

April 20, 2021

President Joseph R. Biden  
The White House  
1600 Pennsylvania Ave.  
Washington, DC 20500

**Re: Addressing the Climate Crisis' Domestic Impacts on Maternal and Infant Health Outcomes**

Dear President Biden,

We are a group of human rights, reproductive rights, reproductive justice, environmental justice, maternal and child health, health care professional organizations, medical societies, and other advocates writing with a spirit of energized support for your January Executive Order (EO) on Tackling the Climate Crisis at Home and Abroad<sup>1</sup> and for your commitment to racial justice and environmental justice in addressing the climate crisis in the United States.

We are also writing to emphasize that addressing the climate crisis appropriately includes considering how heat, wildfires, floods, and other impacts stand to worsen the maternal health crisis that is dominated by unjust racial disparities, widening further the shocking gap in this country between who has a healthy pregnancy and baby and who does not.

Climate health adaptation efforts should adopt a reproductive justice lens and acknowledge the added vulnerability faced by birthing people, particularly Black and Indigenous women, and others most affected by the country's maternal health crisis. There has been too little attention paid to human health consequences of the climate crisis over the past years, and even less to the distinct impacts on pregnant people, particularly reproductive-aged women of color.<sup>2</sup> We note with appreciation the White House proclamation last week on Black Maternal Health Week.<sup>3</sup>

Maternal mortality and morbidity, premature birth rates, and other adverse birth outcomes in the US are among the worst in the industrialized world and are continuing to worsen.<sup>4</sup> Ending racial

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<sup>1</sup> Executive Order on Tackling the Climate Crisis at Home and Abroad, January 27, 2021, <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/> (accessed April 8, 2021).

<sup>2</sup> For example, President Obama's national climate plan did not acknowledge or plan for health impacts of the crisis. The Climate Health Action coalition noted earlier this year: "Of the nearly 80,000 HHS employees, fewer than a dozen have expertise in climate and health. Other than a small initiative at CDC (representing 0.0007% of the HHS budget), HHS has no formal programming on climate and health." Human Rights Watch has been unable to find any federal or state climate crisis health adaptation program providing interventions for maternal health and most state level climate action plans omit this vulnerable population, or mention pregnancy as a vulnerability only in passing, even when others are included.

<sup>3</sup> "A Proclamation on Black Maternal Health Week, 2021," April 13, 2021, <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/04/13/a-proclamation-on-black-maternal-health-week-2021/> (accessed April 19, 2021).

<sup>4</sup> For example, the Centers for Disease Control (CDC) says that Black women's pregnancies end in premature birth 50 percent more often than those of white women, low birth weight is also twice as common among babies born to Black women, and stillbirth is more than twice as common for Black women as for white women. The March of Dimes, which works to end premature birth in the US, provides analysis that shows that Hispanic and Indigenous American women also have worse birth outcomes than white women. See: "Reproductive Health," CDC, last reviewed September 3, 2019, <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/index.html> (accessed April 8, 2021); and "Peristats," March of

disparities by naming and addressing factors that contribute to systemic racism is a necessary step as we continue to combat the maternal health crisis.

As the Environmental Protection Agency has noted, “[during] pregnancy, physiologic changes, such as higher respiratory rates and increases in blood and plasma volumes, increases a woman’s vulnerability to environmental exposures”.<sup>5</sup> A broad array of studies and government resources have shown or noted links between exposure to heat, wildfire smoke, flooding, hurricanes, air pollution, fracking and other forms of fossil fuel extraction for example, and poor maternal health and birth outcomes.<sup>6</sup>

Both pregnant people themselves and the developing fetus, as well as newborns and children, are at unique risk. Exposure to wildfire, heat, heavy metals (and other contamination like mold after flooding), hurricanes, or stress associated with extreme weather disasters may all have impacts on fetal development.<sup>7</sup> Newborns and children are especially vulnerable to heat and air pollution, for example.<sup>8</sup>

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Dimes, <https://www.marchofdimes.org/Peristats/ViewSubtopic.aspx?reg=99&top=3&stop=63&lev=1&slev=1&obj=1> (accessed April 8, 2021).

<sup>5</sup> “Wildfire Smoke and Your Patients’ Health,” Environmental Protection Agency, last updated September 30, 2019, <https://www.epa.gov/wildfire-smoke-course/which-populations-experience-greater-risks-adverse-health-effects-resulting> (accessed April 8, 2021).

<sup>6</sup> On heat, for example, see “Chapter 14: Human Health” in *Fourth National Climate Assessment*, US Global Change Research Program, 2018, <https://nca2018.globalchange.gov/chapter/14/> (accessed April 18, 2021); and Bruce Bekkar, MD, Susan Pacheco, MD; Rupa Basu, PhD, et al., “Association of Air Pollution and Heat Exposure With Preterm Birth, Low Birth Weight, and Stillbirth in the USA Systematic Review” *Journal of the American Medical Association Network Open* 3, no. 6 (2020), accessed April 8, 2021, doi:10.1001/jamanetworkopen.2020.8243. On wildfire smoke, see “Wildfire Smoke and Your Patients’ Health,” Environmental Protection Agency; and Gregory Joseph, Paul J. Schramm, Ambarish Vaidyanathan, Patrick Breyse, and Bradley Goodwin, “Evidence on the Use of Indoor Air Filtration as an Intervention for Wildfire Smoke Pollutant Exposure,” BRACE Technical Report Series, July 2020, <https://www.cdc.gov/air/wildfire-smoke/socialmedia/Wildfire-Air-Filtration-508.pdf> (accessed April 8, 2021). On flooding, see, for example, Lea H Mallett PhD, Ruth A Etzel MD, PhD, “Flooding: what is the impact on pregnancy and child health?” *Disasters* 42, no. 3 (July 2018): 432-458, accessed April 8, 2021, doi:10.1111/disa.12256; and Van T. Tong, Marianne E. Zotti, and Jason Hsia, “Impact of the Red River Catastrophic Flood on Women Giving Birth in North Dakota, 1994–2000,” *Maternal and Child Health Journal* 15 (2011): 281-288, accessed April 8, 2021, doi:10.1007/s10995-010-0576-9. On hurricanes, see, Shengzhi Sun, Kate R. Weinberger, Meilin Yan, G. Brooke Anderson, Gregory A. Wellenius, Tropical cyclones and risk of preterm birth: A retrospective analysis of 20 million births across 378 US counties, *Environmental International* 140 (July 2020); and Janet Currie and Maya Rossin-Slater, “Weathering the storm: Hurricanes and birth outcomes,” *Journal of Health Economics* 32, no. 3 (May 2013): 487-503. On air pollution, see, Bruce Bekkar, MD, Susan Pacheco, MD; Rupa Basu, PhD, et al., “Association of Air Pollution and Heat Exposure With Preterm Birth, Low Birth Weight, and Stillbirth in the USA Systematic Review.” On fossil fuel extraction, see, for example, Lisa M. McKenzie, William Allshouse, and Stephen Daniels, “Congenital heart defects and intensity of oil and gas well site activities in early pregnancy,” *Environment International* 132 (November 2019); and Lara J. Cushing, Kate Vavra-Musser, Khang Chau, Meredith Franklin, and Jill E. Johnston, “Flaring from Unconventional Oil and Gas Development and Birth Outcomes in the Eagle Ford Shale in South Texas,” *Environmental Health Perspectives* 128, no. 7 (2020). On fracking, see, Concerned Health Professionals of New York and Physicians for Social Responsibility, “Compendium of scientific, medical, and media findings demonstrating risks and harms of fracking (unconventional gas and oil extraction) (7th ed.),” December 2020, <http://concernedhealthny.org/compendium/> (accessed April 8, 2021).

<sup>7</sup> Environmental Protection Agency, “Climate Change and the Health of Pregnant Women”, 2016, <https://nepis.epa.gov/Exec/ZyNET.exe/P100OW3R.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2016+Thru+2020&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C16thru20%5CTxt%5C00000003%5CP100OW3R.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL> (accessed April 8, 2021).

<sup>8</sup> “Climate Change & Children’s Health,” Center for Climate, Health, and the Global Environment, Harvard T.H. Chan School of Public Health, <https://www.hsph.harvard.edu/c-change/subtopics/climate-change-and-childrens-health/> (accessed April 8, 2021).

Pregnant people themselves are also more at risk of heat stress, particularly while working low-income jobs with few labor rights protections like those in the agriculture industry sector.<sup>9</sup> The American College of Obstetricians and Gynecologists has noted about the climate crisis that, “women in affected regions [are] at elevated risk of disease, malnutrition, sexual violence, poor mental health, lack of reproductive control, negative obstetric outcomes, and death”.<sup>10</sup>

To address the climate crisis’ impact on maternal and infant health outcomes, we recommend the following actions:

- Continue to work to dramatically increase funding to federal climate health adaptation efforts. Earmark funds for maternal, newborn, and child health impacts, and for reproductive justice.
- Ensure that climate human health impacts, gender equality, racial equity considerations, and human rights are all addressed in the upcoming new Nationally Determined Contribution, naming the domestic maternal health crisis as an area of concern and action in the document, and highlighting maternal health in public speaking engagements and other communication at the April 22nd Climate Summit.
- Appoint a national gender equity and climate change leader to support the integration of intersectional gender considerations into all aspects of White House climate change policymaking and coordination.
- Ensure that the newly established White House Office of Domestic Climate Policy and the White House Environmental Justice Interagency Council commit to addressing the maternal health crisis in their work by including reproductive justice experts on their staff, and consulting with the reproductive justice community.
- Include climate and other environmental impacts on the health of women and girls, including pregnant people, in priorities for the newly established White House Gender Policy Council and focusing efforts to accelerate progress in ending the maternal health crisis and racial disparities in health outcomes in the US.
- Assess maternal health concerns in relation to the January 27, 2021 EO directing Health and Human Services agencies to establish an Office of Climate Change and Health Equity, an Interagency Working Group to Decrease Risk of Climate Change to Children, the Elderly, People with Disabilities, and the Vulnerable, and a biennial Health Care System Readiness Advisory Council.
- Ask agencies, where appropriate, to address maternal health in their “Climate Action Plans and Data and Information Products to Improve Adaptation and Increase Resilience” required under the January 27, 2021 EO.
- Ask agencies to consider how natural disasters and other climate impacts may undermine health infrastructure and services, including sexual and reproductive health, and protections against gender-based violence in “Climate Risk Analysis” planning, as required under the January 27, 2021 EO.

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<sup>9</sup> “Reproductive Health and the Workplace,” The National Institute for Occupational Safety and Health (NIOSH), last reviewed April 20, 2017, <https://www.cdc.gov/niosh/topics/repro/heat.html> (accessed April 8, 2021).

<sup>10</sup> “Climate Change and Women’s Health,” The American College of Obstetricians and Gynecologists position statement, April 2018, <https://www.acog.org/clinical-information/policy-and-position-statements/position-statements/2018/climate-change-and-womens-health> (accessed April 8, 2021).

- Include estimates, where available, for direct and indirect human health costs from the climate crisis in the proposed National Intelligence Estimate on the national and economic security impacts of climate change, described in the January 27, 2021 EO.

We deeply appreciate your ongoing commitment to maternal health and addressing the climate crisis and would be delighted to discuss further.

Sincerely,

**A Better Balance**



**Allergy & Asthma Network**



**Alliance of Nurses for Healthy Environments**



**American College of Nurse-Midwives**



**American Society of Peri Anesthesia Nurses**



**Asthma and Allergy Foundation of America**



**Black Women's Health Imperative**



**Break the Cycle of Climate Change**



**Break the Cycle of Health Disparities, Inc.**



**Center for Biological Diversity**



**Center for Reproductive Rights**



**CHANGE (Center for Health & Gender Equity)**



**Children's Environmental Health Network (CEHN)**



**Citizens' Environmental Coalition**



**ClimateMama**



**Climate for Health, ecoAmerica**



**The Climate Resilience Fund**



**Every Woman Connecticut**

**Flint Rising**



**Freshwater Future**



**Friends of UNFPA**



**Harambee Village Doulas**



**Human Rights Watch**



**If/When/How: Lawyering for Reproductive Justice**



Lawyering for Reproductive Justice

**In Our Own Voice:  
National Black Women's  
Reproductive Justice  
Agenda**



**Jacobs Institute of  
Women's Health**

**Moms Clean Air Force**



**National Hispanic Council  
on Aging**



**New Mexico Social Justice  
and Equity Institute**



**San Francisco Bay  
Physicians for Social  
Responsibility**



**This is Zero Hour  
NYC/Ludovica Martella**

**Women's Earth and  
Climate Action Network  
(WECAN)**



**Indigenous  
Environmental Network**



**MADRE**



**National Association of  
Nurse Practitioners in  
Women's Health**



**National League for  
Nursing**



**Philippine Nurses  
Association of America**



**Sixth World Solutions**



**We the People of Detroit**



**Women's Environment  
and Development  
Organization (WEDO)**



**International Center  
for Research on  
Women (ICRW)**



**Medical Students for  
a Sustainable Future**



**National Birth  
Equity Collaborative**



**National Partnership  
for Women and  
Families**



**Population Institute**



**Society for Public  
Health Education  
Midwest Chapter**



**White Ribbon  
Alliance**



**Ipas**



**Mom and Baby Action  
Network**

**National Black Nurses  
Association**



**National WIC Association**



**Public Health Advisory  
Council of the Climate  
Action Campaign**



**Stetson University's  
Environmental Club**

**Wisconsin Alliance for  
Women's Health**



CC:

Vice President Kamala Harris

Gina McCarthy, White House National Climate Advisor

Jennifer Klein, Co-Chair and Executive Director of the Gender Policy Council

Julissa Reynoso, Co-Chair of the Gender Policy Council