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https://planetaryhealthweekly.com

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#### **BIG CHANGE TODAY**

HI,

Today we are presenting the *Planetary Health Weekly* to you in a new format. Since beginning four and a third years ago we have been using a PDF attachment to bring you our weekly newsletter on ecological wellness and global health. But, as you'll see below, as you scroll down, we are now sending the same type and about the same quantity of news and information but in a new format which we hope will be more accessible and usable. That is our main goal.

Another equally main goal is to reach as many readers as possible so that more people can be better informed about current events in these two most important realms. The *PHW* grew out of an earlier weekly newsletter I started, the Global Health Weekly, when I was at the University of Alberta. But after a few years, then when I was at Ryerson University, I came to realize that just presenting on global health without also considering which I came to understand as the greatest challenge of our time - the continual destruction of our Earth's environment and physical greatness and its rapidly changing climate becoming more hostile to our civilization, I was missing one of the greatest interdependencies we have. Dealing with both our ecology and health, from a variety of global perspectives, presents a much fuller picture with greater explanatory power for both understanding our current realities and how to deal with them. Ergo: Planetary Health.

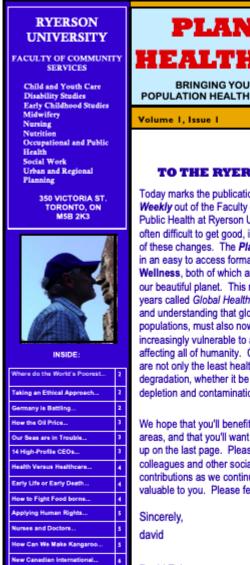
We hope that you will find our new format better; and we always appreciate any feedback. We want to keep improving and spreading important and reliable information. So, please see below our Upfront picture (the very first *PHW* from our website archives) and following it is today's *PHW*, #29 of 2019. Read as you

Best,

david

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### PLANETARY HEALTH WEEKLY



BRINGING YOU CURRENT NEWS ON POPULATION HEALTH & ECOLOGICAL WELLNESS

March 12, 2015

#### TO THE RYERSON COMMUNITY AND BEYOND

Today marks the publication of this first and founding issue of the Planetary Health Weekly out of the Faculty of Community Services and School of Occupational and Public Health at Ryerson University. Our world is changing at a rapid pace and it's often difficult to get good, interesting and reliable information to keep up with many of these changes. The Planetary Health Weekly aims to provide such information. in an easy to access format, in the areas of Population Health and Ecological Wellness, both of which are intimately interconnected and affect every person on our beautiful planet. This newsletter succeeds one I published for the last three years called Global Health Weekly. This new name is the result of further reflection and understanding that global health, with its focus on marginalized and vulnerable populations, must also now include the health, itself, of our planet; in that it too is increasingly vulnerable to a wide variety of ongoing and escalating assaults affecting all of humanity. Certainly, too, the marginalized and poor in all societies are not only the least healthy, but are more easily targeted by global environmental degradation, whether it be from climate change, desertification, deforestation, soil depletion and contamination, water air pollution, food insecurity, etc.

We hope that you'll benefit from keeping up with recent news and trends in these areas, and that you'll want to continue receiving this weekly newsletter. Please sign up on the last page. Please, too, pass it on to your family, friends, students and colleagues and other social media contacts. We welcome your feedback and contributions as we continue to evolve this newsletter to make it more relevant and valuable to you. Please feel free to contact me anytime at <a href="mailto:dzakus@ryerson.ca">dzakus@ryerson.ca</a>.

David Zakus

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# Political Economy Suggests that Geoengineering is Likely to be Used



**Credit: Otto Dettmer** 

It has been a quarter of a century since the UN Framework Convention on Climate Change was passed. However, since 1994, the concentration of carbon dioxide has increased by 15%. In addition, compared to the average global temperature between 1951 and 1980, it has increase by 0.5°C since then and the annual emissions was the highest in 2018. It will be hard to reduce the levels of annual greenhouse gas emissions relative to in 2010 by about half in 2030 in order to prevent global temperatures to rise more than 1.5°C. However, as climate targets are missed, there is a greater likelihood for geoengineering to be used with urgency for governments to understand the challenging political economy. Read more at The Economist.

# Neocolonial Epidemiology; Public Health Practice and the Right to Health in Guatemala



Credit: Adam Gorlick

Studies from Guatemala aim to understand how the daily practice of epidemiology shapes and is shaped by health as a human right. Based on an ethnographic investigation from the Guatemalan National Epidemiology Center, it was determined that although the relationship between epidemiological practice and the right to health is influenced by the specific configuration of local and transnational flows, epidemiologists also play a significant role facilitating this relationship. In addition, there are four intermediate social mechanisms that shape the relevance of epidemiological practice to fulfill the right to health in Guatemala are known as 'neocolonial epidemiology'. These mechanisms include institutional chaos, disciplinary conformism, global health international relations, and social relations at the national level. Read more at Medicine Anthropology Theory.

# 'The Goalposts are Clear': World's Biggest 200 Firms Face \$1tr in Climate Change Risks



Credit: Alamy

Top companies believe many of the physical, transitional and reputational risks presented by climate change are likely to hit within the next five years, and could wipe almost \$1tr off the valuations of more than 200 of the world's biggest companies, representing nearly \$17tr in market capitalization. Around \$500bn of costs are rated by the companies as highly likely or almost certain, with the most significant threats coming from higher operating costs linked to legal and policy changes related to climate change. Over 80 % of the companies foresee climate impacts such as extreme and volatile weather patterns, rising global temperatures, and increased pricing of greenhouse gas emissions hitting their business. They also report potential stranded asset losses to the tune of \$250bn, including fossil fuel assets. On the other hand, companies in the financial sector see the biggest potential revenue boost - totalling \$1.2tr - as they develop new green products and services. In total the full report covers almost 7,000 companies. Read more at Business Green.

### As Water Scarcity Increases, Desalination Plants Are on the Rise



Credit: Said Khatib/AFP/Getty Images

After decades of slow progress, desalination is increasingly being used to provide drinking water around the globe. Costs for processing salt water for drinking water have dropped, but it remains an expensive option and one that creates environmental problems that must be addressed. At the Claude "Bud" Lewis Carlsbad Desalination Plant, the largest effort to turn salt water into fresh water in North America, 100 million gallons of seawater each day are pushed through semi-permeable membranes to create 50 million gallons of water that is piped to municipal users. The first large-scale de-sal plants were built in the 1960s, and there are now some 20,000 facilities globally that turn sea water into fresh. Globally, more than 300 million people now get their water from de-salination plants. Read more at E360.

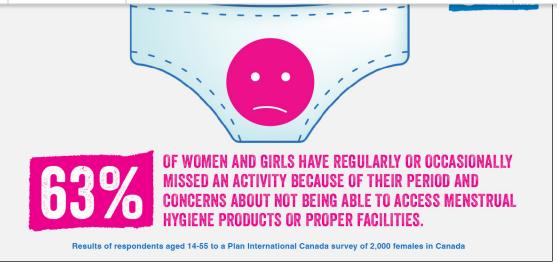
### Miami (Brickell): Climate Change Ground Zero



Credit: Joe Raedle/Getty

Brickell is a trendy urban neighbourhood south of downtown Miami. In the past decades, it has outgrown Miami's historic central business district to the north to become the city's major financial center and hub for all things urban and chic. The neighborhood boasts lavish five-star hotels, extraordinary shopping, great dining and exciting bars and nightlife. However, global warming and rising sea levels threaten to uproot and destroy all of this beauty and cosmopolitan wonder. Hurricane Irma was only the fifth hurricane with winds of 185 mph or higher in the region since the advent of reliable record keeping, and it was the strongest hurricane ever observed in the open Atlantic Ocean. Extreme weather patterns, including hurricanes, wildfires and other climate-related natural disasters, are only expected to intensify in the immediate future. The threat of more storms and flooding compromises the long term viability of such a region dependent on tourism and long- term investment from condo buyers and businesses, though developers are not deterred. Read more at PolisPandit.

New Plan International Canada Research Shows Large Majority of Canadians Support Free Menstrual Hygiene Products in Schools and in the Workplace



Credit: Plan International

To mark Menstrual Hygiene Day in May, Plan International Canada released new data that suggests Canadian women continue to face challenges when it comes to affording, accessing and talking about menstrual hygiene products, amplified by the fact that men and boys remain uncomfortable talking about women's health, including periods. The research reveals almost two-thirds of females aged 14 to 55 in Canada have had to miss out on an activity because of their period and concerns about not being able to access menstrual hygiene products, while 58 % have felt the need to lie about being on their period or hide a menstrual product. The survey results also showed that despite growing public conversation about menstrual products and menstruation, social stigmas strongly persist. Despite persistent stigmas, the survey also showed very significant support for free access to menstrual hygiene products all over the country. Globally, Plan Canada has been working hard to end period shaming, engaging boys to discuss and break down menstruation taboos. Read more at Cision.

# South Sudan: Sanitary Towels Keep Girls in School



**Credit: UNICEF** 

UNICEF and partners in South Sudan are providing vulnerable school girls with dignity kits containing reusable pads, soap, underwear, a torch, a clothes line and a comb. In 2018, dignity kits reached over 50,000 vulnerable girls and over 5,000 women of child-bearing age. School lessons have also been very helpful in reducing stigma for girls. Both boys and girls now understand that periods are very normal. This is good because girls can enjoy an environment where no one teases them in school. The toilets in the schools are also user friendly and give privacy to girls. Read more at UNICEF.org.

# Kerala is India's Healthiest State; UP, Odisha Worst



Credit: Martin Bader

Kerala remains at the top of the heap among larger states in terms of various health parameters, followed by Andhra Pradesh and Maharashtra. Uttar Pradesh, Odisha and Bihar are the worst performers, according to Niti Aayog's latest health index. Haryana, Rajasthan and Jharkhand top the charts based on incremental performance. Read more at The Times of India.

# **OPINION:** Responsible Engagement in Climate Policy



Credit: Carlos Barria/Reuters

Climate change is one of the greatest challenges we face, as a society and in business. If we are to avoid the catastrophic consequences of global heating, urgent action is required to shift our economies onto a zero carbon pathway. Like many businesses, Unilever is seeking to accelerate climate action within its operations and wider value chain. However, it is increasingly clear that tackling climate change at the speed and scale necessary requires wider transformational changes to the systems in which it operates. This requires strong government policy that creates the right context for further change and accelerated business action. Unilever advocates for policies that advance the goal of the Paris Agreement on Climate to achieve net zero emissions by 2050, and supports the United Nations Global Compact's Commitment to Responsible Engagement in Climate Policy, which calls for companies and trade associations to ensure their lobbying aligns with their public position on climate change. The climate crisis has now reached a point where there can be no room for misinterpretation on the scale of the challenge. Read more at Unilever.

See also: Unilever boss urges world leaders to reduce carbon output

#### **SPOTLIGHT ON POLICY**

New Natural-Gas Power Plants in Canada to Pay Carbon Tax on all Emissions by 2030



Credit: https://www.power-technology.com

The Canadian government is increasing the carbon tax on new natural-gas plants to discourage power companies from building them. Any natural gas plant that starts operating after 2021 will have to pay the carbon price on a higher portion of its emissions each year until 2030, when it will pay the price on all emissions. The big-emitters program, known officially as the "output-based pricing system," affects businesses that produce more than 50,000 tonnes of greenhouse gases a year, the equivalent of about 10,000 cars' emissions. It is designed to limit impacts on competitiveness for major industrial emitters, who will pay the carbon tax on a portion of what they emit rather than on all the fuels that they use; an emissions standard is set for every industry and companies only pay the carbon price on what they emit above that standard. Canada has other regulations that will require all coal-powered plants to close, be converted to natural gas or be equipped with carbon-capture technology by 2030. Read more at Canada's National Observer.

# SPOTLIGHT ON INDIGENOUS WELLNESS Fragmented homelands



Credit: Emilee Gilpin

The Saulteaux (Anishinaabe), Nehiyaw (Cree) and mountain Dunne-Za people existed in the Canadian northeast, in British Columbia, long before adhering to Treaty 8 in 1914. Before settlers arrived, an agreement was made between the Saulteaux and the Dunne-Za people for coexistence, the Nehiyawak (Cree people) arriving later in phases. The groups are bound together by a collective history, worldviews, ancient laws and kinship, and they continue to uphold unique forms of governance, spiritual traditions and connections to the land. But nothing is as it was before. Industrialization has pushed many species to the very limits of survival. Frack wells are abandoned interspersed with gas processing plants that resemble "space stations," sporting tubes and aluminum as apocalyptic plumes belligerently billow into the air. There is also large dam construction and other environmental assaults. The wounds on the land mirror the wounds embodied by the people. The impact of all this development has severely fragmented those who call the land home. Read more at Canada's National Observer.



Credit: Pablo Cozzaglio/AFP/Getty Images

"Climate change threatens to undo the last 50 years of progress in development, global health, and poverty reduction. Yet democracy and the rule of law, as well as a wide range of civil and political rights are every bit at risk. The risk of community discontent, of growing inequality, and of even greater levels of deprivation among some groups, will likely stimulate nationalist, xenophobic, racist and other responses. Maintaining a balanced approach to civil and political rights will be extremely complex. The enjoyment of all human rights by vast numbers of people is gravely threatened. The need for the deep social and economic transformation...is urgent if climate catastrophe is to be averted".

-Philip Alston, UN Special Rapporteur on Extreme Poverty and Human Rights, June 2019

'Climate apartheid': UN expert says human rights may not survive

#### List of events

- September 14th 18th <u>Latin American Summit of Sustainable Communities</u> (Intikamari, Azulay, Ecuador)
- October 7th 11th Climate Change and the Role of Nuclear Power (Vienna, Austria)
- October 15th 18th Global Symposium of Citizenship, Governance and Accountability in Health (New Delhi, India)
- November 22nd -24th <u>2nd International Symposium on Community Health Workers</u>
   (Dhaka, Bangladesh)

# FYI#1: SPOTLIGHT ON MEDIA New Series from the Journal of Global Health Collections



Credit: Journal of Global Health

For the complete Collection of Studies of the Rapid Access Expansion (RAcE) Program of integrated Community Case

Management of malaria, pneumonia and diarrhea see: <a href="http://www.jogh.org/col-race.htm">http://www.jogh.org/col-race.htm</a>

### ONE EXAMPLE: Clinical Evaluation of the Use of an mHealth Intervention on Quality of Care Provided by Community Health Workers in Southwest Niger

Under the World Health Organization's (WHO) integrated community case management (iCCM) Rapid Access Expansion Program (RAcE), World Vision Niger and Canada supported the Niger Ministry of Public Health to implement iCCM in four health districts in Niger in 2013. Community health workers (CHWs) were deployed in their communities to diagnose and treat children under five years of age presenting with diarrhea, malaria and pneumonia and refer children with severe illness to the higher-level facilities. Two of the districts in southwest Niger piloted CHWs using smartphones equipped with an application to support quality case management and provide good timely clinical data. A two-arm cluster randomized trial assessed the impact of use of the mHealth application mainly on quality of care (QoC), but also on motivation, retention and supervision. The intervention arm comprised 66 CHWs equipped with a smartphone and 64 in the paper-based control arm. Trained expert clinicians observed each CHW assessing sick children presenting to them (264 in intervention group; 256 in control group).

Results suggest that use of the mHealth application led to modestly improved QoC through better assessment of the sick children and better referral decisions by RCom, but not to improvement in the actual treatment of malaria, pneumonia and diarrhea. Considering mHealth's additional costs and logistics, questions around its viability remain. Further implementation could be improved by investing in CHW capacity building, building organization culture and strengthened supervision. This study did not support the overall value of the mHealth intervention. Much was learned for any future mHealth interventions and scale-up.

# FYI #2: An Aviation Pioneer Goes All In On Electric Planes



Credit: H55

It has been three years since André Borschberg and Bertrand Piccard completed an around-the-world journey in Solar Impulse 2, the sun-powered plane that could stay aloft for days at a time. That aircraft was remarkable but impractical: It had the wingspan of a Boeing 747, but maxed out around 90 mph and its cockpit was so cramped that the pilots used a toilet built into the seat. Now Borschberg has started a new company called H55, and created a new electric aircraft. H55's first plane has room for two and can stay aloft for just about 90 minutes. Where Solar Impulse was a unique flying machine, this one, the Bristell Energic, is a modified version of an aircraft made by the Czech Republic's BRM Aero. And where Solar Impulse was meant as an over-the-top demonstration of what electric technology can do, the Energic is a training plane. The throughline is that the new plane is all-electric, and represents Borschberg's latest effort to divert aviation from fossil fuels. Beyond cost and convenience, though, is the sensation of flying without relying on a fuel-exploding, ear-drumming engine.

#### FYI #3: Investing in Canadian Climate Science



Credit: Pacific Press/LightRocket via Getty Images

This report is centered on feedback from Canadian climate scientists about their experiences with research funding. It identifies strengths and weaknesses in how funding is allocated to climate science in Canada and puts forth seven recommendations to strengthen the landscape of climate science helping to ensure that Canada remains a global leader in the field.

This project was undertaken because, in the face of the climate crisis, Canadian science plays a key role in understanding climate change. Canada has unique access to the Arctic and Canadian researchers have pioneered research in atmospheric sciences, meteorology and oceanography. Given this, Canada is primed to be a global leader in these fields, if we strive to support our researchers by providing them the resources and funding that they require to carry out world-class research.

#### Some key findings:

- 77% of climate scientists think that highly qualified scientists are leaving the field due to a lack of support for their work.
- 94% of climate scientists say that they rely on foreign resources to carry out their research.
- There is significant anxiety about the federal approach to climate science within the scientific community, with 82% of surveyed climate scientists having concerns.

 As one climate scientist said "The current government funding approach is not a well-considered coherent approach but rather an amalgam of funding from diverse departments."

For the rest of the findings, and more on the seven recommendations:

#### Read more at Evidence for Democracy

# FYI #4: The Slow Road to Eco-renovation of Existing Buildings



Credit: Alamy

The only way the world can possibly tackle climate change successfully is to decarbonise existing buildings at pace, in line with the Intergovernmental Panel on Climate Change's recommendation that global carbon emissions should reach zero by 2050 to limit warming below 1.5C. Eight European cities have just pledged to completely decarbonise their existing building stocks by 2050. In a commitment called Build Upon2 convened by the World Green Building Council, these cities will together develop, implement and test a multi-level renovation impact framework using a set of progress indicators including emissions reductions, job creation and better health. The cities are: Velika Gorica, Croatia; Budaörs, Hungary; Dublin, Ireland; Padova, Italy; Wroclaw, Poland; Madrid, Spain; Eskisehir, Turkey; and Leeds, UK. They aim to prove that net zero is possible for the built environment sector in urban environments. There are now more than 50 signatories to the Net Zero Carbon Buildings Commitment, launched

frameworks (from the Netherlands and the UK) that have recently been set up.

#### Read more at The Fifth State

# FYI #5: Misinformation is Everywhere. these Scientists Can Teach You to Fight BS



Credit: Dean Rutz / The Seattle Times

The world, according to University of Washington professors Carl Bergstrom and Jevin West, is awash in BS. So begins their popular course, "Calling Bullshit," which trains college students to identify and call out misinformation. BS warps voter choices. It can damage businesses. BS oozed from a crudely edited video that falsely suggested House Speaker Nancy Pelosi (D-Calif.) was inebriated at a public event. Foreign propaganda machines spread BS through social and news media during the 2016 U.S. presidential campaign and beyond. And BS, when it clouds the science of vaccine safety and climate change, even threatens our health. Many people believe the BS they encounter and transmit it further — and that's what this class aims to stop. The class focuses on a pernicious form of misinformation that can be especially misleading: the kind that comes cloaked in data and figures. The class teaches students that a thing can be true and also BS.

# FYI #6: SPOTLIGHT ON EDUCATION How the University of Toronto's Dalla Lana School of Public Health is Indigenizing the Teaching of Public Health



Credit: Nick Iwanyshyn

There were grad students, a public health nurse, a paramedic, a midwife and two physicians — and they had just finished a lesson in the proper way to split logs. Now they sat in a circle in a teepee trying to light a fire with metal. It wasn't easy. 
"Learning how to make a traditional fire is teaching the self," said Clayton Shirt, Elder at DLSPH's Waakebiness-Bryce Institute for Indigenous Health. "It's teaching patience and dealing with the fire within yourself. So it's very sacred." The day was raw and wet, an early spring afternoon at Hart House Farm, about an hour's drive north-west of Toronto in the Caledon Hills. The students, all enrolled in public health or Indigenous studies courses at DLSPH or OISE, were spending five days learning about Indigenous health in one of Canada's first land-based learning courses. Learning on the land is really about learning from the

teaching through the Elders and Knowledge Keepers and me." The land is not an exotic other, said Mashford-Pringle. It is part of the self. She hopes that if students can understand that, they can begin to grasp why the residential schools, Sixties Scoop and other actions that separated Indigenous people from the land were so devastating to their health. Many of the students already work with Indigenous people, but worry that a lack of cultural understanding is creating barriers to healing.

Read more at University of Toronto's Dalla Lana School of Public Health

From the PHW Archives:

### FACULTY OF COMMUNITY SERVICES

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### **HEALTH WEEKLY**

BRINGING YOU CURRENT NEWS ON
GLOBAL HEALTH & ECOLOGICAL WELLNESS

Volume 1, Issue 3

March 26, 2015

#### 14 of 15 Hottest Years Ever Since 2000



Globally, 14 of the 15 hottest years on record have occurred since 2000, according to the UN World Meteorological Organization, as rising carbon emissions continue to trap heat and drive climate change.

See: http://www.theguardian.com/ environment/2015/feb/02/14-15-hottestyears-record-2000-un-global-warming

#### Over 7,000 Girls Experience Alternative Rite of Passage

#### 7,361 girls in Kenya and

Tanzania have marked their transition to womanhood with an Alternative Rite of Passage rather than Female Genital Mutilation (FGM), thanks to a partnership between AMREF Health Africa and Maasai communities.

Leah Ntatu, one of the first girls in her community to go through an Alternative Rite of Passage, says the change has been positive. "We are very happy and wanted this change to happen... Everyone just treats me with respect, men and women. They are happy for me that I'm still in school, to continue learning. I have never regretted it."



See: Read what Leah, others girls, community elders and former circumcisers have to say about the change.

> RYERSON LINIVERSITY

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