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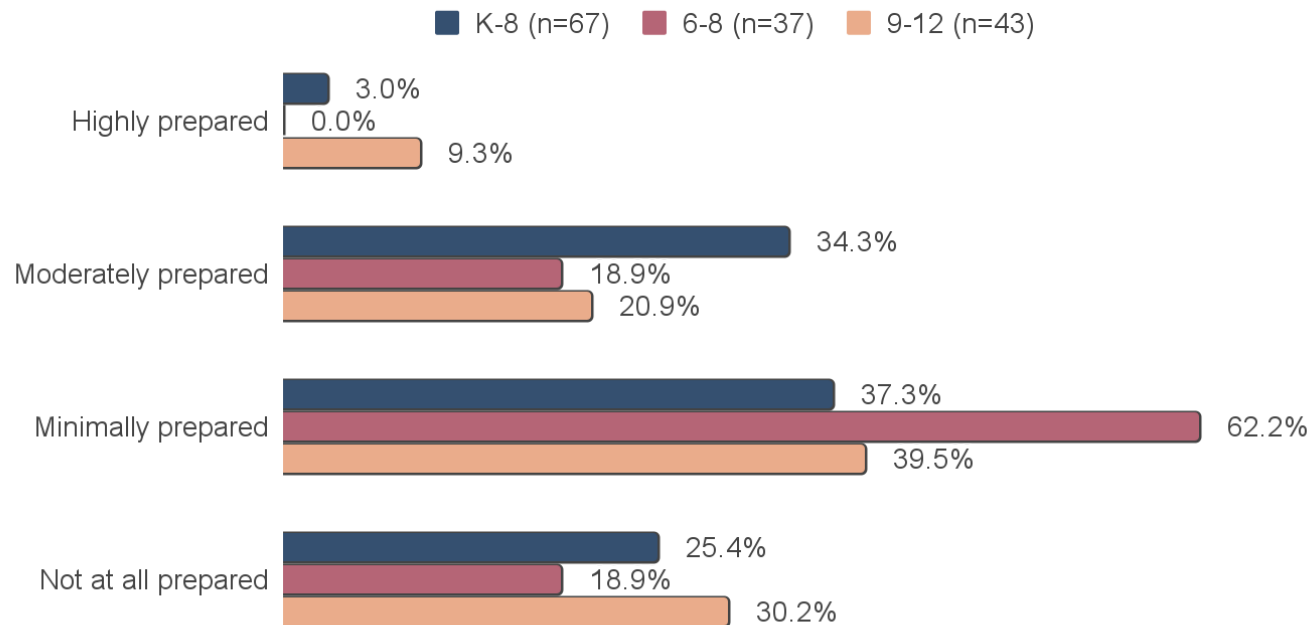
Grades	Principals
K-8	67 (39%)
6-8	37 (22%)
9-12	43 (25%)
Other	24 (14%) (not included in this report)

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

K-8 (n=67) **6-8 (n=37)** **9-12 (n=43)**

Highly prepared
- 3.0%
- 0.0%
- 9.3%

Moderately prepared
- 34.3%
- 18.9%
- 20.9%

Minimally prepared
- 37.3%
- 62.2%
- 39.5%

Not at all prepared
- 25.4%
- 18.9%
- 30.2%

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

Legend: ■ K-8 (n=67) ■ 6-8 (n=37) ■ 9-12 (n=43)

Highly prepared:
- 10.4%
- 10.8%
- 16.3%

Moderately prepared:
- 35.8%
- 40.5%
- 27.9%

Minimally prepared:
- 44.8%
- 35.1%
- 41.9%

Not at all prepared:
- 9.0%
- 13.5%
- 14.0%
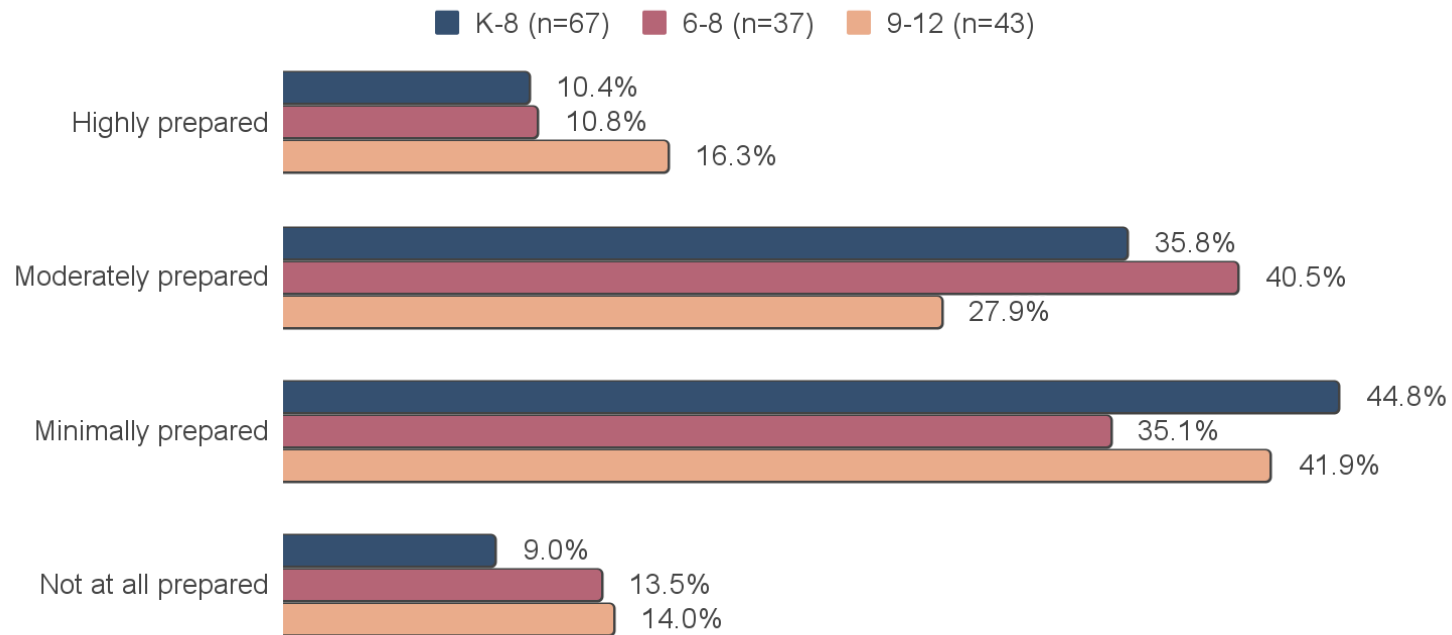
Preparedness for distance learning

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

K-8 (n=67)   6-8 (n=37)   9-12 (n=43)

Highly prepared
- 4.5%
- 8.1%
- 18.6%

Moderately prepared
- 26.9%
- 37.8%
- 16.3%

Minimally prepared
- 43.3%
- 29.7%
- 44.2%
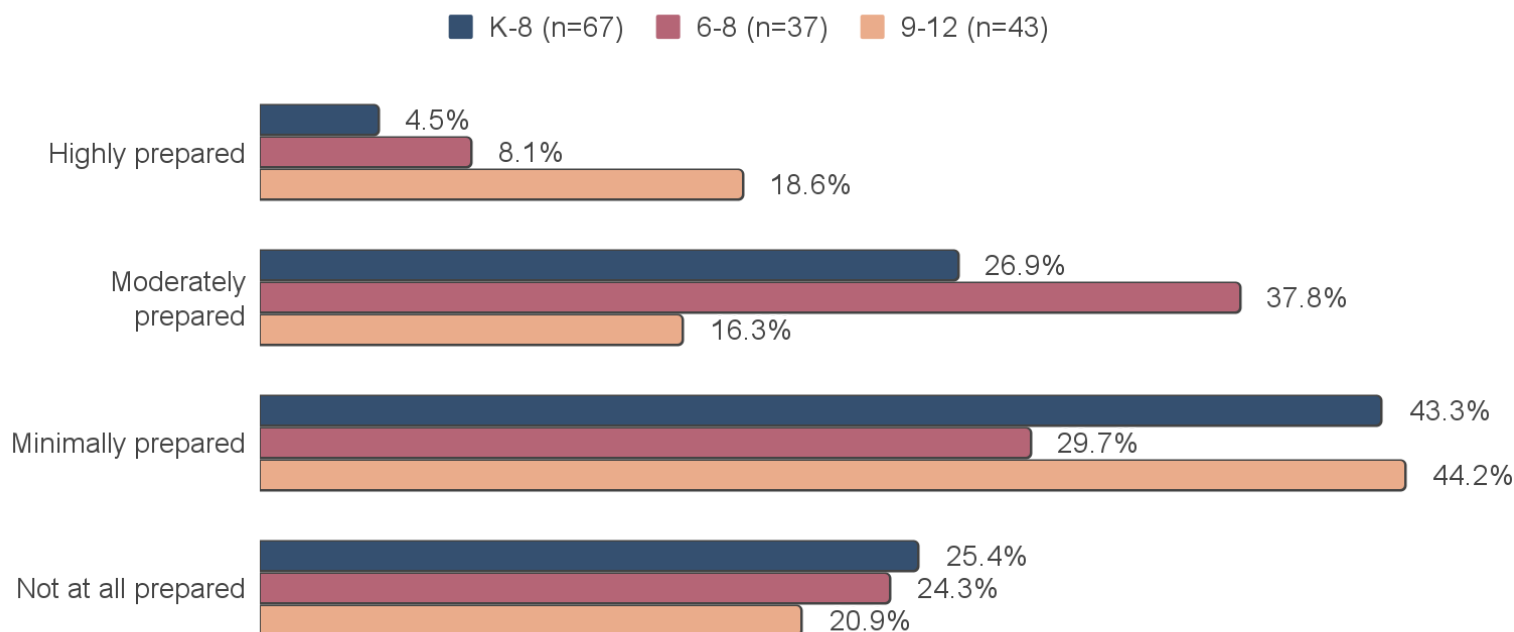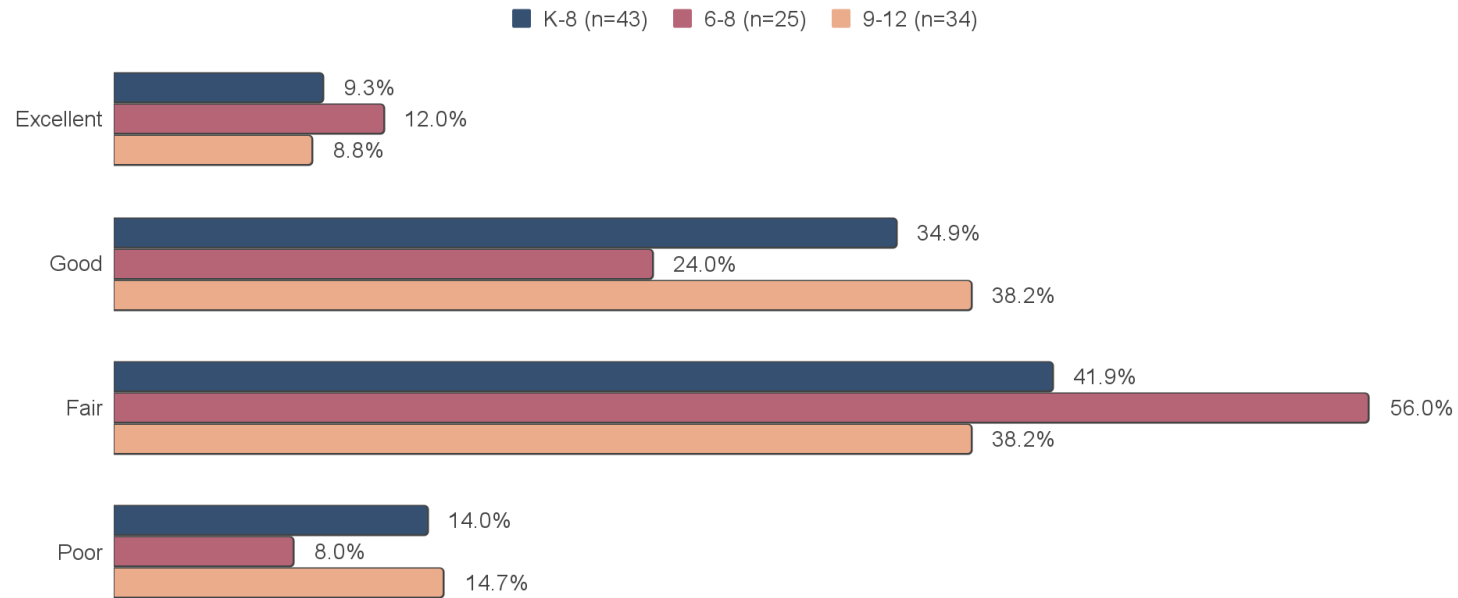
Not at all prepared
- 25.4%
- 24.3%
- 20.9%

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.

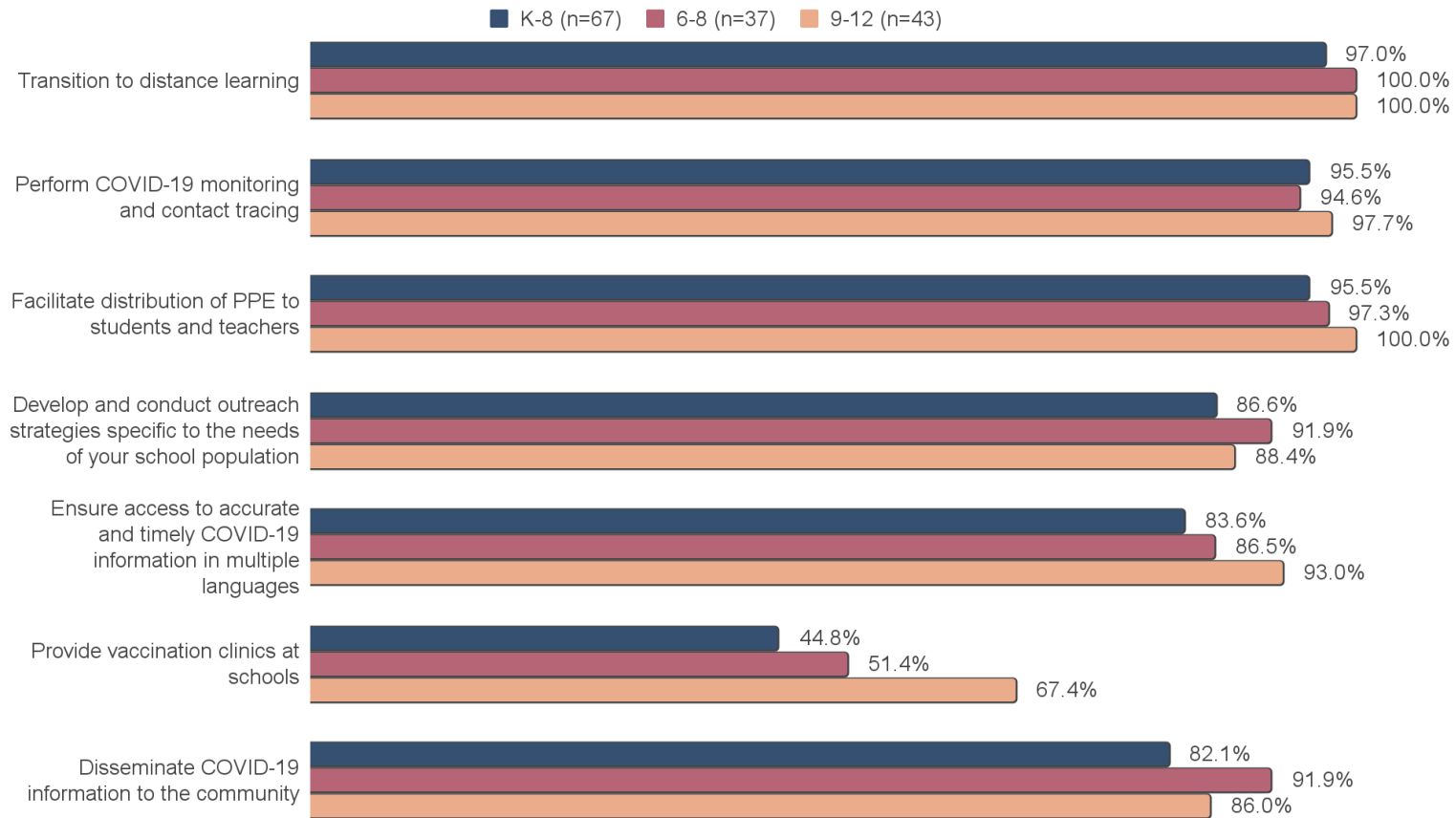Figure 4: Principal Survey Respondents: Evaluation of effectiveness of school delivery of distance learning,

Legend: ■ K-8 (n=43) ■ 6-8 (n=25) ■ 9-12 (n=34)

Response	K-8	6-8	9-12
Excellent	9.3%	12.0%	8.8%
Good	34.9%	24.0%	38.2%
Fair	41.9%	56.0%	38.2%
Poor	14.0%	8.0%	14.7%

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

Legend: ■ K-8 (n=67) ■ 6-8 (n=37) ■ 9-12 (n=43)

Transition to distance learning
- K-8: 97.0%
- 6-8: 100.0%
- 9-12: 100.0%

Perform COVID-19 monitoring and contact tracing
- K-8: 95.5%
- 6-8: 94.6%
- 9-12: 97.7%

Facilitate distribution of PPE to students and teachers
- K-8: 95.5%
- 6-8: 97.3%
- 9-12: 100.0%

Develop and conduct outreach strategies specific to the needs of your school population
- K-8: 86.6%
- 6-8: 91.9%
- 9-12: 88.4%

Ensure access to accurate and timely COVID-19 information in multiple languages
- K-8: 83.6%
- 6-8: 86.5%
- 9-12: 93.0%

Provide vaccination clinics at schools
- K-8: 44.8%
- 6-8: 51.4%
- 9-12: 67.4%

Disseminate COVID-19 information to the community
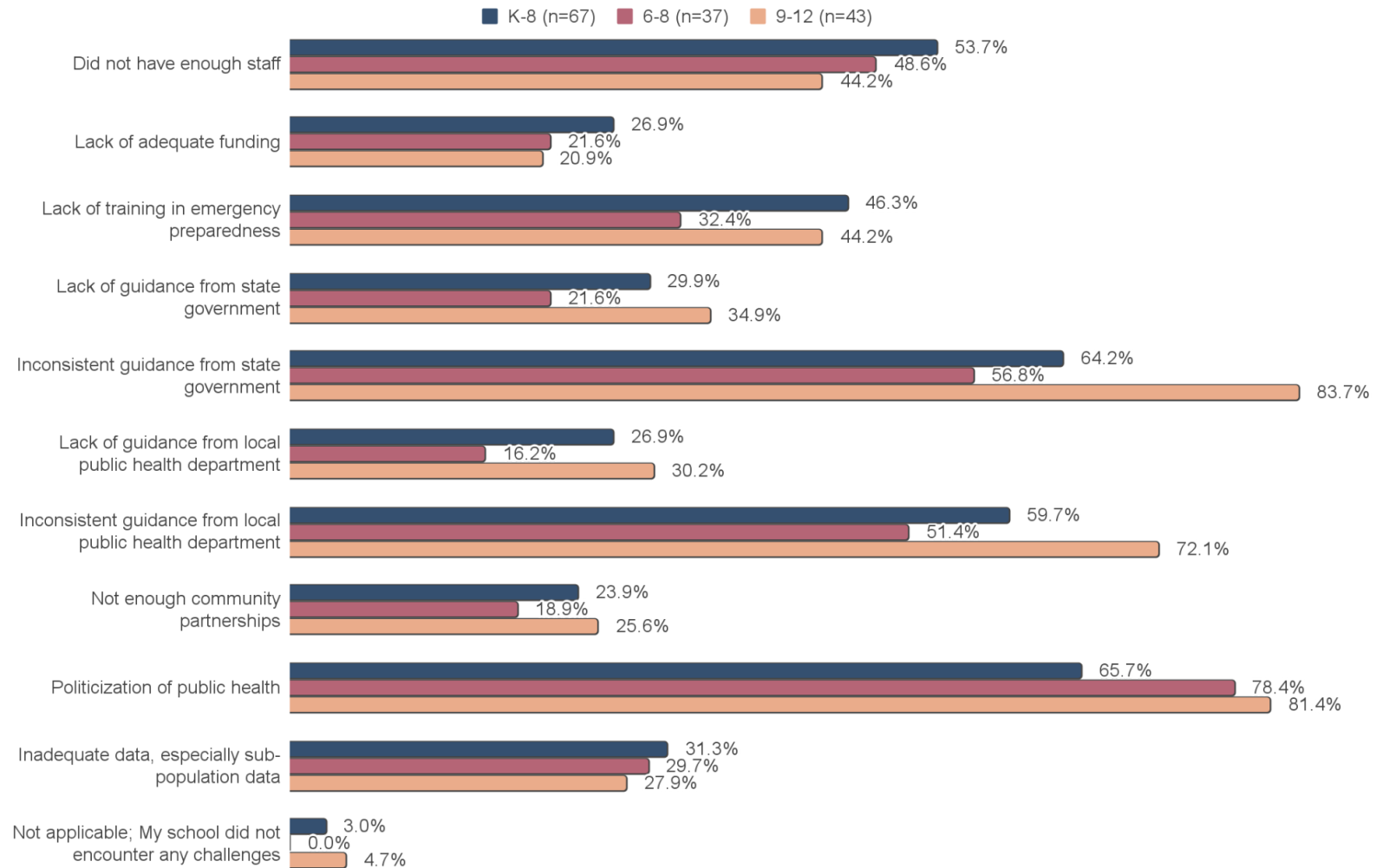- K-8: 82.1%
- 6-8: 91.9%
- 9-12: 86.0%

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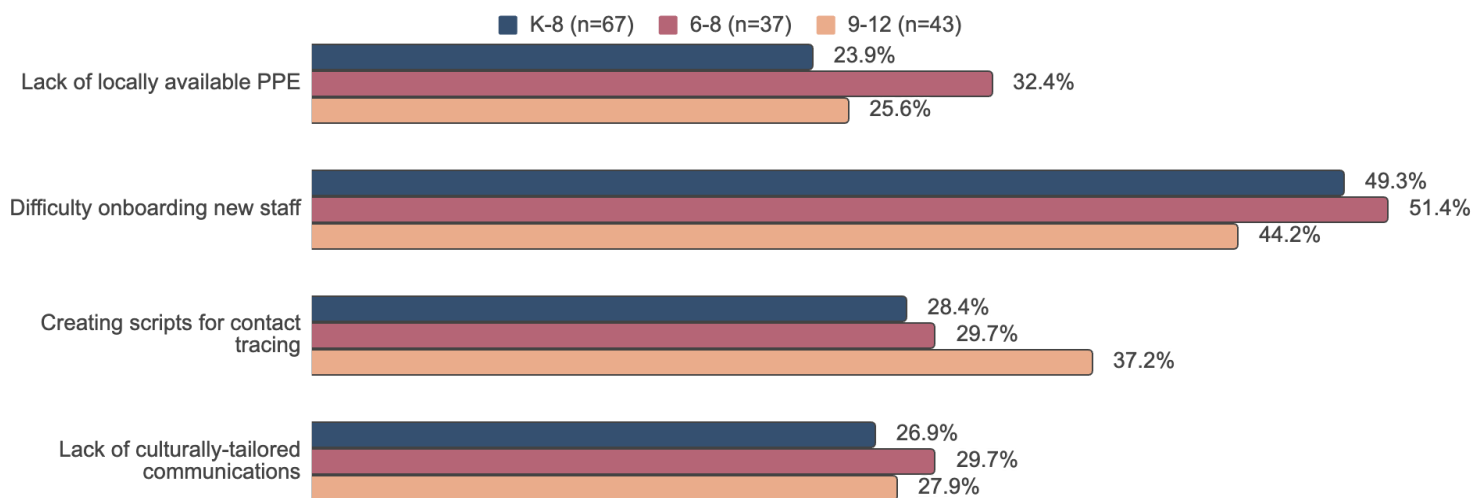
Figure 6: Principal Survey Respondents: Challenges that hindered the effectiveness, scale, or quality of school's COVID-19 response, by grades served

■ K-8 (n=67)   ■ 6-8 (n=37)   ■ 9-12 (n=43)

Did not have enough staff
- 53.7%
- 48.6%
- 44.2%

Lack of adequate funding
- 26.9%
- 21.6%
- 20.9%

Lack of training in emergency preparedness
- 46.3%
- 32.4%
- 44.2%

Lack of guidance from state government
- 29.9%
- 21.6%
- 34.9%

Inconsistent guidance from state government
- 64.2%
- 56.8%
- 83.7%

Lack of guidance from local public health department
- 26.9%
- 16.2%
- 30.2%

Inconsistent guidance from local public health department
- 59.7%
- 51.4%
- 72.1%

Not enough community partnerships
- 23.9%
- 18.9%
- 25.6%

Politicization of public health
- 65.7%
- 78.4%
- 81.4%

Inadequate data, especially sub-population data
- 31.3%
- 29.7%
- 27.9%

Not applicable; My school did not encounter any challenges
- 3.0%
- 0.0%
- 4.7%

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

Legend: ■ K-8 (n=67) ■ 6-8 (n=37) ■ 9-12 (n=43)

Lack of locally available PPE
- K-8: 23.9%
- 6-8: 32.4%
- 9-12: 25.6%

Difficulty onboarding new staff
- K-8: 49.3%
- 6-8: 51.4%
- 9-12: 44.2%

Creating scripts for contact tracing
- K-8: 28.4%
- 6-8: 29.7%
- 9-12: 37.2%

Lack of culturally-tailored communications
- K-8: 26.9%
- 6-8: 29.7%
- 9-12: 27.9%

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
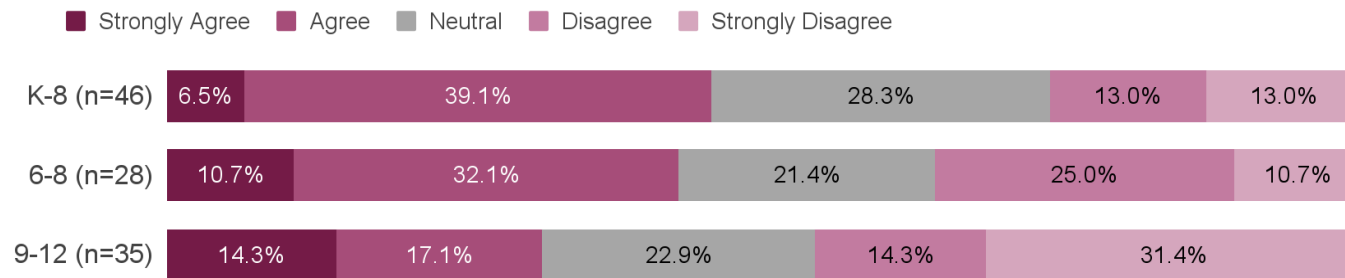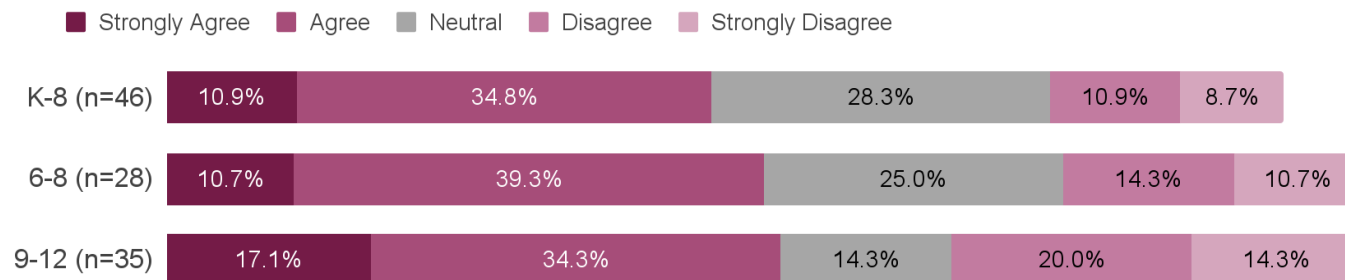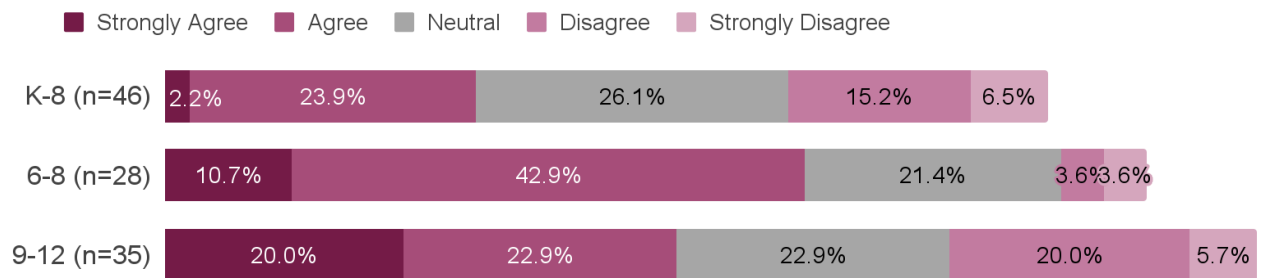
Legend: ■ Strongly Agree ■ Agree ■ Neutral ■ Disagree ■ Strongly Disagree

Grades	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
K-8 (n=46)	6.5%	39.1%	28.3%	13.0%	13.0%
6-8 (n=28)	10.7%	32.1%	21.4%	25.0%	10.7%
9-12 (n=35)	14.3%	17.1%	22.9%	14.3%	31.4%

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

Legend: ■ Strongly Agree ■ Agree ■ Neutral ■ Disagree ■ Strongly Disagree

Grades	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
K-8 (n=46)	10.9%	34.8%	28.3%	10.9%	8.7%
6-8 (n=28)	10.7%	39.3%	25.0%	14.3%	10.7%
9-12 (n=35)	17.1%	34.3%	14.3%	20.0%	14.3%

*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%.

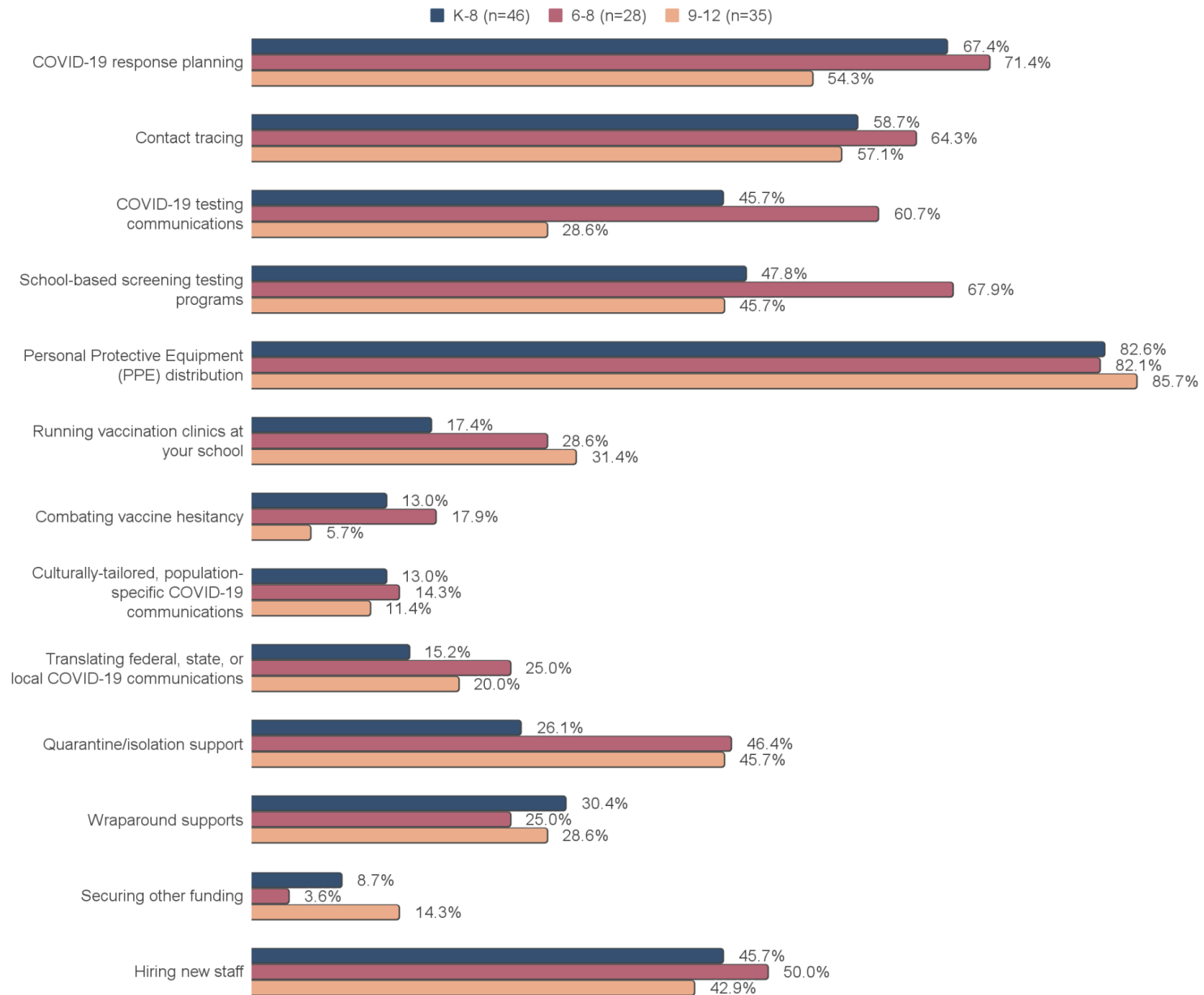Figure 10: Principal Respondents, school received adequate funding for COVID-19 vaccination, by grades served*

Legend: ■ Strongly Agree ■ Agree ■ Neutral ■ Disagree ■ Strongly Disagree

Grades Served	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
K-8 (n=46)	2.2%	23.9%	26.1%	15.2%	6.5%
6-8 (n=28)	10.7%	42.9%	21.4%	3.6%	3.6%
9-12 (n=35)	20.0%	22.9%	22.9%	20.0%	5.7%

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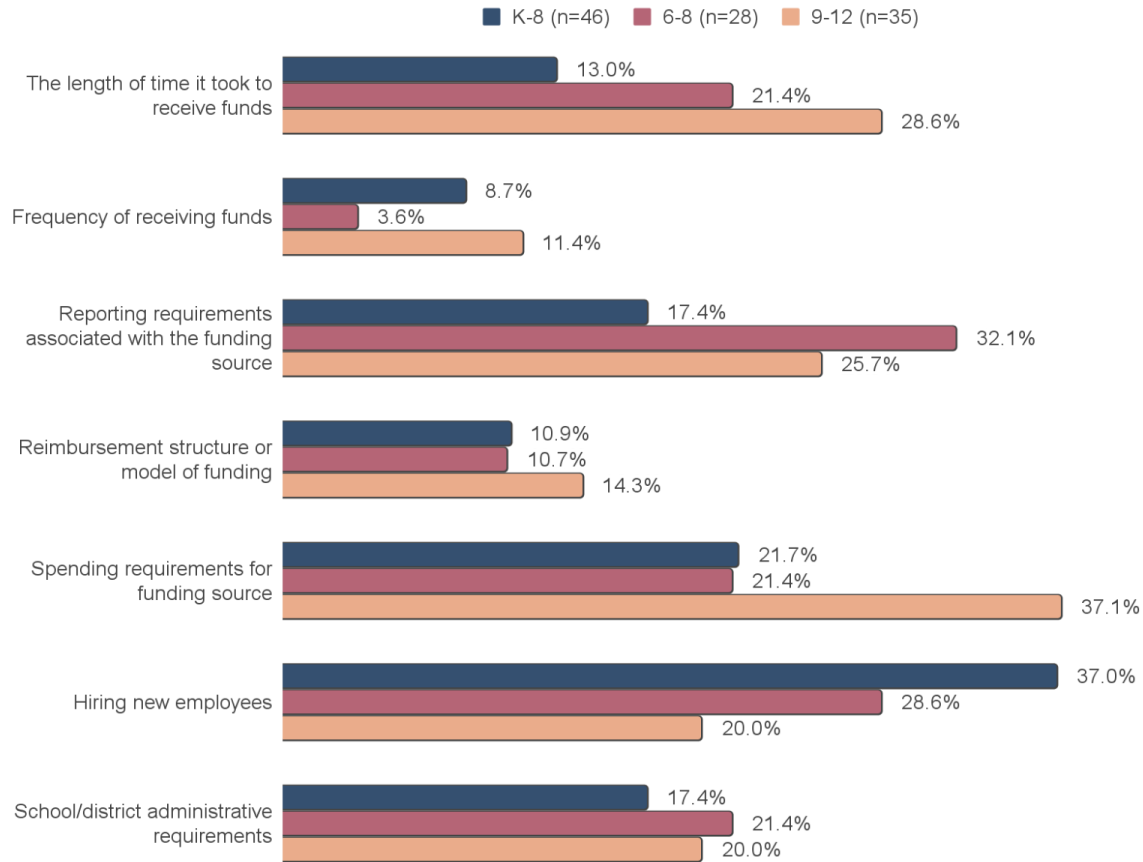
Figure 11: Principal Survey Respondents: How COVID-19 funding was utilized in schools, by grades served

Legend: ■ K-8 (n=46)   ■ 6-8 (n=28)   ■ 9-12 (n=35)

Category	K-8	6-8	9-12
COVID-19 response planning	67.4%	71.4%	54.3%
Contact tracing	58.7%	64.3%	57.1%
COVID-19 testing communications	45.7%	60.7%	28.6%
School-based screening testing programs	47.8%	67.9%	45.7%
Personal Protective Equipment (PPE) distribution	82.6%	82.1%	85.7%
Running vaccination clinics at your school	17.4%	28.6%	31.4%
Combating vaccine hesitancy	13.0%	17.9%	5.7%
Culturally-tailored, population-specific COVID-19 communications	13.0%	14.3%	11.4%
Translating federal, state, or local COVID-19 communications	15.2%	25.0%	20.0%
Quarantine/isolation support	26.1%	46.4%	45.7%
Wraparound supports	30.4%	25.0%	28.6%
Securing other funding	8.7%	3.6%	14.3%
Hiring new staff	45.7%	50.0%	42.9%

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

Legend: ■ K-8 (n=46) ■ 6-8 (n=28) ■ 9-12 (n=35)

Barrier	K-8	6-8	9-12
The length of time it took to receive funds	13.0%	21.4%	28.6%
Frequency of receiving funds	8.7%	3.6%	11.4%
Reporting requirements associated with the funding source	17.4%	32.1%	25.7%
Reimbursement structure or model of funding	10.9%	10.7%	14.3%
Spending requirements for funding source	21.7%	21.4%	37.1%
Hiring new employees	37.0%	28.6%	20.0%
School/district administrative requirements	17.4%	21.4%	20.0%

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
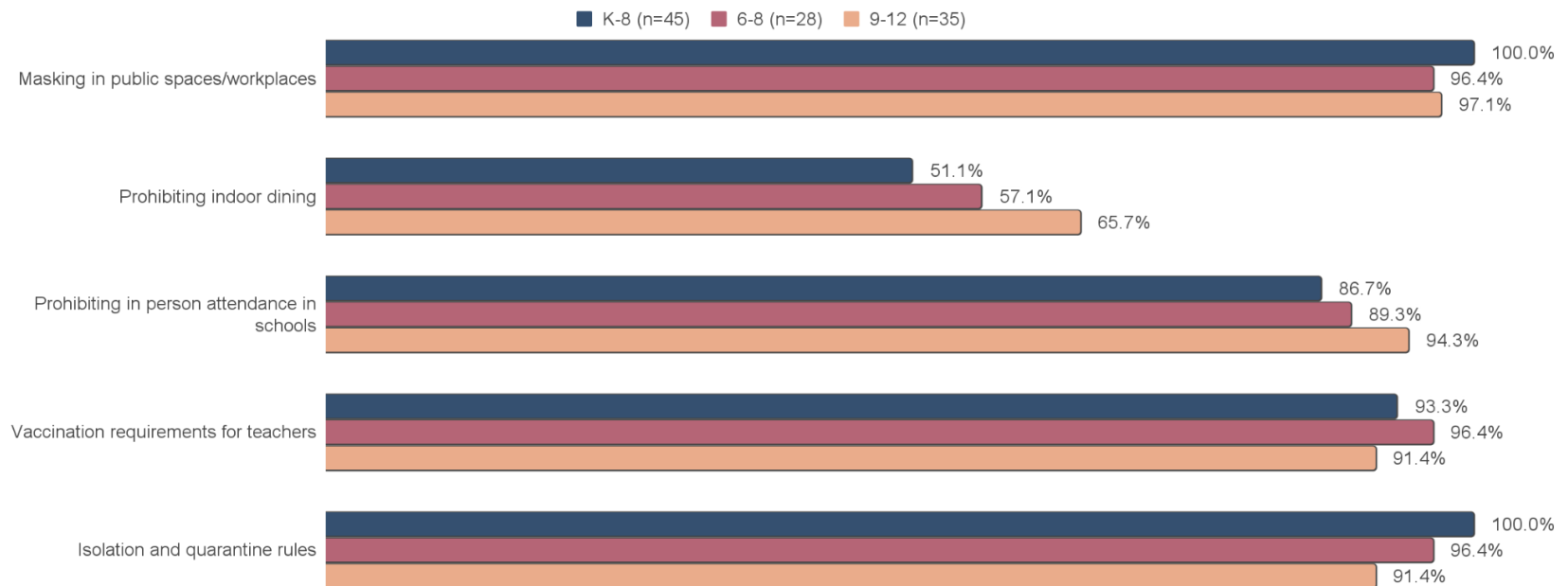

Legend: K-8 (n=45)　6-8 (n=28)　9-12 (n=35)

Masking in public spaces/workplaces: 100.0%, 100.0%, 100.0%

Prohibiting public gathering (churches, community events, etc.): 88.9%, 82.1%, 94.3%

Prohibiting indoor dining: 51.1%, 60.7%, 68.6%

Prohibiting in person attendance in schools: 88.9%, 96.4%, 100.0%

Isolation and quarantine rules: 100.0%, 100.0%, 97.1%
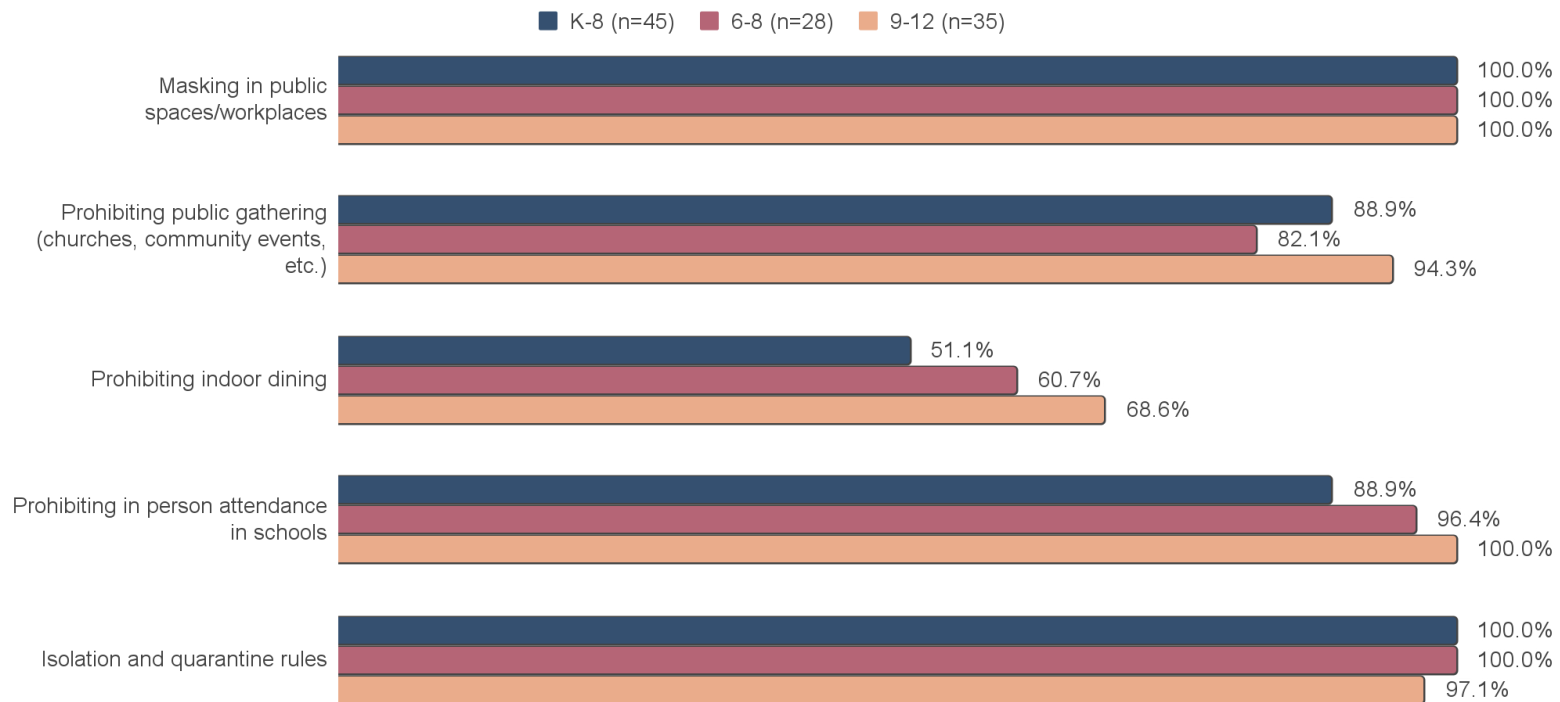
Enforcement of public health requirements

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

Legend: K-8 (n=45), 6-8 (n=28), 9-12 (n=35)

Masking in public spaces/workplaces: K-8 100.0%, 6-8 96.4%, 9-12 97.1%

Prohibiting indoor dining: K-8 51.1%, 6-8 57.1%, 9-12 65.7%

Prohibiting in person attendance in schools: K-8 86.7%, 6-8 89.3%, 9-12 94.3%

Vaccination requirements for teachers: K-8 93.3%, 6-8 96.4%, 9-12 91.4%

Isolation and quarantine rules: K-8 100.0%, 6-8 96.4%, 9-12 91.4%

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
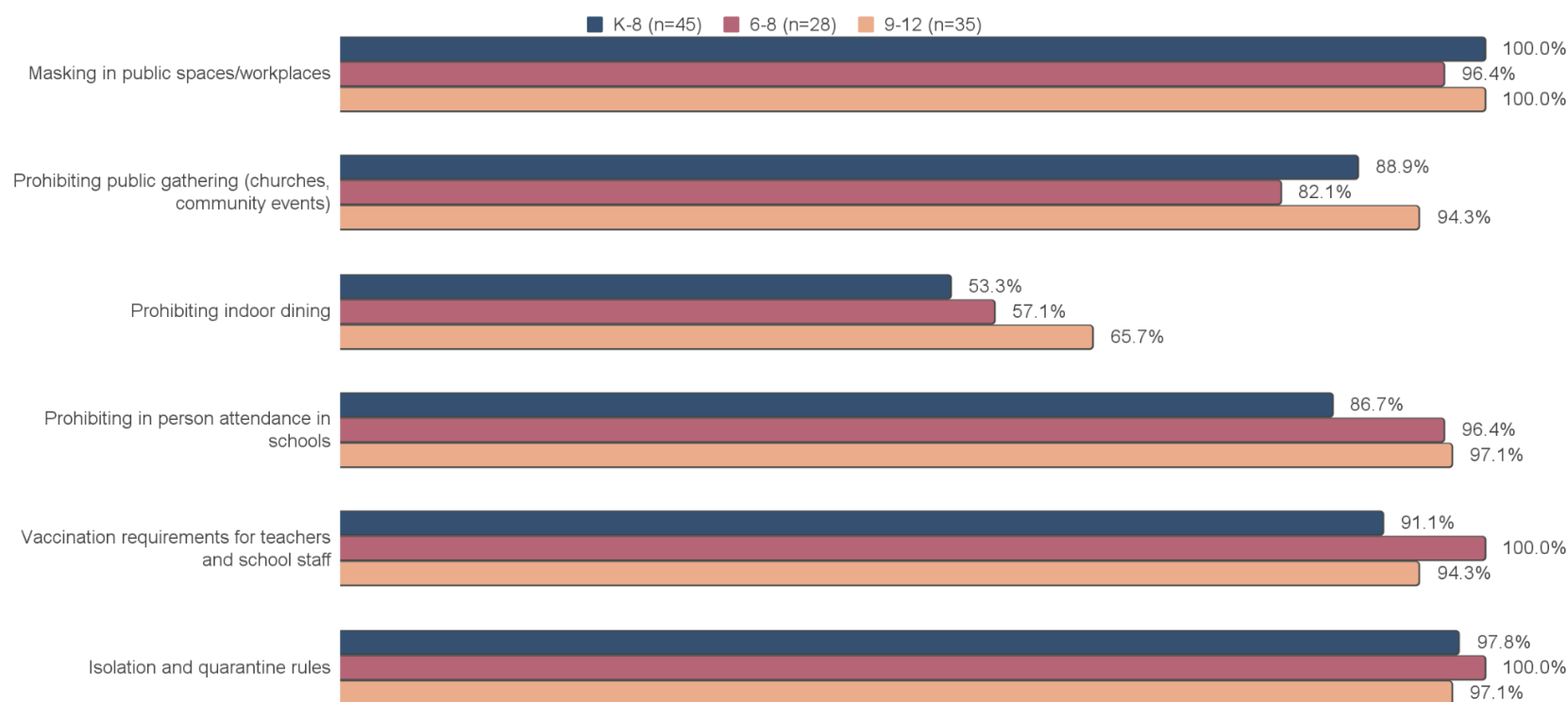
Enforcement strategies

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
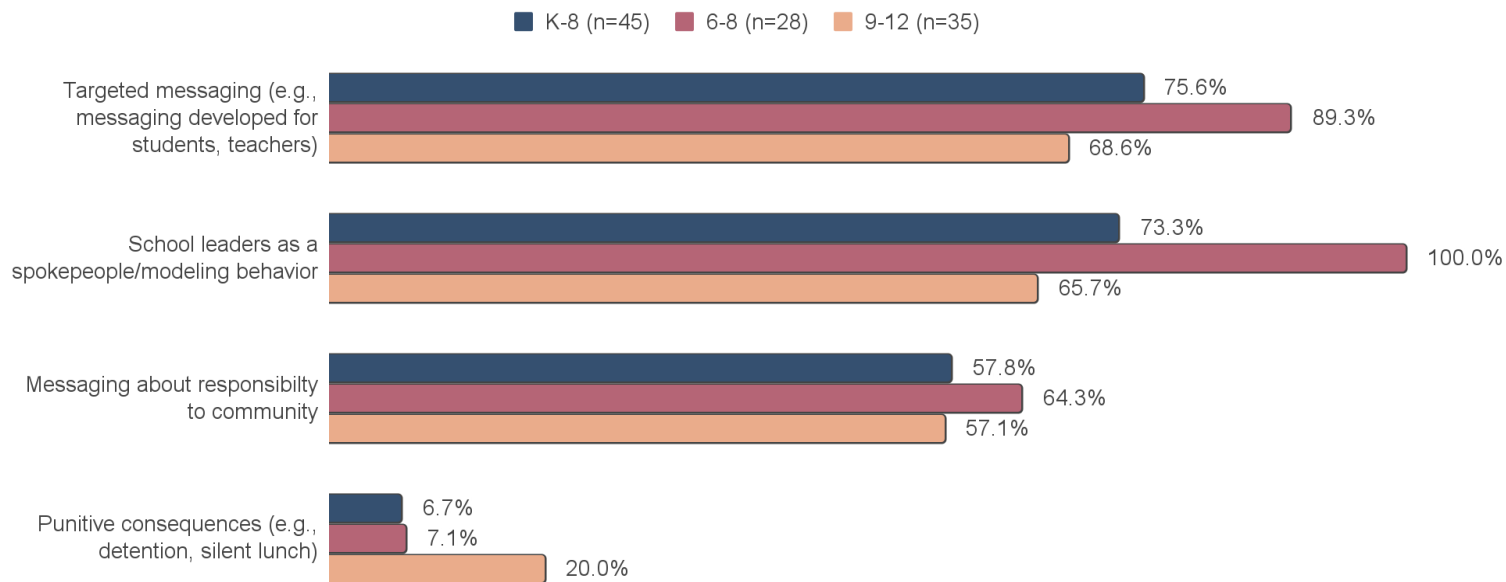
Key Findings

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.