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3. Lu MC. Reducing maternal mortality in the United States. *JAMA* 2018;320:1237–8.

acog.org/advocacy/policy-priorities/maternal-mortality-prevention. Accessed January 23, 2021.

4. American College of Obstetricians and Gynecologists. Policy priorities - maternal mortality prevention. 2020. Available at: <https://www.acog.org/advocacy/policy-priorities/maternal-mortality-prevention>.

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Serial surveillance for SARS-CoV-2 in hospitalized antepartum women



OBJECTIVE: During New York City's (NYC) first wave of COVID-19 in the spring of 2020, NewYork-Presbyterian Hospital/Columbia University Irving Medical Center instituted universal SARS-CoV-2 testing for all admitted pregnant women.¹ No visitors were permitted on the antepartum unit during the peak of the pandemic. As local infection rates decreased, 1 support person was allowed for each patient. During NYC's second COVID-19 wave, which began in October 2020, the 1-support-person policy was maintained. Owing to concerns that hospitalized pregnant women could be within the SARS-CoV-2 14-day incubation period on admission or could become infected by asymptomatic support persons, polymerase chain reaction (PCR) testing for SARS-CoV-2 via nasopharyngeal swabs was obtained every 5 days for all women at >23 weeks' gestation who had prolonged hospitalizations for obstetrical indications. In this letter, we report the outcomes of repeat testing.

STUDY DESIGN: From November 23, 2020, to March 3, 2021, results of all SARS-CoV-2 PCR swabs sent from the antepartum unit were collected. Serial testing was only performed for patients whose admission test was negative and who could require urgent delivery, because an unrecognized SARS-CoV-2 infection could have considerable anesthetic and neonatal

implications. Results were evaluated in the context of the local 7-day positivity rate for our hospital's ZIP code (10032). Our visitor policy is presented in the [Table](#).

RESULTS: A total of 169 swabs were performed on 72 patients. None of these patients became SARS-CoV-2 positive during their hospitalization. Patients were retested an average of 2.34 times (range, 1–13). The 7-day positivity rate for our hospital's zip code was 5.3% on November 28, 2020 and peaked at 10.2% on January 8, 2020. These rates were higher than the overall positivity rate for Manhattan and all of NYC during the same time.²

CONCLUSION: Despite allowing visitors to the antepartum unit during a time of high local positivity rate for SARS-CoV-2, hospitalized pregnant women did not become infected. This may reflect the effectiveness of visitor screening for COVID-19 symptoms upon presenting to the hospital, the self-monitoring of symptoms by our patients' family members, the enforcement of universal masking of patients and visitors, social distancing, and hand hygiene. This testing practice, intended to promote safety, proved to be costly in terms of testing resources and staff workload without adding clear benefit. In addition, several women refused repeat testing owing to discomfort. Similar findings

TABLE

Visitation guidelines for obstetrical units at NewYork-Presbyterian Hospital/Columbia University Irving Medical Center

- Support persons must be 18 y or older.
- One designated support person is selected by patient and, when possible, remains the same person throughout the admission.
- Upon arrival, support persons undergo temperature and symptom screening, screening for COVID-19 illness within the past 10 d, COVID-19 exposure within the past 14 d, and relevant travel history as per New York State Department of Health restrictions.
- Sick visitors are not permitted to enter the hospital.
- Upon arrival, support persons perform hand hygiene and must wear a surgical mask throughout their visit. If cloth masks are used, they must be worn over a surgical mask.
- Support persons must remain at the patient's bedside throughout their visit.
- Visitation h for obstetrical patients are 24 h a day.

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were noted in a larger nonobstetrical patient population. Serial SARS-CoV-2 testing was performed every 5 days in 4580 hospitalized patients in a large tertiary care center, and 96.9% had negative results.³ Only 1% converted from a negative to a positive test during admission. We plan to continue to test all admitted pregnant women for SARS-CoV-2 and to perform a second test on hospital day 5, in case a patient is admitted during the incubation period for SARS-CoV-2. Subsequent testing for SARS-CoV-2 will be performed for patients with signs, symptoms, or exposure or in anticipation of delivery. We hope our experience will be useful to other institutions faced with similar challenges. ■

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REFERENCES

1. Breslin N, Baptiste C, Gyamfi-Bannerman C, et al. Coronavirus disease 2019 infection among asymptomatic and symptomatic pregnant women: two weeks of confirmed presentations to an affiliated pair of New York City hospitals. *Am J Obstet Gynecol MFM* 2020;2:100118.
2. NYC Health. COVID-19 data. 2021. Available at: <https://www1.nyc.gov/site/doh/covid/covid-19-data.page>. Accessed March 26, 2021.
3. Kobayashi T, Trannel A, Holley SA, et al. COVID-19 serial testing among hospitalized patients in a midwest tertiary medical center, July-September 2020. *Clin Infect Dis* 2020. [Epub ahead of print].

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Neonatal intensive care unit admission is associated with lower breastfeeding in late preterm infants



OBJECTIVE: Breastfeeding is associated with maternal and infant medical benefits.¹ Infants who deliver during the late preterm period (34+0 to 36+6 weeks' gestational age) represent more than 70% of preterm births and have increased morbidity in comparison with term infants.² The role of neonatal intensive care unit (NICU) admission in the decreased breastfeeding rate among these infants is not fully characterized, and previous studies have yielded conflicting results.^{3,4} In this study, we examine the effect of NICU admission on initiating breastfeeding by hospital discharge among late preterm infants.

STUDY DESIGN: This is a secondary analysis of live births between 34+0 and 36+6 weeks in the Maternal-Fetal Medicine Unit Antenatal Betamethasone for Women at Risk for Late Preterm Delivery (ALPS) study, a randomized controlled trial of antenatal corticosteroid use in the late preterm period.⁵ The study was deemed exempt by the

University of Chicago Institutional Review Board (IRB20-1225). Statistical analyses were completed using Stata release 15.1 (StataCorp LLC, College Station, TX). The primary outcome of any breastfeeding by neonatal hospital discharge was compared by infant NICU admission status. Secondary outcomes included presence of breastfeeding problems, median hours to first oral feed of any type, and breastfeeding rates by respiratory morbidity. Bivariable comparisons were analyzed using chi-square test and Wilcoxon rank sum test as appropriate. Logistic regression was used to adjust for confounders. Analysis was repeated among infants who were fed within the first hour of life.

RESULTS: A total of 2329 mother-infant dyads were included in the study sample. Mothers whose infants were admitted to the NICU were older, more likely to be nulliparous, less likely to be of Hispanic ethnicity or Black race, less likely to have public insurance, and more likely to have preeclampsia with severe