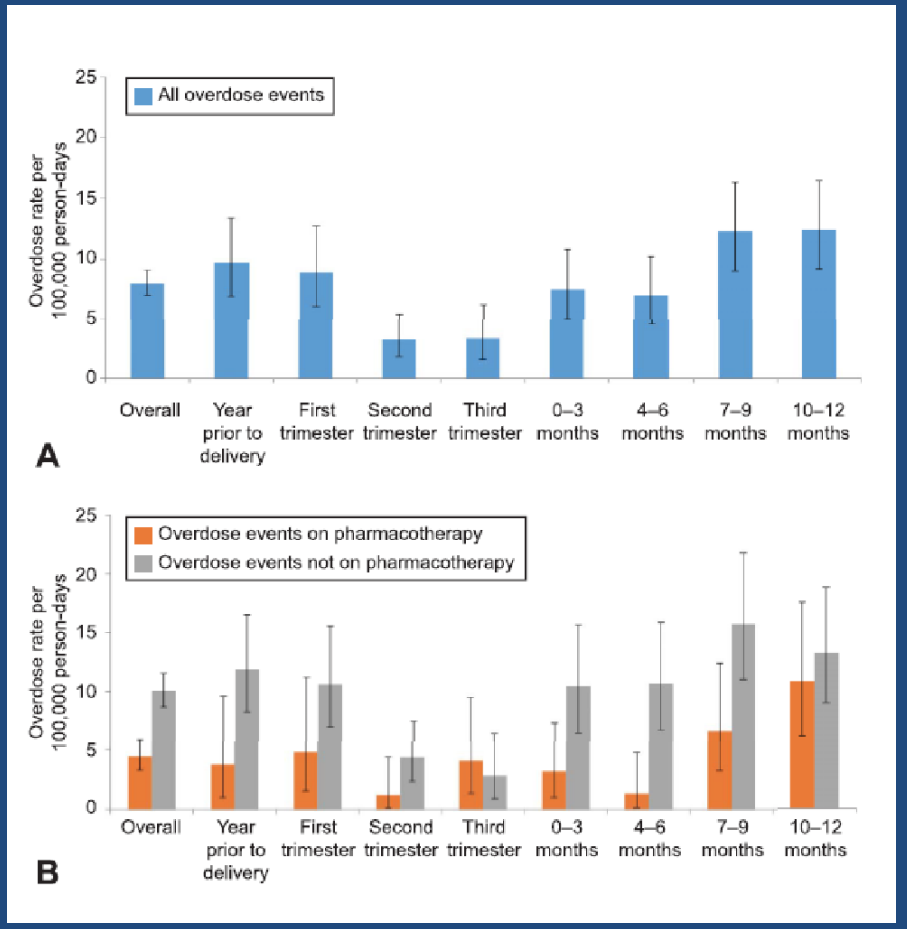
OBSTETRICS & GYNECOLOGY

Davida M. Schiff, MD, MSc, Timothy Nielsen, MPH, Mishka Terplan, MD, MPH, Malena Hood, MPH, Dana Bernson, MPH, Hafsatou Diop, MD, MPH, Monica Bharel, MD, MPH, Timothy E. Wilens, MD, Marc LaRochelle, MD, MPH, Alexander Y. Walley, MD, MSc, and Thomas Land, PhD

Table 2. Opioid Overdose Rates Among Pregnant and Parenting Women With Evidence of Opioid Use Disorder in the Year Before Delivery (n=4,154)

Period Relative to Delivery	All OD Events	OD Events While Receiving Pharmacotherapy	OD Events Not Receiving Pharmacotherapy
Overall	7.99 (7.01–9.06)	4.43 (3.28–5.86)*	10.04 (8.67–11.56)*
Year before delivery–conception	9.72 (6.91–13.29)	3.74 (1.02–9.57)	11.89 (8.28–16.54)
Trimester (weeks of gestation)			
1st (0–12)	8.88 (6.04–12.61)	4.79 (1.56–11.18)	10.63 (6.94–15.58)
2nd (13–28)	3.23 (1.81–5.32)	1.20 (0.15–4.35)	4.35 (2.32–7.44)
3rd (29 or greater)	3.32 (1.59–6.10)†	4.08 (1.32–9.51)	2.80 (0.91–6.53)
Postpartum (mo)			
0–3	7.41 (4.92–10.71)	3.17 (1.03–7.41)	10.44 (6.62–15.67)
4–6	6.89 (4.50–10.10)	1.31 (0.16–4.74)*	10.67 (6.84–15.88)*
7–9	12.2 (8.93–16.28)†	6.74 (3.23–12.40)	15.75 (11.03–21.80)
10–12	12.35 (9.07–16.42)†	10.84 (6.20–17.60)	13.3 (9.04–18.88)

OD, opioid overdose.
Data are rate/100,000 person-days (95% CI).
* Denotes statistically significant difference between overdose rates among women receiving pharmacotherapy vs women not receiving pharmacotherapy.
† Denotes statistically significant difference between overall overdose rates during third trimester and 7–12 months postpartum.



Postpartum Issues

- Breast Feeding:
  - Attachment and NAS management (ESC)
  - vs
  - COVID-19 hospital policies

- Contraception:
  - Sterilization at time of delivery
  - Postpartum LARC

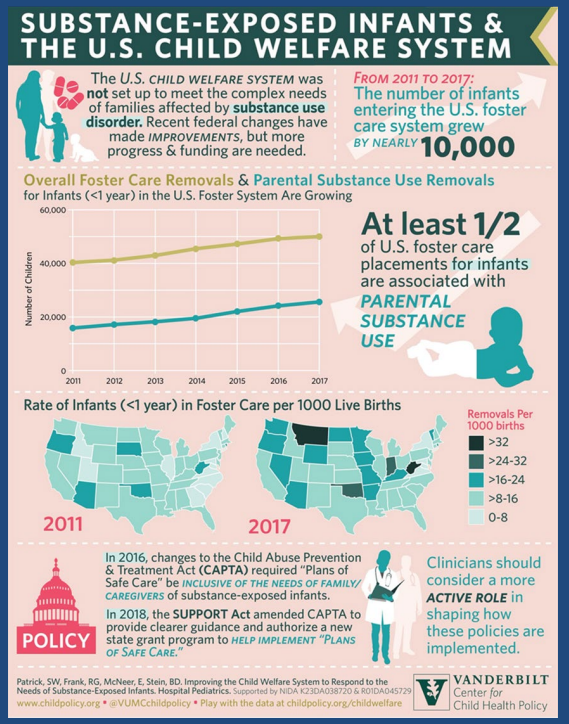
- Medication and addiction treatment continuation
  Telehealth for Postpartum Visits

Concerning Trends: Child Welfare

- Opioid Crisis and Foster Care Epidemic
- Racial Inequities Along Child Welfare Continuum

- COVID-19 Response:
  - Delay in Family Court Hearings
  - Denial of Visitation for Parents
  - Insistence on Tele-visits for Newborns (!)

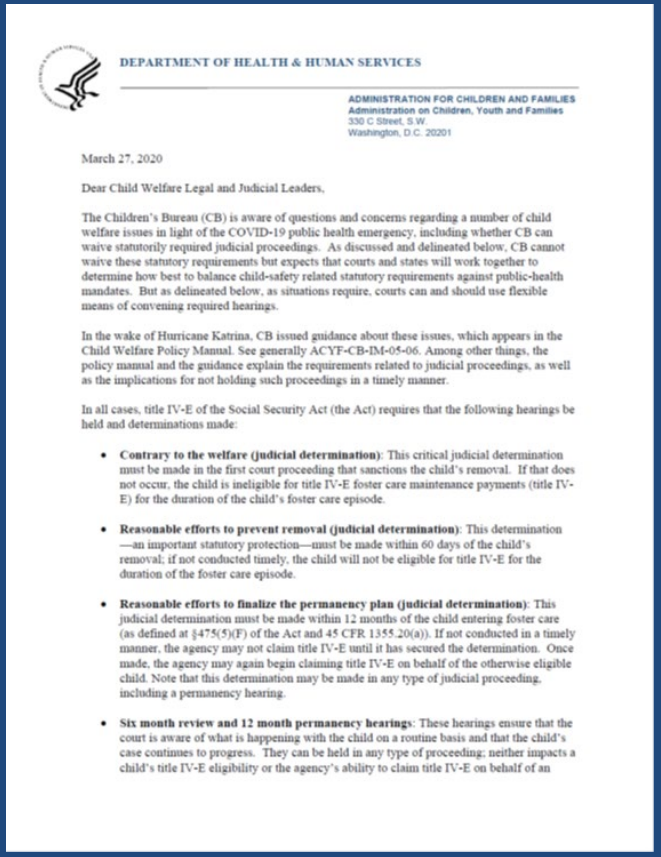
  - In context of continued increase in reporting and removals



Concerning Trends: Child Welfare

- Children's Bureau Response:

- Refrain from making sweeping, blanket orders ceasing, suspending, or postponing court hearings;
- Ensure that important decisions about when and how hearings are conducted are made on a case-by-case basis in accordance with the facts of each individual matter;
- Encourage attorneys to file written motions raising issues of immediate concern;
- Make maximum use of technology to ensure due process where in-person hearings are not possible or appropriate;
- Ensure parents and youth have access to technology such as cell phones, tablets, or computers with internet access to participate in hearings or reviews and maintain important familial connections;
- Consider utilizing CIP funds to support and enhance virtual participation for parents, children, youth, and their attorneys in hearings and reviews; and
- Encourage attorneys to resolve agreed-upon issues via stipulated orders. For example, if all parties agreed that a child in foster care can be reunified with his/her family immediately, that issue should be resolved via a stipulated order, rather than waiting weeks or months for an in-person court hearing.



DEPARTMENT OF HEALTH & HUMAN SERVICES

ADMINISTRATION FOR CHILDREN AND FAMILIES
Administration on Children, Youth and Families
330 C Street, S.W.
Washington, D.C. 20201

March 27, 2020

Dear Child Welfare Legal and Judicial Leaders,

The Children's Bureau (CB) is aware of questions and concerns regarding a number of child welfare issues in light of the COVID-19 public health emergency, including whether CB can waive statutorily required judicial proceedings. As discussed and delineated below, CB cannot waive these statutory requirements but expects that courts and states will work together to determine how best to balance child-safety related statutory requirements against public-health mandates. But as delineated below, as situations require, courts can and should use flexible means of convening required hearings.

In the wake of Hurricane Katrina, CB issued guidance about these issues, which appears in the Child Welfare Policy Manual. See generally ACYF-CB-IM-05-06. Among other things, the policy manual and the guidance explain the requirements related to judicial proceedings, as well as the implications for not holding such proceedings in a timely manner.

In all cases, title IV-E of the Social Security Act (the Act) requires that the following hearings be held and determinations made:

- **Contrary to the welfare (judicial determination)**: This critical judicial determination must be made in the first court proceeding that sanctions the child's removal. If that does not occur, the child is ineligible for title IV-E foster care maintenance payments (title IV-E) for the duration of the child's foster care episode.
- **Reasonable efforts to prevent removal (judicial determination)**: This determination —an important statutory protection—must be made within 60 days of the child's removal; if not conducted timely, the child will not be eligible for title IV-E for the duration of the foster care episode.
- **Reasonable efforts to finalize the permanency plan (judicial determination)**: This judicial determination must be made within 12 months of the child entering foster care (as defined at §475(5)(F) of the Act and 45 CFR 1355.20(a)). If not conducted in a timely manner, the agency may not claim title IV-E until it has secured the determination. Once made, the agency may again begin claiming title IV-E on behalf of the otherwise eligible child. Note that this determination may be made in any type of judicial proceeding, including a permanency hearing.
- **Six month review and 12 month permanency hearings**: These hearings ensure that the court is aware of what is happening with the child on a routine basis and that the child's case continues to progress. They can be held in any type of proceeding; neither impacts a child's title IV-E eligibility or the agency's ability to claim title IV-E on behalf of an

Concerning Trends: Overdose

CPDD Scientific Virtual Meeting

A New Surge in Opioid-Related Overdoses in the Emergency Department During COVID-19

Submission ID 3002091

Submission Type Late-Breaking Abstract

Topic Human

Status Submitted

Submitter Taylor Ochalek

Affiliation Virginia Commonwealth University

SUBMISSION DETAILS

Select Drug Category Opiates/Opioids

Topic Substance Use Disorder

Name of Sponsor F. Gerard Moeller

Abstract Category Original Research

Aim: Individuals with opioid use disorder (OUD) may be more susceptible to SARS-COv-2 infection and may also be disproportionately burdened by the health and societal consequences associated with COVID-19, such as increased unemployment rates and worsened mental health symptoms. These pandemic-related costs may place individuals at a heightened likelihood of using illicit opioids and experiencing an opioid-related overdose (OD). Using real-time monitoring, we characterized the amount of unintentional opioid ODs in an urban emergency department (ED) in Richmond, Virginia during COVID-19.

Methods: Data on the number of overdoses from 2019 to April 2020 were obtained from twice daily reports generated by a machine learning algorithm that identifies potential opioid overdoses from patients' electronic medical records based on the following chief complaint terms: "OD," "overdose," "opioid," "heroin," "fentanyl," "AMS," and "altered mental status." Intentional ODs and non-opioid-related ODs were excluded.

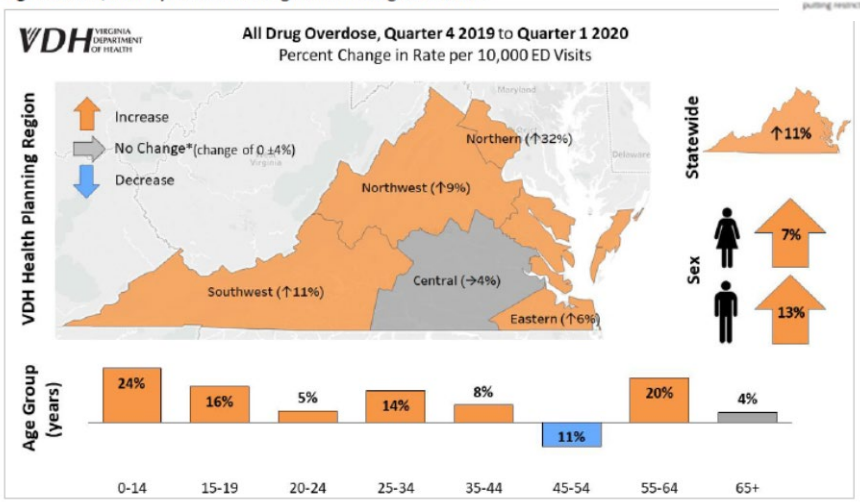
Results: Opioid-related overdoses increased from an average of 6 per month in 2019 to 50 and 57 in March and April 2020, translating to 721% and 836% increases, respectively. OD visits also increased substantially from February to March and April. During COVID-19, there has been a consistently greater frequency of days with OD visits, with at least one OD reported on 74% and 90% of days in March and April compared to only 10% and 24% of days in January and February of this year, respectively. Data from May 2020 and statistical analyses will be available for presentation at the June 2020 meeting.

Conclusions: We have observed an increasing trend of opioid-related OD visits in our local ED during COVID-19 via real-time monitoring. Given this, efforts are needed to examine the effects of the pandemic on the opioid crisis and to improve ED-initiated treatment and public health interventions to reduce the potential downstream effects of COVID-19 on exacerbating the opioid epidemic.

Financial Support NIDA T32 DA7027-44, UL1TR002649, U54DA038999

Emergency Department Visits for All Drug Overdose among Virginia Residents

Figure 1A. Quarterly Percent Change for All Drug Overdose.



What can community partners do?

- Help get people into treatment and recovery
  - Substance use, misuse and addiction assessment
- Support medication for OUD
  - Remote Initiation of Medication for OUD
  - Disseminate provider support information (UCSF Warmline)
- Support Breastfeeding
  - Disseminate PPE to make breastfeeding safer

What can community partners do?

- Naloxone
  - Co-prescribe / distribute
- Support Postpartum Care
  - Consider telehealth
- Support Wellness
  - Recognize behavioral health consequences of COVID19 response

What can community partners do?

- Resist Policies of Isolation and Separation
- Don’t Educate – Center on women who use drugs
  - Person-Centered Care
  - Humility and Open-ended Questions
- Recognize Opportunities and Guard Against Unintended Consequences

Thank You

Mishka Terplan @do_less_harm Mishka.Terplan@ucsf.edu

CLINICIAN CONSULTATION CENTER

National rapid response for HIV management and bloodborne pathogen exposures.

Substance Use Warmline

Peer-to-Peer Consultation and Decision Support

10 am – 6 pm EST Monday - Friday

855-300-3595

Free and confidential consultation for clinicians from the Clinician Consultation Center at San Francisco General Hospital focusing on substance use in primary care

Q & A

If you have a question, please enter it in the Question box or Raise your hand to be un-muted.

We can only unmute you if you have dialed your Audio PIN (shown on the GoToWebinar side bar).

Please complete the survey after exiting this webinar!