

PLANETARY HEALTHWEEKLY

BRINGING YOU CURRENT NEWS ON GLOBAL HEALTH & ECOLOGICAL WELLNESS

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MERCURY IN WOMEN OF CHILD-BEARING AGE IN 25 COUNTRIES

A new study now reveals dangerous levels of mercury in women of childbearing age across global regions. Women in the Pacific Islands and in communities near gold mining sites in Indonesia, Kenya, and Myanmar were found to have average mercury levels many times higher than US Environmental Protection Agency (EPA) health advisory levels. In the Pacific Islands, which is far from all industrial mercury sources but where people eat fish as their primary food source, 85.7% exceeded the 1 ppm threshold, with most women measuring three times above the US EPA standard. "This study illustrates the unfolding global mercury pollution threat for the women and children of many Pacific Island nations and for most women engaged in small-scale gold mining," said Lee Bell, the study's Principle Investigator from IPEN. "The very high mercury levels found in the hair of most of these women point to the urgent need for action to phase-out coal-fired power plants and the international trade of mercury supplying small-scale gold mining, the two most significant causes of mercury pollution."

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ZOMBIE DISEASES OF CLIMATE CHANGE: WHAT LURKS IN THE ARCTIC'S THAWING PERMAFROST

Though an immense ice sheet sits in its interior, Greenland's ice-free coast encompasses almost 159,000 square miles and houses 57,000 people. In other words, it is larger than Germany with a population half the size of Topeka, Peoria, or New Haven. Surrounding it sit great landmasses— Europe, Asia, North America—and a surfeit of islands. Many of these pathogens may be able to survive a gentle thaw- and if they do, researchers warn, they could reinfect humanity. In all of these places, rich, marshy soils run from the edge of the interior ice right up to the ocean cliffs. Once, this dirt gave rise to lush ferns and open grasslands; now, after 35,000 years of frigid cold, we call them *permafrost*. The newly active permafrost is packed with old *stuff*: dead plants, dead animals, mosses buried and reburied by dust and snow. This matter, long protected from decomposition by the cold, is finally rotting, and releasing gases into the atmosphere that could quicken the rate of global warming. This matter is also full of pathogens: bacteria and viruses long immobilized by the frost.

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Sugar Industry Long Downplayed Potential Harms

The sugar industry funded animal research in the 1960s that looked into the effects of sugar consumption on cardiovascular health, and then buried the data when it suggested that sugar could be harmful. The internal industry documents were uncovered by researchers at the University of California, San Francisco. The report's authors say it builds on evidence that the sugar industry has long tried to mislead the public and protect its economic interests by suppressing worrisome research, a tactic also used by the tobacco industry.

Read More on The New York Times

Child Mortality Rates Decrease in India

Rates of child mortality in children younger than 5 years in India have been decreasing since 2000, with the steepest decline seen from 2010 to 2015. Most deaths in India occur at home without medical attention. As a result, many deaths are not routinely registered and their causes aren't reported. To obtain more accurate data on the number and causes of death, about 900 nonmedical surveyors visited 1.3 million homes in more than 7000 randomly selected areas of India to conduct "verbal autopsies" in which they spoke to members of these households about infant mortality.







Broadening the Frontiers of Adolescent Health Through Telemedicine and Online Networks (in Brazil)

The Telemedicine University Network (RUTE) was launched in 2006, and by July 2017, its network covered 126 telemedicine units in medical schools and teaching hospitals spread across all Brazilian states. Its network is composed of 50 special-interest groups (dedicated to specific health areas) that hold 2 to 3 scientific videoconference sessions per day on average, engaging 380 different health institutions. Once certified, participating institutions are free to propose, create, and coordinate special interest groups (SIGs) covering medical topics, all operating under RUTE's infrastructure. The SIG Children and Adolescent Health and Medicine started its videoconferences in 2008 with a partnership network between the Medical Schools of the University of the State of Rio de Janeiro and Federal University of Bahia. The main objectives are to promote scientific activities through web and videoconferences; to develop medical training on child and adolescent health and medicine for medical students, interns, and residents, as well as for multidisciplinary and allied health teams; to promote research activities and debates; and to inform professionals on medical topics related to child and adolescent target groups. So far, 28 university hospitals and centers have joined the network and participated in monthly videoconferences.

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A Huge Salmon Die-Off is Happening, and Our Cars Might be Responsible

Silvery Coho salmon are as much a part of Washington state as its flag. The fish has a sacred place in the diets and rituals of the state's indigenous peoples, beckons to tourists who flock to watch its migration runs, and helps to sustain a multimillion-dollar Pacific Northwest fishing industry. "Coho have not done well where a lot of human activity impacts their habitat," said Nat Scholz, a research zoologist for the National Oceanic and Atmospheric Administration. That's to say the least. A recent study traced a major Coho salmon die-off to contaminants from roads and automobiles, brake dust, oil, fuel, chemical fluids, that hitch a ride on storm water and flow into watersheds. The contaminants are so deadly, they kill the salmon within 24 hours. This sort of point-source pollution from antiquated sewer systems is a problem across the nation, including the Chesapeake Bay region. Rain overwhelms storm drains, commingles with human waste and surface road garbage, then flushes into ponds, creeks, streams and rivers.

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In Shadow of Germany's Climate Conference, a Village Disappears to Make Way to Coal

The growth of German coal mines at a time when the fuel is being rapidly phased out elsewhere also shows how difficult it can be for countries, even ones that aggressively commit to cleaner technologies, to actually make the switch. The demolition of Immerath, making way for the expansion of megamines that will produce billions of tons of carbon emissions in the coming decades and leave a deep gash where villages dating to Roman times once stood, represents the dark underside of Germany's efforts to address climate change. For Germany, the gap between its bright-green rhetoric and coal-smudged reality has never been more vivid. But just an hour's drive away is Immerath, which in its dying days has become an emblem of Germany's struggle to break its heavy addiction to brown coal, the dirtiest of all fossil fuels. "There's no bigger impact on the environment than brown coal mining, and we're the world champion," said Dirk Jansen, a leader of the local chapter of Friends of the Earth in Germany's coal heartland of North Rhine-Westphalia.



Read More on The Washington Post



This River Kills Thousands of Wildebeests, then Gives Life to Everything Else

The Mara River, which runs through one of Earth's most beautiful wild lands, is itself nothing special. But its role in the wildebeest migration is fascinating. The animals see storms on the horizon and move toward them, knowing that the grass they eat grows after the rain. They're driven by such a strong instinct to follow those rains that they cross the river. It's a tragic thing to observe. Tragic and mesmerizing. Millions of wildebeests live on the Serengeti, but they don't all go to the river at once. They go in clans of tens of thousands. They don't appear to be aware of the fate that awaits them. The creatures' carcasses feed more than a bunch of fat crocodiles. They nourish an entire ecosystem, river fish, plants, microorganisms, hyenas, birds and even hippopotamuses.

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Too Right it's Black Friday: Our Relentless Consumption is Trashing the Planet

The promise of economic growth is that the poor can live like the rich and the rich can live like the oligarchs. But already we are bursting through the physical limits of the planet that sustains us. Climate breakdown, soil loss, the collapse of habitats and species, the sea of plastic, insectageddon: all are driven by rising consumption. The promise of private luxury for everyone cannot be met: neither the physical nor the ecological space exists. With every generation, the baseline of normalised consumption shifts. Thirty years ago, it was ridiculous to buy bottled water, where tap water is clean and abundant. Today, worldwide, we use a million plastic bottles a minute. Every Friday is a Black Friday, every Christmas a more garish festival of destruction. With all the junk we consume, we're trashing the living planet, and our own prospects of survival.

Read More on The Guardian

SPOTLIGHT ON POLICY: EU to Slash Vehicle Carbon Emissions One Third More From 2012 Through 2030

Europe already has tough standards for reducing carbon-dioxide emissions in current and future vehicles. Now they're going to get significantly tougher between 2021 and 2030. The European Union formally adopted far more s tringent requirements for reductions in vehicle emissions of carbon dioxide through 2030. Under the newly adopted plan, passenger cars and light trucks must cut CO2 emission by 15 percent over their 2021 levels by 2025, and by 30 percent by 2030. The EU commission acknowledged that these levels would be hard to meet, and would increase the cost of cars sold to all buyers. It estimated that by 2030, an average new car could cost roughly €1,000 (\$1,160) more, and an average light van about €900 (\$1,050) more. As is common with such rules, savings in fuel costs over the vehicles' lifetimes would make up for the additional upfront cost several times over.







SPOTLIGHT ON INDIGENOUS HEALTH: Vanished: The Place Where Thousands of Women and Girls Go Missing Without a Trace

There are moments in life that forever change the trajectory of one's path, passion and life commitment. For me, that moment arrived in April 1995 in my home community of Sagkeeng First Nation, as I stood over the casket of my beautiful, tragically pitiful, childlike mother, dead of a heroin overdose at the age of 42 after years of violent physical and sexual abuse. There's a longstanding history and reality many Canadians fail to see or recognise in respect of Indigenous women and girls' space and place. Canada's colonial history includes strategically, methodically and tragically racializing and sexually objectifying Indigenous women and girls' bodies, minds and spirits, as a means of purposefully oppressing Indigenous Peoples and territories. This is where the fight for Indigenous women and girls' space and place occurs each and every day in deconstructing the systemic justifying narratives that shifts responsibility onto those most marginalised, vulnerable and disenfranchised.

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QUOTE OF THE WEEK

"It's appallingly clear that the pesticide industry is essentially running Trump's EPA... Rather than following the science and the law, the agency is turning its back on endangered species across the country."

Lori Ann Burd, environmental health director at the Center for Biological **Diversity**

Read More on The Washington Post



EVENTSTABLE

DATE	CONFERENCE	LOCATION	REGISTER
March 16-18	2018 CUGH Conference	New York Canada	www.CUGH2018.org
April 14-15	Unite For Sight Conference	New Haven USA	https://slate.uniteforsight.org/register/ GHIC2018

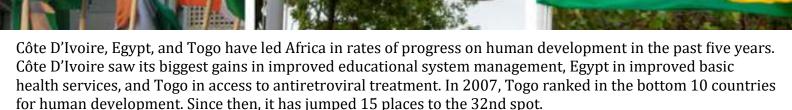






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The gains in Côte D'Ivoire might be attributed to a "bounce back" after conflict ended in the country in 2011 and the election of President Alassane Dramane Ouattara began to bring stability to the country. This could also be true for Egypt, where the regime change in 2014 with the election of Abdel Fattah el-Sisi has been seen as a force of stability following the Arab Spring. But despite Egypt's progress on health, its rankings on citizen participation and human rights have deteriorated.

Togo, as well, has seen recent street protests against the government. President Faure Gnassingbé succeeded his father in 2005, who had seized power in a coup in 1967. Protesters in Togo are demanding term limits and his resignation. The gains that are happening in human development are not really being broadly appreciated by the public, who are more interested in pushing out a dictator who has been there for a quite a bit of time.

The greatest rates of deterioration in development over the past five years, meanwhile, have been in Libya, Ghana, and Sierra Leone. In the human development category, Libya saw its greatest declines in its existence of a social safety net, Ghana saw a decrease in the public's perception of how the government is handling basic health services, and Sierra Leone has seen the greatest deterioration in efforts to narrow income gaps.

In terms of overall rankings on human development, Mauritius, Seychelles, and Botswana are leading the continent. Somalia, South Sudan, and the Central African Republic fall at the bottom of the index. Antiretroviral treatment provision is the most improved indicator for Africa, across the entire index, in the past 10 years, as well as the past five years. According to the World Health Organization, in 2000 less than 1 percent of people who needed antiretroviral treatment were receiving it, but last year that figure had risen to 54 percent.

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GLOBAL HEALTH OBSERVATORY DATA



Density of physicians (total number per 1000 population, latest available year) Situation and trends

Available statistics show that over 44% of WHO Member States report to have less than 1 physician per 1000 population.

Health workers are distributed unevenly across the globe. Countries with the lowest relative need have the highest numbers of health workers, while those with the greatest burden of disease must make do with a much smaller health workforce. The African Region suffers more than 24% of the global burden of disease but has access to only 3% of health workers and less than 1% of the world's financial resources.

To View Report, Visit World Health Organization



- 1. Boyan Slat, a 19-year-old genius, has been developing a unique solution to get rid of plastic that has infested our oceans. At such a tender age he has already come up with a brilliant idea to use natural currents of the ocean to collect the garbage and later recycle it. Plastic is one of those things that has become an inseparable part of our lives, yet it is also true that it has caused one of the biggest environmental issues of modern days. Boyan Slat's 'Ocean Cleanup' offers a feasible solution to this problem and requires \$43 million per year. While this sum of money can seem overwhelming, it is much cheaper than any other project dealing with plastic.
- 2. Eco-concrete is one of those technologies that has the power to transform our lives completely. This new type of concrete combines practicality, strength and air-purification. Air-pollution is one of the biggest problems people experience in big cities, making eco-concrete a modern day savior. It devours all kinds of pollution and eats smog by transforming harmful nitrogen oxide into nitrogenous compounds that aren't so dangerous.
- 3. Vertical farming: We may soon find ourselves growing crops not outside in the sun, but indoors, without using soil and usual agricultural techniques. Vertical farming has been all over various sci-fi movies for decades, and now it's finally time to try it out in real life. It uses hydroponics (no soil, only nutrient-rich water solution) to grow crops stacked upon each other using only artificial light. The whole idea may not sound so 'yummy', but the truth is, crops grow much more quickly this way. With the growing population of Earth, it would be only logical to develop alternative agricultural methods. Vertical farms can produce 100 times more crops than those using fields! Urban Crops is one of the many companies that are currently developing vertical farming. They use LEDs to provide the plants with light and special hardware that supplies each plant with the necessary nutrients. Let your Facebook friends know about this invention right now!

Read More on EnergySpore



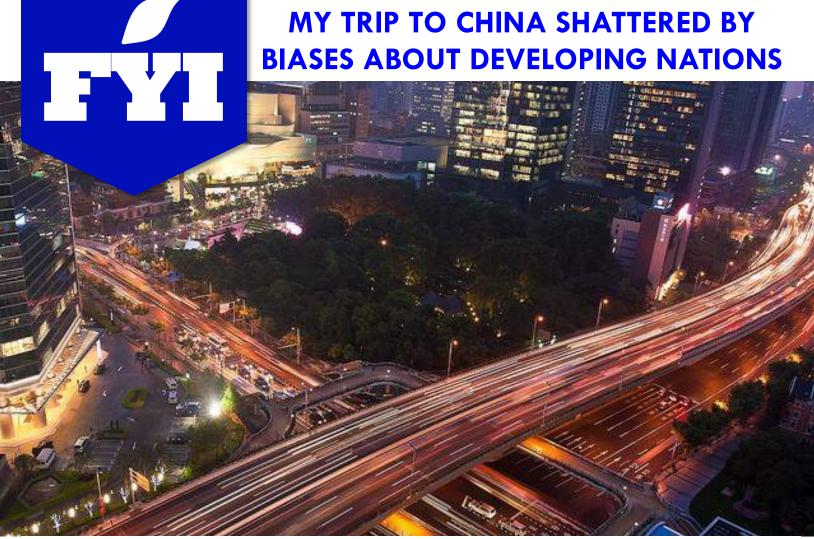
President Donald Trump's administration is seeking a two-year delay of an upcoming deadline to determine whether a family of widely used pesticides is harmful to endangered species. The request filed before a federal judge comes after Dow Chemical Co. and two other pesticide makers asked the government to set aside research by federal scientists that shows organophosphates are harmful to about 1,800 critically threatened or endangered species

Under a 2014 legal agreement, the National Marine Fisheries Service is required to issue findings on the use of the three pesticides under review, chlorpyrifos, diazinon and malathion, by the end of this year. The Environmental Protection Agency, which is also involved in the case, is responsible for determining whether pesticides sold in the United States are safe for people and wildlife.

It is the latest example of the Trump administration seeking to block or delay environmental rules at the behest of the industry. EPA Administrator Scott Pruitt in March reversed an Obamaera effort to bar spraying chlorpyrifos on fruits and vegetables after peer-reviewed studies found that even tiny levels of exposure could hinder the development of children's brains.

Government scientists also compiled an official record running more than 10,000 pages indicating the three organophosphates pose a risk to nearly every endangered species they studied. Before the change in administration, federal regulators had been expected to issue new limits on how and where the three pesticides can be used. A coalition of environmental groups has fought in court for years to spur the federal government to more closely examine the risk posed to humans and endangered species by pesticides, especially organophosphates.

Read More on The News Times



When I went to China for two weeks on a recent reporting trip, I had certain expectations. Officially, China is still a developing country. I thought I had a pretty clear picture of life in developing and developed nations, having grown up in India and spent most of my adult life in the United Kingdom.

Going by the data, I was expecting China to be a lot more like India than the UK. After adjusting for purchasing power parity, China's GDP per capita was \$15,535 in 2016, closer to India's (\$6,572) than the UK's (\$42,609). I expected trains and subways in China to be more modern than India's, but equally chaotic. I thought customer service would be more polite, but equally harried. In other words, in any number of large and small ways, I thought China's status as a developing country would show.

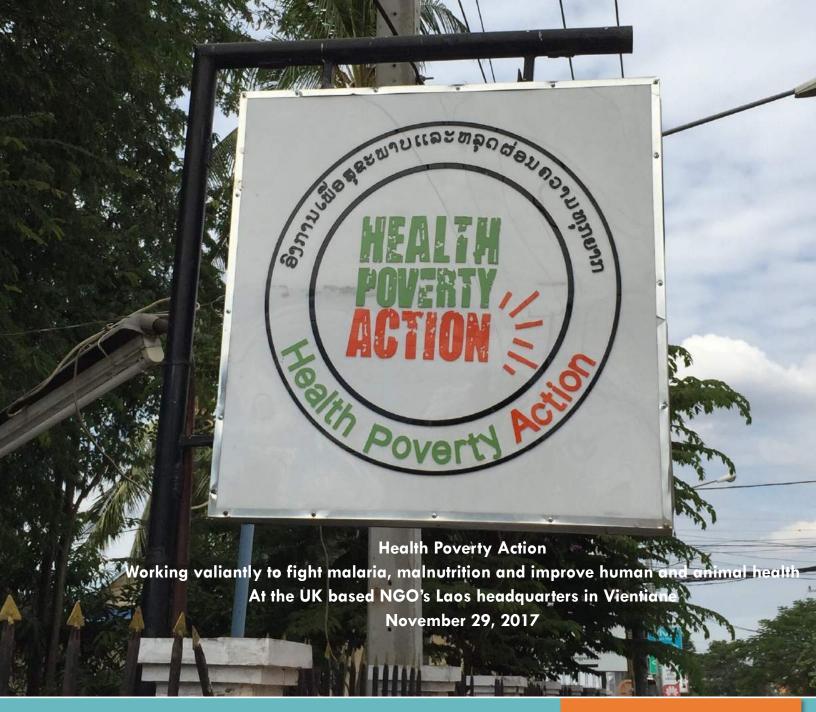
I was wrong. My experience of two weeks in China left me thinking that I was visiting a country as rich as any I had visited before. The trip showed me how important it is for Westerners to change our perception of China so we can make more informed decisions, particularly when it comes to recognizing our own place in the world relative to others. I had vastly underestimated the impact of China's economic growth. Subways were modern, spacious, and fitted with air-conditioning. Mobile 4G internet worked on underground metro, on high-speed trains, and even on the short, very fast magnetically levitated train in Shanghai. Taxis were easy to find and cheap, though most smelled of cigarettes. Convenience stores were everywhere. Google Maps wouldn't work without VPN, but Apple Maps did a decent enough job. When I did get lost, it was not because the signs were missing, as in India, only that they lacked a translation.

My own ignorance may be partly to blame for my misconceptions of China, but Jonathan Woetzel, a director in McKinsey's Shanghai office, makes the case that the rest of the blame likely lies with the biased views of academics and think tanks that help create the misconceptions. "My experience working and living in China for the past three decades suggests that this one-dimensional view is far from reality," he writes.



- 1. Start early. This goes without saying, but it is important to get a head-start on studying for exams. By studying early, you won't be as stressed trying to cram 11+ weeks of info into one or two nights.. It's a good idea to start reviewing your notes around the one-month mark. This doesn't mean reviewing one to two hours a day, just take as much time as needed to keep things you learn in lectures fresh in your mind!
- 2. Reviewing is key. Not reiterated enough, but reviewing really is the key to success. Take some time out of your schedule, and keep it solely for reviewing. Reviewing your work will make studying during the exam crunch much easier because you will remember information much faster. They never said winning was easy. That's because they didn't have the key.
- 3. Water your plants. Figuratively (unless you really do have plants then please do water them). If you're not at 100%, how can you expect to get a 100% on that exam? So, eat snacks, take walks, even watch some Netflix. Your mind needs a break; you can't study for four hours straight without being exhausted. Taking short breaks will clear your mind and help you stay on track.
- 4. Know yourself. Know when you study best. If you study best in the morning, then why pull ineffective and draining late-nighters? Go to sleep early, and wake up early and refreshed, ready to study. Know where you study best. If you cannot study at home with the distractions of a warm bed and a full refrigerator, study at a nearby library. Know how you study best. If rereading your notes proves ineffective, develop new study strategies.
- 5. Manage thy time. The ol' reliable technique of time management. Incredibly effective yet largely ignored. Use an agenda or planner to plan study schedules ahead of time, and then create daily to-do lists that will help you keep track of what needs to be studied that day. If you find it useful, you can even allot specific time slots for different courses. Be reasonable, avoid unnecessary anxiety by planning to study five weeks' worth of content in two hours. Take a 15 minute break every hour... a REASONABLE break, not five hours of watching cat videos on YouTube.

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CONTACTUS







@PlanetaryHealthWeekly



Publisher and Editor: **Dr. David Zakus** dzakus@rverson.ca

Production: **Angeline Sahayanathan &** Abinethaa Paramasivam

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350 Victoria St. M5B 2K3

