Food Safety Summit attendees rolled their eyes and noticeably suppressed an urge to smirk as I encouraged them to think about the root cause of most food-borne illness in the U.S.: sick retail food employees who show up to work. A few conference participants approached me privately to suggest that some chain restaurants provide liberal leave policies for sick employees, and that those policies are subject to abuse. As a frequent traveler, I shared my biased observation that I regularly encounter visibly ill employees in some of the largest and most ubiquitous companies in the global hospitality and food and beverage industry. I try to make it a point to ask these employees why they are at work since they appear unwell. The answers disproportionately fall into one of two buckets: 1) they need the money or 2) there is no one else to cover their shift. By far, the majority of answers is money.

The reality is that poverty is awful. As of 2016, more than 40 million U.S. citizens live below the poverty line—13.3 million are children. Poverty is also intrinsically linked with environmental health. Cities like Flint, Michigan, have the dubious distinction of poverty rates 3.5 times higher than the national average. Children are not the only ones who are affected, their mothers also suffer.

The U.S. ranks as the worst developed country for maternal health outcomes. Poor American women encounter difficulty accessing care, are over prescribed medical interventions when they have access to care, and often enter pregnancy with a chronic disease. Then toss race into the crucible. Black mother in the U.S. is twice as likely to die before reaching her/his first birthday compared with a baby born to a White mother. Sadly, poor infants of color are then subject to an environmental health race to the bottom. The risk of lead exposure falls disproportionately on minority children. Black children are 3 times more likely to have elevated blood lead levels than their White counterparts.

Childhood poverty is associated with lifelong struggles and difficulties. Evidence suggests poor children suffer from developmental and psychosocial struggles, which ultimately give rise to financial problems for them, their families, and society. Children who do not earn a high school diploma are more likely to become teenage parents, be unemployed, and be incarcerated. A study by the National Student Clearinghouse found that poverty remains a more important indicator of whether a student will go to college than high school demographics or location. Place does matter, however, in other contexts.

The U.S. Environmental Protection Agency (U.S. EPA) has reported that approximately 12 million people live within one mile of a Superfund site. These people are generally characterized as being more minority, low income, linguistically isolated, and less likely to have a high school education than the U.S. population taken in aggregate. If a person is low income they are more likely to be obese. Poverty rates and obesity were reviewed in 2010 across 3,139 U.S. counties. Jurisdictions with poverty rates of more than 35% had obesity rates 145% greater than their wealthy counterparts.

The relationship between cancer and poverty is also sobering. There is an abundance of evidence that demonstrates cancer incidence and cancer survival are related to socioeconomic circumstances. If a person is poor, they are more likely to develop cancer and more likely to die from it. For breast cancer specifically, poverty is associated with lower survival rates. Dr. Danielle Henry, a Florida-based Board Certified General Surgeon and Breast Surgical Oncologist in Training, recently expressed her dismay. “I often see patients, those insured and uninsured, who have to make hard decisions about what parts of their cancer care they can afford. Even with all the advances we have made in cancer care, it often comes down to what they can afford and not always what they really need.”

These relationships are not strictly U.S. phenomena. In a recent study conducted in Alagoas, Brazil, about half the mothers of Zika-affected babies were teens between the

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ages of 14–19, and about 80% were Black. Roughly 6% were illiterate and 52% of the teens had not finished high school.

Christopher Murray, director of the Institute for Health Metrics and Evaluation, may have summed it up best. “The gaps continue to widen between the communities with the highest life expectancy and the lowest,” explained Murray. “Would that be different if the income inequality were reduced? If you took a 30-year view, then yes. There does seem to be that long run relationship between community income and these life expectancy outcomes.”

Most, if not all, of us in the NEHA network are altruistic and desire every American to reach their full potential. It strikes me that environmental health professionals are the foundation of prevention in the U.S. and elsewhere. We know our communities because we spend considerable time in the field, unlike most of the other public health professions. We disproportionately ascend into leadership positions because our political skills are honed through routine interaction with elected officials and the regulated community. Our science-based education gives us special insight and abilities to communicate to clinical professionals.

I ask that as we engage in our demanding work obligations, let us be aware of opportunities to advocate with local employers to build employment bridges to impoverished communities. We should use our influence with local elected officials to create conditions that improve high school graduation rates. Let’s be alert to teachable moments that might shine a light on the health implications of living in poverty.

Your association is doing its part. I nominated Dr. Sandra Whitehead, NEHA’s director of Program and Partnership Development, to U.S. EPA’s Federal Advisory Committee on Environmental Justice. U.S. EPA Administrator Scott Pruitt accepted our recommendation and recently named Dr. Whitehead to that committee. To the best of my knowledge, Dr. Whitehead is the first NEHA staff member to be named to a federal advisory committee.

I close on an optimistic note. I believe science as a worldview remains widely accepted. Society understands that addressing poverty and environmental issues are a strategic national, dare I say, global priority. To that end, and outside of the classroom, you represent science at the local level and command authority unlike many other professionals. Use your authority diplomatically. Use your authority humbly. Use your authority in service to others. Leadership matters. Your leadership matters. You matter.