**Climate** 



Health



**Poverty** 

TORONTO
PEOPLE'S
ASSEMBLY
ON CLIMATE
JUSTICE



### The Elephant

#### **IPCC 2014**

"climate change is unequivocal"

"more than half of the observed increases in globally averaged temperatures from 1951 – 2010 is **extremely likely** due to the observed increase in **anthropogenic** greenhouse gas concentrations"

### The Elephant

97% consensus among climate scientists

NASA, 2015

only 2% of Canadians do not think climate change is occurring

IPAC CO2 Research, 2012



#### The Vitals

2°C

0.75°C

350ppm

401ppm

1/3





### The Impact



150,000 deaths over last 20 years 250,000 deaths per year by 2030

# THE LANCET

Executive summary

Lancet 2009; 373: 1693-733

Climate change is the biggest global health threat of the 21st century

#### Climate = Health

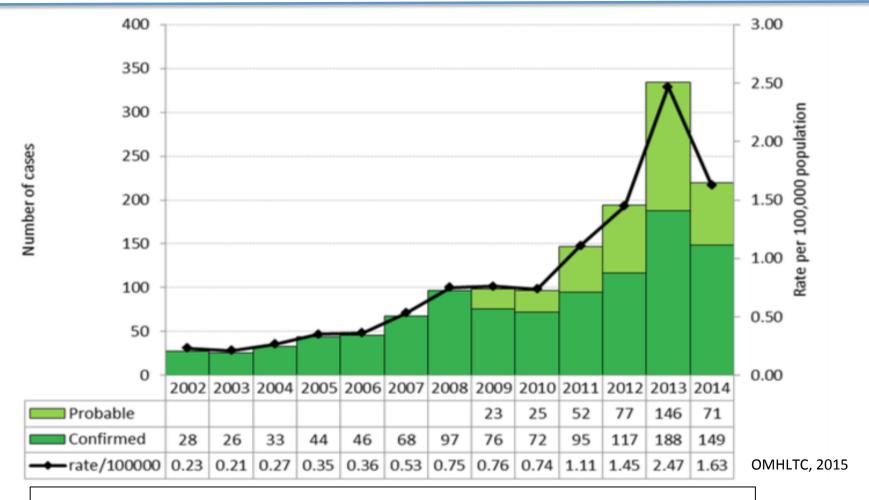
#### direct effects

- frequency & intensity of floods, droughts, storms
  - intensity of heat-waves

#### indirect effects

- ↑ range of insects -> ↑ insect-spread diseases
  - **Ψ**crop yields -> ↑malnutrition
  - Adisplacement, migration, conflict

### Local Effects: Lyme Disease



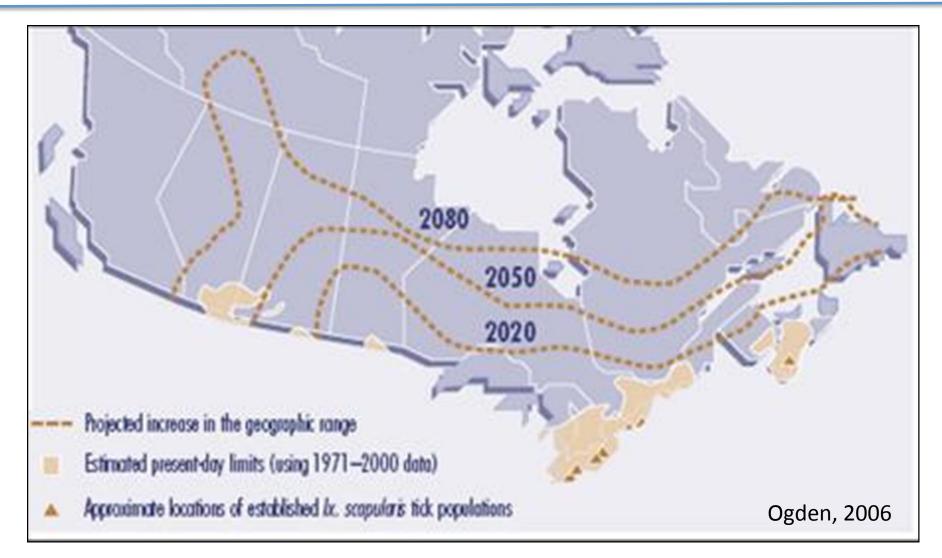
### Cases of Lyme disease surge in Ontario

Ticks that carry the disease confirmed in GTA park.



Published on Fri Nov 27 2015

## Lyme Disease



#### **Heat Waves**

at risk:

urban, elderly, isolated, no A/C heart and lung disease

Toronto Medical Officer of Health, 2014 triple the days with temperatures >30°C by 2050

Europe 2010: 11,000 deaths in Moscow alone



### Northern Communities

decreased access to country food items

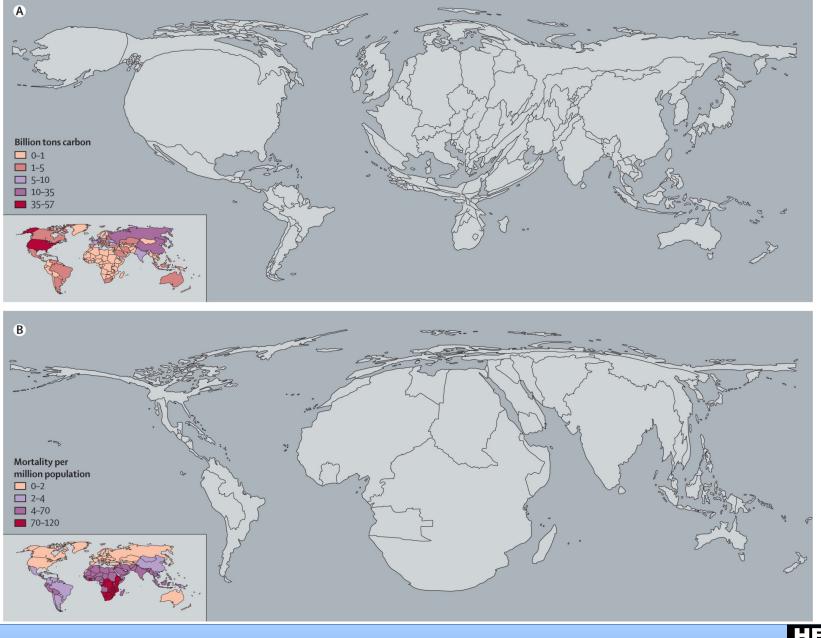
decreased food security

erosion of social and cultural values associated with
country foods preparation, sharing, and consumption

increased permafrost melting challenges to housing and transportation

Furgal, 2006





### Global Impact

#### malnutrition

1 billion people at risk 4 million child & maternal deaths per year increase by 25% by 2050

WHO, 2006

#### mosquito-transmitted diseases

dengue: additional 2 billion people at risk by 2080 Hales, 2002

malaria: spreading to higher elevations



### Global Impact: Conflict, Displacement

- 2003: agriculture = 25% of Syria's GDP, self-sufficient of wheat
- severe drought 2006 2011 (worst on record)\*
  - crop failures, livestock herds lost
  - importation of wheat, foodstuffs
  - cost of wheat, rice, and feed prices doubled in a year
- mass migration rural -> urban, civil unrest
  - \*2 3 times more likely than by natural variability alone

## Climate change in the Fertile Crescent and implications of the recent Syrian drought

Colin P. Kelley<sup>a,1</sup>, Shahrzad Mohtadi<sup>b</sup>, Mark A. Cane<sup>c</sup>, Richard Seager<sup>c</sup>, and Yochanan Kushnir<sup>c</sup>



### Response from Health Providers

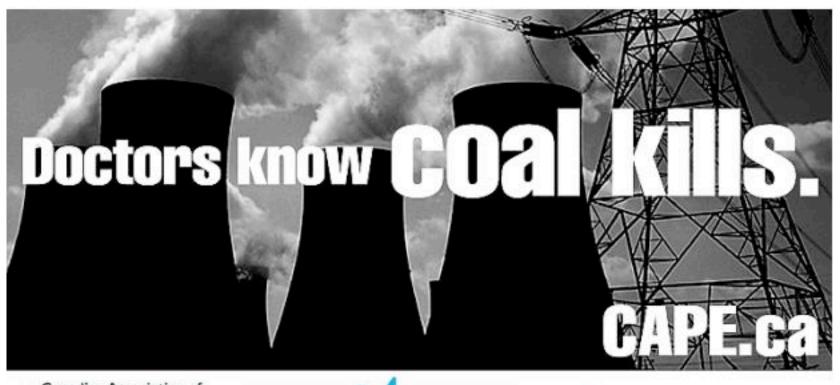


### CMA POLICY

### Climate Change and Human Health

Canada's physicians believe that: What is good for the environment is also good for human health. It is past time for those of us in the health sector in Canada to engage fully in the debate and discussions within our own house, as well as in the broader body politic to ensure that protecting human health is the bottom line of environmental and climate change strategies.

### Response from Health Providers









### Response from Health Providers

#### Open Letter to PM Trudeau: Climate Change and Health.

Dear Prime Minister Justin Trudeau and Canadian Delegation at the COP21 Climate Change Negotiations;

- 1-Adopt a strong, universal and ambitious global climate agreement at COP 21 in which the protection and promotion of health is a central principle.
- 2-Integrate health considerations into all national planning processes regarding climate mitigation and adaptation.
- 3-Phase out fossil fuel subsidies and instead use this public money to accelerate the transition to renewable energy, protect fresh water and support climate-friendly agriculture.
- 4-Prioritize actions that both reduce climate change and improve health, including reducing the number of deaths from cancer, respiratory and cardiovascular diseases that are caused by air pollution (approximately 1/8 worldwide)(2) through actions such as creating a 10-year timeline to the phase-out of coal-powered electricity in Canada.

#### Canadian Medical Association divests of fossil fuels

Selling off fossil fuel assets probably the clearest way to say 'climate change is a health issue'

By The Trailbreaker, CBC News Posted: Aug 31, 2015 12:23 PM CT Last Updated: Aug 31, 2015 12:23 PM CT



**CBCnews**