

Global Health Newsletter

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Staten Island University Hospital

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Americas

Canadian Wildfires

The Canadian wildfires began in the Central Canadian provinces of Ontario and Quebec on June 2nd. Since then, more than 11.6 million acres have burned throughout Canada. Wildfires are typically started by a lightning strike or human activity and are more likely when the ground is dry and air is hot which is why wildfires usually last through the summer. Climate change has also played a role due to more intense high-pressure zones. This year, some of the Canadian provinces have already experienced record heat.



<https://www.bloomberg.com/news/articles/2023-06-07/amid-wildfire-smoke-here-s-how-to-gauge-air-quality-in-your-area>

Canada has deployed the Canadian army and firefighters. The United States, South African and other countries have sent nearly 1,000 firefighters to help.

Smoke from the wildfires drifted into the Northeastern United States and covered many places such as New York City in a haze. On June 6, New York City experienced the highest pollution level in the world. The effects of poor air quality are many. Particles with a diameter less than 10 microns are able to penetrate the lungs and blood vessels and can trigger inflammation throughout different organs. Particles with a smaller diameter of 2.5 microns or less are even more dangerous and have been linked to heart attacks, strokes and lung cancer. The immediate effect is more apparent amongst vulnerable populations; the elderly, children pregnant women and those with preexistent conditions. Hospitalization visits for respiratory concerns increased during this time.

Air quality is measured with the Air Quality Index (AQI) developed by the Environmental Protection Agency and is used to explain the safety of the air in certain areas. The scale is between zero to 500. On June 6th the AQI was 405 and broke the record for worst air quality. The previous record was in July 1981 and was 279.

| Air Quality Index Levels of Health Concern | Numerical Value | Meaning |
|--|-----------------|--|
| Good | 0 to 50 | Air quality is considered satisfactory, and air pollution poses little or no risk. |
| Moderate | 51 to 100 | Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution. |
| Unhealthy for Sensitive Groups | 101 to 150 | Members of sensitive groups may experience health effects. The general public is not likely to be affected. |
| Unhealthy | 151 to 200 | Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects. |
| Very Unhealthy | 201 to 300 | Health alert: everyone may experience more serious health effects. |
| Hazardous | 301 to 500 | Health warnings of emergency conditions. The entire population is more likely to be affected. |

AQI table courtesy of airnow.gov

Further reading

<https://www.statnews.com/2023/06/07/the-canada-wildfires-are-exposing-the-harmful-effects-and-health-inequities-of-air-pollution/>

<https://gothamist.com/news/nyc-air-quality-hazard-levels-latest-data-maps-and-charts>

Middle East/Northern Africa

7 Hours by Camel to Deliver

80 percent of the Yemeni population is reliant on aid. The United Nations Population Fund (UNFPA) estimates that, in Yemen, a woman dies every two hours from preventable causes in childbirth. Fewer than half of births in Yemen are assisted by a doctor and only one third of deliveries take place in a health facility. Two fifths of the population live more than an hour away from a functioning health facility.

Mona, a 19 year old woman, journeyed to the nearest hospital to deliver her baby. She thought the journey would be four hours; however, it lasted seven hours instead. She traveled on a camel until the road was too difficult for even the camel to continue. The journey on the camel was a difficult one and she states “with every step the camel took forward, I was torn apart.”

Mona lives in north-west Yemen’s Mahweet province and Bani Saad hospital is the only surviving health facility for thousands of women. Mona was so weak at some point she doesn’t actually remember arriving at the hospital. Mona was accompanied by Salma Abdu who states that half way through the journey she saw a pregnant woman who died on the journey. Mona was one of the lucky ones and a skilled surgeon was able to deliver her baby and save her life.

Further reading

<https://www.bbc.com/news/world-middle-east-65362736>



SADAM ALOLOFY/UNFPA
<https://www.bbc.com/news/world-middle-east-65362736>

Asia/Pacific

Every Child in Kyrgyzstan will have a Birth Certificate

On June 24th Kyrgyzstan will pass a new law ensuring that all children born within the country will be registered at birth regardless of their immigration status, including children whose parents are in the country illegally. As a result, from a study done by the government in 2022 at least 5,000 families will benefit from this decision.

Being undocumented is not the same as being stateless; however, those without a birth certificate can put people at risk of becoming stateless. A birth certificate is a key document in obtaining a nationality. Without this documentation children are left unaccounted for and may prevent them from having access to vaccines, attending school and other protections.

Further reading

<https://www.unhcr.org/news/press-releases/ground-breaking-law-means-every-child-kyrgyzstan-will-have-right-birth>



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Sub-Saharan Africa

New Anti-Gay Law in Uganda

Uganda just passed a 19 page “Anti-Homosexuality Act of 2023” and it is one of the world’s toughest anti-gay laws. Under this new law, a person can face life in prison if convicted of homosexuality. Same-sex relations were already illegal in Uganda but this law goes much further. The goal is to “prohibit any form of sexual relations between persons of the same sex; to prohibit the promotion or recognition of sexual relations between persons of the same sex; and for related matters.” In “aggravated cases” which is having sex with someone below the age of 18 or when someone has HIV the death penalty can be imposed. It stipulates a 20 year sentence for “promoting” homosexuality. Landlords who rent to homosexuals can also get up to seven years in prison.



<https://www.npr.org/2023/05/29/1178718092/uganda-anti-gay-law>

The international community has responded against this Act. President Biden called this bill “a tragic violation of universal human rights” and as a result the administration will evaluate the US engagement with Uganda. This could lead to potentially cutting foreign aid. The US provides nearly \$1 billion each year of public health programs to Uganda.

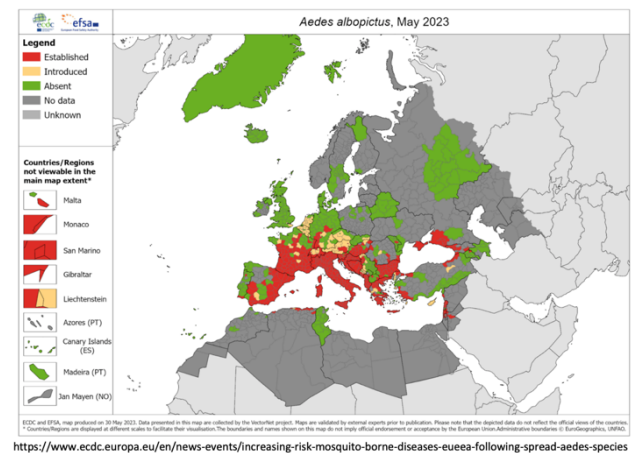
Further reading

<https://www.scribd.com/document/649130731/Uganda-s-Anti-Homosexuality-Act-2023-As-signed-by-President-Museveni#>

Europe

Mosquito Borne Diseases on the Rise in Europe

Europe has seen more cases of locally acquired dengue in 2022 than the total number of cases in the past decade. The increase in heat waves and flooding across Europe have allowed invasive mosquitoes to thrive. In 2022, there were 71 cases of locally acquired dengue with 65 in France and six in Spain. There were also 1,133 cases of West Nile virus with 92 deaths with 700 cases being in Italy. The two mosquito types that concern scientists the most are the Asian tiger mosquito which carries chikungunya and dengue and the *Aedes aegypti* mosquito which transmits dengue, yellow fever, chikungunya, zika, and West Nile viruses.



<https://www.ecdc.europa.eu/en/news-events/increasing-risk-mosquito-borne-diseases-eueea-following-spread-aedes-species>

The establishment of mosquito species is defined as having self-sustained mosquito populations that are able to overwinter and reproduce in a given regions. Europe managed to eradicate malaria through a postwar program of insecticide spraying, swamp draining and drug therapy.

Further reading

<https://www.politico.eu/article/spike-europe-dengue-cases-fear-more-infections-deaths/>

What's New at Northwell's Center for Global Health?

Daniel Leon MBA PMP

GUYANA- Northwell Takes Action Following Tragic Guyana School Fire

On May 21st, 2023, a devastating fire broke out in the female dormitory of the Mahdia Secondary School in Guyana, resulting in the tragic death of twenty children and injuring many others. Among the survivors was Moriza Williams, a 12-year-old girl severely burned on almost 50% of her body. After two critical surgeries to stabilize her condition, Dr. Shilindra Rajkumar, Chief of Surgery, together with Chief Medical Officer Dr. Navin Rambarran and Robbie Rambarran, CEO of The Georgetown Public Hospital in Guyana, reached out to Northwell's VP of Global Health, Dr. Eric Cioe Pena to facilitate a patient transfer.



In less than 24 hours, Dr. Cioe Pena had deployed Center For Global Health staff and partnered with Global Rescue to swiftly transport the young patient to the care of Dr. Michael Cooper, Director of Burn Surgery at Staten Island University Hospital. "The patient suffered second and third degree burns to about 40 percent of her body," Dr. Cooper reported, yet remained optimistic about her progress, praising the immediate care she received.

Dr. Cooper commended Dr. Shilindra Rajkumar of GPHC's burn unit for the patient's promising condition and GPHC's CEO Robbie Rambarran for facilitating the family's travel to New York. Following her recovery, Moriza will return to Guyana once medically cleared to fly.

Recognizing the emotional impact of this tragedy on the close-knit Guyanese community, CGH, with Dr. Lauren Hanna of Zucker Hillside, dispatched a team of six psychiatrists from Northwell's Center for Traumatic Stress, Resiliency, and Recovery to Mahdia, Guyana. Their mission: assist the community in the grieving process and mental health recovery.

Enhancing these efforts, the Center for Global Health coordinated with the Ministry of Health of Guyana and GPHC to leverage its crisis telemedicine platform, which had previously assisted Ukraine during war. This platform now offers telepsychiatric services to victims, their families, and the affected communities.

"A hotline has been set up for the community to arrange mental health counseling," said Dr. Cioe Pena, noting the deep impact this tragedy has had on the community.

Additionally, CGH extended teleburn services to physicians and GPHC, enabling consultations with Northwell burn specialists in New York. Dr. Cioe Pena praised the speedy implementation of telehealth relief as a "game-changer."

Northwell's response to the tragic Mahdia Secondary School Fire strengthens an already flourishing relationship with the Georgetown Public Hospital, the Ministry of Health, and the citizens of the Guyanese Republic.

UKRAINE- Destroyed Dam leaves Communities Flooded

In the early morning of June 6, 2023, a catastrophic explosion shattered the Nova Kakhovka dam in southern Ukraine. The disaster released an estimated 9.3 billion cubic meters of water, causing severe flooding along the Dnipro River and devastating numerous communities.

This tragic event heightened the already tough conditions for Ukrainians, putting thousands of lives in jeopardy. Entire villages vanished under the floodwaters, productive farmland became saturated and unusable, and hazardous mines emerged on the shores. With water and electricity access cut off, the affected communities became entirely dependent on outside humanitarian help.



In response to the crisis, the EU's humanitarian partners are working on the ground to provide urgent aid and supplying drinking water, prepackaged meals, shelter supplies, and cash assistance. Additionally, the EU has mobilized support through its Civil Protection Mechanism and rescEU strategic reserves, including water pumps, tankers, boats, rescue vehicles, generators, and portable water treatment stations.

Northwell's Center for Global Health (CGH) has also joined the relief efforts, contributing 15 water-purifying filters that have already reached first responders assisting victims. These filters are vital in providing safe drinking water, helping mitigate the immediate water supply crisis.

While continuing to support Ukraine through their telehealth and tele-psych programs, which cater to both physical and mental health needs, CGH remains committed to finding more ways to assist. These remote healthcare services are especially crucial for people in isolated or hard-to-reach areas. Northwell's unwavering partnership with Ukraine is a testament to its dedication to global health, even in the face of their toughest challenges.

Upcoming Lectures/Conferences

Video: Refugees are Changemakers

Leading up to World Refugee Day, we partnered with IRC Ambassador Sepideh Moafi, an Iranian-American actor, singer, and former refugee, to show how the influence of refugees on culture is immeasurable. Wherever they come from, wherever they live, refugees are shaping policies, art, traditions, cuisine, dreams and futures in ordinary—and extraordinary—ways. Join us by sharing the journeys, stories, and contributions of refugee changemakers around the world.

<https://www.rescue.org/video/refugees-are-changemakers>