



# PLANETARY HEALTH WEEKLY

BRINGING YOU CURRENT NEWS ON GLOBAL HEALTH & ECOLOGICAL WELLNESS

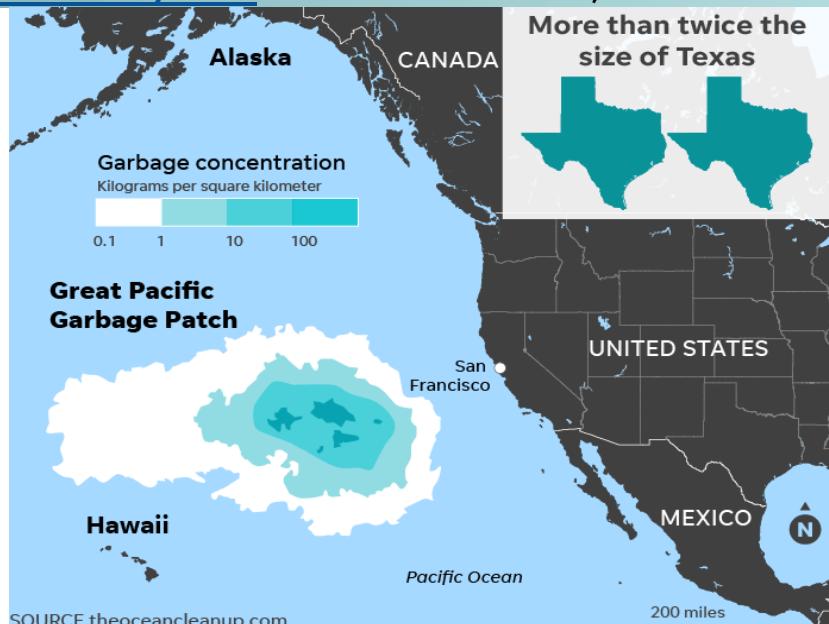
April 19, 2018

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## THE 'GREAT PACIFIC GARBAGE PATCH' IS BALLOONING - 87,000 TONS OF PLASTIC AND COUNTING

In the Pacific Ocean between California and Hawaii, hundreds of miles from any major city, plastic bottles, children's toys, broken electronics, abandoned fishing nets and millions more fragments of debris are floating in the water — at least 87,000 tons' worth. In recent years, this notorious mess has become known as the Great Pacific Garbage Patch, a swirling oceanic graveyard where everyday objects get deposited by the currents. The plastics eventually disintegrate into tiny particles that often get eaten by fish and may ultimately enter our food chain. The worry is that, within a few decades, the larger pieces of debris could break up into microplastics, which are much harder to remove from the ocean. "It's like a ticking time bomb," said Joost Dubois, a spokesman for the Ocean Cleanup Foundation. [Read more on The New York Times](#)



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## HARNESSING SATELLITE TECH FOR PUBLIC HEALTH

On a clear day it takes nearly an hour to drive from Akure, the Nigerian capital of Ondo state, to the remote, palm-flecked village of Aseigbo. During the wet season, the narrow dirt road leading to the village turns to churning mud, virtually cutting off the small community from the outside world for months at a time. Phones don't work here; it's outside the range of any cell tower. Nor do most homes have electricity or indoor plumbing. In case of emergency, or an outbreak of disease, it might take the central authorities weeks — or even months — to respond. Today, thanks to a new satellites, not only is Aseigbo on grid — allowing workers to contact central authorities at the touch of a button — but they are able to record patients' health data and send them to a cloud. This project has the potential to revolutionize health coverage. [Read more on Devex](#).





## YOU CAN KISS MUCH OF CALIFORNIA'S AGRICULTURE GOODBYE BECAUSE OF CLIMATE CHANGE



There are an estimated 77,500 farms in California, the largest and most varied agricultural state in the US. California produces over one-third of the country's vegetables and two-thirds of its fruits and nuts. That critical food supply is at great risk of mostly vanishing as a result of the greenhouse gas emissions from our relentless burning of fossil fuels. The LA Times tells the sorry tale of a phenomenon that threatens a large portion of the food supply for the United States from just one American state. Also worrying for future food production is that climate change is threatening south and central Florida agricultural lands by sea level rise that poisons the state's fresh water supply by salt water intrusion into the Floridan aquifer. Today, nearly 40% of the continental United States is in drought. [Read more on Daily Kos.](#)

## WARMING WATERS THREATEN SEABIRDS' BREEDING HABITS

Warming seas may put seabirds such as puffins and albatrosses out of sync with their prey and make them struggle to find food for their chicks. Vulnerable birds will be unable to shift their breeding seasons as the climate warms, according to a study carried out by Scottish scientists. Rising sea temperatures in coming decades could create a mismatch between breeding periods and times when prey is most plentiful. The findings suggest that if prey species continue to shift their breeding seasons forward — as studies have already shown in some regions — it could further threaten the survival of birds such as the albatross and Scottish breeding populations of puffins. [Read more on The Times.](#)



## DO DIESEL ENGINES PRODUCE LESS CO2 THAN REGULAR ENGINES?



Diesel engines took a huge, disgraceful hit when Volkswagen was exposed for installing software on its vehicles designed to cheat emissions tests. But the fact remains that diesels are more efficient than gasoline engines—and according to one recent study, newer models are cleaner, except for their higher emissions of nitrogen oxides. The scandal, though, led to heavily decreased sales of diesels in Europe, while some big cities such as Paris are now planning to ban diesels. Meanwhile, sales of all-electric and hybrid cars are rapidly increasing. A diesel engine can also usually run twice as long as a gasoline engine before demanding serious service. (Some Mercedes-Benz diesels have logged a whopping 900,000 miles.) Because diesels are more efficient, they do in fact emit less carbon dioxide than gasoline engines. [Read more on Sierra Club.](#)



## 5 STUNNING FACTS ABOUT WORLD HEALTH

April 7 was World Health Day, a day designated by WHO to promote health for all. But half of the world's population lacks access to vital health services and over a hundred million people worldwide have been pushed into poverty due to high health care costs. This year, World Health Day is celebrated with the slogan "Universal Health Coverage: Everyone, Everywhere." As the world becomes richer, many remain hungry. Even in high-income countries, around 10 percent, or 100 million people, deal with food insecurity. One of the internationally agreed upon Sustainable Development Goals aims to completely get rid of hunger by 2030. We are off track to meet this goal. [Read More on Brookings.](#)

## OBESITY IS SHIFTING CANCER TO YOUNG ADULTS

A Case Western Reserve University School of Medicine researcher has compiled evidence from more than 100 publications to show how obesity increases risk of 13 different cancers in young adults. The meta-analysis describes how obesity has shifted certain cancers to younger age groups, and intensified cellular mechanisms promoting the diseases. Cancers typically associated with older adults over 50 are now reported with increasing frequency in young adults. Of the 20 most common cancers in the United States, nine are now reported in young adults. In 2016, nearly 1 in 10 new breast cancer cases, and 1 in 4 new thyroid cancer cases were in young people aged 20-44. According to this review, childhood obesity may have lasting effects that could lead to cancer early and late in life.

[Read more on Science Daily.](#)



## HEALTH-CARE SYSTEM TRANSITION IN CHINA

On March 27, the National Health Commission replaced China's National Health and Family Planning Commission (NHFPC) as the ministry responsible for health. The new commission is now headed by the former deputy head of the dismantled NHFPC, Ma Xiaowei. Chinese media have described him as the person who understands China's health and hospital situation best, owing to his strong background in medicine. He is also the president of the Chinese Medical Association as well as vice president of the Red Cross Society—China's biggest charity organization. Three forthcoming Lancet Commissions on China, led by Chinese specialists, on healthy cities, primary care, and NCDs will be timely contributions to this transition. [Read more on the Lancet.](#)





## ECONOMIC IMPACTS OF CHILD MARRIAGE: GLOBAL SYNTHESIS REPORT

The international community is increasingly aware of the negative impacts of child marriage on a wide range of development outcomes. Ending child marriage is now part of the Sustainable Development Goals. Yet investments to end the practice remain limited across the globe. In order to inspire greater commitments towards ending child marriage, this study demonstrates the negative impacts of the practice and their associated economic costs. The study looked at five domains of impact: (i) fertility and population growth; (ii) health, nutrition, and violence; (iii) educational attainment and learning; (iv) labor force participation and earnings; and (v) participation, decision-making, and investments. It suggests that investing to end child marriage is not only the right thing to do, but also makes sense economically. [Read more on World Bank.](#)

## SPOTLIGHT ON POLICY: WHEN NATURE SAYS 'ENOUGH!': THE RIVER THAT APPEARED OVERNIGHT IN ARGENTINA

A new watercourse is playing havoc with farmland and roads and even threatening a city – but also highlights the potential cost of the country's dependence on soya beans. After a night of heavy rainfall, Ana Risatti woke to an ominous roar outside her home. Mistaking the noise for a continuation of the night's downpour, she stepped outside to look. "I nearly fainted when I saw what it really was," said Risatti, 71. Instead of falling from the sky, the water she heard was rushing down a deep gully it had carved overnight just beyond the wire fence around her home. The sudden appearance of a network of new rivers in Argentina's central province of San Luis has puzzled scientists, worried environmentalists and disheartened farmers. It has also raised urgent questions over the environmental cost of Argentina's dependence on soya beans, its main export crop. [Read more on the Guardian.](#)



## SPOTLIGHT ON INDIGENOUS HEALTH: INDIGENOUS AND BLACK CHILDREN OVER- REPRESENTED IN FOSTER CARE AND GROUP HOMES IN ONTARIO

A new Ontario Human Rights Commission report says underlying social issues such as poverty and systemic racism are involved in over-representation of Indigenous and Black children in foster care and group homes overseen by children's aid societies across the province. "These findings are deeply concerning," said Chief Commissioner Renu Mandhane, who noted Indigenous and Black communities have been raising the alarm about the problem for decades. "The long-term damage caused by separating children from their families is undeniable and was extensively documented by the Truth and Reconciliation Commission of Canada," Mandhane said. "The government and CASs must take urgent action. Overall, the proportion of Indigenous children taken into care was 2.6 times higher than their proportion of the child population. [Read more on The Star.](#)

In response to the first sentence of Editor Zakus's opening blog sentence on March 29, 2018 (PHW #13) "Can you imagine a carefree life, one in which there are no problems, no conflicts, no serious challenges to survival, just fun and games?" reader Greg Mychajluk responded:

**"The first line in your note today reminded me of some lyrics from a SpaceHog song - In the Meantime - 'when all is well and well is all for all' Wouldn't that be nice! It is my tag line these days, something to work towards despite the impossibility."**



## EVENTS TABLE

DATE	CONFERENCE	LOCATION	REGISTER
April 20-22	BioVision Alexandria 2018	Alexandria Egypt	<a href="http://www.bibalex.org/bva2018/home/StaticPage.aspx?page=69">http://www.bibalex.org/bva2018/home/StaticPage.aspx?page=69</a>
April 27-29	Pegasus Conference	Toronto Canada	<a href="https://www.pegasusconference.ca/">https://www.pegasusconference.ca/</a>
May 24-26	Indigenous Health Conference	Toronto Canada	<a href="https://www.cpd.utoronto.ca/indigenoushealth">https://www.cpd.utoronto.ca/indigenoushealth</a>
May 25-27	Bethune Round Table: The Role of the Trainee in Global Surgery	Toronto Canada	<a href="https://bethuneroundtable.com/">https://bethuneroundtable.com/</a>
June	McGill University Summer Institutes in Infectious Diseases and Global Health	Montreal Canada	<a href="http://mcgill-idgh.ca/courses/tuberculosis-research-methods/">http://mcgill-idgh.ca/courses/tuberculosis-research-methods/</a>
June 22-24	Annual Conference, The Council of Canadians	Ottawa Canada	<a href="https://canadians.org/conference">https://canadians.org/conference</a>
Oct 8-12	5th Global Symposium on Health Systems Research	Liverpool England	<a href="http://healthsystemsresearch.org/hsr2018/">http://healthsystemsresearch.org/hsr2018/</a>
Nov 15-19	4th People's Health Assembly	Dhaka Bangladesh	<a href="http://www.phmovement.org/en/node/10805">http://www.phmovement.org/en/node/10805</a>
November 19- 21	Canadian Conference on Global Health	Toronto Canada	<a href="http://www.csih.org/en/events/canadian-conference-global-health">http://www.csih.org/en/events/canadian-conference-global-health</a>



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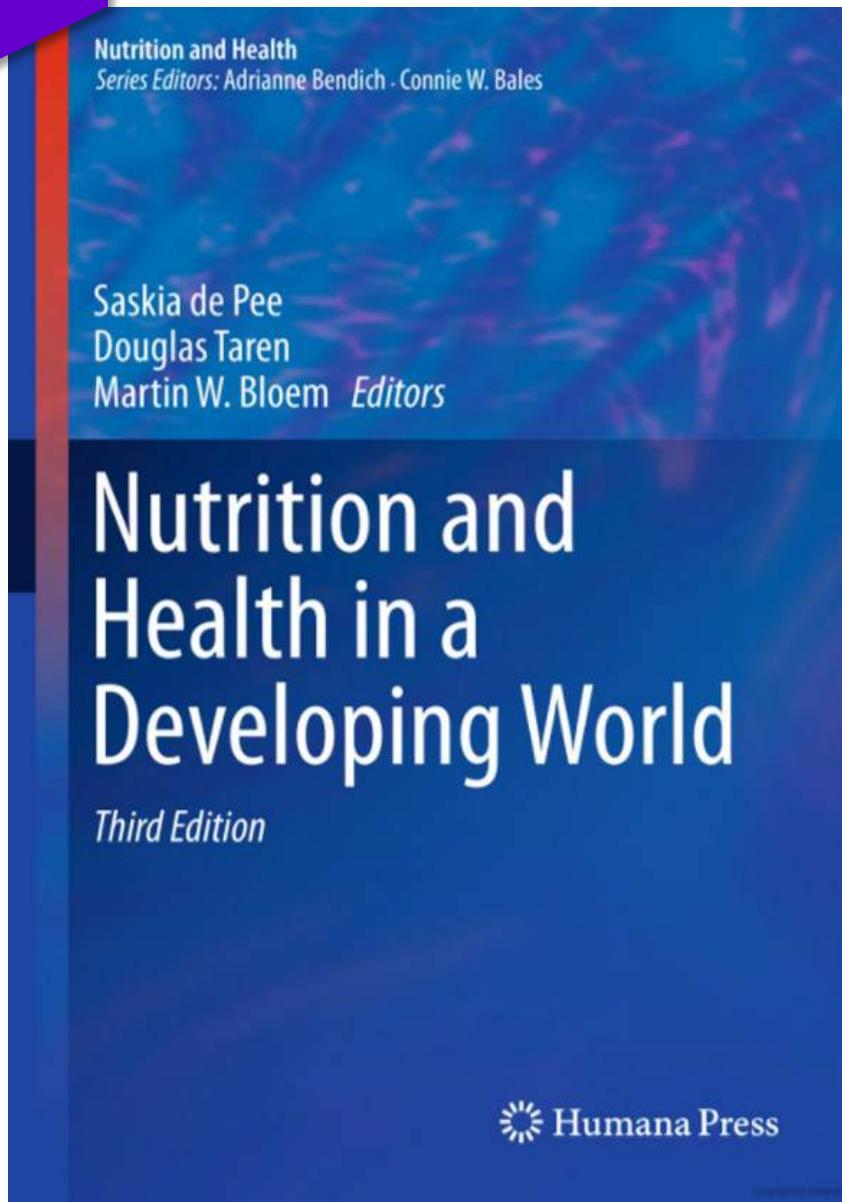


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# NEW BOOK: NUTRITION AND HEALTH IN A DEVELOPING WORLD



This third edition reviews the epidemiology, policies, programs and outcome indicators that are used to determine improvements in nutrition and health that lead to development. This greatly expanded edition provides policy makers, nutritionists, students, scientists, and professionals with the most recent and up-to-date knowledge regarding major health and nutritional problems in developing countries. Policies and programs that address the social and economic determinants of nutrition and health are now gaining in importance as methods to improve the status of the most vulnerable people in the world. This volume provides a resource that can be used to advance methods for improving the public's health and the development of nations. [Read more on Google Books.](#)



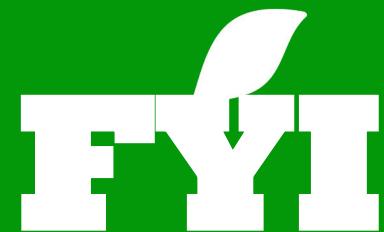
# MISSED OPPORTUNITIES: YOUTH HOMELESSNESS IN AMERICA (2017)



Through multiple methods and research angles, *Voices of Youth Count* sought to capture and understand the voices and experiences of thousands of young people. While the deprivation of housing stability was the common thread in Voices of Youth Count research, the stories of youth homelessness—and the opportunities for intervention—rarely centered on housing alone. Every experience, every youth, was unique. Yet, with the data gained through Voices of Youth Count, we can begin to better understand the scale and scope of the challenge and the patterns that can guide smarter policy and practice.

However, despite important national actions—and many efforts at the state and community levels—a sizable percentage of American youth continues to experience homelessness. The problem is solvable, but much remains to be done.

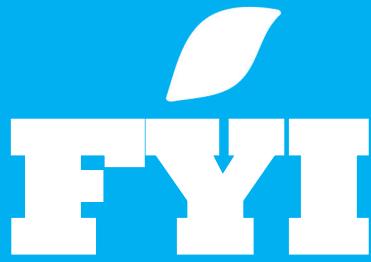
[Read more on Voices of Youth Count.](#)



# CHALLENGES AND TREATMENT OF MICROPLASTICS IN WATER



Microplastics are particularly problematic and pose big treatment challenges. In today's world, plastic is an essential raw material. Since their invention in the 1930s, plastics have become ubiquitous in the manufacture of everyday products. Part of the problem stems from the fact that it can be difficult to pinpoint the exact source of the microplastics because of their relatively fragmented nature, small size, and wide range of potential sources. Microplastics have become a threat to the environment, a concern reflected by sites with unusually high concentrations and a possibility of even greater concentrations in the future. Consequently, the use and subsequent release of microplastics must be drastically reduced as part of a global initiative even prior to the availability of research studies outlining the long-term risks involved. [Read more on InTech.](#)



# EXAMPLES OF RECENT INDUSTRIAL SOLAR TECHNOLOGY DEVELOPMENTS



**Next Winter Olympics Could Be Powered by Renewable Energy**

<http://www.solardaily.com/reports/>

[Next Winter Olympics could be powered by renewable energy 999.html](http://www.solardaily.com/reports/999.html)

**Saft Deploys Intensium Mini For Solar Energy Storage at Industrial Plant in Spain**

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[Saft deploys Intensium Mini for solar energy storage at industrial plant in Spain 999.html](http://www.solardaily.com/reports/999.html)

**Seminole Financial Services Surpasses Three-Quarters of a Gigawatt in Renewable Energy Financing**

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[Seminole Financial Services Surpasses Three Quarters of a Gigawatt in Renewable Energy Financing 999.html](http://www.solardaily.com/reports/999.html)

**Lockheed Delivers Energy Storage Systems to Cypress Creek Renewables**

<http://www.solardaily.com/reports/>

[Lockheed Martin delivers energy storage systems to Cypress Creek Renewables for Solar Plus Storage Projects 999.html](http://www.solardaily.com/reports/999.html)

**Fronius supplies inverters for Solar Project in Vietnam**

[http://www.solardaily.com/reports/Fronius supplies inverters for solar project in Vietnam 999.html](http://www.solardaily.com/reports/)

**India Inaugurates Mega Solar Project**

<http://www.solardaily.com/reports/>

[India inaugurates mega solar project 999.html](http://www.solardaily.com/reports/999.html)

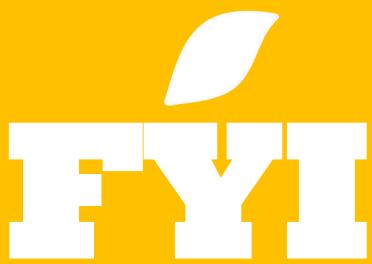


# LOST AMAZON VILLAGES UNCOVERED BY ARCHAEOLOGISTS



Once people thought the Amazon was a near-uninhabited rainforest before the Europeans turned up, but researchers say they have found new evidence that it was in fact a hive of human activity and home to millions of people. A new study has revealed details of 81 sites in the previously uncharted territory of the Amazon's upper Tapajós Basin, with settlements ranging from small villages just 30m wide to a large site covering 19 hectares. Researchers say the new discoveries are helping to unpick what the Amazon would have been like before Europeans arrived. "The idea that the Amazon was a pristine forest, untouched by humans, home to scattered nomadic populations ... we already knew that was not true," said Dr Jonas Gregorio de Souza, first author of the study from the University of Exeter. Writing in the journal *Nature Communications*, de Souza and colleagues explain how the sites were first discovered by satellite imagery of the area, revealed by deforestation. And how they show evidence of human activity in the form of earthworks.

[Read more on the Guardian.](#)



## AN INDIGENOUS HISTORY COURSE AT UALBERTA IS THE MOST POPULAR IN CANADA



With an enrolment total of nearly 20,000 students, the University of Alberta's "Indigenous Canada" is reportedly the country's most popular online course. UAlberta Assistant Professor of Native Studies Paul Gareau states that the course, which includes modules on pre-contact history, settler colonialism, and Idle No More, "focuses on telling an Indigenous experience of Canada" while inviting Indigenous and non-Indigenous people to participate. A student, a Sixties Scoop survivor Shirley Jubinville, described her experience with the course as both emotional and edifying. "What I've learned in the last six weeks has been amazing. It's a completely different world." [Read more on CBC.](#)

# เหตุผลที่สุภาพสตรีห้ามเข้าเสาวินทีล

Why can't women entry Inthakhin Pillar Vihara

禁止女性进入城市柱的原因



手机扫一扫

免费听城市柱语音讲解

Inthakhin Pillar Vihara free audio guide

เสาวินทีล เป็นเสาหลักเมืองของเชียงใหม่ เป็นสถานที่สักศิริที่ชาวไทยโดยเฉพาะชาวเชียงใหม่ให้ความเคารพสักการะ ถือเป็นหลักยึดเหนี่ยวจิตใจของเมือง ภายใต้ฐานเสาวินทีลบรรจุเครื่องสักการะไว้เป็นจันวนามาก จึงมีเชื้อฟ้ามาราบรับสตรีไม่ว่าชาติศาสนาใดเข้าไปบนวิหารอินทีล เพราะสตีมีประจำเดือน มีความเชื่อว่าจะเป็นการลบหลู่และทำลายความศักดิ์สิทธิ์ของเสาวินทีล แม้แต่ผู้ชายที่แต่งตัวไม่เรียบร้อยและไม่เคารพก็ไม่สมควรเข้ามานะครับ เสาอินทีล และเชื่อว่าหากมีการฝ่าฝืนจะทำให้บ้านเมืองเกิดเหตุทางภัย

Chiang Mai's city pillar is located in Wat Chedi Luang and is now enshrined underground. It is a sacred place and worshiped by Thai people, especially those from Chiang Mai. It is the pillar of the city. Women are prohibited to enter because they menstruate. It is believed that it humiliates and ruins the sanctity of the city pillar. Besides, men who dress inappropriately are not allowed to walk in. It is believed that any disobeying of the rules will cause social instability.

柱是清迈的国柱神庙，在神殿的底下供奉着很多神圣的祭品，受到泰国人特别是清迈人的崇拜，可以说是城市的支柱中心。因为女性会来月经，如果女性进入会使得城市柱的神力遭到损害，所以有禁止所有女性进入该殿的规定。此外，衣冠不整以及对城市柱不怀敬意的男士，也不该进入城市柱。如果违背以上规定，将会造成社会的不安定。



Antithesis in Thai Temples

Chiang Mai, Thailand

April 16 & 17, 2018

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