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% (I2/782) 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.

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.

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