

The National Environmental Health Association (NEHA) represents more than 7,000 governmental, private, academic, and uniformed services sector environmental health professionals in the U.S., its territories, and internationally. This workforce represents the second largest constituent of the existing public health workforce, second only to nursing. We are the profession's strongest advocate for excellence in the practice of environmental health as we deliver on our mission to build, sustain, and empower an effective environmental health workforce.

Role of Environmental Health in Addressing Environmental Justice

Adopted: July 2023

Policy Sunset: July 2028

NEHA acknowledges that environmental injustice is a threat to public health. Environmental injustice can result in exposure to hazardous pollutants, which can cause a range of health problems such as respiratory and cardiovascular disease, cancer, and developmental delays, among others. Communities that are disproportionately affected by environmental injustice usually lack access to the health services and resources needed to address health problems. Furthermore, environmental injustice is often correlated with racial and economic disparities, which can exacerbate health inequalities. Environmental justice is the cornerstone of NEHA's work because the health and well-being of our communities are inextricably linked to the quality of our environment. Environmental justice is not just a matter of fairness but a matter of public health and social justice.

Key services provided by environmental health professionals are undermined by environmental injustice. As a result, not all populations have benefitted equally from national improvements to air and water quality or food safety. Therefore, we recognize that environmental injustice hinders our members from carrying out our vision of healthy environments, protected communities, and empowered professionals.

To address structural and systemic injustice that hinders the delivery of environmental health services to disproportionately affected populations, NEHA believes in the following action agenda:

- **Adopt statements on justice, equity, diversity, and inclusion.** To be most effective, these statements will be developed collaboratively and with consideration for how the values can be applied to daily operations. These statements will represent core values of the agency and will allow for the adoption of practices that foster on justice, equity, diversity, and inclusion for those employed within the agency and communities, individuals, and groups they serve (National Council of Nonprofits, 2023).

- **Uphold environmental justice.** Upholding environmental justice admonishes race as a factor in the distribution of dangerous environmental burdens. Environmental justice requires the meaningful involvement of all people in the development, implementation, and enforcement of environmental laws, regulations, and policies (U.S. Environmental Protection Agency [U.S. EPA], 2023).
- **Incorporate a Health in All Policies framework to inform decision making.** Health in All Policies (HiAP) is a collaborative, data-driven approach to public policies across sectors that systematically considers the health implications of decisions, seeks synergies, and avoids harmful health impacts to improve population health and health equity. HiAP is a collaborative effort to improve the health of all people by integrating health in decision making across sectors and policy areas.
- **Require recurring diversity, equity, and inclusion training for staff.** Instituting effective trainings on diversity, equity, and inclusion (DEI) can build staff awareness, as well as change attitudes and behavior, allowing the environmental health workforce to better serve their constituencies through a health equity lens. Instituting an internal culture that values differences will manifest externally in the communities served.
- **Employ hiring practices that encourage diversity in the workforce.** Gerding et al. (2019) found that 86% of environmental health professionals self-identified as White. In terms of the public health workforce, Sellers et al. (2015) reported that 70% self-identified as White. These findings suggests that the environmental health workforce—more so than the greater public health workforce—is often distinctly demographically different than the populations served. In addition to hiring practices, agencies must put into practice strong retention strategies and ensure opportunities for senior and executive leadership among diverse candidates.

Analysis

Environmental health professionals have an essential role to play in addressing environmental justice. Racism and environmentalism are linked to the oppression and systemic racism that communities of color face; marginalized groups of people are devalued in the protection of environmental health. Communities with limited resources and families with lower incomes are also affected. A study on air quality showed racial disparities in exposure to particulate matter, with non-Whites having a 1.28 times higher burden and Black residents, in particular, have a 1.54 times higher burden than the overall population (Mikati et al., 2018). The racial disparities noted in this study are linked to poor health outcomes and increased morbidity and mortality. Another study highlighted that communities in Central Appalachian face similar challenges, with many counties in this region listed near the bottom of all U.S. states in health outcomes (Hoover et al., 2020).

Environmental health professionals protect and enhance the health and well-being of all, and that means placing a special focus on people who suffer marginalization and discrimination. The



public health field has been fighting health disparities that burden people of color and vulnerable populations for decades. The environmental justice movement that started in the 1960s sought to address the inequity of environmental protection in communities of color (U.S. EPA, 2023).

Communities of color disproportionately experience severe environmental injustice, including issues related to the built environment, food deserts, gentrification, exposure to hazards, dilapidated infrastructure, health disparities, and systemic racism. These disparities are leading to both health and environmental crises that are racially motivated. The systems of oppression that play a role in the mortality of marginalized communities are perpetuating environmental injustice.

In *Understanding the Needs, Challenges, Opportunities, Vision, and Emerging Roles in Environmental Health (UNCOVER EH) Initiative*, a disproportionately high percentage (86%) of environmental health professionals self-identified their race as White (Gerding et al., 2019). Environmental justice is at the core of racism as an environmental health issue. Yet, the workforce is not representative of the marginalized and oppressed communities of color. This lack of representation in the environmental health workforce risks a loss of valued skills, inherent knowledge, and abilities to connect with diverse communities (Jones et al., 2021). Dr. Welford Roberts, NEHA president from 2009–2010, stated that diversity in the environmental health workforce is important to the success of environmental health services in communities and that the environmental health workforce should reflect the communities it supports (Roberts, 2009).

Achieving a more equally diverse environmental health workforce provides a firm understanding of cultural differences, different beliefs and attitudes toward environmental health, and cultural sensitivity. Furthermore, it can potentially increase community engagement, communication, and understanding. Environmental health professionals have an opportunity to address the social injustices and systemic changes that are needed.

The environmental health field emerges from the broader public health field. We must call attention to the linkage of social determinants of health and health equity. We must apply a health equity lens when discussing the environmental health concerns that marginalized communities are facing. Within the environmental health profession, we must acknowledge the need for adhering to diverse hiring practices, identifying opportunities for cultural competency training, combating implicit biases, and combating systemic racism.

Justification

Adopting Statements on Justice, Equity, Diversity, and Inclusion

Organizations whose operational core values reflect their commitment to justice, equity, diversity, and inclusion define this commitment through policy statements. Such statements affirm their commitment to these principles. Embracing these organizational values into a statement ensures the promotion of justice, equity, diversity, and inclusion throughout their organization, in their employment practices, in their board rooms, and in their communications.

The value of these statements is illustrated in the following experience: A government agency chose to use an outside contractor to conduct diversity training before adopting a statement and



without discussing such efforts with their employees of color. This led to resentment by these persons throughout the training. The agency did not first review their own operational practices and values before engaging in the training.

Policy statements reflect the efforts of an organization to discuss how individuals interpret and experience discrimination, which allows for an exploration of the organization's own implicit and unconscious biases about race, gender, sexual orientation, and other identities. Statements demonstrate that the organization reviewed its own culture and values on justice, equity, diversity, and inclusion, and has made these principles a part of organizational values (National Council of Nonprofits, 2023).

Upholding Environmental Justice

Environmental exposures are not experienced equally. Environmental injustices—such as inequitable distribution of hazardous waste storage and processing facilities, wastewater treatment plants, and power plants—have been well documented in the U.S. (Federal Emergency Management Agency, 2022). Race is the single most predictive factor in the location of hazardous facilities (Bullard et al., 2008). Black, Hispanic, and Latinx communities are often the victims of decades of environmental mismanagement with these communities experiencing higher rates of chronic diseases, such as cancer and heart and lung disease, that can be linked to environmental exposure (Gee & Payne-Sturges, 2004).

Louisiana offers a crucial example of how environmental injustices compound to impact communities of color. Large quantities of solid and hazardous waste from Hurricane Katrina were deposited at sites in communities predominantly inhabited by people of color (Johnson & Rainey, 2007). To make matters worse, these same communities became repositories for waste materials from the BP Deepwater Horizon oil spill and cleanup (Osofsky et al., 2012). The distribution of hazardous waste into these communities was outlined in BP's waste management plan, which was approved by the U.S. Environmental Protection Agency, the states, the U.S. Coast Guard, and the Unified Area Command (Osofsky et al., 2012).

Environmental justice and promotion of health equity is a responsibility that falls squarely on the shoulders of environmental health professionals. The day-to-day operations of environmental health professionals play an important role in combating environmental injustice and inequality. The quality of education and inspection an environmental health professional gives to a restaurant operator in a neighborhood of color can determine the quality of food safety within that community. In addition, cultural competence is essential when inspecting ethnic restaurants. The 2012 Environmental Justice Strategy and Implementation Plan proposes a variety of approaches to reduce environmental injustice and should be utilized by all environmental health professionals (U.S. Department of Health and Human Services, 2012). Environmental health professionals have the basic duty of educating, supporting, and maintaining the environmental health of communities and eliminating racial environmental injustice.

Health in All Policies

HiAP strives to improve the health of all members of a community through the deliberation of collective decision making across various community sectors and policy areas (Rudolph et al.,



2013). This approach is achieved through educating policymakers on areas of health, equity, and sustainability to make the most informed and inclusive health promotion policies. Determinants of health that influence HiAP approaches are economic status, education level, systemic racism, and neighborhood characteristics and inequities (Rudolph et al., 2013). Often, policy decisions that can influence a community's health outcomes are overseen by non-health professionals in housing development, transportation, education, and criminal justice, among others. The framework of HiAP allows environmental health to be an integral part of policy development. Without HiAP, policymakers can make impactful decisions based on implicit racial biases, rather than scientifically supported data, which can negatively affect racial and ethnic minority communities and result in decades of systemic health inequity.

The value of environmental health in a community requires investment in that community's culture and expansion of health education. Access to better pharmaceuticals can reduce environmental illnesses such as asthma in communities of color, but interventions such as the reduction of pollution, improved air quality, and safer and healthy housing are more cost effective and easier to replicate in scale (Wernham & Teutsch, 2015). Many big cities have begun the integration of HiAP into their environmental health policies. For example, Public Health—Seattle & King County changed the Natural Resource and Park budget to provide safer areas for physical activity in low-income neighborhoods (Wernham & Teutsch, 2015). In 2013, the mayor of Washington, DC, issued an executive order on employing HiAP in the sustainability plan of the city. This plan consisted of several provisions to improve the health of low-income residents by creating more parks and green space, reducing food deserts, and increasing access to safer and healthy housing neighborhoods (Wernham & Teutsch, 2015). To secure healthy outcomes for all people, environmental health professionals must ensure equitable public and environmental health investments in communities with racial and ethnic minorities.

Training on Diversity

Addressing racism and bias in the workplace goes beyond recruitment and hiring practices. Most companies implement DEI training to raise awareness and foster an inclusive atmosphere in the workplace (Chavez & Weisinger, 2008). There is mixed evidence regarding the effectiveness of DEI training. More studies, however, demonstrate that incorporating DEI training into the organizational culture does have positive impacts, including improving attitudes and behaviors, but these effects can be short-lived.

There are benefits to incorporating DEI training and programs that go beyond single training events. Organizations should not perceive one-off DEI trainings as a sole remedy for combatting bias and prejudice (Kalev et al., 2006). A meta-analysis of 260 studies on the effects of diversity training overall indicated positive outcomes on cognitive learning. The positive effects were greater when trainings were complimented by other diversity initiatives that target awareness of biases and skill development and occurred over a period of time (Bezrukova et al., 2016). DEI training alone cannot solve racial inequity in the workplace; a holistic approach to shifting the organization's culture in relation to justice, equity, diversity, and inclusion is required. Consistent DEI training, though crucial, is just one part of the solution (Kovacs, 2021). When incorporating



diversity trainings at the organization level, there must be a broader strategy in place to reinforce learning and continued awareness and education.

There are many types of DEI trainings and resources. It is important to ensure that the organization implements the training in a manner that will yield positive outcomes among the workforce. The most effective diversity programs establish organizational responsibility and incorporate an accompanying organization-wide strategy that is culturally inclusive and includes regular education elements (Kalev et al., 2008). Additionally, an all-inclusive multiculturalism approach is useful for positive and effective organizational changes and to enhance employee engagement where traditional diversity approaches such as color blindness and multiculturalism have failed (Stevens et al., 2008). By implementing these strategies for diversity programs in the workplace, organizations can continue to address bias and racism that contribute to health inequities.

Diversifying Hiring Practices

According to Dr. Priscilla Oliver, NEHA president from 2019–2020, “Diversity has increasingly become an important part of organizational operations and health” (Oliver, 2020). Employment opportunities play a vital role in economic stability; however, racial discrimination in hiring practices lead to major disparities in employment and wages. Recent studies have highlighted bias against racial and ethnic minorities in the resume screening process. Resumes that had been scrubbed of references to racial identity received twice as many calls for interviews than resumes from candidates who revealed their race (Kang et al., 2016). Similarly, there is evidence that White-sounding names receive 50% more callbacks for interviews than Black-sounding names (Bertrand & Mullainathan, 2004). Additionally, in New York City, when White, Black, and Latinx job applicants used equivalent resumes to apply for hundreds of entry-level jobs, Black candidates were one half as likely as White counterparts to receive a callback for an interview (Pager et al., 2009). While the Civil Rights Act of 1964 made discrimination based on race illegal, individual biases and attitudes contribute to continued systemic racism present in hiring practices.

To combat racial discrimination and bias in the workplace and to promote diversity, best practices should focus on the implementation of policies and procedures at the various stages of recruitment, hiring, and employment (U.S. Equal Employment Opportunity Commission, n.d.). These practices include diversifying recruitment strategies to expand the pool of eligible candidates, conducting ongoing analysis of current employment practices, creating objective qualification standards, and ensuring consistent evaluation of candidates. The U.S. Equal Employment Opportunity Commission also recommends providing retention strategies such as training and mentoring to workers of all backgrounds to ensure that all employees have the same access to opportunities, skills, and experiences. These efforts can help recruit and retain a diverse leadership and workforce that more closely resembles the populations served.



References

- Bertrand, M., & Mullainathan, S. (2004). Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. *American Economic Review*, *94*(4), 991–1013. <https://doi.org/10.1257/0002828042002561>
- Bezrukova, K., Spell, C.S., Perry, J.L., & Jehn, K.A. (2016). A meta-analytical integration of over 40 years of research on diversity training evaluation. *Psychological Bulletin*, *142*(11), 1227–1274. <https://doi.org/10.1037/bul0000067>
- Bullard, R.D., Mohai, P., Saha, R., & Wright, B. (2008). Toxic wastes and race at twenty: Why race still matters after all of these years. *Environmental Law*, *38*(2), 371–411.
- Chavez, C.I., & Weisinger, J.Y. (2008). Beyond diversity training: A social infusion for cultural inclusion. *Human Resource Management*, *47*(2), 331–350. <https://doi.org/10.1002/hrm.20215>
- Federal Emergency Management Agency. (2022). *Executive order 12898: Environmental justice*. <https://www.fema.gov/fact-sheet/executive-order-12898-environmental-justice>
- Gee, G.C., & Payne-Sturges, D.C. (2004). Environmental health disparities: A framework integrating psychosocial and environmental concepts. *Environmental Health Perspectives*, *112*(17), 1645–1653. <https://doi.org/10.1289/ehp.7074>
- Gerding, J.A., Landeen, E., Kelly, K.R., Whitehead, S., Dyjack, D.T., Sarisky, J., & Brooks, B.W. (2019). Uncovering environmental health: An initial assessment of the profession's health department workforce and practice. *Journal of Environmental Health*, *81*(10), 24–33. <https://www.neha.org/Images/resources/JEH6.19-Feature-Uncovering-EH.pdf>
- Hoover, A.G., Koempel, A., Christian, W.J., Tumlin, K.I., Pennell, K.G., Evens, S., McAlister, M., Ormsbee, L.E., & Brewer, D. (2020). Appalachian environmental health literacy: Building knowledge and skills to protect health. *Journal of Appalachian Health*, *2*(1), 47–53. <https://doi.org/10.13023/jah.0201.06>
- Johnson, G.S., & Rainey, S.A. (2007). Hurricane Katrina: Public health and environmental justice issues front and centered. *Race, Gender & Class*, *14*(1/2), 17–37.
- Jones, N., Marks, R., Ramirez, R., & Ríos-Vargas, M. (2021, August 12). *Improved race and ethnicity measures reveal U.S. population is much more multiracial: 2020 Census illuminates racial and ethnic composition of the country*. U.S. Census Bureau. <https://www.census.gov/library/stories/2021/08/improved-race-ethnicity-measures-reveal-united-states-population-much-more-multiracial.html>
- Kalev, A., Dobbin, F., & Kelly, E. (2006). Best practices or best guesses? Assessing the efficacy of corporate affirmative action and diversity policies. *American Sociological Review*, *71*(4), 589–617. <https://doi.org/10.1177/000312240607100404>
- Kang, S.K., DeCelles, K.A., Tilcsik, A., & Jun, S. (2016). Whitened résumés: Race and self-presentation in the labor market. *Administrative Science Quarterly*, *61*(3), 469–502. <https://doi.org/10.1177/0001839216639577>



- Kovacs, G. (2021). *Diversity training in the workplace: Assessing effectiveness and outcomes* [Master's research paper]. York Space Institutional Repository. <http://hdl.handle.net/10315/38301>
- Mikati, I., Benson, A.F., Luben, T.J., Sacks, J.D., & Richmond-Bryant, J. (2018). Disparities in distribution of particulate matter emission sources by race and poverty status. *American Journal of Public Health, 108*(4), 480–485. <https://doi.org/10.2105/AJPH.2017.304297>
- National Council of Nonprofits. (2023). *Why diversity, equity, and inclusion matter for nonprofits*. <https://www.councilofnonprofits.org/tools-resources/why-diversity-equity-and-inclusion-matter-nonprofits>
- Oliver, P. (2020). A call for diversity in environmental health. *Journal of Environmental Health, 82*(8), 6–7.
- Osofsky, H.M., Baxter-Kauf, K.M., Hammer, B., Mailander, A., Mares, B., Pikovsky, A., Whitney, A., & Wilson, L. (2012). Environmental justice and the BP Deepwater Horizon oil spill. *NYU Environmental Law Journal, 20*(1), 99–198.
- Pager, D., Bonikowski, B., & Western, B. (2009). Discrimination in a low-wage labor market: A field experiment. *American Sociological Review, 74*(5), 777–799. <https://doi.org/10.1177/000312240907400505>
- Roberts, W.C. (2009). Diversity in the environmental health workforce. *Journal of Environmental Health, 72*(3), 4, 22.
- Rudolph, L., Caplan, J., Mitchell, C., Ben-Moshe, K., & Dillon, L. (2013). *Health in All Policies: Improving health through intersectoral collaboration* [Discussion paper]. Institute of Medicine of the National Academies, National Academy of Sciences. <https://nam.edu/wp-content/uploads/2015/06/BPH-HiAP.pdf>
- Sellers, K., Leider, J.P., Harper, E., Castrucci, B.C., Bharthapudi, K., Liss-Levinson, R., Jarris, P.E., & Hunter, E.L. (2015). The Public Health Workforce Interests and Needs Survey: The first national survey of state health agency employees. *Journal of Public Health Management and Practice, 21*(Suppl. 6), S13–S27. <https://doi.org/10.1097/PHH.0000000000000331>
- Stevens, F.G., Plaut, V.C., & Sanchez-Burks, J. (2008). Unlocking the benefits of diversity: All-inclusive multiculturalism and positive organizational change. *The Journal of Applied Behavioral Science, 44*(1), 116–133. <https://doi.org/10.1177/0021886308314460>
- U.S. Department of Health and Human Services. (2012). *2012 Environmental Justice Strategy and Implementation Plan*. <https://www.hhs.gov/sites/default/files/environmentaljustice/strategy.pdf>
- U.S. Environmental Protection Agency. (2023). *Environmental justice*. <https://www.epa.gov/environmentaljustice>
- U.S. Equal Employment Opportunity Commission. (n.d.). *Best practices for employers and human resources/EEO professionals*. <https://www.eeoc.gov/best-practices-employers-and-human-resourceseeo-professionals>



Wernham, A., & Teutsch, S.M. (2015). Health in All Policies for big cities. *Journal of Public Health Management and Practice*, 21(Suppl. 1), S56–S65.
<https://doi.org/10.1097/PHH.0000000000000130>

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Acknowledgements

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