

PUTTING EVIDENCE TO WORK FOR HEALTH:

HOW HEALTH DEPARTMENTS CAN ENCOURAGE EVIDENCE-BASED DECISION MAKING

Introduction

Health department staff are charged with developing and implementing program and policies that keep large populations of people healthy and disease free. Evidence-based decision making (EBDM) uses the best available research evidence to select, implement and evaluate these programs and policies¹. Lack of EBDM within health departments hampers the ability of staff to make informed choices and manage resources, which makes it less likely that people will receive effective programs to help prevent or control diseases. This is especially important where the causes of a disease are complicated, such as obesity, and where resources to address the disease are limited. Because EBDM is a process, it must be fostered and supported within departments as part of day-to-day practice. Health department staff have reported some challenges that get in the way [Figure 1].

Our project started in 2012 to learn concrete ways in which state health departments and researchers can support staff and partners in practicing EBDM⁵. This report is a summary of how we worked with 12 state health departments over the last four years, what we learned, and what we recommend for action steps.

Figure 1. ²⁻⁴

Challenges faced by health department staff to evidence-based decision making:

Lack of skills to make evidence-based decisions	Funding uncertainties or budget cuts
No incentives/rewards for using EBDM	Lack of time
Unsupportive organizational culture/climate	Staff turnover

Activities

We started by learning more about EBDM practices in state health departments across the nation. A survey of over 900 state health department staff working mostly in chronic disease and health promotion helped us understand more about the factors related to EBDM and fine-tune a testing tool⁶.

Next, we randomly selected 12 state health departments in which to test whether providing basic supports would improve health department staff's individual skills in EBDM and cause them to feel more supported in practicing EBDM. To do this, we provided in-person training and continued EBDM support to six of the states, while providing less active support and no training to the other six. We conducted surveys with all 12 states before the start of the project and after so that we could observe any differences. We also spoke one-on-one (qualitative interview) with staff from all 12 states to learn more about what facilitates EBDM within their health departments.

In the six states that received in-person EBDM training, we followed up with regular planning meetings to identify and implement activities to further enhance EBDM efforts [Figure 2].



Figure 2. ^{7,8}

Examples of follow-up activities:

Accreditation preparation

Ongoing quality-improvement efforts

Supplemental trainings in EBDM topics

Work unit and cross-section meetings to explicitly address EBDM

Annual in-person partner meeting (EBDM themed presentations)

National EBDM course in St. Louis for new team members

Findings and Impact

Analyzing the survey data, talking with health department staff and working one-on-one with work units brought to light important findings:

- Leadership support (at all levels) is a key facilitator of EBDM.
- Training increases individual skills in EBDM⁹. [\[Read more\]](#).
- Access to research evidence is key for use in program planning, and other activities¹⁰. [\[Read more\]](#).
- Different leadership types and workplace cultures can affect the use of research evidence¹¹. [\[Read more\]](#).
- Leadership support and training, as well as enhanced information sharing across program areas are among several facilitators [Figure 3] of EBDM, some more modifiable than others⁴. [\[Read more\]](#).



Figure 3.

Examples of EBDM facilitators:

Leadership at all organizational levels as champions and role models

Leadership and organization support for workforce development

Internal and external partners as experts and champions

Commitment to data-driven planning

Transparency in financial reporting practices

Recommendations

In just five short years, truly meaningful work was accomplished. We worked with some of public health's brightest people to learn and support EBDM practices. To maintain this momentum, we offer what we and health department staff we spoke with think are the most actionable ways health department leadership can strengthen EBDM within work units and department-wide.



01 | RECOMMENDATION

Provide ongoing, tailored training.



02 | RECOMMENDATION

Create a health department that supports EBDM through culture (shared values/beliefs), climate (employee experience), and leadership.



03 | RECOMMENDATION

Engage health department partners in EBDM practice in ongoing and meaningful ways.



01 | RECOMMENDATION

Provide ongoing, tailored training.

Ideas

- Identify training sources and support attendance.
- Provide ongoing, skill-based trainings to all staff (in person or remotely), tailored to their education and experience.
- Incorporate EBDM into new employee orientation training.
- Assess existing training needs to fill gaps. We found a common need for training in policy change, program evaluation, change management, and strategies for specific settings or populations.
- Offer and promote training in leadership processes and practices.
- Provide and encourage staff training in how to provide technical assistance to partners in communication, strategic planning, policy development, coalition building, quality improvement, performance management, the latest evidence-based approaches and change management.
- Tie requirements for ongoing training in EBDM to agency plans for accreditation or reaccreditation.

Considerations

Training requires financial and personnel resources. Partnering with a public health training center or university may help sustain ongoing trainings. Alternative methods, such as conducting some training online, can reduce travel and/or other costs. EBDM encompasses many skills and a broad range of practical experience. One staff person cannot be expected to be expert in every facet; combining work unit/agency expertise can maximize the impact of collective skills to practice EBDM.





02 | RECOMMENDATION

Create a health department that supports EBDM through culture (shared values/beliefs), climate (employee experience), and leadership.

Ideas

- Include EBDM in the workplace mission.
- Develop common language for EBDM processes and principles.
- Include principles of EBDM in goals, work plans, formal accountability procedures, and/or strategic plans, and develop methods to monitor performance (and acknowledge staff/programs that excel).
- Provide ready access to low-cost research evidence sources (e.g., academic journals, guidelines, toolkits, evaluation databases, cost-effective modeling for EBDM strategies) through online sources/digital libraries (potentially through increased university partnerships).
- Encourage use of on-line sources of data and evidence-based practices (The Community Guide).
- Have leadership (at all levels) instill EBDM principles by modeling processes, demonstrating long-term commitment and offering safe space for staff to practice EBDM (e.g., protected time to attend trainings, obtain and digest evidence).
- Formally include EBDM updates/progress in work unit and/or cross-section meetings.
- Hire individuals committed to EBDM (include in job description and interview questions).
- Increase the number of staff that have degrees in public health or related fields and/or staff with formalized training in public health.
- Share resources, data, evaluation findings, programmatic materials, success stories, and research evidence interdepartmentally, within work units, and across the organization.

Considerations

Change will not happen overnight, and that's ok. Our recommendations address different roadblocks, depending on the agency. After identifying an area for improvement, we recommend conducting a feasibility assessment before attempting a change in policy or practice. It may also be helpful to talk with other, similar agencies to see how they approached different steps. Combining work unit/agency expertise can maximize the impact of collective skills to practice EBDM.



03 | RECOMMENDATION

Engage health department partners in EBDM practice in ongoing and meaningful ways.

Ideas

- Develop a process for health department staff to communicate EBDM practice and progress with partners (and policymakers). Provide summaries of emerging issues.
- Include EBDM expectations and requirements in funding proposals and contracts.
- Train partners in EBDM or observe how partners are using EBDM and collaborate in planning replication and/or other trainings.
- Provide remotely accessed ongoing, short, topic-specific trainings for partners with additional access to archived trainings.
- Increase university partnerships and/or enhance partnerships through formal agreements.
- Provide technical support and guidance for partners. Include plan to assess accountability of contracted partners regarding evidence-based interventions.

- Share resources, data (particularly local data), funding, evaluation findings, program materials, success stories, and research evidence with partners.

Considerations

Since health departments work with all types of organizations (nonprofits, healthcare organizations, universities), including partners in the EBDM process will be different for each department. In addition, engaging policymakers as partners is critical and brings a different set of challenges to consider. Including partners in assessing, planning, implementing, evaluating and disseminating programs and policies is a core element of EBDM; therefore, developing and supporting effective methods to include partners can only enhance a health department's own EBDM processes.

References

1. Brownson RC, Baker EA, Deshpande AD, Gillespie KN: Evidence-based public health, Third edn. Oxford University Press; 2017.
2. Dodson EA, Baker EA, Brownson RC: Use of evidence-based interventions in state health departments: a qualitative assessment of barriers and solutions. *J Public Health Manag Pract* 2010, 16(6):E9-E15.
3. Jacobs JA, Dodson EA, Baker EA, Deshpande AD, Brownson RC: Barriers to evidence-based decision making in public health: a national survey of chronic disease practitioners. *Public Health Rep* 2010, 125(5):736-742.
4. Allen P, Jacob RR, Lakshman M, Best LA, Bass K, Brownson RC: Lessons Learned in Promoting Evidence-Based Public Health: Perspectives from Managers in State Public Health Departments. *J Community Health* 2018.
5. Allen P, Sequeira S, Jacob RR, Hino AA, Stamatakis KA, Harris JK, Elliott L, Kerner JF, Jones E, Dobbins M et al: Promoting state health department evidence-based cancer and chronic disease prevention: a multi-phase dissemination study with a cluster randomized trial component. *Implement Sci* 2013, 8:141.
6. Stamatakis KA, Ferreira Hino AA, Allen P, McQueen A, Jacob RR, Baker EA, Brownson RC: Results from a psychometric assessment of a new tool for measuring evidence-based decision making in public health organizations. *Eval Program Plann* 2017, 60:17-23.
7. Allen P, O'Connor JC, Best LA, Lakshman M, Jacob RR, Brownson RC: Management practices to build evidence-based decision making capacity for chronic disease prevention in Georgia: A case study *Preventing Chronic Disease*. Accepted January 2018.
8. Allen P, Kiley H, Ahrendt LJ, Lakshman M, Jacob, RR, Brownson, RC: Capacity building for evidence-based public health in a state health department chronic disease prevention unit. *Inquiry*. Accepted February 2018.
9. Brownson RC, Allen P, Jacob RR, deRuyter A, Lakshman M, Reis RS, Yan Y: Controlling Chronic Diseases Through Evidence-Based Decision Making: A Group-Randomized Trial. *Prev Chronic Dis* 2017, 14:E121.
10. Jacob RR, Allen PM, Ahrendt LJ, Brownson RC: Learning About and Using Research Evidence Among Public Health Practitioners. *Am J Prev Med* 2017, 52(3S3):S304-S308.
11. Hu H, Allen P, Yan Y, Reis RS, Jacob RR, Brownson RC: Organizational supports for research evidence use in state public health agencies: A latent class analysis. *Journal of public health management and practice*. Published online ahead of print, April 2018.

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