For Educational Purposes

Supplement to University of Maryland Francis King Carey School of Law Environmental Law Clinic, Whitepaper on FAQs to Maryland's Proposed Environmental Human Rights Constitutional Amendment

Zoonotic Diseases and the Environment

An Environmental Human Rights amendment could help slow climate change.¹ Slowing and decreasing the effects of climate change is imperative now, more than ever, because of the link between zoonotic diseases—diseases that jump between animals and humans—and climate change.² Growing climatic warming increases the frequency of future pandemics.³ There may be more than 3,200 strains of coronavirus among bats, and the likelihood that other strains of the virus spread to humans increases with the mounting effects of climate change.⁴ Climactic warming, biodiversity loss, and deforestation all contribute to animals, such as bats, expanding their geographic boundaries and therefore allowing further overlap between humans and disease-carrying animals.⁵ Further, progress on slowing climate change is likely to benefit marginalized groups the most. Marginalized groups tend to have a higher risk than others to ill effects from climate change and pandemic.⁶ Due to the cumulative negative health affects already burdening

disease — recognized risk factors for severe Covid-19 — are closely linked to climate change, through effects including extreme heat, ground-level ozone, wildfire smoke, and increased pollen counts over longer seasons. Moreover, fine particulate matter air pollution — linked to combustion of fossil fuels — increases the prevalence of both conditions. Marginalized groups are at higher risk than others for exposure to high levels of air pollution and associated chronic illnesses, as well as for Covid-19–related illness and death. Recent unpublished data have

¹ UNIVERSITY OF MARYLAND FRANCIS KING CAREY SCHOOL OF LAW ENVIRONMENTAL LAW CLINIC, WHITEPAPER ON FAQS TO MARYLAND'S PROPOSED ENVIRONMENTAL HUMAN RIGHTS CONSTITUTIONAL AMENDMENT 6-8 (2021) ("The EHR could force the state to consider the aggregate environmental effects of issuing certain permits in a way that no existing regulations or laws require. The EHR would promote and help facilitate the promulgation of cumulative impact and other environmental bills. The EHR is also meant to act as a backstop for when existing legislation fails to fully address adverse environmental effects").

² Abrahm Lustgarten, *How Climate Change Is Contributing to Skyrocketing Rates of Infectious Disease*, PROPUBLICA (May 7, 2020), https://www.propublica.org/article/climate-infectious-diseases; Ilana Cohen, *Covid-19 and Climate Change Will Remain Inextricably Linked, Thanks to the Parallels (and the Denial)*, INSIDE CLIMATE NEWS (Jan. 1, 2021), https://insideclimatenews.org/news/01012021/covid-climate-parallels-denial/ (Reporting that "[c]limate change is also responsible for the proliferation of zoonotic diseases, like Covid-19, as drought, flooding and extreme weather force food production to encroach on habitats populated by bats, monkeys and other virus-carrying wild animals").

 $^{^3}$ Id.

⁴ *Id.* (Asserting "[c]limate change is making outbreaks of disease more common and more dangerous. . . Over the past few decades, the number of emerging infectious diseases that spread to people — especially coronaviruses and other respiratory illnesses believed to have come from bats and birds — has skyrocketed. A new emerging disease surfaces five times a year. One study estimates that more than 3,200 strains of coronaviruses already exist among bats, awaiting an opportunity to jump to people.").

⁵ *Id.* (Explaining "[t]here are three ways climate influences emerging diseases. Roughly 60% of new pathogens come from animals — including those pressured by diversity loss — and roughly one-third of those can be directly attributed to changes in human land use, meaning deforestation, the introduction of farming, development or resource extraction in otherwise natural settings. Vector-borne diseases — those carried by insects like mosquitoes and ticks and transferred in the blood of infected people — are also on the rise as warming weather and erratic precipitation vastly expand the geographic regions vulnerable to contagion. Climate is even bringing old viruses back from the dead, thawing zombie contagions like the anthrax released from a frozen reindeer in 2016, which can come down from the arctic and haunt us from the past.").

⁶ Renee N. Salas, James M. Shultz, & Caren G. Solomon, The Climate Crisis and Covid-19 — A Major Threat to the Pandemic Response, NEW ENGLAND J. OF MEDICINE (July 15, 2020), https://www.nejm.org/doi/full/10.1056/NEJMp2022011 (Discussing how "[c]ardiovascular and chronic pulmonary

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environmental justice communities, the threat of climate change and zoonotic diseases stresses the importance of action.

suggested direct associations between long-term exposure to particulate air pollution and risk of Covid-19–associated death").