

Eight Ways Health Department Leaders Can Support Effective HAI/AR Programs

Executive Summary

Healthcare-associated infections (HAIs) are those that patients acquire while receiving care and treatment in healthcare facilities. HAIs can be caused by antimicrobial-resistant (AR) organisms such as bacteria and fungi that may be difficult or impossible to treat, as well as viruses such as influenza and SARS-CoV-2. While HAIs are a threat to patient safety, they are largely preventable.

State and territorial health agency (S/THA) HAI/AR programs play a critical role in spearheading prevention, detection, and outbreak response efforts in their communities. Throughout the COVID-19 pandemic, HAI/AR programs have led and supported healthcare infection prevention and control (IPC) activities, leveraging their expertise in assessing healthcare IPC practices to mitigate gaps, experience in conducting outbreak investigations in a wide range of healthcare settings, knowledge of the complex healthcare regulatory environment, and proven skills in building and growing relationships with a wide array of partners.

Several significant federal investments have been made to HAI/AR programs during the COVID-19 Public Health Emergency. Most recently and significantly, \$385 million from the American Rescue Plan Act of 2021 (ARP) was awarded through CDC's Epidemiology and Laboratory Capacity (ELC) Cooperative Agreement under the [Strengthening HAI/AR Program Capacity \(SHARP\) supplement](#), which aims to build on the strong foundation already established by HAI/AR Programs and the AR Lab Network.

Additionally, the \$500 million [Nursing Home & Long-term Care Facility Strike Team and Infrastructure Project](#) offers opportunities for complementary support of healthcare IPC activities, specific to nursing homes and long-term care communities. To meet the requirements of these new investments, HAI/AR programs need support from S/THA leaders and their partners.

To support and promote HAI/AR programs, S/THAs can:

- Connect routinely with HAI/AR program staff.
- Reassess the organizational structure for HAI/AR fit.
- Align programs and activities to better support healthcare facilities.
- Engage leadership across healthcare and public health sectors.
- Establish pathways for recruitment and retention of program staff.
- Support workforce development and sustainability.
- Employ strategies to improve workforce mental wellbeing.
- Inform policies to strengthen practice.

Connect routinely with HAI/AR program staff

Health department leaders can start by connecting routinely with their HAI/AR program staff to learn about the breadth and depth of HAI/AR program activities, including strategies to enhance IPC in healthcare settings, and to understand the nuances of HAI/AR program activities, such as HAI surveillance through the [National Healthcare Safety Network \(NHSN\)](#). They can also seek to be informed of the changing landscape of HAI/AR program activities due to the rapid expansion of these programs.

Leaders should consider establishing regular communication to ensure that there is shared awareness of HAI/AR and leadership priorities among key stakeholders. Leaders can work to ensure that HAI/AR programs have adequate administrative and management support from the health department so that staff with IPC expertise can focus on technical activities. Additionally, Leadership can routinely promote and share the achievements and efforts of HAI/AR programs with policymakers and include these updates in annual reports.

Support Effective Communications with HAI/AR Programs

Regular communication between health department leadership and the HAI/AR program is vital to ensure awareness, share information and data, and ultimately build capacity. S/THA leadership can consider the following questions to support an effective communication plan with HAI/AR programs:

- *What activities are HAI/AR programs currently responsible for in your jurisdiction?*
- *How do these activities support the overarching goals of the health department for protecting citizens and promoting healthcare quality?*
- *How has the program's role evolved in recent years, particularly during the COVID-19 response?*
- *What improvements should be sustained or enhanced?*
- *Are HAI/AR program staff able to complete program goals with the current level of resources? If no, what additional resources are needed?*
- *Do HAI/AR program staff have representation in relevant statewide committees, workgroups, and coalitions?*
- *Are HAI/AR program priorities and goals included within statewide health improvement plans?*

Reassess Where HAI/AR Programs Sit

S/THA leadership can evaluate whether HAI/AR programs are well positioned organizationally with the visibility needed to be successful. Establishing communication channels between the HAI/AR programs and S/THA leadership will ensure that the needs, support, and necessary visibility of these programs are addressed.

Additionally, state reporting structures can be evaluated and updated, if needed, to ensure barriers are mitigated and HAI/AR program growth and expansion are supported. In some cases, this may involve re-evaluating the placement of the HAI/AR program in the agency structure to align with the scope and size of the program, such as creating a separate unit or section based on the state's resources and needs. For S/THAs looking to re-evaluate their organizational reporting structures more broadly, the guiding questions below can help jurisdictions think through ways to structure operations.

Optimize Organizational Structure

Optimal organizational structure can depend on many factors within the jurisdiction. S/THA leadership can consider the following questions to develop a reporting/organizational structure that focuses on the epidemiological impact of IPC activities. The use of a quick Strengths, Weaknesses, Opportunities, and Threats ([SWOT analysis](#)) might help with decision making:

- *Does the current organizational reporting structure support the current and future needs of the HAI/AR program and health department goals?*
- *How can S/THA leadership use organizational reporting structures to improve collaboration across the health department for more connected and effective healthcare prevention and response programs?*
- *Are the achievements and efforts of the HAI/AR program routinely shared with leadership, policy makers, and other stakeholders?*

Align programs and activities to better support healthcare facilities

With several recent streams of funding to S/THAs to respond to COVID-19, coordination of HAI/AR activities within the health department is critical to reduce duplication of efforts, align resources across the organization, and facilitate appropriate and efficient spenddown of funds. Additionally, alignment with other programs and services helps clarify the roles and responsibilities of the HAI/AR program.

HAI/AR programs encompass a wide range of activities that intersect with other programs within and outside the health department. Examples include working with emergency preparedness or multi-disciplinary strike teams to address resource shortages, working with immunization programs to increase vaccine uptake in nursing homes and collaborating with state survey agencies to support regulatory activities.

Outbreaks in healthcare settings involve a wide range of pathogens, including bacterial, viral, and fungal pathogens that may be based in other parts of the health department, and may rely on the expertise of the HAI/AR program. Ensuring that HAI/AR programs are consulted for their IPC expertise can facilitate coordination and resource-sharing with other S/THA programs. For example, the Georgia Department of Public Health HAI/AR program effectively applied standardized tools and processes used for long-term care facility (LTCF) outbreak response to a COVID-19 outbreak in a correctional facility.

S/THA leadership can support resource and programmatic alignment by building awareness of department activities and promoting relationship-building and department-wide collaboration for an integrated approach to support healthcare facilities. Leadership can also incorporate HAI/AR priorities and objectives within their state [Health Improvement Plans](#), and may consider citing HAI/AR program activities to meet health department accreditation standards and measures. In addition, efforts to inform and build awareness with leadership across the health department can facilitate uninterrupted succession or continuity of operations on healthcare IPC.

Engage leadership across healthcare and public health sectors

Partnerships and collaboration are central to healthcare IPC efforts. S/THA leaders and their HAI/AR program leads can work with partners including hospitals, post-acute and long-term care associations, healthcare coalitions, regulatory and licensing agencies, quality improvement organizations, and local health departments to establish strong relationships and coordinate approaches to support various healthcare settings, such as nursing homes. For example, state survey agencies are an integral part of HAI/AR outbreak response, and collaboration with these teams can help facilitate investigation and control activities in healthcare facilities.

S/THA leadership can clarify the role of the HAI/AR program as a supportive partner to healthcare surveyors and promote the HAI/AR program as a non-regulatory partner to healthcare facilities. Additionally, S/THA leaders can leverage their influence to encourage stronger collaboration and communication between the HAI/AR program and frontline healthcare personnel, including promoting [Project Firstline](#) activities, participating in the HAI/AR program's Advisory Committee meetings to engage partners for strategic planning and decision-making, data sharing, and coordinating IPC activities, and inviting HAI/AR program staff to discussions with external partners. CDC's [Success Framework for HAI/AR Partner Networks](#) provides practical guidance about leveraging existing HAI/AR partner networks.

Further, S/THA leadership can collaborate with healthcare partners to highlight the importance of automated and timely data exchange efforts, such as electronic health records (EHRs), NHSN, syndromic surveillance, and antibiotic-resistant lab networks (ARLN), that can be used for needs assessment, development of targeted interventions, and evaluation of improvement efforts to prevent and control the spread of HAI/AR pathogens across the healthcare spectrum.

Related: [Partner Coordination Efforts to Strengthen Infection Prevention and Control Practices](#)

Establish pathways for recruitment and retention

S/THA leadership can facilitate practical processes and pathways to address staffing needs. HAI/AR programs require specialized expertise, including healthcare epidemiology, infection prevention, and antimicrobial stewardship. Individuals with this specialized experience often have clinical training or significant experience working in or with healthcare facilities. Recruiting qualified staff specific to the needs of the HAI/AR program may require exploring options for competitive compensation, on-the-job training, opportunities for professional development, staff advancement and growth. Given the rapid expansion of many HAI/AR programs, it is important that the titles and salaries of program leadership reflect the increase in associated responsibilities. Additionally, leadership and management trainings can be considered for HAI/AR program managers.

Leadership should consider opportunities to establish more efficient contracting processes and minimizing administrative impediments for recruitment. For example, states can use the General Services Administration's [COVID-19 response support package](#) for state, tribal, local, and territorial public health departments seeking vendors for surge staffing and other needs. ASTHO's [Issue Brief on Administrative Preparedness Strategies for Managing and Streamlining COVID-19 Response and Recovery](#) provides strategies for state and territorial health leadership, as well as examples of state policy actions.

Support efforts for workforce development and sustainability

The SHARP investment emphasizes the need to build and sustain a strong public health workforce through the HAI/AR programs, to address HAI/AR and state public health priorities. The critical project areas of the SHARP funding are the [HAI/AR Program Response and Prevention Network](#), [Antibiotic Resistance Laboratory Network \(AR Lab Network\)](#), [antibiotic stewardship](#), and enhancing states' use of the NHSN and [Project Firstline](#). These project areas strengthen and expand public health capacity of prevention, detection, and response of infectious disease threats, as well as supports initiatives to bolster support and sustainability of the public health infrastructure. HAI/AR programs can hire staff assigned to regions within the state who are positioned to quickly respond to outbreaks and provide ongoing IPC expertise to healthcare facilities. Additionally, creating full-time permanent positions can be crucial for long-term sustainability of HAI/AR programs.

S/THAs, in collaboration with partners, can create opportunities to enhance and expand public health workforce competencies. These can include training and professional development opportunities for public health students and healthcare professionals such as practicums, internships, and fellowships with a focus on promoting diversity, equity, and inclusion. Health department leaders can also build a sustainable public health workforce by fostering long-term relationships with academic institutions and credentialing programs, healthcare facilities, and professional associations to facilitate continued professional development post-COVID-19.

Related: [Building Back a Stronger Public Health Workforce Post-Pandemic](#)

Support the HAI/AR Workforce

Public health workforce development and sustainability requires organizational change, trusted partnerships, and viable funding. Consider the following key questions:

- *How many staff are working on HAI/AR activities?*
- *How many of these positions are temporary?*
- *How many HAI/AR program positions are partially or fully funded with state funds?*
- *How does this compare to other public health programs?*
- *How will S/THAs ensure support for professional development, certifications, and staff training?*
- *What is needed to make these positions desirable long-term? What do you need to be able to recruit and keep staff?*

Employ strategies to improve workforce mental well-being

The pandemic has [taken a toll](#) on the mental health and well-being of the public health and healthcare workforce. Working at the public health-healthcare intersection, HAI/AR program staff have directly supported partners through challenging outbreaks and prolonged workforce shortages, particularly in long-term care settings. S/THA leaders can create and promote a work environment that supports the mental well-being of their staff, promotes a positive and healthy work environment, and encourages self-care for workers.

Supporting mental health and well-being of program staff can help reduce turnover, burnout, and improve sustainability of HAI/AR and IPC expertise. For example, the New Jersey Department of Human Services developed a [self-care factsheet](#) for public health emergency workers, which includes daily tips for stress management.

Related: [Taking Care of the Public Health Workforce Post-Pandemic](#)

Create Unique Solutions

Given the pressure of responding to urgent outbreaks in high-stress facilities, adopting and applying evolving guidance, adapting to fast-changing circumstances, and making infection control recommendation in novel situations, HAI/AR teams may experience unique challenges.

- The GA Department of Public Health introduced a “one approach,” where staff in their infection prevention unit/division work in pairs or teams.
- The Kansas Department of Health applied a pairing approach for staff visiting facilities to decrease pressure and to ensure peer support.
- The Montana Department of Public Health HAI/AR program staff perform infection control assessments and consults as a team. The expansion of the HAI/AR program has also provided adequate staff coverage to encourage time-off for staff.
- The Washington State Health Department created an employee safety policy to provide staff, especially Black, Indigenous, and People of Color staff members, with resources on how to de-escalate hostile conversations and safely exit unsafe environments that may take a toll on their mental well-being.

Inform policies to strengthen practice

S/THA leaders are well-positioned to advocate for and inform policies to enhance IPC efforts across the healthcare delivery system and the COVID-19 pandemic has highlighted the need to implement or strengthen such [policies](#). S/THA leaders can develop policies in consultation with their HAI/AR programs and subject-matter experts, to guide HAI/AR activities within the health department. These may include policies to enhance HAI/AR outbreak [reporting](#) and [notification](#) practices, as well as policies to ensure adequate [staffing](#) in LTCFs.

Conclusion

The recent SHARP and Nursing Home & Long-term Care Facility Strike Team funding provide opportunities for innovative and sustainable activities within HAI/AR programs. Given these new investments, HAI/AR programs are well-placed to leverage their expertise and activities to improve IPC and HAI/AR outbreak response practices.

Further, these investments also provide new opportunities for state health department leadership to engage with their HAI/AR programs and partners to effectively implement IPC and HAI/AR outbreak response policies. State health department leaders are encouraged to consider the actions outlined in this report to support HAI/AR program activities.