

To: Transport & Health Policy Makers, & Practitioners
From: Professor Adrian Davis
Date: 6th July 2022
Subject: Essential Evidence 4 Scotland No.55: Solving the global climate crisis: the greatest health opportunity of our times?

Top Line: Adopting sustainable transport, especially active transport by foot or by bicycle, in combination with effective public transport, is a key action to help tackle the climate crisis.

According to reports of the Intergovernmental Panel on Climate Change (IPCC), the Lancet Commission on Health and Climate Change and many more, today's substantial global health gains are being undermined by climate change.¹ A wealth of evidence shows that global health and global climate and ecological conditions are inseparable. Healthy human populations simply cannot be sustained on a sick planet. The global climate crisis therefore demands a rapid change in policies and collective actions to divert our current path toward a 7 °C warmer world by the end of this century. Unfortunately, environmental and economic arguments, while important, are not moving climate change policies quickly enough. Caring about our own health supersedes all other priorities. Therefore, focusing on the problems of and solutions to climate change through a health lens compliments not only the environmental and economic efforts but also, most importantly, a health framing that can bring more focus and resolve to the global climate crisis.

Ironically, the actions required to confront the climate crisis represent possibly the largest public health opportunity in more than a century, according to Jonathan Patz.^{2, 3} Current rates of chronic disease alongside continued rising trends in fossil fuel-based energy consumption that are causing today's global climate crisis present daunting risks to civilization. The interdependence of these challenges, however, affords an enormous opportunity to solve both simultaneously.

Health benefits from improved air quality may far outweigh the cost of clean energy investments. Upward trends in chronic diseases are now occurring throughout the world. Herein lies even more golden opportunities for public health through the following: first, adopting more alternative modes of transport, especially those that promote "active transport" by foot or by bicycle, in combination with effective public transport; and second, by reducing meat in the diet. In essence, there is no better time to focus on health as central in the climate negotiations; and in so doing, may we move faster and further with effective actions on climate change and the subsequent health benefits that will arise from a low-carbon society.

Studies from across the world show marked health benefits from active transport. Patz cites the following as examples: that active transport in Shanghai, China, could reduce colon cancer risk by over 44%. Bike commuting in London could lower ischemic heart disease by 10 to 19%. In the USA, comparing cities with the highest versus the lowest levels of active transport, obesity rates are 20% lower and diabetes rates are 23% less, and switching short car trips to bike trips would save 1300 lives annually for just one region of the USA. Bicycling commuters in Copenhagen have a 39% reduction in mortality rate compared to non-cycling commuters.

¹ Whitmee, S., Haines, A., Beyrer, C., et al. 2015 Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. *Lancet*. 386(10007):1973–2028. doi: 10.1016/S0140-6736(15)60901-1

² Professor, and Director of the Global Health Institute, University of Wisconsin, USA.

³ Patz, J, 2016 Solving the global climate crisis: the greatest health opportunity of our times? *Public Health Rev*, 37:30.