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Introduction

The Advancing Health Equity, Addressing Disparities (AHEAD AZ) project, based at the University of Arizona's Center for Rural Health (AzCRH) and funded by the Arizona Department of Health Services (ADHS), focuses on addressing COVID-19 health disparities. Public health systems tackle acute diseases like COVID-19, respond to natural disasters, identify health needs, and implement interventions. The public health system, operating at various levels (U.S., state, county, and local), plays a crucial role in ensuring community health, addressing threats, and promoting well-being. COVID-19,



being the third leading cause of death in the U.S. and Arizona, has highlighted significant disparities, including those related to geography, income, and age. Rural, low-income, elderly, and minority populations are disproportionately affected, necessitating proactive interventions by public health systems to assess, prioritize, and support community health.

This summary expands on the Public Health System Capacity in Arizona: Learning from the COVID-19 Pandemic Response and uses a prioritization matrix to identify the most feasible and impactful interventions to improve public health system capacity in Arizona.

Methods

This summary categorizes the final recommendations to improve public health system capacity from the <u>Public Health System Capacity in Arizona: Learning from the COVID-19 Pandemic Response</u>. This report summarized findings from interviews with nine public health system stakeholders who were members of the Capacity Assessment Advisory Team (CAAT), representing local and tribal health departments, federally qualified health centers, and civic and academic organizations. These action-oriented recommendations to strengthen Arizona's public health system capacity were classified and prioritized based on a 2-dimensional assessment: impact and feasibility.

For the purposes of this report, impact is defined as recommendations that will have a strong effect or influence on the public health system if accomplished and feasibility is defined as recommendations that can easily or likely be accomplished with public health's existing resources or it is convenient to obtain resources (Glasgow, Vogt, Boles, 1999). We found that the interventions with the greatest potential impact and the most feasibility were:

- Implement improved crisis communications training.
- Document and evaluate partnerships to improve public health for the community.
- Collect and analyze successful funding models at local health departments.



Prioritization Matrix

Potential public health system capacity interventions can be categorized into a 2-by-2 matrix: high impact/high feasibility, high impact/low feasibility, low impact/high feasibility, and low impact/low feasibility.

It is important to recognize that these categories exist on a spectrum, without distinct thresholds defining "high" or "low" impact or feasibility. We purposely kept this framework straightforward with the aim of enhancing its practicality for policymakers and public health leadership, facilitating the prioritization of strategic interventions.

Figure 1: Impact-feasibility prioritization matrix for public health system capacity interventions.

How to Strengthen Public Health System Capacity in Arizona

MPACT

High impact/low feasibility: **Gather support**

Diversify funding sources

Build collaboration in preparation for grant cycles

Structure flexible state resources and allocation to reflect population fluctuations

Advcoate supprt for loan-repayment programs

Improve leadership training on naviagating politiacal environments

High impact/high feasibility: Immediate Action

Improve crisis communication traing for new hires

Develop training on how to communicate science to a lay audience

Improve emergency response education and training for all employees

Document the sustainability and diversit of relationships

Collect and share funding models with local health departments

Low impact/low feasiblity: **Redesign**

Process for timely initegration of emergency funding with existing finacial opperations

Ensure messaging comes from trusted messengers

Low impact/high feasibility: **Effective revision**

Research a national model for hiring processes

Develop emergency hiring prcedures and examples from other health departments

Ensure updated policies and plans for emergency response

Find examples of health officers working well with their board of supervisors

FEASIBILITY



Discussion/Interpretation

We suggest implementing high impact/high feasibility recommendations with immediate action, while high impact/low feasibility interventions should first focus on garnering support or buy-in (Njuguna et al., 2020). Interventions with low impact/high feasibility should be revised to enhance their effectiveness, and those with low impact/low feasibility may need redesigning considering resource constraints (Njuguna et al., 2020). By adopting this framework, policymakers, public health experts, and stakeholders can prioritize and optimize limited resources more efficiently to mitigate the public health workforce shortage.

High impact/high feasibility: Immediate Action

Interventions in this category can be acted on immediately to improve Arizona's public health system capacity because there are existing resources, infrastructure, and favorable support. Several of the interventions listed in the high impact/high feasibility box in Figure 1 involve training and education that already exist within or are readily accessible to the public health workforce and would result in immediate improvement. Public health departments expanded their relationships with internal and external organizations during COVID-19, however there should be action taken to document and maintain the diverse relationships on a routine basis. Lastly, there are local health departments willing to share their funding models but require assistance in their summary and compilation.

High impact/low feasibility: Gather Support

Interventions in this category require additional support or buy-in from public health stakeholders and have lower acceptance with the existing governmental infrastructure and leadership, however they can improve Arizona's public health system capacity. The interventions listed in the Table 1 box for high impact/low feasibility require additional funding for public health programs—a solution with significant impact and extreme barriers. Other interventions in this category require a shift in the political environment and attitudes of leadership.

Low impact/high feasibility: Effective Revision

Interventions in this category are more practical and easier to enact but are more targeted, benefiting only a small part of Arizona's public health system capacity. The impact of the low impact/high feasibility interventions in the box in Table 1 can be improved through effective revision. For instance, public health professionals can easily research national models for hiring processes, but the impact is minimal when there is limited funding to hire new employees and a small, inexperienced labor pool.

Low impact/low feasibility: Redesign

Interventions in this category are limited in their ability to create a widespread impact and lack the necessary resources to improve Arizona's public health system capacity. While these interventions have the potential for great impact, they a require systematic, societal change in attitudes towards public health.



Programs that are acting now!

The Center for Rural Health and other state agencies house various programs that are addressing the recommended interventions. Table 1 summarizes the five interventions that can be acted upon immediately (high impact/high feasibility).

Immediate Action Intervention	Available Resources
Improve crisis communication training for new hires.	Public health workforce support and training provided by AzCRH.
	On-demand training from the Western Region Public Health Training Center.
Develop training on how to communicate science to a lay audience.	Public health workforce support and training provided by AzCRH.
	On-demand training from the Western Region Public Health Training Center.
Improve emergency response education and training for all employees.	Training and support from the <u>ADHS Bureau of</u> <u>Public Health Emergency Preparedness.</u>
	In-person training from the <u>Arizona Department of</u> Emergency and Military Affairs.
Document the sustainability and diversity of relationships.	Develop a <u>strategic plan.</u> Involve partners in the development of a <u>Community</u> Health Assessment.
Collect and share funding models with local health departments.	Participate in organizations or groups that bring local public health departments to share strategies and best practices (e.g. Arizona Public Health Association, Arizona Local Health Officers Association).

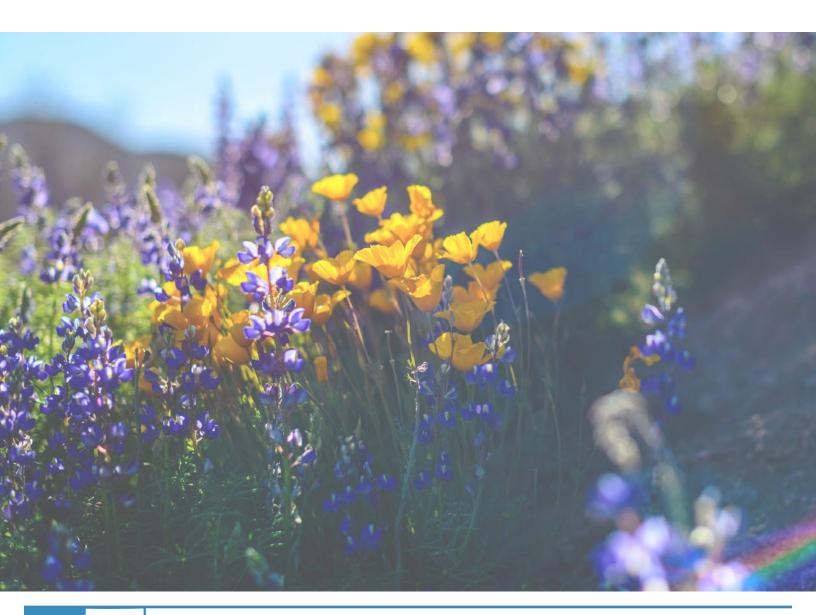


Conclusion

A previous report summarized findings about Arizona's public health system capacity to 1) better understand the status of public health system capacity and 2) assess the implications of the COVID-19 pandemic for future public health system needs. This action item summary prioritizes actionable interventions for the public health workforce. We found that the interventions with the greatest potential impact and the most feasibility were:

- ► Implement improved crisis communications training.
- ▶ Document and evaluate partnerships to improve public health for the community.
- ► Collect and analyze successful funding models at local health departments.

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References

Njuguna, B., Fletcher, S. L., Akwanalo, C., Asante, K. P., Baumann, A., Brown, A., Davila-Roman, V. G., Dickhaus, J., Fort, M., Iwelunmor, J., Irazola, V., Mohan, S., Mutabazi, V., Newsome, B., Ogedegbe, O., Pastakia, S. D., Peprah, E. K., Plange-Rhule, J., Roth, G., Shrestha, A., ... Vedanthan, R. (2020). Proactive prevention: Act now to disrupt the impending non-communicable disease crisis in low-burden populations. PloS one, 15(12), e0243004. https://doi.org/10.1371/journal.pone.0243004

Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). Evaluating the public health impact of health promotion interventions: the RE-AIM framework. American journal of public health, 89(9), 1322–1327. https://doi.org/10.2105/ajph.89.9.1322

