## DETAILED AUTHOR CONTRIBUTION STATEMENTS

## Listed alphabetically by surname

Saharai Caldera (SC)- Study coordinator; recruited, enrolled and maintained study participants with NS, JAR, HD and NWS; study-data quality control; validated data provided by participants in study instruments.

Hannah Davich (HD)- Lead study coordinator; recruited, enrolled and maintained study participants with NS, JAR, SC and NWS; developed recruitment strategies and did outreach with NS; study-data quality control; validated data provided by participants in study instruments; Compiled data from screening with NS for use in Fig 1B. Compiled data for household size and density metrics.

Matthew Feaster (MF)- Co-investigator; contributed to overall study design and recruitment strategies; provided guidance and expertise on SARS-CoV-2 epidemiology and local trends. Contributed to design of biostatistical analysis, particularly conceptualization of causal model represented in Fig 1C and parameterization/coding of covariables. Technical guidance on analysis method and interpretation. Reviewed manuscript.

Ying-Ying Goh (YYG)- Co-investigator; contributed to overall study design and recruitment strategies; provided guidance and expertise on SARS-CoV-2 epidemiology and local trends.

Rustem F. Ismagilov (RFI)- Principal investigator; provided leadership, technical guidance, oversight of all analyses, and was responsible for obtaining the primary funding for the study.

Jenny Ji (JJ)- Conceptualization of study with AVW and RFI. Performed extensive literature search on household transmission and co-wrote enrollment questionnaire with AW and NS. Data curation. Performed preliminary analyses. Coded and cleaned data from participant questionnaires. Validated underlying data. Parameterization of participant data for analysis. Assigned index case with AVW, NS, and NWS. Performed analyses in STATA. Prepared Figure 1, 2 and 3 with AVW. Prepared Table 1 with AVW. Study-specific literature review with AVW. Outlined manuscript with AVW. Revised manuscript with AVW.

Jessica A. Reyes (JAR)- Lead study coordinator; recruited, enrolled and maintained study participants with NS, HD, SC, and NWS; study-data quality control; validated data provided by participants in study instruments.

Natasha Shelby (NS)- Study administrator; contributed to initial study design and recruitment strategies; co-wrote enrollment questionnaire with AW and JJ; hired, trained, and supervised the study-coordinator team; recruited, enrolled and maintained study participants with JAR, JAR, NWS, HD and SC; study-data quality control; validated data provided by participants in study instruments; data curation; organized archiving of participant data; helped assemble CONSORT diagram (Fig 1B); assisted with assignment of household index cases with JJ, AVW, and NWS; managed reference library; reviewed and edited the manuscript.

Noah W. Schlenker (NWS)- Study coordinator; recruited, enrolled and maintained study participants with NS, JAR, HD and SC; study-data quality control; validated data provided by participants in study instruments; major role in assignment of household index cases with JJ, AVW, and NS.

Colten Tognazzini (CT)- Coordinated the recruitment efforts at PPHD with case investigators and contact tracers; provided guidance and expertise on SARS-CoV-2 epidemiology and local trends.

Alexander Viloria Winnett (AVW)- Conceptualization of study with JJ and RFI. Contributed to overall study design and recruitment strategies. Co-wrote enrollment questionnaire with NS and JJ; Data curation and analysis. Assigned vaccination status for each participant. Assigned infection status from viral load data. Assigned index case with JJ, NS, and NWS. Prepared Figure 1, 2 and 3 with JJ. Prepared Table 1 with JJ. Verified underlying data and analyses performed by JJ. Study-specific literature review with JJ. Outlined manuscript with JJ. Drafted initial manuscript. Revised manuscript with JJ.