Appendix I: Detailed Limitations

Study Limitations

Study findings should be interpreted in the context of limitations. These limitations include time constraints, participant incentive structure, reliance on self-reported data, the retrospective nature of this study, and the large amount of public health workforce turnover. Importantly, these limitations were beyond the study team's control. Study design elements, including methodological approach and sampling and recruitment strategies were used to counteract these limitations to the extent possible. These limitations are described in detail below.

Overarching Limitation

Time Constraint

The time constraint was the largest limitation of this report. It is important to note that the contract for this study was not executed until June 15, 2022. This gave approximately 4.5 months to collect and analyze all of the data necessary to answer the research questions for Report 1. The accelerated timeline of this study impacted both primary and secondary data collection methods.

Primary Data Collection

The rapid study timeline for Report 1 prohibited the study team to be exhaustive of all key informants involved in Oregon's Public Health System Response to the COVID-19 pandemic. As the study team could not interview and analyze all 32 LPHA Directors prior to the development of the quantitative instrument (online survey), stratified sampling was utilized to represent all LPHAs.

Although Report 1 was designed to initially include education as a key informant group, this informant group will be discussed and analyzed in Report 2 due to recommendations from the ODE.

Incentives

Despite the fact that the RFP stated a not to exceed the amount of $70,000 allocated for participant incentives, OHA would not allow specific study informant groups, including LPHAs, Tribal Nations, OHA Staff and Managers, Health Care Agencies, State Agencies, OHA Directors, Professional Associations, and City, County, and Tribal Emergency Management to be compensated for their time spent participating in data collection activities (e.g., focus groups and interviews). Additionally, the overall incentive amounts were relatively low for the time associated with participating in this study. Assuredly, response rates, particularly for LPHAs, CBOs, and Tribal Nations, were impacted by the lack of incentivization for survey completion.

OHA provided incentives for this study to community-based organization representatives through reimbursement of $40/hour for the interview and focus group participation. Travel costs for CBO representatives, LPHAs, and Tribes/NARA representatives were available at current General Services Administration rates and in accordance with all OHA travel reimbursement policies however, no travel was required for participants in this study. In some instances, participants were frustrated that compensation would not be provided.

Self-report

Reliance on self-report is a limitation of this study. Although qualitative findings provide information-rich data, there is a chance that social desirability bias is present. In an effort to reduce the impact of social desirability bias on participants' responses, the study team reassured all participants of the confidential nature of this study.

Retrospective Recall

Although unavoidable, the retrospective nature of this study is a key limitation of this study.

Public Health Workforce Turnover

Public health workforce turnover is another substantial limitation of this study. Many informants with historical knowledge of Oregon's public health response to the COVID-19 pandemic exited at some point during the response. In turn, this impacted the study team's ability to recruit key informants with extensive knowledge of their organization's public health response. Public health workforce turnover was most prominent among LPHAs and OHA staff and managers. This was not a significant limitation for the following key informant groups: OHA Director's Office and Tribal Health Directors.

Secondary Data Collection

Document Review

Although OHA and other key informant groups were willing to provide documents for review, this was not without challenges. The first limitation of the document review is that many documents were not well-organized (e.g., missing date, etc.) and therefore, were time-intensive to catalog. During the process, some documents provided rich information and others provided little or no useful data.

COVID-19 Health Outcome Data

Most COVID-19 health outcomes included in Report 1 were retrieved from OHA's COVID-19 Dashboards. In many instances, however, the data displayed on the dashboard was unavailable to download for further manipulation or analysis, hindering the study team's ability to examine certain outcomes.

Indirect Effects of COVID-19 Data

The study team was able to find secondary data points for many health indicators of interest. There are, however, many health indicators that the study team wanted to examine for Report 1 for which data for years beyond 2020 could not be found. Thus, challenges with data availability was the largest limitation in examining the indirect effects of COVID-19 in Oregon. As most data for

surveillance systems for 2021 or 2022 had not been finalized as of the Report 1 due date, we were unable to include these outcomes for Report 1. The study team does, however, expect to include an analysis of additional secondary health effects of COVID-19 as a part of Report 2 and/or Report 3.

For indirect effects of COVID-19 that are included in Report 1, the study team was limited by what data was available and available online. Therefore, there were limitations on how the data could be reported based on how the data was presented in the original source. The timeline for Report 1 did not allow time to formally request restricted-use datasets, which is a limitation of this analysis.