Issue Brief:

Improving Health – and Health Care – Through Environmental Stewardship

The growing severity and frequency of climate-related events like floods, wildfires, and hurricanes threatens both public health and the health sector's ability to deliver safe, high-quality, and affordable care. For example, air pollution caused by emissions and wildfires has been linked to asthma,[1] premature birth,[2] and dementia.[3] Floods and hurricanes can lead to loss of life and critical health care infrastructure, while rising temperatures increase rates of heat stroke, dehydration, and infectious diseases.[4]

Racial and ethnic minorities, rural populations, older adults, people with disabilities, and people with lower incomes face the greatest threats.[5] These groups are more likely to experience chronic health conditions and lack access to health insurance and services.[6]
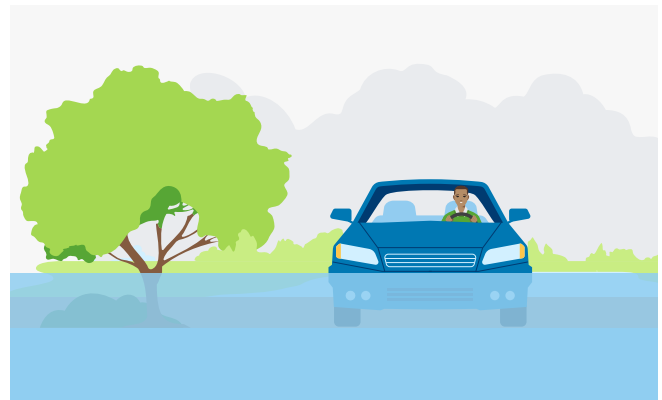
Health systems and hospitals are committed to providing the best possible care to patients and can further this mission through their environmental stewardship. The U.S. health sector is responsible for 8.5% of U.S. emissions and 25% of health sector emissions worldwide.[7,8] Hospital care is the largest individual emissions contributor at 35%.[8] However, the majority of hospital emissions are concentrated in their supply chains, where lack of transparency and direct control of manufacturing, packaging, and transportation practices complicate hospitals' efforts to be more sustainable.[8]

More environmentally-friendly practices can support better health outcomes and patient experiences. By focusing on high-value care and streamlining operations, health systems can reduce waste and emissions while improving care quality and potentially lowering costs. While shifting established health care practices will take monumental effort, we can all play a critical role in protecting health.

Kaiser Permanente's Approach

At Kaiser Permanente, we are showing it is possible to be carbon-neutral while providing high-quality care and better health outcomes. Here are some of the ways we support environmental stewardship and community resilience across the U.S. and globally.

Decarbonizing buildings: Kaiser Permanente was the first health system to become carbon-neutral, largely through decarbonizing our buildings and purchasing green power. We're now the 8th largest business user of solar energy in the U.S. and on our way to net zero, which involves cutting greenhouse gas emissions to as close to zero as possible and offsetting unavoidable emissions.[9]

Focusing on preventive medicine: Our commitment to prevention and providing high-quality care reduces the need for medical services and unnecessary hospitalizations, lowering emissions while improving patient health.[10]

Expanding telehealth: We continue to innovate in developing and deploying telehealth services, which can be more convenient for our patients and reduce transportation-related emissions. In 2023, we provided more than 22 million phone and video visits and filled an average of 136,000 prescriptions by mail each day.[11]

Quality improvement: Kaiser Permanente clinicians and researchers partner to identify the most effective ways to reduce our environmental impact while maintaining or improving our standard of care, such as by replacing anesthetic gases that emit high amounts of greenhouse gases with equally effective but environmentally friendlier alternatives.[12]

Pioneering research: We conduct large longitudinal studies that measure the impact of environmental factors on health and help to inform policy action, like our recent study on air pollution that provides support for strengthening air quality standards to protect health.

Supporting community-led resilience: We provide strategic planning, advocacy, and financial support to community-led efforts to build climate resilience and reduce the health impacts of climate change in the communities we serve.[13]

Championing innovation: Kaiser Permanente is involved in the National Academy of Medicine's Climate Grand Challenge, a multi-year global initiative. We fund research and participate in working groups aimed at identifying best practices and policy opportunities for decarbonizing health care and protecting health.[14]

Sharing information and roadmaps: We are partnering with the National Academy of Medicine to create a public-facing resource detailing the relationship between climate and health that will empower communities, researchers, and policymakers to pursue the most effective strategies to support health and health equity.[15] We also teamed up with Health Care Without Harm to develop The Path to Carbon Neutral, a guide based on lessons learned from our journey to carbon neutrality, to help other institutions identify their own priority actions.

Policy Opportunities

Members of the health sector are joining forces to help address these challenges, which is critical to supporting public health and the continuity of health services in a changing climate.

While many hospitals and health systems have taken important steps, having additional guidance, roadmaps, and structural support could encourage more groups to take action. Policies can help the health sector embed sustainability into their operations and facilitate transitions to care delivery improvements. Based on existing research and internal discussions among Kaiser Permanente environmental sustainability leaders, we recommend several approaches:

Develop strategies and incentives to help the health sector reduce emissions.

- **Set emissions reduction targets:** Support health systems, suppliers, and manufacturers in tracking emissions and setting science-based greenhouse gas emissions reduction targets. Encourage consistent monitoring of key metrics to facilitate continuous improvement.

- **Support decarbonization of buildings:** Establish energy efficient building codes and other policies that promote decarbonization of new and existing buildings. Clear codes and policies help to bridge the knowledge and action gap by translating evidence into clear next steps and guidelines.

- **Fund new technology:** Support government investments in research, pilot projects, and incentives for energy efficiency and renewable energy technologies to enable full decarbonization in health care. This research could also support evidence-based policies and federal guidance on how health systems can safely make changes to clinical practices to reduce their climate impacts

while maintaining care quality and regulatory compliance, such as optimizing ventilation strategies or appropriately cleaning and reusing certain medical devices instead of discarding them.

- **Provide financial support for reducing greenhouse gas emissions:** Leverage state and federal funding, direct payments, and other financing, including through utilities, that would help health care facilities to reduce their greenhouse gas emissions and invest in environmentally-friendly and resilient infrastructure. Help health systems to adopt actions identified as high-impact by the National Academy of Medicine Climate Action Collaborative and the Agency for Healthcare Research and Quality, such as transitioning from centrally piped anesthetic gases to portable e-cylinders and offering more plant-based options by default for patient and cafeteria meals.
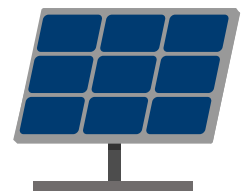
Support transparent health care supply chains and sustainable procurement.

- **Increase supply chain transparency:** Support the research capabilities and data sources needed for Life Cycle Assessments (LCAs) of health care products and services to enable stakeholders to take meaningful action on supply chain emissions. This also helps the health sector in developing purchasing standards that incentivize suppliers to provide more environmentally-friendly products.

- **Incentivize environmentally and socially responsible procurement:** Incentivize payers and providers to address social determinants of health and environmental stewardship by leveraging their economic impact in communities, such as by contracting with minority-owned businesses, implementing environmentally preferable procurement policies, and by helping local businesses scale to meet supply chain needs.

Promote climate resilience and emergency preparedness across health systems and the communities they serve.

- **Improve data sharing:** Support coordination between health care and public health, including through data and resource sharing, emergency preparedness plans between health care institutions and public health entities, and more timely data to understand the health risks of climate change, with an emphasis on populations at highest risk.

- **Support climate resilience strategies:** Support research on "tipping points" for health care facility failure during and after extreme weather events and climate-related disasters and the return on specific investments related to healthcare facility resilience. This research and existing evidence on effective interventions can inform updates to emergency preparedness and resilience programs and policies, helping providers and suppliers to be more responsive to climate-related challenges.

- **Support upstream interventions and preventive care:** Support incentives for healthcare organizations' upstream investments in community resilience. Shifting from acute to preventive care is critical, including addressing health inequities, supporting upstream care management, and incorporating climate-related exposures into social determinants of health screening and referral.

With action from multiple sectors, including health care, we can deliver more sustainable, environmentally-friendly care and protect the public's health.

References

Full citations for this document can be found at: kpihp.org/references-ics.