

AUTHOR CONTRIBUTIONS (listed alphabetically by last name):

RA: collaborated with AVW in creating digital participant symptom surveys; assisted with data quality control/curation with JJ, NWS, NS; created current laboratory information management system (LIMS) for specimen logging and tracking. Creation of iOS application for sample logging/tracking. Configured an SQL database for data storage. Created an Apache server and websites to view study data. Configured FTPS server to catalog PCR data. Wrote a Python package to access study data. Worked with ESS, AVW, AER to implement logic that prioritized specimen extraction order.

JTB: Created initial specimen tracking database to aid in specimen logging and tracking. Maintenance of database and implementation of corrections.

AMC: Received, performed QC on, and logged specimens. Performed nucleic acid extractions and RT-qPCR. Aliquoting and preparing study reagents as needed. Performed preliminary experiments to assess RNA stability in our saliva and nasal swab samples. Summarizing daily RT-qPCR data of participant time courses to inform participant keep/drop decisions. Provided feedback on early figure drafts.

MMC: Collaborated with AVW, MF, NS, YG, RFI, on study design and recruitment strategies. Co-wrote initial IRB protocol and informed consent with AVW and NS; assisted in the writing of the enrollment questionnaire; developed laboratory sample processing workflow for saliva with AVW and AER; performed sample processing on subset of samples; funding acquisition; collaborated with AER to write data processing/visualization code for observing household transmission events for active study participants. Contributor to the design of the calibration curve for saliva LOD experiments. Performed specimen logging and QC.

MF: Co-investigator; collaborated with AVW, MMC, NS, YG, RFI on study design and recruitment strategies; provided guidance and expertise on SARS-CoV-2 epidemiology and local trends.

YG: Co-investigator; collaborated with AVW, MMC, NS, MF, RFI on study design and recruitment strategies; provided guidance and expertise on SARS-CoV-2 epidemiology and local trends.

RFI: Co-investigator; collaborated with AVW, MMC, NS, MF, YG on study design and recruitment strategies; provided leadership, technical guidance, oversight, and was responsible for obtaining funding for the study.

JJ: Researched epidemiological survey structures, performed epidemiological literature review with MMC and AVW, and co-wrote enrollment questionnaire with NS and AVW. Major contributor to curation of participant symptom data. Provided quality control of participant data with RA, NS, NWS.

MKP: Performed specimen logging and QC, RNA extractions, RT-qPCR, data processing. Performed data acquisition and analysis for and made Figure S2 with AVW. Prepared participant sample collection materials and helped with supplies acquisition. Assisted in literature analysis with ESS, RA, AVW. Performed data analysis and prepared Fig. 1B, 1D with AVW. Performed data analysis and prepared Fig. 2B, 2D with AVW. Verified the underlying data with AVW and NS. Outlined and wrote manuscript with AVW.

JAR: Lead study coordinator; collaborated with NS, AVW, NWS, and RFI on recruitment strategies, translated study materials into Spanish, co-wrote informational sheets with AVW and NS; created instructional videos for participants; enrolled and maintained study participants with NS and NWS.

AER: Developed laboratory swab sample processing workflow with ESS. Optimized extraction protocols working with vendor scientists. Created budgets and managed, planned, and purchased reagents and supplies; developed and validated method for RT-qPCR analysis for saliva and nasal-swab samples with MMC, and AVW. Performed specimen logging and QC, RNA extractions, RT-qPCR; Design of saliva calibration curve experiment. Managing logistics for the

expansion of the BSL-2+ lab space with ESS. Provided feedback on earlier manuscript revision and provided a few references.

ESS: Coordinated laboratory team schedules and division of lab work. Performed initial nasal-swab workflow validation experiments with AER. Major contributor to workflow validation, methods, biosafety SOPs. Developed/implemented system for sample archiving. Performed specimen logging and QC, RNA extractions, RT-qPCR, and data processing. Managing logistics for the expansion of the BSL-2+ lab space with AER and biohazardous waste pickups.

NS: Study administrator; collaborated with AVW, MMC, RFI, YG, MF on initial study design and recruitment strategies; co-wrote IRB protocol and informed consent with AVW and MMC; co-wrote enrollment questionnaire with AVW and JJ; co-wrote participant informational sheets with AVW and JAR; enrolled and maintained study participants with JAR and NWS; study-data quality control, curation and archiving with RA, JJ, and NWS; reagents and supplies acquisition; assembled Table 1 with AVW; managed citations and reference library; verified the underlying data with MKP and AVW; edited the manuscript.

NWS: Study coordinator; collaborated with NS, AW, JAR, and RFI on recruitment strategies; enrolled and maintained study participants with NS and JAR; study-data quality control, curation and archiving with RA, JJ, and NS.

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

AVW: Collaborated with MMC, NS, RFI, YG, MF on initial study design and recruitment strategies; co-wrote IRB protocol and informed consent with MMC and NS; co-wrote enrollment questionnaire with NS and JJ; co-wrote participant informational sheets with NS and JAR and digital survey; developed and validated methods for saliva and nasal-swab sample collection; developed and validated methods for RT-qPCR analysis for saliva and swab samples with AER, ESS, MMC; reagents and supplies acquisition; funding acquisition; developed laboratory sample processing workflow with AER, ESS, and MMC; performed specimen logging and QC, nucleic acid extraction, RT-qPCR; assembled Table 1 with NS; analyzed viral load timeseries data to visualize trends (Fig. 1A, Fig. 1C, Fig. 2A, Fig. 2C); assisted MKP in the preparation of Fig. 1B, 1D; analyzed viral load data to generate Fig 3; analyzed sample collection data for Fig S1; generated longitudinal RT-qPCR plot array for Fig S2, Fig S3; analyzed data for Fig S4. Verified the underlying data with MKP and NS. Outlined and wrote manuscript with MKP.