



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Coronavirus disease 2019 impact on abortion care at a Northern California tertiary family planning program



OBJECTIVE: This study aimed to assess surgical abortion procedures at a Northern California tertiary referral center during the early outbreak (February 2020), the initial surge (March to April 2020), and decline (May 2020) of the coronavirus disease 2019 (COVID-19) pandemic.

STUDY DESIGN: We accessed a deidentified database that contained patient referral information to extract data by month for February to May in the years 2017 to 2020. We evaluated referring provider or self-referral, procedure indication, gestational age on the procedure day, and COVID test results, when available. We used R (R Core Team, 2020, Vienna, Austria) to calculate Poisson prediction intervals for each month, based on values from 2017 to 2019, to assess whether the monthly 2020 values were significantly different from expected (ie, outside the 95% prediction interval) based on source, referral indication, and gestational age (at 15- and 20-week cutoffs). No institutional abortion access- or provision-related changes occurred during the years evaluated. Our institution did not suggest routine COVID-19 testing for preoperative patients

until April 2, 2020, and required testing as of April 13, 2020. The University of California, Davis Institutional Review Board determined this evaluation as exempt.

RESULTS: For the months of February to May, our service received 355, 434, 507, and 555 surgical abortion referrals in the years 2017, 2018, 2019, and 2020, respectively. During these years, we performed 163 (46% of referrals), 203 (47%), 169 (33%), and 235 procedures (42%). The number of referrals and procedures performed fluctuated from month to month and year to year, with an increase in referrals in February and March 2020 compared with previous years, correlating with an increase in the number of procedures in March and April 2020 of 35% to 52% compared with the previous 3 years (Table). Based on Poisson prediction intervals, the number of procedures in February and May was within the expected range, but March and April represented a significant increase. Most of the procedures we performed were referred from community clinics, and these clinics accounted primarily for the increase in the number of procedures. We identified no significant increase

TABLE

Surgical abortion referrals and procedures in February to May 2020 compared with previous years at a Northern California tertiary referral center

	2017	2018	2019	2020	Poisson prediction intervals		
					Mean (2017–2019)	Variance (2017–2019)	Bounds ^a
Surgical referrals							
February	68	118	117	163	101.0	187.0	79, 125
March	93	100	111	157	101.3	82.3	79, 126
April	83	110	137	124	110.0	729.0	87, 135
May	111	106	142	111	119.67	380.3	65, 146
Total	355	434	507	555			
Surgical procedures							
February	39	49	40	51	42.7	30.3	28, 59
March	46	49	39	62	44.7	26.3	30, 61
April	39	49	49	65	45.7	33.3	31, 63
May	39	56	41	57	45.3	86.3	30, 62
Total	163	203	169	235			
Procedures as percentage of referrals	45.9%	46.8%	33.3%	42.3%			

^a A value in 2020 outside the bounds indicates statistical significance (unexpected value).

Creinin. Coronavirus disease 2019 impact on abortion care at a Northern California. *Am J Obstet Gynecol* 2021.

in procedures for any month of 2020 compared with previous years based on referral source. We identified significant increases in March by indication (patient choice only [40 vs mean 25 for 2017–2019] and not for pregnancy loss or anomaly). Procedure volume increased significantly in gestations of 15 weeks or more in March and April 2020 (mean 60 in 2017–2019 vs 97 in 2020; 61% increase), mainly from procedures at 20 weeks or more (mean 26 compared with 63, respectively; 145% increase). Of 105 patients (all in April and May) who had COVID-19 testing, none had a positive result.

CONCLUSION: During the initial COVID-19 surge, our Northern California tertiary reproductive health referral center experienced a significant increase in abortion referrals in February and March 2020, correlating with a significant overall increase in procedures during March and April 2020, the initial peak months of COVID-19 cases in the United States. These data come from a region with relatively low COVID-19 infection rates during the months analyzed; it is possible that service availability in areas with higher infection burden was affected differently. The increase in referrals and procedures during the initial surge of this pandemic may just be an extreme of the normal variations we experience from month to month and year to year; we will not be able to discern this limitation until we have data for another 1 to 2 years. At a minimum, for now, we can conclude that the need for tertiary-level abortion care does not decline during the pandemic. Legislation aimed at restricting abortion access during the pandemic are contrary to patient need. ■

Mitchell D. Creinin, MD
Department of Obstetrics and Gynecology
University of California, Davis
4860 Y St., Suite 2500
Sacramento, CA 95817
University of California, Davis School of Medicine
Sacramento, CA
mdcreinin@ucdavis.edu

Hailee Tougas, BA, BS
University of California, Davis School of Medicine
Sacramento, CA

Machelle Wilson, PhD
Division of Biostatistics
Department of Public Health Sciences
University of California, Davis School of Medicine
Sacramento, CA

Melissa C. Matulich, MD, MAS
Department of Obstetrics and Gynecology
University of California, Davis
Sacramento, CA
University of California, Davis School of Medicine
Sacramento, CA

The authors report no conflict of interest.

The project described was supported by the National Center for Advancing Translational Sciences, National Institutes of Health (NIH), through grant number UL1 TR001860 and the National Institute of Environmental Health Sciences, through grant number NIEHS ES023513. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.

© 2021 Elsevier Inc. All rights reserved. <https://doi.org/10.1016/j.ajog.2021.03.007>

Prioritization of pregnant individuals in state plans for coronavirus disease 2019 vaccination



OBJECTIVE: The US Centers for Disease Control and Prevention (CDC) considers pregnant people to be at high-risk for severe disease and death from coronavirus disease 2019 (COVID-19), and the Advisory Committee on Immunization Practices (ACIP) recommends that pregnant individuals should be prioritized for vaccination in Phase 1c of vaccine allocation.¹ However, various state vaccination plans have not been uniform in the adoption of the ACIP priority group recommendations. Prior research found 15 states included pregnancy among other COVID-19 priority groups,² but planning has been highly dynamic in recent weeks. The objectives of this study were to determine how many states prioritize pregnant individuals for COVID-19 vaccination and assess the current eligibility of pregnant people to receive COVID-19 vaccinations across the United States.

STUDY DESIGN: We searched for information about the priority groups for COVID-19 vaccinations from all 50 states

in the United States and the District of Columbia on March 6, 2021. Our analysis included information from official government websites. This study did not require institutional review board approval because it examined data from publicly available sources and used no patient information.

RESULTS: As of March 6, 2021, most states (36 of 51; 73%) classified pregnant individuals as a priority group for COVID-19 vaccination; in just under 50% of the states (24 of 51), pregnant people are currently eligible for vaccination (Table). The 36 states prioritizing pregnancy encompass 76% of the US population. Of these states, 23 refer to the CDC's classification of pregnant people as being at an elevated risk for severe COVID-19 illness. Several states (9 of 51; 18%) prioritize groups at elevated risk for severe COVID-19 illness because of preexisting health conditions but have not specifically enumerated pregnant people as a priority group. Four states have designed their prioritization plan around an