

# Association between SARS-CoV-2 Infections during Pregnancy and Preterm Live Birth

Sarita Mohanty<sup>1</sup>, Alan Tita<sup>2</sup>, Michael Varner<sup>3</sup>, Melissa Stockwell<sup>4</sup>, Gabriella Newes-Adeyi<sup>5</sup>, Ashley Battarbee<sup>2</sup>, Lawrence Reichle<sup>5</sup>, Tyler Morrill<sup>5</sup>, Michael Daugherty<sup>1</sup>, Mirella Mourad<sup>4</sup>, Raul Silverio Francisco<sup>4</sup>, Kate Woodworth<sup>1</sup>, Kristina Wielgosz<sup>1</sup>, Romeo Galang<sup>1</sup>, Pete Maniatis<sup>1</sup>, Vera Semenova<sup>1</sup>, and Fatimah Dawood<sup>1</sup>

<sup>1</sup>Centers for Disease Control and Prevention

<sup>2</sup>UAB School of Medicine

<sup>3</sup>The University of Utah Health Sciences Center

<sup>4</sup>Columbia University Medical Center

<sup>5</sup>ABT Associates Inc

March 10, 2023

## Abstract

We examined associations between mild or asymptomatic prenatal SARS-CoV-2 infection and preterm live birth in a prospective cohort study. During August 2020–October 2021, pregnant persons were followed with systematic surveillance for RT-PCR or serologically-confirmed SARS-CoV-2 infection until pregnancy end. The association between prenatal SARS-CoV-2 infection and preterm birth was assessed using Cox proportional-hazards regression. Among 954 pregnant persons with a live birth, 185 (19%) had prenatal SARS-CoV-2 infection and 123 (13%) had preterm birth. The adjusted hazard ratio for the association between SARS-CoV-2 infection and preterm birth was 1.28 (95% confidence interval 0.82-1.99,  $p=0.28$ ), although results did not reach statistical significance.

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