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***Amicus* Brief to Explain the Health Impacts of Climate Change on Children and Youth
To Be Submitted in the Case of *Juliana v. United States***

WHAT: The purpose of the brief is to educate the judges in the Ninth Circuit Court of Appeals about the unique threats to the health of children and youth posed by climate change. This type of brief is known as an *amicus curiae* or friend of the court brief.

WHO: We invite interested doctors, nurses, public health and medical researchers, and public health and medical organizations with expertise on the subject to sign the brief, which is being written by faculty and students at Harvard Law School’s Emmett Environmental Law & Policy Clinic, led by the Clinic’s Director, Professor Wendy B. Jacobs, and Deputy Director Shaun A. Goho. The Clinic is working closely with a core team of signatories affiliated with Harvard Medical School: Dr. Regina LaRocque, Dr. Caren Solomon, Dr. Jonathan Slutzman, Dr. Renee Salas, and Dr. Jim Recht.

WHEN: We expect to circulate a draft of the brief to potential signatories by about the middle of February. The deadline for submitting the brief to the court is March 1, 2019.

BACKGROUND: In August 2015, a group of youth (all under the age of 20 at that time) together with the nonprofit organization Earth Guardians, and a group named “Future Generations,”—whose guardian is identified as Dr. James Hansen, the former director of the NASA Goddard Institute for Space Studies—filed suit in the federal district court for the District of Oregon against the federal government. The plaintiffs allege that the government has allowed fossil fuel production, consumption, and combustion to occur at dangerous levels, thereby violating the plaintiffs’ constitutional rights to life, liberty, property, and equal protection of the laws. The plaintiffs seek a court order to compel the government to develop and implement a national science-based climate recovery plan to decarbonize the nation’s energy system. The case is currently before the Ninth Circuit on appeal from the trial court’s decision to allow the case to go to trial. The case is being briefed this winter, with oral argument expected in the spring.

MORE DETAILS ON THE BRIEF: An *amicus*—or “friend of the court”—brief is a brief filed by people or organizations that are not parties to a case, but who have information or expertise that is relevant to the court’s understanding of the case and its broader implications. The function of an *amicus* brief is to educate the judges rather than to rehash the parties’ legal arguments. To that end, our brief will describe the adverse health effects of climate change and how the plaintiffs’ generation will face harms to which no previous generation has been exposed.

First, the brief will explain the variety of ways in which climate change harms Americans’ health. These include:

- **Extreme temperatures:** High temperatures, especially during summer heat waves, can increase the risk of a range of illnesses and lead to higher death rates. Certain

populations are particularly vulnerable, such as children, pregnant women, the elderly, and people living in urban heat islands.

- **Extreme weather events:** Research on the attribution of particular events to human influence on the climate has demonstrated that climate change can increase the frequency and/or intensity of extreme weather events such as droughts, wildfires, heavy rainfall, and flooding. These events can both cause direct injuries or deaths and contribute to many of the other effects described below. Exposure to these extreme events can also have harmful mental health consequences by increasing rates of depression, post-traumatic stress, and suicide.
- **Air quality:** Climate change is expected to raise concentrations of ground-level ozone, increase pollen production and lengthen the pollen season, and result in increased exposure to smoke from wildfires.
- **Vector-borne diseases:** Climate change is expected to result in increased exposure to vector-borne diseases such as Lyme disease, West Nile virus, chikungunya, dengue fever, and Zika viruses.
- **Water-related illnesses:** Increasing water temperatures are expected to change the geographic range of harmful algae and coastal pathogens; higher temperatures and flooding are linked to higher rates of diarrheal disease.
- **Food safety and nutrition:** Rising temperatures can result in increased exposures to some food-borne pathogens and toxins; higher CO₂ concentrations can reduce the nutritional quality of crops and seafood.

Second, the brief will describe how all of these effects are projected to worsen in the coming decades, particularly in the absence of significant actions to reduce greenhouse gas emissions. The plaintiffs' generation will thus suffer from these impacts to a greater degree than any previous generation.

Third, the brief will explain how the health care system is already being burdened by climate change and project the costs that the system will face in the coming decades as a result of climate change.

CONTACT: For more information or to indicate your interest in signing on to the brief, please contact Regina LaRocque at rclarocque@mgh.harvard.edu.