Supporting Equity and Environmental Justice

Recommendations for 2021 and Beyond

For decades, people from marginalized communities, including communities of color, Indigenous communities, and low-income communities, have fought for the right to live in environments free of toxic waste, pollution, and other hazards. Their victories in these hard-fought battles have led to federal programs and policies that help communities address health, safety, occupational, and quality-of-life concerns (Bullard, Johnson, and Torres 2011).

Nevertheless, marginalized communities continue to face disproportionate harm from environmental pollution, hazardous workplace conditions, industrial activities, a lack of access to health care, and many other threats. To further address such disparities, federal agencies must prioritize, carry out, and allow public access to scientific research and data collection focused on communities (Desikan et al. 2019). Data help communities identify and track harms and inequities; advocate for just, equitable policies; and participate in democratic government. For example, environmental justice groups have often advocated for assessing risks to communities using cumulative impacts analyses, which examine multiple potentially synergic hazards and estimate the total environmental and public health impacts from these hazards (Bullard and Johnson 2000).

The COVID-19 pandemic is exacerbating the health, safety, occupational, and wellness burdens shouldered by underserved communities. Clear evidence has emerged that people of color, particularly people from Black, Brown, Latinx, Indigenous, and Pacific Islander communities, face a slew of pandemic-related inequities, such as disproportionately higher rates of contracting and dying from the novel coronavirus and limits on their access to COVID-19 tests and health care (Godoy and Wood 2020; Doshi et al. 2020; Dettman 2020). Additionally, the
pandemic has strained the ability of government programs to serve underserved communities, such as food assistance, education, housing, and employment programs.

It is imperative that federal agencies implement strong safeguards to address such disparities. To ensure that scientific work identifying and addressing disproportionate health burdens takes place in an open, robust, and equitable manner, federal agencies must enforce and strengthen their scientific integrity policies. Additionally, they must continue to combat systemic racism by examining their internal processes. Agencies cannot adequately protect underserved communities or understand their needs or circumstances when hindered by a system that fails to support a workforce from diverse and underrepresented backgrounds (see box) (Simmons-Duffin and Huang 2020).

**Protecting Communities from Health Hazards**

Despite the federal government’s fundamental duty to protect the health and safety of all the nation, it has a long history

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### Improving Diversity and Equity in the Federal Workforce

Racism and inequity in the workplaces of federal agencies limit their ability to fulfill their missions and serve the public. Protests in 2020 have highlighted the deeply entrenched systems of racial injustice and White supremacy in the United States, as well as the urgent need to identify, address, and dismantle these systems and protect the health and safety of people in marginalized communities across the United States. Like many organizations employing scientists, the Union of Concerned Scientists (UCS) included, federal agencies must prioritize addressing racism and inequities within their own walls and take steps toward becoming anti-racist organizations (Fears and Mufson 2020).

However, federal agencies are receiving significant push-back from the highest levels of government on offering a basic and essential component of any anti-racist organization, racial equity and diversity trainings. In a September 2020 memo, the White House's Office of Management and Budget ordered the cancelation of contracts related to trainings that used the terms “white supremacy” and “critical race theory” (Dawsey and Stein 2020). Racial equity and diversity trainings should be available and encouraged for all federal employees since they shine a light on unconscious biases operating at the workplace and often provide a set of tools and strategies for combating systems of racial injustice.

In July 2020, more than 1,200 current employees of the Centers for Disease Control and Prevention (CDC)—more than 10 percent of the agency’s workforce—signed a letter stating that they “can no longer stay silent to the widespread acts of racism and discrimination within CDC that are, in fact, undermining the agency’s core mission” (Simmons-Duffin and Huang 2020). The letter highlighted a “pervasive and toxic culture of racial aggressions” that systematically favored and privileged one race over another.

An entrenched system of injustice likely plays a role in the governing structures of many federal agencies. In a 2018 survey conducted by UCS and Iowa State University, several federal scientists explicitly called out their workplaces for tolerating or even encouraging racist practices that disenfranchis staff of color (Carter, Goldman, and Johnson 2018). For example:

- A National Oceanic and Atmospheric Administration (NOAA) scientist said, “There does not seem to be any capacity to support people of color and their advancement in the sciences. That is a workforce issue but it impacts the ability to deliver our mission. Furthermore, there is no appetite to address disproportionate impacts to communities of color; therefore the topic is an automatic no go.”

- A US Department of Agriculture scientist said, “The corruption in the chain of command is sometimes breathtaking. The old boy network, old gal network, [and] the white network are fully in effect. Supervisors hand pick winners and losers and prevent people they do not like from getting promoted or getting funding.”

- A US Geological Survey scientist said, “Diversity in workforce has become just a slogan. No particular attention has been given to minority scientists to encourage their advancement.”

- A NOAA scientist said, “We basically are ‘talking heads’ when it comes to diversity. We talk a good talk, but have no hiring capability now, thus are able to say we will hire minorities, but have no ability to do so. Our vision of equal opportunity is to make sure all the white men working in the agency have an equal voice.”

Federal agencies must identify and address racism in their decisionmaking processes, workforce demographics, and workplace culture. This includes evaluating and addressing office cultures that may foster microaggressions, influence the handling of personnel complaints, and erect barriers preventing the hiring, promotion (especially to senior leadership positions), and other support for staff of color.
of failing to safeguard Black, Brown, and low-income communities from industrial pollution and the enormous health burdens associated with that exposure, such as respiratory diseases, decreased lung function, cardiovascular disease, skin and eye diseases, and cancer, among other health impacts (Eom et al. 2018; Bergstra, Brunekreef, and Burdorf 2018; WHO n.d.). Too often, the government prioritizes the profit-driven concerns of industry over the health of environmental justice communities. While the activities of the Environmental Protection Agency (EPA) often play a particularly prominent role toward improving health and wellness outcomes in environmental justice communities, all federal agencies have roles and responsibilities in this regard and should work to identify and address health and environmental harms that disproportionately affect underserved communities.

Across the nation, science-based federal agencies must carry out several critical activities to help reduce air, water, and other forms of pollution that regularly burden environmental justice communities.

**To ensure that the federal government recognizes environmental justice as a core activity, heads of agencies such as the EPA, the Department of the Interior, and the Department of Health and Human Services should direct their agencies to take the following steps:**

- Develop or enhance an agency-wide environmental justice strategy. Each agency’s equity or environmental office (or the agency’s chief scientist if it lacks these offices) should lead this effort.
- Set up an intra-agency task force to oversee the process of incorporating environmental justice into the core mission of each federal agency (Park, Reid, and Vagins 2003).

**To ensure that the nation regularly and equitably enforces science-based laws, each federal agency should employ the following oversight mechanisms:**

- Establish the position of an environmental justice ombudsman to receive, review, and process complaints and allegations with respect to environmental justice programs.²
- Commit to filling open safety inspector positions and expanding the workforce responsible for health and safety inspections. The Occupational Safety and Health Administration, the EPA, the Food Safety and Inspection Service, and other agencies have reduced the number of health, safety, and compliance inspectors on their staff by unprecedented amounts since 2017. This is a dangerous trend: health and safety inspections are the nation’s primary mechanism for identifying hazardous conditions and holding employers accountable for complying with science-based laws (Berkowitz 2019; Katz 2017; Bachman and Stokes 2019).
- Make greater use of existing legal authorities to pursue criminal enforcement for regulatory violations (Goodwin 2019).

Executive Order 12898 requires federal agencies to assess how proposed rules will affect underserved communities. While the executive order encourages the use of equity-based analyses “whenever practicable and appropriate,” it does not mandate their development or use in policymaking (Clinton 1994).

**Each agency head should strengthen the implementation of Executive Order 12898 by issuing an agency-wide directive that makes these analyses mandatory when developing significant policies (Carter et al. 2020). The directive should:**

- Explore how to ensure that scientific assessments of industry’s impacts, including health and risk assessments and cost-benefit analyses, adequately account for sources of pollution that affect nearby communities, such as impacts from fugitive releases during startups, shutdowns, and malfunctions (Zirogiannis, Hollingsworth, and Konisky 2018). This could include evaluating whether assessments use all available data sources in considering unplanned chemical releases and the cumulative impacts of exposures on the health of nearby communities.
- Whenever agencies assess and make decisions about the risks faced by frontline communities, each agency head should commit to adhering to the primary presumption that exposure to cumulative hazards adversely affects health. According to the US Commission on Civil Rights, agencies fail to adhere to Executive Order 12898 by failing to make this assumption. An absence of evidence of health impacts should not be treated as an indicator that no harm is occurring for communities facing multiple hazards (Park, Reid, and Vagins 2003).
- Disaggregate data on risks and exposures by race, ethnicity, gender, age, income, and geographic location to the maximum extent possible (Park, Reid, and Vagins 2003).
To ensure that environmental justice communities are properly, frequently, and fully informed of the pollution and hazardous chemical risks they face—and about how they can act on that information—federal agencies should consider forming an interagency working group focused on environmental justice, developed and coordinated by the Office of Science and Technology Policy.

- The working group should be made up of environmental justice experts across the federal government, environmental justice advocates, community members, and staff from the Office of Science and Technology Policy.
- The working group should help ensure the continuation or undertaking of environmental justice activities related to science and technology matters and prioritize addressing inequities that affect environmental justice communities.
- The working group should solicit stakeholder input from members of environmental justice communities early and frequently.
- The working group should develop guidelines and other processes to carry out the following recommendations:
  - Issue formal guidance on how to assess the environmental and health harms associated with cumulative risk, including the nature and magnitude of exposures, the types of risk faced, and any harmful synergistic effects, and describe best practices for reducing or eliminating cumulative impacts (Park, Reid, and Vagins 2003).
  - Reinvigorate and expand the consultation process for environmental justice communities, including early, meaningful engagement with communities for agency rulemaking and other decisions that affect them.
  - Identify and work to address barriers that hinder meaningful community engagement in the rulemaking process, particularly during public comment processes, public hearings, and any other stakeholder engagement processes, and develop strategies to overcome such barriers.
  - Develop and implement processes for agencies to use forms of communication and languages understandable to populations affected by agency decisionmaking. The processes should mandate the use of such communication strategies during emergency situations.

The EPA should take the following steps to safeguard the health and safety of marginalized communities and undo recent actions that cause these communities disproportionate harm:

- Ensure that the EPA’s Office of Environmental Justice has sufficient capacity and resources to carry out its responsibility to ensure that the agency’s science-based decisions, like all its decisions, consider impacts on communities most affected by environmental pollution (Outka and Warner 2019).
- Rescind the EPA’s final petition denial order to revoke all tolerances and cancel all registrations for the insecticide chlorpyrifos. The denial failed to consider the best available science and disproportionately harmed agricultural communities, particularly low-income Latinx and migrant communities (EPA 2020a).
- Abandon the proposed “Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act” (EPA 2020b). This rule would sideline scientific evidence, reinterpreting the Clean Air Act in a manner that could increase cancer-causing toxic air pollution (Declet-Barreto et al. 2020). Communities of color, Indigenous communities, and low-income communities tend to be located in areas with a greater clustering of industrial facilities and are disproportionately affected by industrial air pollution (Bullard et al. 2007).
• Ensure that the best available science informs EPA decisions on chemical safety in consumer products, in accordance with the 2016 Frank R. Lautenberg Chemical Safety for the 21st Century Act, which updated the 40-year-old Toxic Substances Control Act. Although the Lautenberg Act specifically mandates protection for susceptible and highly exposed populations, evidence suggests that the EPA largely failed to assess the impact on susceptible populations while conducting its first 10 risk evaluations (Koman et al. 2019).

• When the EPA’s National Air Toxics Assessment shows that a facility poses an adverse public health risk, the EPA should prioritize enforcement and cleanup efforts for facilities located near environmental justice communities.

• Evaluate and improve the processes used to inform communities living near Superfund and brownfield sites about the health and environmental hazards they face; how best to mitigate these risks; grants and technical assistance the EPA can provide communities; the EPA’s current plans for prioritizing and cleaning up these sites; and accountability mechanisms in place for communities to ensure the EPA is meeting expectations (Carter and Kalman 2020). These processes should include ways to involve frontline communities.

Safeguarding Programs Designed to Help Underserved Communities

Many federal programs are designed to address inequities around health, safety, and measures of well-being—from lifting the community voice in policymaking to providing food security—and many of these programs serve low-income communities, Indigenous communities, and communities of color. The need for these programs is often grounded in science, and their successes are many. For example, the Supplemental Nutrition Assistance Program (SNAP) has resulted in fewer sick days taken, fewer hospital visits, lower health-care costs, and fewer children born with low birth weights (Gregory and Deb 2015; Berkowitz et al. 2017; Almond, Hoyes, and Schanzenbach 2011). These measurable successes chip away at long-standing inequities, and such programs are among the nation’s most powerful tools for reducing health and wellness inequities for marginalized communities.

A number of federal agencies have offices or divisions dedicated to studying disproportionate health burdens on marginalized communities and examining policy actions that could help address such inequities. However, these same programs face concerted attempts to roll them back, restrict access to them, and reduce or eliminate their funding. Federal agencies should strengthen their commitment to these programs.

Federal programs that provide nutrition assistance to children and families have led to measurable health gains and reduced inequities for low-income communities. Improving research and data collection is critical to ensuring that these and other programs can most effectively meet the needs of underserved communities.
In 2021, federal agencies should systematically evaluate these programs and ensure that these offices can function to the best levels possible by taking the following steps:

- Rescind the Office of Management and Budget memo from September 4, 2020, with the subject line “Training in the Federal Government,” which orders the defunding of racial equity and diversity trainings on the grounds that they promote “un-American propaganda” (Dawsey and Stein 2020). Racial equity and diversity trainings are an essential step in helping foster a more equitable agency culture, which in turn helps support programmatic efforts that aim to reduce health disparities faced by marginalized communities.

- Agencies that issue federal loans and other forms of relief after major disasters should evaluate and take action using a racial justice lens to improve their current processes. Evidence suggests that, in the wake of a natural disaster, the Federal Emergency Management Agency’s buyout programs and the Small Business Administration’s low-interest rebuilding loans disproportionately favor white communities over communities of color (Benincasa 2019; Frank 2020).

- The Occupational Safety and Health Administration should evaluate and ensure that its rules, guidance, and enforcement practices promote workplace safety for low-income workers, workers of color, and Indigenous workers.

Independent oversight boards often generate or utilize scientific data during their investigations, and their work can provide insight into how the federal government incorporates environmental justice and equity into its operations. However, the boards cannot operate when the president fails to nominate enough members for them to reach a quorum.

The president should quickly nominate and encourage speedy appointment through Congress of qualified, independent board members to several independent boards:

- The Chemical Safety and Hazard Investigation Board is pivotal in preventing disasters at industrial facilities, a situation that disproportionately affects frontline communities (Campbell 2020).

- The Merit Systems Protection Board can help root out systemic racism within the federal government through its roles in adjudicating employee complaints filed under the Whistleblower Protection Act and in investigating allegations of personnel practices that potentially violate the Civil Rights Act (Ogrysko 2020).

- The Consumer Product Safety Commission works to reduce the risk of injury or death from consumer products, and its actions can help reduce health burdens faced by children from everyday objects in homes and schools (Goldman 2020).

- The National Labor Relations Board investigates employer practices that may violate the National Labor Relations Act, which protects the rights of workers to unionize and bargain collectively, and it curtails certain employer practices that can harm workers (Rhinehart 2020).

The most disenfranchised communities are underrepresented at the policymaking table, even though government decisions disproportionately affect them.

Agency heads should direct their agencies to identify and address barriers preventing members of marginalized communities from engaging meaningfully in rulemaking processes. Specifically, agencies should take the following steps:

- Agency heads should meet, interact, and engage with community members more often and provide community members with greater access to agency staff, helping ensure that voices of underserved community members are heard and not perceived as less valuable than the input of other stakeholders.

- Agencies with regulatory, oversight, or permitting authority for industrial facilities should mandate the meaningful participation of frontline communities in agency decisionmaking processes. Specific measures include but are not limited to outreach to communities in providing information about a proposal, using appropriate means of communication, soliciting public comments, and creating a set of best practices for ensuring that communities have their views adequately presented and fully considered (Goodwin 2019).

- Agencies should work to address gaps in the participation of tribal communities in rulemaking, and issue guidance regarding best practices for meaningfully consulting and engaging with tribal groups at the start of deliberations on rulemaking processes. A 2017 report from the Department of the Interior, the Department of the Army, and the Department of Justice, in consultation with 59 tribal groups, laid out gaps preventing federal agencies from meaningfully engaging with, consulting with, and allowing public participation of tribal communities in rulemaking (DOI, DOA, and DOJ 2017).
• Agency heads should issue or expand upon guidance to encourage the holding of public hearings in the communities most affected by proposed rules. The guidance should include insight on holding virtual hearings, especially during the COVID-19 pandemic, in ways that do not exacerbate existing inequalities or diminish the voices of community members (Desikan 2020). Possible examples include phone-in options for individuals without reliable Internet service, video features that enable participants to feel they are providing public comments to “real” people, and the ability for participants to showcase visual aids in virtual environments.

• The guidance on public rulemaking hearings should provide insight into processes for conducting them—and for providing the public documents and notices associated with them—in the languages widely used in the communities most affected by the rules under consideration.* Guidance should cover translation services, which should be the responsibility of the agency, not the community, and it should cover the sound quality and reliability of translation technologies such that these important services function well and consistently during hearings.

Improving Research and Data Collection on Health Disparities

Across the government, federal agencies collect scientific data in order to anticipate, identify, and address public health and safety risks, evaluate the effectiveness of public policies, and identify gaps and inequities in public services. However, the ability to focus research and data collection on the factors that lead to health disparities and actions that can be taken to reduce them has been hampered in recent years. In open-ended responses to the 2018 UCS survey, federal scientists in at least seven agencies reported they were blocked from accessing data or were unable to obtain it, carrying out data collection, or conducting research that could have been used to identify and reduce health disparities (Carter, Goldman, and Johnson 2018).

Scientific research is fundamental to much of the federal government’s evidence-based rulemaking. Diminishing efforts to collect data and carry out research on health disparities seriously erodes efforts to enact policy solutions for alleviating the health, social, and economic inequities faced by underserved communities. Federal agencies should consider the following recommendations to ensure that strong scientific integrity processes govern the ability to conduct research on how to reduce health disparities across the nation.

To ensure that federal data-collection efforts on health disparities are conducted in a scientifically robust and community-focused manner and without political interference, federal agencies should take the following steps:

• For data collection carried out with community assistance, develop protocols that incorporate a racial and environmental justice lens and encourage input from community members early in processes, such as during the design of research.

• Prioritize grant solicitations for, and otherwise encourage research on, efforts that can highlight health disparities in underserved communities. Pertinent examples include research on the health and safety of Indigenous and rural communities engaged in subsistence hunting and fishing activities; the cumulative or local impacts of air, water, and soil pollution resulting from industrial activities such as mining, fossil fuel extraction, and other large-scale operations associated with the release of toxic substances; the impacts on underserved communities of climate change and natural disasters, such as hurricanes, wildfires, and extreme heat waves; and research on gun violence and lethal force in policing.

• Assess ways that agencies can support community science programs that provide underserved communities with opportunities to engage in research.* The community research generated by such programs should be carried out in a robust manner to ensure that evidence-based rulemaking and other scientific efforts can give it appropriate weight. Effective strategies could include basic training for residents of environmental justice communities on conducting research activities—for example, air and water sampling—that accredited educational institutions or federal scientists can oversee. Such efforts could mirror the EPA’s Environmental Justice Small Grants Program, utilizing grant solicitations to increase equitable community science efforts (EPA n.d.).

Agencies should ensure that strong scientific integrity processes govern research that informs how to reduce health disparities across the nation.
Conclusion

Science plays a critical role in federal programs and rulemaking processes that help identify and address health, safety, wellness, and occupational inequities that disproportionately affect low-income communities; Black, Indigenous, and Latinx communities; and other communities of color. The ability to conduct research and collect data with community assistance, as well as to have this information communicated and freely accessible to the public, has proven to be an invaluable resource. Grassroots advocates, decisionmakers, scientists, and members of the public utilize this research when seeking strong evidence-based policies that can tackle issues of environmental justice and health disparities in communities across the United States.

The COVID-19 pandemic has shined the spotlight on the need for such efforts. For example, scientific data on racial and income disparities during the pandemic have served as the underlying basis for a series of equity-focused actions across local, state, and federal governments, prompting at least 18 states to activate task forces to address the high rates of COVID-19 cases and deaths in communities of color (Higgins 2020). Data also have increased our sense of urgency in tackling long-standing inequities and saving the lives and well-being of people from marginalized groups facing increased health burdens during this crisis.

During the COVID-19 pandemic and beyond, it is vital that federal agencies act to dismantle systems of racial injustice and oppression and uplift efforts to highlight and address the enormous health and safety burdens disproportionately affecting the most underserved populations throughout the country.

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ENDNOTES

2. See S.4401—A bill to restore, reaffirm, and reconcile environmental justice and civil rights, provide for the establishment of the Interagency Working Group on Environmental Justice Compliance and Enforcement, and for other purposes. https://www.epw.senate.gov/public/index.cfm/legislative-calendar?ID=84E98572-8E8C-4F72-B98B-1DE1A430EE06
6. See S.4401—A bill to restore, reaffirm, and reconcile environmental justice and civil rights, provide for the establishment of the Interagency Working Group on Environmental Justice Compliance and Enforcement, and for other purposes. https://www.epw.senate.gov/public/index.cfm/legislative-calendar?ID=84E98572-8E8C-4F72-B98B-1DE1A430EE06
8. See the Equitable and Just National Climate Platform, developed by a group of environmental justice and national environmental group advocates who participate in the Climate Forum. https://justclimate.org/about.html

REFERENCES


