September 8, 2016

Seize the Day: Opportunities for Health Care

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Senior Advisor, Health Care Without Harm

Health Care Without Harm

the good news

The health care sector can play a leading role in solving these problems.

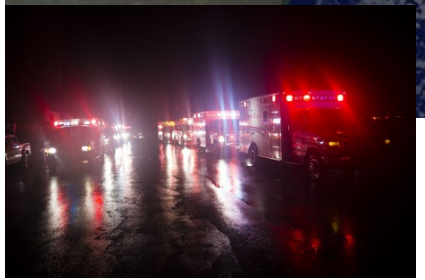
Through its massive buying power and mission-driven interest in preventing disease, the health care sector can help shift the entire economy toward sustainable, safer products and practices.

IS OUR HEALTHCARE INFRASTRUCTURE RESILIENT TO CLIMATE CHALLENGES?

Charity Hospital and VAMC

New Orleans, LA

(Hurricane Katrina, 2005)

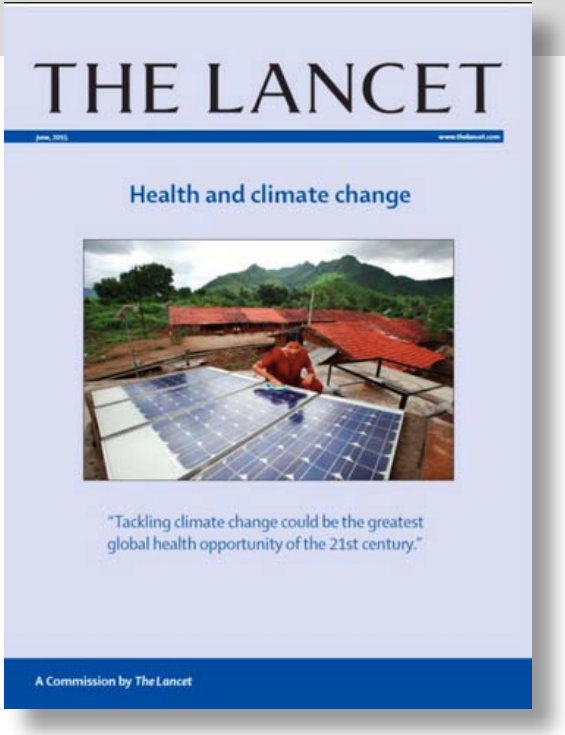


NYU Langone and Bellevue

New York, NY

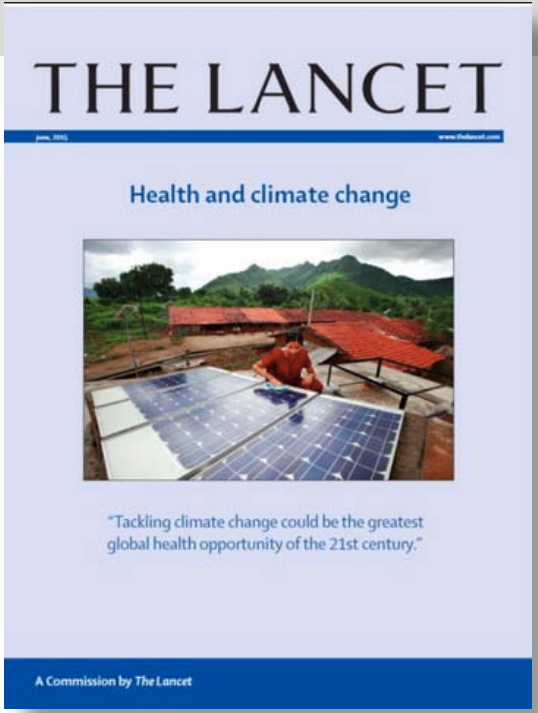
(Hurricane Sandy, 2012)

The Lancet Commission



"The effects of climate change are being felt today, and future projections represent an unacceptably high and potentially catastrophic risk to human health."

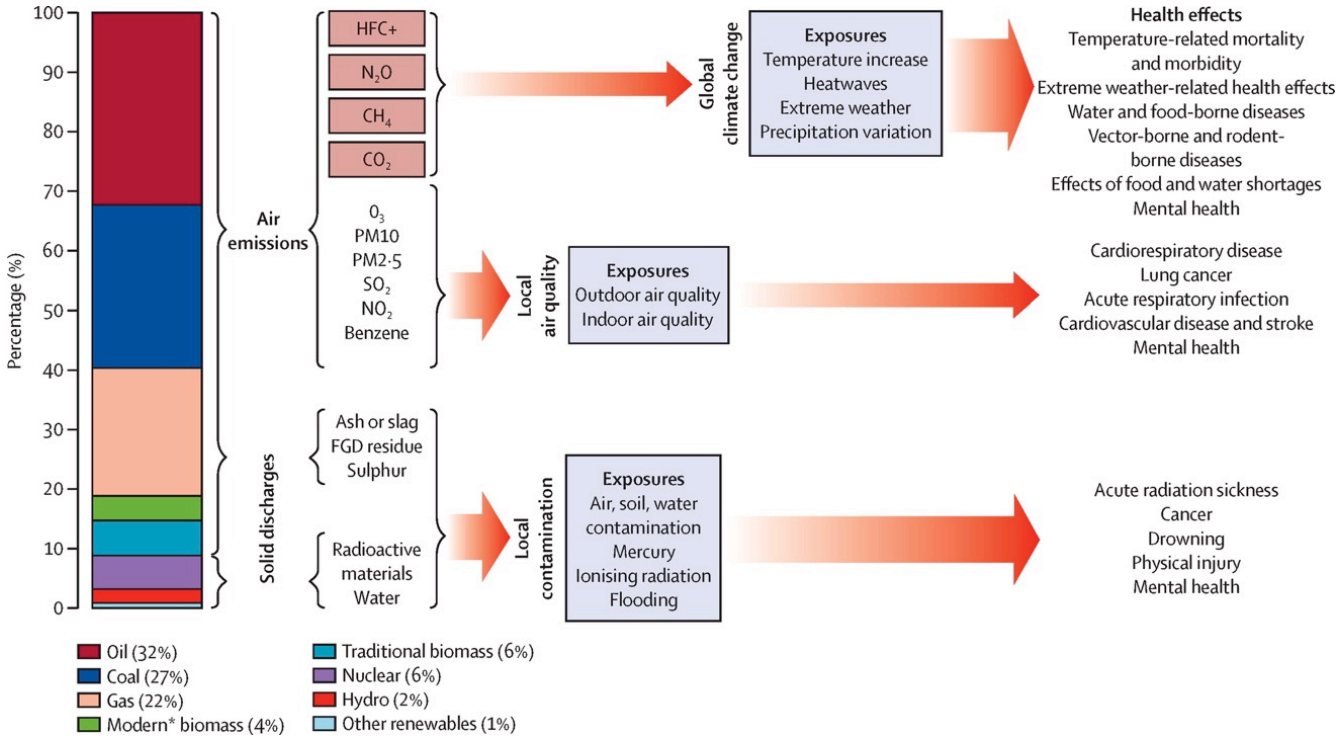
LANCET commission ON health & climate '15



"Hospitals and health systems, particularly in more industrialized settings, have a significant carbon footprint."

"By moving toward low-carbon health systems, health care can become more resilient to the impacts of climate change, save money, and lead by example."

Fossil Fuels and Health



Health Care's Role

1
REDUCE IMPACTS

2
IMPROVE RESILIENCE

3
ADVOCATE

MITIGATE

- Reduce resource use
- Reduce fossil fuel emissions in buildings
- Reduce transportation impacts
- Review supply chain

ADAPT

- Improve infrastructure design
- Engage communities
- Link to sustainability and quality initiatives

LEAD

- Support local and national public policies
- Improve public understanding of climate and health risks

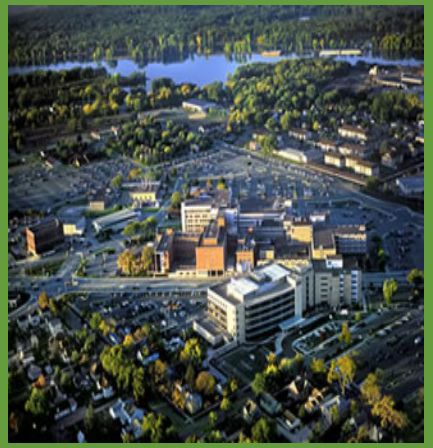
MITIGATE

Reduce Energy And Water Use

Energy Independent by 2014

"We did not set out to be the greenest health system. We set out to make the air better for our patients to breathe, control our rising energy costs and help our local economy."

–Jeff Thompson, MD
Gundersen Health System 2014



Envision GUNDERSEN HEALTH SYSTEM

- Low–energy design
- Passive design strategies – operable windows
- On-site power generation
- On-site renewable energy

- Low water use design
- Recycled and reclaimed water reuse
- Independent water source

Kiowa Memorial Hospital
Greensburg, KN
(EF-5 tornado, 2008)

Press Release

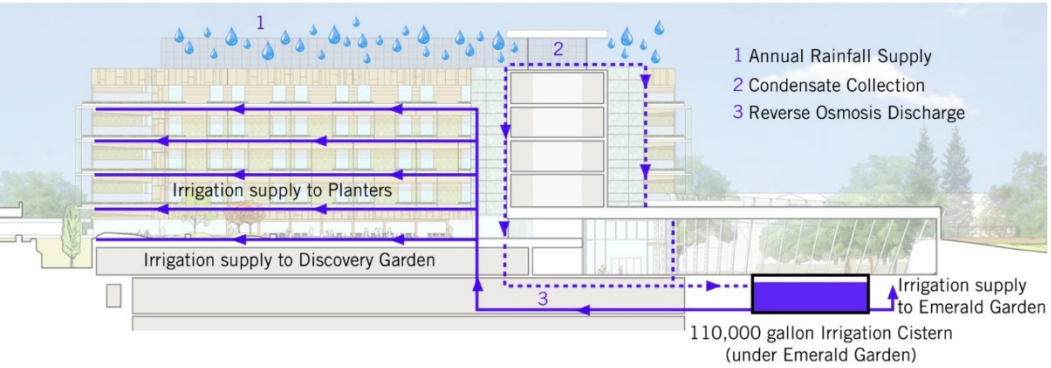
Kaiser Permanente Pledges Bold 2025 Environmental Performance to Benefit People and Planet

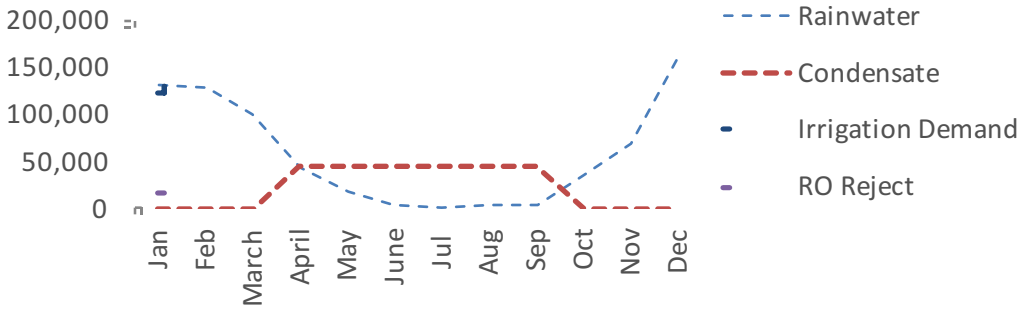
Already a global leader in climate action, organization sets in motion its most ambitious plan ever for a healthier future

May 17, 2016

carbon positive

Kaiser Permanente
Oakland, California





Lucile Packard Children's Hospital at Stanford

Palo Alto, California

ADAPT

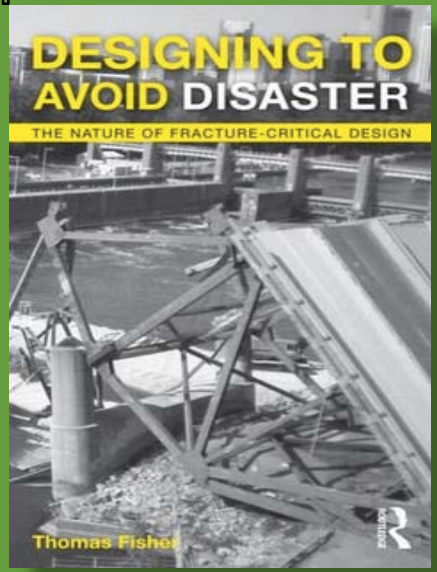
Improve Healthcare Infrastructure Resilience

Fracture Critical

"…going forward, good design and planning will be based on the understanding that nothing will work as planned, or even at all.

We are at our best when we have imagined, and accounted for, the worst."

–Thomas Fisher
University of Minnesota



Focus on patient health and safety and provider outages that will strain the healthcare system:

1. Reduce the risk of emergency evacuations
2. Be able to take on acute emergent patient needs (during and after)
3. Avoid extended facility outages that strain the system
4. Reduce how many patients cannot access their normal provider

Minimize disruptions in the **healthcare system** in order to preserve the wellbeing and health of staff, patients and community

Operate continuously

or

Re-open quickly

Key strategies

1. **Ensure critical healthcare providers' operability through redundancy and the prevention of physical damage**
2. **Reduce barriers to care during and after emergencies**

Goals of Resilient Healthcare

- functioning well under stress
- successful adaptation
- self reliance
- social capacity

Sustainability

Sustainability and Resilience

Resilience

Low VOC Materials
Local Food Suppliers
Waste Recycling
Air Quality

Energy, Water Efficiency
Daylighting
Natural Ventilation
Rainwater Capture
Solar Shading

Flood barriers
Elevation
Backup generators

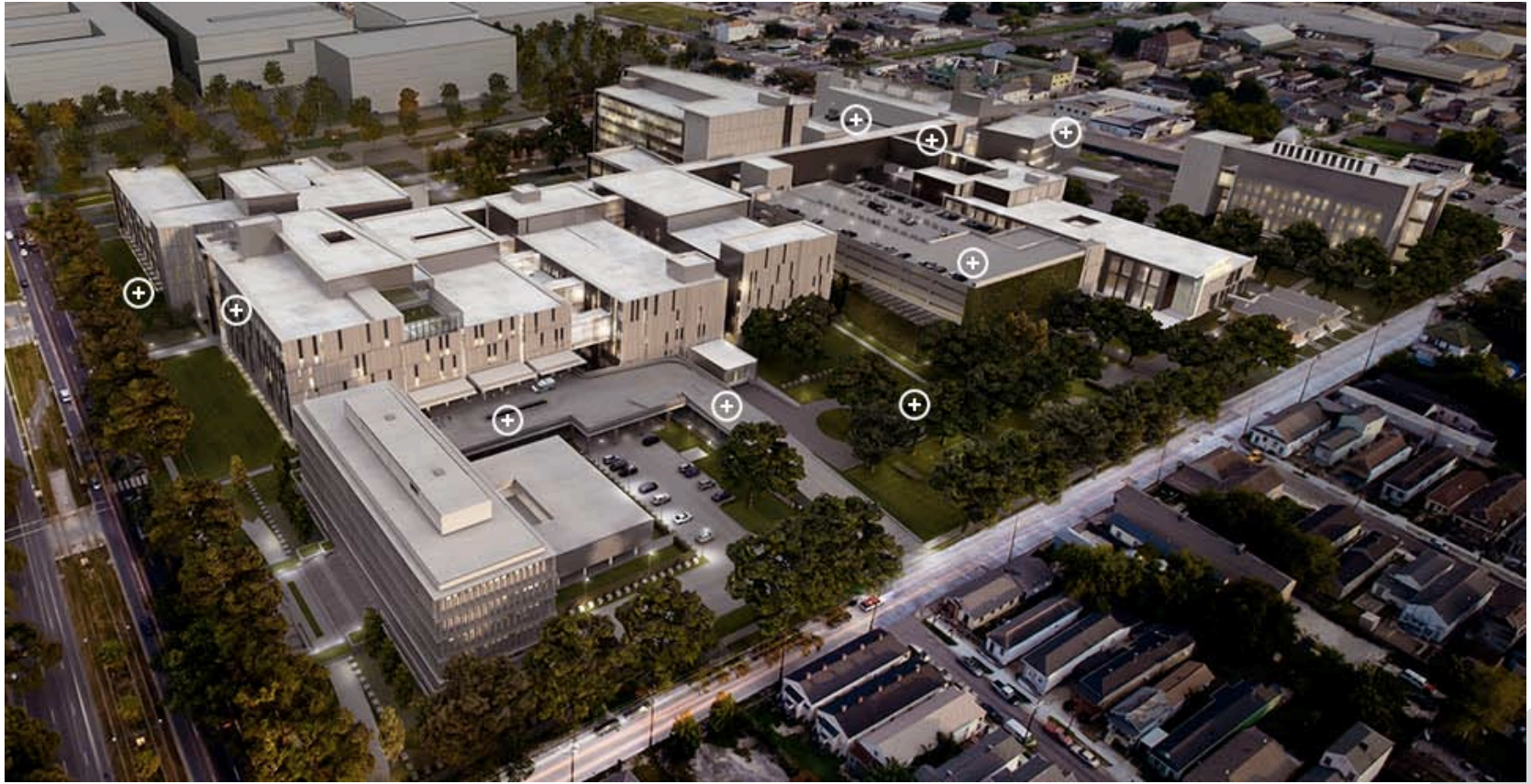
Texas Medical Center, Houston, Texas (SOM Site Master Planning)

Completed early in 2006, Brays Bayou Marsh at Mason Park is near the mouth of Brays Bayou. The marsh is an award-winning partnership project.

Texas Medical Center

Houston, TX

Since Tropical Storm Allison, 2001



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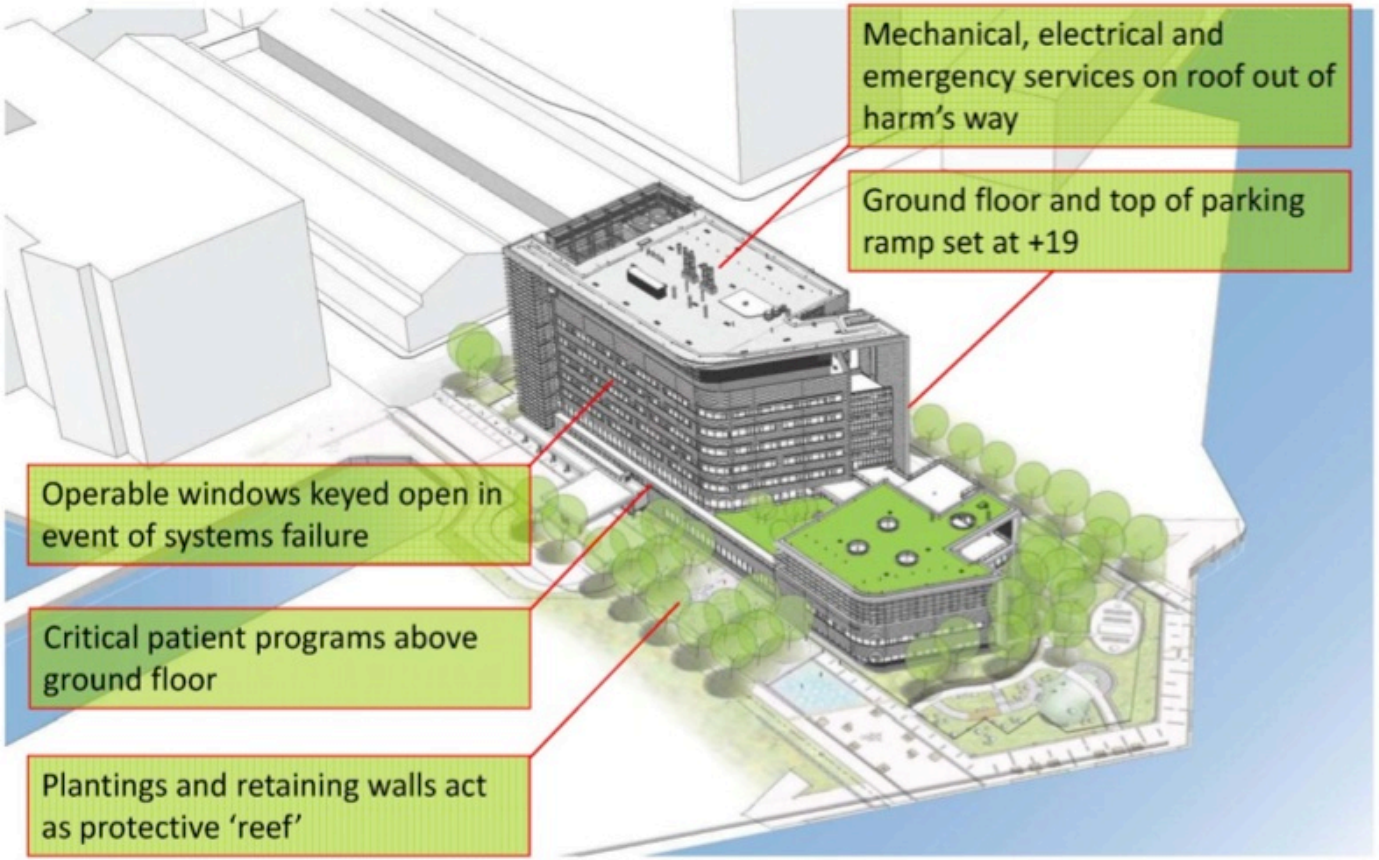
Spaulding Rehabilitation Hospital

Boston, MA



Spaulding Rehabilitation Hospital

Boston, MA

LEAD

Educate and advocate locally and globally for climate policies

The President's Climate Action Plan- June 2013

THE PRESIDENT'S PLAN WILL

PREPARE THE U.S. FOR THE IMPACTS OF CLIMATE CHANGE

WE'VE MADE GREAT PROGRESS

The Administration and partners developed national strategies to help decision makers address the impacts of climate change on freshwater resources — fish, wildlife, and plants — and oceans.

PROGRESS: In 2013, federal agencies released Climate Change Adaptation plans for the first time, outlining strategies to protect their operations, missions, and programs from the effects of climate change.

PROGRESS: The US Global Change Research Program, NOAA, USACE, and FEMA developed and released interactive sea-level rise maps and a calculator to aid rebuilding efforts in NY and NJ after Superstorm Sandy.

THERE'S MORE WORK TO DO

Moving forward, the Obama Administration will help states, cities, and towns build stronger communities and infrastructure, protect critical sectors of our economy as well as our natural resources, and use sound science to better understand and manage climate impacts.

SUPPORT CLIMATE-RESILIENT INVESTMENTS

at the community level by removing policy barriers, modernizing programs, and establishing a short-term task force of state, local, and tribal officials to advise on key actions the federal government can take to support local and state efforts to prepare for climate change.

REBUILD AND LEARN FROM SUPERSTORM SANDY

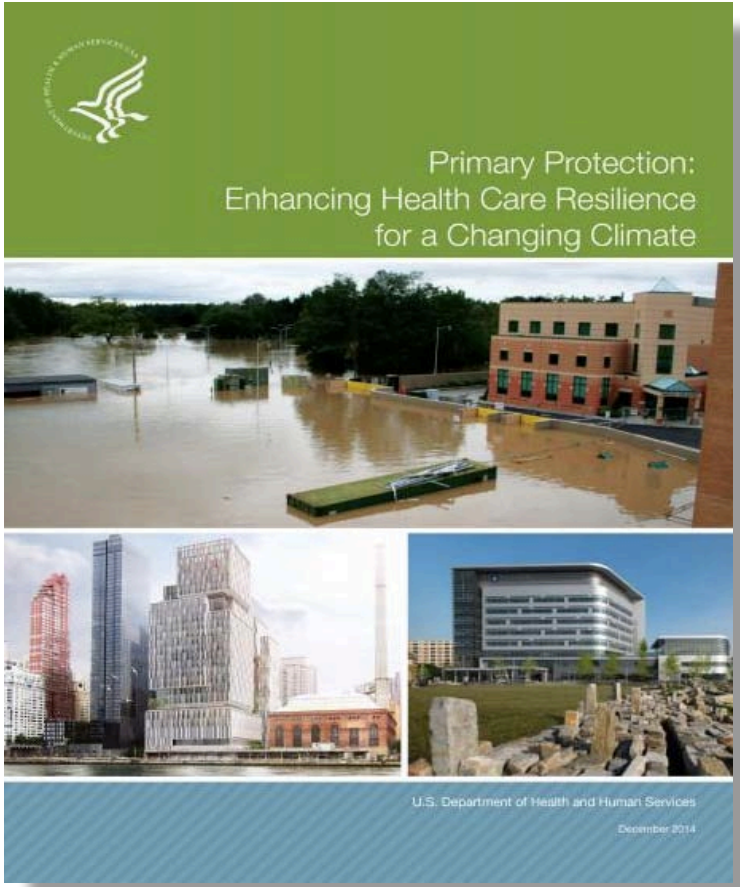
by piloting innovative strategies in the Superstorm Sandy-affected region to strengthen communities against future extreme weather and other climate impacts and building on a new, consistent flood risk reduction standard established for the Sandy-affected region, agencies will update their flood-risk reduction standards for all federally-funded projects.

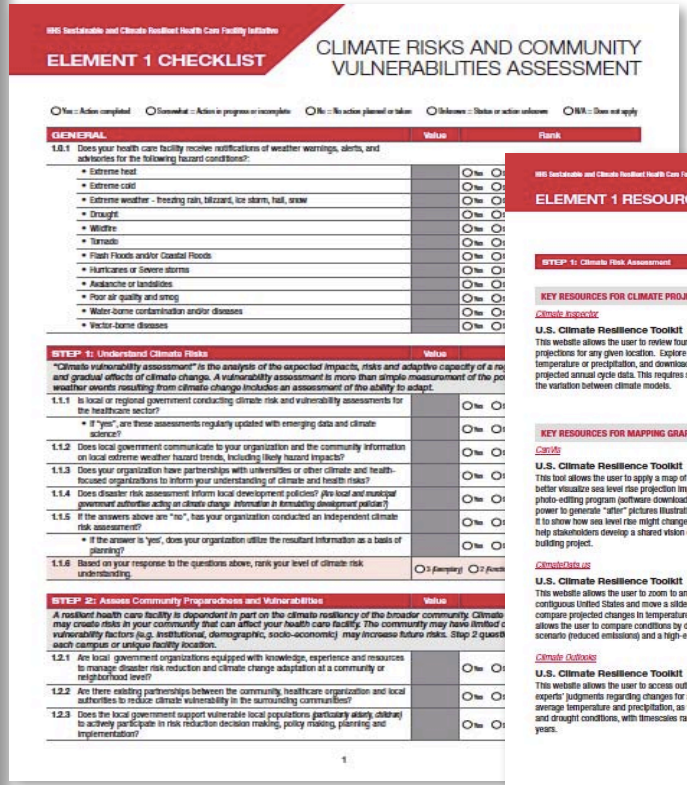
LAUNCH AN EFFORT TO CREATE SUSTAINABLE AND RESILIENT HOSPITALS

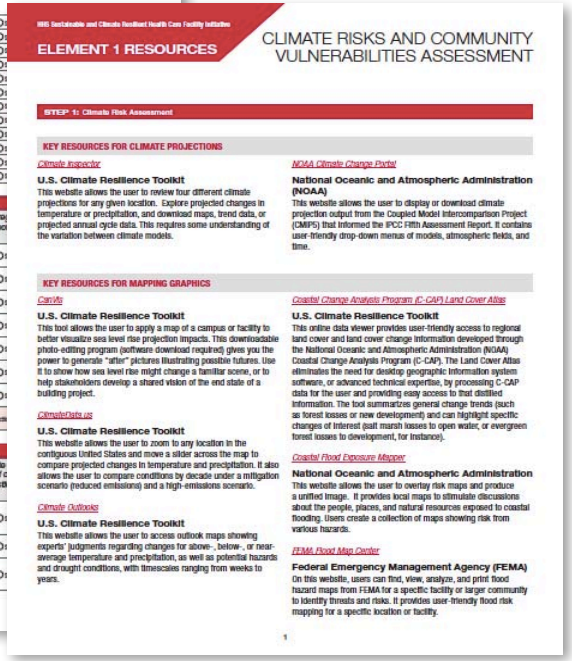
in the face of climate change through a public-private partnership with the healthcare industry.

PROVIDE TOOLS FOR CLIMATE RESILIENCE

including existing and newly developed climate preparedness tools and information that state, local, and private-sector leaders need to make smart decisions.







Health Care Without Harm

http://toolkit.climate.gov/topics/human-health/building-climate-resilience-health-sector

December 15: the White House highlights health sector resilience

GLOBAL GREEN and HEALTHY HOSPITALS

Mitigation

Reducing health care's own carbon footprint

Adaptation

Preparing for the impacts of extreme weather and the shifting burden of disease

Leadership

Educating staff and the public while promoting policies to protect public health from climate change