

A Summary of EPN All-Hands Call Friday, September 25, 2020

Cumulative Environmental Exposure Frameworks, Patricia (Trish) Koman, MPP, PhD

Trish is a research investigator at the University of Michigan School of Public Health Environmental Health Sciences department and the faculty research program manager at the College of Engineering Multidisciplinary Design. She leads community-engaged research to create healthier communities. Trish also served for 22 years in EPA's Office of Air and Radiation (Research Triangle Park and Ann Arbor) and in Region 9 (San Francisco). During her time at EPA, she received 5 EPA gold medals, a silver medal, and an EPA Administrator's Award for Excellence.

Trish discussed the inequitable distribution of environmental exposures and the influences that create these health disparities.

Cumulative environmental risk frameworks are tools for scientists, policymakers, and community organizations. These approaches can inform policy decisions that improve health outcomes and reduce disparities. Exposures to industrial chemicals and their harmful health consequences are preventable. If current levels of cumulative exposures to chemicals continue unabated, the consequences will be an even greater toxic legacy for future generations. Actionable environmental exposures and scientific frameworks can be used to improve global public health through policy. Methods for assessing the cumulative environmental exposures include the [CalEnviroScreen 3.0 tool](#) and the National Health and Nutrition Examination Survey (NHANES) biomonitoring study of phthalates and regrettable substitution.

Below is the Abstract to Trish's paper "[MI-Environment: Geospatial patterns and inequality of relative heat stress vulnerability in Michigan](#)"

Heat stress causes morbidity and mortality and is increasing with climate change. Heat stress can pose particular challenges in northern regions not well adapted to heat. To assist decision makers, we identified the relative vulnerability of census tracts within Michigan to factors that increase exposure to heat stress or reflect susceptibilities in the population based on a California heat vulnerability index. In the MI-Environment assessment, we used a Geographic Information System (GIS) to combine future ensemble climate model projections to create a total of 9 geospatial and demographic variables. As part of a broader planned cumulative environmental exposure assessment, the statewide heat vulnerability index (HVI) maps display the location and relative magnitude of exposure on three metrics: built environment (Place), future expected long-term temperature averages (Temperature), and population susceptibility (People). We observed varied and distinct patterns for each of the three component indices. We assessed how equitably those exposures are distributed by racial and socioeconomic factors. This analysis showed that each of the component indices and the aggregate HVI are disproportionately distributed along racial and socioeconomic lines in Michigan. Census tracts with higher percentages of people of color had larger exposure to HVI factors with a deviation from equity of -0.115 [95% CI -0.108, -0.122]. Similarly, for census tracts with higher percentage of people experiencing poverty, the deviation from equity was -0.101 [95% CI -0.094, -0.107]. The

MI-Environment visualization tool can help communities prepare for climate change and resolve inequities by identifying census tracts with the most vulnerable residents and highest potential exposures.

[Resetting the Course of EPA](#), Sebastian Irby

Sebastian Irby provided a recap of EPN's rollout of the "Resetting the Course of EPA." Please edit the template outreach letter below as needed, and share it with your colleagues/former colleagues and others who you think might be interested in our work:

Template Outreach Letter (Feel free to edit and share widely.)

The [Environmental Protection Network](#) (EPN) recently released [Resetting the Course of EPA](#). Our [summary report](#) is accompanied by a [letter of support](#) signed by six former EPA administrators from both Republican and Democratic administrations. (See initial press below.)

In addition to the high-level summaries of recommendations contained in the report, EPN has created [17 more detailed papers](#) on specific immediate, 100-day, and long-term actions on a variety of topics: [EPA Core Values](#), [Drinking Water](#) and the [Nation's Water](#), [Science](#) and [Economics](#), [Environmental Justice](#), [Collaboration](#) and [Innovation](#), [Budget](#) and [Workforce](#), [Environmental Enforcement](#), Air Emissions from [Mobile](#) and [Stationary Sources](#), [Toxics](#), [Pesticides](#), [Superfund](#), and [International Cooperation](#).

EPN strongly believes that EPA should recommit to its mission of protecting public health and the environment and set a course toward a new vision for the agency as it confronts pressing needs—from addressing environmental risks and inequities to vigorously confronting climate change. EPN has developed extensive recommendations, which are critical to creating a renewed EPA.

EPN, an organization of more than 500 former EPA career employees and political appointees across the country who served under multiple Democratic and Republican administrations, has compiled this report to help inform EPA leadership with specific and actionable recommendations.

If you or someone you know is interested in learning more, connecting with EPN's volunteer experts, and/or collaborating with EPN, please reach out!

EPN looks forward to collaborating with and being a resource to you and others. Please share!

Associated Press (picked up by over 200 outlets including The New York Times, L.A. Times, NBC, The San Francisco Chronicle, U.S. News and World Report, and others)

[6 Former EPA Bosses Call for Agency Reset](#)

Courthouse News Service

[Six EPA Heads Dating Back to Reagan Advocate Sweeping Reset](#)

The Hill

[Former EPA Chiefs Call for Agency 'Reset'](#)

Al-Jazeera

[Six former heads of EPA call for agency reset after Trump term](#)

Inside EPA

[Six Former EPA Chiefs Back Calls To ‘Reset’ Agency For Future Priorities](#)

E&E News

[Six former administrators urge complete overhaul](#)

Politico

[Politico Morning Energy Newsletter](#)

[Politico’s Energy Podcast](#)

Electrek

[Electrek Green Energy Brief](#)

Government Executive

[Former EPA Leaders Call for ‘Reset’ of Agency’s Mission](#)

Axios

[Former EPA chiefs call for post-election agency “reset”](#)

International Business News

[Former EPA Chiefs Back ‘Reset’ Of The Agency After The Coming Presidential Election](#)

Mic.com

[6 former EPA heads laid out a plan to rescue the agency after Trump](#)

Ethanol Producer Magazine

[EPA ‘reset’ recommendation addresses RFS, LCFS](#)

Oklahoma Energy Today

[Don’t include Pruitt among former EPA administrators wanting “reset” of agency](#)