WISCONSIN DEPARTMENT of HEALTH SERVICES

Communicable Disease General Purpose Revenue Funding Financial Report: Results by Jurisdiction Size

1. Introduction

This report serves as an addendum to the main results report (Communicable Disease General Purpose Revenue Funding Financial Report: Analysis and Results by Year), and thus should be viewed in conjunction with the main report. While the main results report analyzed communicable disease General Purpose Revenue (GPR) funding results by funding year, this report describes the results by jurisdiction population size. Because each local health department and Tribal health organization received a $2,500 base funding amount per year, plus an additional amount based on area population, these results by jurisdiction population size also directly represent the results by funding amount (for example, larger jurisdictions received more funding). Table 1 describes the lowest and highest GPR funding allocation for the 2017-2018 funding period for each jurisdiction size category.

Analyzing GPR funding uses by jurisdiction size is especially important due to the different staffing needs and communicable disease burden experienced by jurisdictions of different sizes. For example, in 2021 jurisdictions with less than 20,000 people received an average of 1,023 confirmed reportable disease referrals, compared to an average of 3,360 reports in jurisdictions with 20,000 to 49,999 people, 7,157 reports in jurisdictions with 50,000 to 99,999 people, and 22,607 reports in jurisdictions in with 100,000 people or more. Though these averages don't include all cases that require investigation by local health departments (for example, these estimates do not include probable or suspect cases), they do demonstrate the relative communicable disease burden differences of each jurisdiction size.

Table 1. Highest and lowest GPR total allocations awarded for the 2017-2018 funding year for each jurisdiction size.

Jurisdiction Size	Lowest GPR Allocation	Highest GPR Allocation
< 20,000 people	$2,600	$3,400
20,000- 49,999 people	$3,400	$4,600
50,000- 99,999 people	$4,800	$6,400
100,000 people or more	$7,000	$28,900

2. Methods

The data collection and analysis methodology were described in detail in the main results report. For this report, local and Tribal health department jurisdiction size was categorized as less than 20,000 people, 20,000–49,999 people, 50,000–99,999 people, and greater than or equal to 100,000 people based on the jurisdiction size values used for the 2019 funding allocation. Because jurisdiction population size generally stays consistent from year to year, these values were also extrapolated to represent health department reports from 2018, 2020, and 2021.[1]

For descriptive purposes, responses to all four report years were combined. To have adequately sized samples to assess dominant themes by jurisdiction size, results are not broken down by year in this report. Because many responses in different years are from the same health jurisdictions, and the same jurisdiction may be more likely to have similar responses from year to year, it is important to note that the input from jurisdictions that provided more responses may somewhat outweigh the responses from those jurisdictions that completed only one or two reports. Though this is a considerable limitation, we deemed these results to still be valuable in describing overall dominant themes by jurisdiction size, given that the majority of respondents completed all four reports. If further analytic analyses are requested, models will incorporate nesting to account for the non-independence of responses from the same local health jurisdiction.

3. Results

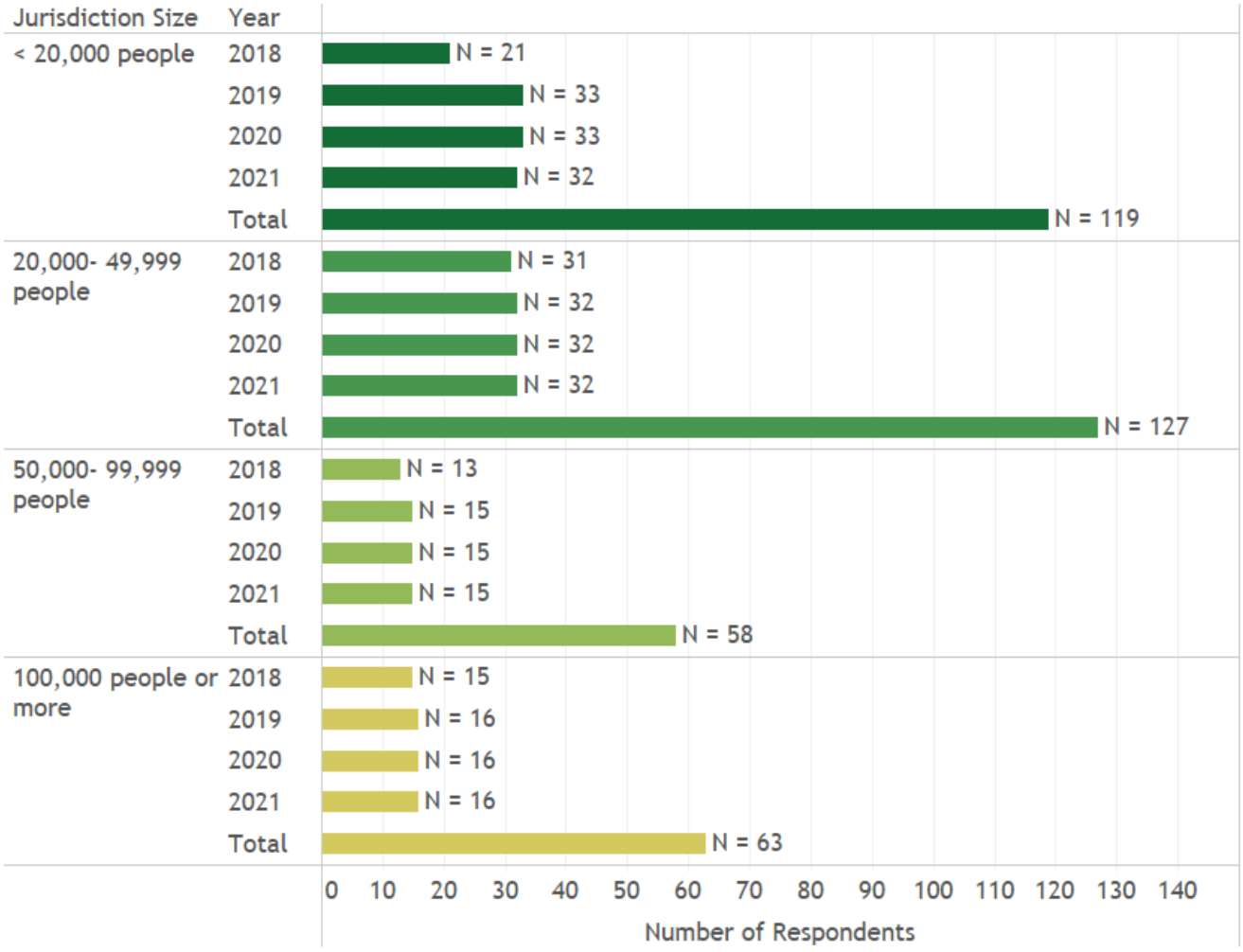
Across the three report years, 80 local health jurisdictions provided a response to all four years,[2] 16 provided responses to three years, and one provided responses for two years.

Combining all four years of data, there were a total of 119 respondents from jurisdictions with less than 20,000 people, 127 respondents from jurisdictions with 20,000–49,999 people, 58 respondents from jurisdictions with 50,000–99,999 people, and 63 respondents from jurisdictions with 100,000 people or more (Figure 1).

[1] St. Francis Health Department and South Milwaukee Health Department combined operations beginning in 2019. In 2018, St. Francis Health Department and South Milwaukee Health Department were analyzed as separate jurisdictions. In years 2019, 2020, and 2021, South Milwaukee/St. Francis completed one funding report, and the results were analyzed by the combined jurisdiction size of the two jurisdictions (i.e., both jurisdiction sizes were summed).

[2] This N = 80 health departments that provided a response to all four years includes South Milwaukee and St. Francis (counted as N = 2).

Figure 1. Number of Respondents by Jurisdiction Size and Year (N = 367)



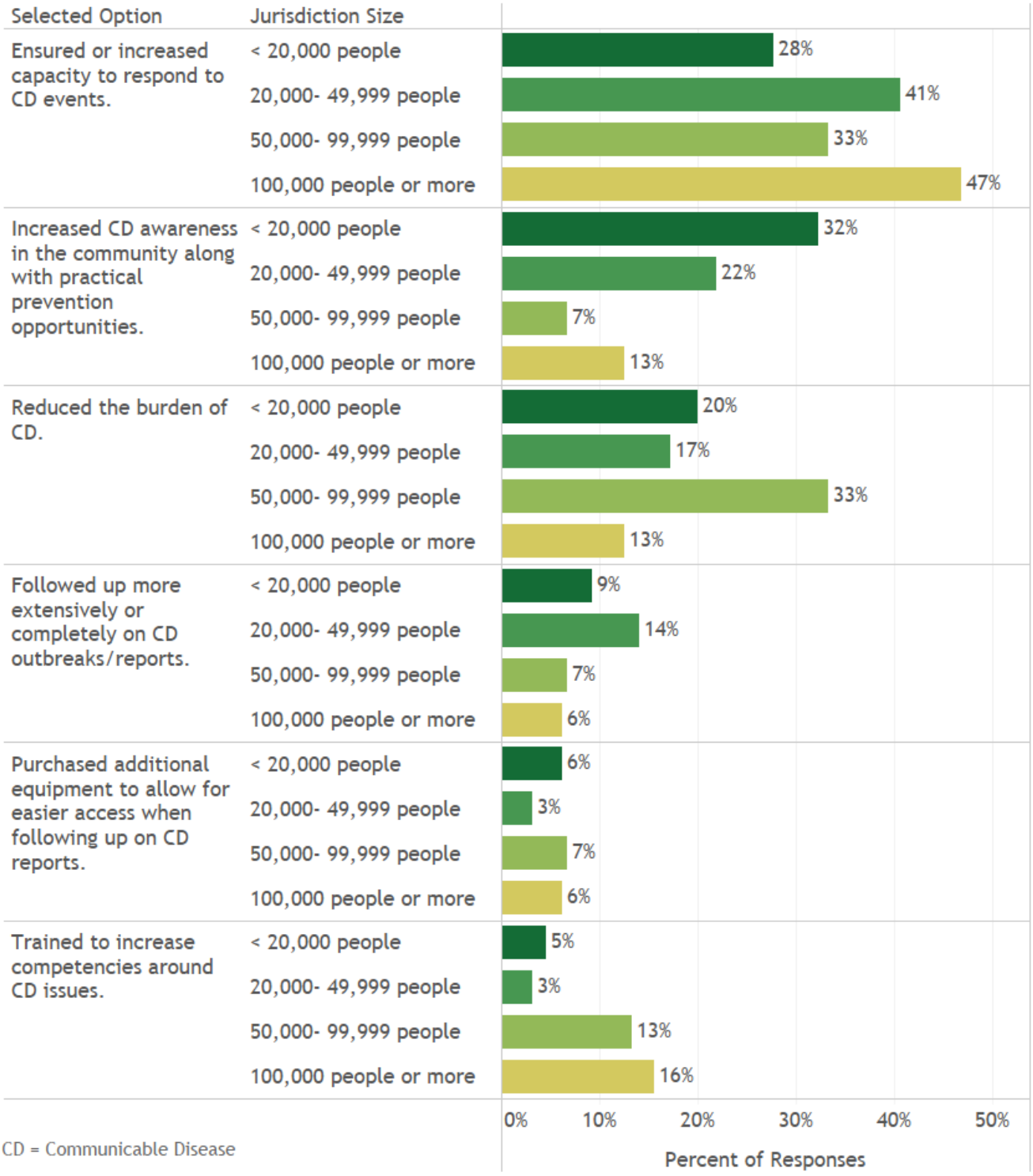
3.1 Funding Uses

In the 2020 and 2021 surveys, funding recipients were asked: *Of the following options, choose one that best describes how your agency or department used the allocated funds during the funding period?* The response options were (1) reduced the burden of communicable diseases, (2) ensured or increased capacity to respond to communicable disease events, (3) trained to increase competencies around communicable disease issues, (4) purchased additional equipment to allow for easier access when following up on communicable disease reports (such as smart phones or tablets), (5) followed up more extensively or completely on communicable disease outbreaks/reports, and (6) increased communicable disease awareness in the community along with practical prevention opportunities.

For all jurisdiction size categories with 20,000 or more people, the most common use of funds was to ensure or increase capacity to respond to communicable disease (CD) events (Figure 2). Reducing the burden of communicable disease was an equally commonly selected use of

funds for those in jurisdictions with 50,00–99,999 people. In the smallest jurisdictions (< 20,000 people), the most common use of funds was to increase communicable disease awareness in the community along with practical prevention opportunities (Figure 2). Additionally, there is some evidence to suggest that a larger proportion of respondents from the largest jurisdictions (50,000–99,999 people and 100,000 people or more) reported using funds for training purposes to increase knowledge around communicable disease issues compared to smaller jurisdictions, though relatively few individuals in all jurisdiction size categories reported using funds for training purposes (Figure 2).

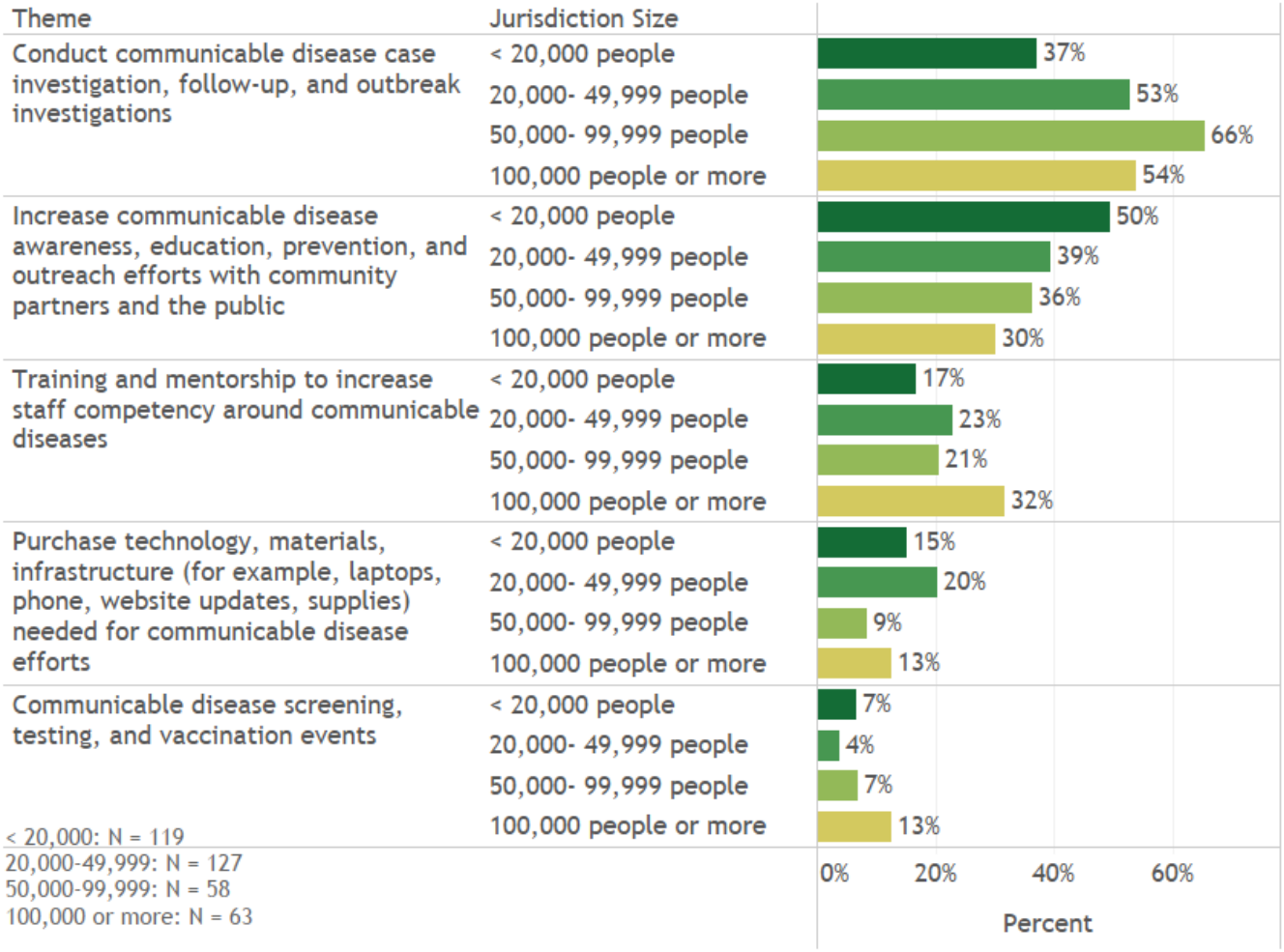
Figure 2. Of the following options, choose one that best describes how your agency or department used the allocated funds during the prior funding period. Responses from 2020 (N = 96) and 2021 (N = 95) are combined.



Though this multiple-choice question regarding funding use was only asked in 2020 and 2021, all survey years asked respondents for a qualitative 2–3 sentence narrative that describes how the agency used the funds during the funding period. Five dominant themes emerged from these narrative responses (Figure 3), and these themes are described in more detail in the main report. Many respondents identified diverse uses of the funds that fell into multiple dominant themes. While all 367 responses answered this question, 10 responses were either too vague to be properly coded into a theme or did not fall into any of the dominant themes shown.

The most common themes were largely similar across jurisdiction sizes, with (1) to conduct communicable disease case investigation, follow-up, and outbreak investigations and (2) to increase communicable disease awareness, education, prevention, and outreach efforts with community partners and the public being the most common themes for funding use. The needs around using funds for increasing communicable disease awareness efforts in the community seemed slightly more prevalent among the smallest jurisdictions, compared to the largest jurisdictions. On the contrary, the use of funds for training and mentorship was more prevalent among the largest jurisdictions (32%) compared to the smallest jurisdictions (17%) (Figure 3).

Figure 3. Most common funding uses identified through narrative responses



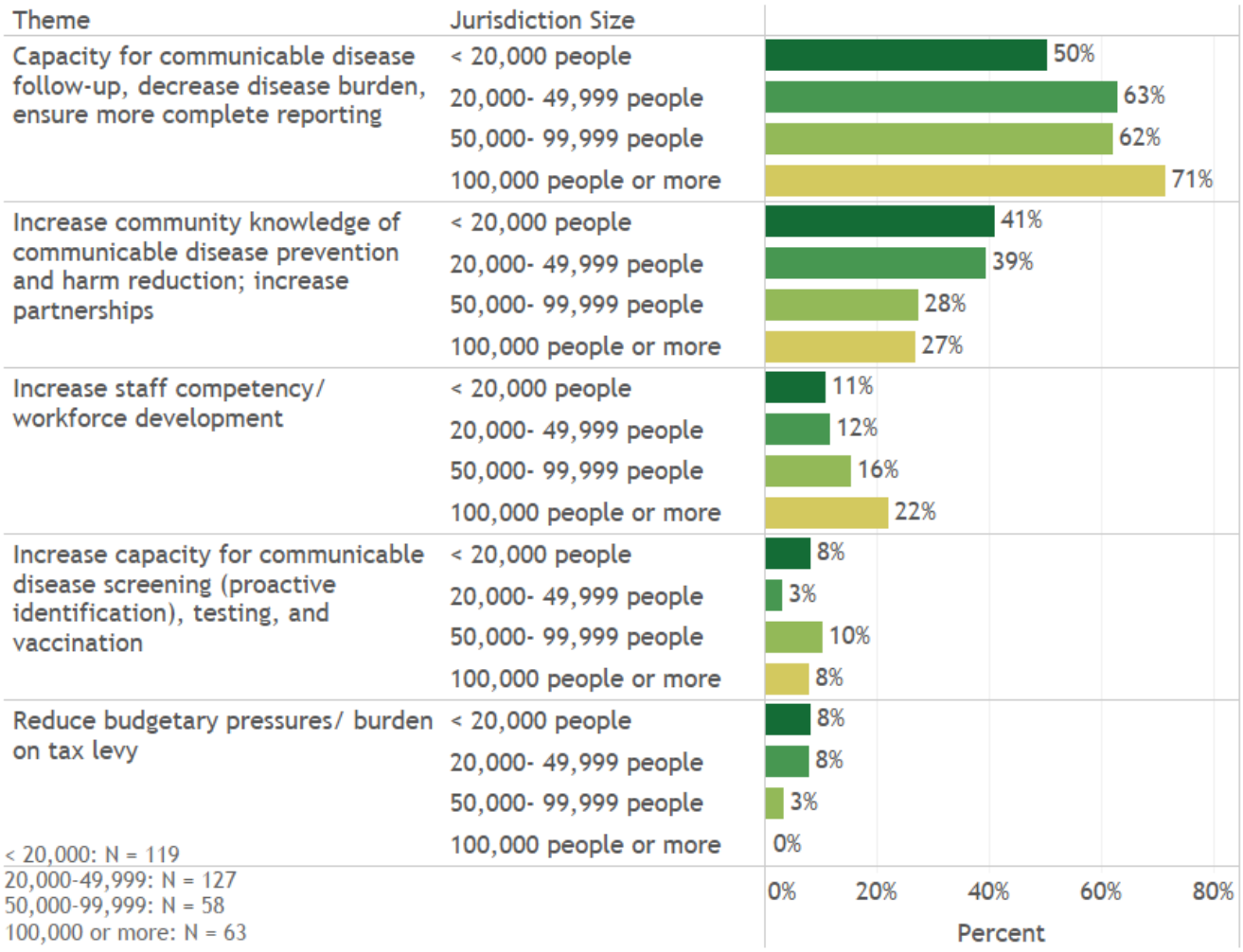
3.2 Desired Funding Outcomes

In all survey years, respondents also described their desired outcomes of the GPR funding. Five dominant themes emerged regarding desired outcomes of funding, which are described in more detail in the main report. Many respondents identified diverse desired outcomes that fell into multiple dominant themes. Of the 367 respondents, 6 responses did not fall into any of the dominant themes identified in Figure 4.

When analyzed by jurisdiction size, many similarities were identified. Among all jurisdiction size categories, ensuring capacity for communicable disease follow-up, decreasing disease burden, and ensuring more complete reporting was the most commonly identified theme. The second most common theme for all jurisdiction sizes was to increase community knowledge of communicable disease prevention/harm reduction and increase partnerships. We do have some evidence to suggest that a larger proportion of those in smaller jurisdictions reported reduced budgetary pressures as a desired funding outcome (compared to 0% of those in

jurisdictions with 100,000 people or more), which may be reflective of the limited funding and resources available to smaller jurisdictions.

Figure 4. Most common desired funding outcomes by jurisdiction size.



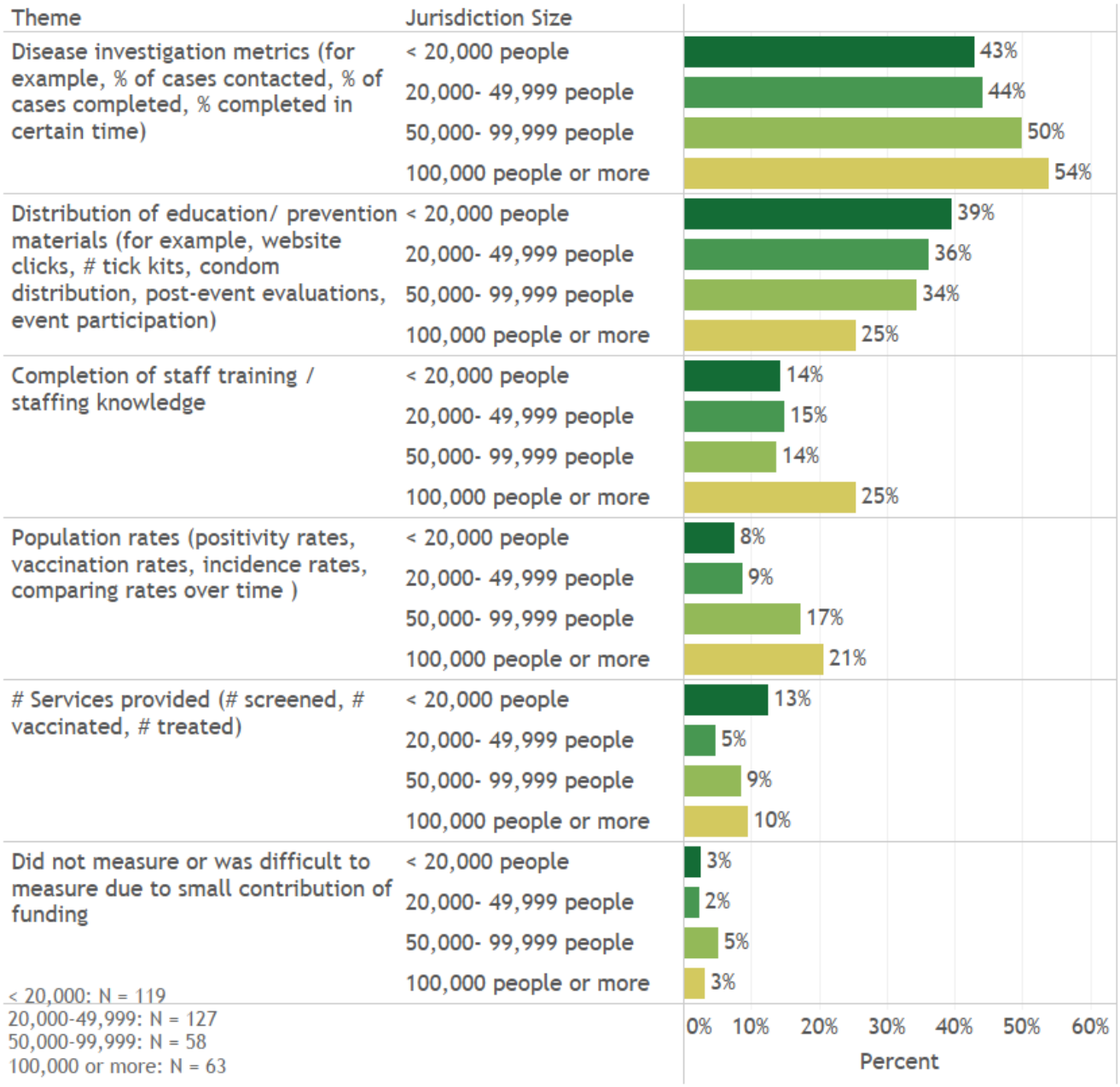
3.3 Measurements of Progress Toward Desired Outcomes

In addition to describing their desired outcomes, grantees also described how they measured their success or progress toward the desired outcomes. Six dominant themes regarding measures of progress were identified (Figure 5), and these themes are described in more detail in the main results report. Many respondents reported using measures that fell into different dominant themes. Of the 367 respondents, 18 responses did not fit into these major themes (including two blank responses).

Overall, the majority of respondents from all jurisdiction sizes reported using at least one measure to assess their progress toward their desired outcome (Figure 5). The most common measures for all jurisdiction sizes were (1) disease investigation metrics (for example, % of cases contacted, % of cases completed, % completed in certain time) and (2) measures

related to distribution of education/prevention materials (for example, website clicks, # of tick kits, condom distribution, post-event evaluations, event participation). Completion of staff training/staffing knowledge was also a prevalent measure of success among jurisdictions with 100,000 people or more (Figure 5).

Figure 5. Most common measures of success or progress toward the desired outcomes by jurisdiction size.



A larger percentage of respondents from larger health departments (those with 50,000–99,999 people and 100,000 people or more) reported using population rates (for example, positivity rates, vaccination rates, incidence rates, comparing rates over time) when compared to smaller health departments, which may again allude to the different resources available at health departments of different sizes. For example, larger health departments tend to have more dedicated epidemiological support that may enable the health department to monitor population rates, while staff at smaller health departments often must take on many diverse roles and may not have the capacity for such measures. Similarly, the increased prevalence of using staff training completion or staffing knowledge as a measure of success among the largest health jurisdictions is also likely indicative of the capacity of larger health departments to leverage this funding for less service-specific operational needs. Providing additional funding, particularly for smaller health agencies, may help ensure that these smaller agencies also have the capacity for workforce development needs, as opposed to only having capacity to maintain operations. Such workforce development and other quality improvement activities are critical in strengthening the public health system and will vastly improve capacity to address future public health events.

3.4 Partner Engagement

Respondents also reported on any partner engagement with the funding source. Five respondents did not report on their partner engagement (missing data).

Overall, when combining responses from all funding years, around half of respondents in all jurisdiction size categories reported engaging with partners in their work using the GPR funding (Figure 6). Figure 6 also clearly depicts that larger percentages of respondents in all jurisdiction sizes reported partner engagement before the COVID-19 pandemic (years 2018, 2019) compared to during the pandemic, illustrating COVID-19's impact on funding uses across diverse jurisdictions.

Many respondents indicated multiple partnerships across sectors. Of those who reported partner engagement, medical/care facility partners were the most commonly reported for all jurisdiction sizes (Figure 7). Daycares/schools/colleges, outdoor recreation areas, and other private businesses were also among the most common partners reported by respondents from all jurisdiction sizes (Figure 7).

Partnerships with daycares, schools, and colleges were more prevalent among the largest jurisdictions (43%) compared to smaller jurisdictions (34% for jurisdictions with less than 20,000 people, 30% for jurisdictions with 20,000–49,999 people, and 19% for jurisdictions with 50,000–99,999 people). While school partnerships were generally more prevalent in 2021 likely due to COVID-19 investigation efforts at schools, this relative increase in school partnerships among larger jurisdictions is largely reflective of more college or university partnerships, even before COVID-19. Larger jurisdictions tend to have more universities and colleges than smaller jurisdictions, which makes these partnerships more likely to occur. Respondents from jurisdictions with 100,000 people or more reported engaging with colleges

and universities for a wide range of activities including collaborating on STD prevention workgroups, providing communicable disease-related trainings to medical students, sampling and testing local water sources, and having local college interns assist with communicable disease awareness events and social media messaging.

Figure 6. Percent of respondents who reported engaging with partners with this funding source by jurisdiction size.

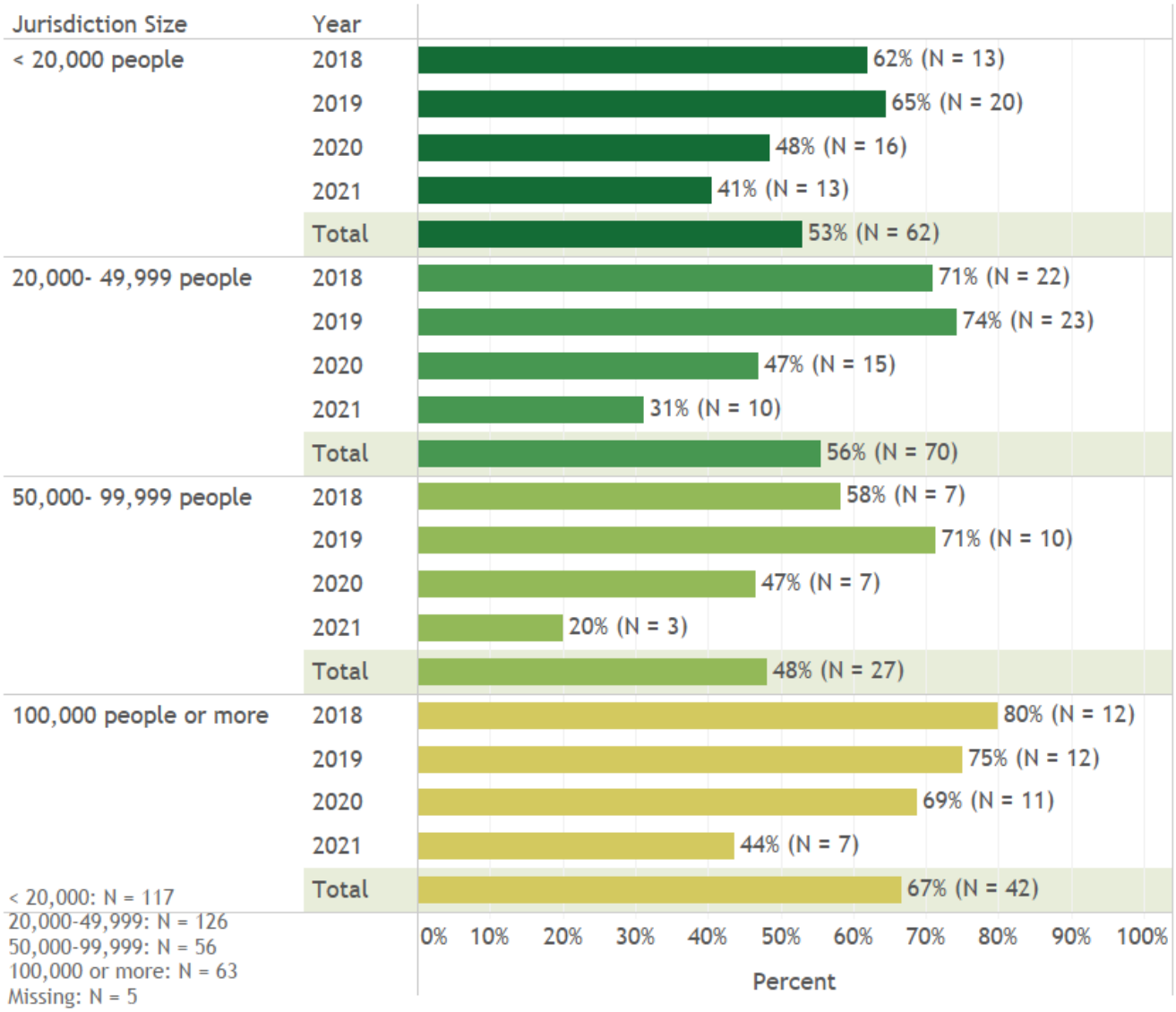
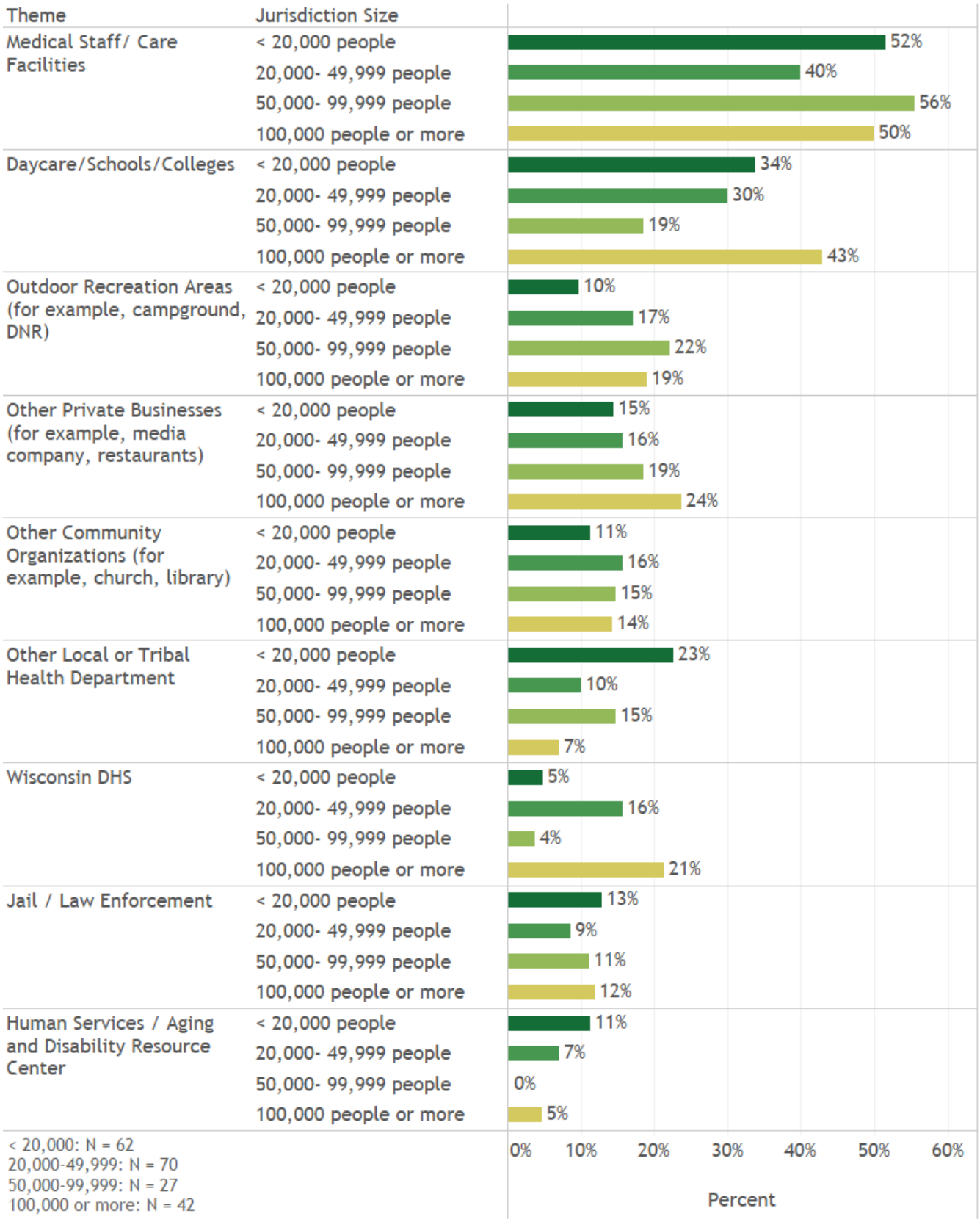


Figure 7. Of those who engaged with partners, who were the partners?



3.5 Lessons Learned

Respondents also reflected on lessons learned because of the funding. While 15 respondents left this question blank, 352 respondents provided some narrative. Seven common themes regarding lessons learned were identified, which are described in more detail in the main results report. Many respondents provided narrative that fell into multiple identified themes, while 13 respondents offered narrative that did not fit into any of the seven themes. Of those who responded, 32% of jurisdictions with less than 20,000 people, 29% of respondents from jurisdictions with 20,000–49,999 people, 30% of respondents from jurisdictions with 50,000–99,999 people, and 16% of respondents from jurisdictions with 100,000 people or more stated they did not have any lessons to share (Figure 8).

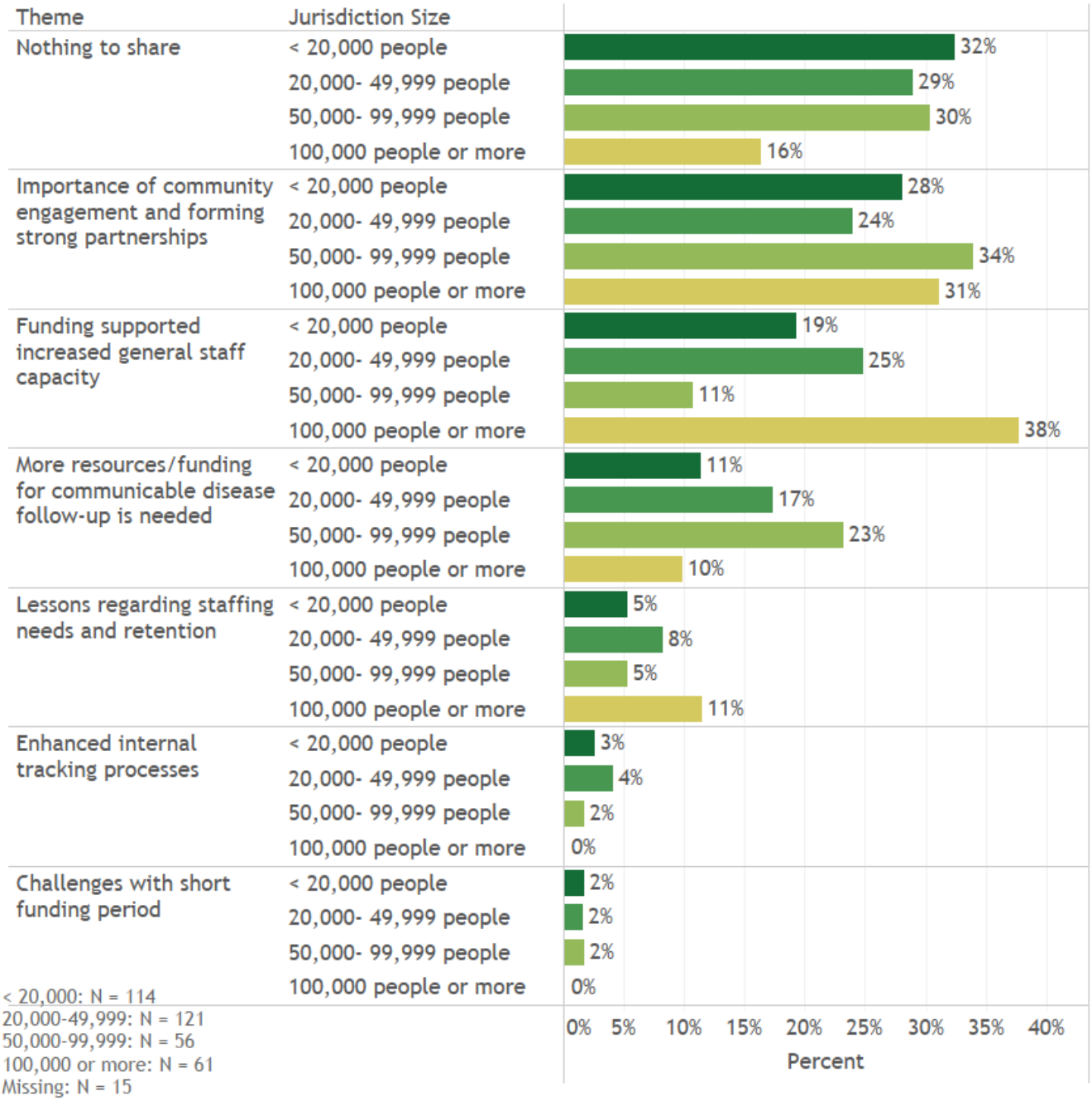
Of those who provided some narrative regarding learned lessons, the importance of community engagement and forming strong partnerships was the most commonly reported theme for all jurisdiction sizes except those jurisdictions with 100,000 people or more. Though 31% of respondents from jurisdictions serving 100,000 people or more reported a lesson about the importance of community engagement and forming strong partnerships, 38% of respondents in the largest jurisdictions reported more general lessons regarding how the funding increased staff capacity. Twenty-eight percent of respondents from jurisdictions with less than 20,000 people, 24% of respondents from jurisdictions with 20,000–49,999 people, 34% of respondents from jurisdictions with 50,000-99,999 people, and 31% of respondents from jurisdictions with 100,000 people or more reported a lesson regarding the importance of community engagement and forming strong partnerships.

This agreement regarding the importance of partner engagement across all jurisdiction sizes is especially interesting, given that less funding was used in 2020 and 2021 for community outreach activities and fewer lessons regarding the importance of community engagement were reported in 2020 and 2021 (see main results report). This may be reflective of agency priorities and types of partner engagement before and after the onset of the COVID-19 pandemic. In years 2018 and 2019, respondents persistently reported that community partners were eager to work with local health agencies, and that the public expressed interest and appreciation for communicable disease education at local events. Respondents in 2018 and 2019 also noted that staff enjoyed being creative in targeting community prevention outreach, and that staff were excited to take on a preventative approach to communicable disease. These comments allude to the reality that resources are often only allocated to such community engagement activities after other operational needs are met, even though local health department staff find such preventative work to be so valuable. Event cancelations to promote social distancing in 2020 and 2021, combined with prioritization of resources for the COVID-19 response, likely made it even more challenging to carry out engagement activities with the public and community partners during the pandemic.

A second commonly reported theme was that that funding supported increased general staff capacity (for example, funding enhanced staff's ability to carry out general communicable

disease activities either due to training, education, increased staff, or enhanced technology). Respondents from all jurisdiction sizes also reported constraints of the current funding and the need for more funding/resources for communicable disease follow-up as a lesson learned. Overall, 11% of respondents from jurisdictions with less than 20,000 people, 17% of respondents from jurisdictions with 20,000–49,999 people, 23% of respondents from jurisdictions with 50,000–99,999 people, and 10% of respondents from jurisdictions with 100,000 people or more reported needing more resources/funding for communicable disease follow-up as a lesson learned. Additionally, 5% of respondents from jurisdictions with less than 20,000 people, 8% of respondents from jurisdictions with 20,000–49,999 people, 5% of respondents from jurisdictions with 50,000–99,999 people, and 11% of respondents from jurisdictions with 100,000 people or more reported lessons regarding staffing needs and retention.

Figure 8. Did your agency learn any lessons regarding how your funding was used? If so, what would you like to share with others?



3.6 Impact of COVID-19 and Funding Adequacy

The 2020 and 2021 surveys also explicitly asked if COVID-19 impacted how communicable disease funds were used. Over half of respondents from all jurisdiction sizes agreed that COVID-19 impacted funding uses in 2020, and these proportions rose to 75% or higher in 2021 (Figure 9). Some respondents in 2020 also indicated that their funding uses would have

been impacted by COVID-19 but were not because all funding was spent before the onset of the COVID-19 response in Wisconsin (2020 report year covered the funding period from July 1, 2019-June 30, 2020).

Figure 9. Percent of respondents who stated that the COVID-19 Pandemic impacted how communicable disease funding was used.

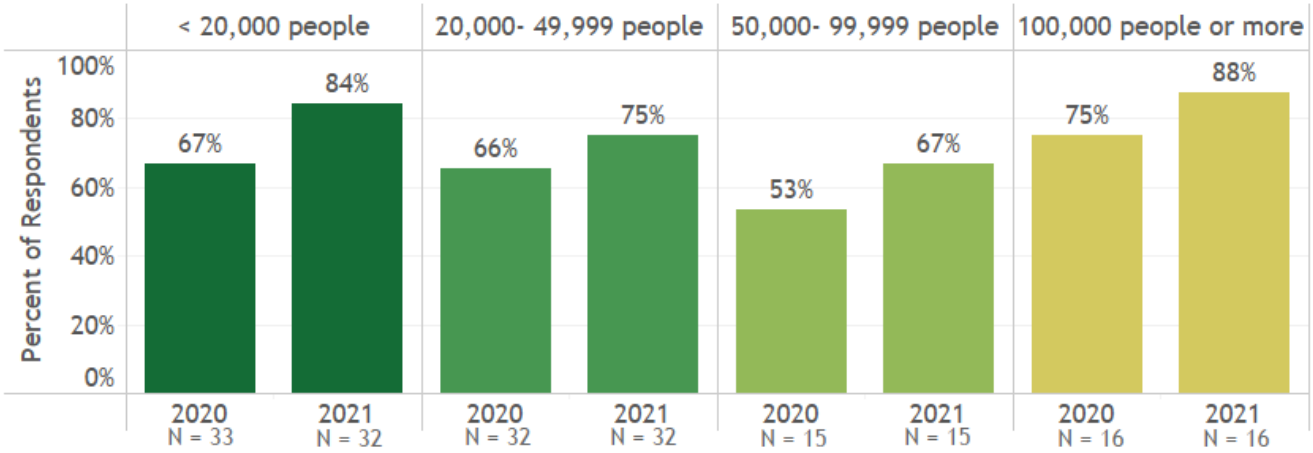
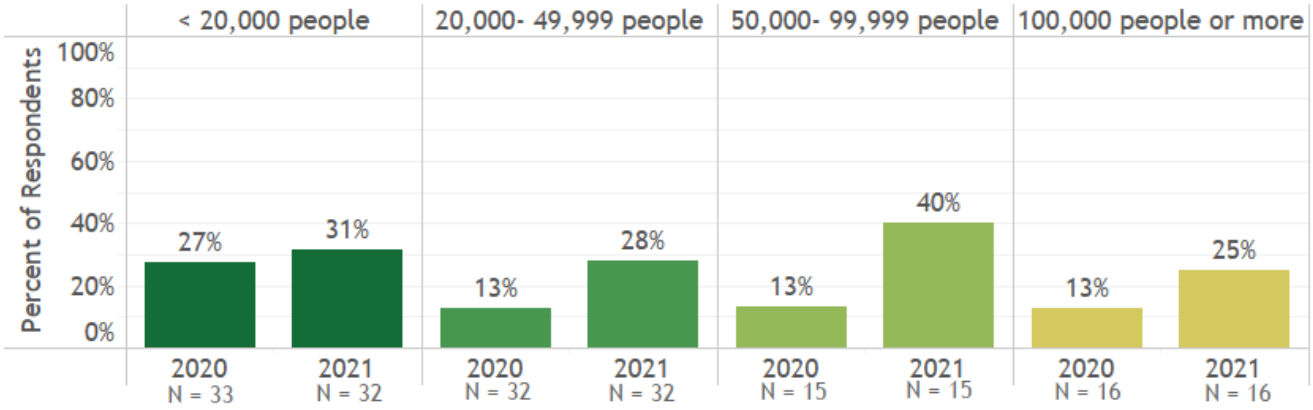


Figure 10. Percent of respondents who stated that the allocated communicable disease funding was adequate for their local health agency or department.



Additionally, respondents in 2020 and 2021 were asked if the allocated communicable disease funding was adequate. In 2021, only 31% of respondents from jurisdictions with less than 20,000 people, 28% of respondents from jurisdictions with 20,000–49,999 people, 40% of respondents from jurisdictions with 50,000–99,999 people, and 25% of respondents from jurisdictions with 100,000 people or more agreed that funding was adequate, and even fewer agreed in 2020 (Figure 10). This is consistent with themes identified across the narrative responses, which consistently identify limitations due to inadequate funding, regardless of jurisdiction size.

4. Conclusions

This report serves as an addendum to the main results report (Communicable Disease General Purpose Revenue Funding Financial Report: Analysis and Results by Year), which further analyzes the Communicable Disease GPR Funding Financial Report results by jurisdiction population size. Because the communicable disease GPR funds were allocated partially based on jurisdiction size, these results also directly represent the results by funding amount (for example, larger jurisdictions received more funding).

While there are many similarities in funding uses, desired outcomes, measures, and partner engagement when comparing results by jurisdiction size, some important distinctions were noted. Particularly, responses from larger health jurisdictions tended to reflect greater overall resources when compared to responses from the smallest local health jurisdictions. Larger health jurisdictions tend to have more epidemiological staff and university partnerships, which may allow them to allocate funding to more capacity building efforts (for example, staff training) compared to smaller health jurisdictions, who used funds primarily to meet service-related needs (for example, increase communicable disease awareness, case investigations). To provide the highest quality public health services, local health departments and Tribal health organizations must have adequate resources to both maintain their essential services, while also having the capacity to implement quality improvement activities. These results show that smaller health jurisdictions may be particularly burdened by inadequate resources, and additional resources may better enhance their capacity for such training and quality improvement activities. Even though larger health jurisdictions may be relatively more equipped to engage in such activities, it is important to highlight that the majority of respondents in 2020 and 2021 from all jurisdiction sizes reported that COVID-19 impacted funding uses and that the allocated funding amount was not adequate. This indicates a continued need for more resources among all health departments across the state. Such funding is particularly needed to ensure that local health departments and Tribal health organizations are able to re-engage in diverse and meaningful community partnerships that, though they may have been deprioritized in the wake of COVID-19, are invaluable in communicable disease prevention efforts.