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PUBLIC HEALTH RESPONSE
TO THE COVID-19 PANDEMIC IN OREGON

Report 3 of 3

Version 1.0

Produced by Rede Group in September 2023

Acknowledgments

Rede Group produced this report as a neutral third party contractor of the Oregon Health Authority (OHA), Public Health Division in response to a legislative requirement set in Senate Bill 1554 (2022). We want to acknowledge the many people who contributed to this report, including Community-based Organizations (CBOs), Coordinated Care Organizations (CCOs), City, County, and Tribal Emergency Management, Health Care Associations, Local Public Health Authorities (LPHAs), OHA Staff, Managers, and Directors, other State Agencies, the Oregon Public Health Advisory Board (PHAB), Professional Associations, Tribal Nations, and Tribal Organizations.

In addition to the study team, community partners contributed to this report by reviewing data collection instruments, supporting recruitment efforts, and reviewing and interpreting key findings.

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The OHA contract administrator and project coordinator with assistance from other OHA staff and partners supported this project through providing context, supporting recruitment, and sharing background documents and secondary data sources.

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OHA also convened a study review committee comprised of OHA staff, LPHAs, Tribal Health Directors, and CBOs to review and interpret key findings for this report.

Everyone has a right to know about and use OHA programs and services. OHA provides free help, and some examples of this help include:

- Sign language and spoken language interpreters
- Written materials in other languages
- Braille
- Large print
- Audio and other formats

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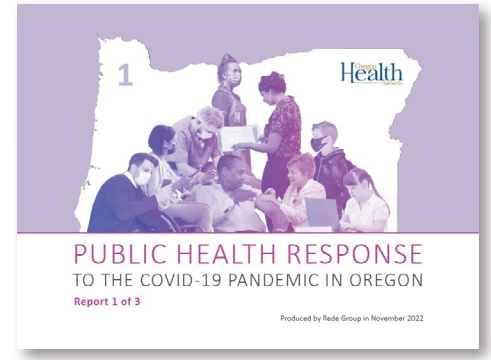
Contents

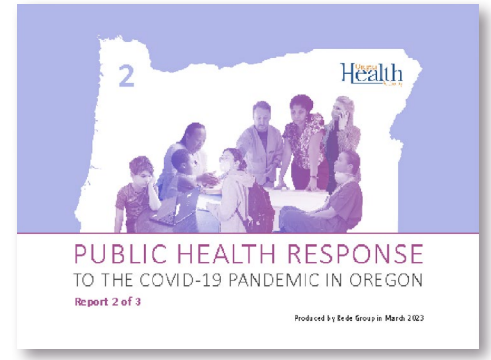
Study Summary

Introduction

This culminating summary report (third in a series of legislatively mandated reports), includes high-level key findings and recommendations from Reports 1 and 2 (linked on the right) as well as additional analyses conducted from May-August 2023.

Additional analyses included more secondary health outcomes and social determinants of health data, educational survey respondents by region and principal survey respondents by grade level, interviews with CBOs who served migrant and seasonal farmworker (MSFW) populations, and secondary documents of CBO and LPHA work serving MSFWs (for more information, see Appendix A, B, C, and D).





Click here for more information about the study

Study Purpose

The purpose of this study is to fulfill the requirements of Senate Bill (SB) 1554 (2022), which calls for a comprehensive study of Oregon's public health system response to the COVID-19 pandemic. This report outlines recommendations for improving and strengthening Oregon's public health system capacity and resiliency for responding to future public health emergencies.

This study is not an external evaluation of an individual's, team's, or agency's performance, but instead is a systematic examination of Oregon's complex and evolving public health system response to the COVID-19 pandemic. As such, this study takes into account the perspectives of a diverse array of organizations engaged in the pandemic response across the state. To ensure objectivity, reduce bias, and provide neutrality, OHA contracted with Rede Group (based on results of an open, competitive solicitation process) to conduct this study. Rede Group has no affiliation with Oregon's public health system response to the COVID-19 pandemic and was not involved in Oregon's public health system response.

Design + Limitations

The study team used an exploratory sequential design for this study, a robust mixed-methods study design that integrates qualitative data to provide an enhanced understanding and interpretation of quantitative findings. Study findings, however, should be interpreted in the context of the limitations of this study. The most significant limitation of the study was the time constraint for each report (roughly four months each). Other limitations are the retrospective nature of this study, which covers over two years, introducing recall bias in which participants may not accurately recall past events. Public health workforce turnover, limited incentive availability for specific participant groups, documents lacking dates and other context, and reliance on self-reported data for online surveys are also limitations.

Participants + Information Sources

The table on the following page describes study participants and information sources contributing to the assessment and associated key findings and recommendations.

PRIMARY DATA COLLECTION			
Participants	Interviews	Surveys	Focus Groups (participants)
CBOs	28	63	4 (27)
Professional Associations	4	n/a	n/a
Health Care Associations	4	n/a	n/a
LPHAs	18	39	n/a
OHA Directors	13	n/a	n/a
OHA Staff + Managers	20	n/a	n/a
C-19 Operations Experts	10	n/a	n/a
State Agencies	7	n/a	n/a
Tribal Orgs.	4	n/a	1 (7)
Tribal Nations	7	1	n/a
School SDs	9	84	n/a
School ESDs	5	8	n/a
School Principals	n/a	220	4 (19)
School Nurses	n/a	90	2 (8)
Local Emergency Management	n/a	22	6 (11)
Total	**129**	**527**	**17 (72)**

LITERATURE, RECORDS, + SECONDARY DATA

Literature Review: Over 30 journal articles
Records review: Over 1200 documents
Secondary Data Sources:

- Annual Trends in Birth & Pregnancy (OHA)
- Deaths by manner Oregon residents (OHA)
- Immunization Program Kindergarten Immunization Data (OHA)
- Annual Trends in Birth & Pregnancy (OHA)
- SNAP Monthly State Participation and Benefit Summary (USDA)
- HIV, Hepatitis, STD, TB, Social determinants of health data (CDC's AtlasPlus Tables)
- Nonfatal Overdose (CDC DOSE System)
- Monthly Communicable Disease Surveillance Report (OHA PHD)
- HIV, STD, & TB Section HIV/STI Prevention Testing (OHA PHD)
- Annual Performance Progress Report (ODE)
- Student Enrollment Reports (ODE)
- Statewide Report Card 2021-2022 (ODE)
- Routine Immunizations Dashboard (OHA)
- State Unintentional Drug Overdose Reporting System (CDC)
- Opioid Overdose Public Health Surveillance Update (OHA)

[Resources]

"There has to be investments in public health capacity, there has to be investments in infrastructure..."

—Tribal Nation Interviewee

Resources

Key Finding:

- Prior to 2020, Oregon's public health system was critically underfunded. Efforts to modernize the system by increasing state resources to rebuild the public health system from 2017-2020 were laudable but inadequate. Sustained state funding is necessary to rebuild the public health system and recover from the strains on the systems caused by the COVID-19 pandemic.

Recommendation:

1. As the COVID-19 pandemic is ongoing and additional population-level health emergencies have surfaced, the Oregon State Legislature must fund the public health system at an additional $143,000,000, annually, devoted to public health modernization. Other investments for shared health data systems may be necessary.

KEY QUOTES

"All this money was poured into the system, hospitals and public health, and they're not funded anymore, and so the rug is coming out from under us, and there's no more help, there's no more resources, right?"

—Health Care Assoc. Interviewee

"I don't need one-time funding. I need funding for staff...we can't provide public health services without the people."

—LPHA Interviewee

"We need better funding for OHA so they can staff up."

—State Agency Interviewee

[Health Equity]

"The people on the ground doing the work — they're the experts."

—OHA Director Interviewee

Health Equity

Key Findings:

- Health equity was a central focus in Oregon's public health system response to the COVID-19 pandemic. Study participants noted they were highly motivated to center equity in pandemic response efforts and were aligned in naming that the central elements of an equitable pandemic response are equitable access to information and equitable access to resources. LPHAs and CBOs were seen as invaluable resources in the response.
- The greatest health equity challenges Oregon faced in its public health pandemic response were an emergency management infrastructure that did not include equity practitioners and communities impacted by health inequities in decision-making; limited equity capacity across the state, including significant delays and challenges producing accessible and culturally-tailored public messaging; and inconsistent buy-in for equity work. A few factors that facilitated and enhanced an equitable pandemic response included strong partnership networks with role clarity; and adequate, timely, and flexible funding.

KEY QUOTES

"We really want to start at, 'Who are our vulnerable populations and why?' It doesn't matter if that's only 500 people. I think that COVID has helped push the conversation to talk about vulnerability and impact to a specific population, as opposed to, 'Show me the high numbers and then we'll talk.'"

—OHA Manager Interviewee

"I felt like they [OHA] trusted us with knowing the families that we serve, knowing our population, and being able to quickly change how we were serving those families."

—CBO Interviewee

Recommendations:

1. Improve equitable communication by ensuring information is timely and accessible for all Oregonians. OHA should do everything possible, including conducting translation in-house, to eliminate the lag in the translation of critical health information into non-English languages. OHA should be hiring, recruiting, and retaining bilingual, and preferably bicultural, staff into various departments - as opposed to hiring that is done solely in response to a critical need.
2. Ensure that timely, accurate morbidity, hospitalization, and mortality data about historically marginalized communities (those most likely to experience health inequity) are collected and available to those communities and partnering organizations serving them as well as government public health.
3. Continue to fund public health-focused CBOs serving communities experiencing historical and contemporary health inequities.

KEY QUOTES

"We could not show up in military fatigues and expect people who were non-documented to feel comfortable getting vaccinated. We had some real conflict with our commitment to lead with equity while showing up with the same tools."

—State Agency Interviewee

"Equity is a discipline and an approach...it requires people with specific skill sets, knowledge, and expertise to be infused throughout the entire process and not limited to just one area, like community engagement."

—OHA Director Interviewee

[Emergency Management + Coordination]

"We didn't know what they were doing or what they weren't doing. It was very siloed."

—City and County Emergency Management Focus Group Participant

Emergency Management + Coordination

Key Finding:

- Throughout the pandemic, some state-level primary response agencies in Oregon struggled to collaborate in coordinating the response and defining leadership roles and authorities. The lack of role clarity between the OHA and the Oregon Department of Emergency Management (OEM) likely led to confusion early on in the pandemic. Issues arising from this confusion affected the overall response but directly impacted LPHAs and City and County Emergency Management.

Recommendations:

1. Explore the concept of a fully resourced, flexible, and scalable Unified Command (UC) Structure between OEM and OHA in support of future public health emergencies.
2. OEM and OHA should work together to establish an equity-specialists team that is formally adopted into the response structure, including roles and responsibilities, job action sheets, inclusion into the Multi-Year Training and Exercise Plan (MYTEP) training and exercises, and integration into the state's emergency plans and procedures.

KEY QUOTES

"We were in competition with our efforts and not in coordination, I did not feel like that was an effective framework for the response…"

—City and County Emergency Management Focus Group Participant

"There were too many disconnections, too many things happening in a vacuum, probably too much distrust, an unfamiliarity of what the emergency management system was, and an unwillingness to rely on the experts, the people that know how to do this work to help guide some of those decision-making processes."

—LPHA Interviewee

Enforcement of Public Health Mandates

Key Findings:

- Enforcement of public health mandates was inconsistent across Oregon, especially after Stage 1 (Mar. 2020-Nov. 2020) of the pandemic when the politicization of the response effort took root, and a widespread misinformation campaign marred the compliance landscape.
- As set forth in law, Oregon's public health system is decentralized with LPHAs having specific responsibilities and rights. This differs from many states. Concerns that the localized decision-making of LPHAs created pandemic responses that put personal beliefs or politics over health was a strong theme across multiple respondent groups.

Recommendation:

1. Local and state agency partners should be convened in a formal committee to determine if the enforcement mechanisms used to protect the public's health from COVID-19 in 2020-2022 are the best fit for Oregon, given all the factors described above. If changes to the enforcement structure for public health mandates are deemed necessary

KEY QUOTES

"There were no guidelines on enforcement. The state really needs to decide who is going to enforce them."

—LPHA Interviewee

"We had a lot of willful violations relating to masking. Unfortunately, this is where things probably got really heightened for our staff because we got a lot of threats, anger, and meanness, people showing up at our houses, having barbecues out front, chanting with bullhorns..."

—State Agency Interviewee

by OHA, partners and the Oregon State Legislature should work to enact necessary statutory or regulatory changes. Minimally, this committee should include OHA, Deparment of Justice (DOJ), Oregon Department of Education (ODE), LPHAs, CBOs, Occupational Safety and Health Administration (OSHA), and Oregon Liquor and Cannabis Commission (OLCC). Enforcement of public health mandates and various roles and responsibilities should be clearly articulated and documented, and all parties in the public health system should educate themselves accordingly.

KEY QUOTES

"Most people in the community that I serve really wanted to follow the rules. They wanted to protect the people that they loved, and they were kind of on board with that. And I didn't see enforcement about any of that stuff happening."

—CBO Interviewee

Health Outcomes

Key Findings: COVID-19

As of the end of the study period, the week of July 31, 2022, OHA recorded 860,300 COVID-19 cases in Oregon. There were 34,376 hospitalizations (4% of all cases), and 8,291 people died. The COVID-19 case rate peaked at 1,332.25 during the week of January 10, 2022. It is evident that COVID-19 exacerbated already existing health inequities in the state of Oregon. In particular, Tribal Nations and Communities of Color were impacted by the COVID-19 pandemic disproportionately in comparison to White communities. This is attributable to systemic inequities that influence the Social Determinants of Health, rather than personal choices related to virus protection. See Report 1 and Appendix J for more detailed information about the data and visualizations.

COVID-19 Testing

- Throughout the study period there were 12,243,393 COVID-19 tests reported.
  - The largest number of tests were reported in January 2022 (1,182,604).
  - The highest test positivity rate (the percent of tests that are positive) was in March 2020, at 31.8%, and the second highest test positivity rate was in January 2022, at 27.9%.

Emergency Department Visits

- Emergency department visits aligned with increases in COVID-19 cases and case rates across Oregon during the same weeks throughout the study period.

Hospitalizations

- Throughout the study period, adults aged 65 and over had the largest number of hospitalizations in Oregon, with a total of 15,870 individuals aged 65 and over ever being hospitalized, representing approximately half (48.7%) of all COVID-19 hospitalizations in Oregon.
- Hospitalization rates were consistently highest among individuals who identified as American Indian/Alaska Native, Black, Pacific Islander, and Other in comparison to those individuals who identified as Asian, White, or Multiracial.

COVID-19 Deaths

- As of the week of July 31st, 2022, there were 8,291 COVID-19 deaths in the state of Oregon. September 2021 and February 2022 were the months with the highest number of COVID-19 deaths (646 and 460, respectively).
- The number of COVID-19 deaths among individuals who had an underlying health condition decreased throughout the study period (between March 2020-July 2022).
- During the Delta wave (August 2021), a larger percent of weekly deaths were from those without an underlying health condition.
- In 2021, Oregon's death rate from COVID-19 was 69.2 per 100,000 population, the 11th lowest death rate of the US. Oklahoma had the highest death rate at 158.8 per 100,000 population, and Vermont had the lowest death rate at 29.5 per 100,000 population.[1]

1. Centers for Disease Control and Prevention. COVID-19 Mortality by State. 2021. Retrieved from: https://www.cdc.gov/nchs/pressroom/sosmap/covid19_mortality_final/COVID19.htm

Statewide Deaths by Age

- As age increased, so did the cumulative number of COVID-19 deaths.
- As of July 2022, there were 13 COVID-19 deaths among children less than 18 years of age.
- The largest number of COVID-19 deaths occurred among older adults.
- Those 80 years of age and older represent the largest number of cumulative deaths (n=3,502).

Statewide Deaths by Congregate Setting

- Although at the start of the pandemic nearly 50% of COVID-19 deaths were among people living in congregate settings, by July 31, 2022, the majority of deaths (63.8%, n=5,310) occurred among individuals whose congregate setting status was unknown.

Statewide Deaths by Race/Ethnicity

- Throughout the study period, White individuals had the highest number of total deaths.
- When looking at death rates per 100,000 of the population, Pacific Islander (196.43 per 100,000) and American Indian/Alaska Native (287.12 per 100,000) individuals had the highest death rates, compared to White individuals (155.04 per 100,000).

Key Findings: Secondary Indicators

This section reviews health equity outcomes related to the COVID-19 pandemic response, including second-hand health disparities resulting from the increased strain on hospitals, health systems,

and resources. Existing data sources were mined to examine differences in some secondary health outcomes and social determinants of health between 2019 and the end of the study period in 2022. These findings are descriptive and do not determine causality; there are likely alternative explanations for changes in outcomes during COVID-19. For example, declines in prevalence statistics may be due to decreased access to health care and screening. See Appendix A for more detailed data, visualizations, and data sources.

Behavioral Health

- Suicide deaths remained fairly constant (there was a very slight decrease).
- Unintentional opioid overdose deaths have increased substantially since 2019; there has been an increase in deaths from all drug overdoses.
- Non-fatal drug overdoses increased slightly.

Sexually Transmitted Diseases

- The incidence rate of HIV in Oregon decreased slightly between 2019 and 2021, then increased in 2022.
- The percentage of Pre-exposure prophylaxis (PrEP)[2] coverage among those with PrEP indicators[3] increased steadily.
- Reported chlamydia cases and gonorrhea cases both decreased slightly; early syphilis cases increased moderately.

2. Pre-exposure prophylaxis (PrEP) is the use of antiviral drugs to prevent HIV/AIDS.
3. PrEP indicators are factors that increase risk for HIV.

- Clinic-based HIV testing:
  - Dropped in 2020, then increased slightly but not to to pre-pandemic levels.
  - Increased slightly for people who are transgender or gender non-conforming.
  - Decreased slightly for White people and increased for other racial/ethnic groups.

Immunizations

- The number of kindergarteners completing all school-required immunizations decreased by 1%.
  - Tillamook, Curry, Crook, Harney, Grant, and Jefferson counties saw larger decreases.
- Between 2019 and 2022, the percentage of two-year-olds with up-to-date immunization status decreased by 3%.
- The number of TDaP vaccines distributed among women of childbearing age decreased substantially.
  - Regions 2 and 3 saw the greatest drops, which increased slightly over time (See Appendix A for a list of counties in each region).

Maternal Health

- Adequate prenatal care rates remained constant with a very small dip in 2022.
- The percentage of infants with low birthweight slightly increased.

Economic Well-being

- The percentage of Oregon residents receiving SNAP benefits increased substantially.

Education

- Fall student enrollment numbers declined by almost 30,000 students between 2019-2020 and 2020-2021 school years.
- Enrollment in Region 3, 4, and 5 increased between 2020-2021 and 2021-2022 while enrollment continued to decline in Regions 1 and 2 (See Appendix A for a list of counties in each region).
- Chronic student absenteeism rose dramatically for all students.
- The percentage of 9th graders on track to graduate decreased between the 2019-2020 and 2020-2021 school years, and increased for the 2021-2022 school year.
- The percentage of students meeting or exceeding statewide academic achievement standards in 3rd grade reading fell statewide during the study period (2019-2022).
- Inequities in school measures did not change over time, and students of color and students with disabilities remained more chronically absent, less likely to be on track to graduate, and less likely to meet/exceed statewide academic achievement standards.
- The number of students experiencing houselessness was on a downward trend between the 2018-2019 and 2020-2021 school years, and increased slightly between the 2020-2021 and 2021-2022 school years.

[Public Health Response in Schools]

"Schools shouldered so much of the public health burden of our young people and communities."

—SD Interviewee

Public Health Response in Schools

Key Findings:

Resources

- School Districts (SDs) and Educational Service Districts (ESDs) reported using state and other COVID-19 funding for an array of pandemic response activities at the district and school levels including purchasing personal protective equipment (PPE) and modifying school environments to allow for social distancing.
- SDs, ESDs, and Schools reported concerns about having continued funding to support COVID-19 response in their community.
- Lack of clarity around allowable use of funds, short timeframe to spend funds, frequent changes to funding structure(s), inflexibility of funds, and administrative requirements associated with COVID-19 funding were all cited as barriers to efficient use of funds by education sector participants.

Emergency Preparedness + Public Health Emergency Coordination

- The majority of SDs and ESDs reported their district was highly or moderately prepared to respond to the COVID-19 pandemic, but a third of SDs reported their district was minimally or not

KEY QUOTES

"We spent quite a bit of money just trying to create a more robust online experience. So, we spent a lot of money on Chromebooks…we needed to make sure that all the kids had devices and then hotspots for people that didn't have very good internet."

—SD Interviewee

at all prepared to respond. At the school level, results were less positive. Principals felt their school was unprepared for COVID-19 response. Outdated or non-existent Emergency Operations Plans (EOPs) at the school level, lack of prior training and experience in emergency preparedness, and inexperience as an administrator (i.e., COVID-19 hit during their first year as a school administrator) were all cited as reasons for unpreparedness.

- Unclear roles in pandemic response hindered the response in schools. Some educators reported that collaboration with LPHAs specifically, was, at times, a challenge due to low capacity for collaboration or not having a pre-existing relationship with their LPHA.
- Many schools collaborated with their LPHA or other community organizations (e.g., local hospital or health care clinic) to coordinate vaccine clinics on or near school grounds. Many educational participants reported confusion around the prioritization of educators for the COVID-19 vaccination without the associated return to schools.
- The vast majority of educational participants reported using COVID- 19 resources developed by the ODE and OHA to inform COVID-19 response in their district or school. Unfamiliarity with public health jargon, however, often made interpretation of these resources confusing. Further, unique challenges for

KEY QUOTES

"I had no knowledge about health care protocols or best practices. We didn't even have laptops for teachers or Chromebooks for students. We didn't have enough textbooks for everyone to take a book home. Implementation and logistics were really overwhelming."

—SD Survey Respondent

"We had internal mechanisms and protocols to immediately implement. Roll out of plans from ODE was slow for school reopening documents and protocols. Excellent working relationship, collaboration, and communication with the local health department."

—ESD Interviewee

serving populations with specific needs (e.g., students with learning or physical disabilities) added a layer of complexity to interpretation and implementation of guidance.

Public Health Mandates: Compliance + Enforcement in Schools

- Lack of clarity around roles and responsibilities in implementing public health mandates and guidelines was problematic for schools, particularly relating to contact tracing, which schools felt became overly burdensome during COVID-19 infection spikes. Role uncertainty around implementing public health mandates and associated changes to roles during the COVID-19 pandemic response hindered schools' response effectiveness.
- SDs, ESDs, Principals, and School Nurses reported trying their best to adhere to executive orders and used an array of enforcement methods, including behavior modeling, clear messaging, and punitive consequences. Overarching enforcement challenges included the politicization of mandates, the frequency with which public health mandates and associated guidance changed, and lag times between when a complaint (OR-OSHA) was filed and follow-up. Additionally, there were many enforcement-related challenges specific to the school setting, including confusion about how public health mandates applied to schools, inconsistent enforcement across districts, and inability to implement specific measures with school-aged

KEY QUOTES

"The majority of my day sometimes would be creating contact tracing lists for our public health, our county public health, and calling families and getting work and having them pick things up."

—Principal Focus Group Participant

"I mean, the scope of trying to do contract tracing for that many people, for that many schools across that many areas was probably foolish to even imagine you could do. So, I think the contract tracing was really a little bit of a disaster, just because of the scope."

—SD Interviewee

children. Enforcement was not consistently applied across all Oregon schools.

Public Health Messaging + Communication in Schools

- Education sector study participants reported numerous successes related to COVID-19 public health messaging and communication, including creating clear messaging (e.g., meetings, signage, exposure letters) and translation of materials across multiple languages. Nevertheless, the frequency at which public health guidance and communication changed from state level agencies and LPHAs, as well as conflicting guidance across different agencies, posed substantial challenges.

Recommendations:

1. Build out and invest in comprehensive emergency preparedness for schools at the district- and school-level to incorporate pandemic-level events, and include training for school administrators and frequent EOP updates.
2. Continue to invest in partnerships between the education sector (e.g., SDs, ESDs, schools) and public health sectors (e.g., LPHAs, OHA), as this will enable a more timely and collaborative response to future public health emergencies in Oregon's schools.

KEY QUOTES

"It was the worst time as an educator. There were extremely long hours, we did not have local control, and I was asked to enforce rules that my community did not believe in. It divided our staff and community, and the administrators took the brunt of it."

—Principal Focus Group Participant

"I literally had my life threatened over asking someone to wear a mask. I had milk thrown at me. I had all kinds of things happening."

—School Nurse Focus Group Participant

3. Invest in sustained emergency operations funding for schools; with sustained effort, EOPs and communicable disease management plans in schools will be implemented with more efficiency and timeliness. Specific recommendations regarding funding for schools include:
    a. Invest in necessary school building infrastructure improvements (i.e., HVAC, desks, filtration systems, outdoor access) to align with best practices to prevent or slow transmission of communicable diseases.
    b. Streamline funding to reduce administrative burden for schools.
    c. Improve communication about emergency operations funding, including communication specific to allowable use of funds, timeline for spending funds, and duration of funding.
4. Clearly define roles and expectations for all involved in public health response in schools in advance of emergency response.
5. Support disease investigation training and resources in schools to effectively respond in future communicable disease related emergencies.
6. Support both districts and schools to conduct an After-Action Review (AAR) of their response and to define areas of improvement to inform future public health emergency response.
7. Involve schools when making decisions about public health mandates and other emergency response decisions that impact schools; it is imperative that the education sector is brought to the table to inform development of guidelines and recommendations for the school setting. School nurses, in particular, are a valuable resource that should be utilized when planning emergency response at both the district and school levels.
8. Ensure data availability at district and local levels that includes sub-population data and corresponding TA; a designated liaison at LPHAs to coordinate data availability and provide

TA for each district would ensure greater availability and accessibility of TA to inform response for future public health emergencies. This recommendation may require additional resources for LPHAs.

9. Recommendations related to the enforcement of public health protection mandates in schools are summarized as follows:
    a. Comprehensively examine the benefits and risks of specific public health mandates in varied schools and population settings, including the long-term impact of using specific mandates in Oregon preschool and school settings on child health and educational outcomes.
    b. Re-examine the enforcement structure for public health mandates in schools to ensure schools are adequately equipped with the necessary resources to support enforcement.
    c. Clearly articulate compliance roles and responsibilities; all parties involved in this structure should receive the necessary training to ensure successful follow-through in future public health emergencies.
    d. Ensure that enforcement-related messaging is clear, consistent, and takes into consideration the individualized needs of the populations(s) the district or school serves.
10. Coordinate messaging across public health and education organizations before information is communicated to the public. This step is imperative to build trust and allow schools time to digest guidance and figure out how to implement guidance at their school. Further, schools need support (via additional funding, staffing, or otherwise) with translating and communicating information to be culturally-specific and tailored for the population served.

[Non Governmental + Community Partners]

"We need to have CBOs at the table when it comes to any kind of pandemic response."

—CBO Interviewee

Non Governmental + Community Partners

Key Findings:

- CBOs made pivotal contributions to Oregon's COVID-19 pandemic response and played four primary roles:
  - Providing essential resources to community members;
  - Educating community members about COVID-19 and pandemic control measures;
  - Implementing or partnering to support emergency response activities; and
  - Elevating community needs with state and local partners through advocacy.
- Most CBOs reported they were highly or moderately prepared for the pandemic and significantly grew their capacity throughout the pandemic. CBOs cited their capacity strengths as trust with the community, experience supporting community members to navigate services, strong communication channels, extensive partner networks, and flexibility. The top CBO capacity limitations were financial and staffing-related.
- OHA and LPHAs provided significant support to CBOs, including funding via grants and contracts, resource allocation, training and technical assistance, and information and data-sharing.
- CBOs identified several gaps in the support they received, including:

KEY QUOTES

"Our team was ready, willing and able to implement COVID protocols at our events and in daily operations. We are an extraordinarily flexible organization and built our capacity quickly to respond to the emergency."

—CBO Survey Respondent

"We underestimated the lack of trust that communities of color have in government institutions and health care, due to lack of access or discrimination... Building trust and being more engaged with our partners earlier on, I think could have really helped us, by way of inequities."

—OHA Director Interviewee

- Lag in the prioritization of vulnerable populations in the pandemic response;
- Limited understanding within government agencies of how to operationalize equity in response activities;
- Need for more funding support;
- Limited buy-in from some local leaders for pandemic control measures; and
- Lack of role clarity between LPHAs and CBOs which hindered partnerships.

Recommendations:

1. Improve communication about funding opportunities.
2. Simplify funding application and documentation processes.
3. Increase flexibility of funding.
4. Prioritize learning and capacity building around equity practices in a public health emergency response.
5. Designate OHA and LPHA staff contacts for CBOs, creating a clear and consistent chain of communication for support and efficiency.
6. Foster and maintain relationships and collaboration between CBOs and OHA and LPHAs.

KEY QUOTES

"We had the infrastructure in place to reach our community, but we lacked the resources to do so."

—CBO Survey Respondent

"Two of the most important factors in our ability to respond to the COVID-19 pandemic were established relationships with communities most impacted and community trust. We had both going in, and were able to respond quickly to connect folks to information and resources."

—CBO Survey Respondent

[Tribal Nations + Tribal Organizations]

"As a sovereign nation, we can set our own [vaccine] priority list..."

—Tribal Nation Interviewee

Tribal Nations + Tribal Organizations

Key Findings:

- Tribal Nations performed key public health functions for their tribal and non-tribal communities throughout the pandemic.
- Tribal Nations implemented and enforced similar public health measures as state and local governments, such as mask mandates, stay-at-home orders, and remote work.
- Tribal Organizations filled a critical supportive role for American Indians/Alaska Natives (AI/ANs) during stay-at-home orders and isolation/quarantine with food, traditional medicines, activities, and cultural connection.
- Partnerships were an important way to coordinate COVID-19 testing and vaccination clinics; acquisition of PPE, testing, and vaccination supplies; and coordinating care for community members.
- Funding provided to Tribal Nations and Tribal Organizations was often too specific in requirements for what it could be spent on and inconsistent with current needs of the community.
- Both Tribal Nations and Tribal Organizations struggled with having enough staff/staff capacity to efficiently support their communities during the pandemic.

KEY QUOTES

"COVID is… or at least the negative aspects of it, are highlighted by capitalism and colonialism… what we have is people fighting for dollars and fighting for land and space, and health, as a direct result."

—Tribal Organization Interviewee

"We were given a lot of money to meet critical needs, but none of that came with FTE. So it was great being able to get money out and get people's rent paid, but it was a huge burden on our staff."

—Tribal Organization Interviewee

- Tribal Nations reported a lack of accessible tribal-specific data to support their decision-making related to COVID-19 response in their communities.

Recommendations:

1. Implement flexible funding streams for Tribal Nations and tribal organizations so they can identify and support their communities specific needs.
2. Develop data collection and reporting methods for tribal-specific data.
3. Increase communications between Tribal Nations and Tribal Organizations with LPHAs, OHA, Northwest Portland Area Indian Health Board (NPAIHB), and Indian Health Services (IHS) to better coordinate disease investigation and reporting processes.
4. Maintain new and strengthened partnerships that were built by Tribal Nations and Organizations during COVID-19 response. Utilize these partnerships to actively work together to eliminate health inequities in order to reduce the disproportionate impact of public health emergencies on tribal communities in the future.

KEY QUOTES

"It was difficult when the money was specifically earmarked for testing only, or for quarantine, or something like that."

—Tribal Nation Interviewee

"Keeping up on the disease investigation became harder as case numbers went up, just due to the number of staff we had who could do that. So we did turn contact tracing back over to the county… that process… could definitely use some improvement on how the LPHA and the Tribe are going to work together in response, that communication back and forth and how it works in the different software systems."

—Tribal Nation Interviewee

Migrant + Seasonal Farmworker Supports

Key Findings:

- OHA, CBOs and LPHAs supported Migrant and Seasonal Farmworker (MSFW) communities by providing funding, disseminating information/combating misinformation, and providing testing services, vaccinations, emergency financial assistance, food boxes, and connections to other resources in the community.
- CBOs were critical in supporting MSFWs in the COVID-19 response. Most CBOs believed that their separation from the local and state government accelerated relationship-building with MSFWs and allowed them to provide services to many more people than would have received services if they were not involved in the COVID-19 response.
- One of the biggest barriers to providing COVID-19 supports to MSFWs was reaching them at times and locations that were tenable with their long working hours and limited time off and transportation. This was overcome by bringing the supports to MSFWs in the form of PPE deliveries, mobile testing and vaccination units, and information sessions at worksites.

KEY QUOTES

"In partnership with [a health center] and [a CBO], we coordinated on-site vaccination events at all of the largest agricultural employers in our county. By offering vaccinations on job sites, we have been able to vaccinate individuals who otherwise would not have had the opportunity given the financial impact of missing work."

—LPHA Equity Plan

"There's new infrastructure, there are new working relationships between the state and public health departments as well as with CBOs. I think we need to continue that and continue the resources."

—CBO Interviewee

Recommendations:

1. Continue to nurture relationships between OHA, LPHAs, CBOs, farmers, and MSFWs to improve coordination in future public health emergencies and support health equity among MSFWs more broadly.
2. Embrace population-specific engagement methods, including radio, on-site information and services, and the use of trusted messengers such as CBOs with established relationships to MSFW communities.
3. Restructure contracts and reporting requirements for CBOs to facilitate sustained relationships between OHA, LPHAs, and CBOs, and minimize administrative burden.

KEY QUOTES

"This is the first time that the government, the state of Oregon, and the federal government really considered farmworkers as essential workers in the midst of the pandemic. We need folks to continue growing food, processing food for the country. The fact that we're recognizing that folks, their work, and their families as essential needs to be continued in some way. And within the Oregon Health Authority and the state overall, I think that particular community needs to be lifted up because they're often without resources, even though they are essential within our community."

—CBO Interviewee

Local Epidemiological Capacity + Data

Key Findings:

- Not surprisingly, the COVID-19 pandemic stretched Oregon's epidemiological capacity. Many LPHA participants reported great difficulty hiring staff with the necessary skills and knowledge to perform critical data collection, interpretation, and dissemination functions.
- OHA supported local epidemiological capacity in various ways, including:
  - Providing direct technical assistance;
  - Conducting statewide and regional meetings that provided an opportunity to share epidemiological data and get technical assistance;
  - Routing funding to LPHAs to increase staffing for local epidemiological data capacity;
  - Sharing epidemiological data communication and messaging resources that aided LPHAs in addressing misinformation efforts in their communities; and
  - Setting up and streamlining systems for LPHAs to order and receive tests, vaccines, and other supplies.
- Existing epidemiological data systems were severely strained by the surge of users trying to access the system at the same time. LPHA participants described these systems

KEY QUOTES

"We had to do a lot of our own data analyses before the state could ever do it, to understand what was happening in our community. Our epidemiologist identified the disparities in our Hispanic/Latino/Latina/Latinx community before the state did. But we had to navigate discrepancies in race/ethnicity data, [the] old way of collecting data versus REALD."

—LPHA Interviewee

as all but unusable during peak stages of the pandemic, and OHA reported that modules had to be built and separated from the original system to improve usability.

- When Oregon's pandemic response officially began in March 2020, OHA was in the process of developing standards to improve collection and reporting of Race, Ethnicity, Language and Disability (REALD) data and sexual orientation and gender identity (SOGI) data, which meant that there were not strong practices in place or sufficient capacity to build and adapt standards across governmental public health entities and the array of partners engaged in pandemic response activities. These capacity challenges hindered the use of REALD and SOGI data to inform Oregon's health equity work in response to the public health pandemic.

Recommendations:

1. Invest in epidemiological data systems improvements.
2. Continue to prioritize the development of standards for the collection of and access to REALD and SOGI data.
3. Collaborate with LPHAs to consider innovative staffing models that support sustainable epidemiological capacity, such as regional epidemiologists that can support multiple counties.

KEY QUOTES

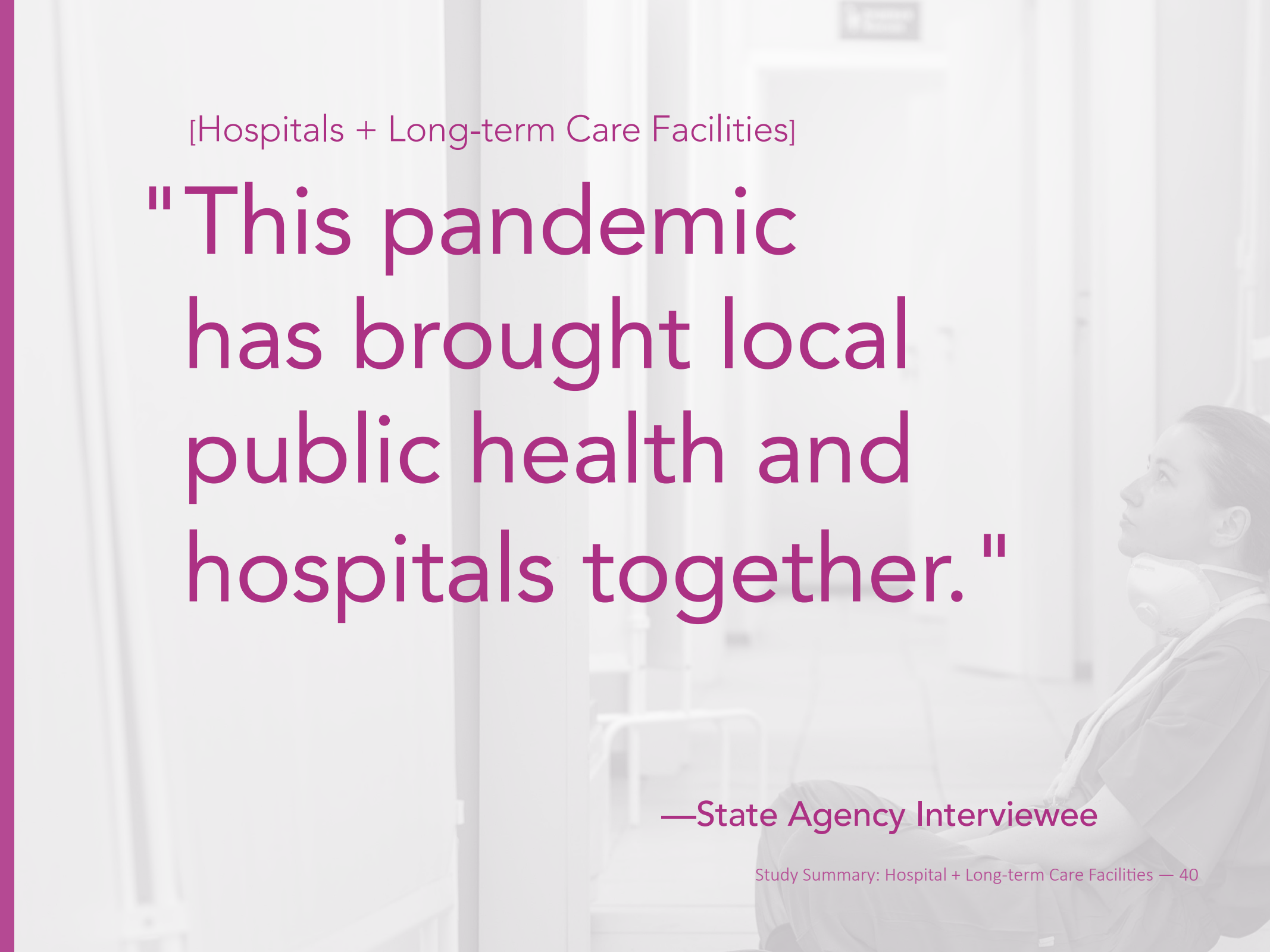
"Disease investigation started to improve because we leveraged the support of OHA. We didn't have enough staff trained to do that."

—LPHA Interviewee

[Hospitals + Long-term Care Facilities]

"This pandemic has brought local public health and hospitals together."

—State Agency Interviewee



Hospitals + Long-term Care Facilities

Key Findings:

- Long-term care facilities (LTCFs) required special attention in Oregon's public health system response to COVID-19.
- Previously established relationships and lines of communication were essential for successful role coordination between hospitals, LTCFs, and LPHAs. In cases where LPHAs and LTCFs did not have extant working relationships, pandemic response was markedly less effective, causing harm to LTCF residents.
- Jurisdictional role confusion about OHA and Oregon Department of Human Services' (ODHS) roles occurred around enforcement of public health measures in LTCFs. This created additional (and unnecessary) challenges for LTCFs.

Recommendations:

1. Develop and maintain relationships among LPHAs, LTCFs, and hospitals to ensure effective communication during a public health emergency.
2. Develop clear guidance for LTCFs around public health and infection control regulations outlining different roles of OHA and ODHS. Ideally, dissemination of this information would be co-created with LTCFs and LTCF advocacy groups.

KEY QUOTES

"I think that we had a great relationship with our local hospital before. We have an excellent relationship now."

—LPHA Group Interview Participant

"In some regions, the relationship was really good; and in others, it depends on personalities."

—Health Care Association Interviewee

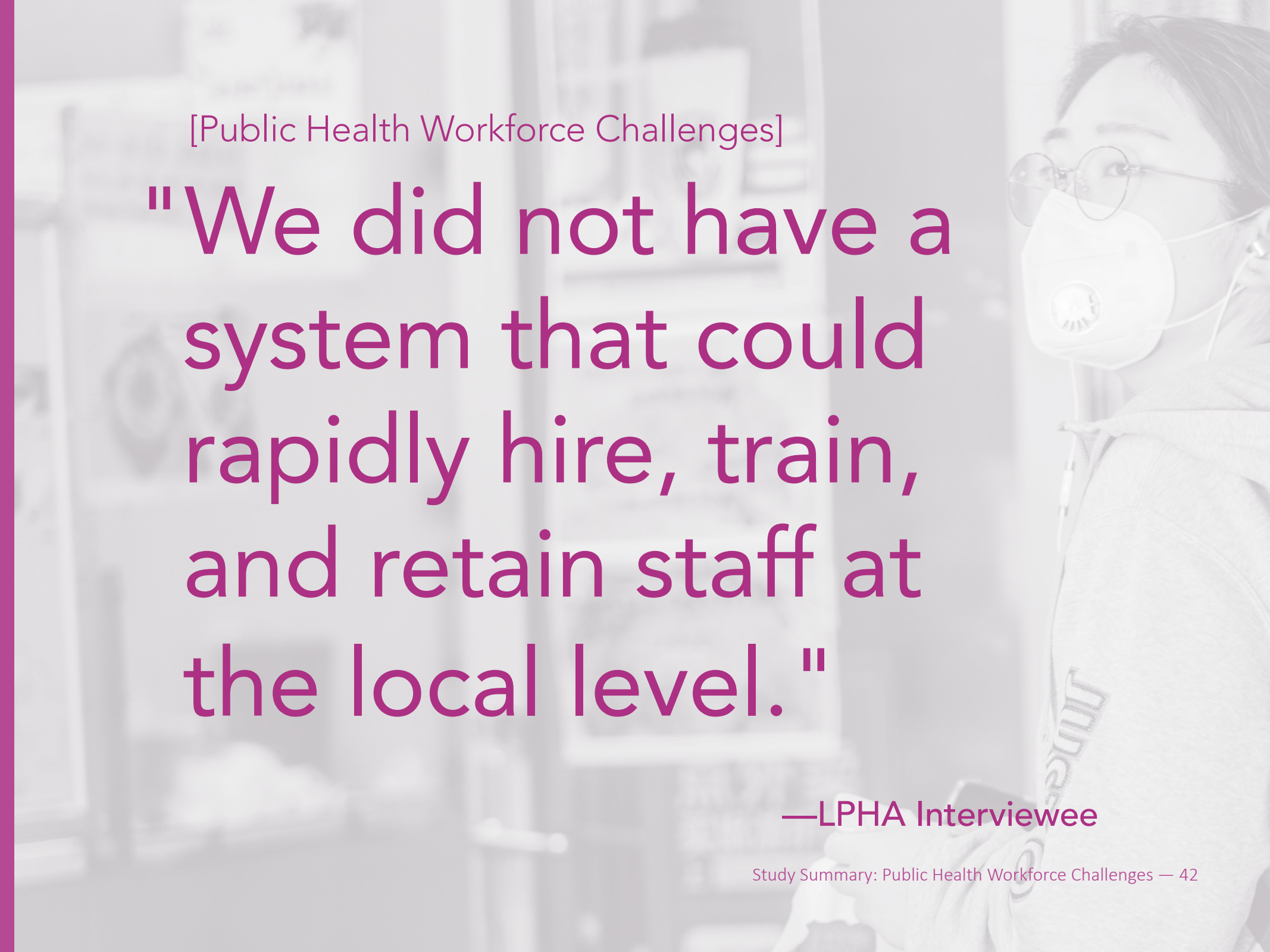
"The nursing homes, they were getting conflicting guidance from the state and the feds… We absolutely positively need to figure out who the nursing homes are going to answer to."

—LPHA Interviewee

[Public Health Workforce Challenges]

"We did not have a system that could rapidly hire, train, and retain staff at the local level."

—LPHA Interviewee



Public Health Workforce Challenges

Key Findings:

- Staffing challenges hindered pandemic response for governmental public health. Difficulty recruiting, onboarding, and retaining staff was a strong theme across individual interviews, group interviews, and surveys with LPHA administrators and staff. In the LPHA survey, 87.2% (n=34) of respondents reported that staffing shortages hindered the effectiveness of their pandemic response.
- A majority of OHA Director interviewees ranked staffing capacity at OHA as a significant challenge that negatively affected OHA's ability to respond to COVID-19. At the beginning of the pandemic, OHA needed to hire numerous new staff to mount and coordinate an effective response; in addition, OHA reassigned many existing staff to new COVID-related work and roles. Small applicant pools for hiring and contracting and limited human resources administrative capacity to meet the hiring demand stalled hiring efforts.
- Multiple respondent groups routinely reported working 60-70 hour work weeks for many months during 2020 - 2022. Several OHA Staff and Manager interviewees indicated that maintaining overall workforce capacity after the Delta variant emergency was especially difficult because the workforce was already stretched thin.

KEY QUOTES

"It was difficult to onboard staff and do training in the midst of dealing with case investigation and contact tracing. It was definitely like building the plane as you were flying it."

—LPHA Group Interview Participant

- Analysis of individual interviews, group interviews, and LPHA survey responses surfaced two themes within challenges to recruiting public health staff during the pandemic:
  - County-level administrative burden for hiring; and,
  - Overall public health workforce shortages, especially for nurses and epidemiologists.
- LPHAs were able to relieve some of the burden on staff by turning to volunteers to assist with the work. Medical Reserve Corps were specifically named by several LPHAs as a helpful resource during the pandemic response. However, a few LPHAs noted that because individuals in Medical Reserve Corps were older, they were at higher risk for COVID-19 serious illness and therefore were not able to be as involved. Other LPHAs were able to draw on community volunteers, including retired nurses, through the county government volunteer management department or through partnerships with CBOs. Importantly, volunteer management required staff capacity and many health departments were not able to devote resources to this task.
- Other solutions LPHAs used to augment staff capacity included:
  - Contracts with CBOs to facilitate major work areas such as contact tracing;
  - "Loaned" staff from other departments within county government;
  - Mobilizing graduating nurses directly to the LPHA's pandemic response or working with university to

KEY QUOTES

"We needed to staff up with 100+ contact tracers, and we didn't have the HR systems in place to do good, quick hiring. I mean, it just felt like we were always one step behind in trying to catch up. It impacted our ability to be responsive to community. It impacted our ability to get ahead of some of the work like contact tracing and vaccines."

—OHA Director Interviewee

intern PhD students for epidemiology support; and
  - Hiring temporary staff.
- OHA also relied on reassignment of staff from other non-communicable disease programs and hiring temporary staff.
- LPHAs and OHA demonstrated tenacity, creativity, and accountability in staffing up for the pandemic.

Recommendations:

1. Plan for surge capacity within a large-scale, longer-term public health emergency using lessons learned from the COVID-19 experience. Mutual aid agreements, whereby jurisdictions establish the legal basis for sharing resources in the event of an emergency, are critical tools for preparedness planning, but may be of limited value in a geographically dispersed event; thus planning for hiring, reassigning, and limiting non-emergency response functions should be established.
2. Create plans and protocols at every jurisdiction in the entire public health system that can be activated in a large-scale event, such as the COVID-19 pandemic, for streamlining hiring and worker reassignment processes.
3. Cooperatively, between LPHAs and city and county emergency management programs, create, review, and simulate surge capacity models and plans to outline the most efficient use

KEY QUOTES

"It always felt like we were trying to catch up and it has created a great incredible strain on people and mental health, physical health of us in the agency."

—OHA Director Interviewee

of available human resources in a public health and medical services emergency.
    - Models and plans should clarify roles and responsibilities for primary, supporting, and coordinating agencies to avoid duplication of efforts and provide a baseline for expanding workforce capacity in areas where it is most needed.
    - Planning should include additional partners such as CBOs, neighborhood associations, and other government agencies (e.g., housing, human services, volunteerism, and natural resources departments).
4. Emphasize and create local public health emergency preparedness relationships, especially as the public health leadership workforce rebounds from the strain of the COVID-19 pandemic and experiences an influx of new leadership.
5. Improve local epidemiological capacity while recognizing that local capacity may come in the form of regional epidemiological services or other shared services models. Recognize that funding, in addition to Public Health Modernization funding, may be necessary to create the requisite capacity.

KEY QUOTES

"There was not an adequate infrastructure prior to the pandemic that could have supported something so longterm and of this magnitude. We did not have a system that could rapidly hire, train, and retain staff at the local level…. We have been working with the bare minimums for decades."

—LPHA Interviewee

Appendix

- Appendix A: Secondary Health Outcomes + Social Determinants of Health Data
- Appendix B: Educational Survey Respondents Regional Analysis
- Appendix C: Principal Survey Respondents Analysis by Grades Served
- Appendix D: Migrant + Seasonal Farmworker Supports in Response to COVID-19

Click here for more information about the study

Appendix A:
Secondary Health Outcomes + Social Determinants of Health Data

Notes about these figures

- Charts have varying sizes of "Y" axis to fit the data per the population being represented on the chart (for example county, region, age band, etc.); use caution when viewing charts side by side.
- The data presented in this report are from varying secondary data sources; please read labels and descriptions carefully to understand what data is being presented. Additionally, data were not consistently available for all populations and time periods, which accounts for variations in presentation of different outcomes.
- Regions in these charts are modified regions based on the Oregon emergency response regions. Region 1 includes Clackamas, Clatsop, Columbia, Multnomah, Tillamook, and Washington. Region 2 includes Benton, Lincoln, Linn, Marion, Polk, and Yamhill. Region 3 includes Coos, Curry, Douglas, Jackson , Josephine, and Lane. Region 4 includes Baker, Gilliam, Hood River, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, and Wasco. And Region 5 includes Crook, Deschutes, Grant, Harney, Jefferson, Klamath, Lake, and Wheeler.
- Some data is organized by stage of the pandemic:
    - **Stage 1** - *March 2020 - November 2020:* outbreak, disease investigation, implementing public health protections (masking, distancing, shutdowns), preparing for vaccination
    - **Stage 2** - *December 2020 - August 2021*: vaccination, disease investigation, enforcing public health protections, and partial reopening
    - **Stage 3** - *September 2021 - February 2022:* vaccinations, reopening and dealing with variants
    - **Stage 4 -** *March 2022 - July 2022:* total reopening, no public health protections (except in health care and school settings), and changes in investigative guidelines

  In some instances where data are displayed in monthly increments, shading is used to differentiate between the Stages. Data for months prior to March 2020 are not shaded.

Data sources

- **Adequate Prenatal Care:** Oregon Health Authority Center for Health Statistics Oregon Annual Trends in Birth & Pregnancy, Births by adequacy of prenatal care. Inadequate prenatal care is fewer than five prenatal visits or care that begins in the third trimester. 2019-2021 data accessed from:

https://visual-data.dhsoha.state.or.us/t/OHA/views/Annualtrendsinbirthandpregnancydashboard/TrendsDashboard?%3AisGuestRedirectFromVizportal=y&%3Aembed=y&%3Atoolbar=no
2022 data accessed from:https://www.oregon.gov/oha/ph/birthdeathcertificates/vitalstatistics/birth/pages/index.aspx

- **Deaths by Suicide:** Oregon Health Authority Center for Health Statistics; Deaths by manner Oregon residents, preliminary data; Focus year of 2022. Accessed online at: https://visual-data.dhsoha.state.or.us/t/OHA/views/Year-to-datepreliminarydeathwebtables/Manner?%3AisGuestRedirectFromVizportal=y&%3Aembed=y&%3Atoolbar=no
- **Kindergartners with School Required Vaccines:** Oregon Immunization Program Kindergarten Immunization Data. Includes DTaP, MMR, Measles 2, Varicella, Polio, Hepatitis A and Hepatitis B, accessed online at: https://public.tableau.com/app/profile/oregon.immunization.program/viz/SchoolLawTableau/Kimmunizations
- **Low Birthweight Infants:** Oregon Health Authority Center for Health Statistics Oregon Annual Trends in Birth & Pregnancy, Low birthweight infants (up to 2499 grams), 2019-2021 data accessed from: https://visual-data.dhsoha.state.or.us/t/OHA/views/Annualtrendsinbirthandpregnancydashboard/TrendsDashboard?%3AisGuestRedirectFromVizportal=y&%3Aembed=y&%3Atoolbar=no
  2022 data accessed from https://www.oregon.gov/oha/ph/birthdeathcertificates/vitalstatistics/birth/pages/index.aspx
- **People on SNAP Benefits:** USDA Food and Nutrition Service, US Department of Agriculture. SNAP Monthly State Participation and Benefit Summary. Accessed from https://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap
- **PReP Coverage:** CDC's AtlasPlus Tables: HIV, Hepatitis, STD, TB, Social determinants of health data. Accessed online at: https://gis.cdc.gov/grasp/nchhstpatlas/tables.html
- **Nonfatal Drug Overdoses**: Centers for Disease Control and Prevention. Drug Overdose Surveillance and Epidemiology (DOSE) System: Nonfatal Overdose Emergency Department and Inpatient Hospitalization Discharge Data. Accessed online at: https://www.cdc.gov/drugoverdose/nonfatal/dose/discharge/dashboard/index.html
- **STD Incident Rates**: Case data comes from Oregon Health Authority Public Health Division Center for Public Health Practice; Monthly Communicable Disease Surveillance Report by Acute and Communicable Disease Prevention. Accessed online at: https://public.tableau.com/app/profile/oregon.public.health.division.acute.and.communicable.disease.pre/viz/MonthlyReportDashboard_EXTERNAL_AGGREGATED/MonthlyReportDashboard Oregon population data to calculate incidence rates were accessed online at: https://data.census.gov/table?q=Oregon+population&tid=ACSDP5Y2020.DP05, https://data.census.gov/table?q=Oregon+population&tid=ACSDP5Y2021.DP05, https://www.census.gov/quickfacts/fact/table/OR/PST045222#PST045222.

- **STD Screening Rates:** Comes from Oregon Health Authority Public Health Division HIV, STD, & TB Section HIV/STI Prevention Testing, publicly funded HIV/STI testing data; accessed online at: https://public.tableau.com/app/profile/oregon.health.authority.public.health.divison/viz/HIVTesting_PUBLIC/Home
- **Student Chronic Absenteeism:** Oregon Department of Education Annual Performance Progress Report. Chronic absenteeism: Percentage of students who are absent more than 10% of days of the school year. Accessed from: https://www.oregonlegislature.gov/lfo/APPR/APPR_ODE_2022-09-30.pdf
- **Student Enrollment Data:** Oregon Department of Education Student Enrollment Reports, fall membership reports for 2018-2019 school year, 2019-2020 school year, 2020-2021 school year and 2021-2022 school year. Accessed from: https://www.oregon.gov/ode/reports-and-data/students/pages/student-enrollment-reports.aspx
- **Students Experiencing Houselessness:** Oregon Department of Education: An Annual Report to the Legislature on Oregon Public Schools; Oregon Statewide Report Card 2021-2022. Students experiencing houselessness in Oregon data on page 5. Accessed online at: https://www.oregon.gov/ode/schools-and-districts/reportcards/Documents/rptcd2022.pdf
- **Students Meeting or Exceeding Statewide Academic Standards:** Oregon Department of Education Annual Performance Progress Report. Percentage of students meeting or exceeding statewide academic achievement standards in 3rd grade reading. Accessed from: https://www.oregonlegislature.gov/lfo/APPR/APPR_ODE_2022-09-30.pdf
- **Students on Track to Graduate:** Oregon Department of Education Annual Performance Progress Report. Students on track to graduate: Percentage of 9th grade students on track to graduate. Accessed from: https://www.oregonlegislature.gov/lfo/APPR/APPR_ODE_2022-09-30.pdf
- **TDAP Vaccines:** Routine Immunizations Dashboard by Oregon Immunization Program; Oregon Health Authority Impact of COVID-19 on Routine Immunizations of Oregonians data. Accessed online at: https://public.tableau.com/app/profile/oregon.immunization.program/viz/RoutineImmunizationsDashboard/Dashboard_C
- **Two-Year-Old Immunization Series Completion Rates:** Oregon Immunization Program Data. Includes dose requirements for DTaP, IPV, MMR, Hib, HepB, Varicella, PCV, HepA, Rotavirus, Flu, Covid-19. Accessed online at https://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/VACCINESIMMUNIZATION/Documents/county/Oregon.pdf
- **Unintentional Drug Overdose Deaths:** Centers for Disease Control and Prevention. State Unintentional Drug Overdose Reporting System (SUDORS). Accessed online at: https://www.cdc.gov/drugoverdose/fatal/dashboard
- **Unintentional Opioid Overdose Deaths:** Oregon Health Authority Injury Data, Oregon ESSENCE. Opioid Overdose Public Health Surveillance Update. Accessed from: chrome-extension://bdfcnmeidppjeaggnmidamkiddifkdib/viewer.html?file=https://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/SUBSTANCEUSE/OPIOIDS/Documents/quarterly_opioid_overdose_related_data_report.pdf

Introduction

Indirect effects of the COVID-19 pandemic can be seen in many population health metrics and indicators, including non-COVID-19 morbidity and mortality. In this report, we will focus reporting on indicators of the indirect effects of the COVID-19 pandemic that align with Healthier Together Oregon (HTO) priorities, were prioritized by our community student partners, were not covered in Report 1, and have complete or nearly-complete data for the study period. The secondary health outcomes and social determinants of health included in Report 1 were: excess deaths, anxiety and depression, preterm birth rates, and unemployment. Additionally, there were additional indicators we were unable to include because the 2022 data sets were not available at the time of this report, including data from the Behavioral Risk Factor Surveillance System (BRFSS) and the Oregon State Cancer Registry (OSCaR).

Mental health

Suicide deaths

Figure 1 is a column chart presenting the number of suicide deaths in Oregon between 2019 and 2022. The total number of suicide deaths in Oregon remained relatively constant between 2020-2022, though slightly lower than the total number of deaths by suicide in 2019.

Figure 1: Number of suicide deaths in Oregon, 2019-2022

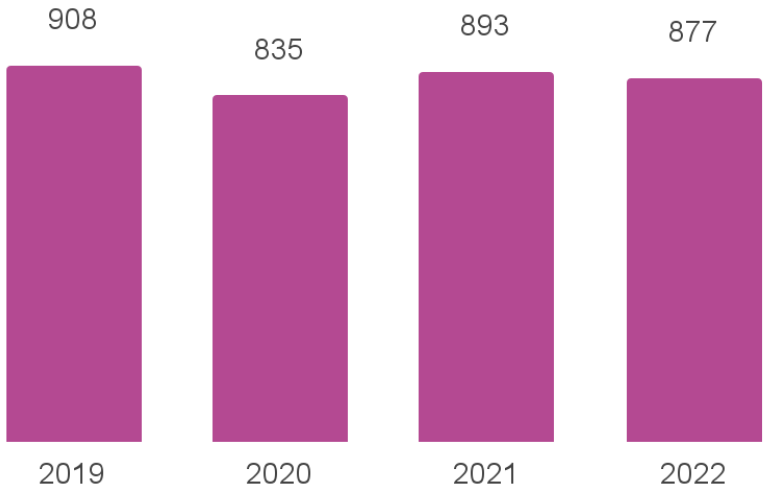
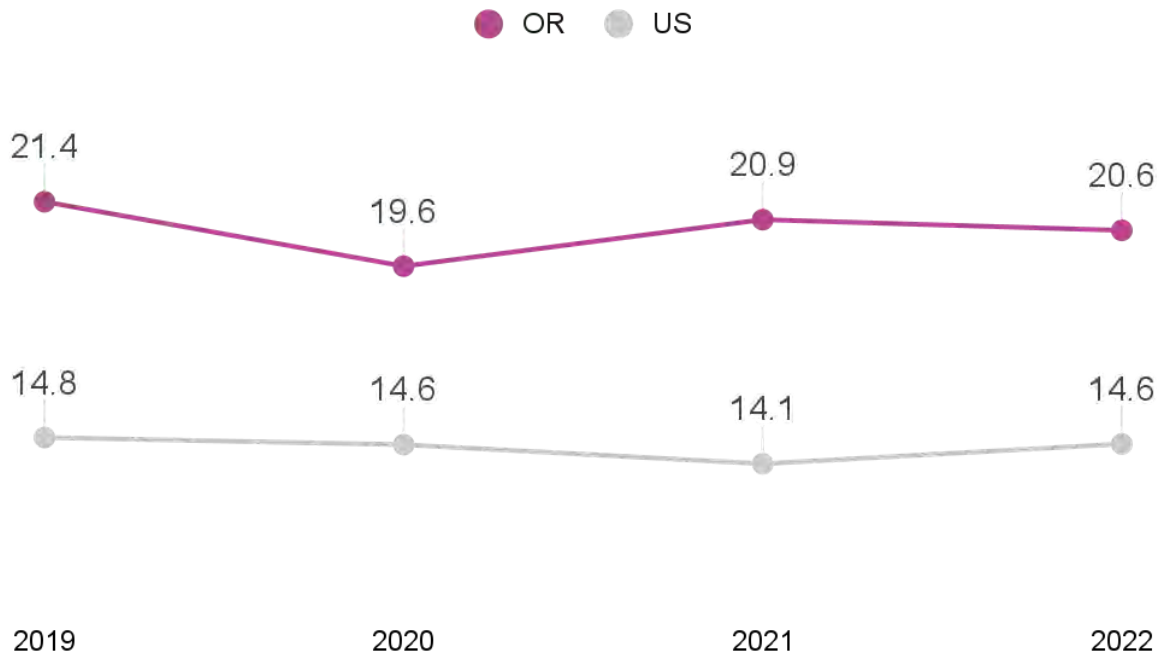


Figure 2 is a line chart comparing the crude death rate by suicide in Oregon and the US from 2019 to 2022. Although the suicide death rate increased slightly from 19.6 in 2020 to 20.9 in 2021, it has remained fairly constant over time. In comparison with crude suicide death rates in the US, however, Oregon has a higher rate of deaths by suicide. Nationally, the US has seen modest declines in suicide death rates since 2019.

Figure 2: Crude death rate by suicide per 100,000 population, 2019-2022

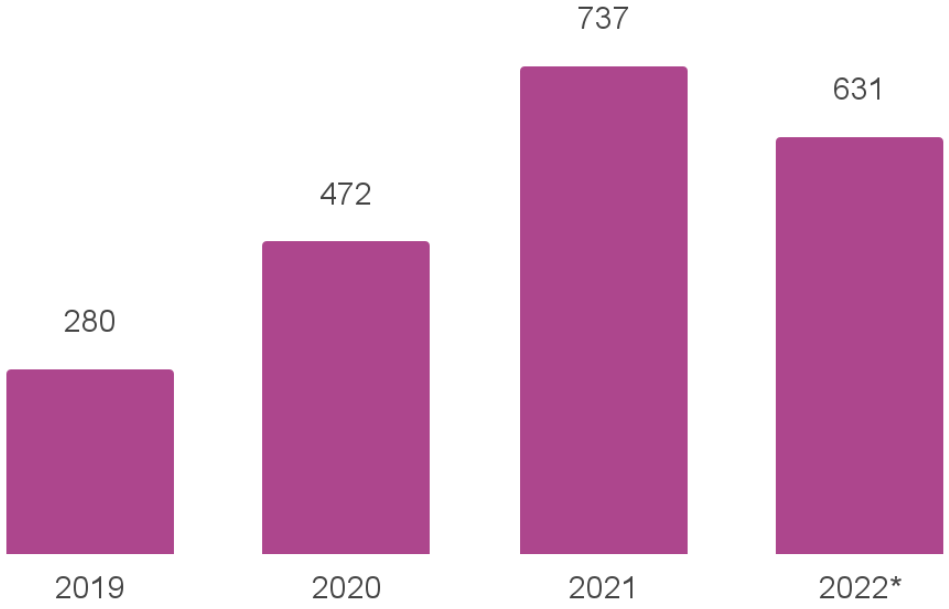


Unintentional opioid overdose deaths

Figure 3 is a column chart displaying the number of unintentional opioid overdose deaths in Oregon between 2019 and 2022. In 2020, unintentional opioid overdose deaths increased approximately 68.6% and continued to increase in 2021. Oregon saw a 2.7 fold increase in unintentional opioid deaths from 2019 to 2021. Although there was a slight decrease in unintentional opioid deaths in

2022, unintentional opioid overdose deaths remain much higher than pre-pandemic rates.

Figure 3: Unintentional opioid overdose deaths in Oregon, 2019-2022

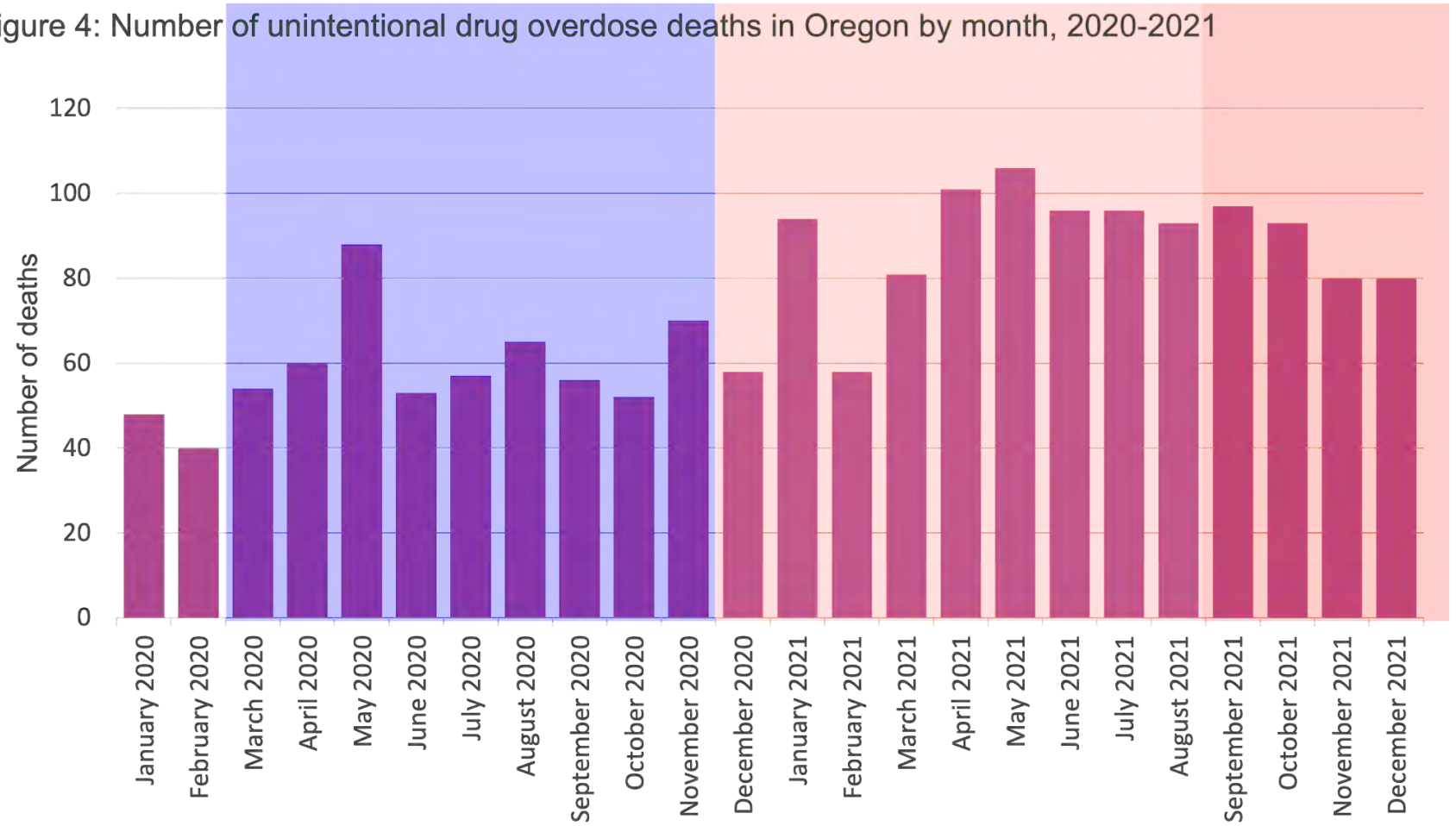


*Data for 2022 is preliminary and may change.

Unintentional drug overdose deaths

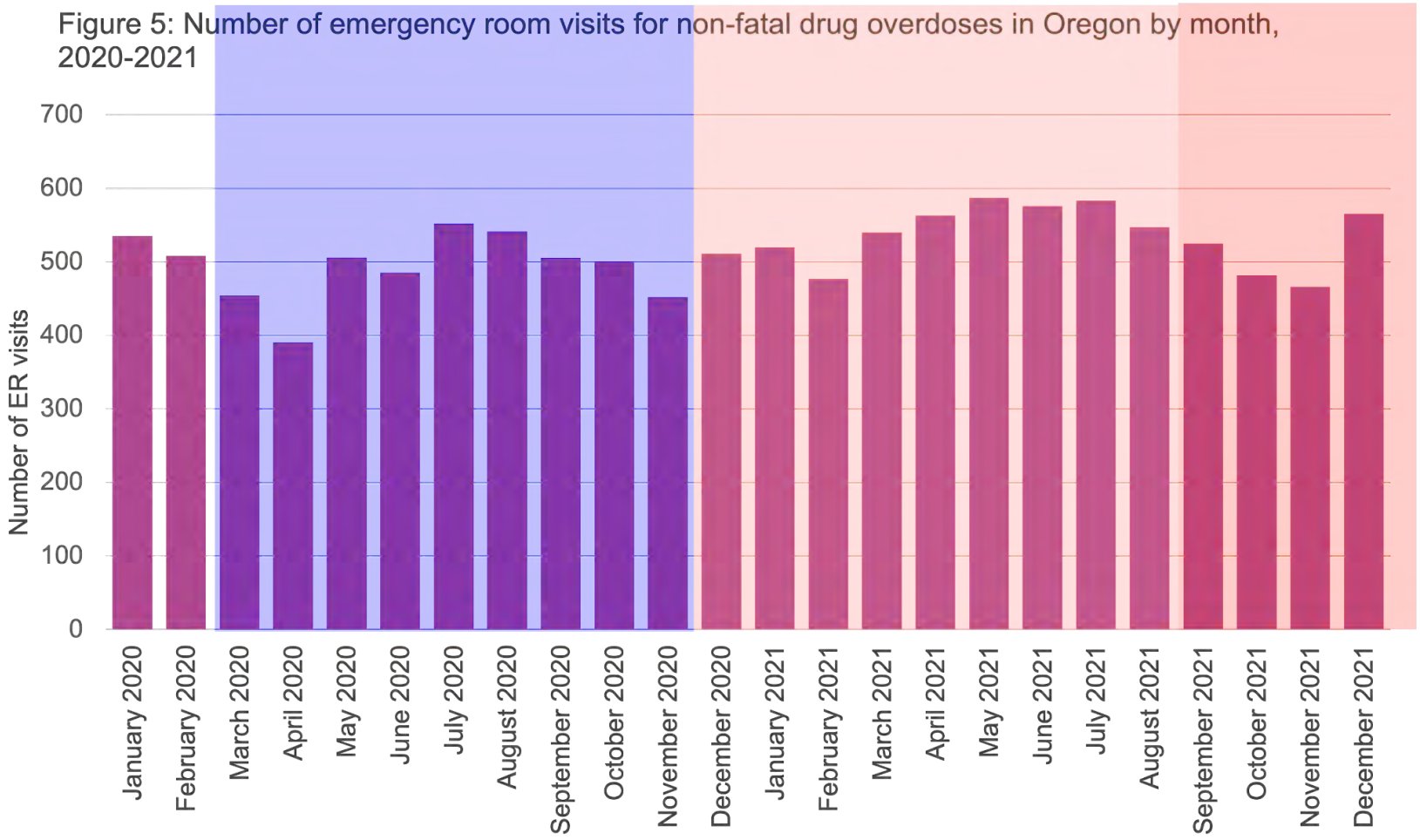
Figure 4 is a column graph displaying the number of monthly unintentional drug overdose deaths that occurred in Oregon during 2020 and 2021. These data include deaths from illicitly manufactured fentanyls, heroin, prescription opioids, any other opioids, cocaine, methamphetamine, and any other stimulants. Since January 2020, Oregon has seen an upward tick in deaths from drug overdoses. In 2020 and 2021, there were a total of 701 and 1,075 total overdose deaths, respectively. In both 2020 and 2021, the majority of deaths (67% and 68%, respectively) involved at least one opioid, with the most commonly involved opioid being illegally manufactured fentanyls.

Figure 4: Number of unintentional drug overdose deaths in Oregon by month, 2020-2021



Non-fatal drug overdoses

Figure 5 is a column graph that displays the monthly number of emergency room visits for non-fatal drug overdoses in Oregon between 2020 and 2021. These data include overdoses from all opioids, all stimulants, and heroin. The number of non-fatal overdoses has increased slightly over time. Seasonal trends are seen via increases in the number of non-fatal overdoses slightly increases during the summer months in 2020 and 2021.

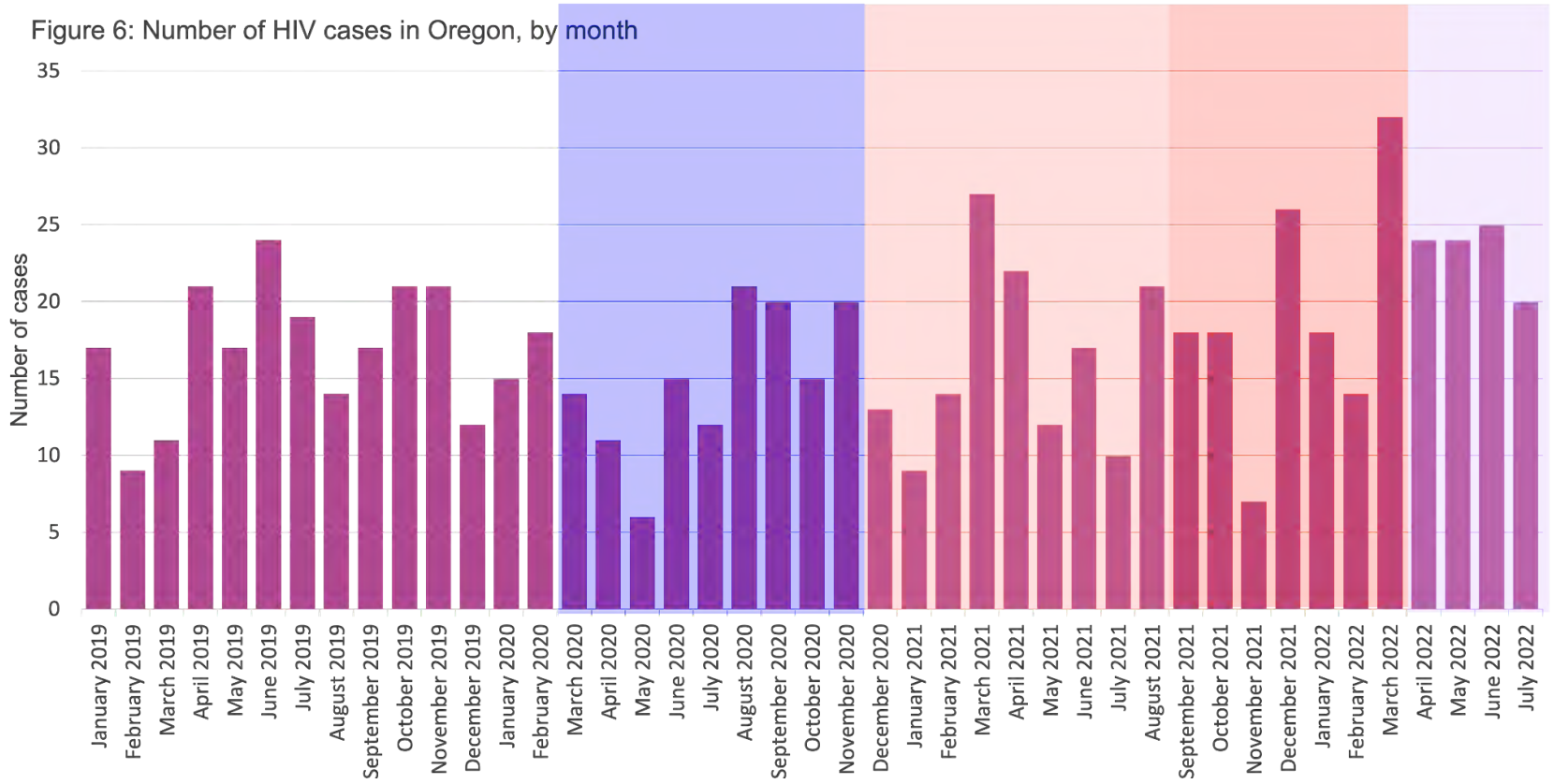


Sexually transmitted diseases

HIV (human immunodeficiency virus)

Figure 6 is a column chart displaying the monthly number of new HIV cases in Oregon between 2019 and 2022. Overall, the incidence rate of HIV in Oregon (per 100,000 population) was 4.9 in 2019, 4.3 in 2020, 4.8 in 2021, and 5.8 in 2022. The incidence rate of HIV in Oregon slightly decreased between 2019 and 2021, and increased somewhat between 2021 and 2022. Importantly, decreases in incidence rates during the pandemic (i.e., 2020, 2021) may reflect a reduction in HIV diagnoses due to reductions in HIV testing (as seen in Figure 7) and primary care visits, as opposed to a reduction in cases.

Figure 6: Number of HIV cases in Oregon, by month



Clinic-based HIV testing

Clinic-based HIV testing numbers are reported by county health departments and community-based organizations to the Oregon Health Authority. Figure 7 is a bar chart displaying the number of clinic-based HIV tests administered each month in Oregon between 2019 and July 2022. Statewide, there was a decline in clinic-based testing at the beginning of the COVID-19, starting in March 2020 and continuing through June 2020. Although there have been increases in the number of monthly HIV tests administered in Oregon since March 2020, the number of tests administered each month still had not reached that of pre-pandemic levels as of July 2022.

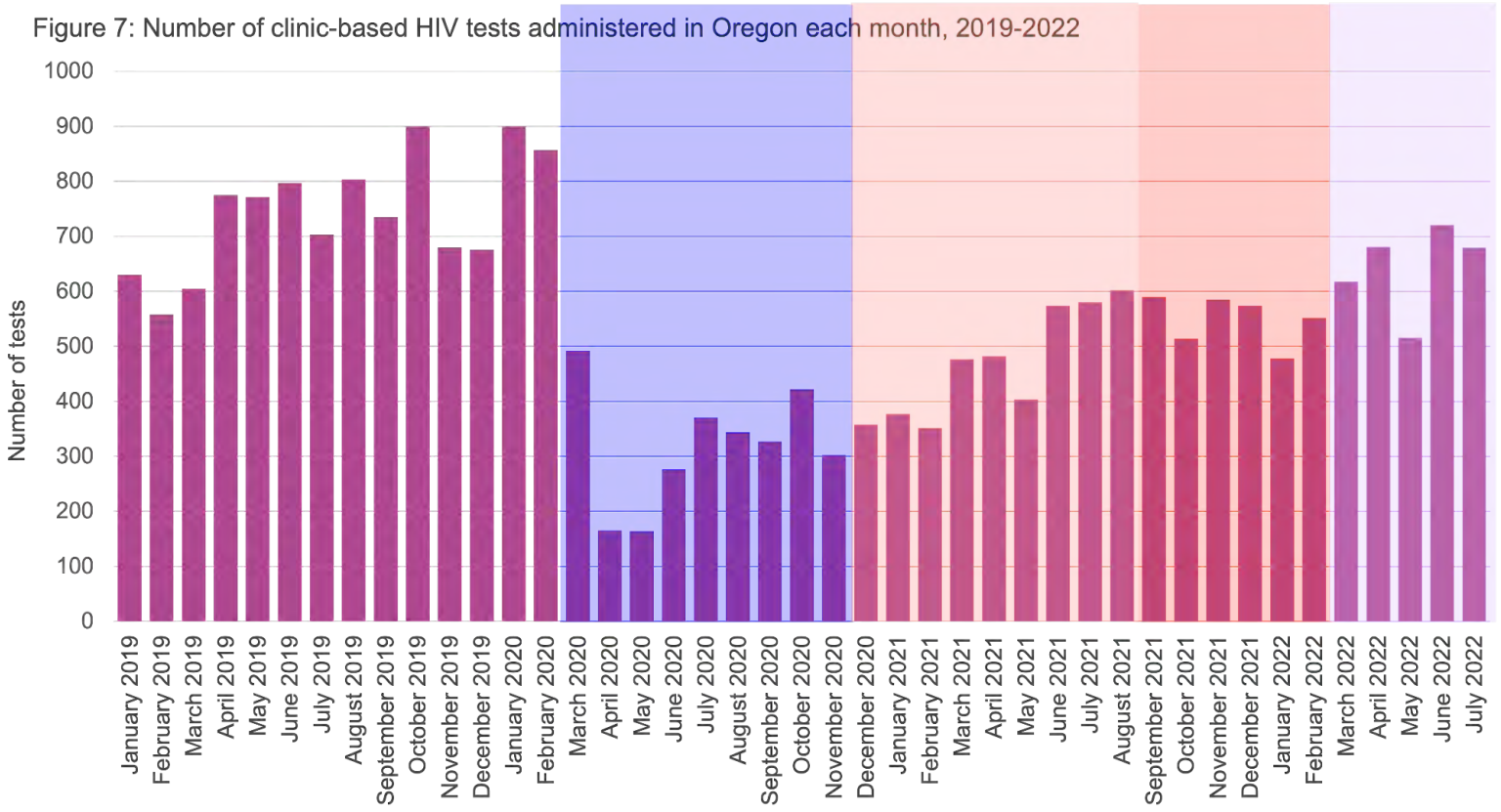


Figure 8 is a stacked column chart displaying the percentage of clinic-based HIV tests administered annually in Oregon by gender between 2019 and 2022. Throughout the study period, most HIV in-clinic tests were administered to cisgender men, followed by cisgender women. The percentage of HIV tests administered in-clinic for transgender/non gender conforming has doubled since 2019. The proportion of testing rates by gender fluctuated slightly from year to year.

Figure 8: Percent of clinic-based HIV tests administered each year in Oregon by gender

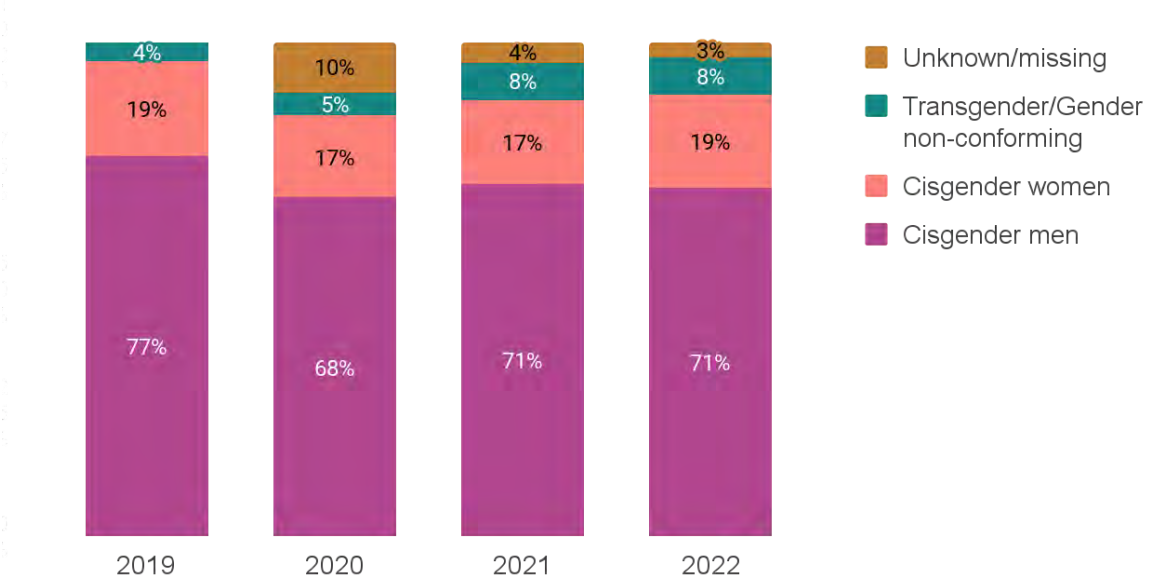


Figure 9 is a stacked column chart displaying the percentage of clinic-based HIV tests administered annually in Oregon by race/ethnicity between 2019 and 2022. The proportion of clinic-based HIV testing rates by race/ethnicity fluctuated slightly from year to year. The proportion of tests administered to White people decreased during the pandemic and increased for other racial/ethnic groups, including Hispanic/Latinx, American Indian/Alaskan Native, and unknown.

Figure 9: Percent of clinic-based HIV tests administered each year in Oregon by race/ethnicity

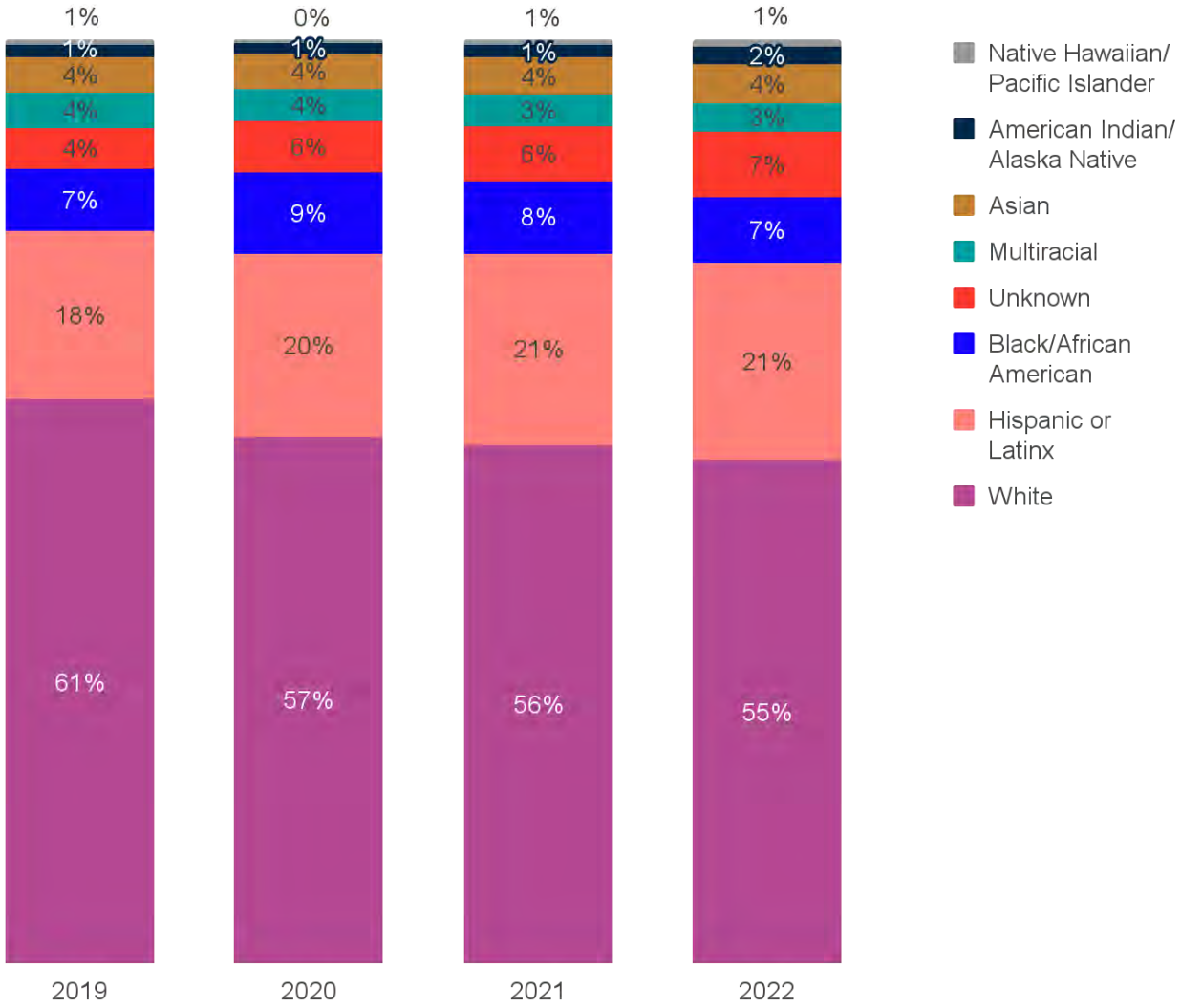


Figure 10 is a stacked bar chart displaying the number of clinic-based HIV tests administered annually in Oregon by age groups between 2019 and 2022. From 2019 to 2020, the number of clinic-based HIV tests decreased across all age groups; testing across all ages increased between 2020-2022, although the number of tests administered have not reached pre-pandemic levels as of 2022.

Figure 10: Number of clinic-based HIV tests administered in Oregon each year by age

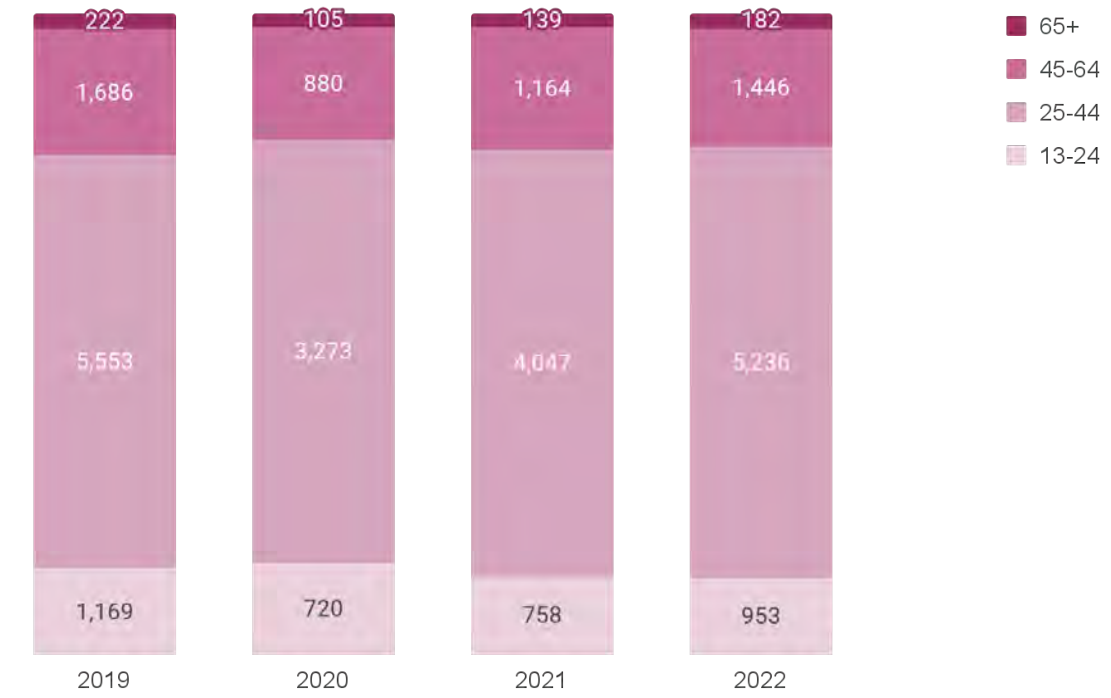
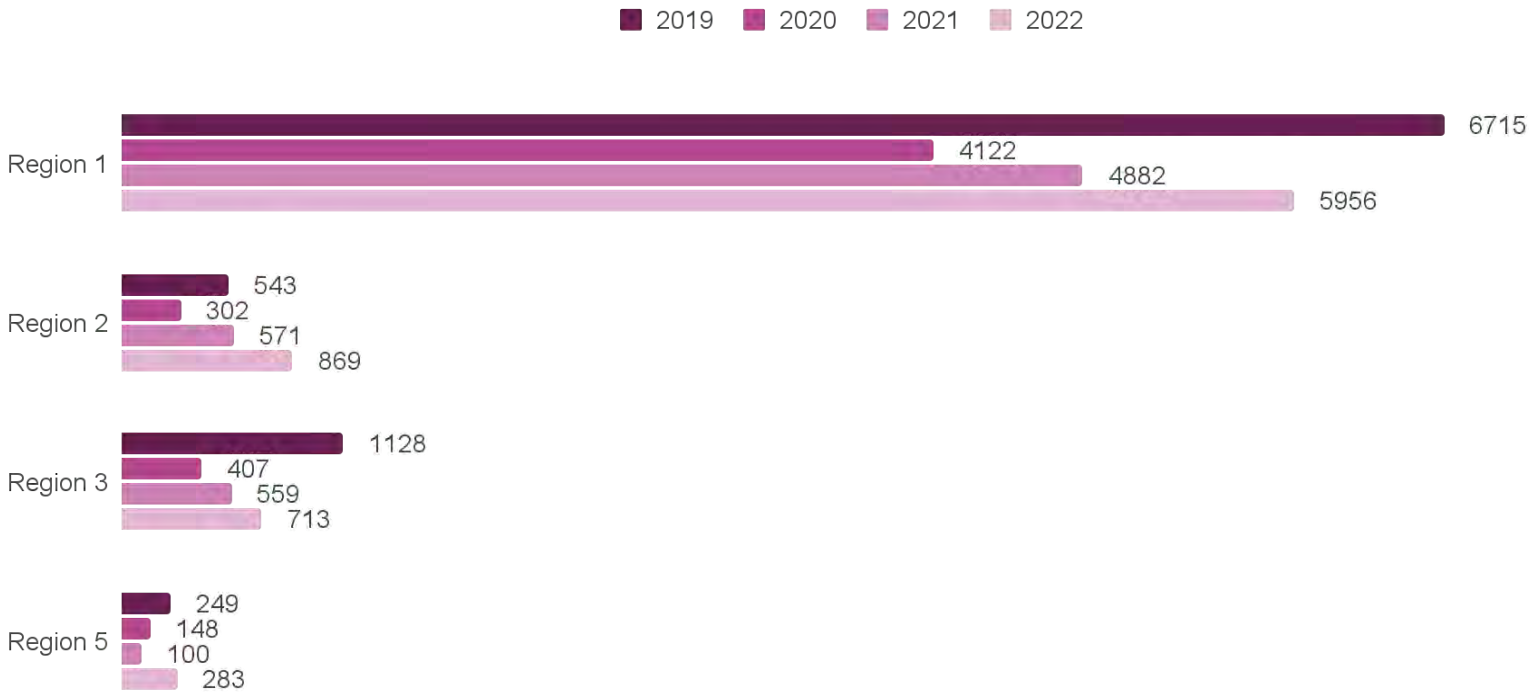


Figure 11 is a clustered bar chart displaying the number of clinic-based HIV testing administered annually in Oregon by region between 2019 and 2022. Similar patterns in HIV testing administration are seen across regions; Regions 1, 2 and 3, there was a reduction in clinic-based HIV testing between 2019 and 2020, and rates have been increasing since 2020, although not back to pre-pandemic levels in 2022. There was a slight dip in Region 5 in 2021 that was not seen in other regions, and rates in 2022 are actually higher than in 2019. Region 4 data has been suppressed due to low numbers.

Figure 11: Clinic-based HIV testing administered each year in Oregon by region



Home-based HIV testing

During the COVID-19 pandemic, the Oregon Health Authority partnered with Building Healthy Online Communities to offer the TakeMeHome program, which enabled Oregonians to test for HIV at home starting in March of 2020. Figure 12 is a bar chart displaying the number of home-based HIV tests distributed monthly in Oregon between 2020 and 2022. There is some variation seen in the number of HIV tests distributed each month, with the most variation seen in early 2022.

Figure 12: Number of home-based HIV tests distributed in Oregon each month, 2020-2022

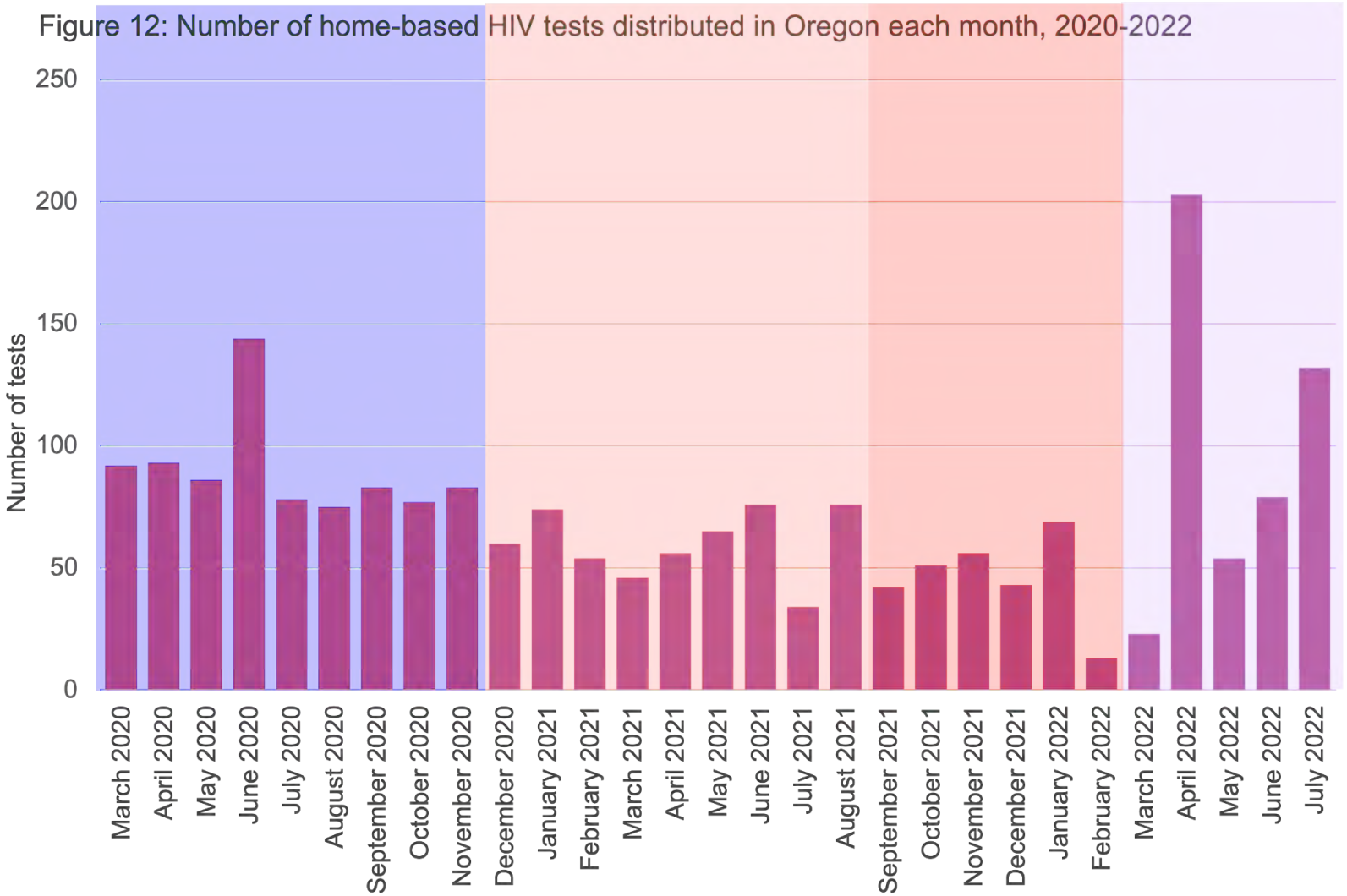


Figure 13 is a stacked column chart displaying the percent of home-based HIV tests distributed annually in Oregon by gender between 2020 and 2022. Overall, the proportion of distributed home-based HIV self-testing kits increased for cisgender women and transgender/gender non-conforming people.

Figure 13: Percent of home-based HIV tests distributed each year in Oregon by gender

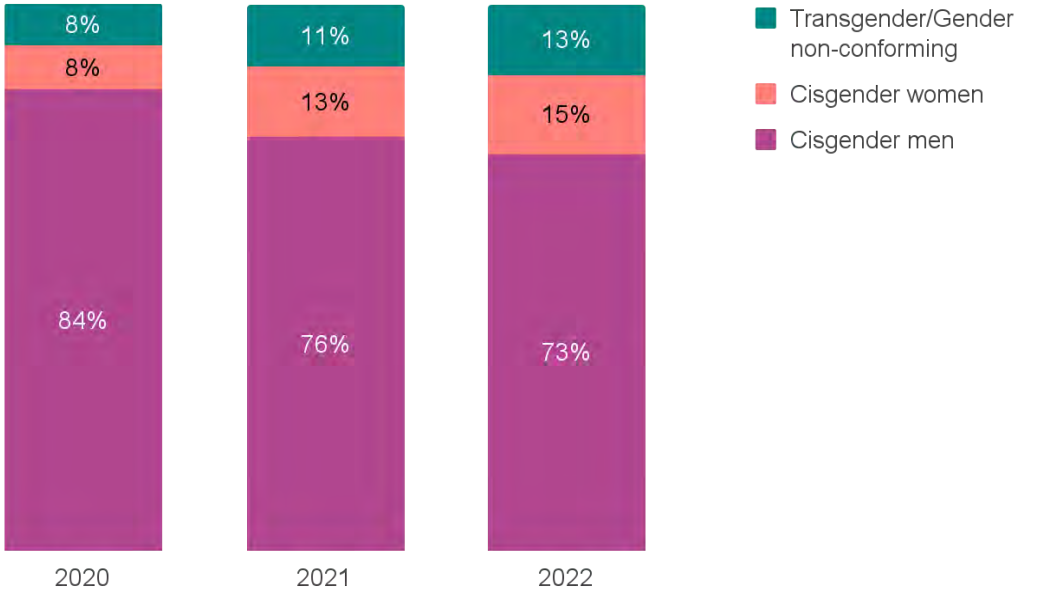
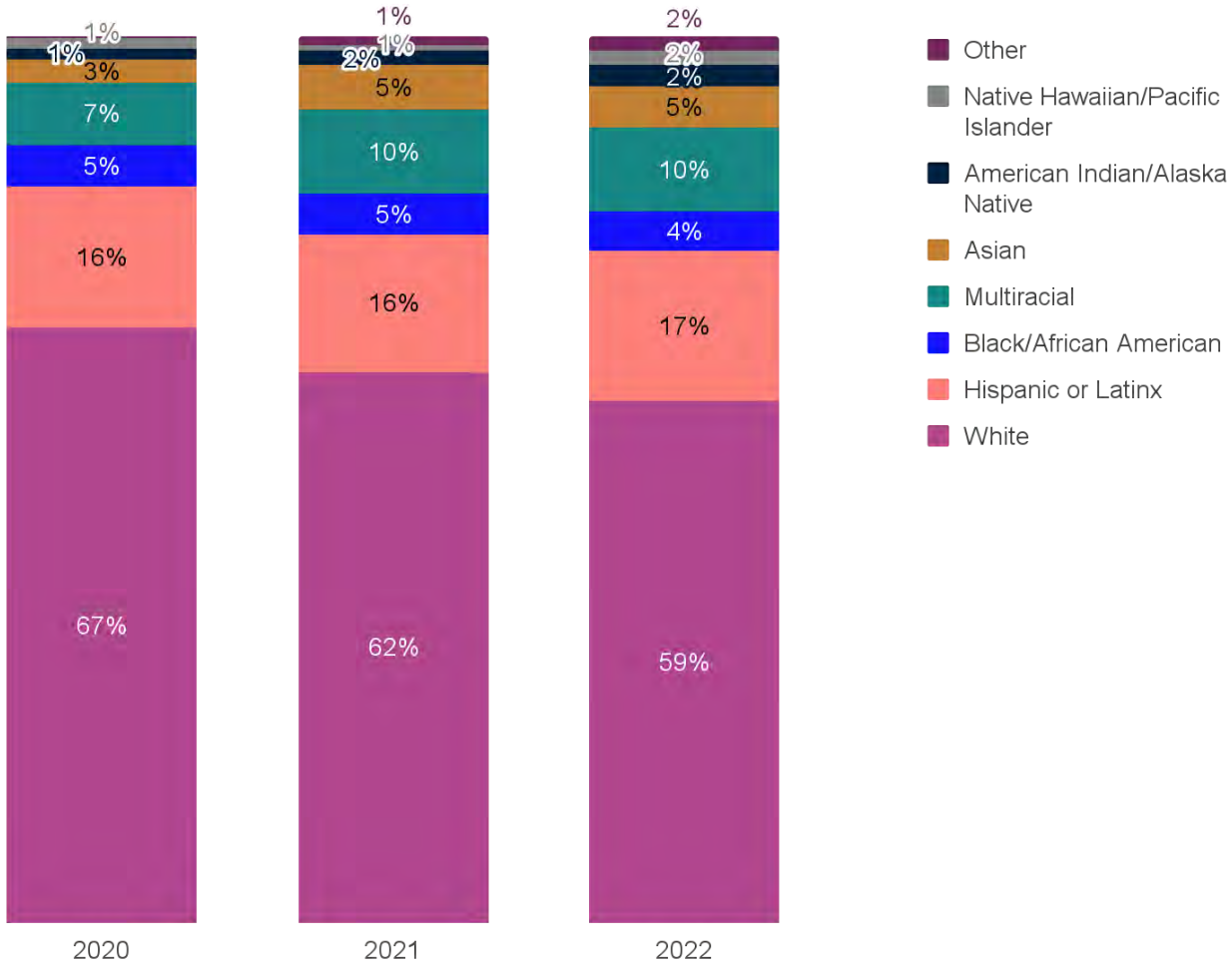


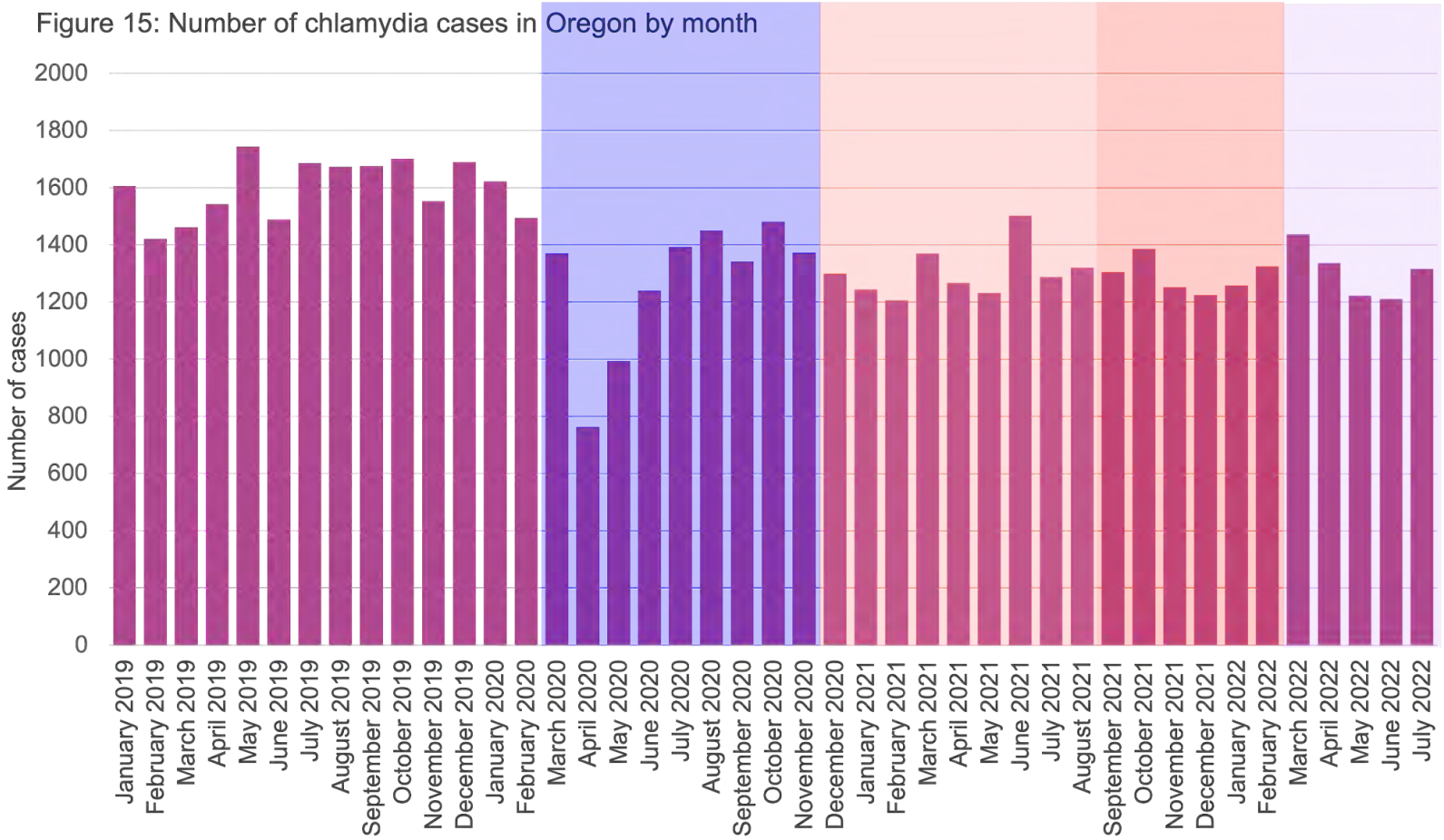
Figure 14 is a stacked column chart displaying the percentage of home-based HIV tests distributed annually in Oregon by race/ethnicity between 2020 and 2022. The distribution of home-based HIV self-testing kits remained relatively stable across racial groups between 2020 and 2022, although there was a slight decrease in home-testing kit distributions for White people and a corresponding increase in Multiracial, Asian, and American Indian/Alaska Native populations.

Figure 14: Percent of home-based HIV tests distributed each year in Oregon by race/ethnicity



Chlamydia

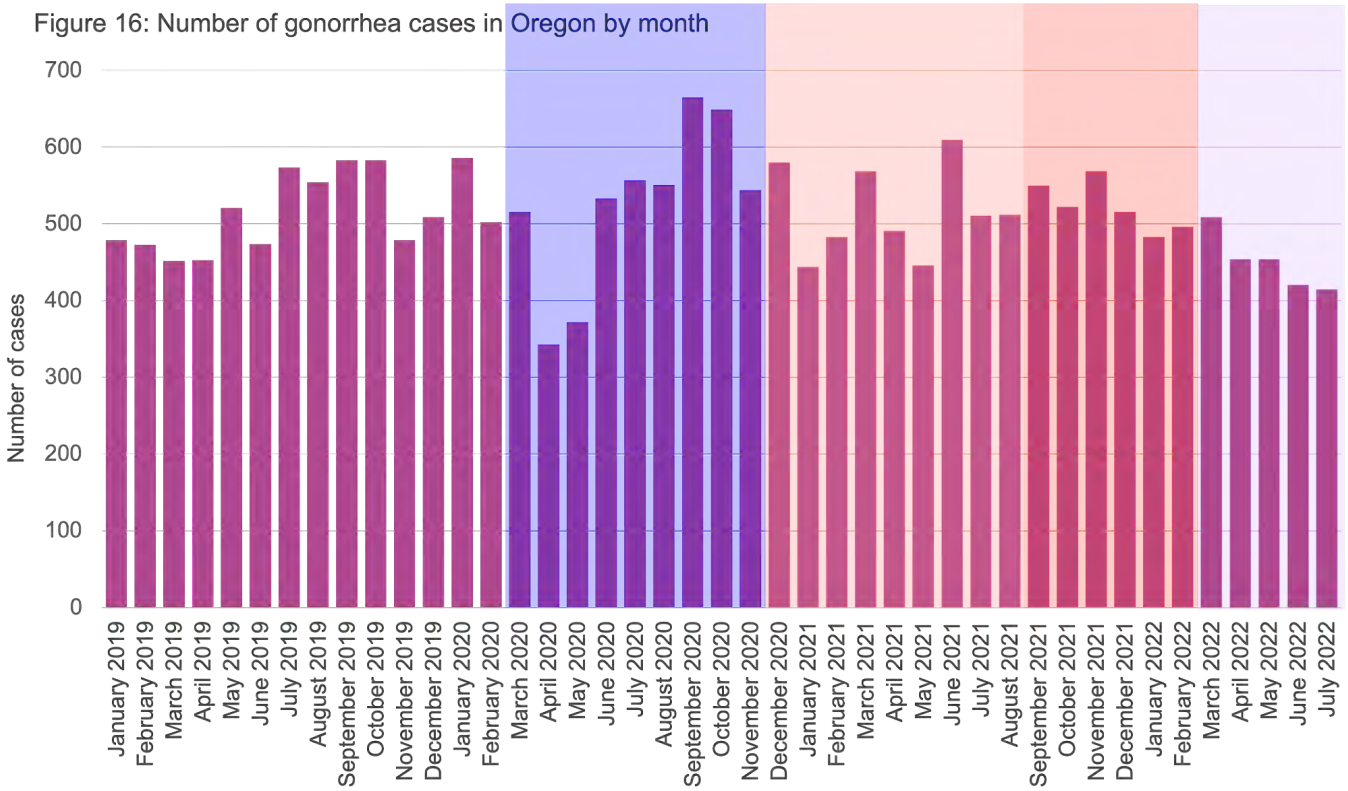
Figure 15 is a column chart displaying the number of chlamydia cases monthly in Oregon between 2019 and 2022. The annual incidence rate of chlamydia in Oregon (per 100,000 population) was 466.1 in 2019, 378.9 in 2020, 370.8 in 2021, and 365.3 in 2022. During the COVID-19 pandemic, the incidence rate of chlamydia in Oregon slightly decreased each year. This may not reflect an actual reduction in chlamydia cases but rather a reduction in accessing heath care services and testing during the pandemic.



Gonorrhea

Figure 16 is a bar chart displaying the number of gonorrhea cases monthly in Oregon between 2019 and 2022. The annual incidence rate of gonorrhea in Oregon (per 100,000 population) was 148.5 in 2019, 153.2 in 2020, 147.9 in 2021, and 129.3 in 2022. Although the incidence rate of gonorrhea in Oregon slightly increased from 2019 to 2020, it decreased between 2020 and 2022. Over the study period, the largest decline in annual incidence rate of gonorrhea was seen between 2021 and 2022, where incidence decreased from 147.9 cases per 100,000 population to 129.3 cases per 100,000 population, respectively. This may not reflect an actual reduction in gonorrhea cases but rather a reduction in accessing heath care services and testing during the pandemic.

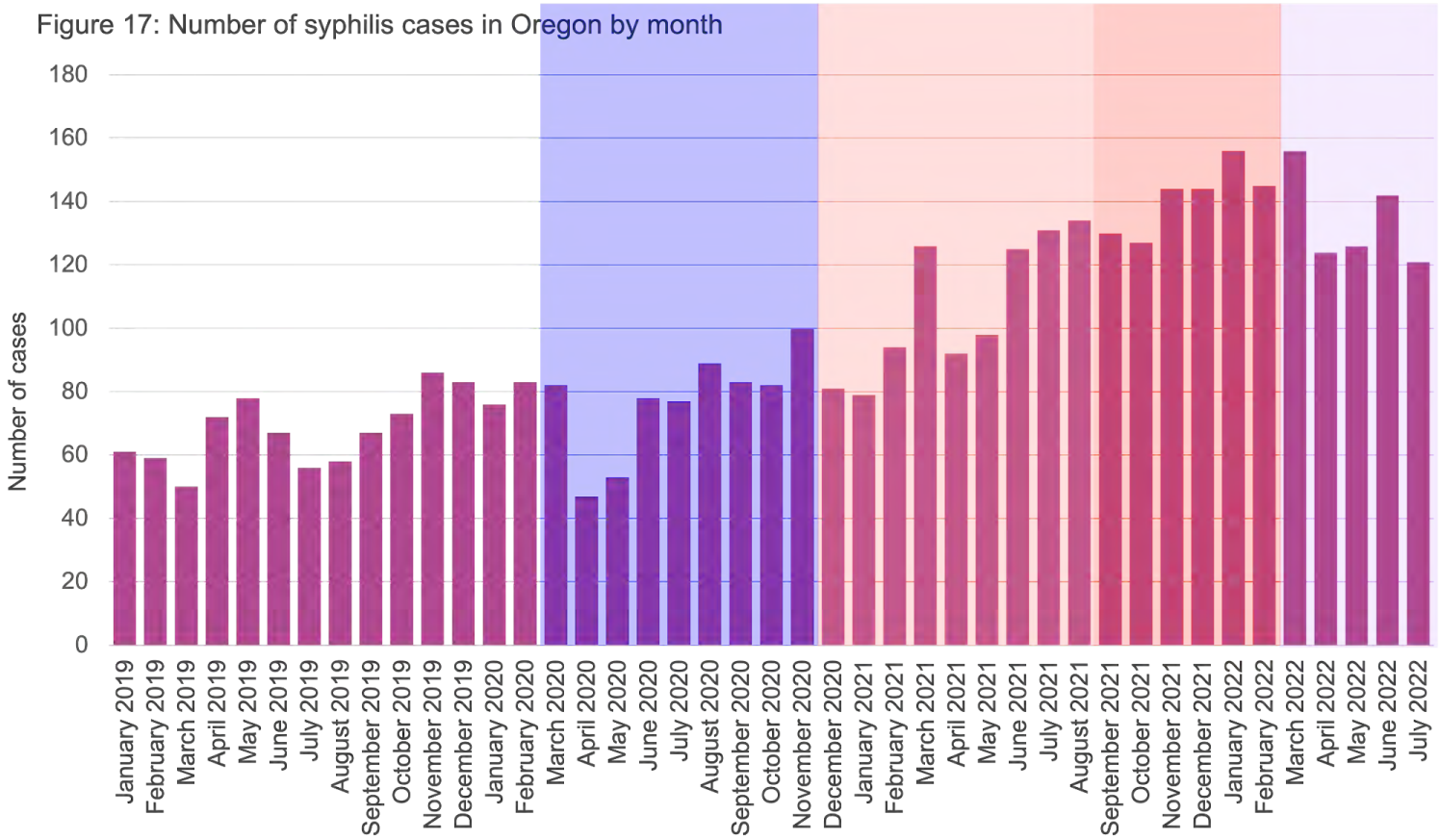
Figure 16: Number of gonorrhea cases in Oregon by month



Early Syphilis

Figure 17 is a column chart displaying the number of early syphilis cases in Oregon by month between 2019 and 2022. The annual incidence rate of early syphilis in Oregon increased between 2020 and 2022. There was an increase of 10 cases per 100,000 population from 2020 to 2021 and an increase of 5 cases per 100,000 population from 2021 to 2022.

Figure 17: Number of syphilis cases in Oregon by month

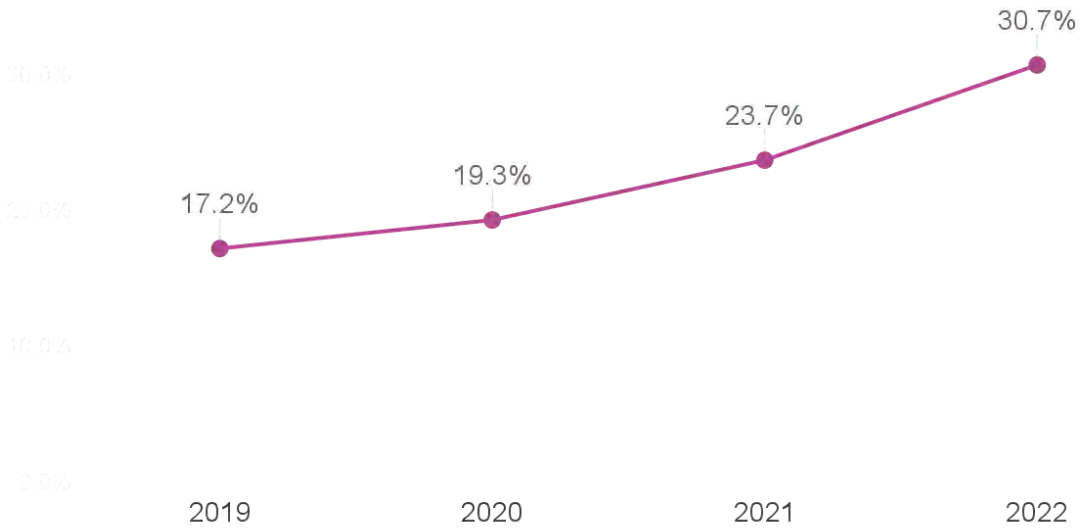


PrEP coverage

PrEP (pre-exposure prophylaxis) is a daily medication that can reduce the risk of contracting HIV. The percentage of the population with indications for PrEP is a calculation based on the percent of HIV negative men who have sex with men, people who inject drugs, and heterosexual men and women with substantial risk of HIV infection.

Figure 18 is a line chart presenting the percent of prep coverage among people aged 16 years and older in Oregon with indications for PrEP. PrEP coverage, reported as a percentage, is calculated as the number of persons aged ≥16 years classified as having been prescribed PrEP divided by the estimated number of persons aged ≥16 years who had indications for PrEP. Throughout the study period, there was a steady increase in the number of persons aged 16 years and older with PrEP indications being prescribed any FDA-approved PrEP medications. In 2019, 3396 (17.2%) people over 16 years old with indications were prescribed PrEP; by 2022, this nearly doubled to 6,062 (30.7%).

Figure 18: Percent of PrEP coverage among persons with PrEP indications each year in Oregon

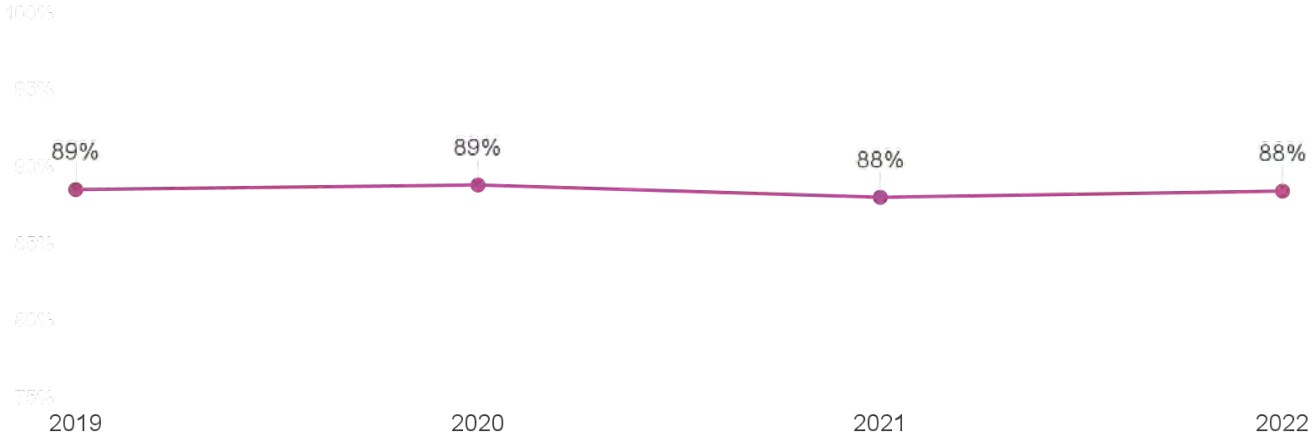


Immunization

Kindergartners completing all school-required vaccines

Figure 19 is a line chart that displays immunization data for kindergarten students in Oregon between 2019 and 2022. The school-required immunizations for kindergartens are TDaP (Tetanus, Diphtheria, and Pertussis), Hepatitis A, Hepatitis B, MMR (Measles, Mumps, Rubella), Polio, and Varicella. Although the percentage of kindergarten students who completed all required school vaccines remained relatively constant during the COVID-19 pandemic, there was a slight reduction in the number of Oregonian Kindergartners who completed all school-required vaccines. Additionally, reductions in school enrollment (see Figure 27) indicate that there could be a greater number of kindergarten-aged children who have not completed all school-required vaccines but did not enroll in school. Some counties saw a larger decrease in the number of kindergarteners who completed all school-required vaccines between 2019 and 2002, including Tillamook (decreased 88% to 81%) , Curry (81% to 76%), Crook (92% to 86%), Grant (86% to 78%), Harney (92% to 82%), and Jefferson (97% to 91%).

Figure 19: Percent of kindergartners with completed school-required immunizations each year in Oregon



Women of childbearing age with TDaP vaccine

Figure 20 is a column chart displaying the number of TDaP (Tetanus, Diphtheria, and Pertussis) vaccines among women of childbearing age yearly in Oregon between 2019 and 2022. Childbearing age is defined by OHA as between 18 to 45 years of age at time of vaccination. During the study period, there was a drop in the total number of TDaP vaccines administered to women of childbearing age in Oregon: in 2019, there were 71,203 doses administered, in 2020 there were 59,130, in 2021 there were 61,080, and in 2022 (through September) there were 46,278. Data was not available beyond September 2022.

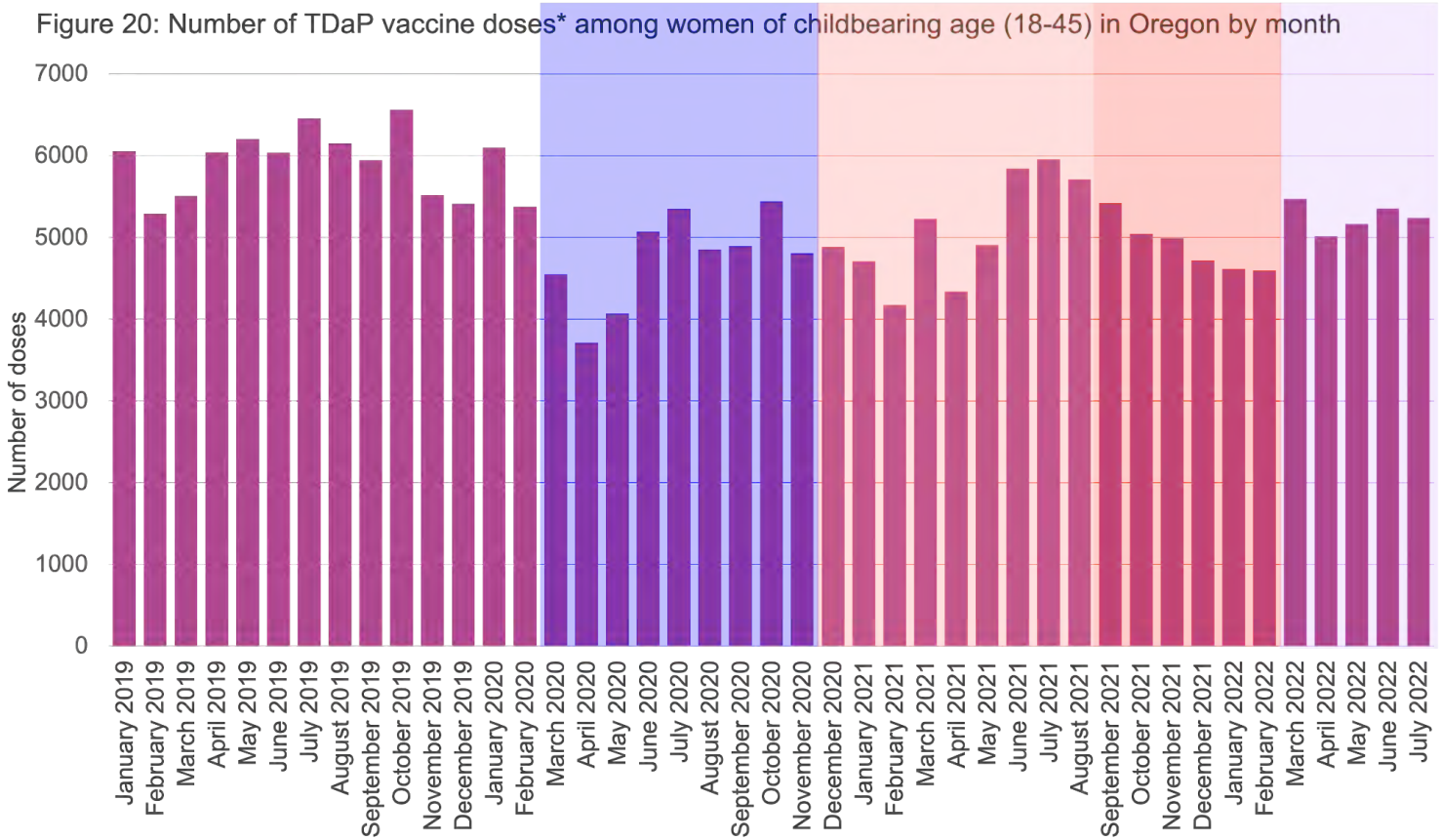
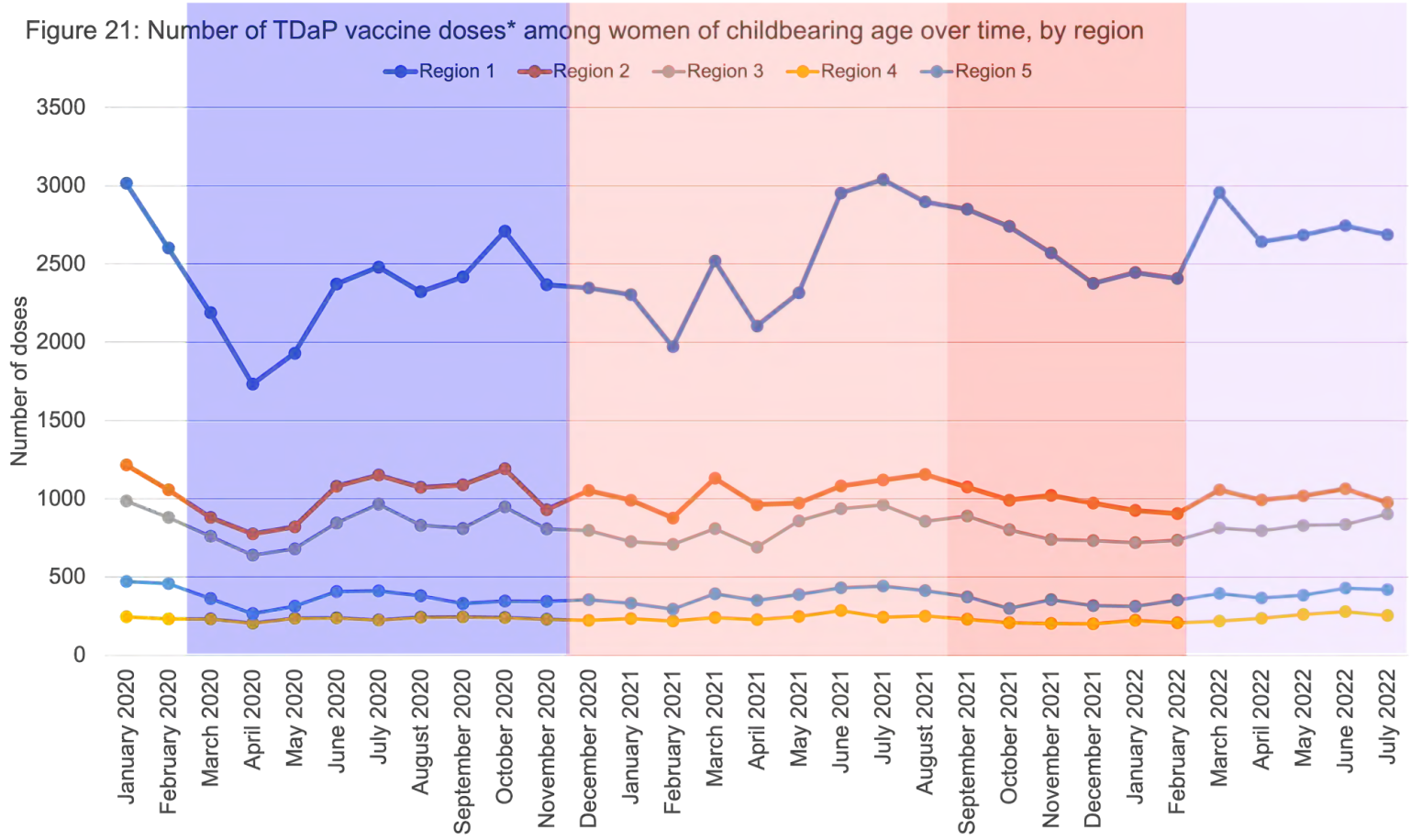


Figure 21 is a line chart showing the number of TDaP vaccines among women of childbearing age yearly in Oregon between 2019 and 2022 by region. TDaP vaccinations in Regions 4 and 5 remained fairly stable throughout the study period, rates in Regions 2 and 3 dropped at the beginning of the pandemic and increased again within a few months, but did not reach pre-pandemic during the study period. For Region 1, doses of TDaP vaccinations decreased by nearly half between January and April 2020 then began increasing again. Variations across regions were seen, with some regions with vaccination rates that remained relatively stable and others exhibiting substantial variation throughout the study period, although the number of doses administered did reach pre-pandemic levels a few times in 2021 and 2022.

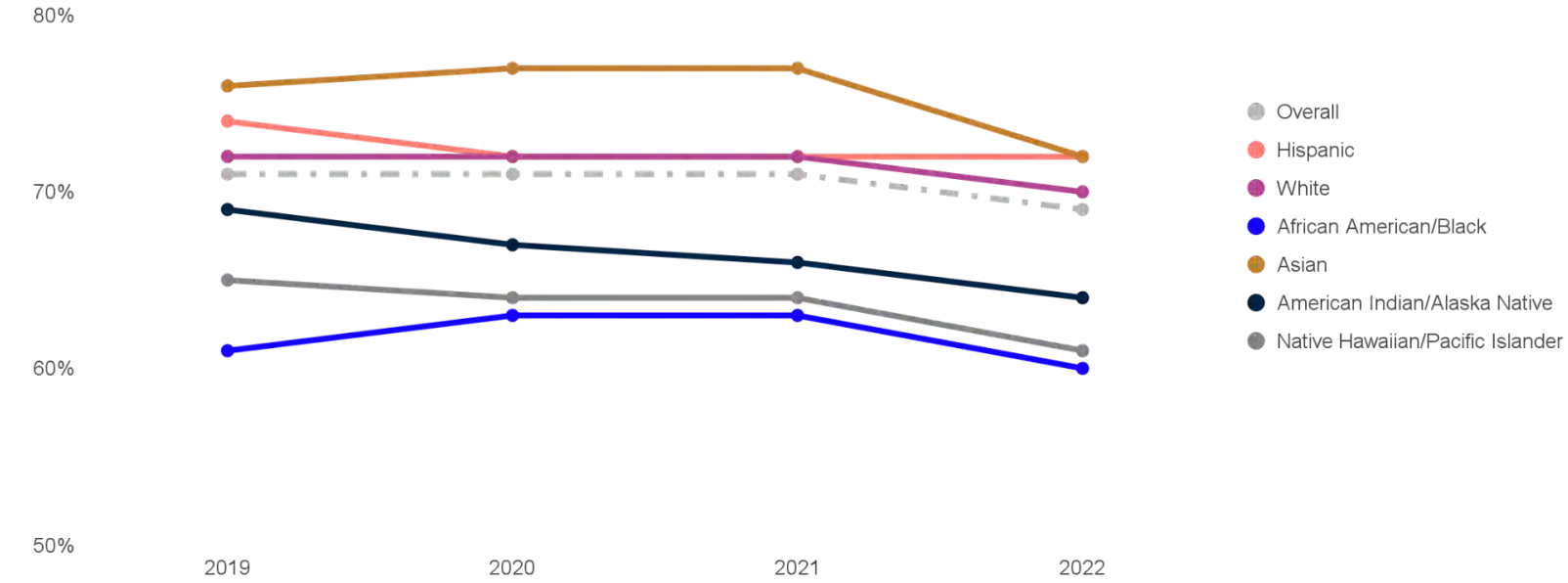


*Vaccine count may include duplicates of the same person if they were pregnant during the study period.

Immunization series completion rates among two-year-olds

Figure 22 is a line chart showing immunization series completion rates for Oregon two-year-olds by race/ethnicity. Overall, immunization series completion rates for Oregon two-year-olds remained fairly constant from during the study period, although there was a decrease seen from 2021 and 2022. By race/ethnicity, rates fell between 2019 and 2020 for Hispanic two-year-olds, American Indian/Alaska Native two-year-olds, and Native Hawaiian/Pacific Islander two-year-olds. They remained constant for all groups from 2020-2021 apart from American Indian/Alaska Native two-year-olds (which fell from 2020-2021), and fell for all groups between 2021 and 2022 apart from Hispanic two-year-olds. African American/Black two-year-olds had the lowest vaccination rates throughout the study period, followed by Native Hawaiian/Pacific Islanders.

Figure 22: Immunization series completion rate for Oregon two-year-olds

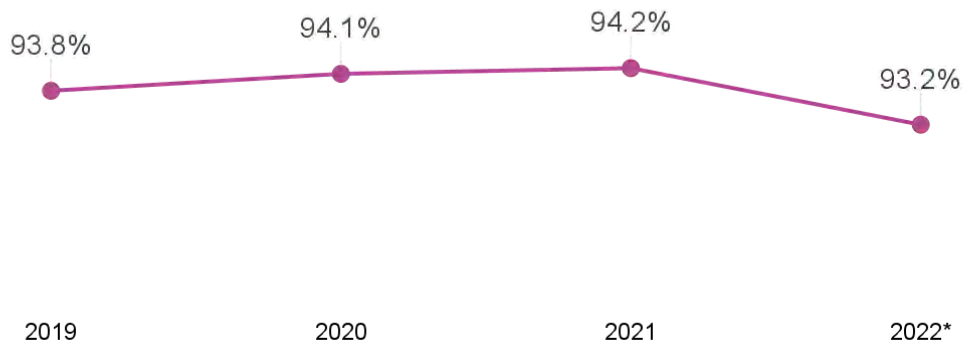


Maternal health

Adequate prenatal care

Figure 23 is a line graph showing the percent of births in Oregon with adequate prenatal care over time between 2019 and 2022. Inadequate prenatal care is defined by OHA as having fewer than five prenatal visits or care that began in the third trimester. Rates remained relatively stable throughout the study period, with a very small dip in adequate prenatal care in 2022.

Figure 23: Percent of births with adequate prenatal care in Oregon, 2019-2022

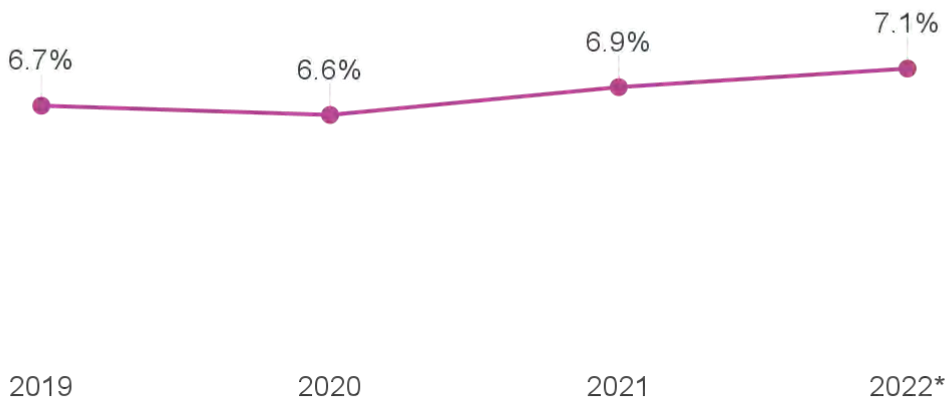


*2022 data is preliminary and may change

Low birthweight

Figure 24 is a line graph displaying the percent of low birthweight infants born in Oregon over time between 2019 and 2022. The percentage of infants with low birthweight slightly increased each year since 2019.

Figure 24: Percent of low birthweight infants, Oregon residents, 2019-2022



*2022 data is preliminary and may change

Economic well being

SNAP benefits

Figure 25 is a line chart displaying the percentage of the Oregonians who received SNAP benefits between 2019 and 2022. Throughout the study period, the percentage of Oregon residents receiving SNAP benefits increased by 4%. Between 2021 and

2022, there was a modest increase of 0.3%. The observed increase could be in part due to changes in expanded eligibility for college students that began in January 2021.[1]

Figure 25: Percent of Oregon population receiving SNAP benefits

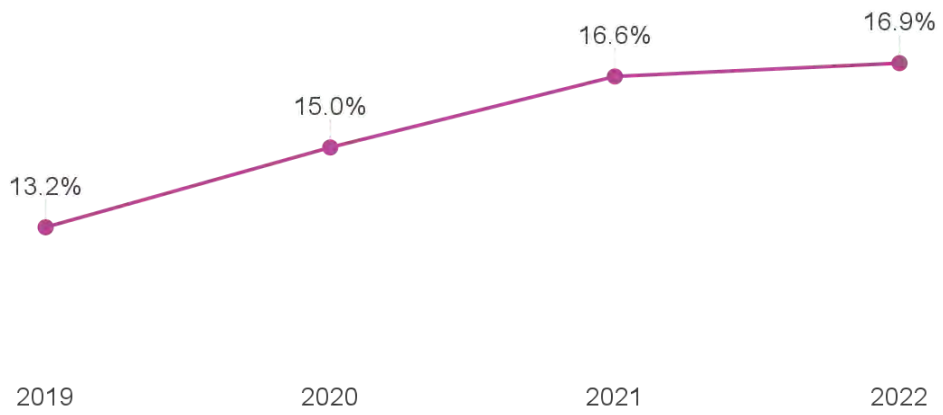
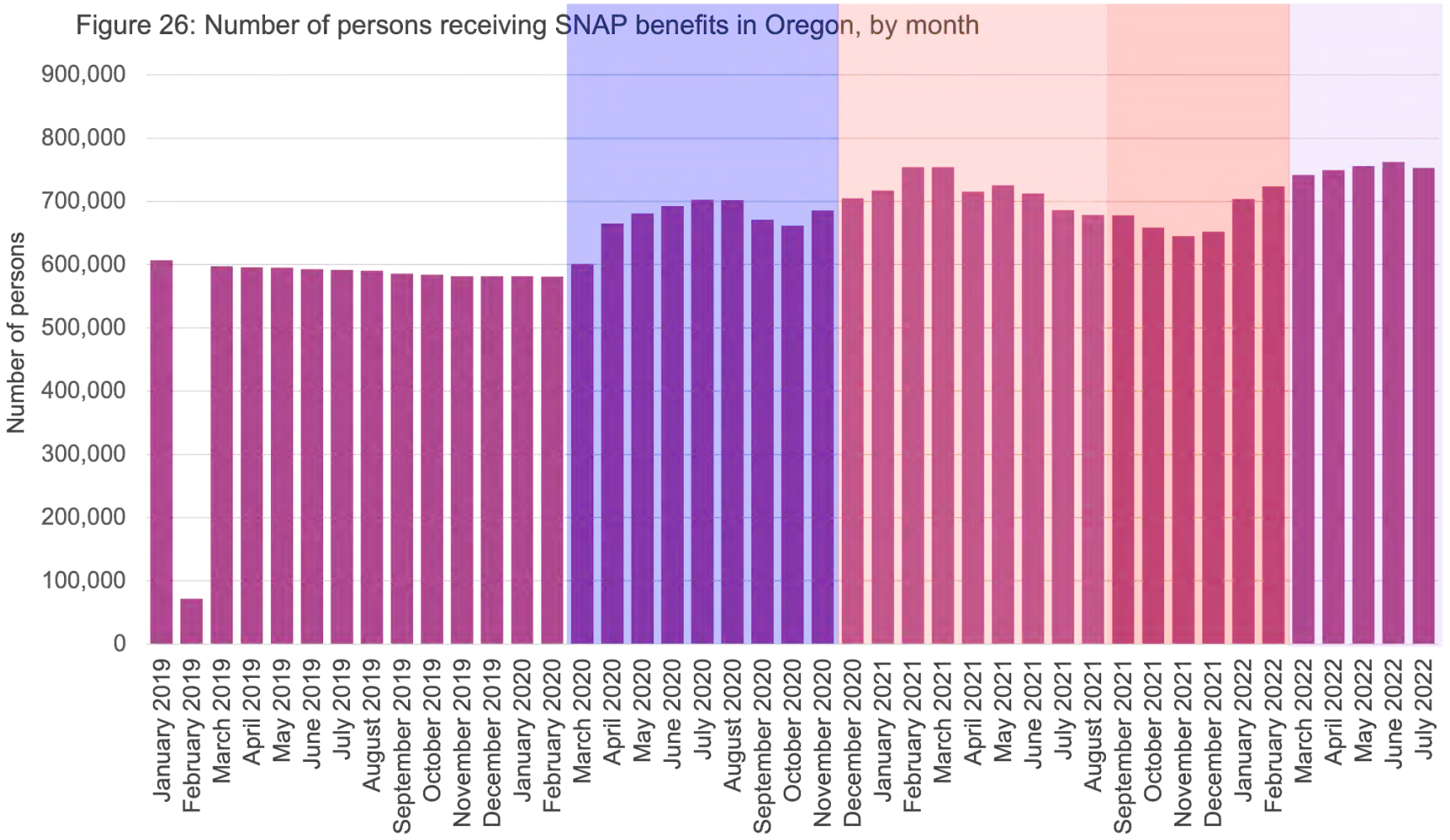


Figure 26 is a column chart showing the people receiving SNAP benefits in Oregon by month from January 2019-July 2022. In March 2020, the number of people receiving SNAP benefits began to climb, fell briefly in September 2020, then climbed again until March 2021. The number of people receiving SNAP benefits at the end of the study period was still much higher than pre-pandemic numbers.

[1] Federal Student Aid (2023) *SNAP benefits for eligible students during the COVID-19 pandemic* [Press release]. https://fsapartners.ed.gov/knowledge-center/library/electronic-announcements/2021-02-23/snap-benefits-eligible-students-during-covid-19-pandemic-updated-april-3-2023

Figure 26: Number of persons receiving SNAP benefits in Oregon, by month



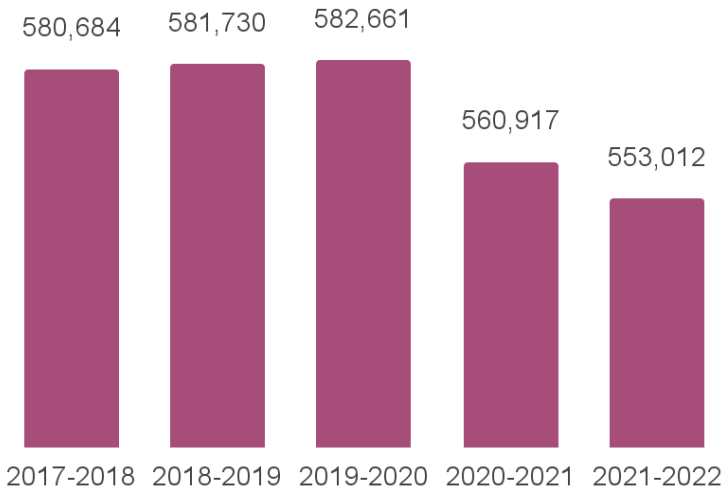
*Due to the partial Federal government shutdown in early 2019, most of the February 2019 SNAP benefits were issued early in the month of January 2019 to ensure SNAP recipients would receive their February 2019 benefits. As a result, February 2019's benefits are significantly less than January 2019.

Education

Student enrollment

Figure 27 is a column chart displaying the total number of students enrolled in the Fall term in Oregon between 2018 and 2022. Fall enrollment numbers steadily declined during the COVID-19 pandemic. Large declines in enrollment were seen from the 2019-2020 and 2020-2021 year. Enrollments continued to decline from the 2020-2021 school year to the 2021-2022 school year.

Figure 27: Fall enrollment numbers,* all grades, all students



*The fall membership count represents the number of students enrolled on the first day of October each year. All K-12 students enrolled in public schools and programs are included; this report includes regular, alternative, charter, and other types of schools and programs. In addition, students attending private schools and programs are included if the students were placed there by a public entity and financed with public funds. Shared-time students (ADM Program Type 09) are also included in Fall Membership.

Figure 28 is a stacked bar chart displaying fall enrollment by race/ethnicity as a percentage of total enrollment. The distribution of enrollment rates by race/ethnicity remained fairly constant throughout the study period, although there was a slight reduction in the percent of White students and a slight increase in the percent of Hispanic/Latino and multiracial students.

Figure 28: Percent of students enrolled by race/ethnicity, all grades

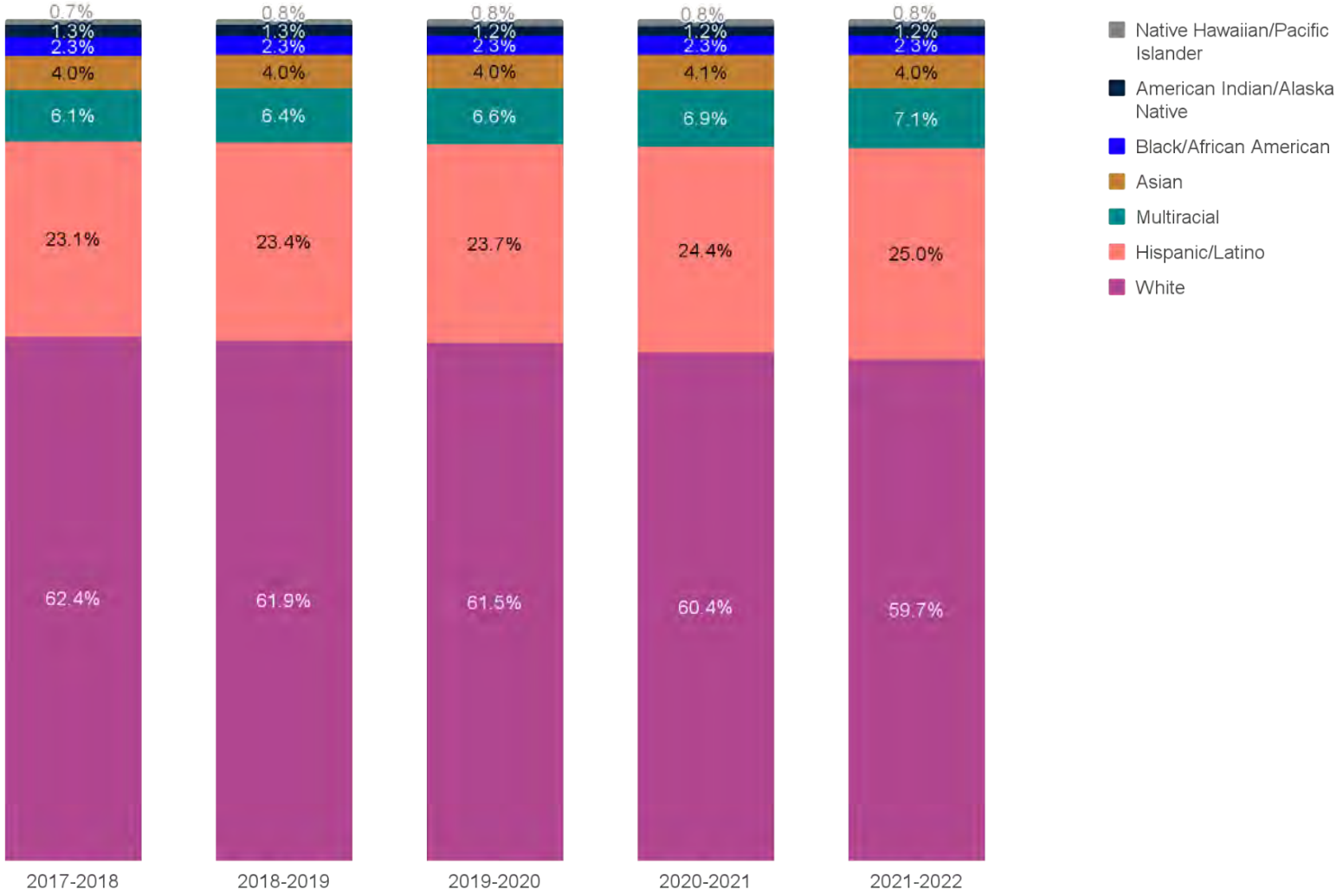


Figure 29 is a stacked bar chart displaying the fall enrollment numbers by race/ethnicity. As noted in Figure 27, enrollment in the State declined between the 2017-2018 school year and the 2021-2022 school year. Declines in enrollment were seen among White, Native Hawaiian/Pacific Islander, American indian/Alaska Native, and Black/African American students, while there was an increase in enrollment among multiracial and Hispanic/Latino students in Oregon.

Figure 29: Number of students enrolled by race/ethnicity, all grades

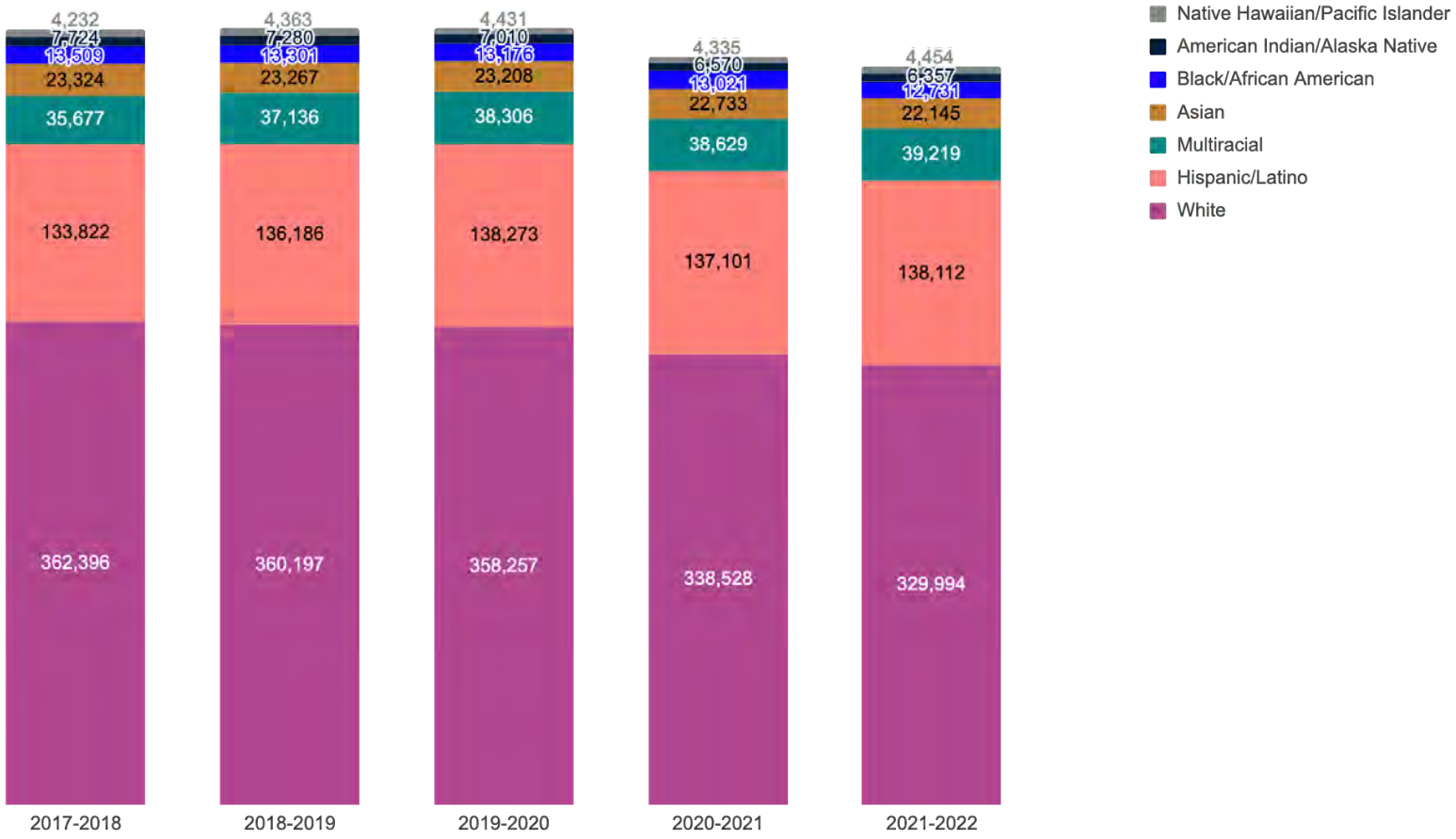
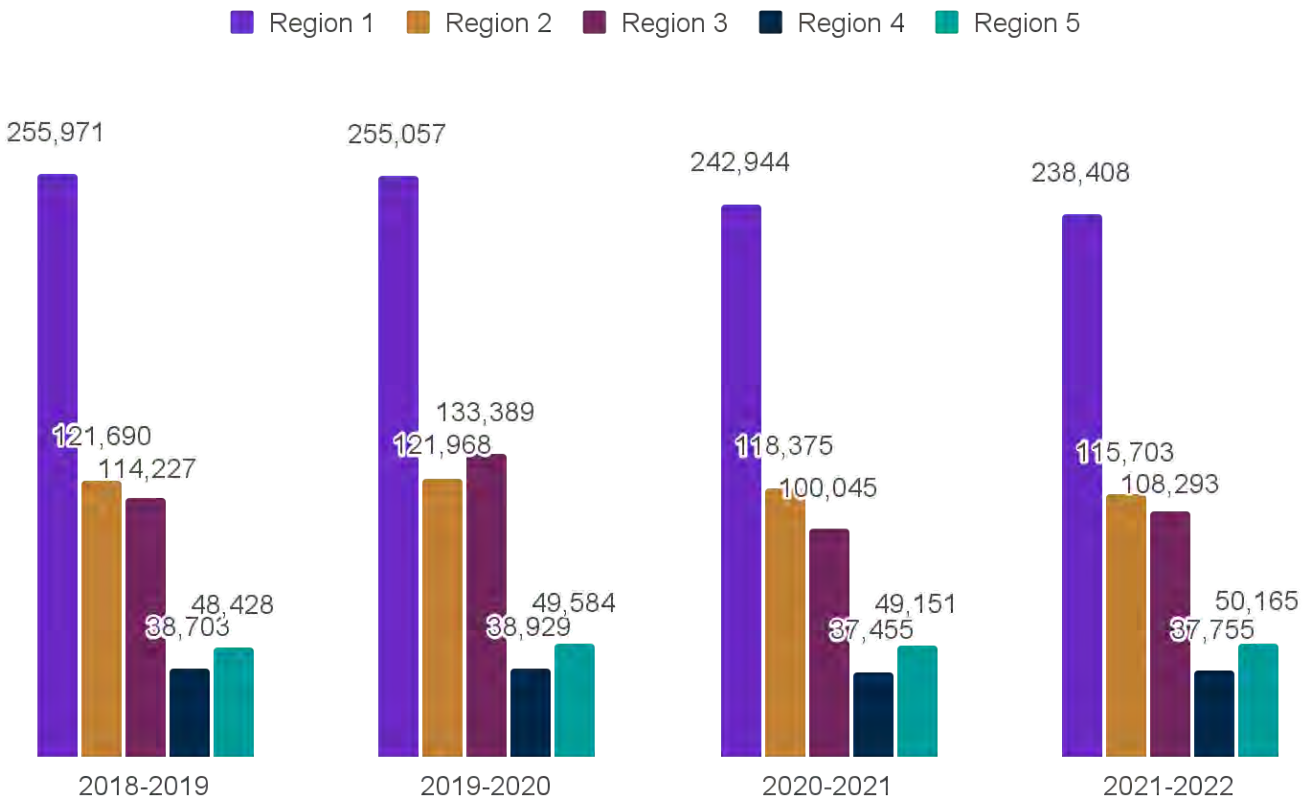


Figure 30 is a clustered column chart displaying the number of students at fall enrollment across all school districts by region. Between the 2019-2020 and 2020-2021 school years, enrollment decreased in all regions. Enrollment in Region 3, 4, and 5 increased between 2020-2021 and 2021-2022 while enrollment continued to decline in Regions 1 and 2.

Figure 30: Fall enrollment*, all districts, all students, by region

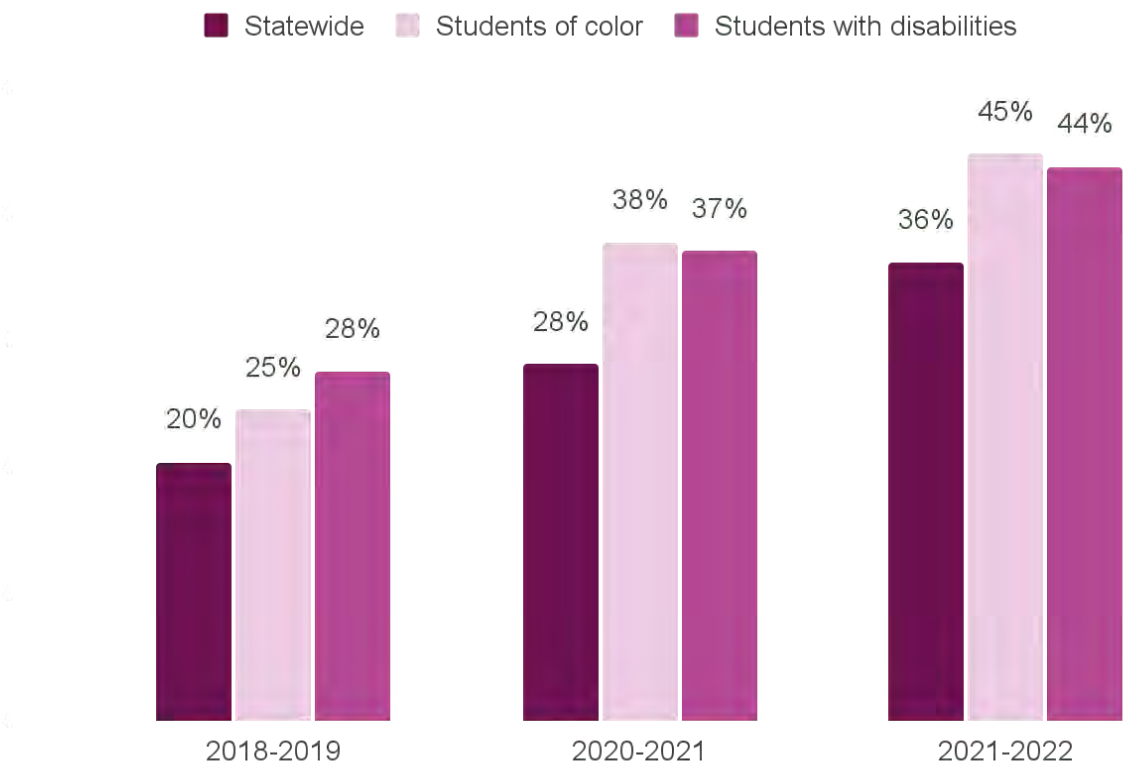


*Due to inconsistencies in the data source, the total enrollment numbers by region do not equal the total enrollment statewide in Figure 30. This may be due to different ways of classifying school districts.

Chronic absenteeism

Figure 31 is a clustered bar chart displaying chronic student absenteeism in Oregon statewide, for students of color, and for students with disabilities between the 2018-2019 and 2021-2022 school years. Chronic absenteeism is students who were absent more than 10% of days of the school year. Throughout the study period, chronic absenteeism rose dramatically for all students. Students of color and students with disabilities had the highest rates of absenteeism, with chronic absenteeism growing by 20% and 16%, respectively, between the 2019-2020 and 2021-2022 school year.

Figure 31: Percentage of students who are absent more than 10% of days of the school year*

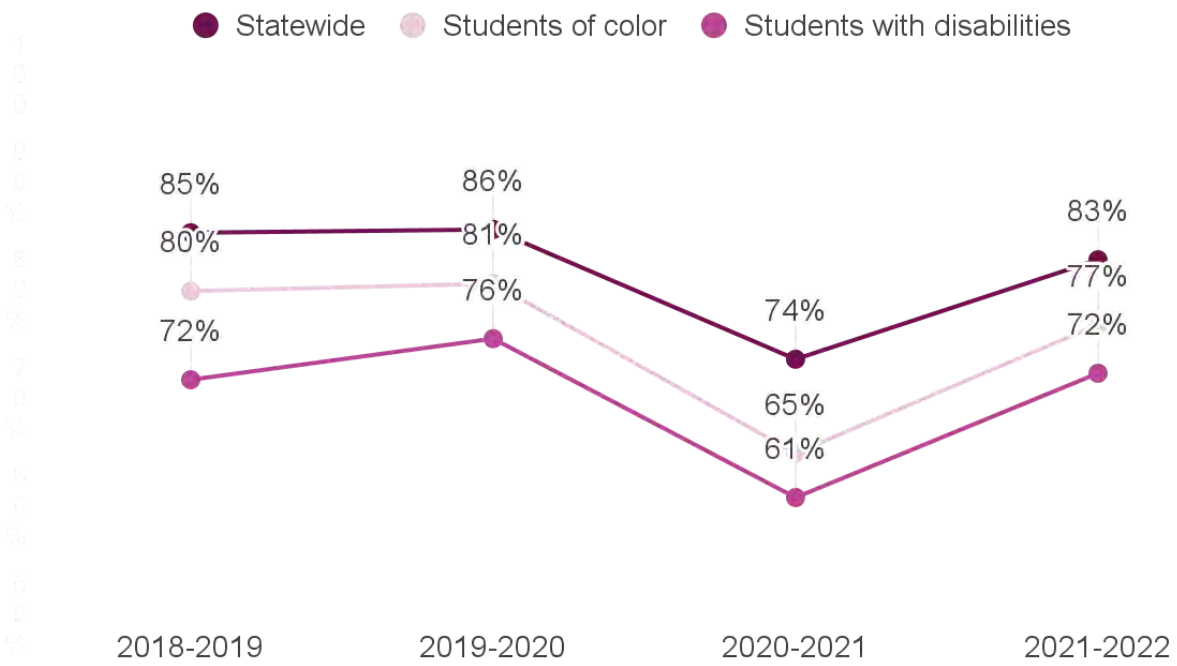


*No data were available for 2020 due to school closures

Students on track to graduate

Figure 32 is a line chart displaying the percentage of 9th grade students on track to graduate in Oregon for all students, students of color and students with disabilities between the 2018-2019 and 2021-2022 school years. From 2018-2019 to 2019-2020, the total percentage of 9th grade students on track to graduate remained fairly steady, and decreased for all subgroups in 2020-2021. However, in the 2021-2022 school year, the percentage of 9th grade students on track to graduate increased again - reaching near pre-pandemic rates overall and for students of color, and matching the 2018-2019 rate for students with disabilities.

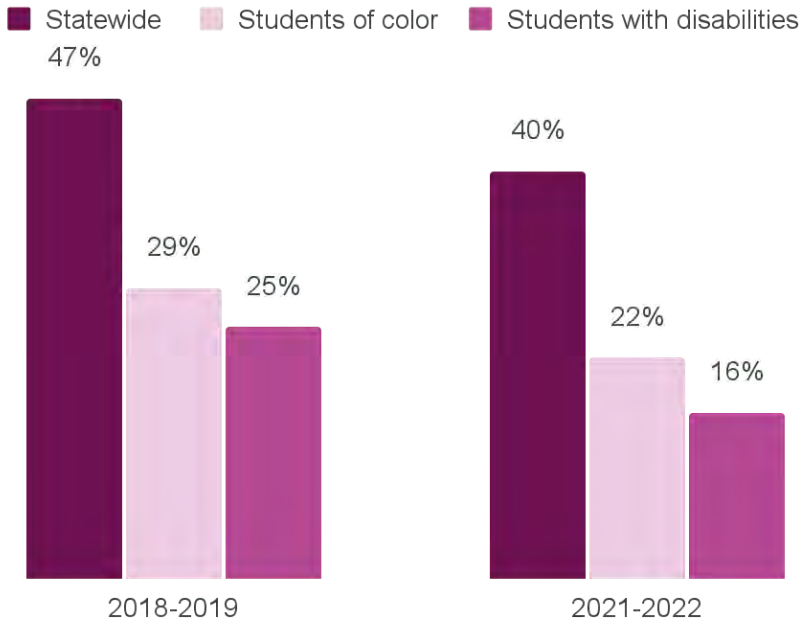
Figure 32: Percentage of 9th grade students on track to graduate



Obtainment of statewide academic achievement standards in 3rd grade reading

Figure 33 is a clustered column chart displaying the percent of Oregon students who meet or exceed the statewide academic achievement standards in 3rd grade reading. Between the 2018-2019 school year and the 2021-2022 school year, the percentage of students meeting or exceeding statewide academic achievement standards in 3rd grade reading fell statewide (by 7%), for students of color (by 7%), and for students with disabilities (by 9%). No data was available for school years 2019-2020 or 2020-2021.

Figure 33: Percentage of students meeting or exceeding statewide academic achievement standards in 3rd grade reading



Student houselessness

Figure 34 is a column chart displaying the number of students from kindergarten through 12th grade experiencing homelessness in Oregon between 2017 and 2022. Throughout the study period, the number of students experiencing houselessness decreased statewide. However, in the 2021-2022 school year, the number of students experiencing houselessness increased by 665 students from the previous school year.

Figure 34: Number of K-12 students experiencing houselessness in Oregon, 2017-2022

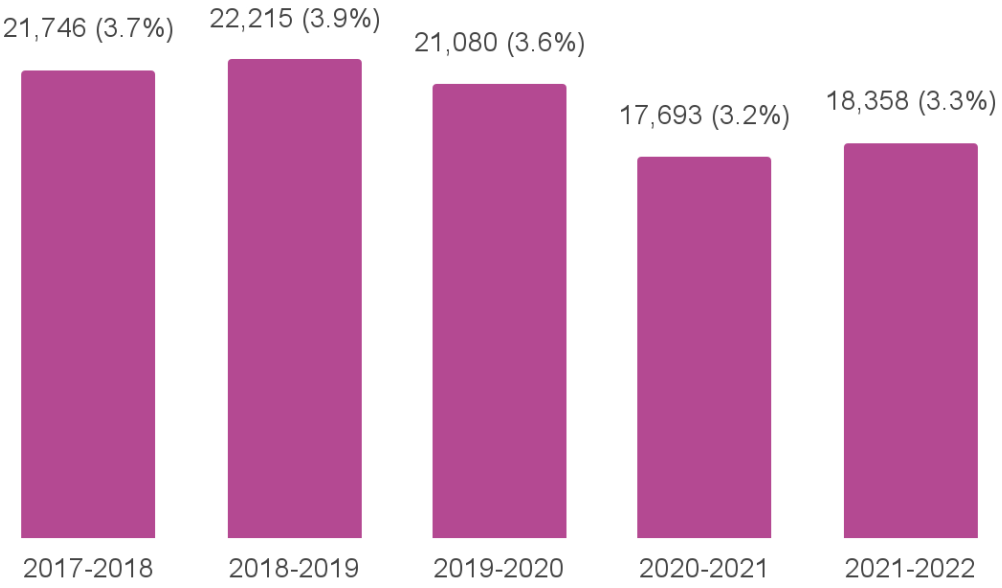


Figure 35 is a clustered bar chart displaying the number of students from kindergarten through 12th grade experiencing homelessness in Oregon by living situation between 2017 and 2022.

Figure 35: Number of K-12 students experiencing houselessness in Oregon by living situation, 2017-2022

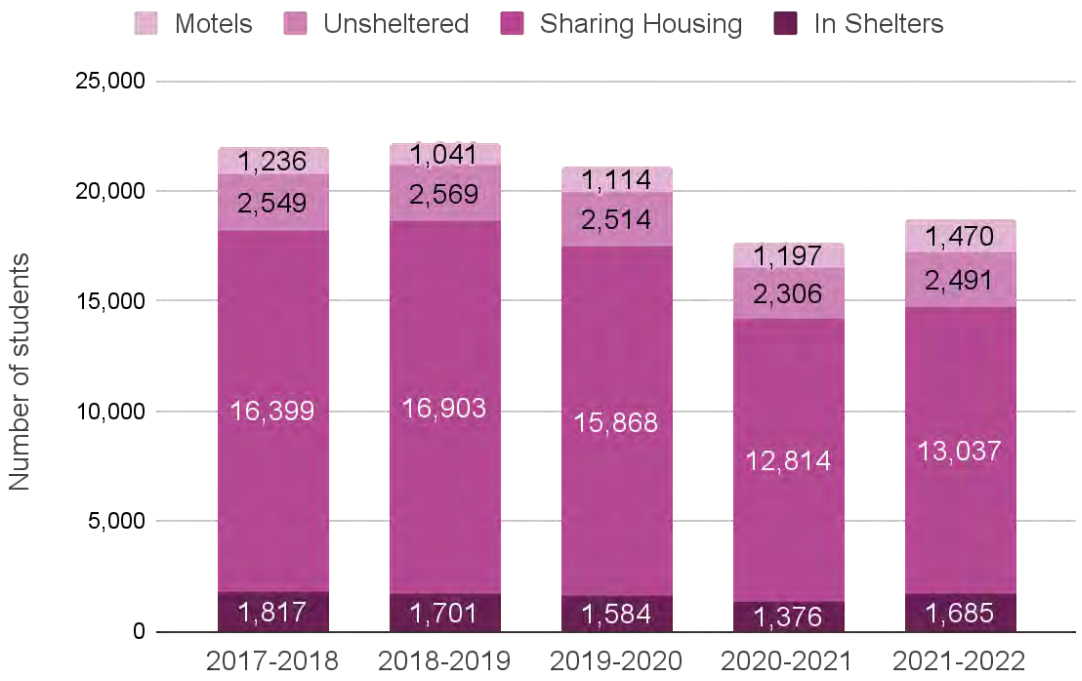
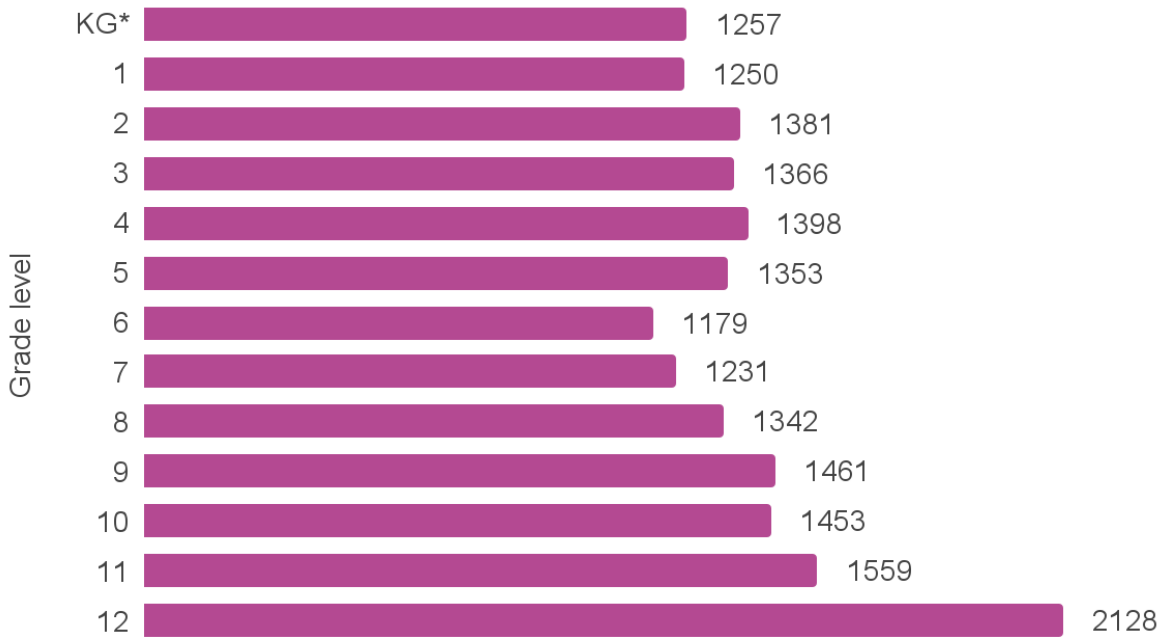


Figure 36 is a bar chart displaying the number of students experiencing homelessness attending public schools in Oregon by grade level during the 2021-22 school year. The top three grade levels of students experiencing houselessness attending public schools in Oregon in 2021-22 were high school students, specifically 12th graders, 11th graders, and 9th graders. Students in the 12th grade were the most affected by houselessness in Oregon.

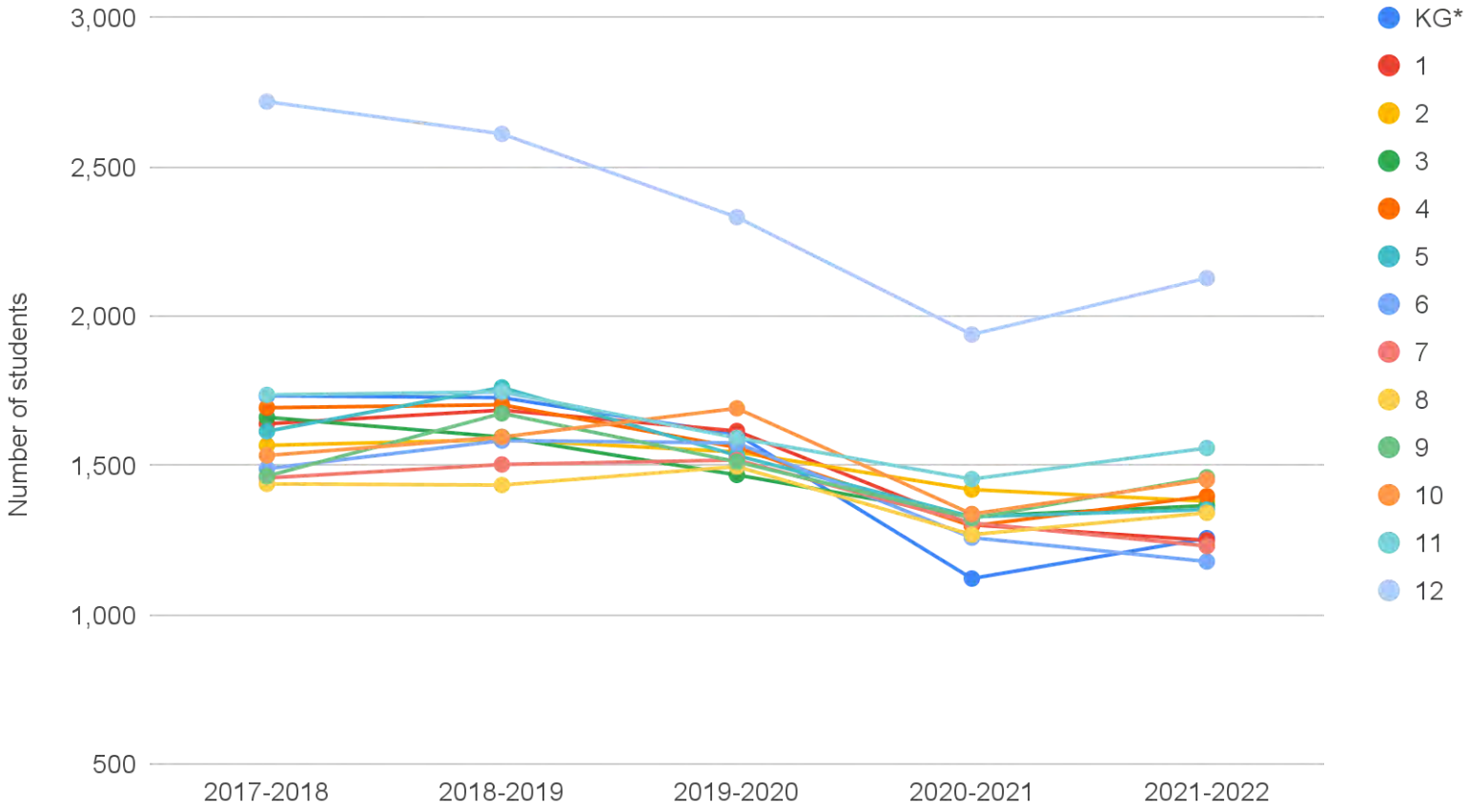
Figure 36: Students experiencing houselessness attending public schools in Oregon by grade level, 2021-2022



* KG stands for Kindergarten

Figure 37 is a line chart displaying the number of the students experiencing houselessness in Oregon between 2017 and 2022 by grade level. From the 2017-2018 school year until the 2020-2021 school year, overall there was a steady decrease in the number of students experiencing houselessness in each grade level. Throughout the study period, there were between 1,000 and 2,000 students in kindergarten through 11th grade who were houseless and between 2,000 and 3,000 students in 12th grade who were houseless.

Figure 37: Number of students in Oregon who were houseless, by grade, over time



*KG = Kindergarten

Appendix B:
Educational Survey Respondents Regional Analysis

Introduction

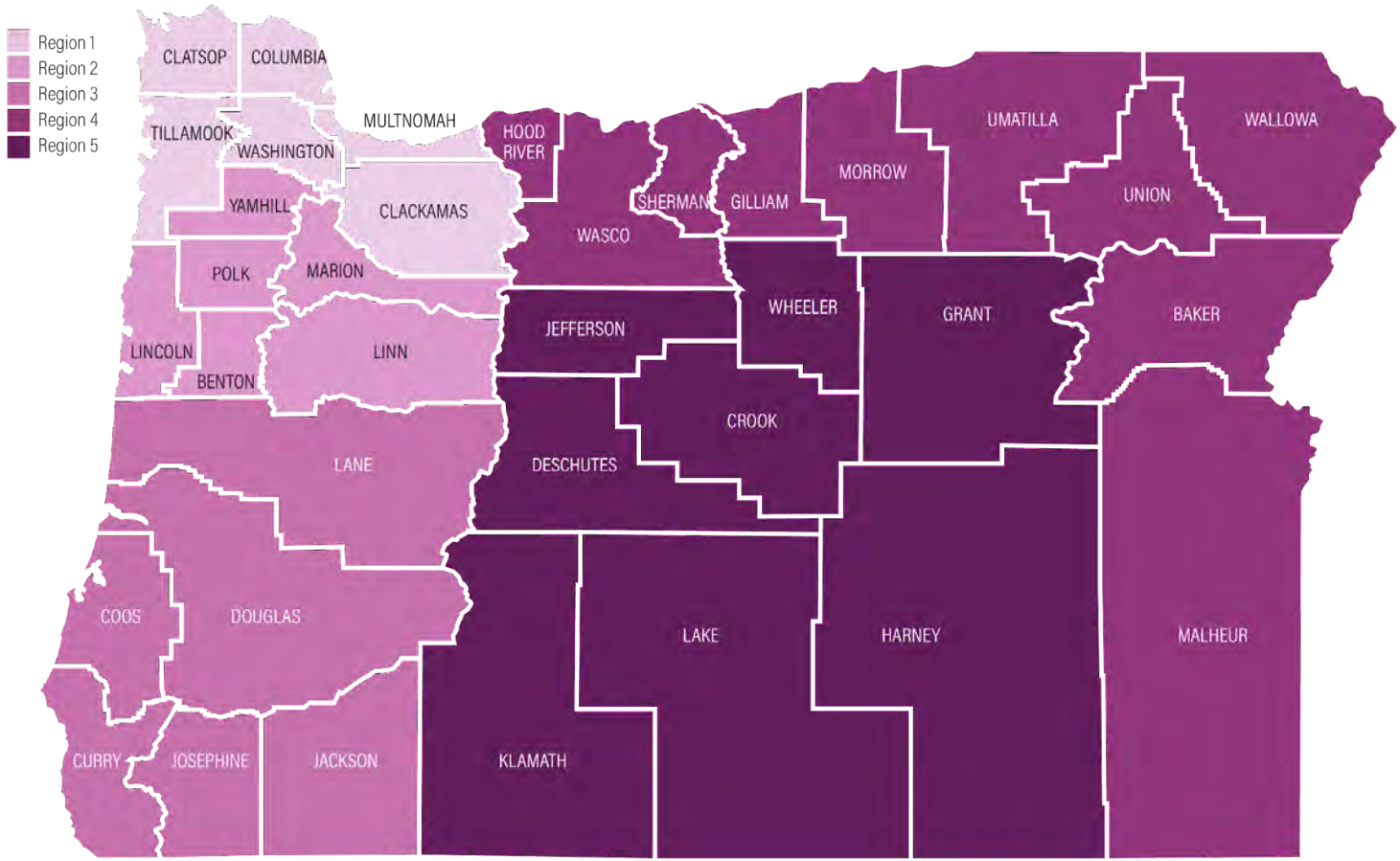
As part of quantitative data collection for this study of the public health response to COVID-19 in Oregon, tailored surveys were administered to Oregon Principals, Nurses, School District Superintendents (SDs), and Education Service Districts (ESDs). Detailed methods relating to survey development and data analysis can be found in Appendix G in Report 2. The majority of findings from educational informant data were presented in Report 2. As part of the survey, respondents were asked to identify which region(s) they provided services in during the COVID-19 pandemic to allow for data analysis by region(s) served. The regions used as part of this study were adapted from the Oregon state emergency response regions[1] and re-numbered for ease of use in the report.

The below findings are based upon an analysis of educational survey respondent data by region served. Unfortunately, small sample sizes did not allow for regional data analysis of all educational survey respondent informant groups. Consequently, School Nurse and ESD data were excluded from this analysis. For SD survey data, Region 5 was suppressed due to low sample sizes. When interpreting the findings presented below, it is important to note that the sample sizes for the educational survey respondents included in regional analysis are not large enough to draw generalizations for each region. Rather, regional data is presented below to examine how the COVID-19 response varied across regions.

	Educational Informant Survey Respondent Group	
Region	Principals	SD
Region 1	59 (35%)	16 (23%)
Region 2	31 (18%)	20 (28%)
Region 3	33 (19%)	14 (20%)
Region 4	28 (16%)	11 (15%)
Region 5	20 (12%)	Suppressed due to fewer than 10 respondents

*Sample sizes may change depending on the question due to attrition of survey respondents and are indicated in all figures.

[1] https://www.oregon.gov/oha/ph/preparedness/partners/pages/regional-support.aspx


Region 1
Region 2
Region 3
Region 4
Region 5
CLATSOP
COLUMBIA
TILLAMOOK
WASHINGTON
MULTNOMAH
HOOD RIVER
UMATILLA
WALLOWA
MORROW
SHERMAN
GILLIAM
UNION
YAMHILL
CLACKAMAS
WASCO
POLK
MARION
WHEELER
GRANT
BAKER
JEFFERSON
LINCOLN
LINN
BENTON
CROOK
LANE
DESCHUTES
COOS
DOUGLAS
LAKE
HARNEY
MALHEUR
CURRY
JOSEPHINE
JACKSON
KLAMATH

Regional Comparison

Emergency preparedness

Individual preparedness

Educational survey respondents were asked to evaluate their own level of preparedness in response to the COVID-19 pandemic. Figure 1 shows SDs' perceived evaluation of their preparedness in response to the COVID-19 pandemic. Almost all of the SDs in Region 1 (81.3%, n=13) and Region 3 (78.6%, n=11) reported that they were minimally or not at all prepared for the pandemic compared to SDs in Region 2 (55.0%, n=11) and Region 4 (54.6%, n=6). Principals serving Region 1 (50.8%, n=30), Region 2 (41.9%, n=13), Region 3 (57.6%, n=19), and Region 5 (45.0%, n=9) more frequently reported they felt minimally prepared for the pandemic (Figure 2). Of all Regions, Principals serving Region 4 (42.9%, n=12) more frequently reported they felt not at all prepared for the pandemic. One-quarter or fewer Principals in Regions 1 (25.4%, n=15), Region 2 (22.6%, n=7), Region 3 (18.2%, n=6), and Region 5 (25.0%, n=5) reported that they were not at all prepared for the pandemic.

Figure 1: SD Survey Respondents: Individual level of preparedness by regions served

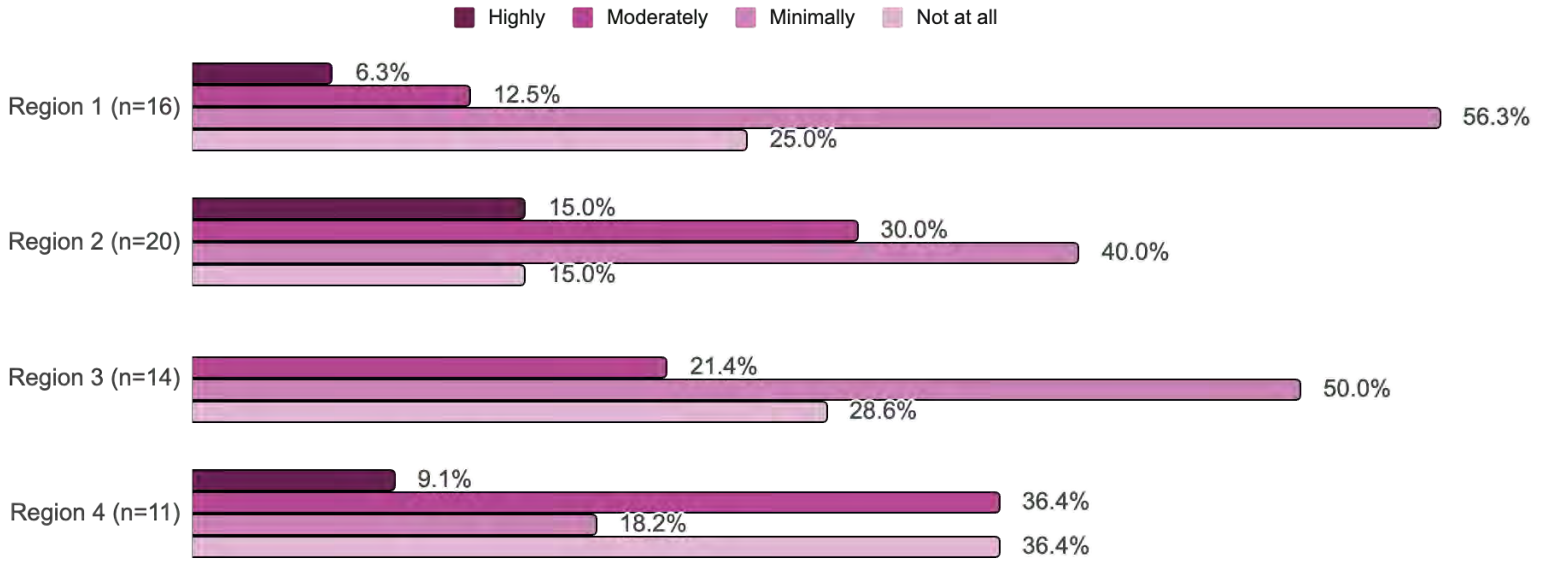
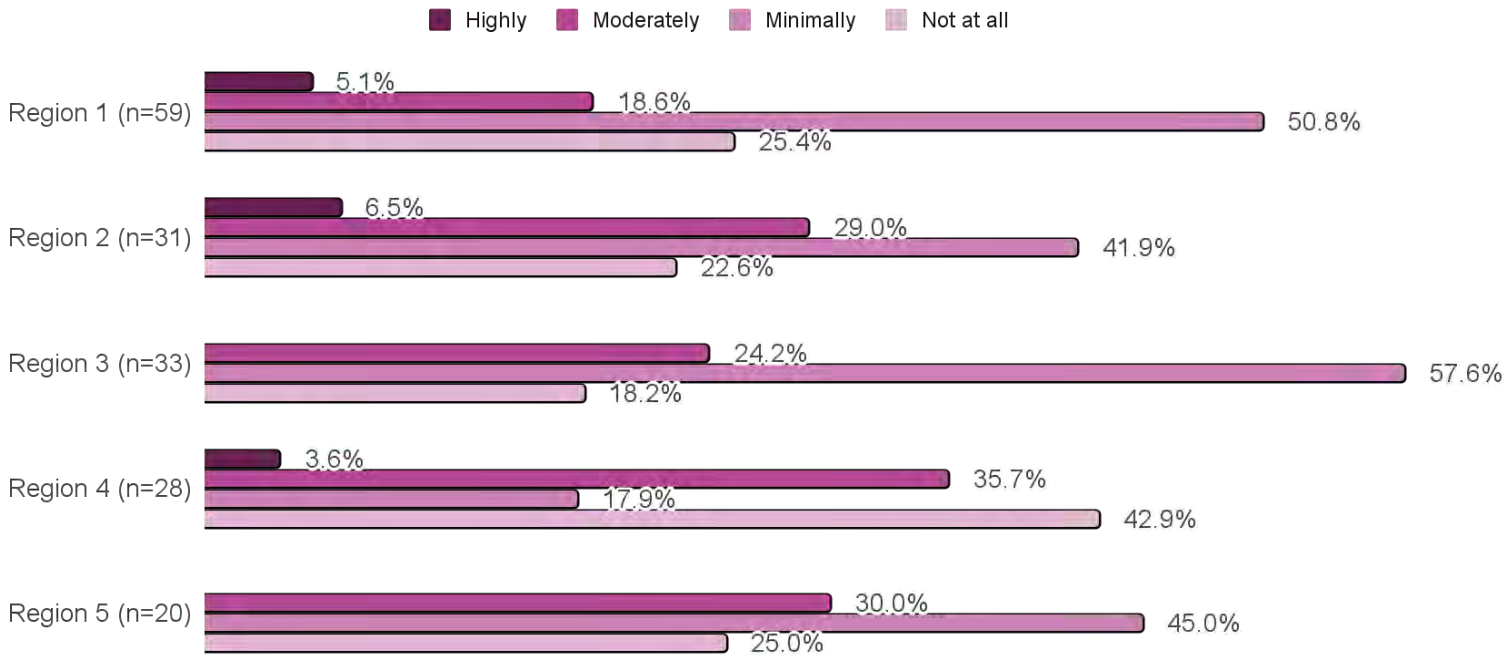


Figure 2: Principal Survey Respondents: Individual level of preparedness by regions served



School/district preparedness

Educational survey respondents were also asked to evaluate the school or district level of preparedness in response to the COVID-19 pandemic. SDs in Region 2 (45.0%, n=9) and Region 4 (45.5%, n=5) more frequently reported that they were highly prepared as a district compared to the other regions for the pandemic (Figure 3). However, almost half of the SDs in Region 3 (42.9%, n=6) more frequently reported that they were minimally prepared as a district compared to the other regions for the pandemic.

Principals in Region 1 (50.8%, n=30), Region 3 (51.5%, n=17), and Region 5 (45.0%, n=9) more frequently reported that they were minimally prepared as a school than Region 2 (25.8%, n=8) and Region 4 (21.4%, n=6) for the pandemic (Figure 4). However,

Principals in Region 2 (45.2%, n=14) and Region 4 (46.4%, n=13) more frequently reported that they were moderately prepared as a school compared to the other regions for the pandemic.

Figure 3: SD Survey Respondents: District level of preparedness by regions served

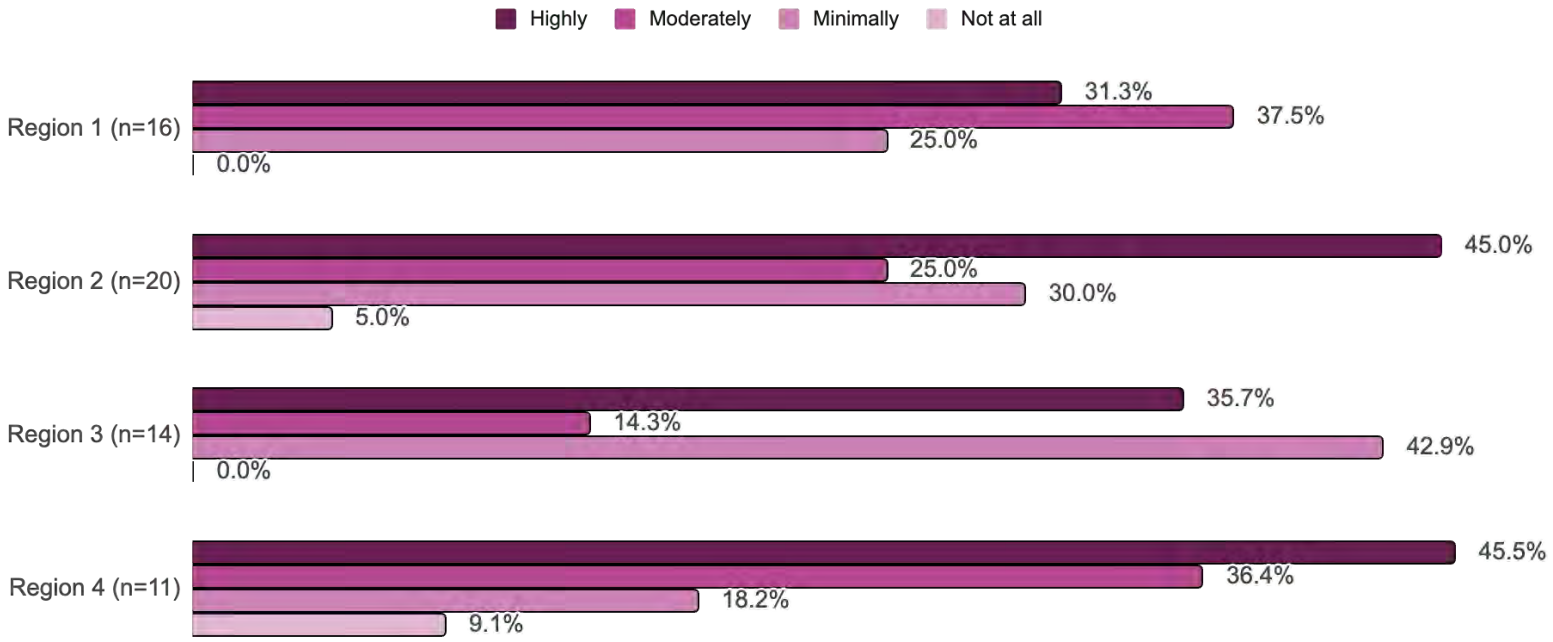
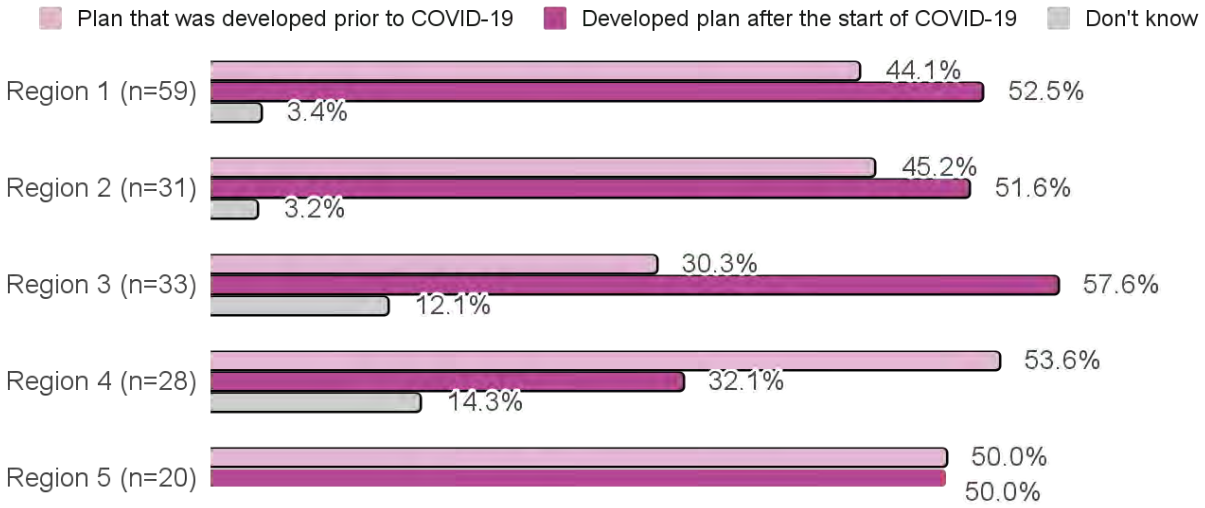


Figure 4: Principal Survey Respondents: School level of preparedness by regions served

Emergency Operations Plan at schools

Principal survey respondents were asked about their knowledge of an Emergency Operations Plan at their school. More than half of the Principals in Regions 1 (52.5%, n=31), Region 2 (51.6%, n=16), and Region 3 (57.6%, n=19) reported that they developed a plan after the start of the COVID-19 pandemic (Figure 5). However, more than half of the Principals in Region 4 (53.6%, n=15) reported that they had a plan that was developed or updated prior to the start of the COVID-19 pandemic compared to the other regions. Ten (10) Principals in Region 5 reported that they had a plan that was developed or updated prior to the start of the COVID-19 pandemic and ten (10) Principals in Region 5 reported that they developed a plan after the start of the COVID-19 pandemic.

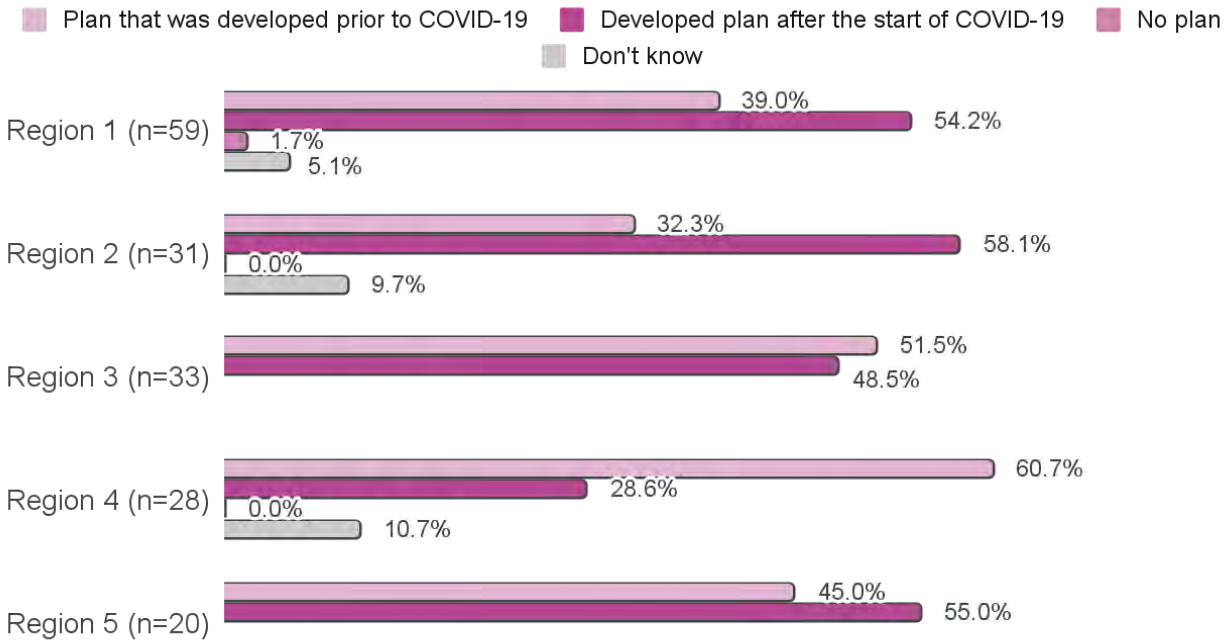
Figure 5: Principal Survey Respondent: Existence of Emergency Operations Plan (EOP) at schools by regions served



Communicable Disease Management Plan at schools

Principal survey respondents were asked to describe the existence of a Communicable Disease Management Plan at their school. More than half of the Principals in Region 1 (54.2%, n=32), Region 2 (58.1%, n=18), and Region 5 (55.0%, n=11) reported that they developed a plan after the start of the COVID-19 pandemic compared to the other regions (Figure 6). However, more than half of the Principals in Region 3 (51.5%, n=17) and Region 4 (60.7%, n=17) reported that they developed or updated a plan prior to the start of the COVID-19 pandemic compared to the other regions.

Figure 6: Principal Survey Respondents: Existence of Communicable Management Plan at schools by regions served



Preparedness for distance learning

Educational survey respondents were asked how prepared their schools or districts were to transition to distance learning. In Region 1, the same number of SDs who reported that their district was moderately prepared or minimally prepared (31.3%, n=5) to transition to distance learning (Figure 7). Also, SDs in Region 2 was the only region that more frequently reported that their district was moderately prepared to transition to distance learning (40.0%, n=8) compared to the other regions. SDs in Region 3 (42.9%, n=6) and Region 4 (54.5%, n=6) more frequently reported that they were minimally prepared to transition to distance learning as a district than the other regions. Principals in Region 1 (35.6%, n=21), Region 2 (38.7%, n=12), Region 3 (36.4%, n=12), and Region 5 (65.0%, n=13) more frequently reported they felt were minimally prepared to transition to distance learning compared to Region 4 (32.1%, n=9) as a school (Figure 8).

Figure 7: SD Survey Respondents: District transition to distance learning by regions served

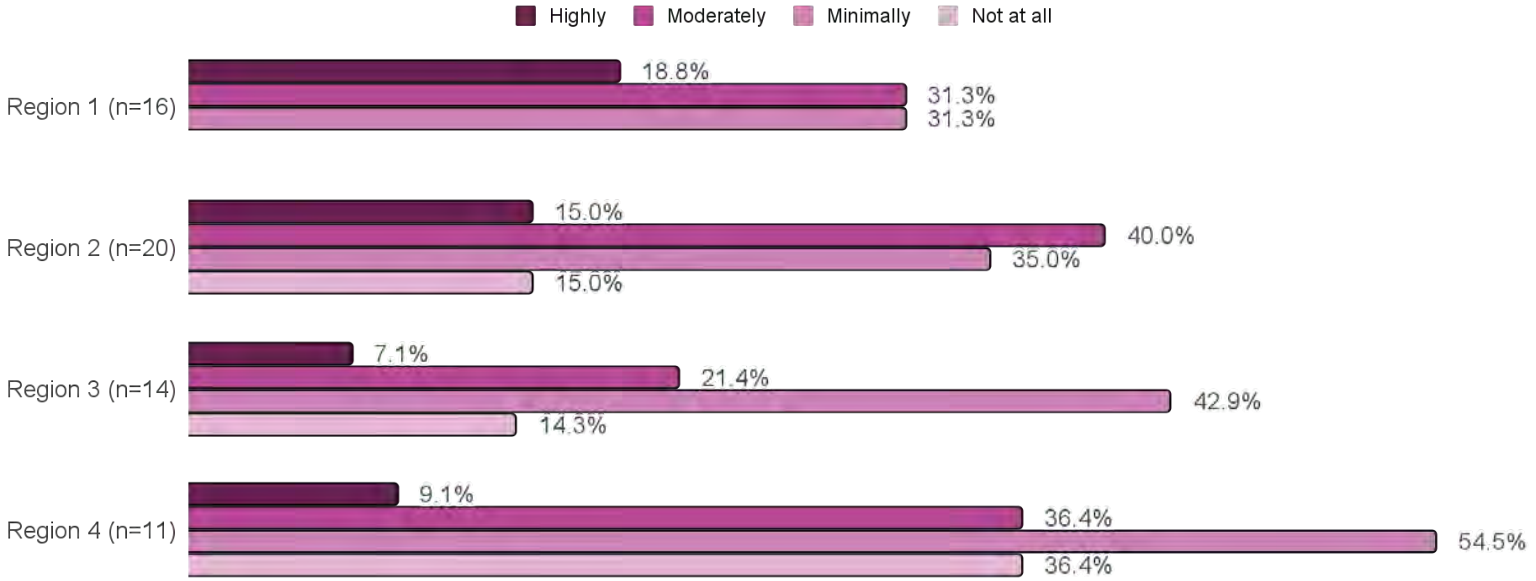
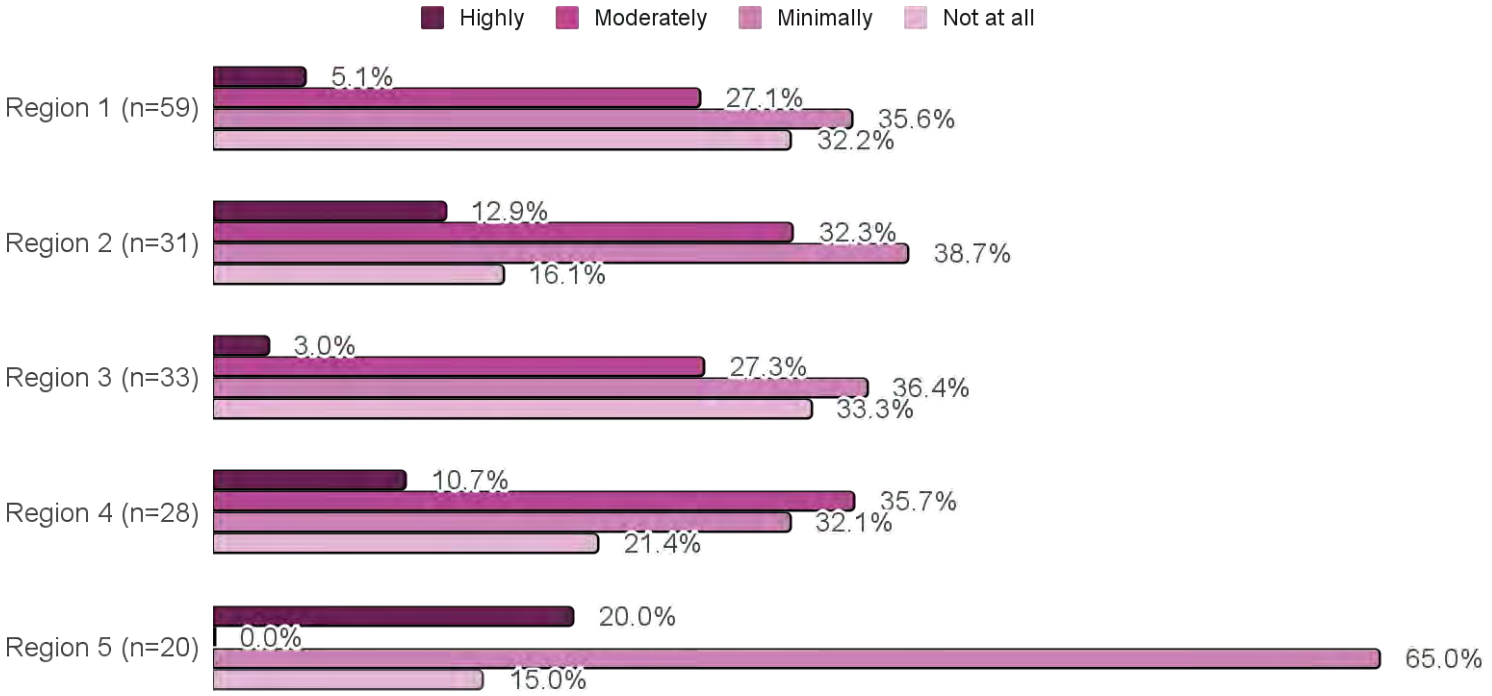
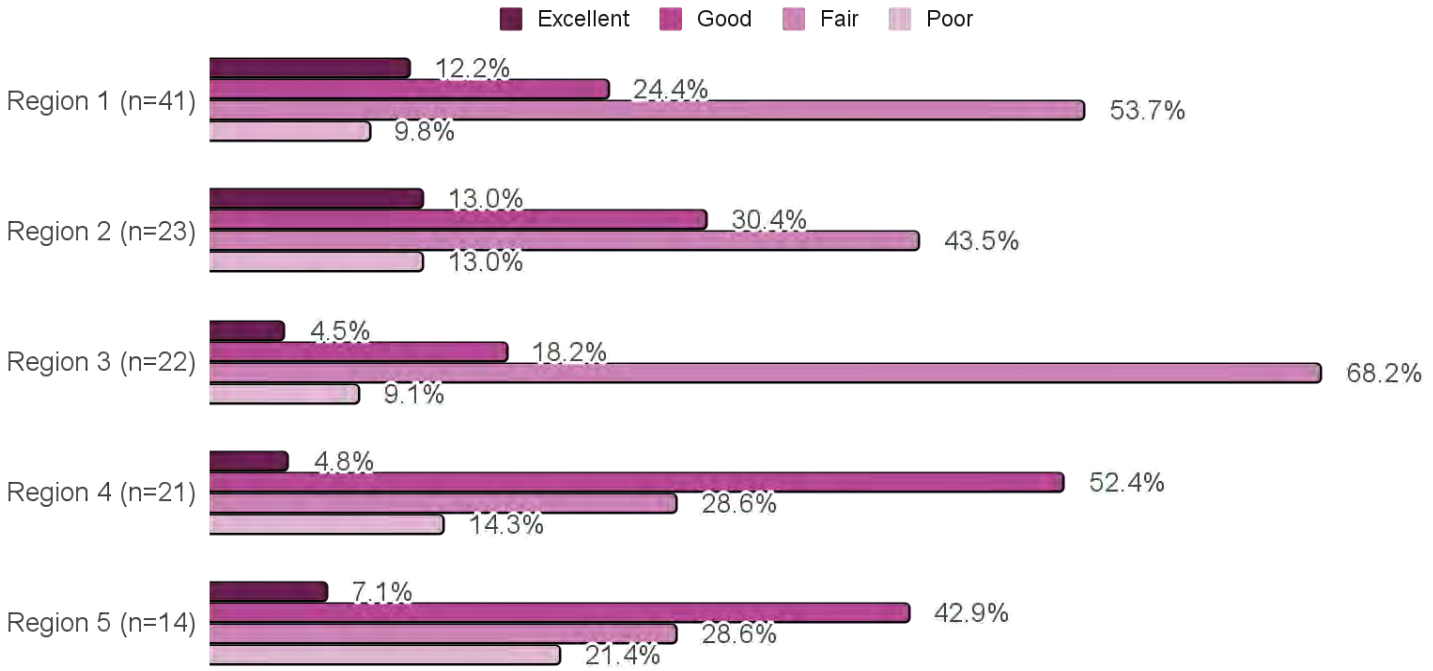


Figure 8: Principal Survey Respondents: School transition to distance learning by regions served



Principal survey respondents were also asked to reflect on how effective their school was in their delivery of distance learning during the COVID-19 pandemic. Principals in Region 4 (52.4%, n=11) and Region 5 (42.9%, n=6) more frequently reported that their school was good at delivering distance learning than the other regions (Figure 9). However, Principals in Region 1 (53.7%, n=22), Region 2 (43.5%, n=10), and Region 3 (68.2%, n=15) more frequently evaluated their school as fair in delivering distance learning than the other regions.

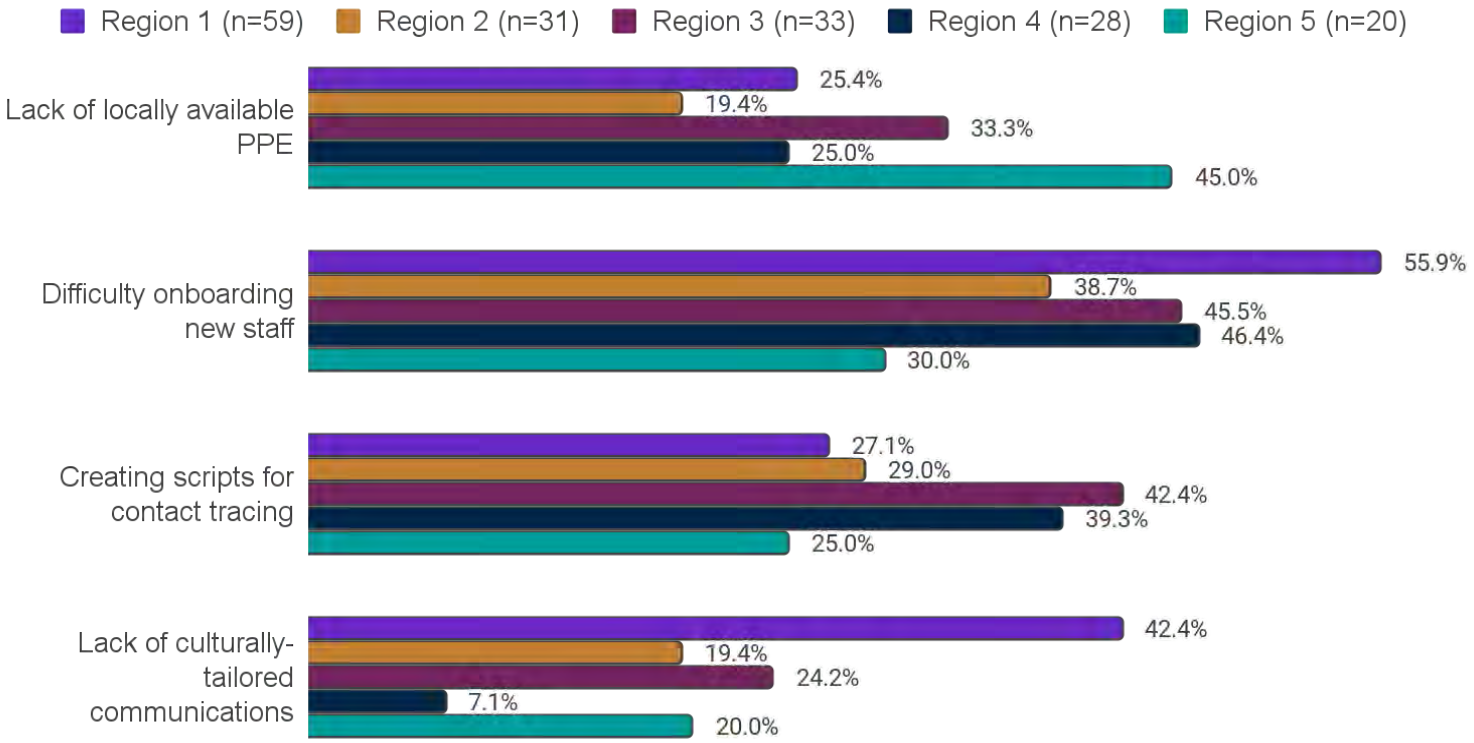
Figure 9: Principal Survey Respondents: Evaluation of the effectiveness of school's delivery of distance learning



Barriers to COVID-19 response

Principal survey respondents were asked to select the challenges that hindered the effectiveness, scale, or quality of their school's COVID-19 pandemic response. SDs were not asked this question. Difficulty onboarding new staff was the barrier most frequently reported by Principals serving Region 1 (55.9%, n=33), Region 2 (38.7%, n=12, Region 3 (45.5%, n=15), and Region 4 (46.4%, n=13) (Figure 10). The barrier most frequently reported by Principals in Region 5 was a lack of locally available Personal Protective Equipment (45.0%, n=9).

Figure 10: Principal Survey Respondents: Barriers not related to funding experienced by school during COVID-19 pandemic response



Public health requirements

Policies adopted

Educational survey respondents were asked if their school or district adopted any public health requirements to reduce the transmission of COVID-19. The top policies adopted across SDs in all regions were masking in public spaces/workplaces and isolation and quarantine rules (Figure 11). The least adopted policy across all regions was to prohibit indoor dining, with 64.3% (n=14) of SDs in Region 1, 40.0% (n=17) of SDs in Region 2, 71.4% (n=14) of SDs in Region 3, and 40.0% (n=8) of SDs in Region 4. The most frequently reported number of Principals across all regions reported adopting masking in public spaces/workplaces, with 100% (n=45) of Principals in Region 1, 100% (n=25) of Principals in Region 2, 100% (n=22) of Principals in Region 3, 100% (n=22) of Principals in Region 4, and 92.9% (n=14) of Principals in Region 5 (Figure 12). The least adopted policy across all regions was to prohibit indoor dining, with 62.2% (n=28) of Principals in Region 1, 56.0% (n=14) of Principals in Region 2, 45.5% (n=10) of Principals in Region 3, 63.6% (n=14) of Principals in Region 4, and 42.9% (n=6) of Principals in Region 5.

Figure 11: SD Survey Respondents: Public health requirements adopted in districts by regions served

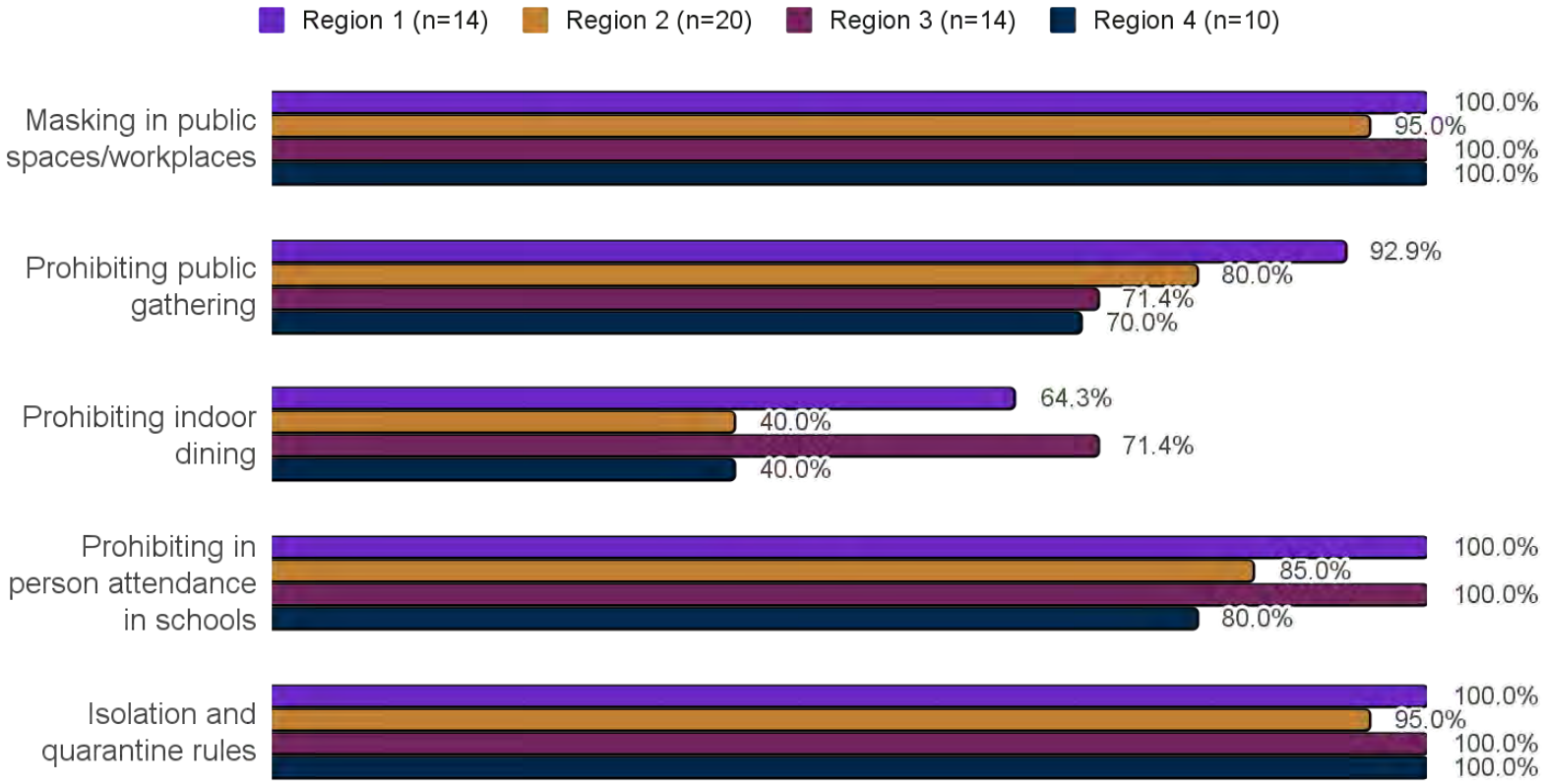
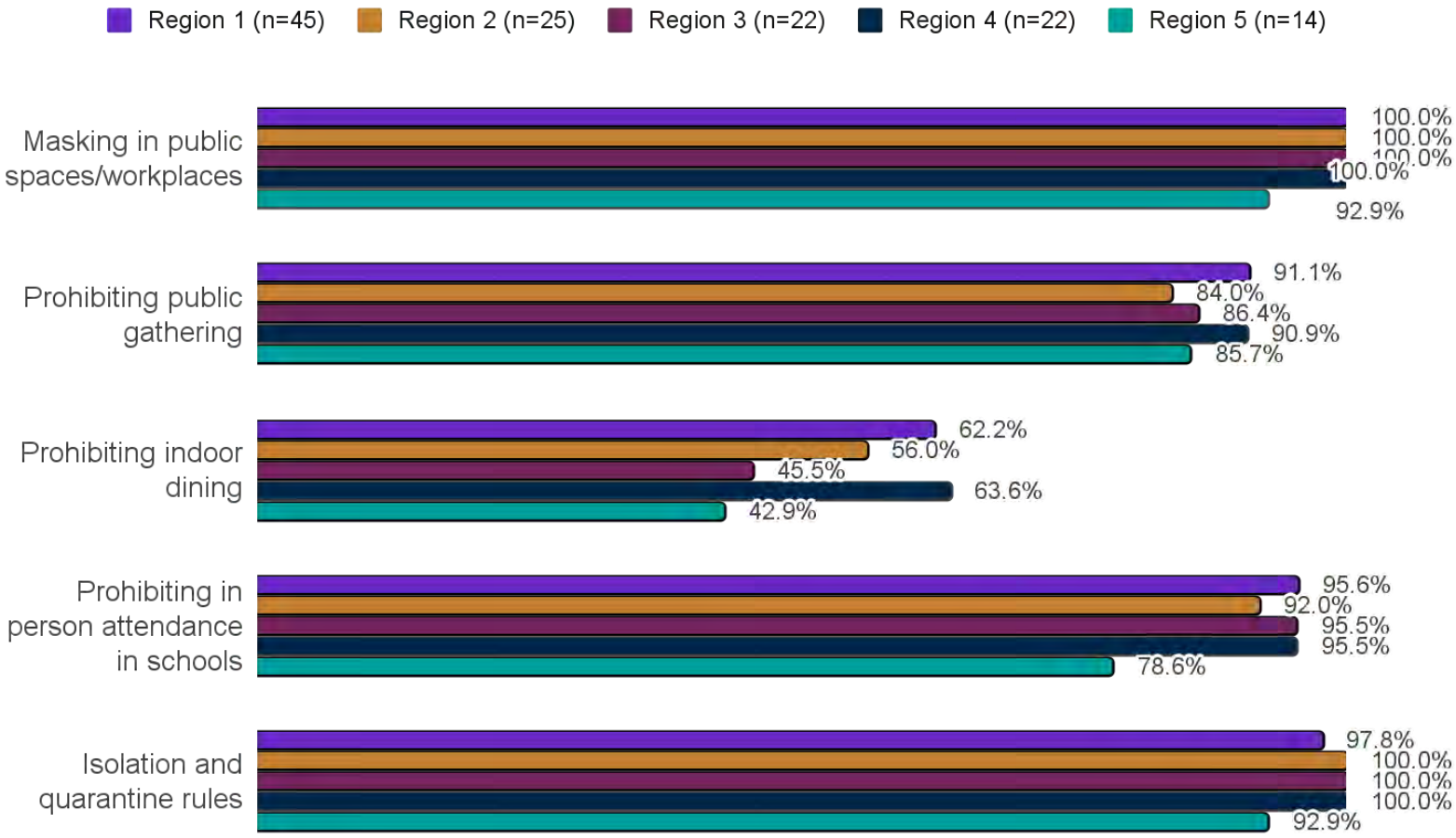


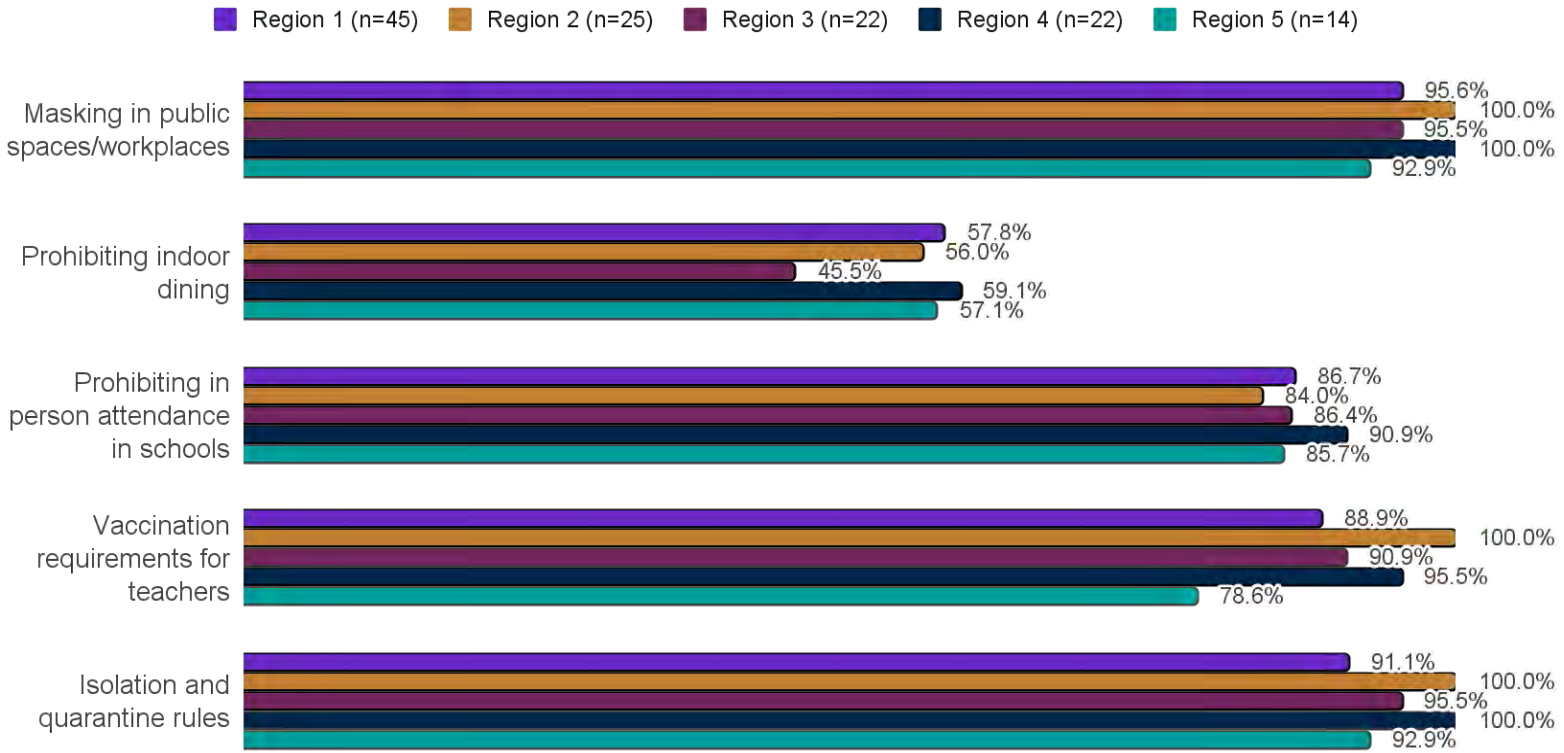
Figure 12: Principal Survey Respondents: Public health requirements adopted in schools by regions served



Enforcement of school policies

Principal survey respondents were asked if they enforced any of their school's implemented public health policies. The majority of the Principals in every region enforced their school policies, with prohibiting indoor dining the least enforced in Region 1 (57.8%, n=26), Region 2 (56.0%, n=14), Region 3 (45.5%, n=10), Region 4 (59.1%, n=13), and Region 5 (57.1%, n=8) (Figure 13).

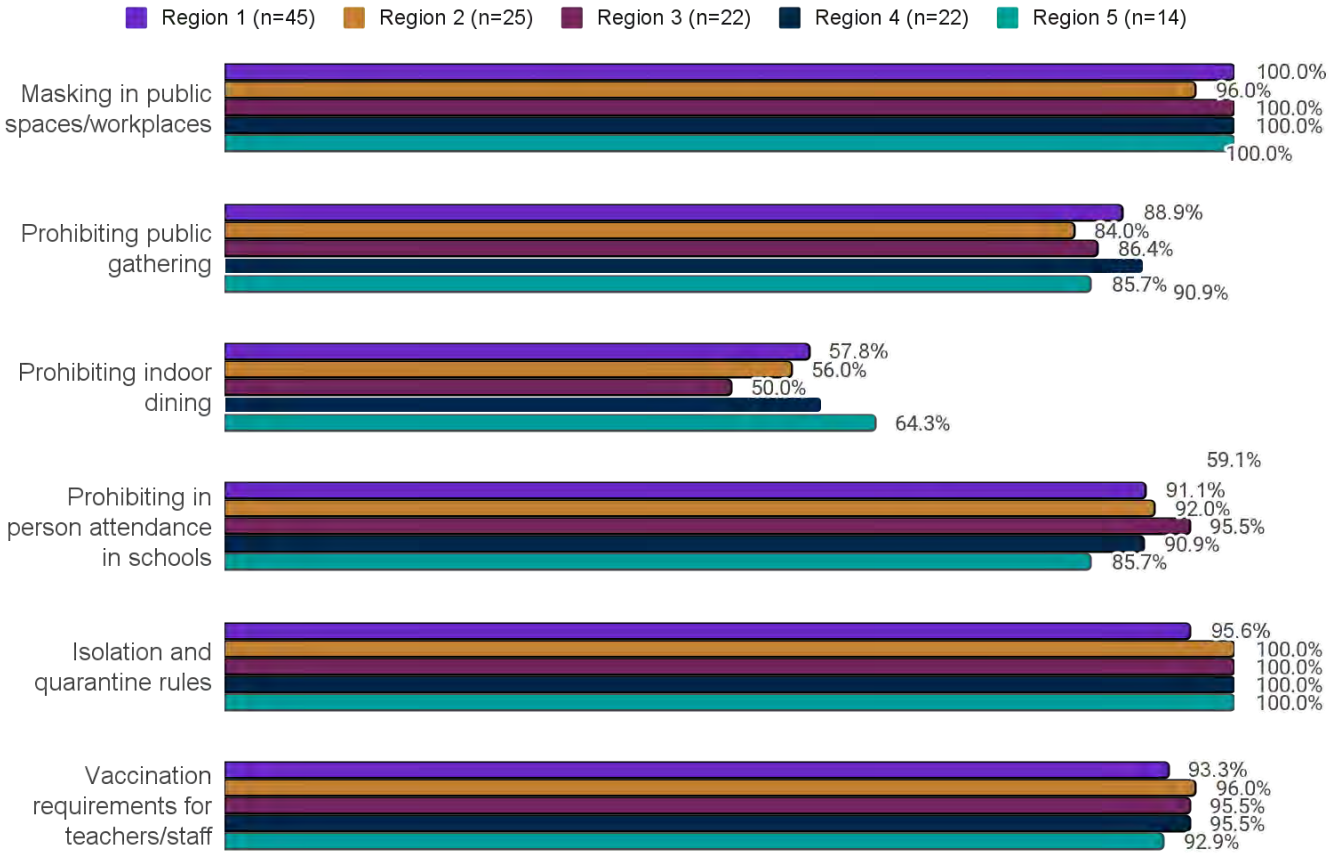
Figure 13: Principal Survey Respondent: Enforcement of school implemented public health requirements by regions served



Enforcement of government policies

Principal survey respondents were also asked if they enforced any of the public health requirements enacted by the state or local government. The majority of Principals in every region enforced government policies, with prohibiting indoor dining the least enforced by Region 1 (57.8%, n=26), Region 2 (56.0%, n=14), Region 3 (50.0%, n=11), Region 4 (59.1%, n=13), and Region 5 (64.3%, n=9) (Figure 14).

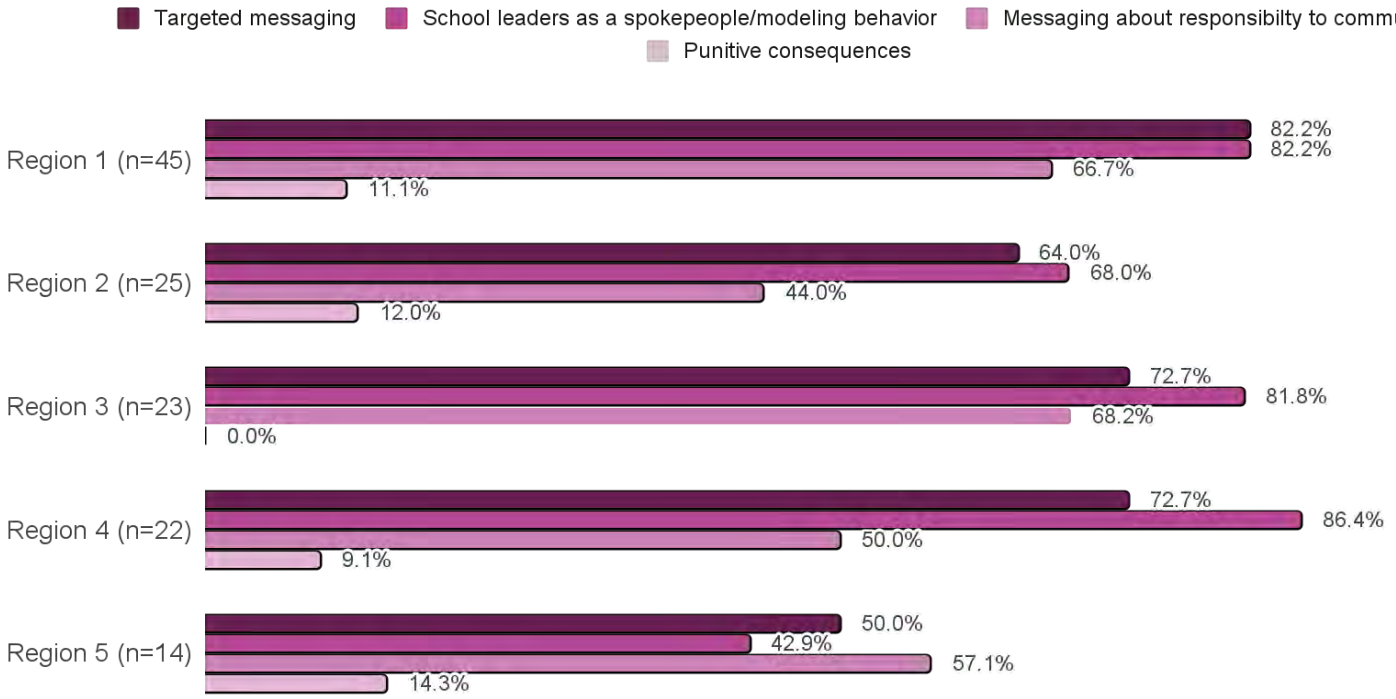
Figure 14: Principal Survey Respondents: Enforcement of government implemented public health requirements by regions served



Enforcement strategies

Educational survey respondents were also asked to identify the most effective strategies for enforcing public health mandates. Targeted messaging for students and teachers and school leaders as spokespeople or modeling behavior were the top two strategies for enforcement of public health requirements by Principals in all the regions, except for Region 5 (Figure 15).
School leaders as spokespeople or modeling behavior was the most frequently reported strategy for enforcement of public health requirements by Principals in Region 1 (82.2%, n=37), Region 2 (68.0%, n=17), Region 3 (81.8%, n=18), and Region 4 (86.4%, n=19) compared to less than half of the Principals in Region 5 (42.9%, n=6). The least effective strategy reported by Principals in all regions was punitive consequences, such as detention or silent lunch.

Figure 15: Principal Survey Respondents: Most effective strategies for enforcement of public health requirements by regions served

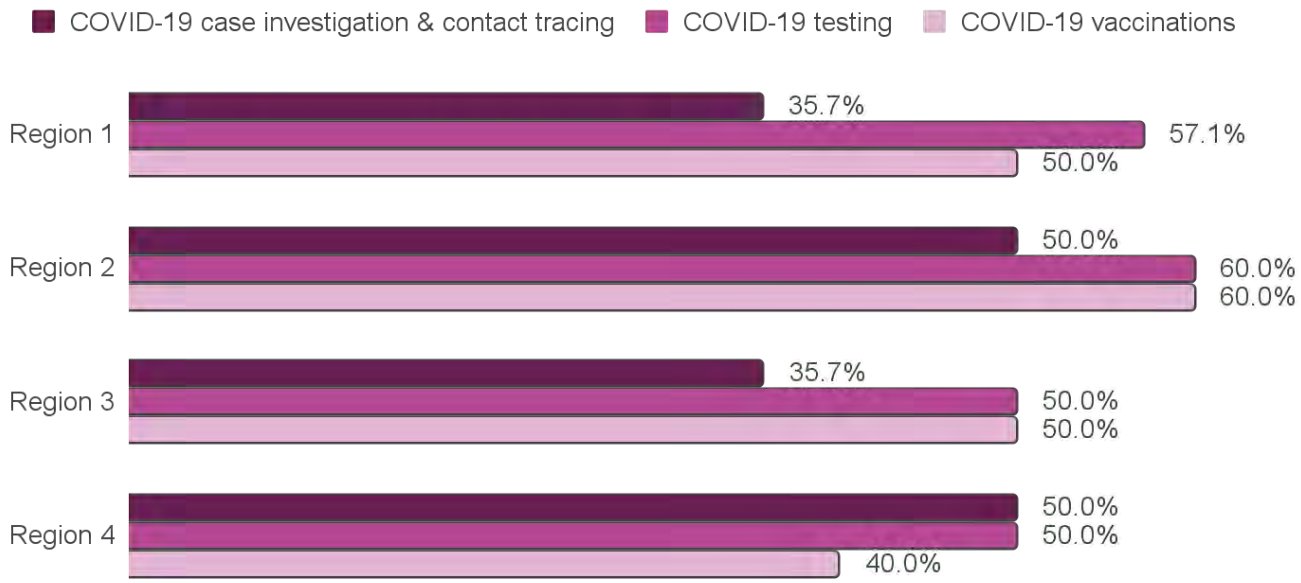


Funding overview

Survey respondents were asked to evaluate whether or not their school or district received adequate funding for three COVID-19 response activities: COVID-19 case investigation and contact tracing; COVID-19 testing (e.g., planning, set-up, communications, running testing sites); and COVID-19 vaccination (e.g., planning, set-up, communications, running vaccination sites). Below is an overview of regional differences in response to these questions; for more detail about COVID-19 activities within each Region, please see the Funding sections for each Region in this report.

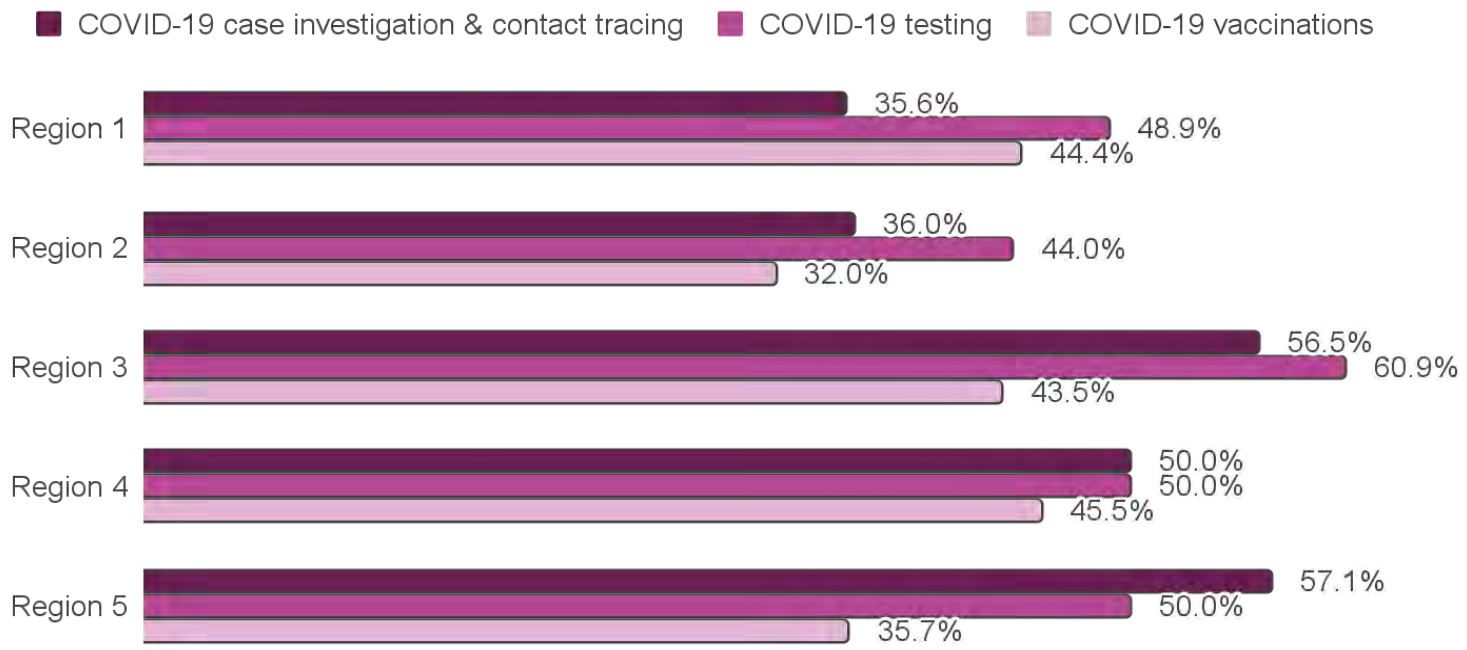
Exactly half of SDs from Region 2 (50.0%, n=10) and Region 4 (50.0%, n=5) reported that they agreed or strongly agreed that they had adequate funding for case investigation and contract tracing compared to a little over one-third of SDs from Region 1 (35.7%, n=5) and Region 3 (35.7%, n=5) (Figure 16). Between 50.0 - 60.0% of SD respondents reported that they agreed or strongly agreed that they had enough funding for COVID-19 testing. Between 40.0 - 60.0% of SD respondents agreed or strongly agreed that they had enough funding for COVID-19 vaccinations, depending on the region; Region 4 (40.0%, n=5) respondents were least frequently to be in agreement and Region 2 (60.0%, n=12) respondents frequently agreed.

Figure 16: SD Respondents: Percent who agreed or strongly agreed their district received adequate funding for COVID-19 response activities



Regional differences among Principal respondents were somewhat different than the regional differences among SD respondents. Principal respondents from Region 3 (56.5%, n=13), Region 4 (50.0%, n=11), and Region 5 (57.1%, n=8) more frequently agreed or strongly agreed that they had adequate funding for case investigation and contact tracing compared to Principals from Region 1 (35.5%, n=16) and Region 2 (36.0%, n=9) (Figure 17). There was similar percentages of Principals for COVID-19 testing, ranging between 48.9 - 60.9% of Principals reporting that they agreed or strongly agreed that they had adequate funding for testing, depending on the region; Region 1 respondents (48.8%, n=22) were least frequently to be in agreement and Region 3 respondents (60.9%, n=14) were most likely to agree. Across regions, there was similar percentages of Principals when asked about COVID-19 vaccinations, ranging between 32.0 - 45.5% of Principals reporting that they agreed or strongly agreed that they had adequate funding for testing, depending on the region; Region 2 respondents (32.0%, n=8) were least likely to be in agreement and Region 3 respondents (45.5%, n=5) were most likely to agree.

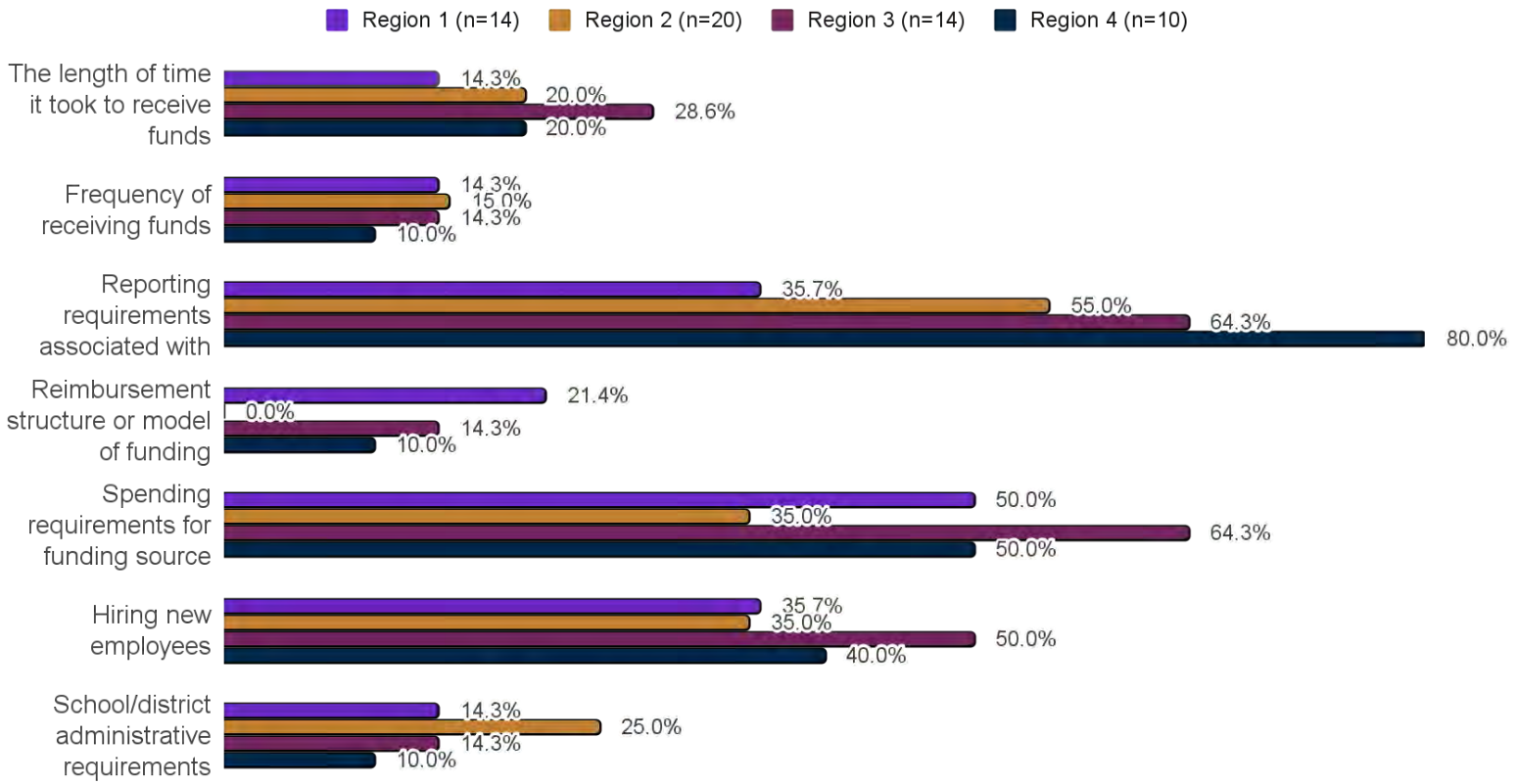
Figure 17: Principal Respondents: Percent who agreed or strongly agreed their school received adequate funding for COVID-19 response activities



Barriers to use of funding

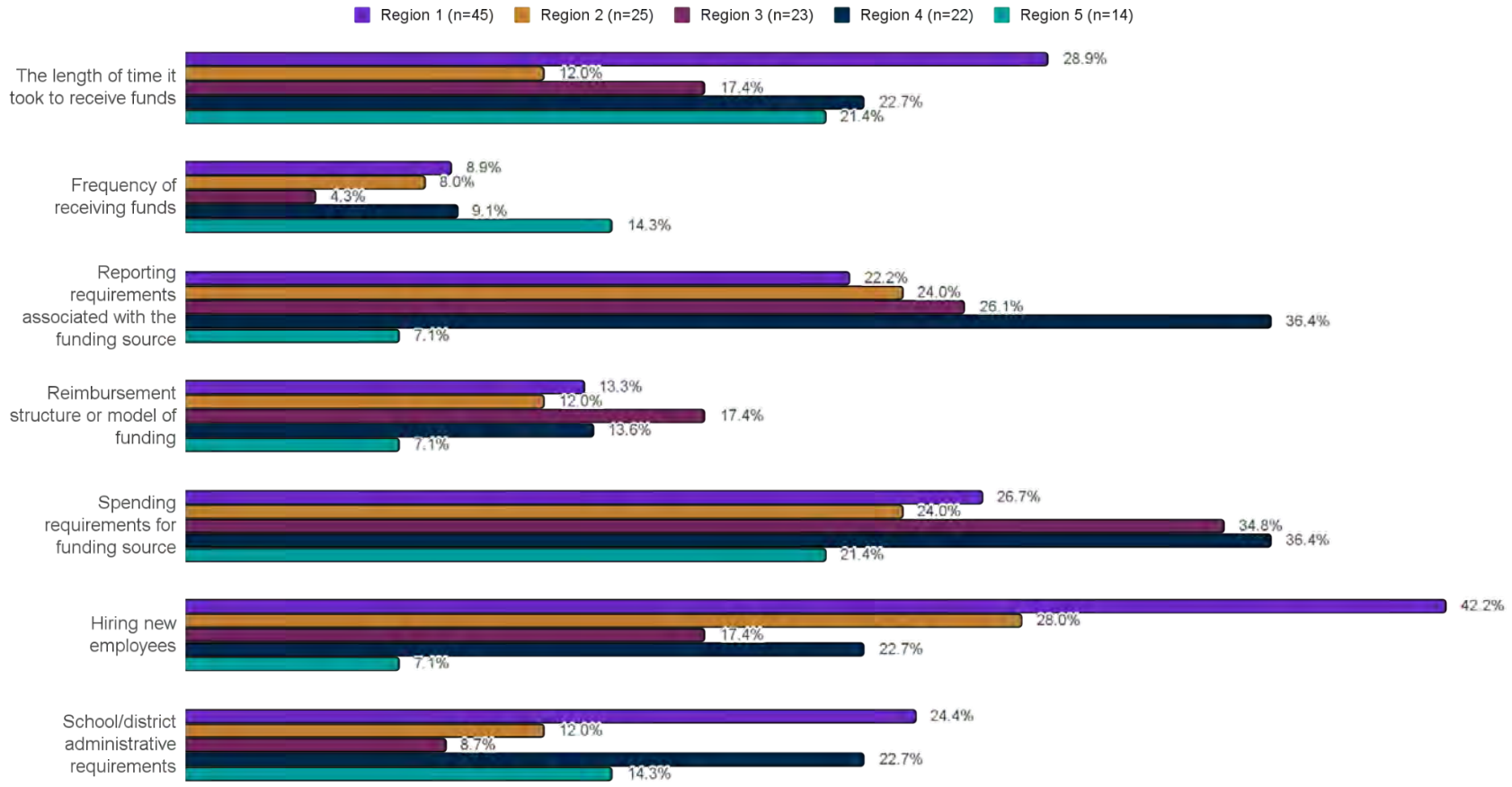
Educational survey respondents reported barriers to efficient use of COVID-19 funds by regions served. The most frequently reported barrier experienced by SDs in all the regions, except for Region 1, was reporting requirements associated with the funding source (Figure 18). Half of the SDs in Region 1 (n=7) reported that spending requirements for funding source was a barrier to efficient use of funds.

Figure 18: SD Survey Respondents: Barriers to efficient use of funds by regions served



Hiring new employees was the most frequently reported barrier experienced by Principals in Region 1 (42.2%, n=19) and Region 2 (28.0%, n=7) compared to Principals in Region 3 (17.4%, n=4), Region 4 (22.7%, n=5), and Region 5 (7.1%, n=1) (Figure 19). Principals in Region 4 and Region 5 experienced two top barriers to efficient use of funds. Reporting requirements associated with the funding source and spending requirements for funding source experienced by Principals in Region 4 (36.4%, n=8). Length of time it took to receive funds and spending requirements for funding source experienced by Principals in Region 5 (21.4%, n=3).

Figure 19: Principal Survey Respondents: Barriers to efficient use of funds by regions served



Region 1

COVID-19 Response Activities

Overall Response

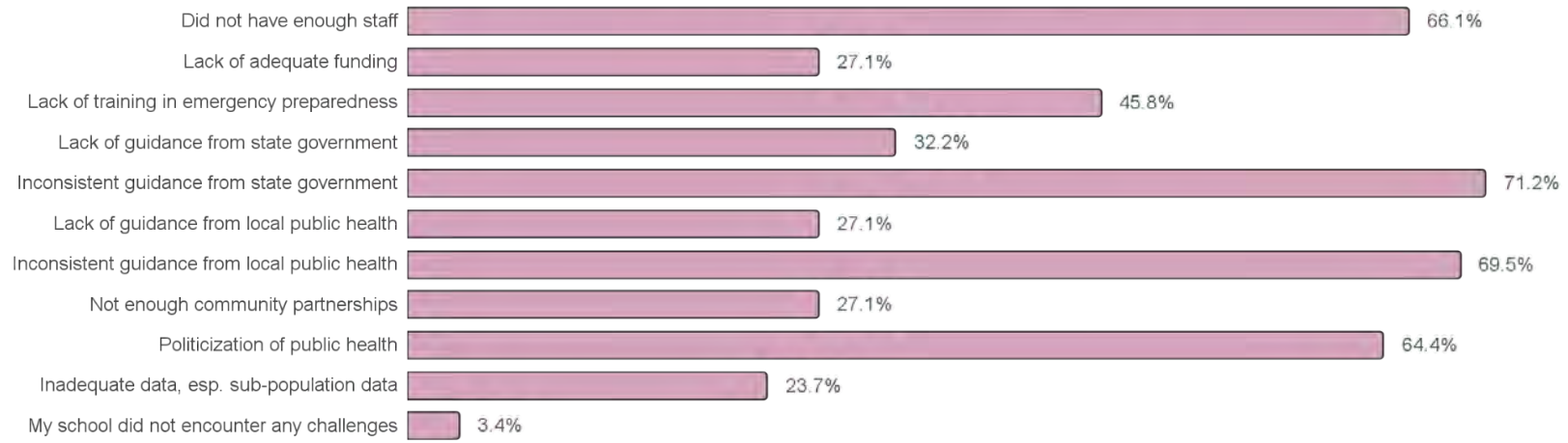
Educational survey respondents in Region 1 shared ways that their school or district responded to the COVID-19 pandemic. There were similar percentages by survey respondent except for those that provided vaccination clinics at their schools. All SDs in Region 1 (100%, n=16) and more than half of the Principals in Region 1 (57.6%, n=34) held vaccine clinics at their school (Figure 20).

Figure 20: Region 1: Ways that schools/districts responded to COVID-19 pandemic by survey respondent

Challenges and Barriers to COVID-19 response

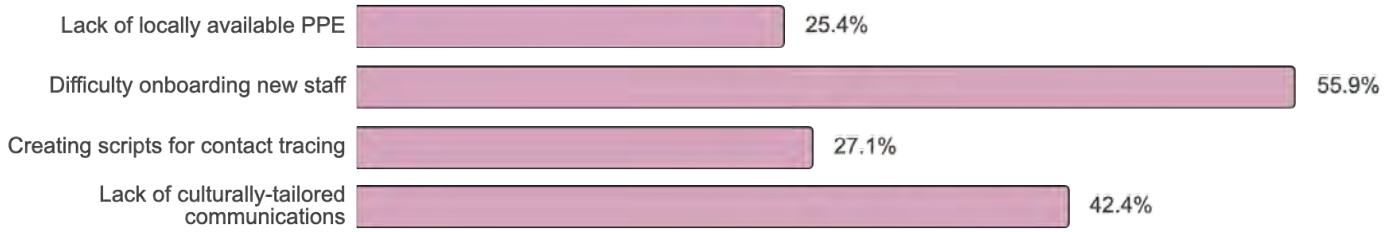
Principal survey respondents in Region 1 were asked to select the challenges that hindered the effectiveness, scale, or quality of their school's COVID-19 pandemic response. The top three challenges Principals in Region 1 reported were inconsistent guidance from state government (71.2%, n=42), inconsistent guidance from local public (69.5%, n=41), and did not have enough staff (66.1%, n=39) (Figure 21).

Figure 21: Region 1: Challenges that hindered COVID-19 pandemic response in schools by Principals (N=59)



Principal survey respondents in Region 1 were asked to select the barriers that their school experienced during the COVID-19 pandemic. These barriers are not related to funding. The top barrier reported by Principals in Region 1 (55.9%, n=33) was difficulty onboarding new staff and the second top barrier was a lack of culturally-tailored communications (42.4%, n=25) (Figure 22).

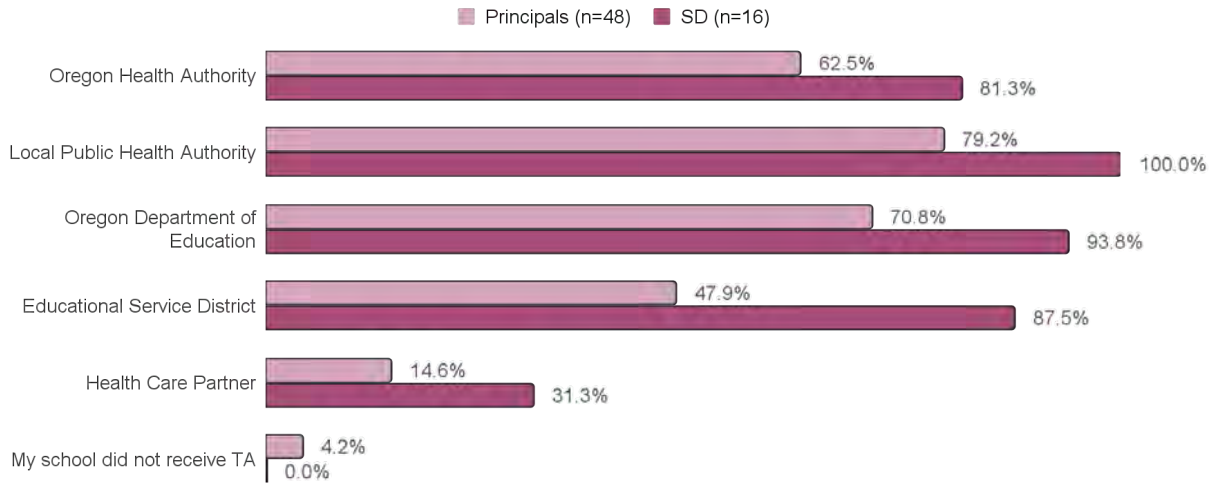
Figure 22: Region 1: Barriers not related to funding during COVID-19 pandemic response experienced by Principals (N=59)



Technical Assistance

Educational survey respondents in Region 1 were asked about the agencies or organizations in which their school or district received technical assistance during the COVID-19 pandemic. The top three agencies or organizations that SDs in Region 1 received technical assistance from were the Local Public Health Authority (100.0%, n=16), the Oregon Department of Education (93.8%, n=15), and the Educational Service District (87.5%, n=14) (Figure 23). The top three agencies or organizations that Principals in Region 1 received technical assistance from were the Local Public Health Authority (79.2%, n=38), the Oregon Department of Education (70.8%, n=34), and the Oregon Health Authority (62.5%, n=30).

Figure 23: Region 1: Agencies schools received technical assistance from to support COVID-19 pandemic response by survey respondent



Funding

Adequate funding

Educational survey respondents in Region 1 were asked if they received adequate funding for a variety of COVID-19 response activities in their schools or districts; case investigation and contact tracing, COVID-19 testing, and COVID-19 vaccinations. All survey respondents reported that they did provide case investigation and contact tracing, two (2) Principals in Region 1 reported that they did not provide testing at their school, and seven (7) Principles in Region 1 reported that they did not provide vaccinations at their school.

The same number of SDs in Region 1 reported that they agreed or strongly agreed and disagreed or strongly disagreed (35.7%, n=5) Principals in Region 1 more frequently disagreed or strongly disagreed that they received adequate funding for case investigation and contact tracing (42.2%, n=19) than they agreed or strongly agreed (Figure 24). SDs (57.2%, n=8) and Principals (48.9%, n=22) in Region 1 more frequently agreed or strongly agreed that they received adequate funding for COVID-19 testing (Figure 25). Lastly, Principals (44.5%, n=20) and SDs (50% , n=7) in Region 1 more frequently agreed or strongly agreed that they received adequate funding COVID-19 vaccinations (Figure 26).

Figure 24: Region 1: School/district received adequate funding for COVID-19 case investigation and contact tracing by survey respondent

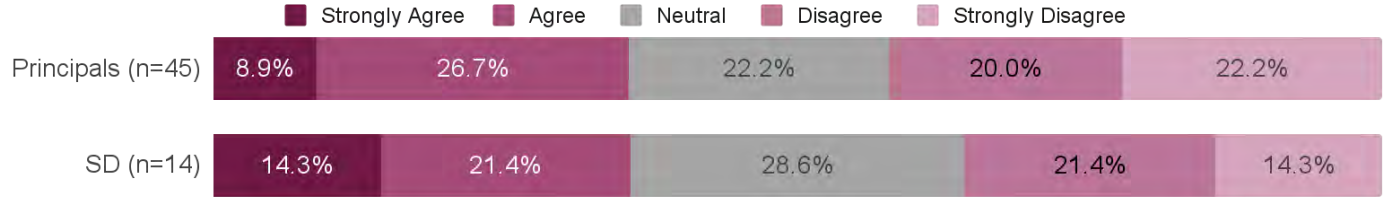
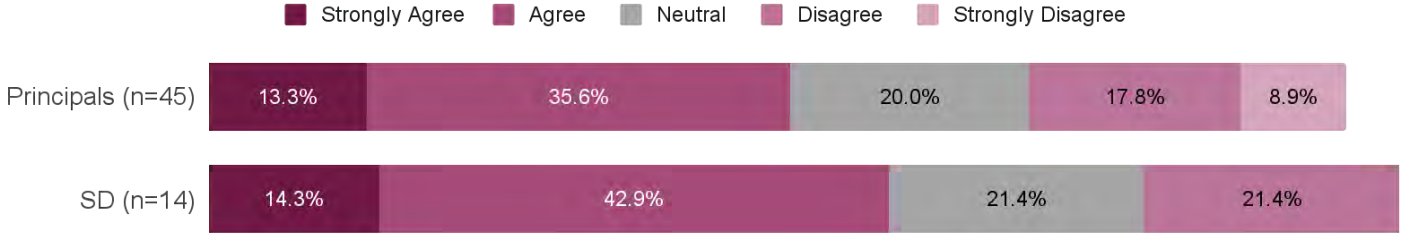
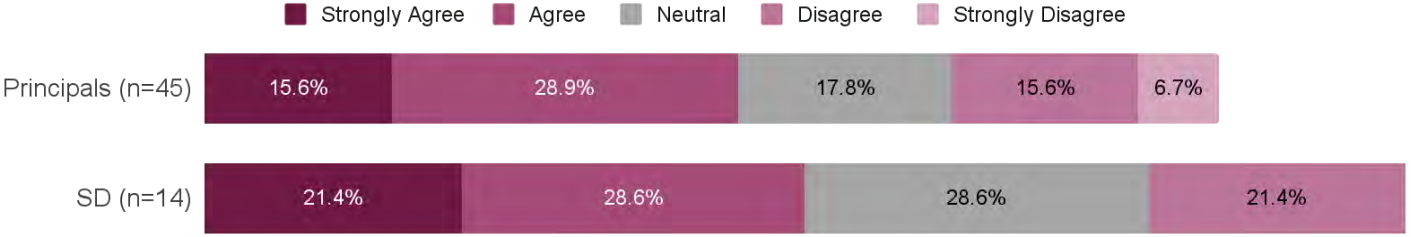


Figure 25: Region 1: School/district received adequate funding for COVID-19 testing by survey respondent*



* Not all rows will equal 100% since one of the response options to these questions, “My school did not engage in these activities”, was not included in the data visualization.

Figure 26: Region 1: School/district received adequate funding for COVID-19 vaccinations by survey respondent*

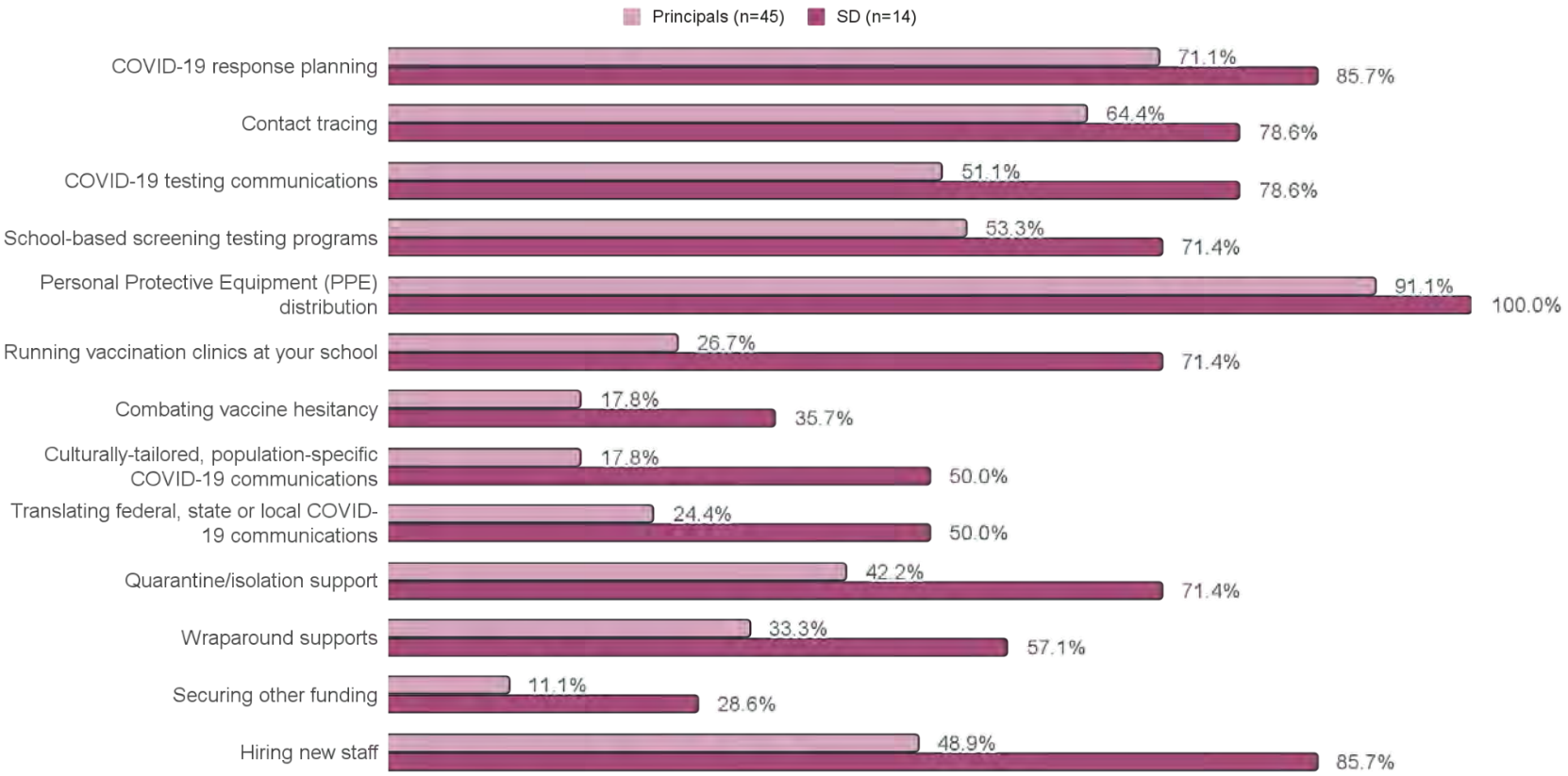


* Not all rows will equal 100% since one of the response options to these questions, “My school did not engage in these activities”, was not included in the data visualization.

Funded activities

Educational survey respondents in Region 1 were asked to report on a variety of activities they used for COVID-19 funding at their school or district. All SDs in Region 1 reported that they used COVID-19 funding on personal protective equipment (PPE) distribution (100%, n=14) and almost all Principals in Region 1 reported that they used funding on PPE distribution (91.1%, n=41) (Figure 27). SDs in Region 1 most frequently reported activities were PPE distribution (100%, n=14), COVID-19 response planning (85.7%, n=12) and hiring new staff (85.7%, n=12) were tied, and contact tracing (78.6%, n=11) and COVID-19 testing communications (78.6%, n=11) were tied. Principals in Region 1 most frequently reported activities were PPE distribution (91.1%, n=41), COVID-19 response planning (71.1%, n=32), contact tracing (64.4%, n=29), and school-based screening testing programs (53.3%, n=24).

Figure 27: Region 1: How COVID-19 funding was utilized by schools/districts by survey respondent



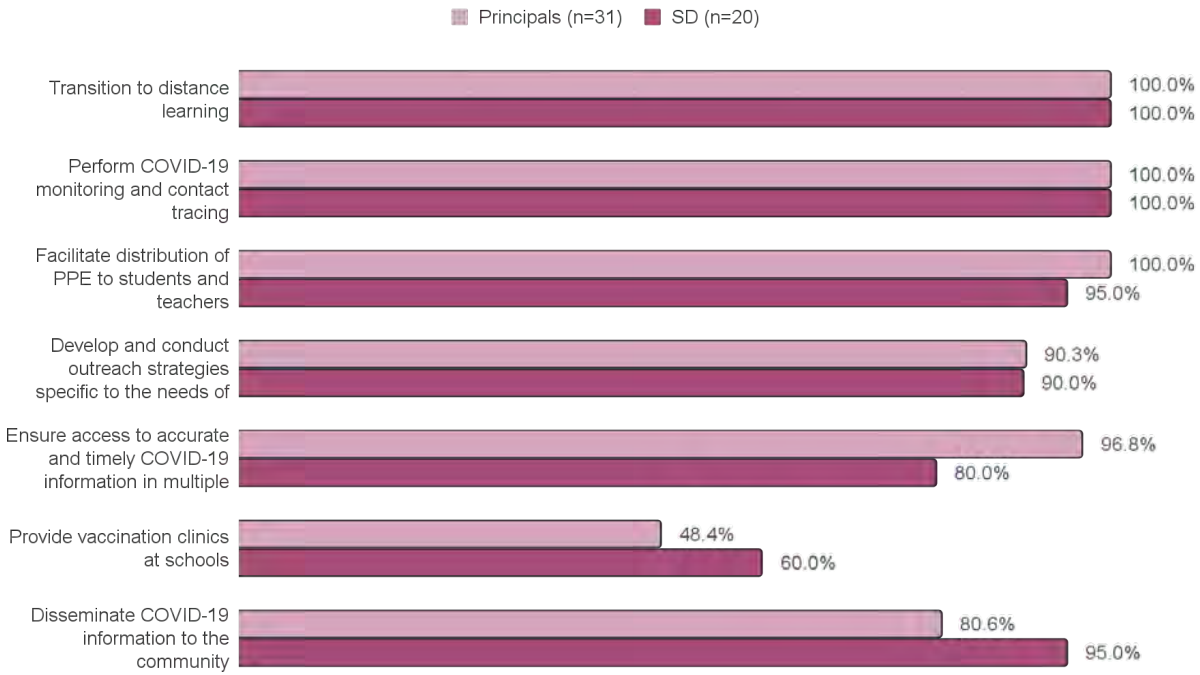
Region 2

COVID-19 Response Activities

Overall Response

Educational survey respondents in Region 2 shared ways that their school or district responded to the COVID-19 pandemic. There were similar percentages by survey respondent except for those that provided vaccination clinics at their schools. More than half of the SDs in Region 2 (60.0%, n=12) and slightly less than half of the Principals in Region 2 (48.4%, n=15) held vaccine clinics at their school (Figure 28).

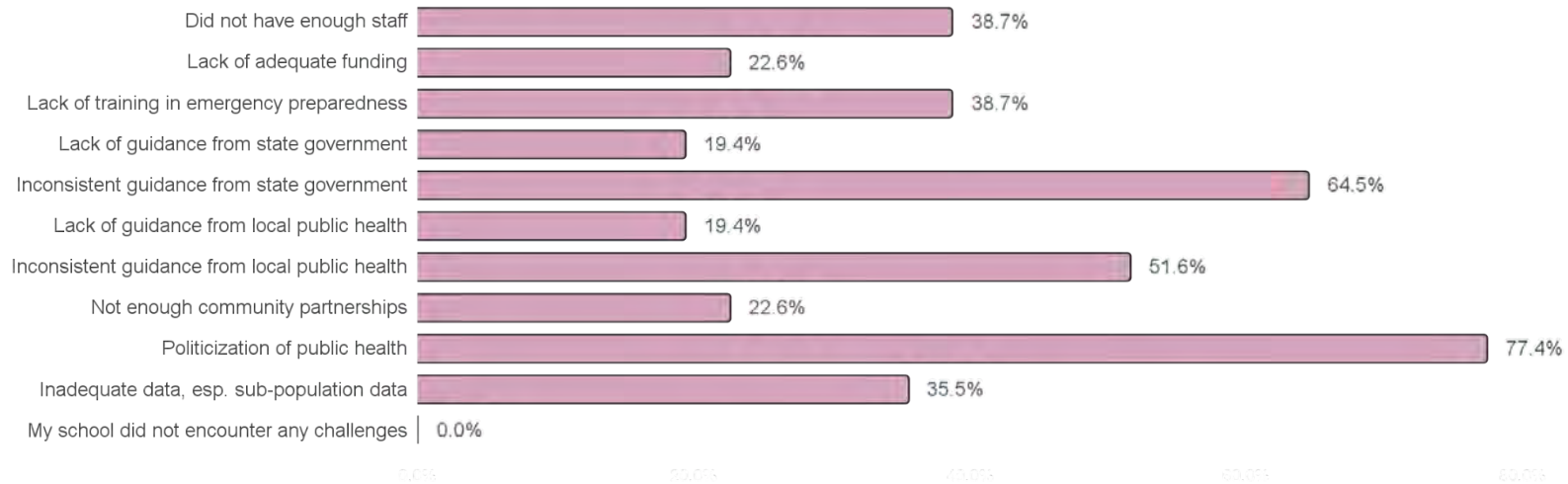
Figure 28: Region 2: Ways that schools/districts responded to COVID-19 pandemic by survey respondent



Challenges and Barriers to COVID-19 response

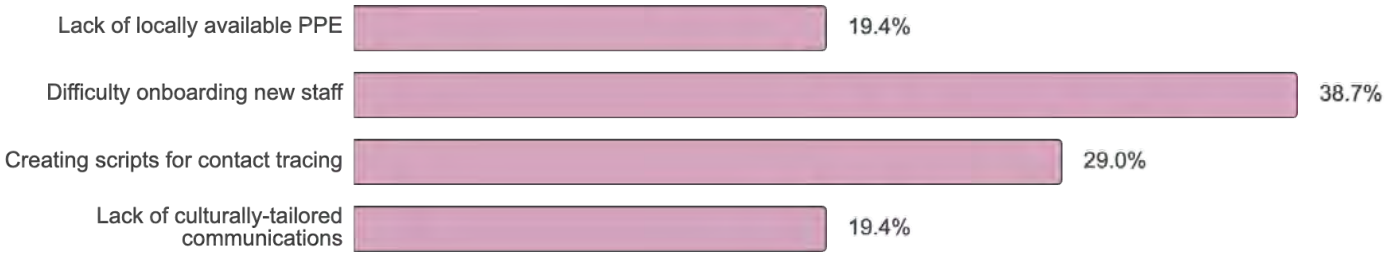
Principal survey respondents in Region 2 were asked to select the challenges that hindered the effectiveness, scale, or quality of their school's COVID-19 pandemic response. The top three challenges Principals in Region 2 reported were politicization of public health (77.4%, n=24), inconsistent guidance from state government (64.5%, n=20), and did not have enough staff (38.7%, n=12) and lack of training in emergency preparedness (38.7%, n=12) were tied (Figure 29).

Figure 29: Region 2: Challenges that hindered COVID-19 pandemic response in schools by Principals (N=31)



Principal survey respondents in Region 2 were asked to select the barriers that their school experienced during the COVID-19 pandemic. These barriers are not related to funding. The top barrier reported by Principals in Region 2 (38.7%, n=12) was difficulty onboarding new staff and the second top barrier was creating scripts for contact tracing (29.0%, n=9) (Figure 30).

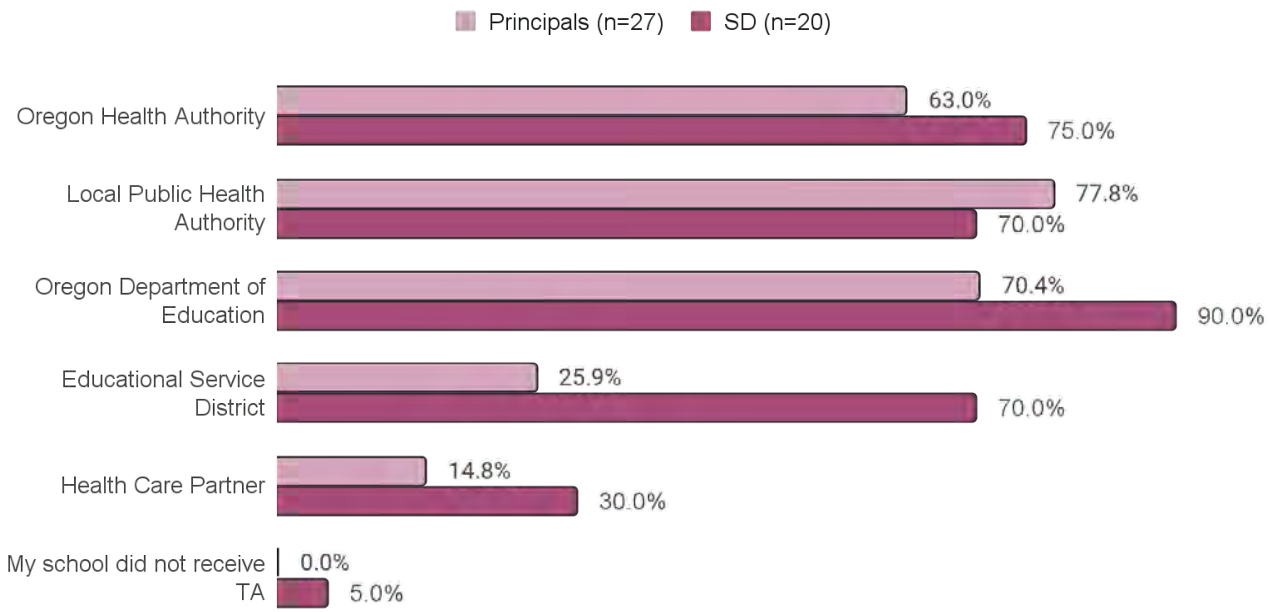
Figure 30: Region 2: Barriers not related to funding during COVID-19 pandemic response experienced by Principals (N=31)



Technical Assistance

Educational survey respondents in Region 2 were asked about the agencies or organizations in which their school or district received technical assistance during the COVID-19 pandemic. The top three agencies or organizations that SDs in Region 2 received technical assistance from were the Oregon Department of Education (90.0%, n=18), the Oregon Health Authority (75.0%, n=15), and the Local Public Health Authority (70.0%, n=14) and the Educational Service District (70.0%, n=14) were tied (Figure 31).The top three agencies or organizations that Principals in Region 2 received technical assistance from were the Local Public Health Authority (77.8%, n=21), the Oregon Department of Education (70.4%, n=19), and the Oregon Health Authority (63.0%, n=17).

Figure 31: Region 2: Agencies schools received technical assistance from to support COIVD-19 pandemic response by survey respondent



Funding

Adequate funding

Educational survey respondents were asked if they received adequate funding for a variety of COVID-19 response activities in their schools or districts; case investigation and contact tracing, COVID-19 testing, and COVID-19 vaccinations. All survey respondents reported that they did provide case investigation and contact tracing, one (1) Principal in Region 2 reported that they did not provide testing at their school, and six (6) Principles in Region 2 reported that they did not provide vaccinations at their school.

SDs in Region 2 (50.0%, n=9) and Principals in Region 2 (36.0%, n=15) more frequently agreed or strongly agreed that they received adequate funding for case investigation and contact tracing (Figure 32). SDs (60.0%, n=12) and Principals (44.0%, n=11) in Region 2

more frequently agreed or strongly agreed that they received adequate funding for COVID-19 testing (Figure 33). Lastly, SDs (60.0%, n=12) and Principals (32.0%, n=8) in Region 2 more frequently agreed or strongly agreed that they received adequate funding COVID-19 vaccinations (Figure 34).

Figure 32: Region 2: School/district received adequate funding for COVID-19 case investigation and contact tracing by survey respondent

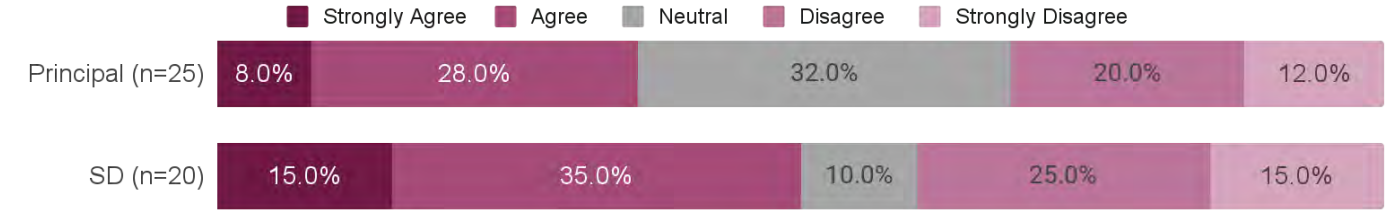
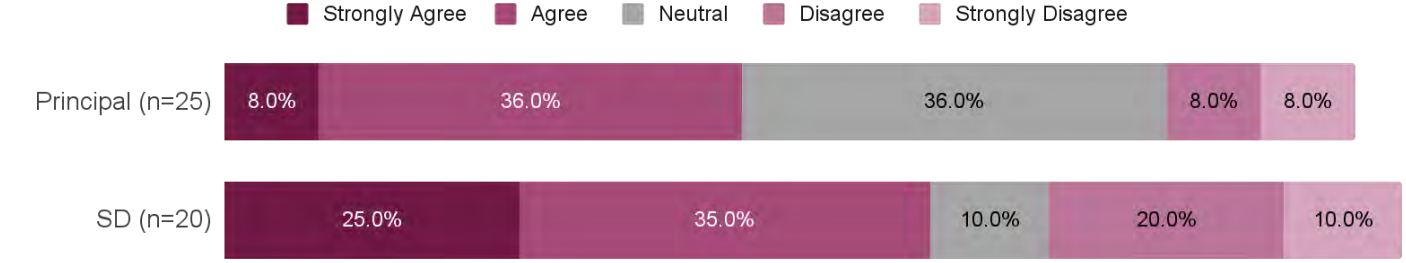
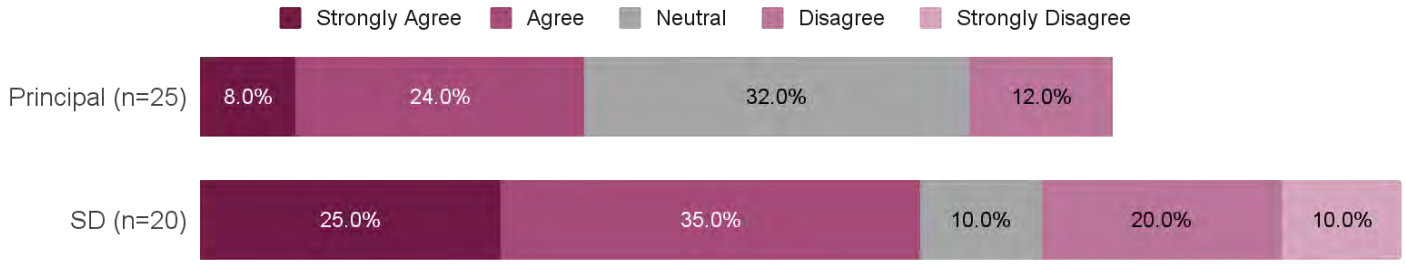


Figure 33: Region 2: School/district received adequate funding for COVID-19 testing by survey respondent*



* Not all rows will equal 100% since one of the response options to these questions, “My school did not engage in these activities”, was not included in the data visualization.

Figure 34: Region 2: School/district received adequate funding for COVID-19 vaccinations by survey respondent*

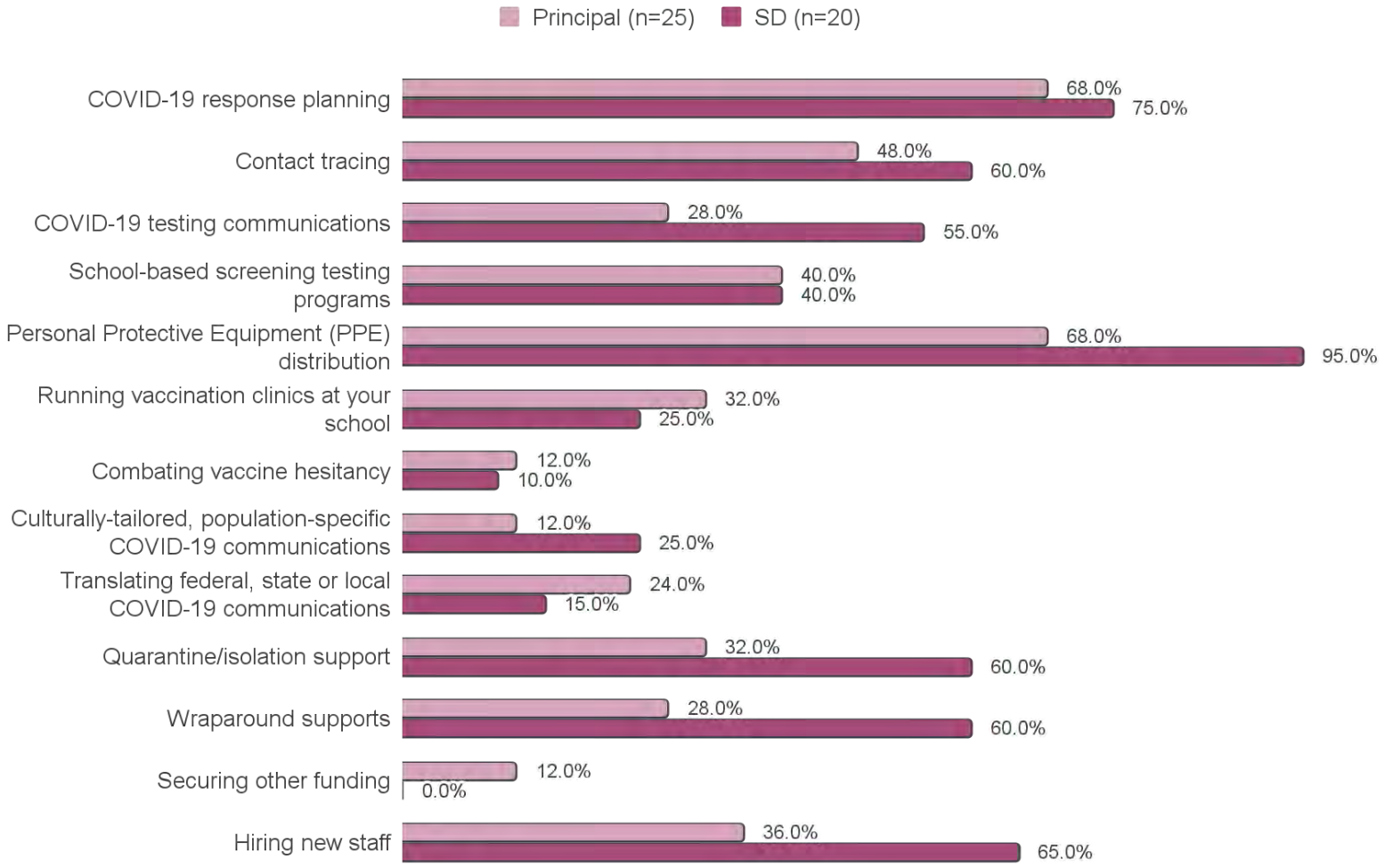


* Not all rows will equal 100% since one of the response options to these questions, “My school did not engage in these activities”, was not included in the data visualization.

Funded activities

Educational survey respondents in Region 2 were asked to report on a variety of activities they used for COVID-19 funding at their school or district. SDs in Region 2 most frequently reported activities were PPE distribution (95.0%, n=19), COVID-19 response planning (75.0%, n=15), hiring new staff (65.0%, n=13), and a three-way tie between contact tracing, quarantine or isolation support, and wraparound supports (60.0%, n=12) (Figure 35). Principals in Region 2 most frequently reported activities were PPE distribution (68.0%, n=17) and COVID-19 response planning (68.0%, n=17) were tied, contact tracing (48.0%, n=12), and school-based screening testing programs (40.0%, n=10).

Figure 34: Region 2: How COVID-19 funding was utilized by schools/districts by survey respondent



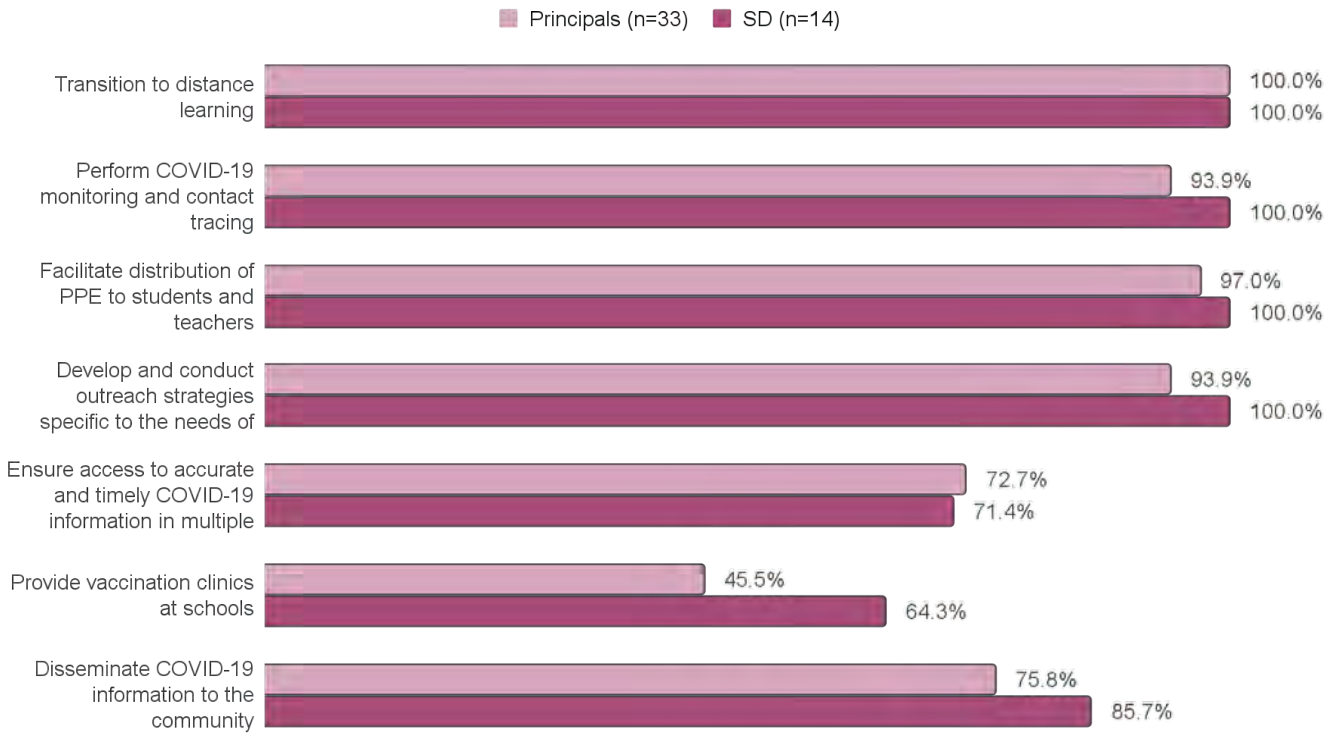
Region 3

COVID-19 Response Activities

Overall Response

Educational survey respondents in Region 3 shared ways that their school or district responded to the COVID-19 pandemic. There were similar percentages by survey respondent except for those that provided vaccination clinics at their schools. More than half of the SDs in Region 3 (64.3%, n=9) and less than half of the Principals in Region 3 (45.5%, n=15) held vaccine clinics at their school (Figure 35).

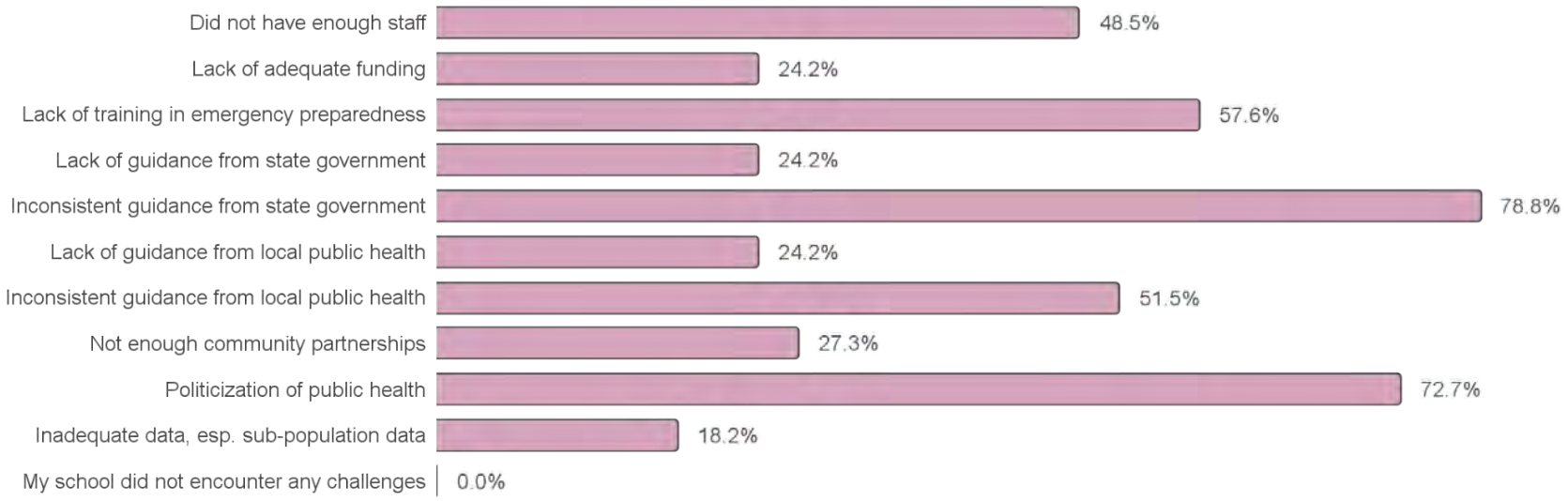
Figure 35: Region 3: Ways that schools/districts responded to COVID-19 pandemic by survey respondent



Challenges and Barriers to COVID-19 response

Principal survey respondents in Region 3 were asked to select the challenges that hindered the effectiveness, scale, or quality of their school's COVID-19 pandemic response. The top three challenges Principals in Region 3 reported were inconsistent guidance from state government (78.8%, n=26), politicization of public health (72.7%, n=24), and lack of training in emergency preparedness (57.6%, n=19) (Figure 36).

Figure 34: Region 3: Challenges that hindered COVID-19 pandemic response in schools by Principals (N=33)



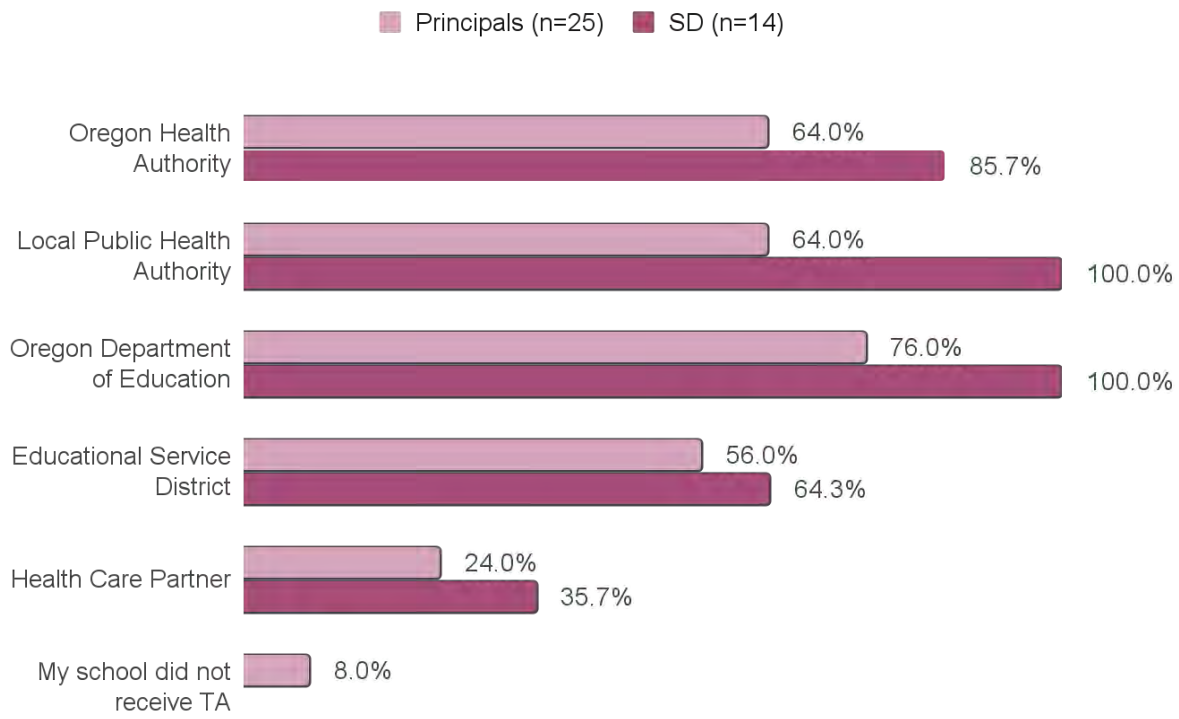
Principal survey respondents in Region 3 were asked to select the barriers that their school experienced during the COVID-19 pandemic. These barriers are not related to funding. The top barrier reported by Principals in Region 3 (45.5%, n=15) was difficulty onboarding new staff and the second top barrier was creating scripts for contact tracing (42.4%, n=14) (Figure 37).

Figure 37: Region 3: Barriers not related to funding during COVID-19 pandemic response experienced by Principals (N=33)

Technical Assistance

Educational survey respondents in Region 3 were asked about the agencies or organizations in which their school or district received technical assistance during the COVID-19 pandemic. The top three agencies or organizations that SDs in Region 3 received technical assistance from were the Local Public Health Authority and the Oregon Department of Education (100.0%, n=14) were tied, the Oregon Health Authority (85.7%, n=12), and the Educational Service District (64.3%, n=9) (Figure 38). The top three agencies or organizations that Principals in Region 3 received technical assistance from were the Oregon Department of Education (76.0%, n=19), the Local Public Health Authority and the Oregon Health Authority (64.0%, n=16) were tied, and the Educational Service District (56.0%, n=14).

Figure 38: Region 3: Agencies schools received technical assistance from to support COVID-19 pandemic response by survey respondent



Funding

Adequate funding

Educational survey respondents in Region 3 were asked if they received adequate funding for a variety of COVID-19 response activities in their schools or districts; case investigation and contact tracing, COVID-19 testing, and COVID-19 vaccinations. All survey respondents reported that they did provide case investigation and contact tracing, all Principals in Region 3 reported that they did provide testing at their school, and two (2) Principles in Region 3 reported that they did not provide vaccinations at their school.

The same number of SDs in Region 3 reported that they agreed or strongly agreed and disagreed or strongly disagreed (35.7%, n=5) that they received adequate funding for case investigation and contact tracing Principals in Region 3 more frequently agreed or strongly agreed that (56.5%, n=9) (Figure 39). SDs (50.0%, n=7) and Principals (60.9%, n=14) in Region 3 more frequently agreed or strongly agreed that they received adequate funding for COVID-19 testing (Figure 40). Lastly, SDs (50.0%, n=7) Principals (43.5%, n=10) in Region 3 more frequently reported to agree or strongly agree that they received adequate funding COVID-19 vaccinations (Figure 41).

Figure 39: Region 3: School/district received adequate funding for COVID-19 case investigation and contact tracing by survey respondent

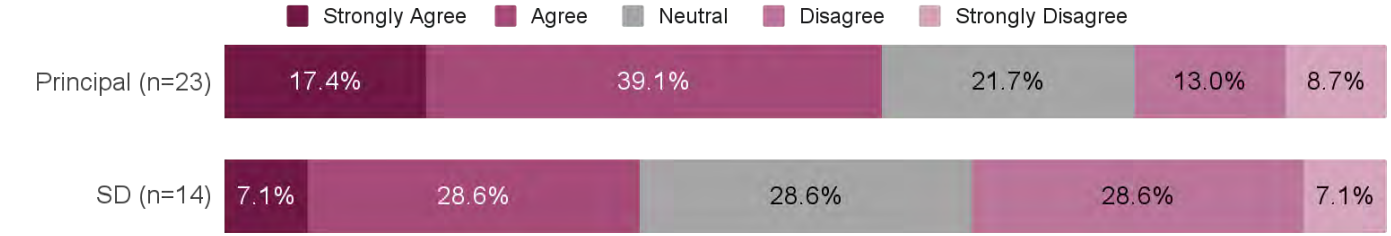


Figure 40: Region 3: School/district received adequate funding for COVID-19 testing by survey respondent

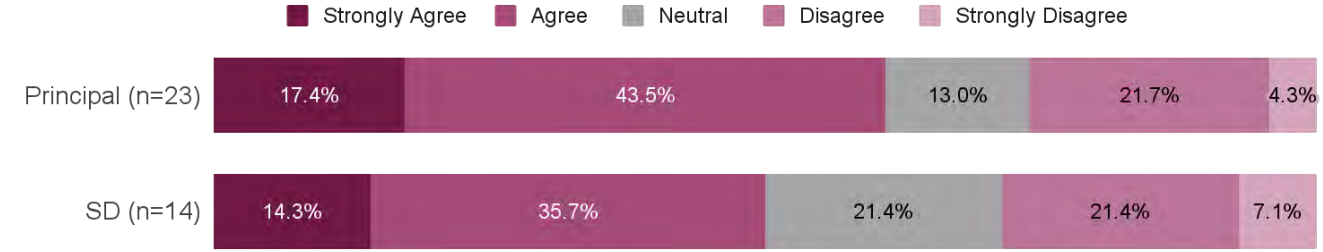
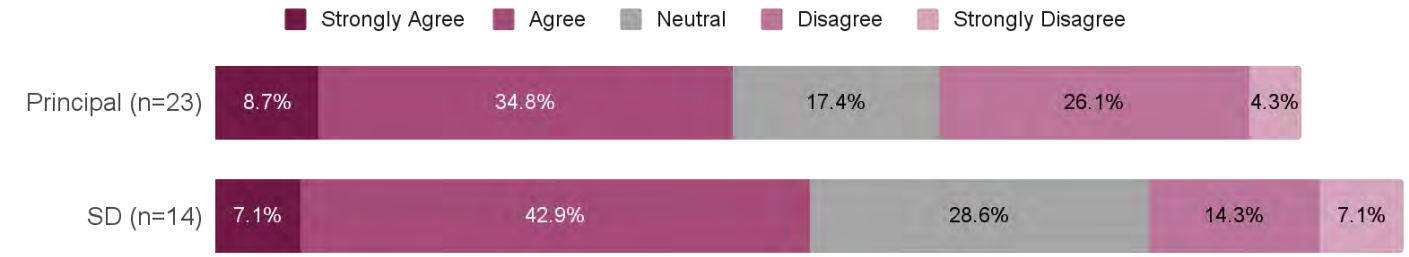


Figure 41: Region 3: School/district received adequate funding for COVID-19 vaccinations by survey respondent*

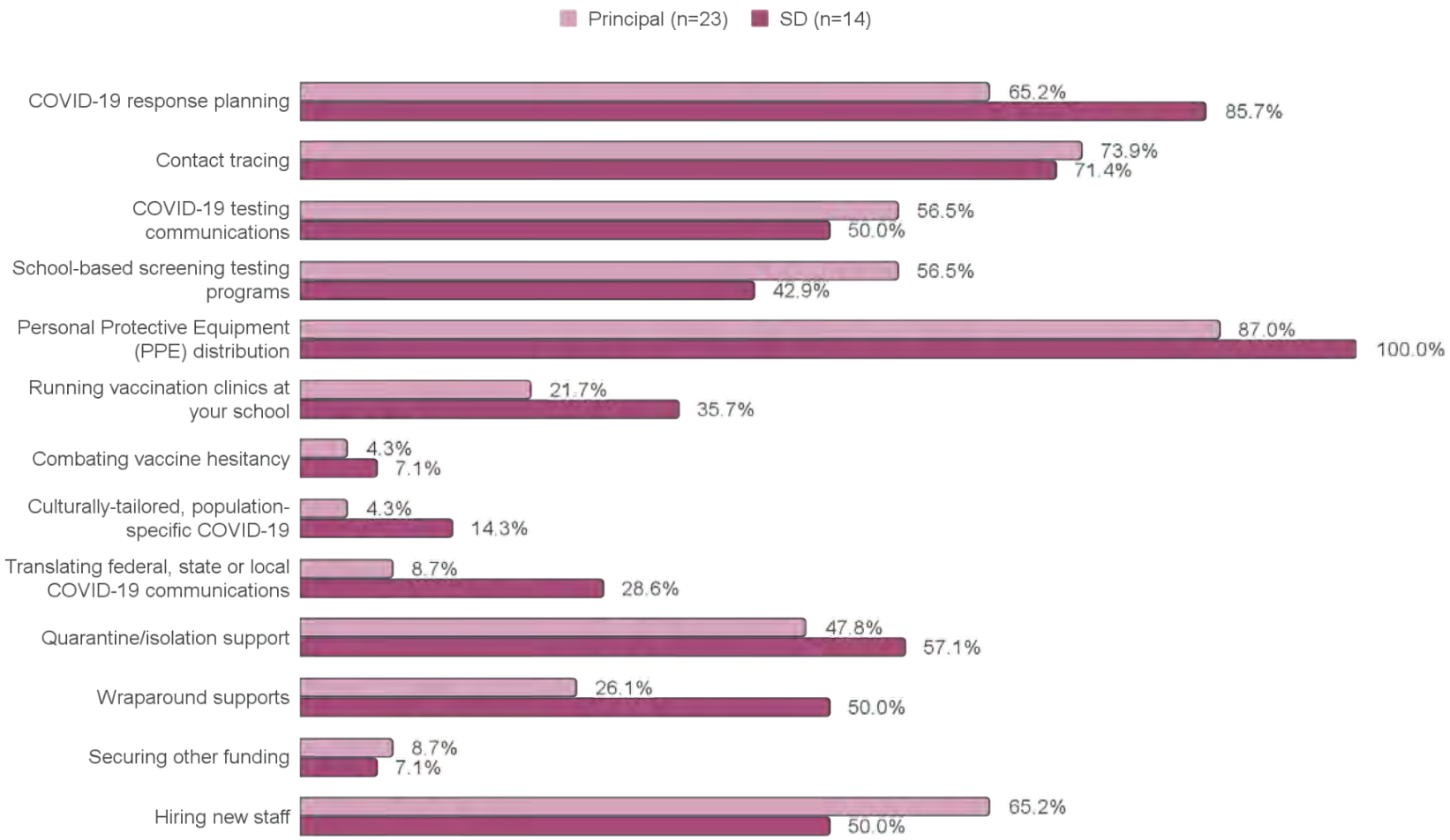


* Not all rows will equal 100% since one of the response options to these questions, “My school did not engage in these activities”, was not included in the data visualization.

Funding activities

Educational survey respondents in Region 3 were asked to report on a variety of activities they used for COVID-19 funding at their school or district. All SDs in Region 3 reported that they used COVID-19 funding on personal protective equipment (PPE) distribution (100%, n=14) and almost all Principals in Region 3 reported that they used funding on PPE distribution (87.0%, n=20) (Figure 42). SDs in Region 3 most frequently reported PPE distribution (100%, n=14), COVID-19 response planning (85.7%, n=12), contact tracing (71.4%, n=12), and quarantine or isolation support (57.1%, n=8). Principals in Region 3 most frequently reported PPE distribution (87.0%, n=20), contact tracing (73.9%, n=17), COVID-19 response planning (65.2%, n=15), and hiring new staff (65.2%, n=15).

Figure 42: Region 3: How COVID-19 funding was utilized by schools/districts, by survey respondent



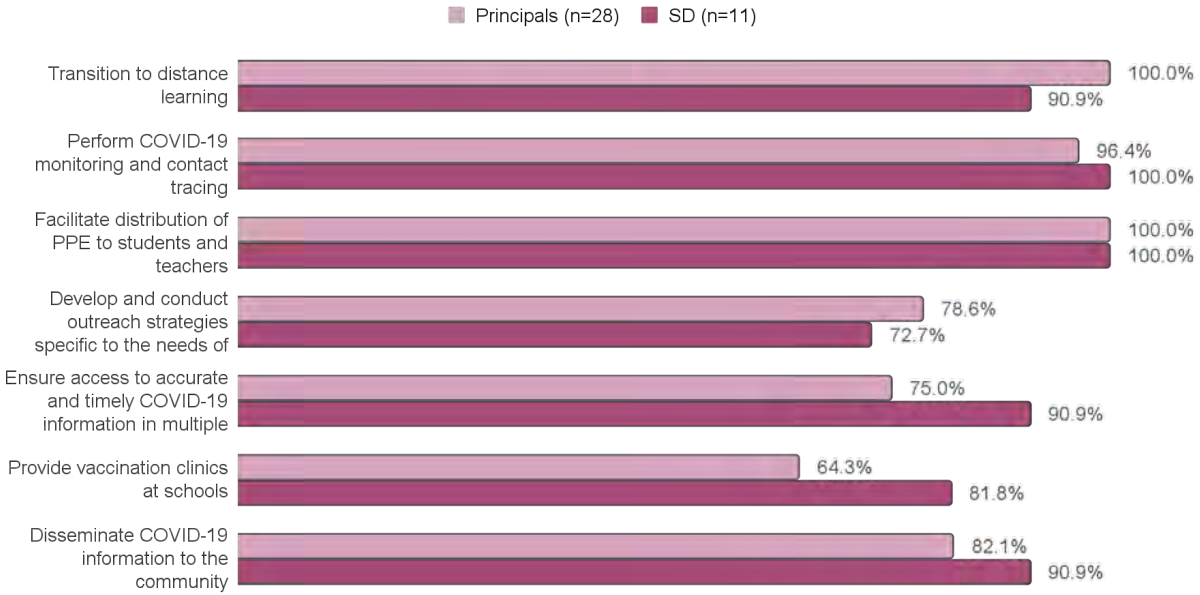
Region 4

COVID-19 Response Activities

Overall Response

Educational survey respondents in Region 4 shared ways that their school or district responded to the COVID-19 pandemic. The top three activities SDs and Principals in Region 4 reported were distribution of PPE to students and teachers (100.0%, n=11), COVID-19 monitoring and contact tracing (100.0%, n=11) and transitioning to distance learning (90.9%, n=10) (Figure 43).

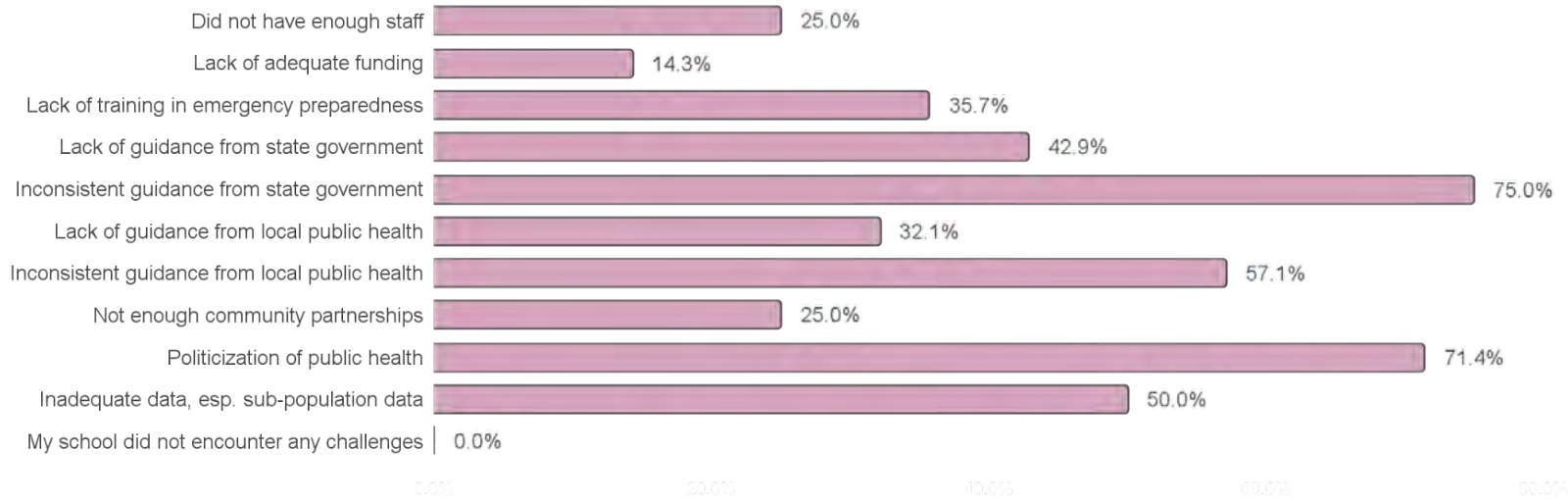
Figure 43: Region 4: Ways that schools/districts responded to COVID-19 pandemic by survey respondent



Challenges and Barriers to COVID-19 response

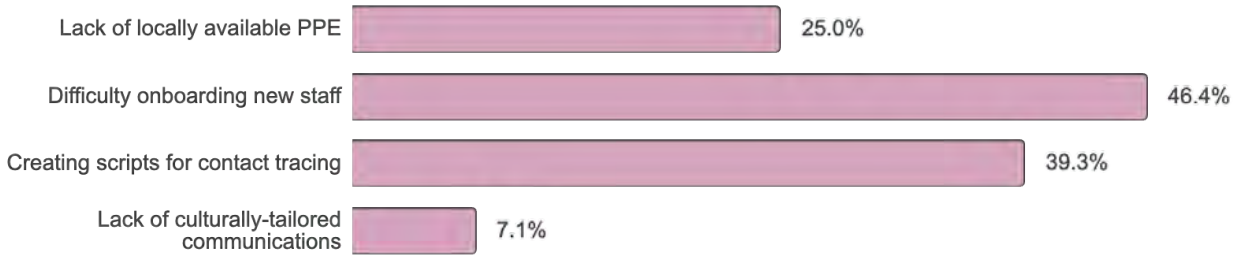
Principal survey respondents in Region 4 were asked to select the challenges that hindered the effectiveness, scale, or quality of their school's COVID-19 pandemic response. The top three challenges Principals in Region 4 reported were inconsistent guidance from state government (75.0%, n=21), politicization of public health (71.4%, n=20), and inconsistent guidance from local public health/county health department (57.1%, n=16) (Figure 44).

Figure 44: Region 4: Challenges that hindered COVID-19 pandemic response in schools by Principals (N=28)



Principal survey respondents in Region 4 were asked to select the barriers that their school experienced during the COVID-19 pandemic. These barriers are not related to funding. The top barrier reported by Principals in Region 4 (46.4%, n=13) was difficulty onboarding new staff and the second top barrier was creating scripts for contact tracing (39.3%, n=11) (Figure 45).

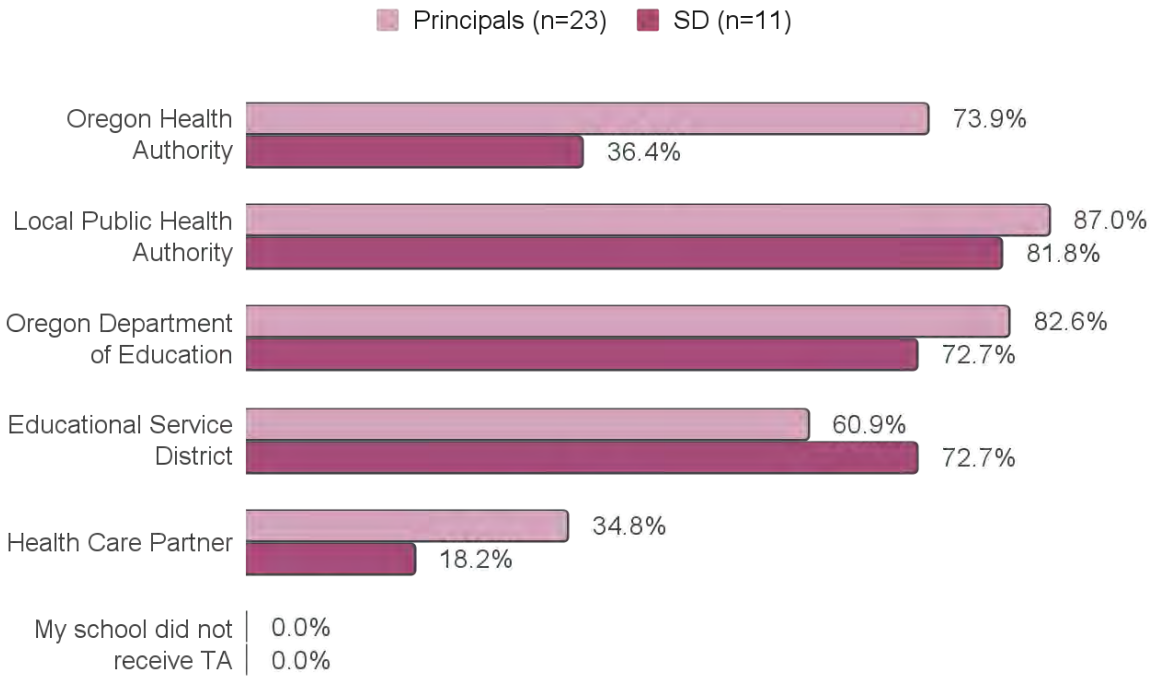
Figure 45: Region 4: Barriers not related to funding during COVID-19 pandemic response experienced by Principals (N=28)



Technical Assistance

Educational survey respondents in Region 4 were asked about the agencies or organizations in which their school or district received technical assistance during the COVID-19 pandemic. The top three agencies or organizations that SDs in Region 4 received technical assistance from were the Local Public Health Authority (81.8%, n=9), the Oregon Department of Education and the Educational Service District (72.7%, n=8) were tied, and the Oregon Health Authority (36.4%, n=4) (Figure 46). The top three agencies or organizations that Principals in Region 4 received technical assistance from were the Local Public Health Authority (87.0%, n=20), the Oregon Department of Education (82.6%, n=19), and the Oregon Health Authority (73.9%, n=17).

Figure 46: Region 4: Agencies schools received technical assistance from to support COVID-19 pandemic response by survey respondent



Funding

Adequate funding

Educational survey respondents in Region 4 were asked if they received adequate funding for a variety of COVID-19 response activities in their schools or districts; case investigation and contact tracing, COVID-19 testing, and COVID-19 vaccinations. All survey respondents reported that they did provide case investigation and contact tracing, one (1) Principal in Region 4 reported that they did not provide testing at their school, and four (4) Principles in Region 4 reported that they did not provide vaccinations at their school.

Half of the SDs (n=5) and Principals (n=11) in Region 4 more frequently agreed or strongly agreed that they received adequate funding for case investigation and contact tracing (Figure 47). SDs (50.0%, n=5) and Principals (50.0%, n=11) in Region 4 more frequently agreed or strongly agreed that they received adequate funding for COVID-19 testing (Figure 48). Lastly, SDs (40.0%, n=4) and Principals (45.5%, n=10) in Region 4 more frequently agreed or strongly agreed that they received adequate funding COVID-19 vaccinations (Figure 49).

Figure 47: Region 4: School/district received adequate funding for COVID-19 case investigation and contact tracing by survey respondent

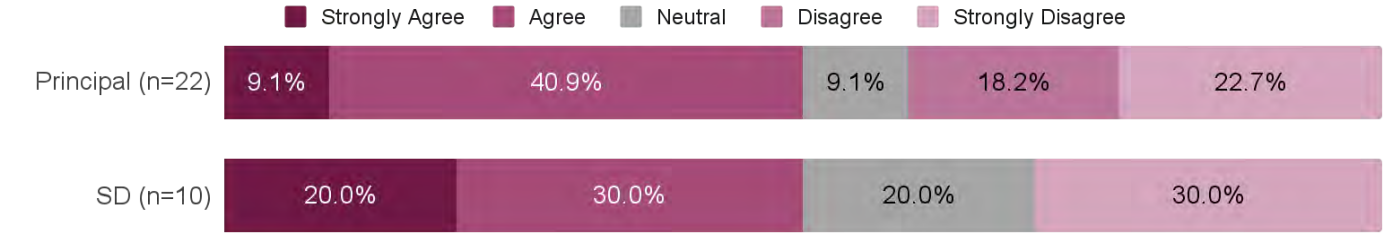
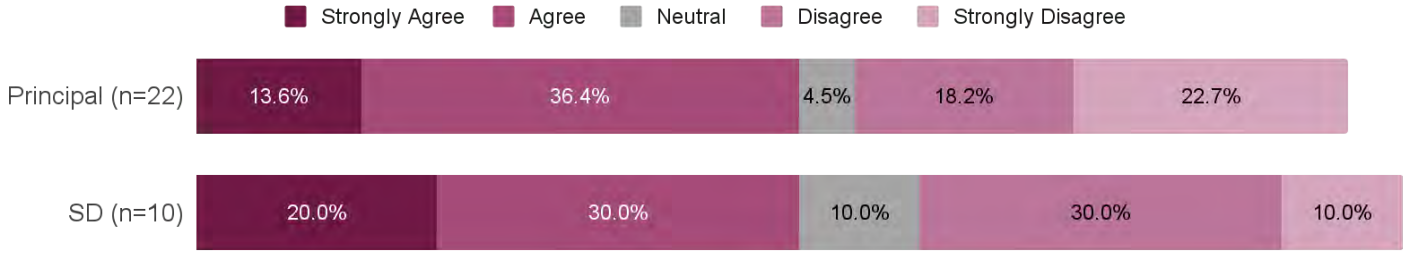
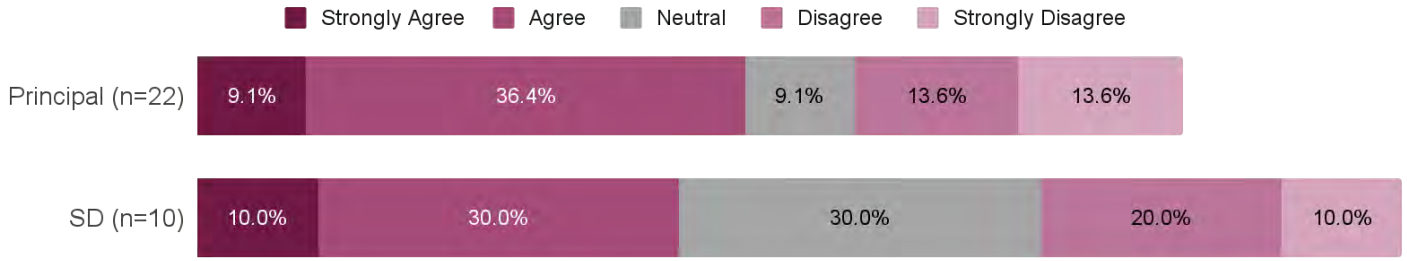


Figure 48: Region 4: School/district received adequate funding for COVID-19 testing by survey respondent*



* Not all rows will equal 100% since one of the response options to these questions, “My school did not engage in these activities”, was not included in the data visualization.

Figure 49: Region 4: School/district received adequate funding for COVID-19 vaccinations by survey respondent*

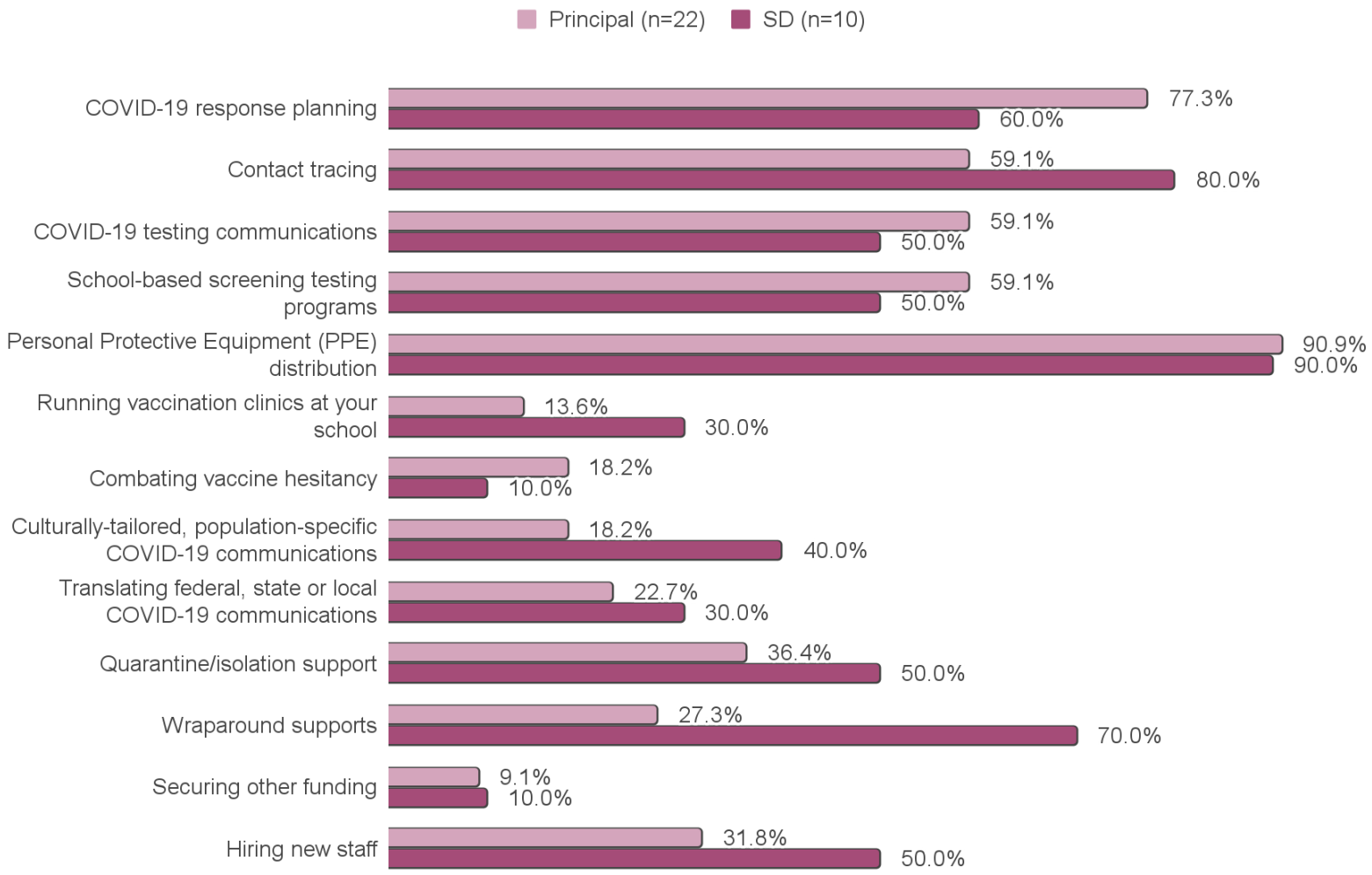


* Not all rows will equal 100% since one of the response options to these questions, “My school did not engage in these activities”, was not included in the data visualization.

Funded activities

Educational survey respondents in Region 4 were asked to report on a variety of activities they used for COVID-19 funding at their school or district. SDs in Region 4 most frequently reported using funding for PPE distribution (90.0%, n=9), contact tracing (80.0%, n=8), wraparound supports (70.0%, n=7), and COVID-19 response planning (60.0%, n=6) (Figure 50). Principals in Region 4 most frequently reported using funding for PPE distribution (90.9%, n=20), COVID-19 response planning (77.3%, n=17), contact tracing (59.1%, n=13), COVID-19 testing communications(59.1%, n=13), and school-based screening testing programs (59.1%, n=13).

Figure 50: Region 4: How COVID-19 funding was utilized by schools/districts by survey respondent



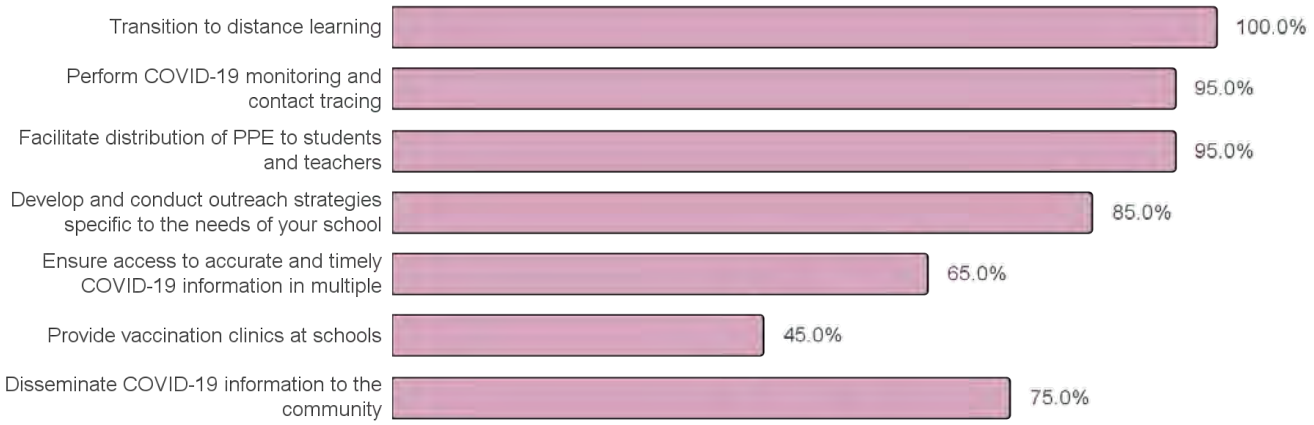
Region 5

COVID-19 Response Activities

Overall Response

Principal survey respondents in Region 5 shared ways that their school responded to the COVID-19 pandemic (Figure 49). There were similar percentages by Principals except for those that provided vaccination clinics at their schools. Less than half of the Principals in Region 5 (45.0%, n=9) held vaccine clinics at their school (Figure 51).

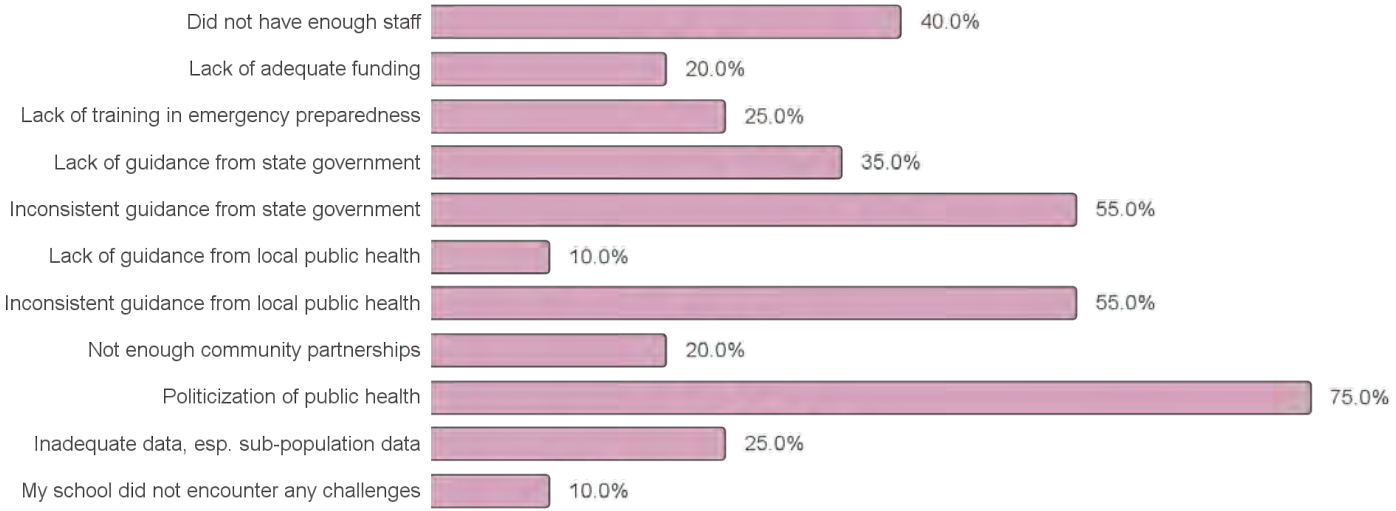
Figure 51: Region 5: Ways that schools responded to COVID-19 pandemic by Principals (N=20)



Challenges and Barriers to COVID-19 response

Principal survey respondents in Region 5 were asked to select the challenges that hindered the effectiveness, scale, or quality of their school's COVID-19 pandemic response. The top three challenges Principals in Region 5 reported were politicization of public health (75.0%, n=15), inconsistent guidance from state government and inconsistent guidance from local public health/county health department (55.0%, n=11), and did not have enough staff (40.0%, n=8) (Figure 52).

Figure 52: Region 5: Challenges that hindered COVID-19 pandemic response in schools by Principals (N=20)



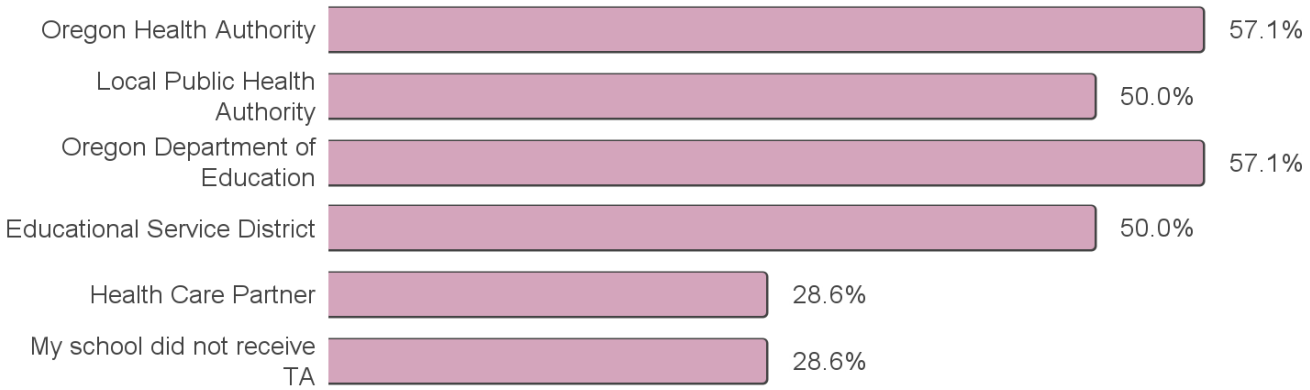
Principal survey respondents in Region 5 were asked to select the barriers that their school experienced during the COVID-19 pandemic. These barriers are not related to funding. The top barrier reported by Principals in Region 5 (45.0%, n=9) was lack of locally available PPE and the second top barrier was difficulty onboarding new staff (30.0%, n=6) (Figure 53).

Figure 53: Region 5: Barriers not related to funding during COVID-19 pandemic response experienced by Principals (N=20)

Technical Assistance

Principal survey respondents in Region 5 were asked about the agencies or organizations in which their school received technical assistance during the COVID-19 pandemic. The top three agencies or organizations that Principals in Region 5 received technical assistance from were the Oregon Department of Education and the Oregon Health Authority (57.1%, n=8) were tied, the Local Public Health Authority and Educational Service District (50.0%, n=7) were tied, and the Health Care Partner and not receiving technical assistance (28.6%, n=4) were tied (Figure 54).

Figure 54: Region 5: Agencies schools received technical assistance from to support COVID-19 pandemic response by Principals (N=14)



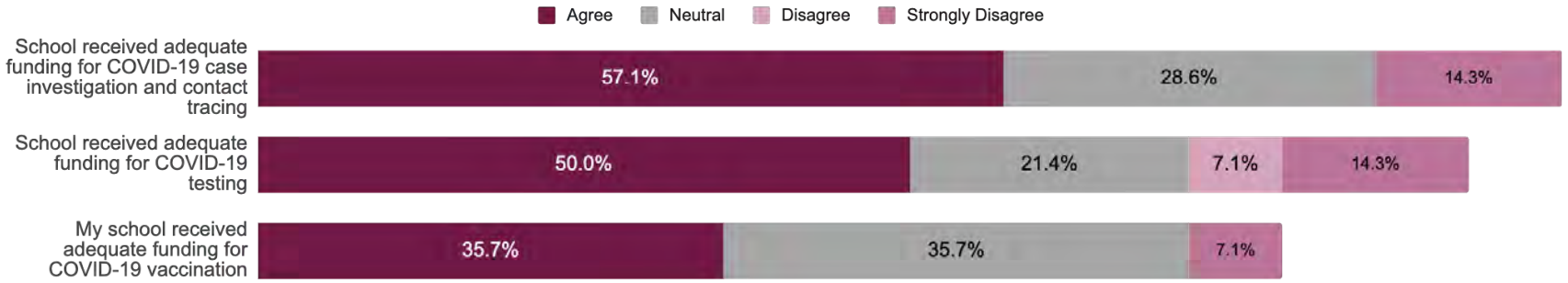
Funding

Adequate funding

Principal survey respondents in Region 5 were asked if they received adequate funding for a variety of COVID-19 response activities in their schools; case investigation and contact tracing, COVID-19 testing, and COVID-19 vaccinations. All survey respondents reported that they did provide case investigation and contact tracing, one (1) Principal in Region 5 reported that they did not provide testing at their school, and three (3) Principles in Region 5 reported that they did not provide vaccinations at their school.

More than half of the Principals in Region 5 more frequently agreed that they received adequate funding for case investigation and contact tracing (57.1%, n=8) (Figure 55). Half of the Principals (n=7) in Region 5 more frequently agreed that they received adequate funding for COVID-19 testing. Lastly, the same number of Principals in Region 5 agreed or were neutral in receiving adequate funding for COVID-19 vaccinations (35.7%, n=5).

Figure 55: Region 5: School received adequate funding for COVID-19 activities, Principals (n=14)



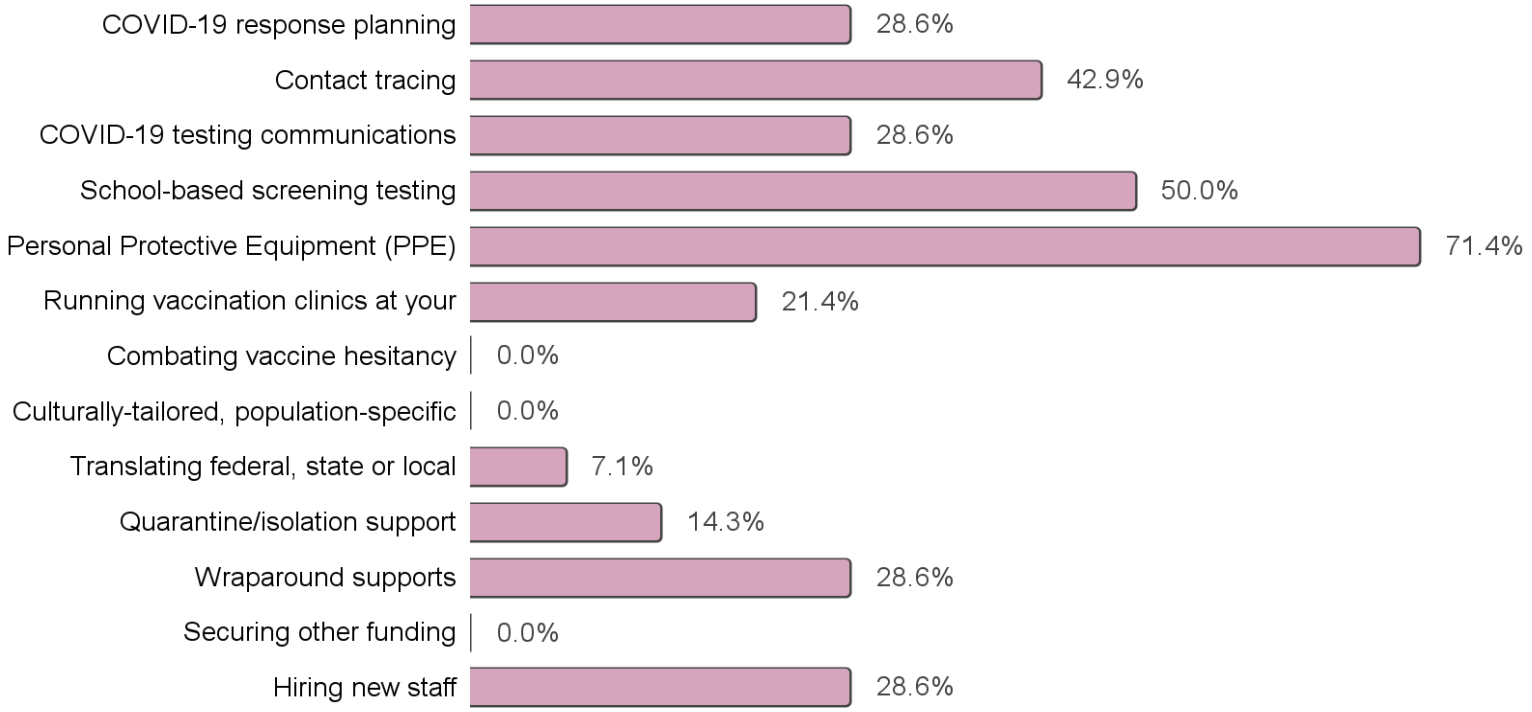
* Not all rows will equal 100% since one of the response options to these questions, “My school did not engage in these activities”, was not included in the data visualization.

Funded activities

Principal survey respondents in Region 5 were asked to report on a variety of activities they used for COVID-19 funding at their school. Principals in Region 5 top four activities were PPE distribution (71.4%, n=10), school-based screening testing programs

(50.0%, n=11), contact tracing (42.9%, n=6), and a four-way tie between COVID-19 response planning, COVID-19 testing communications, wraparound supports, and hiring new staff (28.6%, n=4) (Figure 56).

Figure 56: Region 5: How COVID-19 funding was utilized in schools by Principals (N=14)



Key Findings

1. Preparedness to respond to pandemic varied across Regions with most SDs reporting their district was more prepared to respond than Principals reported.

2. There was variation in the existence of EOPs across Regions, although most Principals, regardless of Region, reported their school developed an EOP after the start of the pandemic.

3. Across Regions, SDs reported being more prepared to transition to distance learning than Principals reported, as the majority of Principals felt their school was minimally or not at all prepared to transition to distance learning.

4. SDs and Principals reported they tried their best to adhere to Executive Orders and health mandates and used an array of enforcement methods, including behavior modeling, clear messaging, and punitive consequences across regions.

5. Region 5 Principals least frequently reported adopting specific COVID-19 public health policies compared to other Regions.

6. Although there was variation across Region in effectiveness of strategies to enforce public health protections in schools, punitive consequences was the least effective strategy reported by Principals in each Region.

7. Across all regions, SDs more frequently reported their district had adequate funding for COVID-19 response activities than Principals.

8. There was variability in TA received across Regions, with Region 5 having the largest percentage of Principals who reported their school did not receive any TA to support pandemic response.

9. Substantial variability in barriers to efficient use of funds was seen across Regions.

10. Reporting and spending requirements were most frequently reported by barriers as SDs (across most Regions).

11. Education sector study participants reported numerous successes with COVID-19 public health messaging and communication, including creating clear messaging (e.g., meetings, signage, exposure letters) and translation of materials across multiple languages.

Recommendations

1. Build out and invest in comprehensive emergency preparedness for schools at the district- and school-level to incorporate pandemic-level events, training for school administrators, and frequent EOP updates that are tailored to take into account the unique needs of each school community.
    a. Newer administrators, as well as schools and districts who do not have as many emergency preparedness resources, may need additional resources to ensure they are fully prepared to respond to future public health emergencies.
2. Ensure technical assistance availability at both the district- and school-level, data availability at district and local levels that includes sub-population data and corresponding TA; a designated liaison at LPHAs to coordinate data availability and provide TA for each district would ensure greater availability and accessibility of TA to inform response for future public health emergencies.
3. Ensure adequate resources for contact tracing and case investigation at the school-level; different schools may require additional resources for these specific efforts.
4. Consider public health mandates and associated guidance for future public health emergencies that are flexible to allow for local school authority and decision-making regarding school closures.
5. Similarly, when enforcing public health mandates, allow decisions about enforcement strategies to be made at the school level to utilize appropriate strategies tailored for the school population(s) served.

Appendix C:
Principal Survey Respondents Analysis by Grades Served

Introduction

As part of quantitative data collection for this study of the public health response to COVID-19 in Oregon, tailored surveys were administered to Oregon Principals, Nurses, School District Superintendents (SDs), and Education Service Districts (ESDs). Detailed methods relating to survey development and data analysis can be found in Appendix G in Report 2. The majority of findings from educational informant data were presented in Report 2.

For each survey, respondents had the option to select from a list or write-in what grades they provided services to. The majority of School Nurses reported that they served all grades, so they were not included in this report. Knowing that different districts had different school structures, the response options in the survey included overlap (i.e., K-5, K-8, 6-8, and 9-12). Fourteen percent of Principal Respondents selected “Other” and wrote in a different grade range. To enable analysis by grades served, we created a combined category for elementary and middle school, K-8, which includes preK-5, K-5, K-6, and K-8.

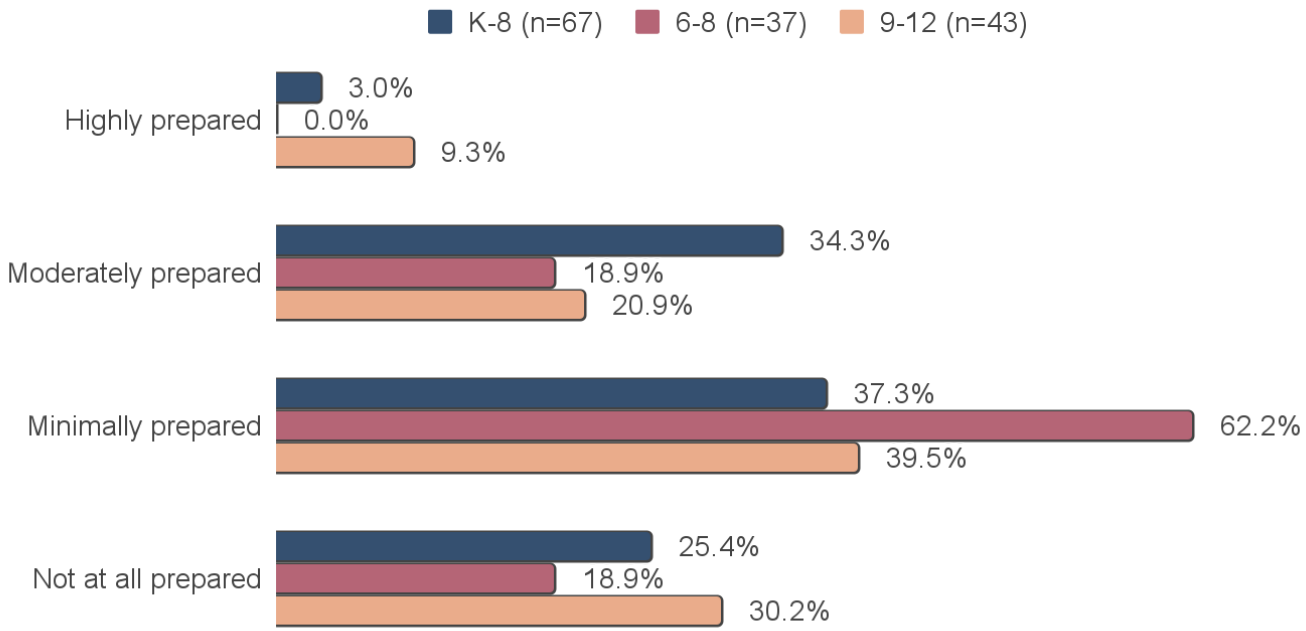
Grades	Principals
K-8	67 (39%)
6-8	37 (22%)
9-12	43 (25%)
Other	24 (14%) (not included in this report)

Emergency preparedness

Self-preparedness

Figure 1 is a clustered bar chart displaying individual levels of preparedness to respond to the COVID-19 pandemic by grades served. Principals of schools serving K-8 graders (34.3%, n=23) more frequently reported being moderately prepared than Principals of schools serving 6-8 graders (18.9%, n=7) and 9-12 graders (20.9%, n=9). Principals of schools serving 6-8 graders (62.2%, n=23) more frequently reported being minimally prepared, compared to Principals of schools serving K-8 graders (37.3%,n=25) and 9-12 graders (39.5%, n=17).

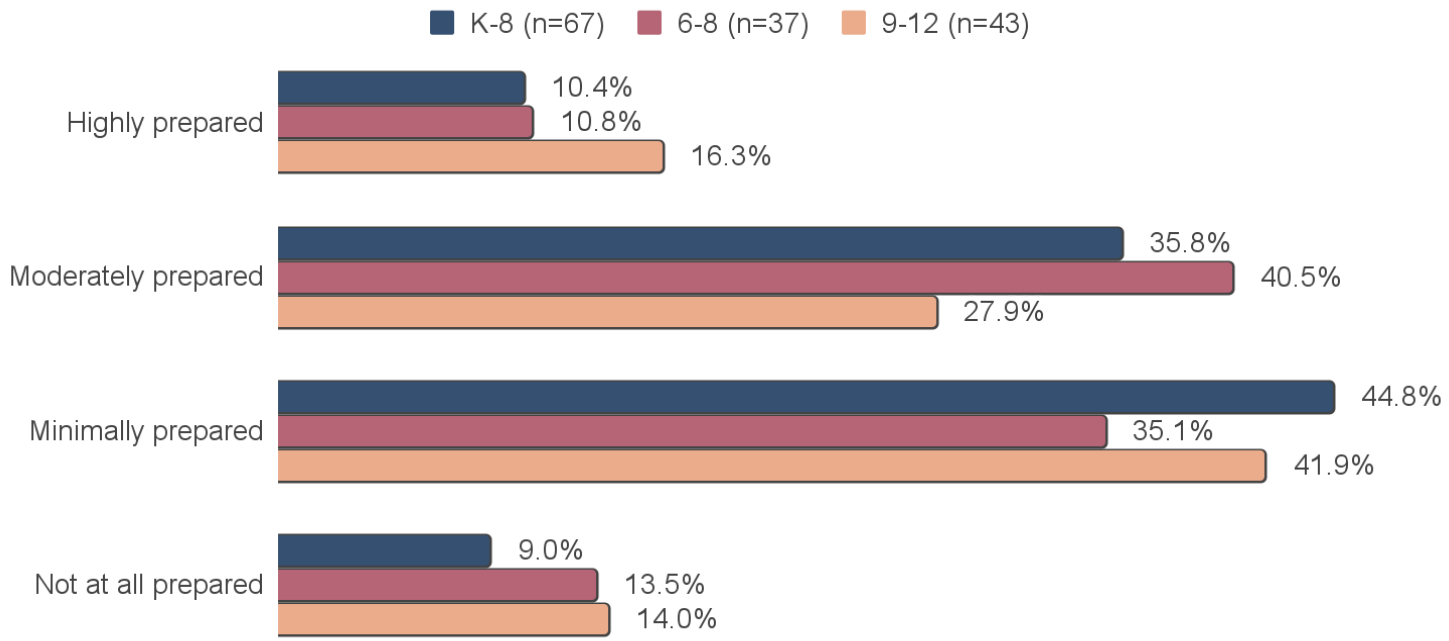
Figure 1: Principal Survey Respondents: Individual level of preparedness by grades served



School preparedness

Collectively, more Principals reported that their schools were more prepared to respond to the COVID-19 pandemic than they were as individuals. Figure 2 is a clustered bar chart displaying survey respondents' evaluation of their school's preparedness by grades served. Principals of schools serving 9-12th graders (16.3%, n=7) more frequently reported being highly prepared than Principals of schools serving K-8 graders (10.4%, n=7) and 6-8 graders (10.8%, n=4).

Figure 2: Principal Survey Respondents: School level of preparedness by grades served



Preparedness for distance learning

Figure 3 is a clustered bar chart displaying survey respondents' evaluation of their school's level of preparedness to transition to distance learning by grades served. Nearly one-fifth of Principals of schools serving 9-12 (18.6%, n=8) reported that they were highly prepared to transition to distance learning compared to only 5% (n=3) of Principals of schools serving K-8 graders and 8% (n=3) of Principals of schools serving 6-8 graders.

Figure 3: Principal Survey Respondents: School level of preparedness to transition to distance learning by grades served

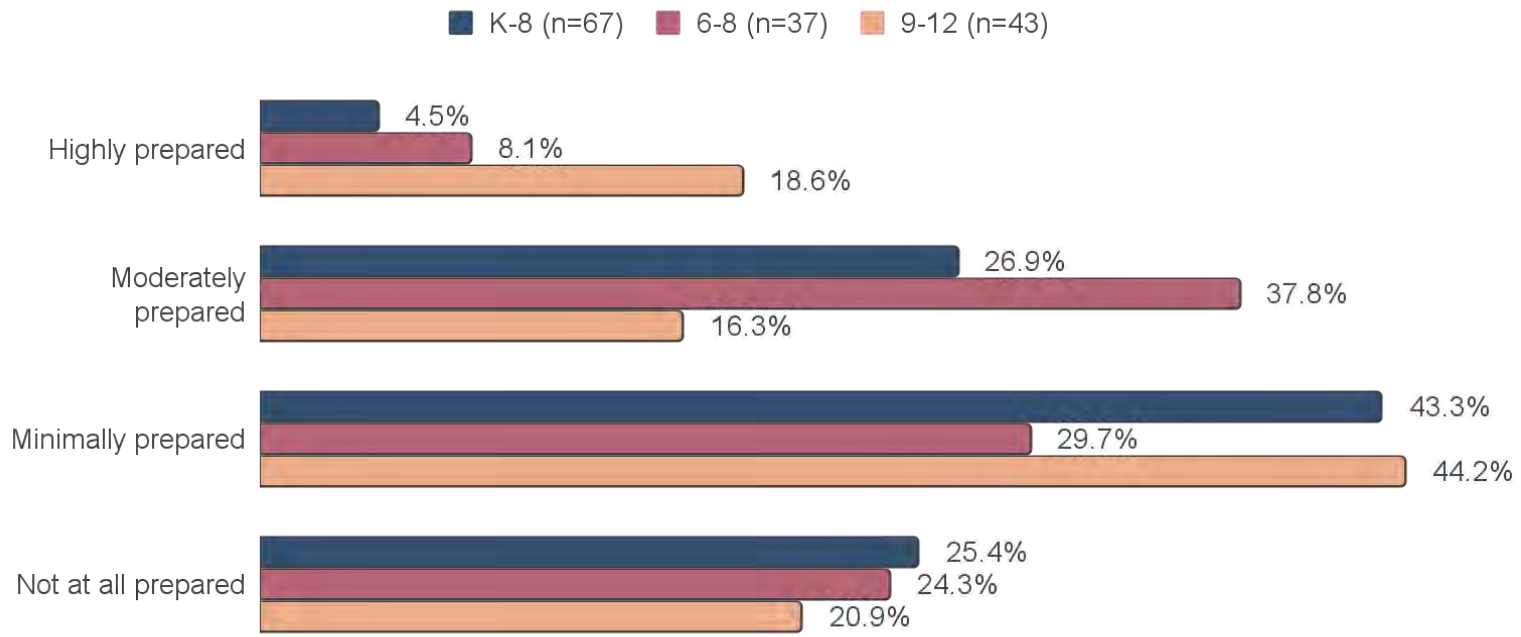
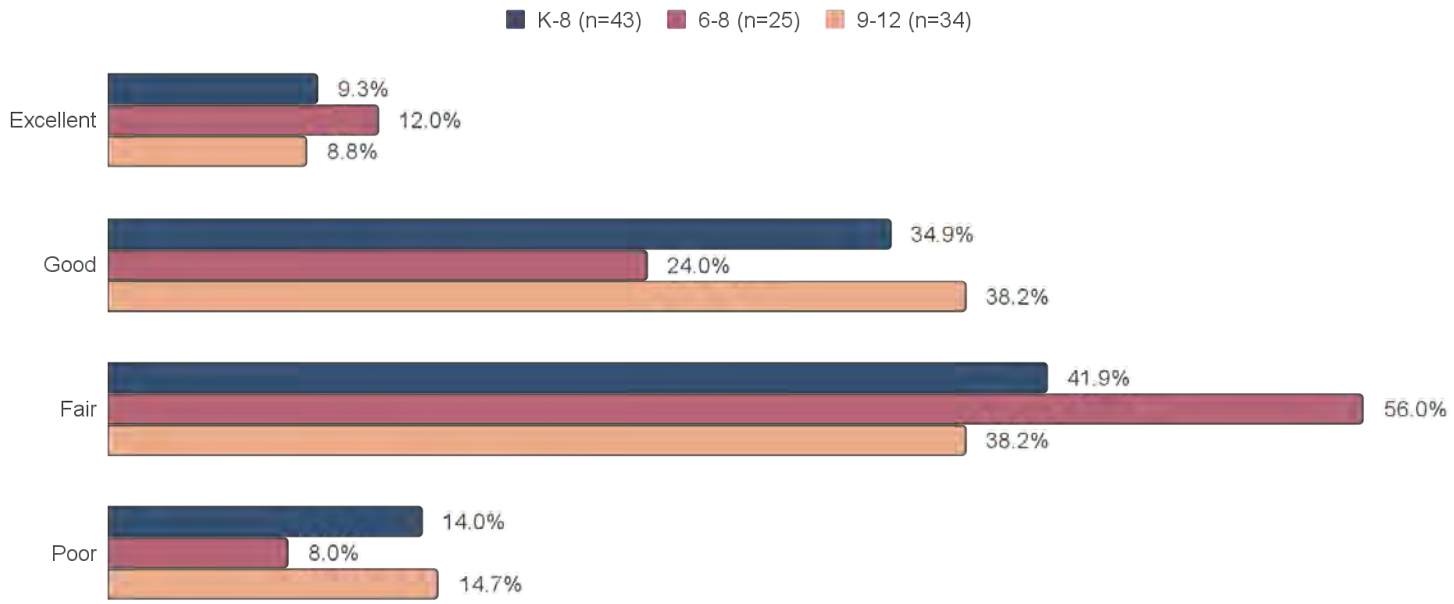


Figure 4 is a clustered bar chart displaying survey respondents' evaluation of their school's effectiveness of delivering distance learning by grades served. Principals of schools serving K-8 graders (34.9%, n=15) and 9-12 graders (38.2%, n=13) more frequently reported that their school was good in delivering distance learning, and Principals of schools serving 6-8th grader (56.0%, n=14) were more likely to evaluate their school as fair in delivering distance learning.

Figure 4: Principal Survey Respondents: Evaluation of effectiveness of school delivery of distance learning,

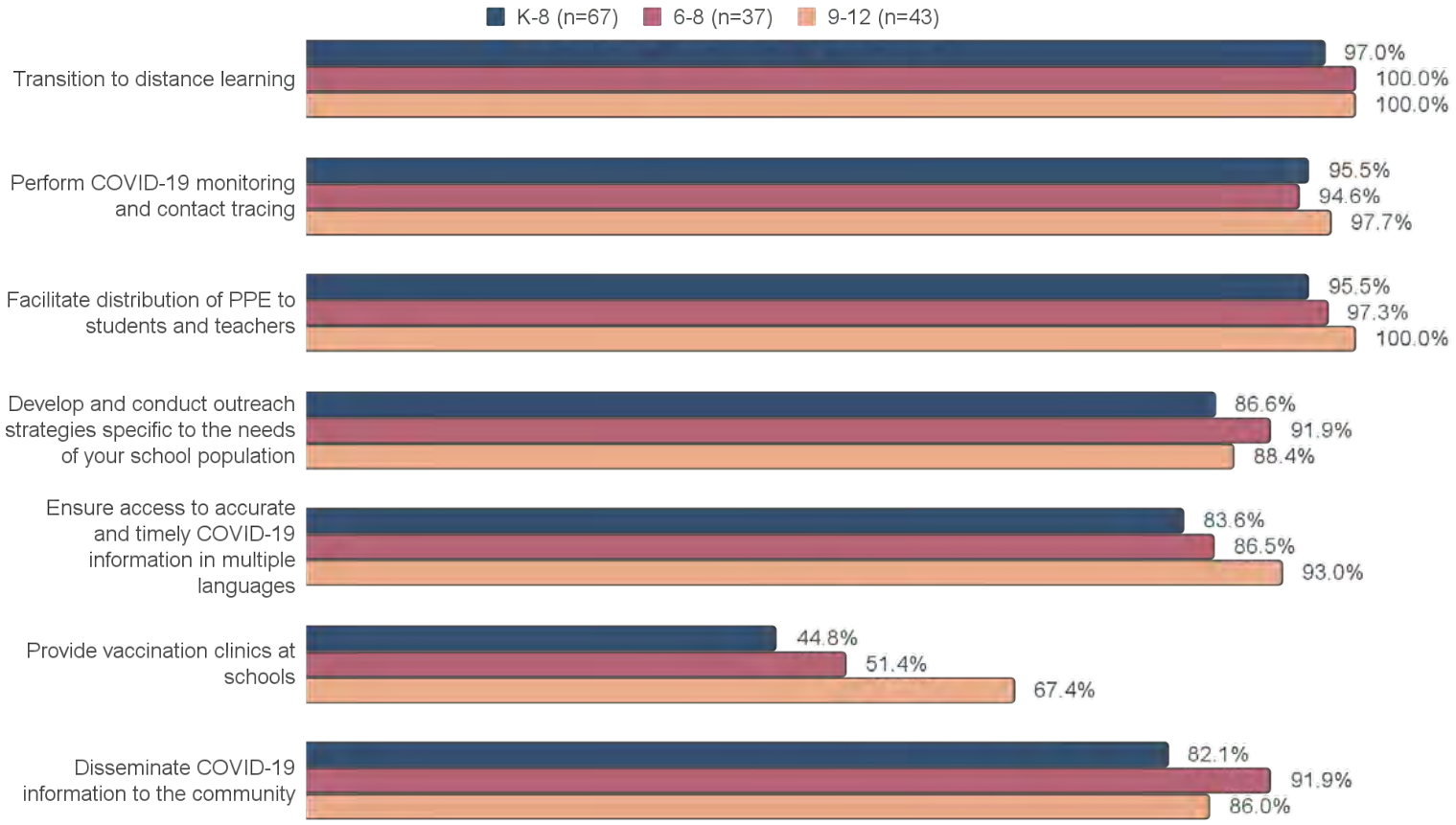


COVID-19 Response Activities

Overall Response:

Figure 5 is a clustered bar chart displaying the various COVID-19 pandemic activities reported by Principals by grades served. There were similar pandemic response activities across grades served except for providing vaccination clinics. A lower percent of Principals at schools serving K-8 graders (44.8%, n=30) reported hosting vaccination clinics at their school in comparison with about half of Principals at schools serving 6-8 graders (51.4%, n=19) and over two-thirds of Principals at schools serving 9-12 graders (67.4%, n= 29) held vaccine clinics at their schools.

Figure 5: Principal Survey Respondents: How schools responded to the COVID-19 pandemic, by grades served

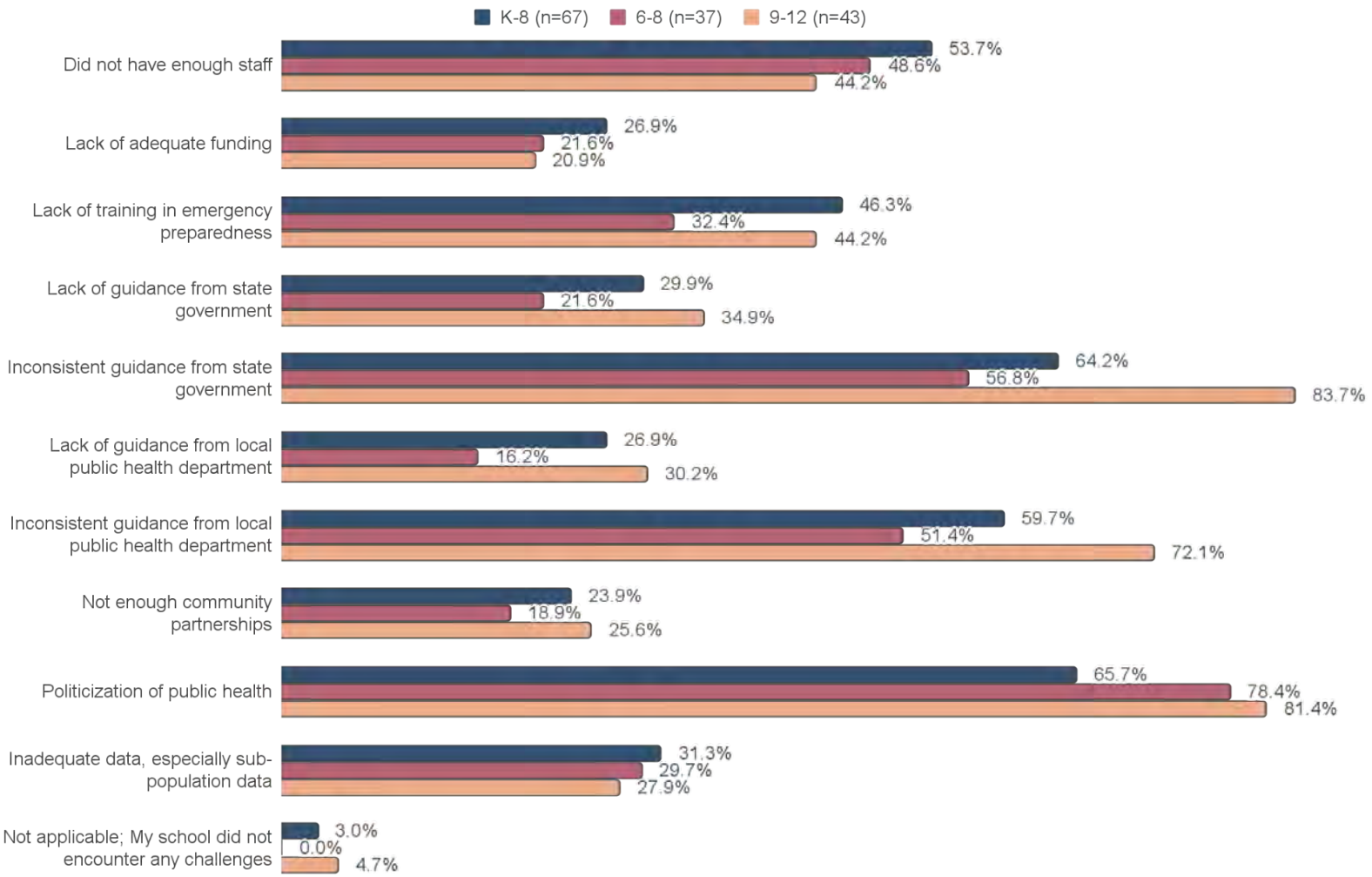


Challenges and Barriers to COVID-19 response

Figure 6 is a clustered bar chart displaying reported challenges that hindered the effectiveness, scale, or quality of the school's response to the COVID-19 pandemic. The most frequently reported challenges for Principals of schools serving K-8 graders were: politicization of public health (65.7%, n=44); inconsistent guidance from their local public health department (64.2%, n=43); and

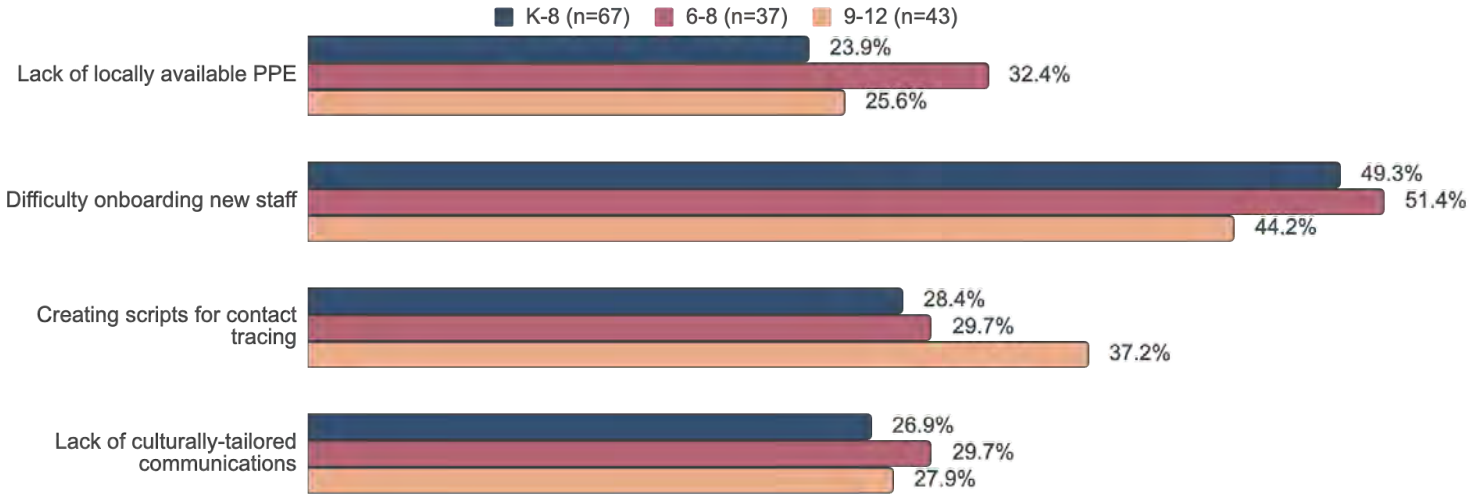
inconsistent guidance from the state government (59.7%, n=40). The most frequently reported challenges by Principals of schools serving 6-8 graders were the same, but in a different order: politicization of public health (78.4%, n=29); inconsistent guidance from the state government (56.8%, n=21); and inconsistent guidance from their local public health department (51.4%, n=19).The most frequently reported challenges by Principals of schools serving 9-12 graders were also the same but in a different order: inconsistent guidance from the state government (83.7%, n=36); politicization of public health (81.4%, n=35); and inconsistent guidance from their local public health department (72.1%, n=31). Two Principals at schools serving K-8 graders (3.0%) and two Principals at schools serving 9-12 graders (4.7%) reported that they did not encounter any challenges.

Figure 6: Principal Survey Respondents: Challenges that hindered the effectiveness, scale, or quality of school's COVID-19 response, by grades served



The most frequently reported barrier by survey respondents was difficulty onboarding new staff, with roughly half (48.3%, n=71) of all respondents reporting this issue. Figure 7 is a clustered bar chart that displays the barriers reported by Principal survey respondents by grades served. The second most frequently reported barrier by Principals at schools serving K-8 graders (28.4%, n=19) and 9-12 graders (37.2%, n=16) was the same, creating scripts for contract tracing, while the second most frequently reported barrier by Principals at schools serving 6-8 graders (32.4%, n=12) was a lack of locally available PPEs.

Figure 7: Principal Survey Respondents: Barriers experienced during COVID-19 response, by grades served



Funding

Adequate funding

School principals were asked if they received adequate funding for a variety of COVID-19 response activities. Figures 8-10 are stacked bar charts displaying Principal survey respondents' level of agreement that they received adequate funding for different areas of COVID-19 response in their schools; case investigation and contact tracing, COVID-19 testing, and COVID-19 vaccinations. All survey respondents reported that they provided case investigation and contact tracing, and all but three (3) Principals at schools serving K-8 graders reported that they provided COVID-19 testing. Principals at schools serving K-8 graders (26.1%, n=12) were

most likely to report that their school did not engage in providing vaccinations, followed by Principals at schools serving 6-8 graders (17.9%, n=5) and 9-12 graders (8.6%, n=3).

Principals at schools serving 9-12 graders more frequently reported that they disagreed or strongly disagreed that they received enough funding for all three areas of COVD-19 response: case investigation and contact tracing (45.7%, n=16); COVID-19 testing (34.2%, n=12); and vaccination (25.7, n=9). Principals at schools serving K-8 graders were more likely to report that they agreed or strongly agreed that they received adequate funding for case investigation and contact tracing (45.6%, n=21), whereas Principals at schools serving 6-8 graders were most likely to report that they agreed or strongly agreed that they received adequate funding for COVID-19 vaccination (53.6%, n=15).

Figure 8: Principal Respondents, school received adequate funding for case investigation and contact tracing, by grades served

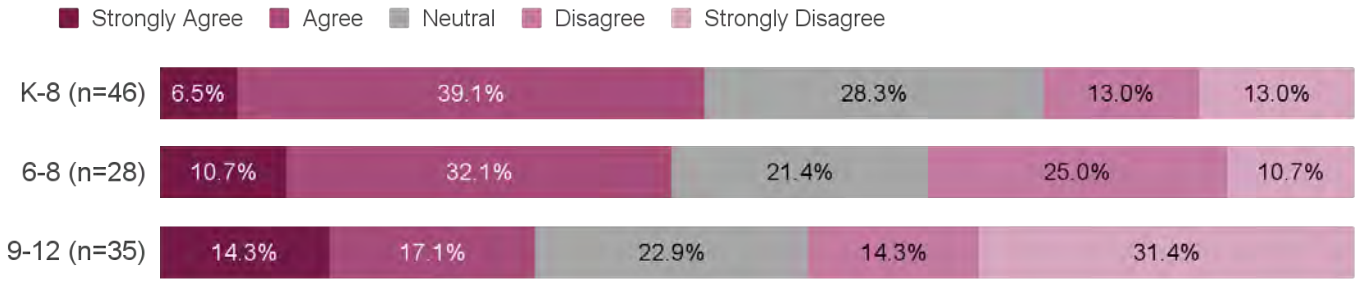
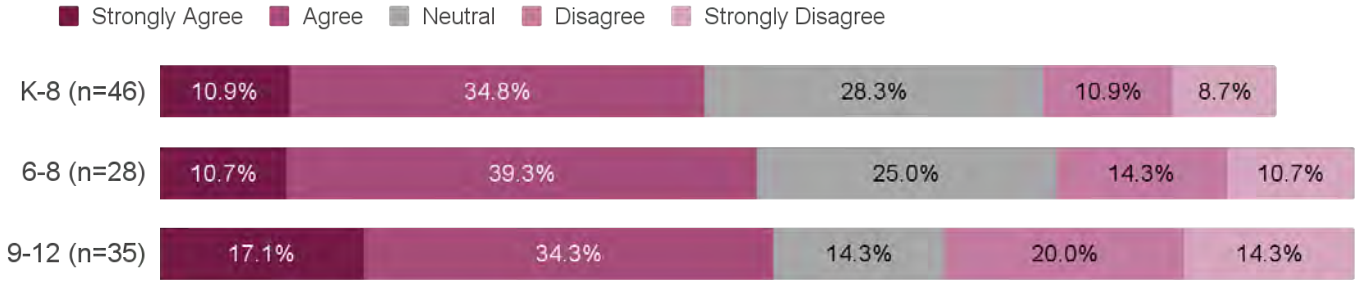
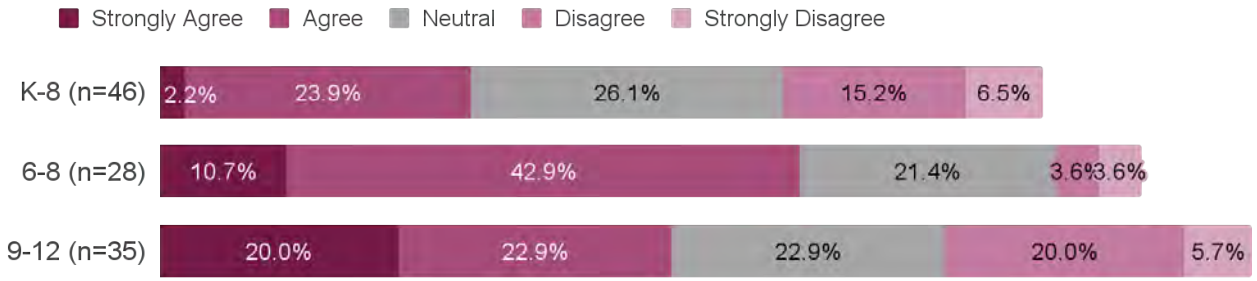


Figure 9: Principal Respondents, school received adequate funding for COVID-19 testing, by grades served*



*The response option “N/A, My school did not engage in these activities” was not included in the data visualizations, so not all rows will equal 100%.

Figure 10: Principal Respondents, school received adequate funding for COVID-19 vaccination, by grades served*

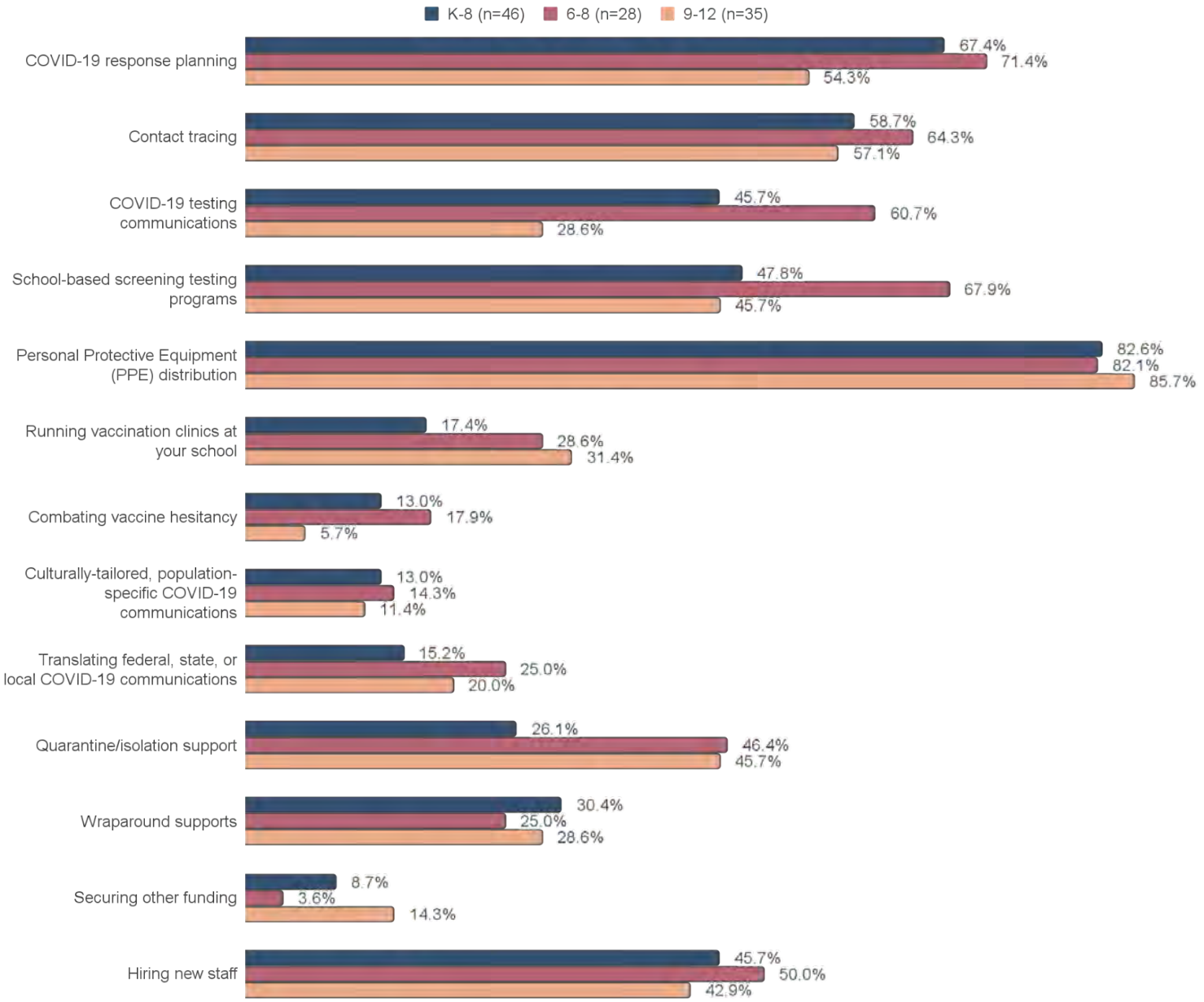


*The response option "N/A, My school did not engage in these activities" was not included in the data visualizations, so not all rows will equal 100%.

Funded COVID-19 response activities

Figure 11 is a clustered bar chart showing the ways Principals reported their school used their COVID-19 funding. Nearly all respondents (83.5%, n=91) reported spending COVID-19 funding on personal protective equipment (PPE) distribution. The most frequently reported ways schools responded to the pandemic were the same for all respondent groups, although in slightly different order. Principals at schools serving K-8 graders most frequently reported they used COVID-19 funding for: PPE distribution (82.6%, n=38); COVID-19 response planning (67.4% n=31); contact tracing (58.7%, n=27); and school-based screening (47.8%, n=22). The most frequently reported activities for Principals at schools serving 6-8 graders were: PPE distribution (82.1%, n=23); COVID-19 response planning (71.4%, n=20); school-based screening (67.9%, n=19); and contact tracing (64.%, n=18). And for Principals at schools serving 9-12 graders, the most frequently reported ways they utilized COVID-19 funding were: PPE distribution (85.7%, n=30); contract tracing (57.1%, n=20); COVID-19 response planning (54.3%, n=19); and school-based screening and quarantine isolation support (45.7%, n=16). The most variation in use of COVID-19 funds by grades served was seen for using funding to secure additional funds, with 8.7% (n=4) of Principals at schools serving K-8 graders, 3.6% (n=1) of Principals at schools serving 6-8 graders, and 14.3% (n=5) of Principals at schools serving 9-12 graders reporting that as a use of their COVID-19 funding.

Figure 11: Principal Survey Respondents: How COVID-19 funding was utilized in schools, by grades served



Barriers to use of funding

Figure 11 is a clustered bar chart showing barriers experienced by survey respondents by grades served. The top barriers reported varied some depending on grades served. The most frequently reported barriers to the use of COVID-19 funding experienced by Principals at schools serving K-8 graders were: hiring new employees (37%, n=17); spending requirements for funding source (21.7%, n=10); and school/district administrative requirements and reporting requirements associated with the funding source (17.4%, n=8). The top two most frequently reported barriers experienced by Principals at schools serving 6-8 graders were reporting requirements (32.1%, n=9) and hiring new employees (28.6%,n=8); three barriers tied for 3rd place: the time it took to receive funds, spending requirements, and school/district administrative requirements (21.4%, n=6). And for Principals at schools serving 9-12 graders, the most frequently reported barriers to efficient use of COVID-19 funds were: spending requirements (37.1%, n=13); length of time it took to receive funds (28.6%, n=10); and reporting requirements (25.7%, n=9). The frequency of receiving funds was the least reported barrier among all Principal survey respondents.

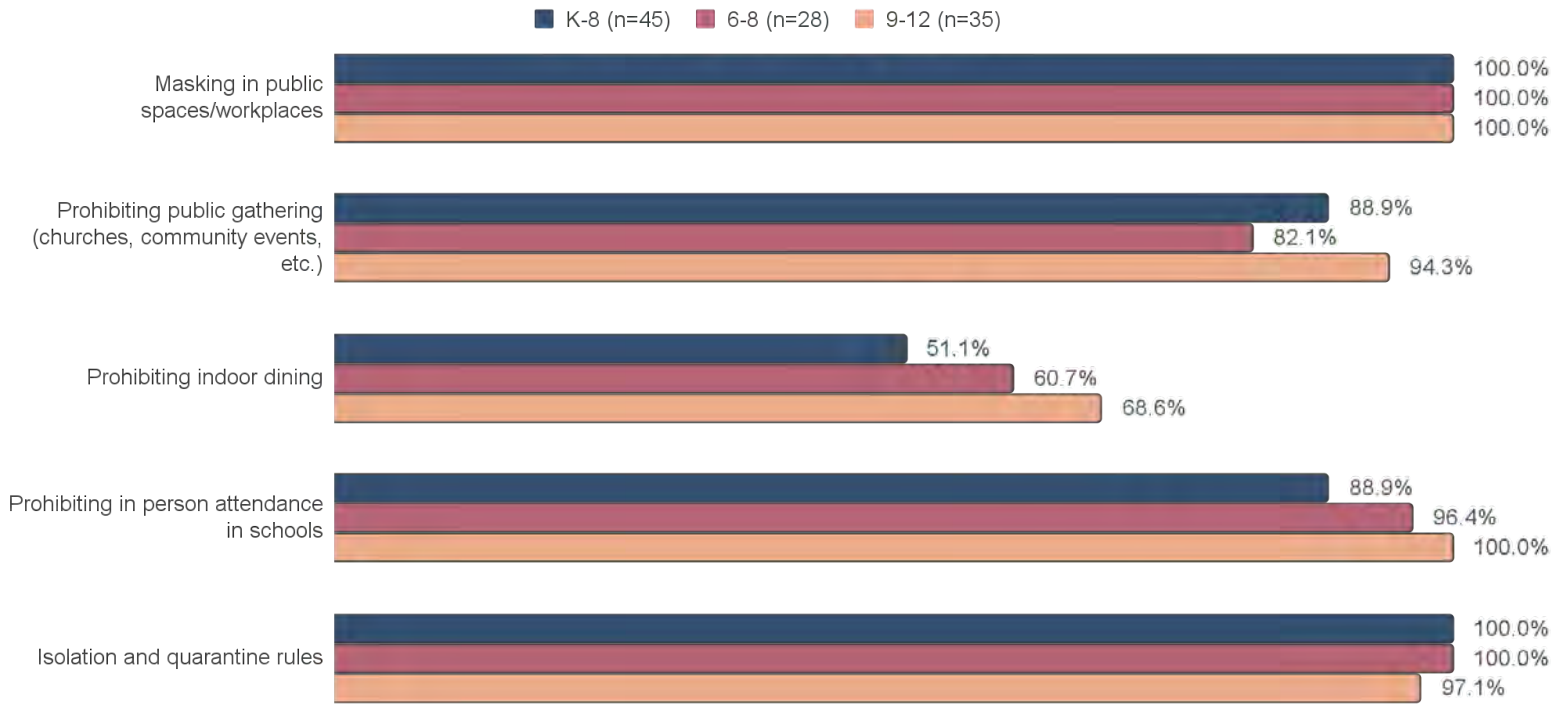
Figure 12: Principal Survey Respondents: Barriers to the efficient use of COIVID-19 funding, by grades served

Public health requirements

Policies adopted

Figure 13 is a clustered bar chart showing what the types of public health requirements Principals reported their school adopted to reduce the transmission of COVID-19 by grades served. All survey respondents selected masking in public spaces/workspaces, all Principals at schools serving K-8 graders and 6-8 graders selected isolation and quarantine rules, and all Principals at schools serving 9-12 graders selected prohibiting in-person attendance in schools. The policy Principals least frequently reported they adopted was prohibition of indoor dining with about half of Principals at schools serving K-8 graders (51.1%, n=23), 60.7% (n=17) of Principals at schools serving 6-8 graders, and over two-thirds of Principals at schools serving 9-12 graders (68.6%, n=24) reporting that they adopted this public health requirement.

Figure 13: Principal Survey Respondents: Public health requirements adopted by schools, by grades served



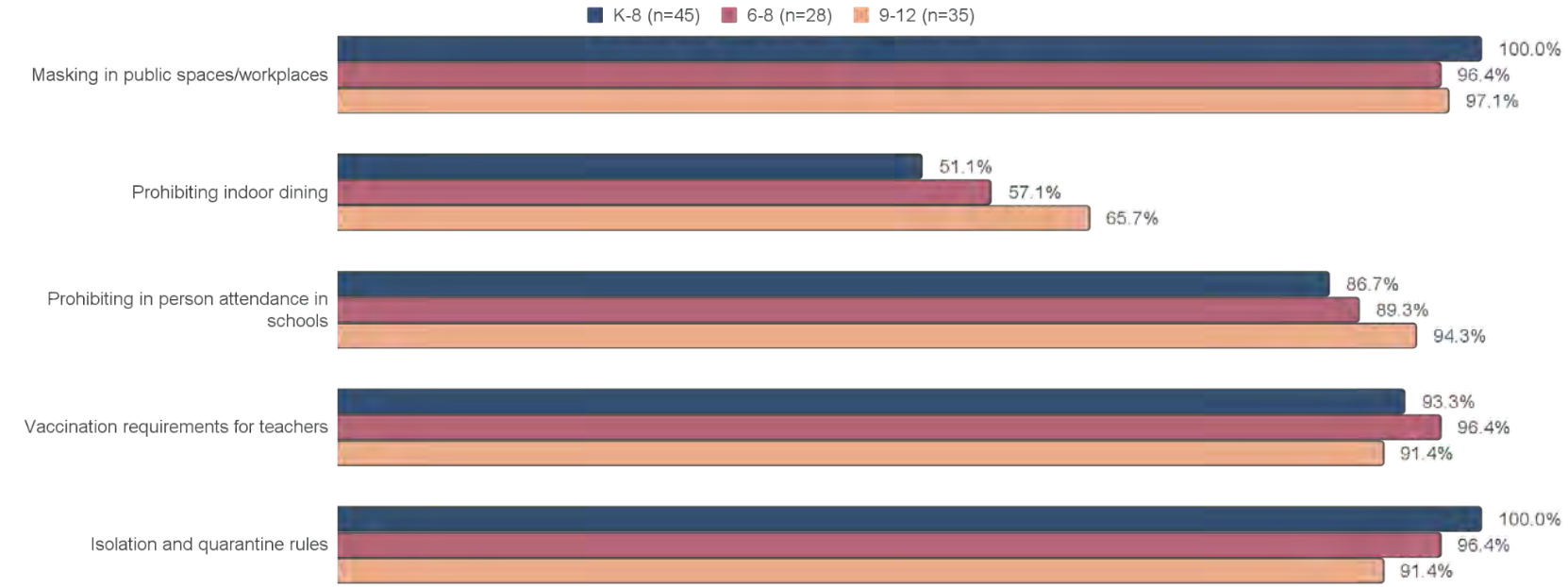
Enforcement of public health requirements

Survey respondents were asked to report which public health requirements they enforced to see if there was a difference in how schools enforced requirements that schools adopted and requirements that state and local governments adopted. Figure 14 displays enforcement of school-adopted requirements and Figure 15 displays enforcement of government-adopted requirements. Enforcement did not vary much based on who adopted the public health requirements.

School-adopted public health requirements

Figure 14 is a clustered bar graph displaying reported school-level enforcement of public health requirements that schools adopted by grades served. The majority of respondents reported enforcement of their school policies, with prohibitions on indoor dining being the least enforced.

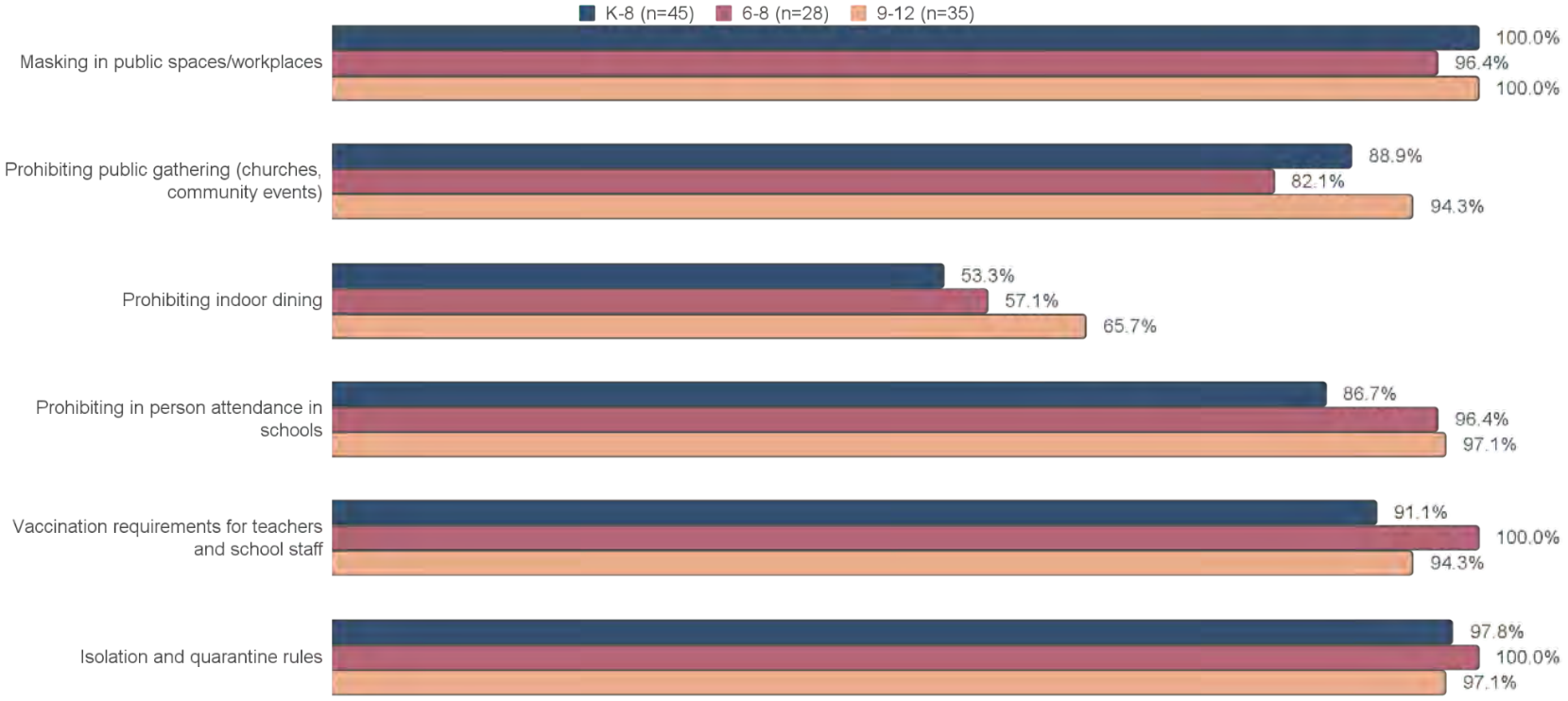
Figure 14: Principal Survey Respondents: Enforcement of school implemented public health requirements, by grades served



Local and state adopted public health requirements

Respondents were also asked if they enforced any of the public health requirements adopted by state or local governments. Figure 15 is a clustered bar graph that displays which government-adopted public health requirements Principals reported their school enforced by grades served. The majority of survey respondents reported fairly high levels of enforcement of government requirements regardless of which grades they served, with the prohibition on indoor dining being the least likely to be enforced.

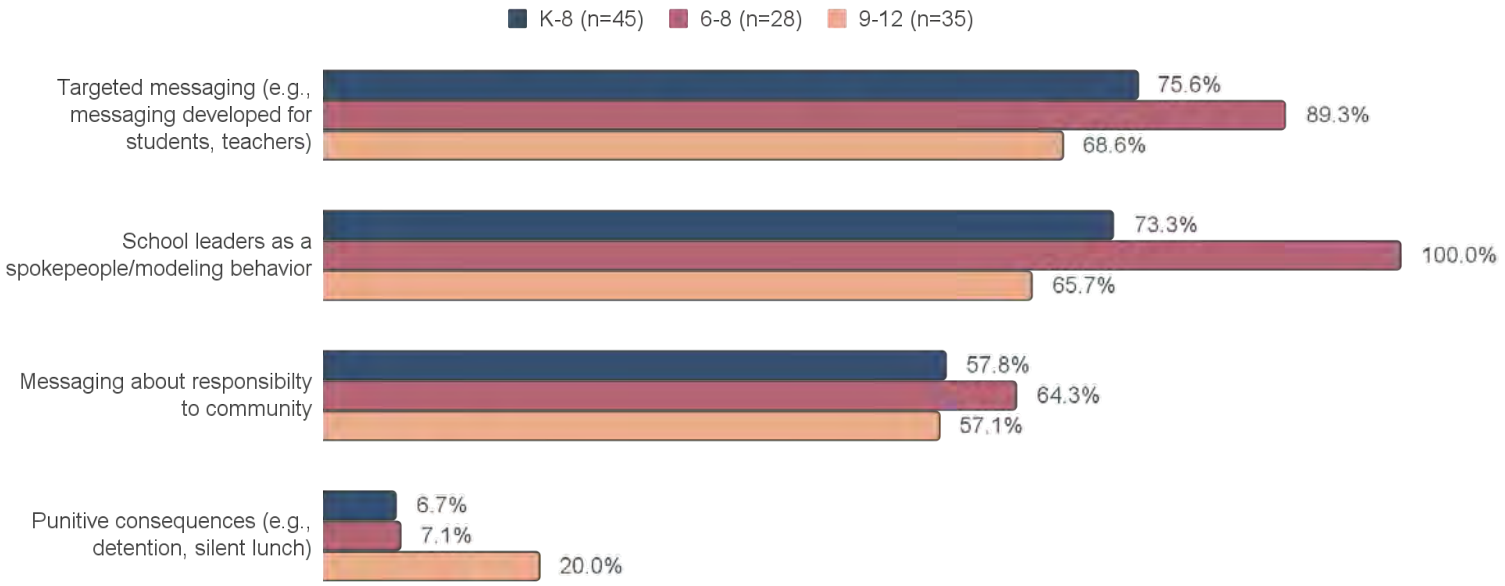
Figure 15: Principal Survey Respondents: Enforcement of government implemented public health requirements, by grades served



Enforcement strategies

Figure 16 is a clustered bar chart displaying the types of strategies survey respondents identified as most effective for enforcement of COVID-19 public health requirements. Patterns were pretty similar across all respondents, although the most frequency selected strategy by Principals of schools serving 6-8 graders was school leaders as spokespeople (100%, n=28) compared to Principals of schools serving K-8 graders and 9-12 graders who selected targeted messages as the top strategy at 75.6% (n=34) and 68.6% (n=4), respectively. Few respondents selected punitive consequences, with Principals of schools serving 9-12 graders (20.0%, n=7) most likely out of the three grade groups to select this as an effective strategy. Three Principals of schools serving K-8 graders (6.7%), and two Principals serving 6-8 graders (7.1%) reported this strategy.

Figure 16: Principal Survey Respondents: Most effective strategies for enforcement of public health



Key Findings

1. Similar variation in effective strategies for enforcement were seen by grade level served.
2. Principals of schools serving 9-12 grades more frequently reported punitive consequences as an effective enforcement strategy than Principals of younger grades.
3. Schools used COVID-19 funding for an array of pandemic response activities, although there were differences in use of funds by grade level served.
4. Schools also experienced challenges with funding during COVID-19 pandemic response:
    a. Staffing challenges, lack of adequate funding, and lack of training in emergency preparedness were most frequently reported as barriers for Principals of schools serving K-8 graders.
    b. Regardless of grade level served, most Principals reported inconsistent guidance as a barrier.
5. Schools used COVID-19 funding for an array of pandemic response activities, although there were differences in use of funds by grade level served.
6. Education sector study participants reported numerous successes with COVID-19 public health messaging and communication, including creating clear messaging (e.g., meetings, signage, exposure letters) and translation of materials across multiple languages.

Recommendations

1. Build out and invest in comprehensive emergency preparedness for schools to incorporate pandemic-level events, training for school administrators, and frequent EOP updates that are tailored to take into account the unique needs of each school community.

    a. Newer administrators, as well as schools who do not have as many emergency preparedness resources, may need additional resources to ensure they are fully prepared to respond to future public health emergencies.

2. Ensure technical assistance availability at the school-level, data availability at local levels that includes sub-population data

and corresponding TA.

3. Ensure adequate resources for contact tracing and case investigation at the school-level; different schools may require additional resources for these specific efforts.

4. Consider public health mandates and associated guidance for future public health emergencies that are flexible to allow for local school authority and decision-making regarding school closures.

5. Similarly, when enforcing public health mandates, allow decisions about enforcement strategies to be made at the school level to utilize appropriate strategies tailored for the school population(s) served.

Appendix D:
Migrant + Seasonal Farmworker Supports in Response to COVID-19

Introduction

"We recognize that this pandemic has been especially cruel in the disproportionate impact among front line workers, and in the Black, Hispanic, Native American, Pacific Islander, and seasonal worker population." - LPHA, Equity Plan

Farmers and farmworkers are essential to maintaining the food supply, and were deemed as essential workers during Oregon's public health response to the COVID-19 pandemic.[1] In March of 2023, there were an estimated 174,000 migrant and seasonal farmworkers (MSFWs) and their families in Oregon.[2] Farmworkers experienced numerous inequities throughout the pandemic response, and have been found to have a four times higher incidence of COVID-19 infection than non-farmworkers.[3,4] Health disparities among farmworkers are related to social determinants of health, including housing that is often crowded, long hours and a lack of paid time off, limited access to health care and some public benefits, and other challenges related to immigration status and mistrust in the government.[2,5]

[1] On March 23rd, 2020, Governor Kate Brown issued Executive Order 20-12, which directed the closure of non-essential businesses, and included a non-exhaustive list of businesses to remain open. On July 8th, 2020, the Department of Consumer and Business Services issued a memo providing guidance on identifying "essential" businesses and employees to remain in operation during the pandemic response, including a list of essential services created by the U.S. Cybersecurity and Infrastructure Agency. "Farmers, farm and ranch workers, and agribusiness support services" are listed as essential on page 8 of this list (page 11 of the document). The memo can be accessed here: https://www.oregon.gov/dcbs/mlac/Documents/2020/070920/070920-memo-essential-workers-businesses.pdf

[2] Much of the information in this introduction was included in the Protecting Oregon Farmworkers Program Report dated March 2023 and provided to Rede by OHA in draft form to provide additional context about the program and support this analysis.

[3] Boggess, B. et al. 2023. CDC-Supported National Network of Farmworker-Serving Organizations to Mitigate COVID-19. *Am J Public Health.* 113(2): 166-169. doi.org/10.2105/AJPH.2022.307159.

[4] Mora AM, Lewnard JA, Kogut K, et al. Risk Factors Associated With SARS-CoV-2 Infection Among Farmworkers in Monterey County, California. *JAMA Netw Open.* 2021;4(9):e2124116. doi:10.1001/jamanetworkopen.2021.24116

[5] Boggess, B. et al. 2023. CDC-Supported National Network of Farmworker-Serving Organizations to Mitigate COVID-19. *Am J Public Health.* 113(2): 166-169. doi.org/10.2105/AJPH.2022.307159.

Many state and local organizations in Oregon came together to protect the health of migrant and seasonal farmworkers (MSFWs) during the COVID-19 pandemic. Through Oregon Health Authority (OHA), local public health authorities (LPHAs) and community-based organizations (CBOs) used multiple funding sources to support their work with MSFWs. Over 170 CBOs received health equity funding to reduce health disparities among numerous populations in Oregon, including MSFWs. In June 2020, OHA's Community Partner Outreach Program (CPOP) worked with community and state agency partners to create the Protecting Oregon Farmworkers (POF) grant program. The POF grant program was made up of 22 Community Partner (CP) organizations, including nonprofits, Federally Qualified Health Centers, and one LPHA. Funding for the POF grant program initially came from Cares Act dollars to fund the Food Security and Farmworker Safety program, established by Governor Kate Brown to protect Oregon's food supply during the public health emergency and Oregon's agricultural and food processing workers. In June of 2021, CPOP requested and was awarded an additional 10 million in FEMA funding. In total, POF grantees have been awarded approximately 13 million in emergency funds through CPOP. The POF program officially ended on June 30, 2023, but many organizations continue to serve this population. Throughout the pandemic response, LPHAs coordinated with CBOs who received equity funding and POF grant dollars, and they also developed and submitted county-wide COVID-19 equity plans detailing their efforts to equitably support all residents in their communities, especially those most vulnerable to COVID-19.

Throughout Oregon's public health response to the COVID-19 pandemic, OHA, CBOs, LPHAs, and other organizations worked together to provide health education, personal protective equipment (PPE) and other supplies, testing, vaccines, wraparound supports, and other supports to MSFWs. The findings below summarize the types of support provided by some of these organizations as described in interviews and reports, but is by no means an exhaustive account of all support provided to MSFWs over the course of the public health pandemic response.

Methods

To better understand and describe the supports for MSFWs provided by local health departments and CBOs in partnership with OHA, Rede:

1. Conducted interviews with five POF grantees, asking about the supports they provided to MSFWs, the challenges they faced, and other aspects of their role in the pandemic response as it related to MSFWs.
2. Reviewed six quarterly activity reports from CBOs receiving health equity funding, with a focus on their efforts with MSFWs.
3. Reviewed 30 COVID-19 equity plans from LPHAs, with a focus on their efforts with MSFWs.

Interviews with POF grantees

Rede received a list of 22 Protecting Oregon Farmworker (POF) grantees from OHA and sorted them into geographic Regions 1-5 based on their service area, and then conducted a random sample to select one grantee from each region to interview. The contact from Region 5 was unresponsive, and there was not another to select. One contact from Region 1 was initially unresponsive, so another was selected and responded. During data collection, the initial contact for Region 1 also responded, so they were included in the data set. The final data set included two grantees from Region 1, one from Region 2, one from Region 3, one from Region 4, and none from Region 5.[6] Interviews were transcribed and uploaded to Dedoose qualitative analysis software for thematic coding and analysis. Key themes related to services and supports provided to MSFWs, greatest challenges, greatest contributions, and lessons learned are summarized in the findings below.

[6] For this study, counties were divided into five regions. Oregon's Emergency Management regions were modified to include at least five counties in each region to support the confidentiality of study informants. See Report 2 for more information about how these regions were used in the study. The regions from Oregon Emergency Management adapted for this study can be viewed here: https://www.oregon.gov/oha/PH/PREPAREDNESS/PARTNERS/Documents/AllState.pdf

CBO activity reports

CBOs receiving health equity funding were required to submit quarterly activity reports describing their efforts to improve health equity in their pandemic response activities. Rede received a total of six reports from OHA dated from Quarter 3 of 2020 to Quarter 2 of 2022. Two reports were sent with the complete, raw data. Four reports were sent only with OHA's analyses in the form of slide decks or spreadsheets with limited questions included. Each report was reviewed for potential relevance to MSFWs, and all responses specifically mentioning migrant seasonal farmworkers or farmworkers in general were included in analysis. Because some of the later reports came with limited data, and the questions and response options seemed to change slightly in later reports, analysis of some questions was not possible for the full reporting period. From these reports, it appears that around 174 CBOs were receiving this funding, and from late 2020 to mid-2022, an average of 74 CBOs were using these funds to serve MSFWs at any time (range 39 - 93).

LPHA COVID-19 equity plans

In 2021, LPHAs were required to submit COVID-19 equity plans to OHA, detailing their efforts to reduce health disparities in their response to the COVID-19 pandemic in their counties. OHA provided plans from 30 LPHAs to Rede for analysis, with dates ranging from May to November of 2021. Plans were reviewed and analyzed for any mention of providing education, services, supplies, or other supports to agricultural workers. Rede reviewed specifically for support provided to MSFWs, but included excerpts speaking generally about agricultural workers, assuming that MSFWs would also be included in this group. Plans were uploaded to Dedoose for thematic coding and analysis, and key findings are summarized below.

Synthesis

Findings and recommendations below are synthesized across data collection sources (interviews and reports).

Findings

Reaching migrant and seasonal farmworkers

In their equity plans, most LPHAs referenced surveys they created and distributed to employers, emphasizing places that were most known for hiring migrant and seasonal workers (MSFWs), to inform them of events and resources available to support COVID-19 precautions, testing, and vaccination at work sites. Some LPHAs also described that they had already been working to support MSFWs, and were able to utilize existing relationships and networks to support them during COVID, especially to provide vaccines and information in languages other than English (primarily Spanish).

> "We had developed our own survey and assessment targeted to employers, business partners, and specifically workplaces such as fisheries, fish plants, and agricultural employers. We are using the data we collected to outreach to these places and ensure we offer specific events as well as provide information about the events that are available to their staff and employees to attend." - LPHA, Equity Plan

> "In [our region] there has historically been significant cooperation and coordination of efforts around Migrant and Seasonal Farm Workers and health equity issues, and this continues regarding vaccine outreach." - LPHA, Equity Plan

However, a few LPHAs reported little to no success reaching migrant and seasonal farmworkers. To identify ways to improve their outreach to MSWFs, some LPHAs reported convening planning groups with their CBO partners to strategize and boost access to supplies and services like testing and vaccination among this population, which was reflected in the CBO activity reports as well.

> "We have tried reaching out to migrant and seasonal farmworkers via their associations and employers without success." - LPHA, Equity Plan

> "In preparation for the summer and fall harvests, in May 2021, [our county] convened a Migrant Seasonal Farmworker/Agricultural planning group that meets weekly to identify gaps in outreach efforts and steps moving forward to close the gaps." - LPHA, Equity Plan

> "We were part of a task force that focused on migrant and seasonal farm workers coming into [our] county to program vaccine opportunities and also testing." - CBO Activity Report

According to the CBO activity reports and the POF interviewees, CBOs also experienced challenges trying to reach and build relationships with the MSFW population, at least initially. In activity reports, CBOs said there was a learning curve in making engagement accessible (especially in virtual settings), making connections across cultural and linguistic differences, and building trust among a population that may have negative perceptions or lived experiences with government and other unfamiliar organizations. Similarly, although many POF interviewees reported that they were trusted by migrant and seasonal farmworkers in their area, some reported that they had some initial difficulty convincing them that vaccines and other public health services were safe to use. They also had some difficulty gaining trust and/or cooperation from some of the farm employers, with negative reactions ranging from slight hesitance or skepticism, to noncompliance with COVID-19 public health mandates and farmworker protections.

> "Starting in spring, one of our community health workers took the lead to start developing connections with a large farm that employs many Spanish and Mam-speaking individuals. The process of establishing a connection was difficult... [however,] our community health worker was able to identify and understand the barriers that were making it difficult to establish a relationship with the farm. Step by step, she established trust with the employers and was able to schedule a visit to the farm and that visit will lead to a health fair we are having in [Region 2], in partnership with [the local] health department. The lesson learned from this experience is that

when working with the Latino immigrant community, there are sometimes institutional barriers (in this case, the farm company administrators) that make it difficult to reach out to people. However, through dedication and establishing trust, those barriers can be overcome. We are confident that because of the efforts of this community health worker, and her capacity to establish partnerships, our organization will now start playing a more active role working with the farmworker population in this area, something that is very much needed." - CBO Activity Report

"We began with outreach at the farms, going into farms. Getting that permission to enter a farm was really difficult just because as a farm owner, you're... Skeptical? In letting an organization join or come into your workplace. It's like, 'Oh my God, what are they going to tell my workers?' That was a big challenge we faced, getting permission to enter the farms, to be able to talk directly to the farm workers… But then with time, also, one of our board members, a previous board member, helped us a lot with... He knows a lot of the farmers so he spread the word and that is how we got permission to enter the workplaces." - POF Interviewee

"Persuading them to get vaccinated? That's been hard… So, it's been challenging to convince people to come get these services, and it's free. And we're not immigration. We're not law enforcement. We're not going to charge you. This vaccine works and it's safe for you. I mean, we've had to explain or try to demystify these myths that... Who knows where they originated from, but just persuading the community has been really challenging." - POF Interviewee

Despite some challenges gaining access to and establishing trust among MSFWs, most POF interviewees believed that their separation from the local and state government accelerated relationship-building with farmworkers and allowed them to provide services to many more people than they would have been able to otherwise.

"...Our monthly PPE events, vaccine events we have been doing in our office have been a tremendous change. Like [another interviewee] mentioned, there's state and county-wide, having events weekly or biweekly and they

don't get the same results we get in a month. That just shows the trust the farm workers and the community have with [Latinx serving CBO]. So that's something I think is big" - POF interviewee

"I feel like in this situation of the Pandemic we saw the importance of the work that non-profit organizations do in the community. The [NW Oregon City] community members have trust in the organizations. I feel like they trust us and what we are saying because they know what we say is not going to hurt them. Many of them do not believe in the assistance from the government because of the consequences around illegal immigration that they could have in the future. Sometimes when you request a service certain rules are not specified so many of them questioned if the financial assistance would harm them. The majority of the questions were about immigration status, so removing the barriers and making everything transparent and communicating that in the work we do is very important." - POF Interviewee

Supports provided to MSFWs

LPHAs, POF Interviewees, and Equity-funded CBOs supported all aspects of the public health response to COVID-19. The key activities highlighted in the reports and interviews analyzed by Rede include the dissemination of COVID-19 health communications; testing; hosting and supporting vaccination events; providing wraparound supports like food boxes; and connecting MSFWs to other resources in the community.

Early COVID-19 communications and health information

During Stage 1 (Mar. - Nov. of 2020),[7] POF interviewees primarily focused on training their staff and getting information about the COVID-19 virus out to farmworkers. They attended webinars, tried new engagement methods

[7] In an effort to acknowledge the transformation of the COVID-19 pandemic, and thus Oregon's public health system response to the pandemic, the study team developed a framework separating the pandemic into four distinct stages that are referenced throughout these findings. See page 22 of this appendix for more information and a graphic depicting the stages.

like radio ads, and developed multilingual information sessions to deliver to farmworkers at their worksites and other community hubs, like local markets. Some interviewees also began to offer testing. In CBO activity reports, respondents reported that they conducted outreach at worksites as well, specifically "in the orchards and packing houses."

> "At the very beginning, the role was to understand COVID and amplify crucial information from Oregon Health Authority as well as the CDC in Spanish and in relevant platforms, beginning with radio all the way to one-on-one conversations with the community so that people could begin to understand what COVID was, begin to understand that there was opportunity to protect themselves with masking and sanitizer and testing. That was stage one." - POF Interviewee

> "So, we would just learn as much as we could from the OHA webinars and Zoom meetings. Then we would take that information and we developed workshops, essentially, verbal workshops. So, our staff put together quick presentations that they would then take with them, go visit workers at their places of employment." - POF Interviewee

> "We are equipping trusted community members with accurate information so they can serve as vaccine ambassadors." - LPHA, Equity Plan

> "Community health workers have been conducting onsite presentations for agricultural workers centered on vaccine information and COVID-19 safety" - LPHA, Equity Plan

On-site vaccinations

LPHA equity plans, POF interviewees, and CBO activity reports all highlighted the importance of "meeting people where they're at" to build trust and confidence in supplies, testing, and vaccines among MSFWs. This strategy was

especially important for distributing vaccines, as MSFWs face many barriers to accessing off-site vaccine clinics (away from work and housing sites), including language barriers, long working hours, and fear or mistrust in the government or the health care system. Many LPHAs, POF interviewees, and CBOs formed partnerships to leverage organizations that were already seen as trusted messengers among MSFWs to boost vaccine confidence, giving information sessions at the work sites and other community hubs. POF interviewees also noted that the one-dose Johnson and Johnson vaccine worked best for MSFWs, who are often not in one area long enough to complete the multi-dose series.

> "In partnership with [a health center] and [a CBO], we coordinated on-site vaccination events at all of the largest agricultural employers in [our county], as well as more targeted events for smaller agricultural employers…By offering vaccinations in the field and on job sites, we and our partners have been able to vaccinate individuals who otherwise would not have had the opportunity given the financial impact of missing work." - LPHA, Equity Plan

> "The [county mobile clinic] has been an unbelievably valuable resource. CBOs, community leaders, and farm sites reach out to register, and/or host small and mobile vaccination events for highest risk and underserved populations." - LPHA, Equity Plan

> "Stage two [Dec. 2020 - Aug. 2021], we started carrying the Johnson & Johnson vaccine because we felt that that was the best at the time with the information we had for the one and done vaccine status, especially since most of the clients coming into the area were not going to be here for more than three or four weeks, so trying to get them a double dose was going to be too difficult." - POF Interviewee

> "[We have] held many drive through clinics; and gone to farms where migrant workers are, to administer vaccines." - CBO activity report

Information dissemination

Across Stages 2 and 3 (Dec. 2020 - Feb. 2022), POF interviewees reported bolstering their communications and outreach efforts, turning to social media, storytelling, and continuing to use radio and direct conversations with farmworkers to educate them on COVID-19 safety practices, testing, and vaccines. Many LPHAs partnered with CBOs in their county to disseminate information in other languages, primarily in Spanish and Mam. Throughout the study period, combating COVID-19 misinformation was a large part of POF interviewees' role, especially around the safety of the vaccine. One POF interviewee described a learning curve to building rapport and disseminating information among diverse groups of MSFWs.

> "Another challenge was understanding that the farm worker community is a very diverse community. We have people who have lived here for a long time. You have people who have grown up here. You have people who are fairly new. You have people who speak, at this point, we're working across eight languages. And so a very diverse community as we have many Mesoamerican indigenous language speakers here as well. And so then, how do we work with folks often without a written language, that means oral communication. And so, how do we find those leaders within the community who speak certain languages, working with them, build leadership with them so that they can be sharing in the right ways with communities. And we had a couple different approaches on that." - POF Interviewee

> "Promotional outreach included promotion on the radio show, promotion through social media. And increasingly had more and more outreach as we did video promotions and video promotions in multiple languages… We'd gather community stories on video in multiple languages from community members and then be sharing that out." - POF Interviewee

> "We also did Facebook Lives. So, we worked with our local health care providers. We asked public health, and even an OHA provider actually, we asked them, give us people that speak Spanish, and we would do live

interviews with them on Facebook. So, that gave them the opportunity to provide information in Spanish about the safety and effectiveness, and it gave the community the opportunity to ask their questions in real time. So, our team would have somebody doing the interview, and somebody checking the comments on the Facebook page, because we would tell people, "What are your questions? What are your concerns?" And as people sent those over, we would be answering them live through the Facebook Live." - POF Interviewee

"So that was a big role we played in letting the seasonal farm workers know the importance of the vaccines, why they need to get vaccinated, and clarifying the myths. Because around that time, there were a lot of myths, a lot of miscommunication. That was a role that we played, is just educating them on the vaccines and that they're safe." - POF Interviewee

Connecting MSFWs to resources and ongoing services

Stage 3 (Sept. 2021 - Feb. 2022) activities were largely a continuation of Stage 2; with most POF interviewees reporting that they provided testing services, helped people find and access vaccine clinics, and connected them to other resources in the community including emergency financial assistance and food boxes. In their equity plans, a few LPHAs reported distributing PPE and supplies to the farm work sites, or reaching out to farmworkers and their employers to let them know where and how to acquire PPE.

"We also added resource fairs to these vaccination events. And so that was a way for our community to have better access to the social services that they needed. Because throughout this process, we learned that our people don't know that there's financial assistance programs, legal assistance programs, housing assistance programs, et cetera, all the social determinants of health. We have barriers to access them. And so when farmworkers would come to our events, we would introduce them to organizations that have programs dedicated to supporting them. And so all of that supports their overall wellness." - POF Interviewee

> "We conducted the migrant outreach to the camps, and there, we offered both testing and vaccines… For another migrant camp area, we went and we did all the testing during migrant camps for them. We were also on call during both years by other smaller migrant camps to just go out and do testing for anyone that was symptomatic and whatnot." - POF Interviewee

> "The mobile vaccination unit… sets up every Sunday at [a local market], a social hub for the local Latino/a/x community. ... CBOs work alongside the mobile unit to provide outreach services and resources including food boxes and gift cards as incentives to bring people in. Seasonal workers have been bussed in to mobile events to close equity gaps. ODHS [Oregon Department of Human Services] has attended events and provides information about health services." - LPHA, Equity Plan

> "At one point PPE for the agriculture community was distributed through the OSU Extension Service. The PPE supply for [our county] ended up in [a neighboring county] with the rest of the regional supply. [Our county] worked with the Extension Service and those in the agriculture community to get the PPE where it was needed so they could pick up supplies locally and not have to travel (a barrier) to obtain these needed supplies. We reached out to both the employers (through the Extension Service) and the workers (through the interpreters) to make sure they knew there was PPE supplies available to them. If they were not able to come into [the county] to pick up the supplies the Extension Service field staff would deliver it to them." - LPHA, Equity Plan

POF interviewees reported that by Stage 4 (Mar. - Jul. 2022) they had solidified their processes for providing testing, vaccinations, and connections to additional resources. Toward the end of the study period, POF interviewees reported continuing to offer vaccinations, supporting MSFWs to acquire home testing kits, and distributing PPE.

> "Oh, I forgot to mention, at this point now, also when the home test kits became available, that was another big priority for us. We received testing kits in large quantities, both from OHA and through our public health department. And so we've been distributing them. We'll just call churches and say, "Hey, we have home test kits.

You want some?" And we'll just leave them with a bunch, so that as their congregation needs, they can just grab one on their way home after church service. We'll leave some at the meat markets and the bakeries so that their checkout stands have free test kits. Apartment complexes, we'll do the same thing. When we go out and talk to workers, we always put together resource kits. So, they're just reusable bags. And we'll put testing kits, face masks, hand sanitizer, small PPE items, and then flyers for different resources that we think would be helpful to them. And so that's another way that we make sure people have information that they need." - POF Interviewee

"So stage four, we are still out there trying to reach workers, distributing PPE. We still do monthly community vaccination clinics. During all of this time, our organization has been the only one doing these community vaccine events. Even though people can now go to their doctor, the pharmacy to get vaccinated, we are the lowest barrier access point because we don't require vaccine appointments, we don't require insurance ID numbers or whatever, and we do them at convenient times… Because especially during the busy season, they're leaving work six, seven at night. And so to take some time off to go to the clinic, that impacts their pocket. And so that's why our work, we really try to organize our events around the worker's schedule, make it easier for them." - POF Interviewee

Challenges in providing supports

POF interviewees described some of the challenges they overcame while supporting MSFWS, including keeping their staff safe while providing in-person services which proved most effective to reach this population. Other interviewees highlighted that COVID-19 wasn't always the most visible or pressing emergency, as many farmworkers and their families were displaced by wildfires, and/or dealing with challenges related to their immigration status like navigating worker violations or staying connected to family members who are not in the United States.

> “It was certainly a challenge to have staff out in the midst of the pandemic exposed. And so how do we keep ourselves and our staff safe as they are doing activities within the community where the virus is?” - POF Interviewee

> “It wasn't just COVID-19 that we were fighting. It was the fires and the drought. There were other pieces on top of the complexity of COVID.” - POF Interviewee

> “I think for me in stage 3 and 4, it really was trying to get into farms. I think there was so much cold calling and farm owners that were interested in having us come by. But also, once we're inside, it's really hard trying to talk to somebody about COVID-19 when there's so many other things that they worry about. And so we're just like, here's a face mask. It's like, cool. But I also have this other worry about my family who's not here in this country or this worker violation that I'm trying to work through all that other stuff.” - POF interviewee

“Seeing” MSFWs

A few POF interviewees described their greatest contribution as supporting state and local public health in finally “seeing” MSFWs; meaning that they felt they finally had the resources to support this population that they described as having been long overlooked and/or underserved.

> “But I think our greatest contribution was letting workers know you're not alone, and there's an organization here to support you. Because beyond this COVID outreach work, we are essentially the hub of where you can go to get resource support in our county. And so people are now coming to us. We offer citizenship classes. We help people to enroll in the Oregon Health Plan. This month, in January, excuse me, we started to provide workforce training for youth. So, us being able to do this supportive outreach work to farm workers allows us to introduce our other programming that we offer. So, it's a way for us to address other issues that workers are facing.” - POF Interviewee

> "This is the first time that the government, the state of Oregon, and the federal government really considered farmworkers as essential workers in the midst of the pandemic. Yes, we need folks to continue to be in the fields, growing food, processing food for the country. The fact that we're recognizing that folks, their work, and their families as essential to the community needs to be continued in some way, some form. And within the Oregon Health Authority and the state overall, I think that particular community needs to be continued to be lifted up because they're often without resources, even though they are essential within our community, just as people, as well as workers." - POF Interviewee

Looking ahead

> "Well, as I've learned more about how state funding is available, I would really love to see, if there were more partnerships, that [could] be organized more as a contract. There are all kinds of contracts that the state makes, but they're for multi-year contracts. They're not tied to the biennial funding of the state budget. And so I would really love to see [a] partnership be developed that is equitable to what we bring to the table. If you're going to contract with a company to build a new bridge, that takes years to do. Why can't you provide funding for more than two years to organizations like us to do work that takes longer than two years to do? Because it's not equitable. We're doing work that benefits the well-being of Oregonians, but we have to jump through many more hoops than construction companies do to get access to state funding. So, that feels inequitable to me. And I know there's some state legislation that is being done to improve the relationship with nonprofits in the state when it comes to funding, but I would really like to see multi-year funding contracts and less of these bureaucratic requirements when it comes to reporting and accountability." - POF Interviewee

Most POF interviewees reported that their collaboration with local and state public health organizations was among their greatest contributions during the pandemic response. LPHAs also highlighted their partnerships with CBOs in

their county as a key strategy to reach and support MSFWs during the pandemic response. In their activity reports, CBOs noted that the increased funding allowed them to increase their capacity and reach many historically marginalized populations, including MSFWs, to improve health equity during the COVID-19 pandemic response. However, POF interviewees also suggested improvements to the administration of funding and contracts to facilitate future collaboration between OHA, LPHAs, and CBOs. A few POF interviewees reported that the frequency of the reporting took up a lot of the organization's capacity, and that longer-term contracts would be preferable, as many organizations also wished to prolong their collaborative relationships with OHA and LPHAs that were created or strengthened during the pandemic response.

> "I think the accomplishment was really making sure that the farm workers had resources, had PPE, knew where to go to get vaccinations, knew where to go to get care because Public Health really responded very quickly with making sure that they had access to their clinics." - POF Interviewee

> "The state has certain expertise and community-based organizations have certain expertise. Let's make sure we're using our different kinds of expertise effectively and collaboratively." - POF Interviewee

> "There's new infrastructure, there are new working relationships, relationships between the state and public health departments as well as with community-based organizations. And I think we need to continue that. And a big part of continuing that is continuing resources." - POF Interviewee

> "Well, I hope that this experience has shown the state that community-based organizations are a strong partner in public health work. Because we tend to hire our staff that are from the community, that fosters a sense of trust and a really strong relationship. We invest a lot of our energy in developing relationships with the community. That is the backbone of our work. And as community members, people are more willing to engage with us. Oftentimes, we had to be very clear that we are not the state, we are not there to enforce anything or get people in trouble. We had to say this message both to the workers and to their employers. And so the fact

that we're like a neutral organization allowed us to do this work faster, I think, than what the state could have done on its own." - POF Interviewee

"We are so grateful for this funding . It has made a real difference in the lives of many farmworker and immigrant families in [our] county. Our vaccine clinic has now given out over 4000 shots to a population that otherwise would have struggled to access the other vaccine clinics due to their hours of operation. Thank you muchooo!!!" - CBO Activity Report

Key findings + recommendations

Key findings

1. Through funding provided by OHA, CBOs and LPHAs supported MSFW communities by providing information/combating misinformation, testing services, vaccinations, emergency financial assistance, food boxes, and connections to other resources in the community.
2. CBOs were critical in supporting MSFWs in the COVID-19 response. Most CBOs believed that their separation from the local and state government accelerated relationship-building with MSFWs and allowed them to provide services to many more people than would have received services if they were not involved in the COVID-19 response.
3. One of the biggest barriers to providing COVID-19 supports to MSFWs was reaching them at times and locations that were tenable with their long working hours and limited time off and transportation. This was overcome by bringing the supports to MSFWs in the form of PPE deliveries, mobile testing and vaccination units, and information sessions at worksites.

Recommendations

Improve support to MSFWs by:

1. Continuing to nurture relationships between OHA, LPHAs, CBOs, farmers, and MSFWs to improve coordination in future public health emergencies and support health equity among MSFWs more broadly.

2. Embracing population-specific engagement methods, including radio, on-site information and services, and the use of trusted messengers such as CBOs with established relationships to MSFW communities.

3. Restructuring contracts and reporting requirements for CBOs to facilitate sustained relationships between OHA, LPHAs, and CBOs, and minimize administrative burden.

Stages of the COVID-19 pandemic

These findings reference stages of the COVID-19 pandemic developed by the study team at Rede at the beginning of this project (see page 20 of Report 1). As the study team gathered data from key informants and analyzed a wide array of documents, distinct stages of the pandemic began to emerge. In an effort to acknowledge the transformation of the COVID-19 pandemic, and thus Oregon's public health system response to the pandemic, the study team, after consultation with OHA, developed a framework separating the pandemic into four distinct stages. Although delineations between stages are imperfect, these stages provided a framework for analyzing public health system capacity, mobilization, and response alongside COVID-19 health outcomes. Figure 1 on the following page was used to describe the pandemic stages for qualitative research used in this study.

Figure 1. Stages of public health response to COVID-19 in Oregon

PUBLIC HEALTH RESPONSE TO COVID-19 IN OREGON

STAGE 1

MAR 2020- NOV 2020:

- Outbreak
- Disease investigation
- Implementing required public health protections (masking, distancing, shut downs)
- Preparing for vaccination

STAGE 2

DEC 2020- AUG 2021:

- Vaccination
- Disease investigation
- Enforcing public health protections
- Partial re-opening

STAGE 3

SEPT 2021 - FEB 2022:

- Vaccinations
- Re-opening
- Dealing with variants

STAGE 4

MAR 2022- JULY 2022:

- Total reopening
- No required public health protections (except in health care settings)
- Changes in investigative guidelines