WISCONSIN DEPARTMENT of HEALTH SERVICES

Communicable Disease General Purpose Revenue Funding Financial Report: Analysis and Results by Year

1. Introduction

1.1 Background

Local health departments in Wisconsin are central to the state's public health system, as both public health service provision and public health decision making occurs at the local level. The public health system in Wisconsin is classified as being decentralized, meaning that local health departments are led by local governments, as opposed to being operated by state government, which leaves most fiscal decision making at the local level. Additionally, the Wisconsin Constitution provision (WI Const art XI § 3) known as the Constitutional Home Rule, which authorizes municipal regulation over local affairs, further expounds the authority that local municipalities have to enact policy and decision-making within their jurisdiction.

Though local health departments have considerable influence over local public health decision-making, all local health departments in Wisconsin must provide certain required services outlined in Wis. Admin. Code ch. DHS 140.04. These services include surveillance and investigation, communicable disease control, disease prevention, emergency preparedness and response, health promotion, human health hazard control, policy and planning, leadership and organizational competencies, and public health nursing services. Though communicable disease control represents just one of these services, local health department communicable disease control programming often reflects many other required services, including surveillance and investigation, public health nursing services, and even emergency preparedness and response. For example, it is through disease surveillance activities that local public health departments will become aware of communicable disease concerns or emergencies, and public health nurses are integral to completing necessary follow-up and control measures.

Communicable disease surveillance, investigation, and control is critical to preventing the spread of communicable disease across the state, though such services require significant resources from local health departments. In Wisconsin, medical professionals and laboratories are required to report certain communicable diseases to the local health officer within a specified timeframe (immediately for category 1 reportable conditions and within 72 hours for category 2 and 3 reportable conditions). Local health departments are then obliged to investigate any case or suspected case in a timely manner to identify exposures sources and initiate methods to control the spread of communicable disease (Wis. Stat. ch. 252.03 and Wis. Admin. Code ch. DHS 145). In public health emergencies involving communicable

disease, local health officers may take additional actions to suppress the spread of disease (Wis. Stat. ch. 252).

In 2020, due to the onset of the COVID-19 pandemic, COVID-19 was declared a Category 1 reportable condition in Wisconsin, leading to an influx of communicable disease reports that needed to be investigated by local health departments. This drastic increase in communicable disease reports overburdened many local health departments that did not have the staff and resources to address the high number of disease investigations. This contributed to a de-prioritization of many other required public health services and has painted a clear picture of the ongoing resource needs for communicable disease control efforts across the state.

1.2 General Purpose Revenue Communicable Disease Funding

Communicable disease efforts require a sizeable portion of local health department budgets, though long-term funding specific to communicable disease has been limited. Prior to 2017, no state of Wisconsin general purpose revenue funds were allocated to communicable disease activities, so local health departments relied on sources like their local tax levy to carry out their statutory responsibilities for communicable disease control.

The 2017–2019 Biennial Budget, however, was the first to allocate $500,000 of general purpose revenue (GPR) funding per year for distribution to local health departments and Tribal health organizations for communicable disease prevention and control, and funding has been maintained since that time. Funding was intended to be used to help offset the growing burden of disease surveillance, contact tracing, training, and public outreach at the local level. Each local and Tribal health department received a $2,500 base amount per year, plus a variable amount based on area population. Initial annual funding amounts ranged from $2,600–$3,400 in the smallest jurisdictions (less than 20,000 people) to $7,000–$28,900 in the largest jurisdictions (100,000 people or more). Though this funding amount is relatively small in comparison to the total resources required to carry out communicable disease activities, it represents a notable shift in GPR funding priorities.

Funding periods ran from July 1 to June 30, and grantees (local and Tribal health departments) were asked to complete a brief financial report in 2018, 2019, 2020, and 2021 to reflect on the uses of the funding during the prior funding year (for example, the 2018 report is for the funding period July 1, 2017–June 30, 2018). This data is yet to be comprehensively analyzed and doing so is necessary to assess both the impact of the funding and continued needs that would benefit from additional funding support. This specific report analyzes results by report year, allowing comparisons to be made from the periods before and after the onset of the COVID-19 pandemic. An addendum to this report (Communicable Disease General Purpose Revenue Funding Financial Report: Results by Jurisdiction Size) assesses main results by jurisdiction size.

2. Methods

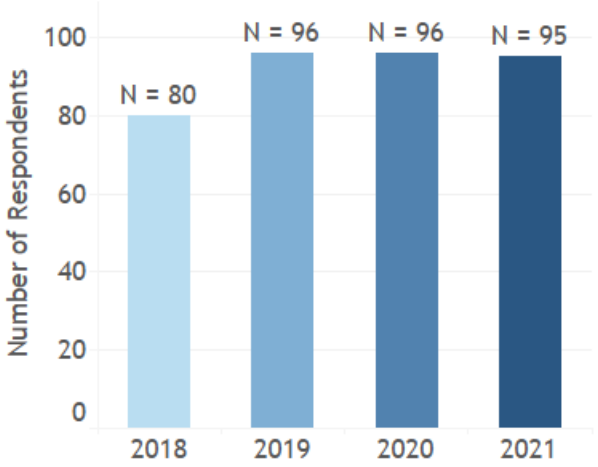
2.1 Data Collection

The financial report was formatted as a brief web-based survey that was emailed to grantees. Survey questions consisted of mostly qualitative write-in responses asking about funding uses, desired outcomes, measurements of success toward outcomes, partner engagement, and lessons learned. While most questions were the same across funding years, the 2020 and 2021 surveys did add three additional multiple-choice questions regarding funding uses, the impact of the COVID-19 pandemic, and funding adequacy.

2.2 Analysis

Most data consisted of qualitative write-in responses that ranged in length from a few words to multiple sentences or bullet points. After becoming familiar with the data, initial themes for each question were developed based on observed patterns in the data. Responses to questions were then read again and coded into relevant themes. New thematic categories that emerged throughout the coding process were added in an iterative manner, and previously coded reports were re-analyzed to capture alignment with the newly identified themes. Singular responses were coded into as many themes as were relevant. After initial coding, similar themes were consolidated. This report is a repeated cross-sectional analysis of dominant themes by funding year.

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



3. Results

A total of 367 unique responses were analyzed. Of the 97 local health departments and Tribal health organizations that received funding, there were 80 respondents in 2018, 96 respondents in 2019, 96 respondents in 2020, and 95 respondents in 2021 (Figure 1).[1] Eight of the 17 funding recipients in 2018 who did not complete the report were from Tribal health organizations, suggesting that the 2018 data may not be representative of Tribal health organizations. The other nine local health departments who did not complete the report in 2018 were from diverse regions across the state.

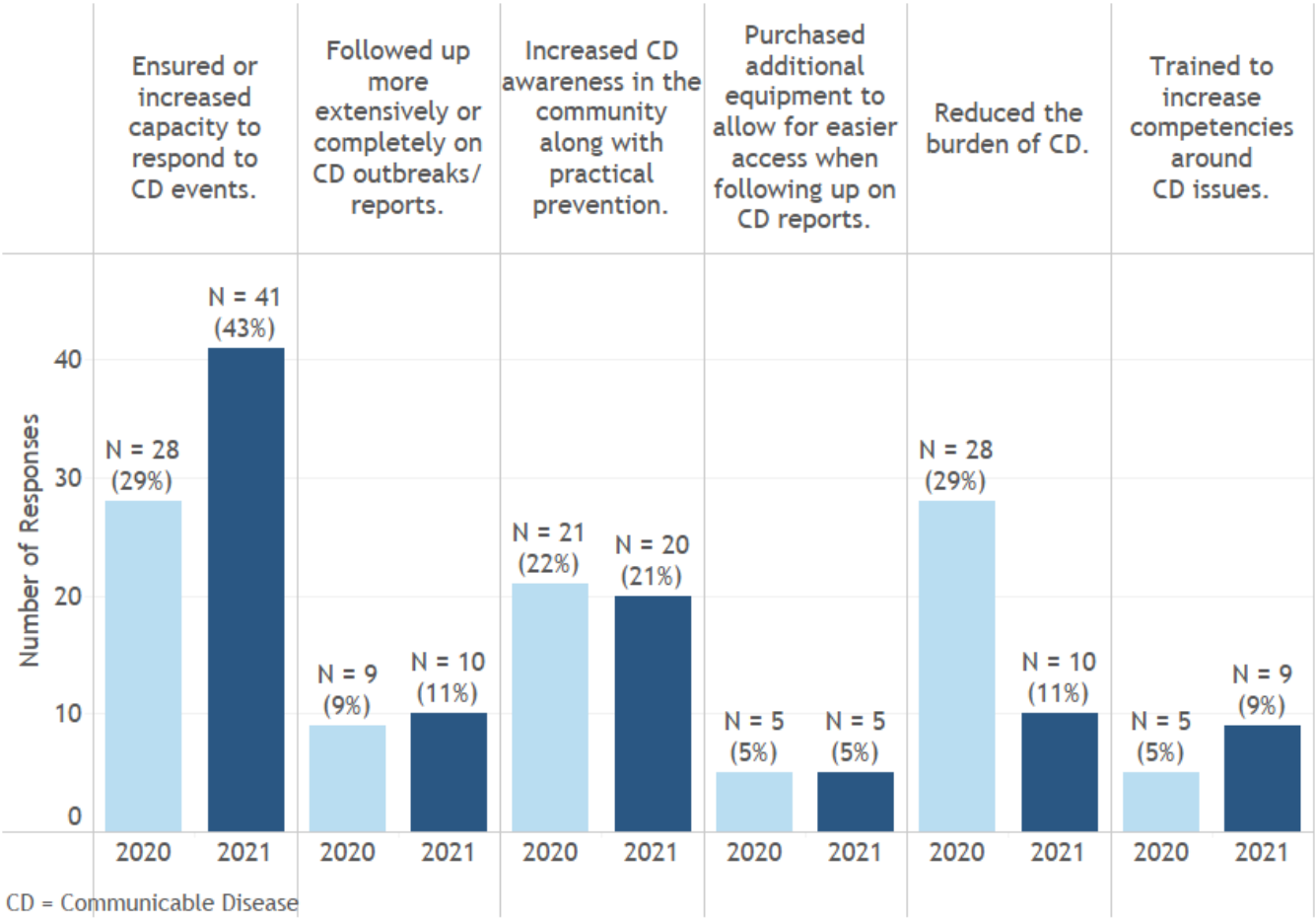
[1] Though 97 local health departments and Tribal health organizations received funding, St. Francis Health Department and South Milwaukee Health Department combined operations beginning in 2019, even though they were funded separately. Therefore, in years 2019, 2020, and 2021, South Milwaukee/St. Francis Health Department completed one financial report that reflected their combined uses of the funding. In years 2019, 2020, and 2021, there were only 96 operationally unique local health departments and Tribal health organizations that received funding.

3.1 Funding Uses

In the 2020 and 2021 surveys only, 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.

Overall, the distribution of funding uses in 2020 and 2021 were similar (Figure 2), but a few differences were identified. In 2020, the two most commonly selected uses for the allocated funds were (1) ensuring or increasing capacity to respond to communicable disease events (29%) and (2) reducing the burden of communicable disease (29%) (Figure 2). In 2021, the largest proportion of respondents (43%) indicated that the funds ensured or increased capacity to respond to communicable disease events, while the second largest proportion of respondents (21%) indicated that the funds increased communicable disease awareness in the community along with practical prevention opportunities (Figure 2).

Figure 2. Of the following options, choose one that best describes how your agency or department used the allocated funds during the funding period that ended June 30 of this year. (2020: N = 96, 2021: N = 95)



Though this multiple-choice question 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. Narrative responses were analyzed as is described in section 2.2.

Five dominant themes emerged regarding funding uses (Figure 3; Table 1). The most common uses of funds were (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. Many respondents identified multiple diverse uses of the funds that fell into different 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 clearly fall into any of the dominant themes shown. For example, three respondents in 2021 and one respondent in 2020 reported using funds for general communicable disease staffing, without noting specific roles of the staff. One

respondent in 2019 reported using funds to remove abandoned tires in an effort to reduce mosquito borne illnesses, and another local health department in 2019 reported using funds to implement a quality improvement process regarding latent tuberculosis medication compliance among international students. Another 2018 respondent noted using funding to support start up costs associated with a bacteria testing lab. One respondent in 2018, which reflected the first funding year, reported that they were unaware of the funds until too late into the grant cycle, so they were unable to use the funds, and a 2019 respondent noted that additional funding was needed. Another respondent in 2020 noted that they originally planned to use the funding for tickborne disease projects, but plans were shifted as a result of COVID-19.

Some important differences were noted by funding year. Slightly over half of respondents in 2021 (55%) and 2020 (54%) indicated using funds to conduct communicable disease case investigation, follow-up, and outbreak investigations, compared to 46% of respondents in 2018 and 44% of respondents in 2019, likely representing the increased burden of COVID-19 investigations. Similarly, a smaller percentage of respondents in 2020 and 2021 reported using funds for (1) communicable disease awareness, education, prevention, and outreach efforts and (2) training and mentorship to increase staff competency around communicable disease. A smaller percentage of 2021 respondents also reported using funds for purchasing technology, materials, and infrastructure needed for communicable disease efforts, compared to respondents in 2018, 2019, and 2020. A larger percentage of respondents in 2021 (12%) also reported using funds for communicable disease screening, testing, and vaccination events, which is again largely due to both COVID-19 testing and vaccination efforts. Some respondents in 2020 and 2021 indicated that the increased burden of COVID-19 investigation impeded on their capacity for initiatives of prior years (for example, tick kit distribution). Some other respondents in 2020 noted that their funding uses would have shifted as a result of COVID-19, but they had already spent the funds during the early part of the funding year, which was before the onset of the COVID-19 response in Wisconsin.

Example responses that fall into each theme for funding uses are listed in Table 1.

Figure 3. Most common funding uses identified through narrative responses

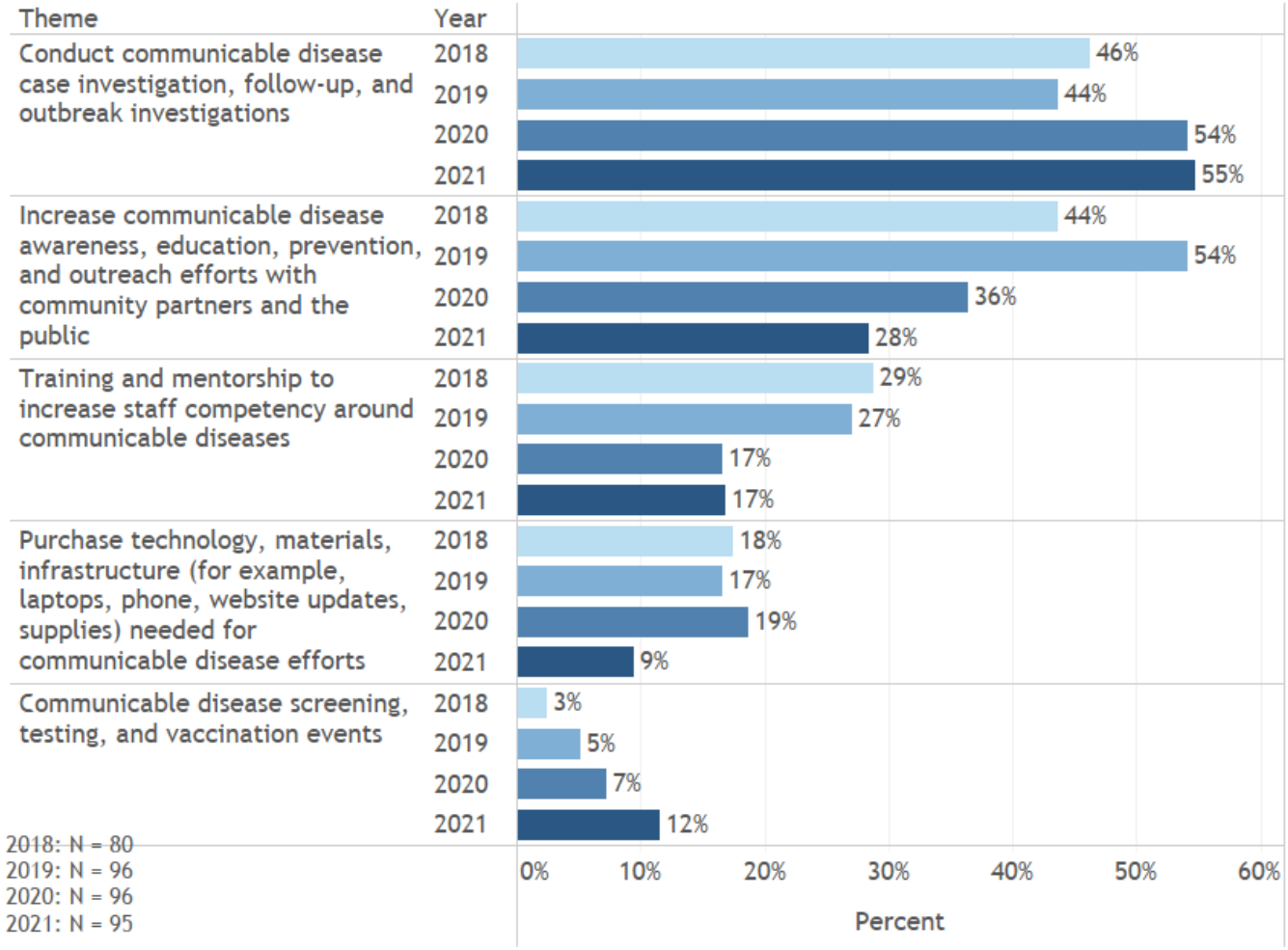


Table 1. Quoted examples in each thematic category for funding use.
1. Conduct communicable disease case investigation, follow-up, and outbreak investigations
• "This grant ensures that we have staff to follow up with reported communicable diseases. The grant is mainly used by public health nurses who follow up with clients diagnosed or exposed to a communicable disease." – 2021, Jurisdiction size less than 20,000 • "Our department investigated 1,464 COVID-19 cases that were either confirmed, probable, or suspect and investigated over 100 other diseases. We investigated several COVID-19 outbreaks and 1 other respiratory illness outbreak at a nursing home." – 2021, Jurisdiction size less than 20,000 • "Reducing the burden of communicable diseases...by ensuring we had appropriate level of capacity to respond to communicable disease events." – 2021, Jurisdiction size 100,000 or more • "We continue to use these funds to offset the cost of communicable disease investigations. We are seeing more and more communicable diseases reported to the health department which takes much more time for follow up." – 2019, Jurisdiction size 50,000—99,999 • "The allocated funding supported the local health department's ability to conduct mandated communicable disease follow-up. This included the emerging issue of COVID-19 in the early parts of 2020." – 2020, Jurisdiction size 20,000–49,999

2.	**Increase communicable disease awareness, education, prevention, and outreach efforts with community partners and the public**
	• "Some of our funding was used to increase communicable disease awareness by purchasing metal signs educating on Lyme Disease Prevention and Swimming associated illness prevention" – 2021, Jurisdiction size less than 20,000 • "Funding was also utilized to purchase baskets for STI prevention kits and tick kits and for staff time to assemble these kits and distribute them at fairs and events around our county." – 2021, Jurisdiction size 20,000–49,999 • "A meeting was organized with infection prevention specialist in our county to educate on Public Health's role in communicable disease." – 2019, Jurisdiction size 50,000–99,999 • "A large banner was purchased and hung above a main street... for Measles awareness and to promote vaccination." – 2019, Jurisdiction size 20,000–49,999
3.	**Training and mentorship to increase staff competency around communicable diseases**
	• "These funds were used to provide training, mentorship and quality assurance for our disease investigation and contract tracing team." – 2021, Jurisdiction size 20,000–49,999 • "We have staff new to communicable disease. This staff has attended training in TB and HIV partner services" – 2021, Jurisdiction size 100,000 or more • "Funding for 07/01/18-06/30/2019 was used to increase public health nursing staff capacity in communicable disease reporting and treatment by having staff attend the DHS TB Summit and STD training." – 2019, Jurisdiction size 50,000–99,999 • "Allocated funds were used to train and educate health department staff the use of WEDSS and communicable disease investigation" – 2021, Jurisdiction size 20,000–49,999 • "The majority of these funds were used to increase competencies around communicable disease issues through trainings/conferences" – 2018, Jurisdiction size 100,000 or more
4.	**Purchase technology, materials, infrastructure (for example, laptops, phone, website updates, supplies) needed for communicable disease efforts**
	• "We purchased a phone for our nurses to enable our limited term employees to follow-up on COVID-19 contact tracing and COVID-19 vaccination clinic coordination." – 2021, Jurisdiction size 20,000–49,999 • "Funding was used to purchase transport cooler and VFC temperature loggers." – 2021, Jurisdiction size 50,000–99,999 • "We purchased a Microsoft Surface Pro to allow our nurses to respond to Communicable Diseases when they were not in the office (WEDSS is not compatible with our iPads or with their cell phones.) " – 2019, Jurisdiction size less than 20,000
5.	**Communicable disease screening, testing, and vaccination events**
	• "During that time period most of our time was spent responding to COVID-19. This funding did allow us to continue to offer STI and Hepatitis C screenings at our local county jail. Those served are high risk and usually under resourced residents." – 2021, Jurisdiction size 20,000–49,999 • "Weekly COVID vaccination outreach sites were implemented. Covid education, daily testing, and vaccination was offered…" – 2021, Jurisdiction size less than 20,000 • "The funds were used to purchase the 2019-2020 influenza vaccine." – 2020, Jurisdiction size less than 20,000 • "...used the funding to increase our disease detection capacity. Specifically, we purchased supplies necessary to conduct rapid HIV and HCV testing so that we may better serve transient and at-risk populations." – 2021, Jurisdiction size 50,000–99,999

3.2 Desired Funding Outcomes

In all survey years, respondents described their desired outcomes of the GPR funding. Written responses were analyzed for common themes in the same manner described in section 2.2. Five dominant themes emerged regarding desired outcomes of funding (Figure 4; Table 2).

Many respondents identified diverse desired outcomes that fell into multiple dominant themes. The most common desired outcomes were (1) to ensure capacity for communicable disease follow-up, decrease disease burden, and ensure more complete reporting and (2) to increase community knowledge of communicable disease prevention/harm reduction and increase partnerships (Figure 4). These desired outcomes largely reflect the most common funding uses described in section 3.1. Additionally, 8% of respondents in 2018, 5% of respondents in 2019, 8% of respondents in 2020, and 4% of respondents in 2021 reported reduced budgetary pressures or reduced financial burden of communicable disease activities on the tax levy as a desired outcome of the GPR funding. Example responses that fall into each theme for desired outcomes are listed in Table 2.

Of the 367 respondents, six responses did not fall into any of the dominant themes identified in Figure 4. Three respondents reported that enhanced infrastructure (for example, storage room organization/security, laptops, infrastructure for testing waterborne communicable diseases) was their desired outcome. One respondent's desired outcome was to reduce mosquito breeding habitats, one respondent reported that a general increase in staffing was their desired outcome, and another respondent left this answer blank due to not using funds (see section 3.1)

Similar to the differences in funding uses by report year that were noted in section 3.1, there are also notable differences in the reported desired funding outcomes by year. A larger percentage of respondents in 2020 (64%) and 2021 (66%) reported a funding outcome related to increasing capacity for communicable disease follow-up, decreasing disease burden, or ensuring more complete reporting than was reported in 2018 (56%) and 2019 (54%). Conversely, a smaller percentage of respondents in 2021 (23%) reported a funding outcome related to increasing community knowledge of communicable diseases and increasing partnerships, compared to respondents in 2018 (44%), 2019 (44%), and 2020 (34%). Some respondents in 2020 reported originally planning to use funds for outreach activities but shifting priorities due to the COVID-19 response. Other 2020 respondents noted that they used funds for outreach activities before the onset of the COVID-19 response locally, which explains why a larger proportion of respondents in 2020, compared to 2021, were able to engage in community outreach and education activities.

A smaller percentage of respondents in 2020 and 2021 also reported increasing staff competency/workforce development as a desired outcome. This again is reflective of the impact of COVID-19 on funding uses. During the pandemic, local health departments and Tribal health organizations used more resources to ensure capacity for communicable disease follow-up, due to the burden of COVID-19 investigations. This left fewer resources and less capacity available for both workforce development and increasing community knowledge through partner engagement, though both themes are important to promote high-quality and equity-focused public health services. This insight should be used to ensure that local health

departments and Tribal health organizations have the funds and resources necessary to uphold all services in the face of future public health emergencies like COVID-19.

Figure 4. Most common desired funding outcomes.

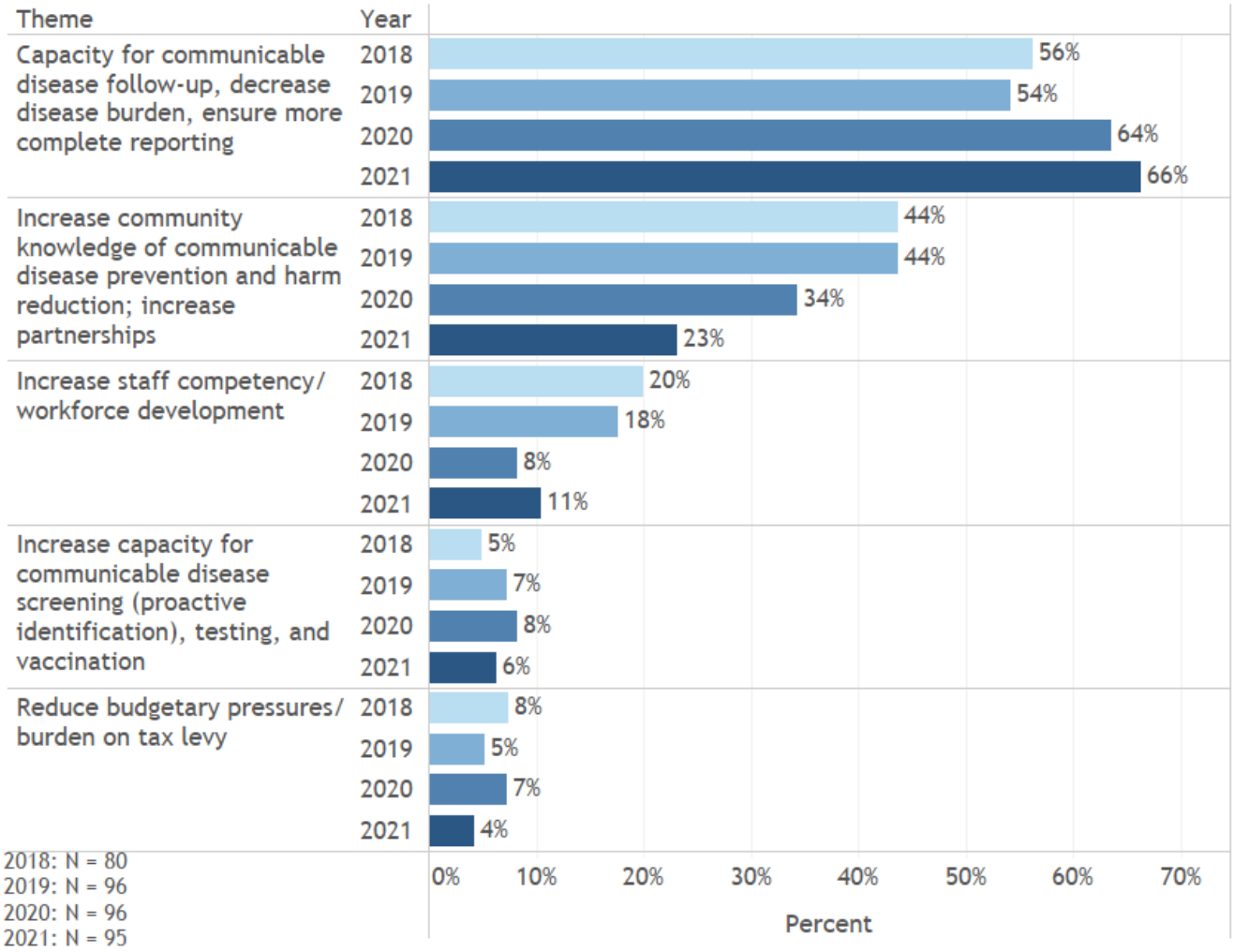


Table 2. Quoted examples in each thematic category for desired funding outcomes.
1. Capacity for communicable disease follow-up, decrease disease burden, ensure more complete reporting
• "To provide more extensive and complete state reporting.." – 2019, Jurisdiction size less than 20,000 • "The desired outcomes of this funding is to ensure that…we have capacity to follow up with clients diagnosed or exposed to a communicable disease." – 2021, Jurisdiction size 20,000–49,999 • "While it is early to determine the STD initiative, our desired outcome would be lower STD cases…" – 2021, Jurisdiction size 20,000–49,999 • "Timely investigation of cases." – 2020, Jurisdiction size 50,000–99,999
2. Increase community knowledge of CD prevention and harm reduction; increase partnerships
• "To increase awareness to community partners and local businesses that engage in services with vulnerable populations." – 2021, Jurisdiction size less than 20,000 • "Increase knowledge of local providers knowledge on EPT and STI follow-up." – 2020, Jurisdiction size 50,000–99,999 • "Increase knowledge of Lyme disease" – 2021, Jurisdiction size less than 20,000 • "Equitable access to Spanish education about com. disease." – 2021, Jurisdiction size 20,000–49,999 • "Increase awareness and knowledge of tick-borne illnesses and prevention strategies…" – 2018, Jurisdiction size 100,000 or more
3. Increase staff competency/ workforce development
• "New staff person has become the TB lead on our communicable disease team, is now competent to manage TB cases independently and initiated a video DOT program within the dept." – 2021, Jurisdiction size 100,000 or more • "Increased staff competencies and confidence addressing communicable diseases." – 2019, Jurisdiction size 20,000–49,999 • "The desired outcome was for all staff working in CD to be effective and efficient in managing communicable disease cases in our county. Implementing a quality improvement process and sending staff to additional trainings allowed us to achieve this" – 2019, Jurisdiction size 100,000 or more
4. Increase capacity for communicable disease screening (proactive identification), testing, and vaccination
• "Provide staff time to offer communicable disease outreach and early identification of disease in an underserved, high-risk population. Our intent was to increase the number of inmates offered free STI and Hepatitis C screening. However due to the pandemic our numbers were down." – 2021, Jurisdiction size 20,000–49,999 • "Increase influenza vaccination rates" – 2021, Jurisdiction size less than 20,000 • "To equip [health department] with the tools necessary to detect HIV and HCV in populations that may not otherwise have access to care. This will allow us to link patients with treatment, providing better health outcomes for these patients as well as reduce transmission within the community." – 2021, Jurisdiction size 50,000–99,999 • "Proactive identification of STI's/Hept C/HIV in the jail population. This is a high-risk population with low health care access." – 2019, Jurisdiction size 20,000–49,999
5. Reduce budgetary pressures/ burden on tax levy
• "The funding is utilized each year to offset some of the local tax levy dollars needed to address communicable disease programming. Communicable disease surveillance and response is a mandated service." – 2021, Jurisdiction size less than 20,000 • "To offset in some small way the $XX,XXX of tax levy dollars used to support communicable disease investigation, so that we could continue to successfully control the spread of communicable disease." – 2019, Jurisdiction size less than 20,000 • "To help offset the increasing budgetary pressures from ongoing disease surveillance and investigations." – 2018, Jurisdiction size less than 20,000 • "Provide fiscal support for statutorily required activities." – 2020, Jurisdiction size 20,000–49,999

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. When analyzed, six dominant themes emerged (Figure 5). Many respondents reported a wide range of measurement strategies.

Overall, most respondents reported using some sort of measure to assess their progress toward the desired outcome. Only 5% of respondents in 2018, 3% in 2019, 1% in 2020, and 3% in 2021 explicitly reported not measuring progress or that it was challenging to measure due to the relatively small contribution of the GPR funding to their overall efforts. The most common measurements of progress or success included disease investigation metrics (for example, % of cases contacted, % of cases completed, % completed in certain time) and measures related to distribution of education/prevention materials (for example, website clicks, # of tick kits, condom distribution, post-event evaluations, event participation). Example responses that fall into each theme for desired outcomes are listed in Table 3.

A larger proportion of respondents in 2020 (53%) and 2021 (59%) compared to respondents in 2018 (38%) and 2019 (34%) reported using disease investigation metrics as a measure of success or progress, likely again due to prioritization of COVID-19 follow-up. Additionally, a smaller percentage of respondents in 2020 (28%) and 2021 (23%) reported using distribution of education/prevention materials as a measure of success/progress, compared to 40% of respondents in 2018 and 50% of respondents in 2019.

Of the 367 respondents, 18 responses were either vague or did not fit into these major themes. Two of these responses were blank. Other measures of success noted were general increases in staff capacity, ability to keep the office staffed, and elements regarding general quality control and short-term goal/priority setting. Another respondent used the number of tires removed as a measure to assess reduction in mosquito breeding environments, and one respondent used the availability of low-cost water testing to residents as a measure of success. Three respondents noted using the reduction in the reliance on the tax levy as their primary measure of success. In 2020, other measures of success included obtaining necessary technology and forming strong partnerships with long-term care facilities.

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

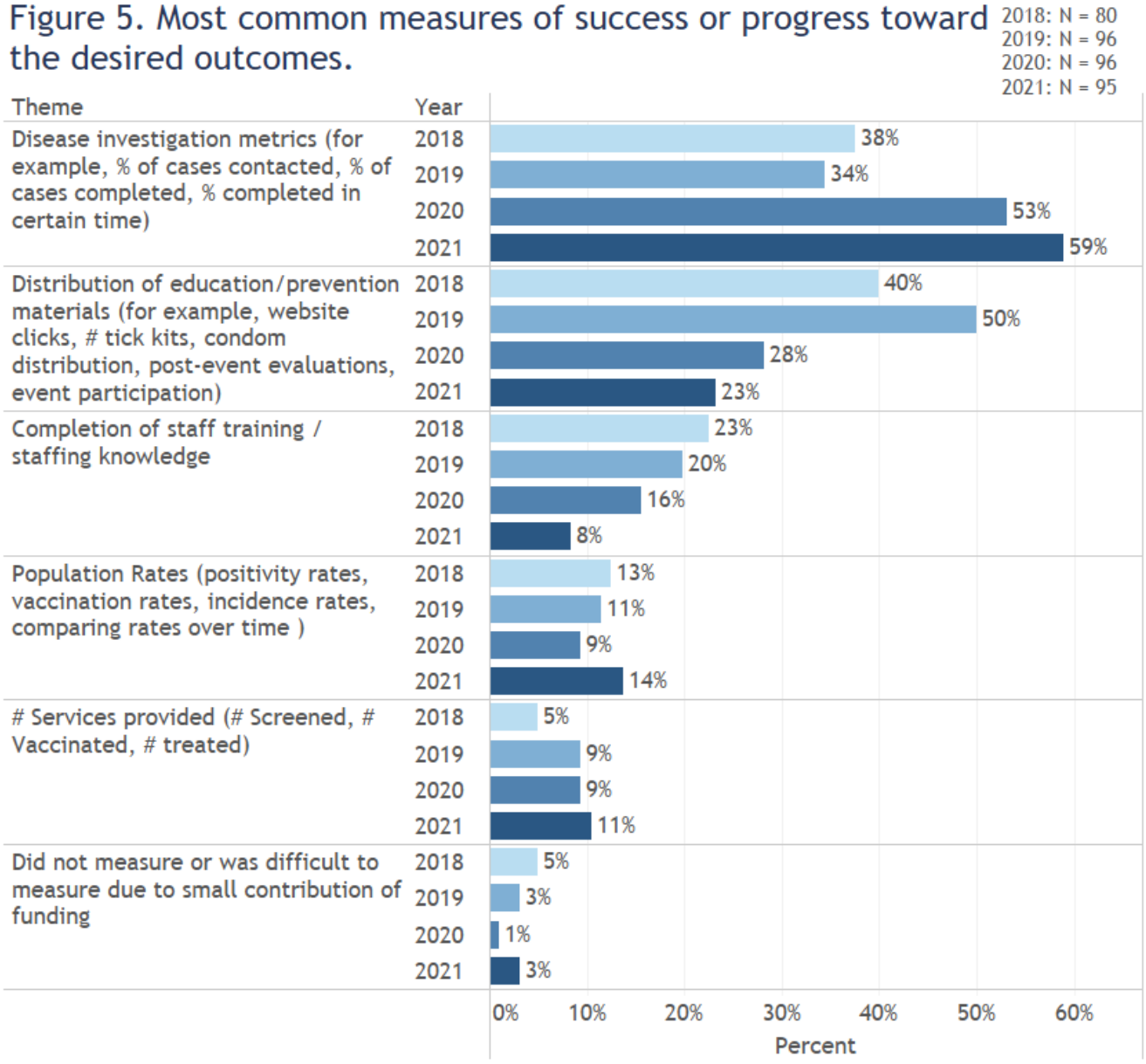


Table 3. Quoted examples in each thematic category for measure of success or progress toward outcome

1.	**Disease investigation metrics (for example, % of cases contacted, % of cases completed, % completed in certain time)**
	• "Complete COVID-19 charts in WEDSS. % of investigations completed within 24 hours." – 2021, Jurisdiction size 20,000–49,999 • "We used the contact tracing dashboard provided through the State to understand how quickly we were following up on cases. We stayed above 75% of the time where cases were attempted to be contacted within 24 hours." – 2021, Jurisdiction size less than 20,000 • "Our department tracked the number of disease incidents and the amount of staff time needed to complete the surveillance and/or investigations on these incidents." – 2019, Jurisdiction size less than 20,000

2.	**Distribution of education/prevention materials (for example, website clicks, # tick kits, condom distribution, post-event evaluations, event participation)**
	• "Number of views/reacts/shares to Facebook posts. Number of tick kits distributed. Number of tick signs hung up." – 2021, Jurisdiction size 20,000–49,999 • "We tracked how many tick-kits were distributed as well as surveyed those who received a kit." – 2019, Jurisdiction size 20,000–49,999 • "How many classes held and number that attended, number of tick kits distributed, fact sheets distributed, social media and website views" – 2019, Jurisdiction size less than 20,000 • "All childcare staff members present at the six presentations were given a brief evaluation to complete. This evaluation included five questions, and a space for comments. All evaluations were reviewed, and the given input will be considered in future presentations of this nature" – 2019, Jurisdiction size 50,000–99,999
3.	**Completion of staff training / Staffing knowledge**
	• "Health educator was able to demonstrate ability to import cases in wedss and navigate field's ability to access epinet for communicable disease investigation protocols" – 2021, Jurisdiction size less than 20,000 • "Successful completion of ICS 300 by all employees. Updated policies and procedures with information gained from attendance at national conference and TB summit" – 2018, Jurisdiction size 50,000–99,999 • "Two additional staff members were included in training during this funding cycle. In all, four staff members attended trainings related to WEDDS and TB." – 2019, Jurisdiction size 100,000 or more
4.	**Population Rates (positivity rates, vaccination rates, incidence rates, comparing rates over time)**
	• "Disease incident/cases per year are monitored and comparison made annually." – 2021, Jurisdiction size less than 20,000 • "Tracking trends in disease incidence and evaluating in comparison to previous years. ." – 2020, Jurisdiction size less than 20,000 • "We monitor communicable disease data on a regular basis to determine if there is any change in disease rates." – 2019, Jurisdiction size 20,000–49,999 • "Monitored positivity rate of Covid-19 and also vaccination rates." – 2021, Jurisdiction size less than 20,000 • "We all looked at our vaccination rates among targeted individuals." – 2021, Jurisdiction size 100,000 or more
5.	**# Services Provided (# Screened, # Vaccinated, # treated)**
	• "We keep a log of those screened and the number of screening opportunities offered." – 2021, Jurisdiction size 20,000–49,999 • "Provided greater than 6,000 vaccines to date and processed more than 7,000 tests." – 2021, Jurisdiction size less than 20,000 • "We measured prevalence of TB in a group of formerly incarcerated and/or homeless" – 2018, Jurisdiction size 100,000 or more
6.	**Did not measure or was difficult to measure due to small contribution of funding**
	• "We did not measure outputs and outcomes." – 2021, Jurisdiction size less than 20,000 • "The funding came so late formal measures were not established." – 2018, Jurisdiction size 50,000–99,999 • "Success/progress toward the desired outcome is difficult to measure through outputs/outcomes because the funding was such a small amount that it only covers a small portion of a nurse salary" – 2018, Jurisdiction size less than 20,000

3.4 Partner Engagement

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

Most respondents in 2018 (68%) and 2019 (71%) reported engaging with partners in their work utilizing the GPR funding, compared to only 51% of respondents in 2020 and 35% of

respondents in 2021 (Figure 6). This is likely reflective of the impact of COVID-19 on funding uses. Because more respondents in 2020 and 2021 reported using funds for disease investigations, and fewer reported using funds for communicable disease outreach with the public, there were likely fewer opportunities for partner engagement in 2020 and 2021.

Many respondents indicated multiple partnerships across sectors. Of those who reported partner engagement, medical/care facility partners and daycare/school/college partners were the most common (Figure 7). While 24% of respondents in 2018 and 20% of respondents in 2019 reported partnerships with outdoor recreation areas (for example, campgrounds, park and recreation programs), only 8% of respondents in 2020 and 6% of respondents in 2021 reported engaging with outdoor recreation partners. This again likely reflects that some activities (particularly tick kit distribution and vector-borne illness education) were largely not prioritized in 2020 and 2021 due to the demands of COVID-19 follow-up. Additionally, the focus on medical/care facility partners, daycare/school/college partners, and jail/law enforcement partners in 2021 likely reflects COVID-related needs for populations of risk. Diverse partner engagement is critical as local health departments and Tribal health organizations work to ensure that their services and policies promote health equity. Ensuring that all local health departments and Tribal health organizations have the funding and capacity to maintain diverse partner engagement throughout emergencies should be a priority.

While Figure 7 displays nine most common partnership themes, six respondents who reported engaging with partners did not fall into any of these categories. Most of these other reported partners were internal partners, including with IT staff, facilities management, and other internal programs. Another respondent noted contracting interpreting services. Examples of partnerships within each theme are listed in Table 4.

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

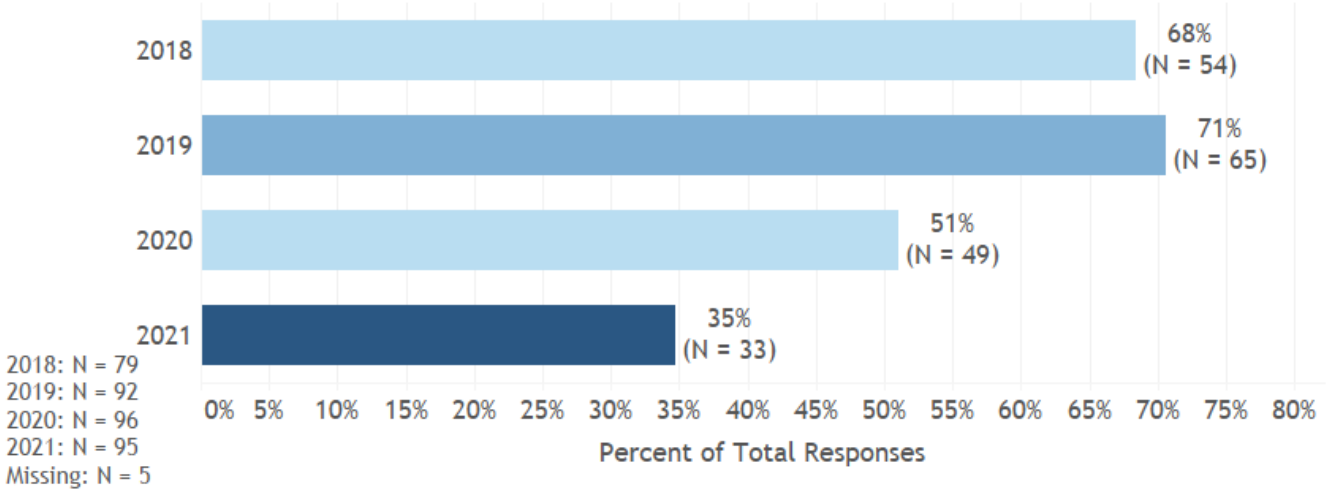


Figure 7. Of those who engaged with partners, who were the partners?

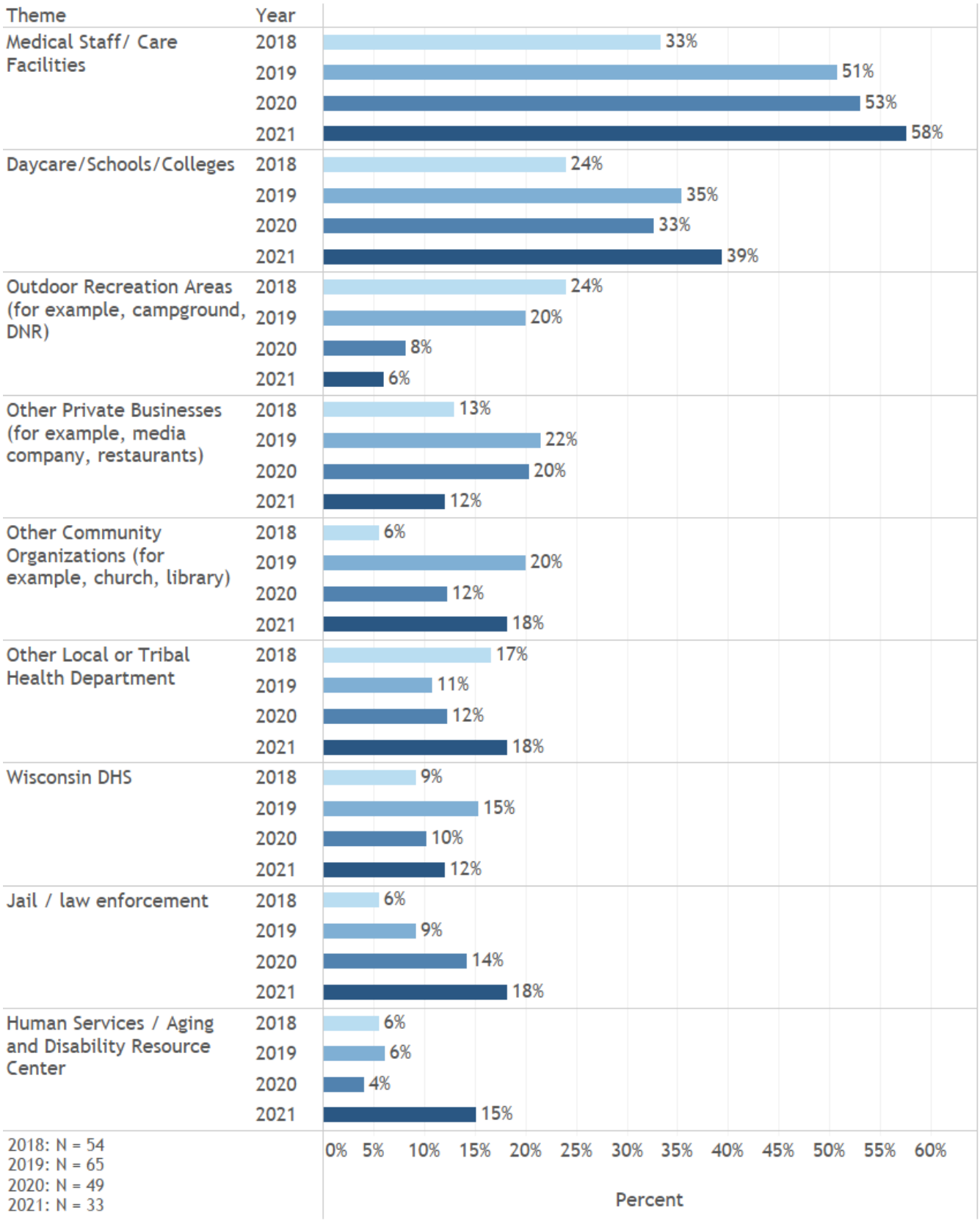


Table 4. Quoted examples in each thematic category for partner engagement.

1. Medical Staff / Care Facilities	
	• "Infection control preventionist distributed two posters within their health systems and emergency departments. One poster was related to the recommend STI treatment guidelines and the other was the revised 2018 reportable diseases and conditions." – 2018, Jurisdiction size 100,000 or more • "We partner with labs, hospitals and medical clinics to follow up with communicable diseases." – 2019, Jurisdiction size 50,000–99,999 • "We engaged the clinic to arrange for lunch and learns" – 2019, Jurisdiction size less than 20,000 • "We have enhanced our relationship with health providers, seeing us a reliable and valued source of information" – 2019, Jurisdiction size 50,000–99,999 • "Infection prevention partners" – 2021, Jurisdiction size 50,000–99,999
2. Daycare/ Schools/ Colleges	
	• "We had PHN's assigned to schools, daycares, churches... We had regular virtual meetings, designed outreach materials and developed resource flyers they could share, and responded to questions and concerns as needed." – 2021, Jurisdiction size 20,000–49,999 • "University…helped design and implement the QI process. They were involved in root cause analysis and process analysis." – 2019, Jurisdiction size 20,000–49,999 • "[Health department] continues to engage with school nurses/or their designees to promote additional surveillance and timely response to COVID-19 cases for school age children. This collaboration with schools includes providing limited access to, technical support, and trainings on WEDSS which promotes communication, and timely identification & follow up of school age COVID 19 cases." – 2021, Jurisdiction size 100,000 or more
3. Outdoor Recreation Areas (for example, campground, DNR)	
	• "We partnered with local agencies and gave them tick kits to help with distribution. We partnered with organizations that owned trails/outdoor recreation areas that allowed us to hang up signs." – 2021, Jurisdiction size 20,000–49,999 • "Yes, we worked with … Nature Center's annual Bug Day,… Park and Recreation program and the local boys and Girl Scout troops." – 2019, Jurisdiction size less than 20,000 • "We partnered with our Maintenance Department as well as our Parks and Rural Planning partners to purchase and install sharps containers in county restrooms" – 2019, Jurisdiction size less than 20,000
4. Other Private Businesses (for example, media company, restaurants)	
	• " [Partners engaged for] STD Campaign: 10 bars, 3 grocery stores, 1 athletic club, 3 salons, 1 women's shelter, and 8 food establishments." – 2019, Jurisdiction size 20,000–49,999 • "[We] partnered with [broadcast company]. They published and broadcasted our advertisements over their radio platforms." – 2021, Jurisdiction size 100,000 or more
5. Other Community Organizations (for example, church, library)	
	• "Community Organizations worked with us as subject experts to help organize culturally appropriate vaccination clinics, helped us secure resources, and provided support promoting vaccination clinics within their affinity communities." – 2021, Jurisdiction size 100,000 or more • "We partnered with an agency…, which is a place for recently released inmates to go after being released from jail early in the morning. The agency also acts as a day shelter for the homeless. We also partnered with the …Warming Center. They provide an evening meal and overnight accommodations for the homeless. These agencies hosted and promoted our testing clinics." – 2018, Jurisdiction size 100,000 or more
6. Other Local or Tribal Health Department	
	• "…Only in the process of follow up and investigation of communicable diseases. Typical partners include neighboring Health Departments…" – 2018, Jurisdiction size less than 20,000 • "Funding allowed [health department] to maintain partnerships with other LHD's…in coordinating routine communicable disease follow up." – 2021, Jurisdiction size 100,000 or more • "We partnered with two other health departments in developing these materials." – 2020, Jurisdiction size 20,000–49,999
7. Wisconsin DHS	

	• "We engaged with numerous partners with this funding. Specifically, we engaged with the WI Department of Health Services. For our TB-related investigations, we engaged with the WI TB Program." – 2019, Jurisdiction size 50,000–99,999 • "The [Health department] has partnered with WIR, WEDSS, DHS, WI TB program and CDC to ensure the information disseminated to the public is accurate and up to date in accordance with the state statues" – 2018, Jurisdiction size 100,000 or more • "We routinely engage with the State on communicable disease follow-up. For example the measles contact Investigations involve significant coordination with the Immunization Program." – 2018, Jurisdiction size 100,000 or more
8. Jail/ Law enforcement	
	• "We partner with our county jail nursing staff and the jail administration to provide testing and treatment of STI's in the jail" – 2018, Jurisdiction size 20,000–49,999 • "Partnered with the Sheriff's Department to allow us to do frequent testing in the jail." – 2019, Jurisdiction size less than 20,000
9. Human Services / Aging and Disability Resource Center	
	• "The local ADRC for distribution of tick kits to seniors at its [local festival] event" – 2018, Jurisdiction size 20,000–49,999 • "We are partnering with our Human Services Department for Mental Health Support with our STD kits. They are providing helpful resources to include in our kits." – 2021, Jurisdiction size 20,000–49,999

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. Of those who responded, 29% in 2018, 27% in 2019, 27% in 2020, and 29% in 2021 stated that they did not have any lessons to share. Narrative responses were again analyzed for common themes, and seven themes were identified (Figure 8). One of the most common themes regarded the importance of community engagement and forming strong partnerships for successful communicable disease outreach, follow-up, education, and prevention. This theme was especially prevalent among respondents in 2018 (31%) and 2019 (41%) but was less prevalent in 2020 (23%) and 2021 (19%). This is likely due to increased community engagement with education and outreach activities before COVID-19 limited capacity for these efforts.

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. Some of these responses regarded practical lessons, like the importance of having nurses schedule call-back times when completing communicable disease follow-up or how keeping inventory of prevention materials can help with estimating demand and future purchasing. Another respondent noted the importance of investing in a timely shipping service to ensure specimens sent to the state laboratory meet requirements for testing. Three other respondents directly reported that educational outreach on many other communicable diseases was impacted by their focus on COVID-19.

Respondents also reported constraints of current funding and the need for more funding/resources for communicable disease follow-up. While 11% of respondents in 2018 and 10% of respondents in 2019 reported this need for more resources as a lesson learned, a larger percentage of respondents in 2020 (20%) and 2021 (18%) reported needing more

resources, which is again likely reflective of the burden of COVID-19. Similarly, a much larger percentage of respondents in 2021 (16%) reported lessons regarding staffing needs and retention, compared to 4% of respondents in 2018 and 1% of respondents in 2019, and 7% of respondents in 2020. A few participants, particularly during the first year the funding was available, also reported challenges regarding completing work during the short timeframe that the funding was available (Table 5).

Examples of lessons learned from each theme are listed in Table 5.

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

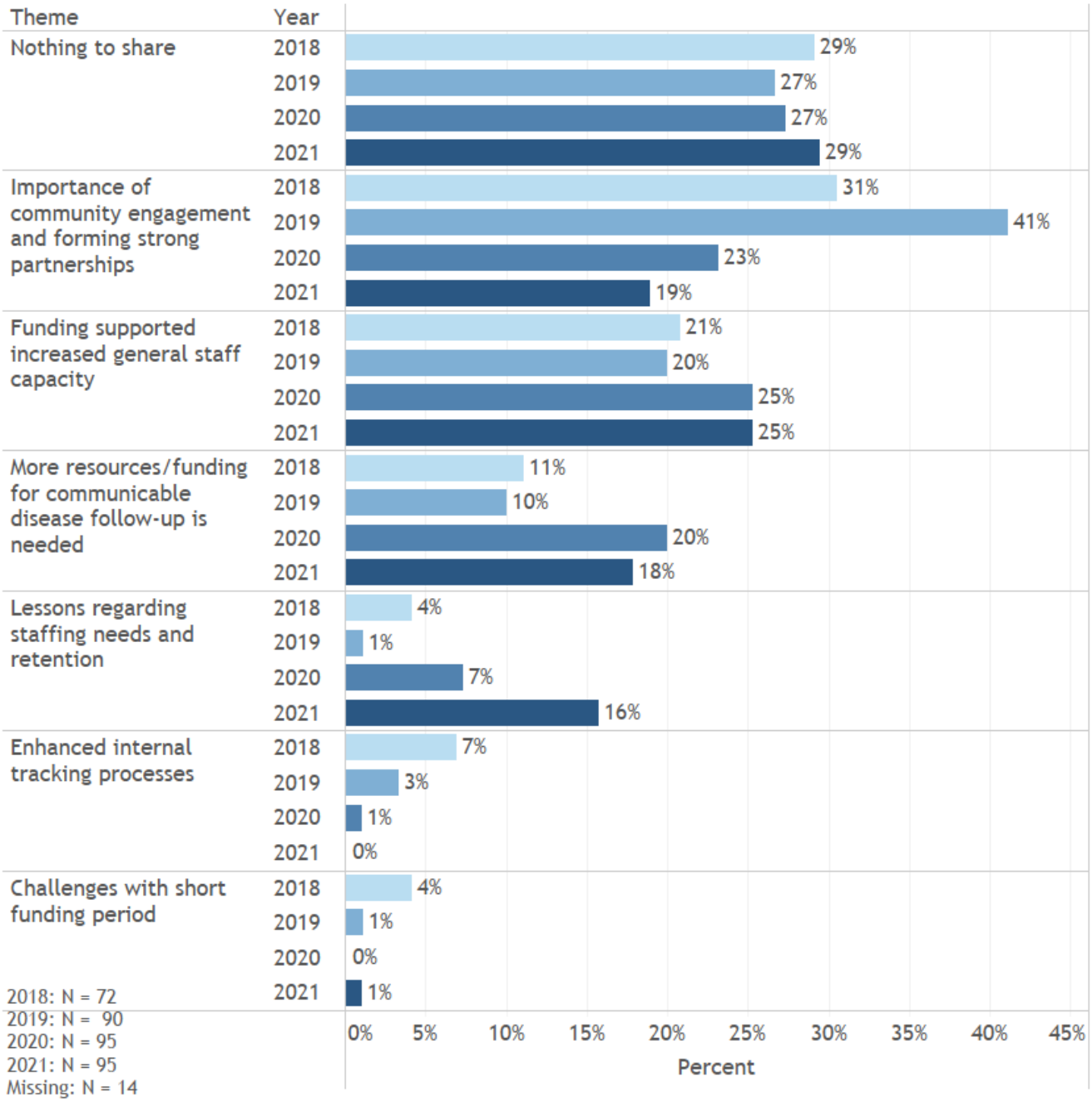


Table 5. Quoted examples of lessons learned as a result of the funding.	
1. Nothing to share	
	• "We always are learning. We have nothing to share with others at this time." – 2019, Jurisdiction size 50,000–99,999 • "No concerns have been identified which would have served as lessons learned." – 2019, Jurisdiction size less than 20,000
2. Importance of community engagement and forming strong partnerships	
	• "Utilizing the funding to allow our staff to be at fairs and events was a great idea. Many people stopped to ask questions and they were able to take free kits home with them." – 2021, Jurisdiction size 20,000–49,999 • "We continue to learn unique was to utilize the funding and create different partnerships that help maximize our outcomes. Due to the COVID-19 pandemic we had to be flexible by shifting from our objectives to address the need to boost awareness around the vaccines." – 2021, Jurisdiction size 100,000 or more • "It takes a community effort to address communicable disease, and resources that are accessible to the public with no questions asked (at least for STI related-diseases)." – 2021, Jurisdiction size 50,000–99,999 • "One lesson learned is that a multimedia approach to advertising for our annual influenza vaccine clinic and communicating about general communicable disease prevention is best. Using only one avenue of advertising will not reach the desired number of people. It is critical to use a variety of resources (social media, website, radio, letters, message boards, etc.)." – 2019, Jurisdiction size less than 20,000
3. Funding supported increased general staff capacity	
	• "Any training or webinars attended leads to an increase in expertise and confidence when navigating communicable disease case management." – 2020, Jurisdiction size 100,000 or more • "Have found funding useful for training and education." – 2021, Jurisdiction size less than 20,000 • "The importance of having staff to respond to any type of communicable disease event" – 2021, Jurisdiction size 20,000–49,999 • "We appreciated the funds. This funding came at a critical time when our current technology limited our ability to respond to the community's need for off-site instruction and our ability to take health programming out to the public." – 2019, Jurisdiction size less than 20,000
4. More resources/funding for communicable disease follow-up	
	• "That Communicable Disease money is limited and not nearly enough to complete any other initiatives related to CD." – 2021, Jurisdiction size less than 20,000 • "Other than we need to allocate more resources towards communicable disease follow up. And people are becoming less cooperative resulting in more resources being needed." – 2021, Jurisdiction size 50,000–99,999 • "Although funding was helpful to pay for staff follow-up, the funding nowhere comes near to covering the true cost of communicable disease investigation." – 2021, Jurisdiction size 20,000–49,999 • "Yes, we learned that the funding received from the State is used up within three months of the 12-month funding period." – 2019, Jurisdiction size less than 20,000
5. Lessons regarding staffing needs and retention	
	• "It is very time consuming and not necessarily a good return on investment to train temporary staff in communicable disease tasks, which require a high level of skill, to respond to a surge in cases. Temporary staff don't get benefits, aren't guaranteed hours, and tend to not stay in the job very long." – 2021, Jurisdiction size 20,000–49,999 • "Communicable disease follow up is one of our most critical program areas and does not receive enough funding or attention (outside of the Covid pandemic). As older staff are beginning to retire, it has been difficult to recruit, train, and retain younger staff to take their places. Extra funding really helps with this." – 2021, Jurisdiction size 100,000 or more

	• "Our department learned to anticipate COVID-19 case increases and recruit LTE Limited Term employees to be hired and trained. We also learned that we would benefit from not discharging staff as case levels reduce as the COVID-19 pandemic is likely to have regular peaks and decreases in cases." – 2021, Jurisdiction size 100,000 or more
6. Enhanced internal tracking processes	
	• "Internally we need to have a better system of tracking the funding." – 2019, Jurisdiction size 20,000–49,999 • "In 2019 we are tracking the time and expenses related to communicable disease follow-up to get a more accurate accounting of resources used." – 2019, Jurisdiction size 50,000–99,999 • "We are going to use a QI approach next time to ensure we have pre-established measures." – 2018, Jurisdiction size 20,000–49,999
7. Challenges with short funding period	
	• "Not really, just that the invoices for the next fiscal year invoices from I.H.S. are received very close to the end of this grant" – 2019, Jurisdiction size less than 20,000 • "It was difficult to do the work in the shortened time frame that the funding was available." – 2018, Jurisdiction size 20,000–49,999

3.6 Impact of COVID-19 and Funding Adequacy

In addition to previously described differences in funding uses before and after the onset of the COVID-19 pandemic, the surveys in 2020 and 2021 also explicitly asked if COVID-19 impacted how communicable disease funds were used. The majority of respondents in 2020 (66%) and 2021 (79%) stated 'Yes' (Figure 9), which is consistent with the previously discussed differences in funding uses, measures, partnerships, and lessons learned before and after the onset of the COVID-19 pandemic.

Respondents in 2020 and 2021 were also explicitly asked if the allocated communicable disease funding was adequate, of which only 18% in 2020 and 31% in 2021 agreed (Figure 10). This is consistent with themes identified across narrative responses throughout all funding years, which consistently bring up limitations due to insufficient funding.

Some of the 18% of respondents in 2020 and 31% of respondents in 2021 who did agree that funding was adequate provided additional narrative context suggesting that, though they indicated funding adequacy, more funding could be used. Some respondents noted that programing could be expanded with additional funding, while others noted that current funding may not meet future needs when COVID-19 funding sources are not available or if additional communicable disease cases, like tuberculosis (TB) cases, are identified. The quotes below from respondents who indicated funding adequacy illustrate this point.

- "[funding] was adequate for what we did but we would not be able to expand" – 2020, Jurisdiction size less than 20,000
- "While this funding cycle was adequate…we would need a larger amount of funding to have a larger project within our community." – 2021, Jurisdiction size 50,000–99,999
- "We would always utilize more funding if it were available!" – 2021, Jurisdiction size 20,000–49,999

- "The allocated amount is usually adequate for our health department. If additional TB cases were identified, it would have been nice to have additional funds." – 2020, Jurisdiction size less than 20,000
- "Funding was adequate for communicable disease in the given year because supplemental funds were given for the COVID-19 response. If those funds were not provided funding would not have been adequate" – 2020, Jurisdiction size less than 20,000

Figure 9. Percent of respondents who agreed that the COVID-19 pandemic had an impact on how the communicable disease funding was used. (2020: N = 96; 2021: N = 95)

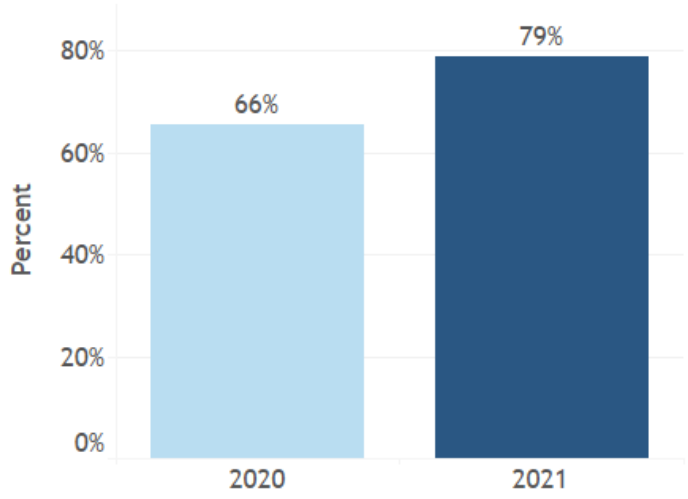
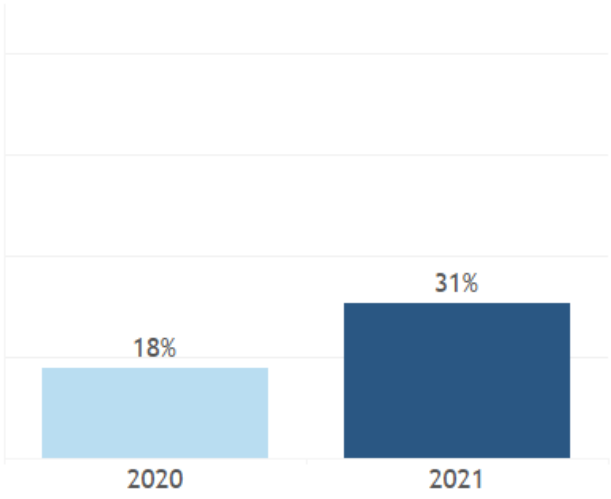


Figure 10. Percent of respondents who agreed that the communicable disease funding was adequate. (2020: N = 96; 2021: N = 95)



It is important to note that GPR funds represented a small portion of total LTHD spending on communicable disease. Though we do not have details on total communicable disease spending for each LTHD, and thus cannot directly calculate the proportion of total spending that GPR funding represented, some respondents volunteered insight on this matter in the last survey question that asked if there was any additional information that they wanted to share about the communicable disease funding. Though many respondents noted funding limitations, a handful of respondents provided detailed responses that clearly illustrated the funding shortages. For example, one 2021 respondent from a jurisdiction between 20,000–49,999 people stated, "Communicable Disease Funding makes up less than 10% of our budgeted expense for communicable disease reporting and follow-up services. The remaining 90% is funded by local levy." Another 2021 respondent noted, "We normally budget an additional $150,000 in local tax levy to cover our communicable disease program costs. The $4,500 we receive from the state, while appreciated, is not nearly enough to support our

normal activities." Others simply noted that "funding was used within months" or that "our current funding is only able to cover about 70 hours of staff time to cover disease investigation." Another 2021 respondent stated, "With a population of [between 50,000–99,999] residents, the amount of [communicable disease] funding we get doesn't even fully cover the follow-up that is required for one specific communicable disease." Another respondent provided a detailed response of how quickly the funding was depleted: "This funding source was utilized from January 2019-February 2019. During this time frame we had 80 confirmed cases, 7 probable, and 4 suspect. Of these two months, there were an estimated 158 hours worked on communicable diseases. The entire funding was depleted after these two months." Though the survey did not explicitly ask respondents to report on what proportion of their total communicable disease budget that these funds represent, these quotes paint a picture of the budgetary constraints experienced by LTHDs across the state.

4. Conclusion

Since the 2017–2019 Biennial Budget allocated GPR funding for communicable disease prevention and control, local health departments and Tribal health organizations have had some increased resources to both carry out their statutory responsibility of communicable disease investigation and to provide important education and outreach to the public and community partners.

Though the yearly financial reports were intended to gather programmatic data on GPR funding uses, these results provide a glimpse into the critical and multi-faceted communicable disease activities carried out by local health departments and Tribal health organizations (LTHDs) across the state. The variety of funding uses reported and the diversity of community partners engaged with further demonstrates that LTHDs take a strength-based approach to ensuring their communicable disease efforts are tailored to the specific needs of their communities.

By looking at dominant funding uses, outcome measures, and lessons learned by funding year, it is also apparent that the demands of communicable disease efforts are changing, particularly after the onset of the COVID-19 pandemic. Though LTHDs' ability to quickly adapt their communicable disease efforts in response to COVID-19 can be viewed as a considerable strength of the local public health system, LTHDs have had limited capability to maintain all their diverse communicable disease efforts on top of their COVID-19 response. Specifically, LTHDs reported less engagement with public education and community partners in 2020 and 2021. Ensuring that LTHDs have the capacity to re-engage with these efforts is critical for communicable disease prevention and strengthening the public health system overall.

Though many insights on the GPR funding uses can be gleaned from analysis of the yearly reports, some data limitations warrant attention. First, the annual funding report survey is relatively short and was intended to just provide high-level overview of general funding uses and outcomes. While this type of survey has many strengths, including being relatively low burden to complete (which may partially contribute to the high response rates), it does not

allow for certain detailed analyses. For example, it would be interesting to know if GPR funding was used for new initiatives or if it contributed to general ongoing communicable disease responsibilities. These types of questions cannot be adequately analyzed with data from the current survey. However, given the relatively small funding amount and limitations of staff time to complete such surveys, making the survey longer may not be feasible.

While many respondents conveyed being thankful for GPR funding as it reduces budgetary pressures faced at the local level, the majority still reported that communicable disease funding is inadequate. Not only did respondents note needing more capacity to carry out prevention programs, but respondents, particularly after the onset of COVID-19, expressed challenges with recruiting and retaining highly qualified staff. This report highlights the complexity of the communicable disease work being done at the local level, and such work requires a workforce that has both communicable disease content expertise and expertise regarding specific community assets. This growing need for public health infrastructure represents another avenue for which more funding is needed. In the next report, we will analyze these results by jurisdiction size to further discern additional resource needs.