Use the pipes that are available.” The speaker’s voice rattled in my cochlea. The thread-worn reference to electronic health and medical records harkened back to the Obama era conversations centered on data. I throttled a primordial urge to enter a comment in the chat feature: “Environmental health pipes are the ones that are available.”

In a recent call with a senior federal official, I shared that environmental health data collection and reporting systems are well established, stable, and frequently the ones with the most experience at the local level. The kinks have been worked out, reflecting local and regional policies, systems, and sensibilities. Given that established presence, we should collectively lead the public health enterprise in the use of data for informed decision making. At a minimum, we can and should contribute to national discussions on data, some of which are underway.

The creation of the Centers for Forecasting and Outbreak Analytics was announced last August. This new center is meant to help predict how disease spreads and to assist in real-time interventions. It will be charged with improving the Atlanta-based agency’s data tools. The Centers for Disease Control and Prevention is also engaged in a Data Modernization Initiative, an effort to create an integrated, real-time public health data and surveillance system that can protect us from health threats. This iteration of the federal government is data-oriented, and we too are leaning into that conversation.

Earlier this week we submitted a new 3-year grant application for $18 million to the Food and Drug Administration to create a visionary technology infrastructure centered on human and animal food safety. We proposed development of a transformational data management system and have assembled a team and partners capable of bringing that vision to life within 3 years. Our project narrative threaded each sector (i.e., state and local environmental public health, agriculture, academia, and laboratories) in the food supply chain, inclusive of One Health. We proposed designing a system that will allow data mining and artificial intelligence to create predictive analytics aimed at identifying and extinguishing the next foodborne outbreak before one needlessly harms or ends a life.

Closer to home, our organization—in collaboration with the talented people at Nordensight, one of our IT partners—is creating an organization data lake for the National Environmental Health Association (NEHA). This data ecosystem will provide us the IT architecture to import data from virtually any source and make it accessible for analysis. The potential is virtually limitless. Imagine the power of crosswalking credentialing data with environmental health performance data. I can foresee analyzing exposure data with electronic health record data. Our ability to detect trends and enhance predictive analytics will grow and possibly leapfrog our association into a new era of potential in the process.

The journey into that preferred future is expensive and riddled with figurative and organizational land mines. If we elect to embark on this journey in earnest, we must stay abreast of the world around us. For example, concurrent national public health data conversations are staying on message: relevant and visionary data systems must address health equity, be cloud-based, and puncture the recalcitrant boils of data silos.

As you read this column, we will have created the architecture of our new website. Data and performance analytics will feature prominently, coupled with other useful features. There are several attributes we are interested in providing our membership. First, we desire to create a convenient user interface that centers on our common call to action and our priorities as a profession. Second, the website must be intuitive and easy to use. Third, the website should be optimized for mobile technology as an increasingly large segment of the population and our profession digest their news and perform their work from mobile devices. Fourth, our content should be fresh and valuable. I believe we are ready. We now employ six people in our association communications team, an increase from two only a few years ago.

Fifth, readily accessible staff information should be provided on the website. Members, continued on page 53
why or why not? Do individuals find value in discussion, are our webinars well attended? what are they doing with them? Extending that our policy and position statements and if so, What does that mean? Are there temporal website and how long do they remain there? professionals accessing when they visit our the website discussion, what information are "so what." In that spirit and threading data to about the "what" and am more focused on theumn. Our vision is to provide you with what you need to know and when you need to know it—all in a manner you find helpful.

Internal to NEHA, these days I inquire less about the “what” and am more focused on the “so what.” In that spirit and threading data to the website discussion, what information are professionals accessing when they visit our website and how long do they remain there? What does that mean? Are there temporal associations or patterns? Do they download our policy and position statements and if so, what are they doing with them? Extending that discussion, are our webinars well attended? Why or why not? Do individuals find value in our courses and if we inquired with them one year after attendance, could course attendees describe what changed in their practice? Data will inform these discussions.

Our organization is deceiving in its complexity. Longtime members Gina Bare and Michele Samarya-Timm recently joined our staff and have subsequently expressed astonishment at the breadth and depth of the organization’s activities. They were unaware. In the haze of meeting the expectations of busy portfolios, I ask myself what performance data are most reasonable and useful to collect to better understand organizational efficiency and effectiveness. I have developed a personal list of my favorite attributes of association data. Are the data easy to collect? Are the data easy to understand? Are the data directional? Are the processes underlying the data amenable to intervention? Do these data represent an organizational priority?

Many of you have heard me speak or read my perspectives on data. I believe most people do not make decisions based on data. They make decisions based on their values, beliefs, and absorbed identities. Our professional data, to be useful, must be woven into stories that deeply resonate with decision makers on a personal level. That is a whole different column.

I feel we are at a threshold, an old and familiar one centered on data. If we elect to open that door, let us start with the pipes that are available to demonstrate the full potential of our profession.

Dyjack.
An old, familiar door. Photo courtesy of David Dyjack.