

# What Can We Do to Mitigate the Impacts of Climate Change on Children's Health?

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## Pediatricians are all about prevention.

- **Primary prevention:** Preventing personal exposure to risk factors
  - Bicycle helmets
  - Turning down water heaters

**Primordial prevention:** Actions to minimize future hazards to health and address broad health determinants

Reducing contaminants in air, water and food

Reducing CO<sub>2</sub> emissions into the atmosphere

“While no single step can reverse the effects of climate change, we have a moral obligation to future generations to leave them a planet that is not polluted and damaged. Through steady, responsible action to cut carbon pollution, we can protect our children’s health and begin to slow the effects of climate change so that we leave behind a cleaner, more stable environment.”

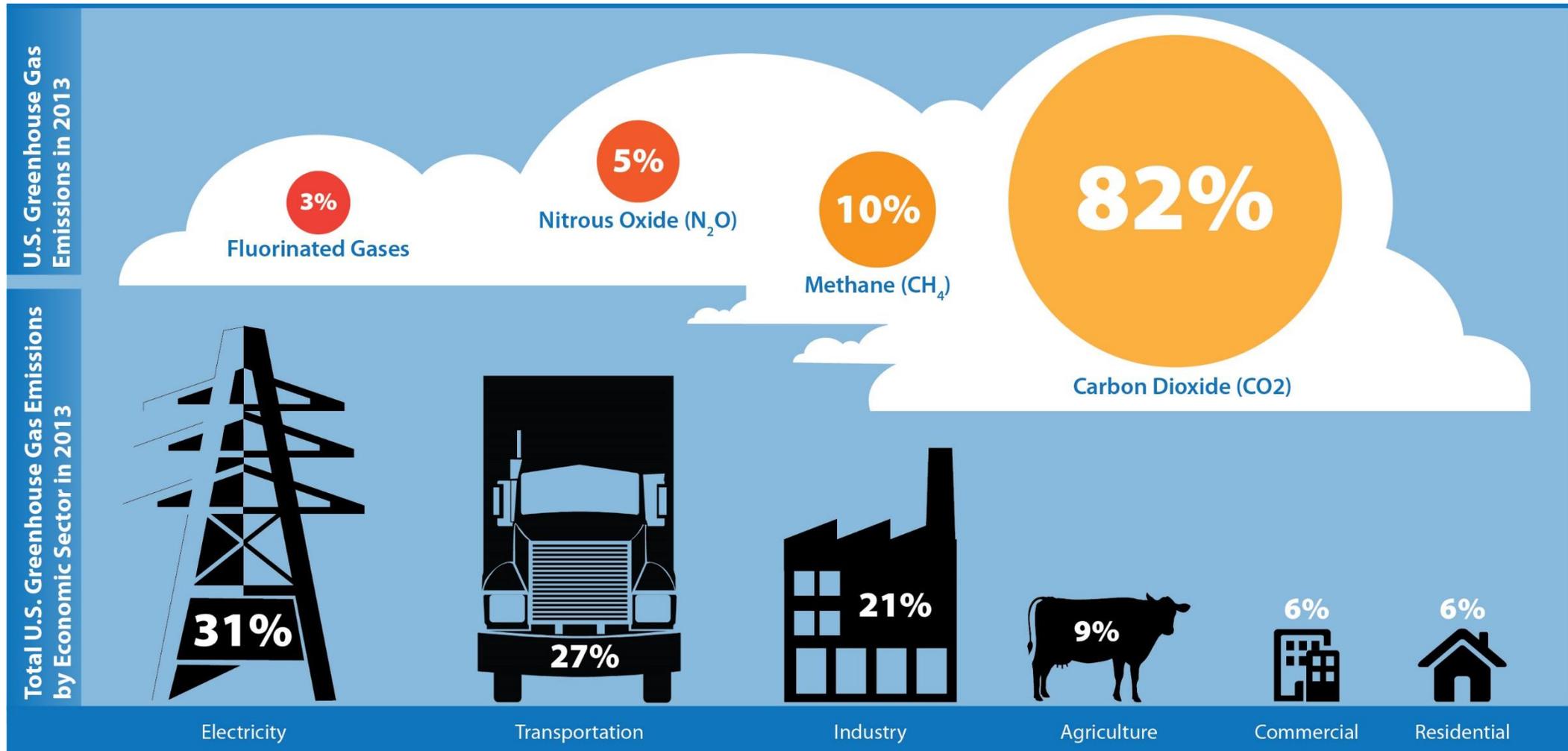
-President Obama’s Climate Action Plan

# President Obama's Climate Action Plan:

1. Cuts Carbon Pollution in America
2. Prepares the United States for the Impacts of Climate Change
3. Leads Efforts to Address Global Climate Change

# CARBON POLLUTION IS THE BIGGEST DRIVER OF CLIMATE CHANGE

## U.S. GREENHOUSE GAS POLLUTION INCLUDES:



# EPA's 5 Key Climate Actions

## Mitigation

Reducing carbon pollution from the power sector through the Clean Power Plan

Reducing hydrofluorocarbon emissions (HFCs)

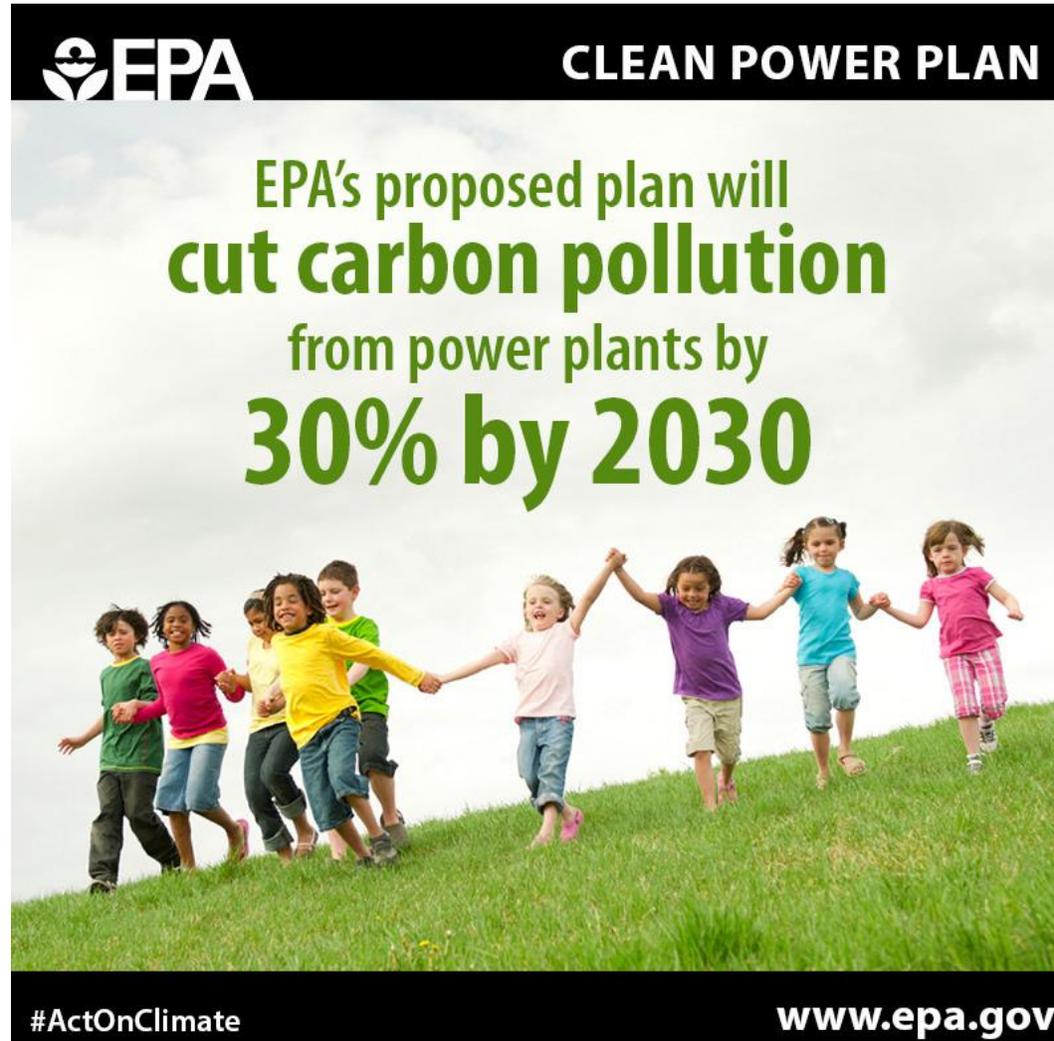
Setting 2<sup>nd</sup> greenhouse gas standards for heavy-duty vehicles

Reducing methane emissions

## Adaptation

Enhancing climate adaptation capabilities

# EPA Priority Action: Proposed Clean Power Plan



**EPA** **CLEAN POWER PLAN**

EPA's proposed plan will  
**cut carbon pollution**  
from power plants by  
**30% by 2030**

#ActOnClimate [www.epa.gov](http://www.epa.gov)

The graphic features a black header with the EPA logo and the text 'CLEAN POWER PLAN'. Below this, a photograph shows a group of diverse children holding hands and running up a grassy hill under a cloudy sky. The text is overlaid on the upper portion of the image. At the bottom, a black bar contains the hashtag #ActOnClimate and the website address www.epa.gov.

# EPA Priority Action: Reducing HFC Emissions



## Big firms agree to cut use of coolants that add to global warming

Los Angeles Times

**Nation / Nation Now**

This article is related to: [Environmental Issues](#),



# EPA Priority Action: Climate Standards for Heavy-Duty Vehicles

- Reduces emissions from the second leading sector of climate pollution- transportation sector;
- Co-benefit of reducing other pollution from trucks and large pickups.

65% of  
HD GHG  
Inventory



Line-Haul Tractors

Line-Haul Trailers  
(currently unregulated)



Vocational Vehicles  
21% of HD GHG Inventory



Large Pickups & Vans  
14% of HD GHG Inventory



# EPA Priority Action: Reducing Methane Emissions



- Important for climate mitigation;
- Helps to reduce temperature increases; and
- Helps reduce all VOCs, precursors to ozone.

# The President's Climate Action Plan

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 2015, 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.

# Background

- In *Massachusetts v. EPA* on April 2, 2007, the Supreme Court found that greenhouse gases are air pollutants covered by the Clean Air Act. Under Clean Air Act Section 202 (motor vehicles), EPA was required to determine
  - whether greenhouse gas air pollution endangers public health and/or welfare
  - whether new motor vehicles contribute to the air greenhouse gas pollution
- On December 7, 2009, the EPA Administrator signed final findings that
  - greenhouse gases in the atmosphere endanger the public health and welfare of current and future generations
  - greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution

## Background

- The President's Climate Action Plan outlines actions to address climate change domestically through both regulatory and voluntary programs, through international negotiations, and by continuing to strengthen the science. EPA has moved forward to propose and finalize a number of actions to address climate change.
- See <http://www.epa.gov/climatechange/EPAactivities.html> for information about what EPA is doing

- The EPA Administrator's judgment in the 2009 Endangerment Finding was informed by a significant body of scientific evidence
  - Primary reliance on the recent, major assessments by
    - U.S. Global Change Research Program
    - Intergovernmental Panel on Climate Change
    - National Research Council of the National Academies

- Based on the assessment literature conclusions, the EPA Administrator placed weight on the fact that certain groups, including **children**, the elderly, and the poor, are most vulnerable to climate-related health effects

- Strongest evidence concerning adverse air quality impacts and increased likelihood of heat waves
- “Directional support” provided by evidence regarding extreme weather events, changes in vectorborne and waterborne diseases, and changes in aeroallergens that cause allergic illnesses



- The 2009 Endangerment Finding is the foundation for EPA’s regulatory actions on GHG emissions

- April 7, 2015 President Obama released a draft Climate and Health Assessment Report
- The assessment is intended to inform policy and decision makers, and other stakeholders at multiple levels of government (e.g., public health officials, urban planners), non-profits (especially those with a community health focus), national health associations (e.g., APHA), and the general interested public.

# Climate Change and Health Assessment

The Climate and Health Assessment is an interagency product of the US Global Change Research Program

Coordinated by the Interagency Crosscutting Group on Climate Change and Human Health, an interagency workgroup of the US Global Change Research Program co-chaired by NIH, CDC, and NOAA

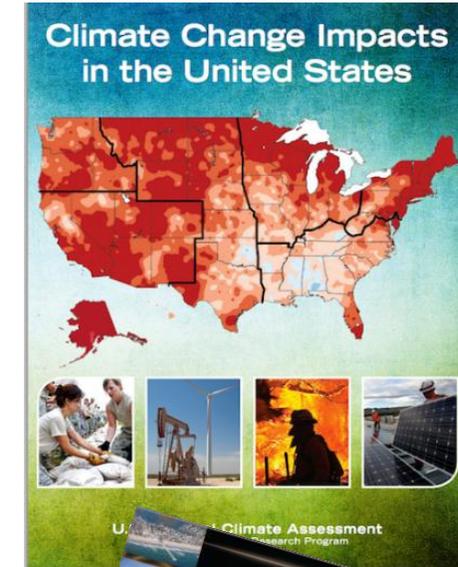
EPA is coordinating development of the assessment. Several EPA employees are authors on the report.

This draft report assesses the body of existing research on the impacts of observed and projected climate change on human health in the United States, with a strong focus on impact quantification where possible, and summarizes the current “state of the science” for a number of key impact areas.

It builds upon the current NCA and 2008 US CCSP climate and health-focused report (SAP 4.6. lead by EPA/ORD), and leverages ongoing research efforts across multiple agencies.

### **WHY is this important :**

- A major scientific assessment focused on climate and public health will address a significant EPA mission-oriented area for which there have been important advancements in the science.
- We are preparing to leverage these advancements to further communicate about climate change and to inform adaptation and/or mitigation



## April 7, 2015 Announcement

- The President also announced:
- Preparing the Next Generation of Medical and Health Professionals:
  - A coalition of Deans from 30 medical, public health, and nursing schools across the country who are committing to ensure that the next generation of health professionals is trained to address the health impacts of climate change

## April 7, 2015 Announcement

- The President announced:
- White House Climate Change and Health Summit
  - Featuring the Surgeon General
  - To bring together public health, medical, and other health professionals, academics, and other interested stakeholders to discuss the public health impacts of climate change and identify opportunities to minimize these impacts

# Climate Data and Tools Initiative



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## Meet the Challenges of a Changing Climate

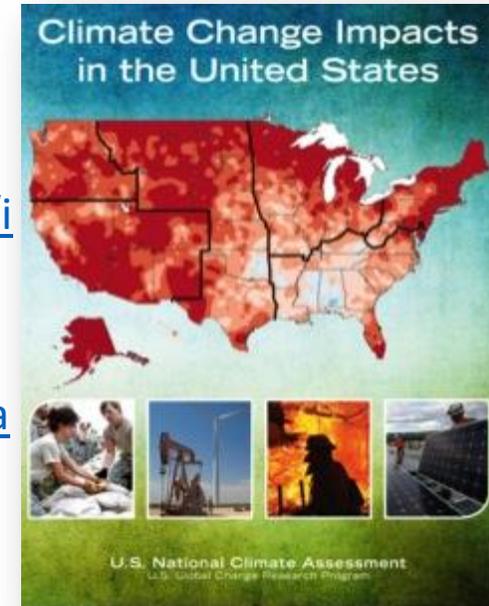
The Climate Resilience Toolkit provides resources and a framework for understanding and addressing the climate issues that impact people and their communities.

- 1 Identify the Problem
- 2 Determine Vulnerabilities
- 3 Investigate Options
- 4 Evaluate Risks & Costs
- 5 Take Action



# Resources and activities for protecting children's health in a context of climate change

- PTF Workshop on Effects of Climate change on Children's Health
  - <http://www.niehs.nih.gov/news/video/scivid/children/index.cfm>
- 3<sup>rd</sup> National Climate Assessment
  - <http://nca2014.globalchange.gov/report/sectors/human-health>
- USGCRP Climate Health Assessment
  - <http://www.globalchange.gov/health-assessment>
- Climate Resilience Tool Kit- <http://toolkit.climate.gov/>



- Review the draft and submit comments to the US Global Change Research Program website
- The draft assessment and information on submitting comments are available at: <http://www.globalchange.gov/health-assessment>.
- All comments must be submitted to the website by **12:00pm EDT on June 8, 2015.**



# Acknowledgements

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[HTTP://WWW2.EPA.GOV/CHILDREN](http://www2.epa.gov/children)

