

► **DirecTalk** MUSINGS FROM THE 10TH FLOOR

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**B**rooks Brothers suits. Seven-fold Italian silk ties. Merino wool jackets and skirts. Jimmy Choo shoes. Association executive director events are predominantly a display of status.

Most, but not all, of my colleagues at these events are professional association executives. They lead their professions, often very effectively. In most cases, however, they are not part of the profession. Medical associations might not be led by a physician. Engineering associations might not be led by a professional engineer. This occurrence does not mean these executives are less committed to their members. On the contrary, they can be very committed, but yet are not part of the profession. If you were to drop in on one of these events, you would likely draw a conclusion about association executive directors. They are professional chief executive officers and not subject matter experts. Now, consider the National Environmental Health Association's (NEHA) executive director, yours truly.

I have worked in environmental health and safety for over 30 years. Along the way I have personally collected hundreds of lead samples from firing ranges, paint, water, and soil. I spent years conducting indoor air quality assessments in hospitals, schools, and day care centers. I've assessed carbon monoxide exposure to U.S. Secret Service personnel, measured solvent exposure in refinery workers, and wrote an oil spill health and safety plan for the North Atlantic and Gulf of Mexico. I share this past work with you to illustrate an ecological fallacy. What might be generally true about executive directors

## Ecological Fallacies

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(i.e., they are not subject matter experts), might not be true at the individual level. An ecological fallacy occurs when group data are used to draw conclusions about individuals.

Ecological fallacies are abundant in our profession. I'm going to use this column to shine a light on a few prominent ones and I'm confident you have a few of your own. Let's start with one that is certain to perplex many of you.

### **Ecological Fallacy #1: There Is a Public Health Workforce Crisis**

There is no workforce crisis. There is, on the other hand, a case to be made that there is a leadership and human resource management crisis. It was 2006 when Dr. Linda Rosenstock, the dean of the University of California, Los Angeles School of Public Health, first introduced this idea in my professional sphere. The general notion was that our country was on the leading edge of a national wave of Nixon-era professional retirements

and that the workforce would soon lose its intellectual capital. The argument had merit.

Fast forward 13 years and we remain mired in some derivative of the same conversation. At the same time, the National Center for Education Statistics reports that the second largest undergraduate enrollment in the U.S. is health and health services, coming in at around 228,000 individuals. While not all will choose public health or environmental health, that is a sizeable student population. At the graduate level, health professions represent the third largest student cohort behind business and education.

There is plenty of skilled and educated talent waiting to ascend into leadership in the public and private sectors. We hypothesize the very long hiring processes (particularly in the governmental sector), coupled with noncompetitive salaries and not a paucity of potentially qualified applicants, to be the crisis. Existing leaders at the local level should make it a priority to address salary and hiring bottlenecks and watch this issue self-resolve.

### **Ecological Fallacy #2: There Are Limited Opportunities for Leadership in Environmental Health**

Approximately 15–20% of all local county and city health officials are registered environmental health professionals and/or registered sanitarians. I acknowledge that a large fraction of those leaders resides in rural and frontier communities; however, I personally know public health and healthcare agency

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directors in large urban centers and influential jurisdictions. These respected professionals are NEHA members. I contend there are three attributes that make us natural leaders.

First, many of us have cultivated political savvy as a function of our jobs. We weave, bob, and broker conversations among the regulated community and elected officials. We understand the concerns of families and the public at large.

Second, we literally speak the language of our local constituents. How else could we effectively communicate expectations around compliance and best practice? In fact, I float the proposition that Darwinian forces, once applied, result in environmental health directors that excel in communication. We know how to work with our constituents and understand what motivates them.

Third, we spend most of our time in our business and regulated communities, not in an office. Most of us are detailed oriented. We generally have strong science educations. We know where the environmental risk factors exist in our regions. Who else would you want in the room if resource and personnel decisions need to be made to protect and promote the public's health? I'd want an informed, educated, and experienced leader.

### **Ecological Fallacy #3: Environmental Health Is Not Part of Emergency Preparedness and Response**

Ladies and gentlemen, I hear this sentiment frequently, particularly in federal government circles. For example, environmental health is not specifically mentioned in the existing version of the Pandemic and All-Hazards Preparedness Act. Currently there is a notable absence of a Public Health Emergency Preparedness environmental health capability. It would seem at first blush from the national



*The National Environmental Health Association's executive director in an underground coal mine, circa 1991. Photo courtesy of David Dyjack.*

perspective that there is no role for us. Of course, this is patently untrue at the local level.

Who makes decisions about reoccupancy of smoke-damaged homes adjacent to wildfires? Who assists 20% of the public who use decentralized water sources after localized floods? When is the day care facility safe to reoccupy after a roof leak or sewage line break? Who better understands risk factors for norovirus in temporary shelters? The environmental health profession is an intimate and central player in emergency preparedness and response at the local level.

### **Ecological Fallacy #4: We Have the Data**

On the face of it, environmental health professionals have plenty of data. In fact, a large fraction of public health data is environmentally oriented. For those of you in local and state government, you are familiar with Public Health Accreditation Board requirements. According to reputable sources, our profession generates much of the data used in Public Health Accreditation Board accreditation efforts.

Citizen scientists are quickly overtaking our monopoly of data collection and reporting. Websites and apps where citizen scientists report everything from ticks to foodborne illness are becoming increasingly common. Environmental health data are no longer solely within our control. Contemporary public health data are increasingly asymmetrical, dynamic, continuous, and reported immediately. I attended two excellent presentations earlier this week at the Oregon Environmental Health Association's conference. Both were focused on shoreline and aquatic health and safety, and both highlighted the important role of citizens in promoting our collective health and safety.

There are many urban legends and ecological fallacies about our profession that merit our attention. When everyone accepts the prevailing wisdom, no one thinks very much. Don't let that happen to you. 🐼

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## Did You Know?

This year you can strengthen NEHA by participating in the Be a Beacon for NEHA Membership campaign! A growing NEHA means greater prominence for environmental health, more resources and support for members, and a larger community to tap into for support, collaboration, and friendship. Learn more about the campaign at [www.neha.org/nehabeacon](http://www.neha.org/nehabeacon).