EXECUTIVE SUMMARY

COVID-19 AND CLIMATE-SMART HEALTH CARE

Health Sector Opportunities for a Synergistic Response to the COVID-19 and Climate Crises

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INTRODUCTION

This is a summary version of the report, *COVID-19 and Climate-Smart Health Care: Health Sector Opportunities for a Synergistic Response to the COVID-19 and Climate Crises.* It describes the actions that the health sector can take during the COVID-19 response and recovery efforts to tackle both the pandemic and climate change threats.

The emergence of the COVID-19 pandemic has brought with it a sharp focus on public health services and health systems, with climate change further exacerbating this challenge. In combination with COVID-19, the climate crisis has shed light on the chronic lack of capacity to manage emerging public health risks. The convergence of these two crises presents a clear risk because it can disrupt and overwhelm health systems, health care facilities, and the health care staff on which these systems rely, thereby reducing the progress toward universal health coverage (UHC). This risk is of particular concern in settings with already weak health systems, leadership challenges, insufficient resources, and limited capacities. However, the collective global effort to respond to and recover from COVID-19 also presents important opportunities for implementing cross-cutting efforts in the health sector to tackle both the pandemic and the climate crises.

> The objective of this summary is to describe the actions that the health sector can take during the COVID-19 response and recovery efforts to tackle both the COVID-19 pandemic and climate change threats.

This report provides a framework that builds on the World Bank's climate-smart health care approach (World Bank 2017) and integrates the World Bank's multiphase programmatic approach (MPA) into the global COVID-19 response (World Bank 2020). It is intended to guide ongoing as well as pipeline activities and investments targeted at the pandemic, with a view to enabling the health sector to leapfrog toward climate-smart UHC.

Furthermore, the report is also targeted at leaders and operational teams in multilateral development banks (MDBs) and other development finance institutions, particularly those in the areas of health, nutrition, and population. It can guide the design of health investments addressing the global COVID-19 emergency as well as prepare for the next pandemic and potential future social or environmental crises. The messages of this report will also be useful for other development agencies, nongovernmental organizations (NGOs), ministries of health, and health agencies, as well as other policy makers committed to building enduring, resilient, and sustainable health systems.

LINKS BETWEEN COVID-19, CLIMATE CHANGE, AND HUMAN HEALTH

There are several important interactions between the health impacts of the COVID-19 and the climate crises, despite climate change not being directly implicated in the emergence or transmission of the virus.

The COVID-19 pandemic has led to a global loss of life not seen since the Spanish influenza pandemic of 1918. This exceptional challenge to public health, food systems, global economies, and social norms is not only leading to millions of deaths, and ill health, but also pushing tens of millions of people back into extreme poverty. It is substantially increasing the prevalence of under-nutrition and likely precipitating significant future chronic disease and mental health burdens.

The health risks of climate change are also immediate, but unlike COVID-19, they are projected to rise over the coming decades, unless rapid and profound action is taken. Rising temperatures, changing rainfall patterns, sea-level rises, shifting disease vector ranges, and extreme climate-related weather events all threaten human health and well-being through a number of direct, indirect, and cascading pathways.

The COVID-19 and climate change challenges share a number of overarching drivers and affect similar vulnerable populations. Each requires frequently overlapping health sector responses, either in dealing with current threats or ensuring that opportunities to build back better are not missed.

> **Despite climate change not being directly implicated in the emergence or transmission of COVID-19, there are several important interactions between the health impacts of the COVID-19 and the climate crises.**

> **The COVID-19 and climate change challenges share a number of overarching drivers and affect similar vulnerable populations.**

- *Climate change and its drivers are known to increase the risks of emerging and reemerging infectious diseases, and therefore, of pandemics.* For example, deforestation contributes to carbon dioxide (CO_2) emissions and the destruction of habitats that, in turn, increase the risks of zoonotic spillover events of infectious diseases from wildlife and livestock to humans.

- *Several of the populations most vulnerable to the health impacts of climate change overlap with the groups most at risk from COVID-19.* These include elderly populations, people with preexisting or chronic conditions (especially those related to respiratory illnesses), ethnic minorities and indigenous groups, as well as those of lower socioeconomic status or in poverty. The dual threats of COVID-19 and climate change, which exacerbate existing inequalities, can produce a compounding effect, leading to health systems being overwhelmed and adding layers of complexity to already strained public health preparedness and response efforts.

- *Measures to control COVID-19 can also have adverse implications for managing climate risks.* Impacts on the ability of the infrastructure to respond to extreme weather events include reducing the capacities of emergency shelters in times of windstorms, flooding, and wildfires due to social-distancing requirements. Moreover, extreme weather events related to climate change, such as heat waves, tropical storms, and wildfires, as well as ongoing issues like air pollution, have not disappeared during the COVID-19 pandemic.

- *Health sector responses to the COVID-19 pandemic have the potential to make health systems more resilient and adapted to climate-related events.* These measures include

strengthening the health workforce capacity; improving disease surveillance and health information systems; enhancing the rapidity of medical supply chains; along with streamlining health technology development processes to speed and scale up innovations, such as telemedicine and vaccine development.

- *The convergence of COVID-19 and climate change also offers opportunities for health systems to become more sustainable and move further toward system decarbonization.* Measures could include more efficient public health systems, such as integrated surveillance, energy-efficient health facilities and transportation, along with the incorporation of sustainable cooling practices in the medical cold chain.

"Climate-smart health care" encompasses both climate change mitigation and adaptation efforts by the health sector. The climate-smart health care approach recognizes the need to ensure that adaptation and resilience measures are put in place for the changes we know will come so that we can integrate them, while addressing the health sector's own contribution to the problem by limiting net global greenhouse gas (GHG) emissions. Climate-smart health care also seeks to facilitate the incorporation of the potential health co-benefits of actions to mitigate climate change in order to deliver further reductions in mortality and morbidity in a changing world.

The collaboration witnessed in the global response to COVID-19 provides lessons that can be replicated in our response to the climate implications of population health and health systems. Essentially, ensuring that investments and resources for recovery are structured with a longer-term green, resilient, and inclusive development perspective provides greater value than short-term panic and neglect.

INTEGRATING CLIMATE-SMART HEALTH CARE IN COVID-19 RESPONSE AND RECOVERY ACTIVITIES

The World Bank's COVID-19 Strategic Preparedness and Response Program, using MPA, provides an operational framework for supporting individual countries in preventing the spread of the virus; strengthening public health and essential medical care structures; building resilience to emerging and reemerging infectious diseases and reducing their risks; along with procuring and deploying vaccines. This "menu" presents an opportunity for incorporating climate-smart health care in COVID-19 responses, thus ensuring that the unprecedented global health investment and effort do not inadvertently worsen the climate crisis but instead actively contribute to the climate goals set out in the Paris Agreement.

To ensure an efficient and effective pandemic response while also tackling climate change, real and perceived tradeoffs must be carefully considered in the design and implementation of any climate-smart interventions. This requires a high level of innovation and collaboration across multiple sectors. Therefore, it is useful to follow several key principles to guide this process: evidence-based decision-making, country ownership, multisectoral approaches, as well as iterative monitoring, evaluation, and learning. Each of these principles is equally important for reducing the health risks of pandemics and climate change now and in the coming decades. Nine areas have been recommended for action. They are listed and elaborated upon in table 1 — Menu of Interventions for Climate-Smart Health Care Actions for COVID-19 Response.

"Climate-smart health care" encompasses both climate change mitigation and adaptation efforts by the health sector.

CONCLUSION

The COVID-19 pandemic has reshaped the world—magnifying gaps in the health system and exacerbating existing inequalities. Similarly, climate change, in combination with current and future global health risks, is threatening the ability of health systems to protect and improve population health and will continue to do so in the future. Nevertheless, opportunities exist to tackle these dual crises and prepare for future events. Building on the unprecedented international action around COVID-19, this report has identified opportunities for implementing synergistic interventions that can enhance the resilience of the health system to the COVID-19 crisis, future pandemics, and climate change. Many of these interventions can also help limit health sector emissions by helping to decouple progress toward UHC from global environmental damage.

TABLE 1.
Menu of Interventions for Climate-Smart Health Care Actions for COVID-19 Response

	Climate-Smart Health Care Actions	
COVID-19 Health Response Areas	**Climate Adaptation and Resilience**	**Climate Mitigation and/or Low-Carbon Health Care**
A. Public Health Surveillance and Risk Assessment	• Adopting the One Health approach in disease surveillance and environmental monitoring (including climate services for health) for the early detection of climate-sensitive infectious diseases • Strengthening the surveillance of climate-sensitive health impacts (for example, dengue, malaria, heat-related illnesses, air pollution-related diseases, and nutritional deficiencies), using lessons from COVID-19 • Conducting integrated risk and vulnerability assessments to include pandemics and climate change [for example, Vulnerability and Adaptation (V&A) assessments, stress testing, and business continuity plans], with special attention to vulnerable populations	• Instituting integrated (instead of separate) surveillance systems for health, weather, and the environment that are powered by renewable energy • Conducting energy use audits and needs assessments of health care facilities to inform energy-efficiency measures and the availability of alternative renewable sources • Integrating the health co-benefits of mitigation options into risk and vulnerability assessments • Adopting low-carbon and energy-efficient rapid-testing and contact-tracing technologies (such as those enabled by mobile phones) as well as facilities (for example, conducting testing outdoors)
B. Emergency Preparedness, Planning, and Rehabilitation	• Adopting a multihazard approach to emergency planning that covers pandemics, climate-related disasters, and other external shocks • Setting up coordinated governance mechanisms (including community networks), service protocols, and information systems, based on a multihazard approach to external shocks • Training health workers and other personnel for deployment in times of emergency • Establishing multihazard disaster financing for pandemics, climate-related disasters, and other external shocks as well as strengthening financing for key community-based organizations serving high-risk communities to reach out to them	• Establishing sustainable low-carbon backup options for electricity [for example, solar photovoltaic (PV)], clean water, adequate food supply, and transport • Adopting low-carbon and energy-efficient devices (for example, flashlights and vehicles) for immediate emergency response • Incorporating green sustainability principles in rehabilitation plans for affected or destroyed health facilities and other infrastructure
	• Maintaining and restoring natural environments around health care facilities to support cooling and minimize flooding impacts	

C. Capacity for Testing, Isolation, and Treatment	• Ensuring the resilience of health facilities against climate-related disasters and their effects, such as electricity disruption • Setting up strong referral networks and contingency plans to ensure the continuity of COVID-19 services during climate-related disasters • Revitalizing national plans for human resources for health, as well as volunteers and workers from other sectors, to sustain the COVID-19 response and prepare for climate-related health risks	• Adopting low-emission energy and energy-efficiency measures for COVID-19 testing, isolation, and treatment facilities, including natural lighting and ventilation • Establishing sustainable health care waste management in testing, isolation, and treatment facilities, including waste minimization, segregation, safe recycling, and incineration phaseout in favor of steam-based disinfection
D. Supply of Essential Medical Commodities	• Ensuring a steady supply of personal protective equipment (PPE), mechanical ventilators, medicines, and other essential commodities, including non-mercury-based thermometers, waste collection bins, and bags, throughout the entire COVID-19 response and in preparation for potential climate-related shocks • Using energy-efficient and low-carbon mechanical ventilators, as well as diagnostics, including X-rays and microscopy, which can still function despite electricity disruptions resulting from climate-related disasters	• Adopting renewable energy and energy-efficiency measures in the manufacturing and transport of essential commodities • Establishing sustainable management for all waste, including waste minimization and the segregation of all items, such as used PPE that includes masks and medicine packaging • Producing washable and reusable PPE made out of sustainable materials • Adopting sustainable procurement standards for PPE, equipment, cooling devices, and medicines, including prioritizing the minimization of waste production and avoiding the purchase of products with high carbon levels, high global warming potential (GWP), or high-energy consumption
	• Strengthening local production and supply chains to ensure the steady supply of commodities while reducing transport emissions	
E. Health Services for Non-COVID Conditions	• Strengthening non-COVID-19 public health programs, including those for climate-sensitive diseases • Enhancing resilience against climate-related impacts and their effects (such as electricity disruption) on health facilities that render non-COVID-19 services • Strengthening health financing mechanisms that ensure universal coverage to people with COVID-19 and other non-COVID-19 conditions, including climate-sensitive diseases • Training health workers on the detection and treatment of climate-related diseases, while managing COVID-19 • Building the mental health resilience of health staff and volunteers while responding to multiple crises, such as pandemics and climate change	• Promoting low-carbon and energy-efficient telemedicine services (along with support for increased access to communication device and wireless connectivity) to ensure the continued provision of primary care and close last-mile delivery gaps • Improving the efficiency of care pathways to ensure health provision, reduce emissions, and save costs • Adopting low-carbon and energy-efficient technologies, as well as cooling practices, for health care provision • Strengthening the capacity to manage health care waste, using environmentally friendly and safe techniques
F. Non-Pharmaceutical Interventions	• Promoting with consistency regular handwashing and other personal hygiene practices to prevent COVID-19 and climate-related waterborne diseases • Designing temporary shelters for victims of climate-related disasters to ensure the continuation of physical-distancing measures	• Maximizing temporary improvements in air quality due to lockdowns by identifying long-term measures for reducing air pollution • Promoting healthy, low-carbon, and COVID-compliant environments, travel, and lifestyles

	• Creating social protection programs informed by high-risk communities that can enable them to adapt to different forms of external shocks, such as pandemics and climate-related disasters	
G. Public Health Risk Communication	• Developing integrated, robust, and cross-sectoral risk-communication plans and channels that can be applied to all types of external shocks, including pandemics and climate-related disasters • Incorporating relevant climate change and environmental sustainability messages into COVID-19 advisories to convey links between climate change and COVID-19 • Targeting COVID-19 communication containing climate-relevant information at populations vulnerable to climate-related disasters and other health effects • Raising the health, climate, and risk literacy of communities to enable them to prepare for and adapt to future external shocks and stresses	• Transitioning to low-carbon and energy-efficient electronic systems for public information dissemination • Incorporating health promotion messages into COVID-19 advisories to encourage healthy and low-carbon lifestyles, while surviving the pandemic
H. Vaccine Readiness, Procurement, and Distribution	• Increasing the capacity of the health workforce for vaccine delivery for COVID-19 and other climate-sensitive diseases • Putting national COVID-19 vaccine plans in place to provide a template for enhancing vaccine coverage for climate-sensitive infectious diseases	• Setting up energy-efficient, climate-friendly cold chain infrastructure, technology, storage, and distribution • Establishing vaccine manufacturing that is powered by renewable energy • Using medical equipment and packaging made out of sustainable and recyclable or reusable materials • Adopting fuel-efficient modes of transport to deliver vaccines to health facilities and communities • Instituting environmentally-friendly management, recycling, and disposal of used syringes and other waste from immunization programs
I. Building Back Better	• Investing in essential services, such as clean water and sanitation, as well as water, sanitation, and hygiene (WASH) in health care facilities, to uplift the baseline health status of populations • Investing in climate-resilient health care infrastructure to build multifaceted resilience • Revitalizing the momentum toward achieving universal health coverage (UHC) to protect citizens from future health shocks • Investing in nature-based solutions to enhance the natural environment and protect communities from climate-related shocks and future pandemics	• Decarbonizing of health care systems and aligning the sector with the ambition of the Paris Agreement • Accelerating the shift from fossil fuel-based electricity generation to clean renewable energy that is resistant to future shocks • Investing in low-carbon, healthy, and equitable transport systems that ensure human mobility during crisis situations when fuel supplies are disrupted • Transitioning to sustainable agricultural systems that also provide steady and equitable supplies of nutritious food to communities

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