



CODE GREEN: Climate Change

*How about a carbon tax? Or, a cookie. No... a carbon tax! A big one.
Yeah. A big carbon tax. And a cookie. Also a big one.*

***Calling all MDs:** You are a critical link between science and society.
You are used to learning new skills and taking responsibility for big issues.*

Few others are. Make your voices heard.



TIME FOR PHYSICIANS TO LEAD ON THE “BIGGEST GLOBAL HEALTH THREAT OF THE 21ST CENTURY.” (LANCET¹)

A child born in 2011 could be facing a world 2.2 to 4.8 degrees C warmer by the time they retire,^{2,3} with consequent risks of malnutrition, vector-borne disease, extreme weather, respiratory disease and conflict.⁴ Or not. There is still time to prevent the worst effects of climate change.^{2,5}

“Since the 1970s, climate change has caused more than 140 000 deaths per year; by 2030, the direct cost to health is expected to be between US\$2 and US\$4 billion per year. We would not be the first to say that this may be the foremost public health issue of our era.

*Physicians will be among the front-line responders to the dire effects of climate change, from malnutrition, to increases in vector-borne disease, to respiratory illness and the aftermath of traumatic weather events. Thus, should physicians not be at the front line of efforts to mitigate climate change now? Physicians can make a difference at the political, professional and person levels.”
Barbara Sibbald, CMAJ Editorial 2013.⁶*

KNOW THIS

1. The world is *NOT* on track to meet the target agreed by governments to limit the long-term rise in the average global temperature to 2 degrees Celsius (°C).⁷

No more than 1/3 of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2 degree Celsius goal.^{8,9}

This means that we need to get on a low-carbon path by 2020 and leave the *majority* of known fossil fuel reserves in the ground.^{8,9}

2. Many changes that decrease greenhouse gases have health co-benefits:

- cardio-commuting decreases CV disease and obesity compared to driving.¹⁰

- wind/solar/hydro power have less CV and respiratory impacts than coal-powered electricity.¹⁰
- Filling unmet contraception needs reduces population growth and improves maternal and neonatal mortality.

3. We need to put a substantial price on carbon and end fossil fuel subsidies:

The International Monetary Fund (IMF), World Bank, (WB)¹² the OECD¹³ and many others are calling for a substantial price to be put on carbon (carbon tax, etc). BC implemented Canada’s largest carbon tax 5 years ago (now at \$30/tonne CO₂ or 7cents/L gas) and has reduced emissions while maintaining economic competitiveness.¹⁴ It has been praised as a “textbook example” of a carbon tax by the head of the OECD¹³ and could serve as a model for the rest of Canada. To truly change behaviour and account for the social cost of carbon, pricing should increase, working towards \$100-\$200 per tonne of CO₂ equivalent¹⁵ (\$200/tonne=44.5cents/litre of gas, resulting in approximately the same gas prices as in Europe currently).¹⁵

4. A low-carbon economy *IS* possible.

Research at Stanford has concluded that it is possible to convert the world’s energy supplies to clean and sustainable sources within 20-40 years with today’s technology at costs roughly comparable to conventional energy.⁵

What is needed most is the societal and political will to make change happen.⁵

DO THIS

1. Present rounds on climate change to your physician group or med school THIS YEAR.

Contact CAPE for powerpoint materials/handouts if desired.

2. Translate the science for society.

Advocacy is part of an MD's job (CANMEDS, CCFP, RCPSC). The CMA has a strong position statement on climate change.¹⁶ We need to implement it.

Research has shown that presenting climate change in a public health frame is the best way to motivate a population to take action.¹⁷ Make new friends to support projects in your community that reduce greenhouse gases and have health co-benefits.¹⁰

Your new colleagues (urban planners, economists, environmentalists, farmers, web designers, elected officials, and ordinary folk) will each lend their skills to building bike lanes, implementing carbon taxes and figuring out exactly where to put the community garden.

Your voice is critical. Call CAPE for advocacy support/mentorship.

3. Check out your own carbon footprint: myfootprint.org

Wash in cold water, hang to dry, cardio-commute, plant a garden and consider staycations or trains instead of planes. Divest from the fossil fuel industry.

4. Take stock of the effect of the diagnosis of climate change on mental health.

Climate change and dramatic climatic events can provoke worry, avoidance, depression and PTSD-like symptoms.⁴ What support do you need to give to yourself, your patients and your community in order that all can cope with this diagnosis and lend their skills to the climate health effort? We suggest exercise, time spent doing the activities you love, time with friends and family and afternoon dance parties with your kids to create a happiness buffer. And cookies.

All your patients live on planet Earth.

$N=1$. $NNT=1$.

So let's give'er.

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