

Vaccines and Global Health: The Week in Review 21 September 2019 Center for Vaccine Ethics & Policy (CVEP)

This weekly digest targets news, events, announcements, articles and research in the vaccine and global health ethics and policy space and is aggregated from key governmental, NGO, international organization and industry sources, key peer-reviewed journals, and other media channels. This summary proceeds from the broad base of themes and issues monitored by the Center for Vaccine Ethics & Policy in its work: it is not intended to be exhaustive in its coverage.

Vaccines and Global Health: The Week in Review is also **posted in pdf form** and as a set of blog posts at https://centerforvaccineethicsandpolicy.net. This blog allows full-text searching of over 8,000 entries. Comments and suggestions should be directed to

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Request an email version: Vaccines and Global Health: The Week in Review is published as a single email summary, scheduled for release each Saturday evening at midnight (EST/U.S.). If you would like to receive the email version, please send your request to david.r.curry@centerforvaccineethicsandpolicy.org.

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D. Announcements

E. Journal Watch

F. Media Watch

Milestones :: Perspectives :: Research

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A World at Risk: Annual Report on Global preparedness for health emergencies

Global Preparedness Monitoring Board

Sep 2019 :: 48 pages :: Download the full report here

From the foreword by Co-Chairs H.E. Dr Gro Harlem Brundtland and Mr Elhadj As Sy: "For its first report, the Global Preparedness Monitoring Board reviewed recommendations from previous high-level panels and commissions following the 2009 H1N1 influenza pandemic and the 2014-2016 Ebola outbreak, along with its own commissioned reports and other data.

"The result is a snapshot of where the world stands in its ability to prevent and contain a global health threat. Many of the recommendations reviewed were poorly implemented, or not implemented at all, and serious gaps persist. For too long, we have allowed a cycle of panic and neglect when it comes to pandemics: we ramp up efforts when there is a serious threat, then quickly forget about them when the threat subsides. It is well past time to act."

EXECUTIVE SUMMARY: ACTIONS FOR LEADERS TO TAKE

[1] Heads of government must commit and invest.

Heads of government in every country must commit to preparedness by implementing their binding obligations under the International Health Regulations (IHR (2005). They must prioritize and dedicate domestic resources and recurrent spending for preparedness as an integral part of national and global security, universal health coverage and the Sustainable Development Goals (SDG).

[2] Countries and regional organizations must lead by example.

G7, G20 and G77 Member States, and regional intergovernmental organizations must follow through on their political and funding commitments for preparedness and agree to routinely monitor progress during their annual meetings.

[3] All countries must build strong systems.

Heads of government must appoint a national high-level coordinator with authority and political accountability to lead whole-of-government and whole-of-society approaches, and routinely conduct multisectoral simulation exercises to establish and maintain effective preparedness. They must prioritize community involvement in all preparedness efforts, building trust and engaging multiple stakeholders (e.g. legislators; representatives of the human and animal health, security and foreign affairs sectors; the private sector; local leaders; and women and youth).

[4] Countries, donors and multilateral institutions must be prepared for the worst.

A rapidly spreading pandemic due to a lethal respiratory pathogen (whether naturally emergent or accidentally or deliberately released) poses additional preparedness requirements. Donors and multilateral institutions must ensure adequate investment in developing innovative vaccines and therapeutics, surge manufacturing capacity, broad-spectrum antivirals and appropriate non-pharmaceutical interventions. All countries must develop a system for immediately sharing

genome sequences of any new pathogen for public health purposes along with the means to share limited medical countermeasures across countries.

[5] Financing institutions must link preparedness with economic risk planning.

To mitigate the severe economic impacts of a national or regional epidemic and/or a global pandemic, the International Monetary Fund (IMF) and the World Bank must urgently renew their efforts to integrate preparedness into economic risk and institutional assessments, including the IMF's next cycle of Article IV consultations with countries and the World Bank's next Systematic Country Diagnostics for International Development Association (IDA) credits and grants. Funding replenishments of the IDA, Global Fund to Fight AIDS, TB and Malaria (Global Fund), and Gavi should include explicit commitments regarding preparedness.

[6] Development assistance funders must create incentives and increase funding for preparedness.

Donors, international financing institutions, global funds and philanthropies must increase funding for the poorest and most vulnerable countries through development assistance for health and greater/earlier access to the United Nations Central Emergency Response Fund to close financing gaps for their national actions plans for health security as a joint responsibility and a global public good. Member states need to agree to an increase in WHO contributions for the financing of preparedness and response activities and must sustainably fund the WHO Contingency Fund for Emergencies, including the establishment of a replenishment scheme using funding from the revised World Bank Pandemic Emergency Financing Facility.

[7] The United Nations must strengthen coordination mechanisms.

The Secretary General of the United Nations, with WHO and United Nations Office for the Coordination of Humanitarian Affairs (OCHA), must strengthen coordination in different country, health and humanitarian emergency contexts, by ensuring clear United Nations systemwide roles and responsibilities; rapidly resetting preparedness and response strategies during health emergencies; and, enhancing United Nations system leadership for preparedness, including through routine simulation exercises. WHO should introduce an approach to mobilize the wider national, regional and international community at earlier stages of an outbreak, prior to a declaration of an IHR (2005) Public Health Emergency of International Concern.

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Gavi at the UNGA: People, planet and prosperity

19 September 2019

At the 74th United Nations General Assembly (UNGA), high-level government, UN and civil society representatives will gather in New York to assess progress on the Sustainable Development Goals, just as converging threats to the planet and people are calling for urgent attention.

UNGA74 High Level Messages

World leaders will gather this September at the 2019 United Nations General Assembly as converging threats to the planet and people are calling for urgent attention. The cumulative effects of population growth and displacement, climate and other environmental changes, increasing fragility, recurrent disease outbreaks, and insufficient investment into public goods,

are threatening to reverse global progress in development over the last two decades. With rising inequality, the world's most vulnerable people, including women and girls, are the ones most affected by these crises. At the same time the world is at a pivotal moment for achieving the Sustainable Development Goals (SDGs). At the UNGA this year, Heads of State will review the progress of the SDGs for the first time this year, and as we move towards a decade of delivery on the SDGs, valuable opportunities exist to increase the ambition and commitment for a collective response that would trigger multiple SDGs and advance their implementation at a much greater scale.

Please find below for your consideration some high-level messages from Gavi that you may want to consider for inclusion in your interventions and engagement at UNGA74:

Climate Action Summit

- :: Climate change impacts health and wellbeing, particularly of marginalised communities. Climate change is expected to contribute to the spread and prevalence of vector- and waterborne diseases that are climate-sensitive such as yellow fever, malaria and cholera. By 2030, malaria alone will claim an additional 60,000 lives annually due to the effects of climate change
- :: Vaccines prevent diseases, outbreaks, and are a tool for climate change adaptation. By preventing outbreaks in the first place, routine immunisation is a key safeguard against vaccine -preventable diseases caused by environmental crises and climate impacts
- :: Strengthen health system resilience through primary health care. Sustainable and resilient health systems, with primary health care as its cornerstone can help communities particularly the poorest and most marginalised, adapt to climate impacts and build resilience for the future

UN High-level Meeting on Universal Health Coverage

- :: Strengthen primary healthcare (PHC) for Universal Health Coverage (UHC). PHC is a cornerstone of a sustainable health system for UHC and the health-related SDGs. Immunisation provides a well-developed and far reaching platform for countries' to strengthen PHC in support of UHC.
- :: More money for health, more health for the money. By 2030, countries should increase public spending to achieve full coverage of PHC services and ensure their efficient and equitable allocation through good health sector governance
- :: Prioritise reaching the furthest behind first with basic package of PHC services. In order to leave no one behind with quality universal health coverage, countries should first reach those furthest behind people living in urban centres, remote areas and conflict settings, with high impact PHC services such as immunisation
- :: Vaccines prevent antimicrobial resistance (AMR). AMR poses a formidable challenge to achieving UHC. Universal coverage of vaccines will help significantly reduce the use and misuse of antibiotics, preventing the emergence and spread of AMR

High-level Political Forum on Sustainable Development under the General Assembly

- :: Gavi's collaborative approach is a model for partnerships to accelerate SDGs. Since 2000, Gavi's public private partnership model has successfully leveraged its flexible funding mechanisms, donor financing, leadership of implementing countries, technical and delivery skills of partners including CSOs, and the know-how and in-kind contributions of the private sector, to achieve more than the sum of its parts
- :: Immunisation contributes to most SDGs. Every US\$ 1 invested in immunisation generates a return of US\$ 54 in broader societal benefits, making immunisation an enabler for social and economic development. As immunised communities are healthier, parents can work and avert productivity loss and healthcare cost. The next generation, both boys and girls, can go to school and grow up to become more productive members of society
- :: Equitable access to quality PHC is a cornerstone to peace and security. Strong PHC including routine immunisation safeguard public health in support of adaptation to climate impacts, build society's resilience and maintain trust in public institutions and services

High-level Dialogue on Financing for Development

- :: Collaboration for sustainable financing for health through Global Action Plan where it adds value for greater, faster and wider impact. Through Global Action Plan for Healthy Lives and Well-being for All (GAP), twelve multilateral agencies, including Gavi, have developed new ways of working together to accelerate progress towards health-related SDGs in alignment with national sustainable development strategies. Gavi co-led the accelerator on sustainable financing to help countries rapidly improve the generation, allocation, and use of funds for health
- :: Innovative financing mechanisms for long-term, predictable funding. Innovative financing mechanisms such as the International Finance Facility for Immunisation (IFFIm) can play an important catalytic role in helping address the financing needs for the SDGs by tapping into new sources and engaging investors as partners and stakeholders in development

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Global Fund Partnership has Saved 32 Million Lives

19 September 2019

GENEVA – Programs supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria have saved 32 million lives, according to a report released today. The Results Report 2019 shows great progress against some of the biggest challenges in the fight against the three diseases, while highlighting new threats.

The report includes key annual results achieved in countries where the Global Fund invests:

- :: 18.9 million people received antiretroviral therapy for HIV;
- :: 719,000 HIV-positive mothers received medicine to keep them alive and prevent transmitting HIV to their babies;
- :: 5.3 million people tested and treated for TB;

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131 million mosquito nets distributed to protect families from malaria.

"This year's Results Report shows clearly why we must step up the fight against HIV, TB and malaria," said Peter Sands, Executive Director of the Global Fund. "We've made extraordinary progress, but we still face very daunting challenges that we have to overcome to reach the SDG 3 target of ending the epidemics."...

Results Report 2019

Our Results Report 2019 delivers a summary of the results achieved through the end of 2018 in countries where the Global Fund invests.

Full Report - download in English | Français

Summary - download in English | Español | Français

Note on Global Fund Programmatic Results 19 September 2019

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The White House [U.S.] Fact Sheet

President Donald J. Trump Is Working to Modernize and Improve Influenza Vaccines

Issued on: September 19, 2019 [text bolding per original]5/

MODERNIZING INFLUENZA VACCINES: President Donald J. Trump is safeguarding public health by helping ensure Americans have access to effective influenza vaccines.

Today, President Trump signed an executive order to modernize influenza vaccines and help protect more Americans through vaccination.

At President Trump's direction, the Administration will work to promote new technologies to improve vaccine manufacturing and effectiveness.

- :: This will reduce reliance on more time-consuming, egg-based vaccine production.
- :: Improving the speed of production will enable experts to better match vaccines to actively circulating viruses, an important piece of making the vaccines more effective.
 - :: The Administration will advance the development of new, more effective vaccines.

The Trump Administration will also work to increase Americans' access to vaccines by reducing barriers to seasonal flu vaccine services.

To help put these objectives into action, President Trump is establishing a task force to identify policy priorities and monitor progress.

PROTECTING LIVES THROUGH PREVENTION: Influenza vaccines are vitally important to disease prevention, yet current production methods need to be improved.

Influenza vaccines are the best way to save lives, reduce the illness severity, and prevent influenza infections in the first place.

- :: During the 2017–2018 flu season, influenza vaccinations prevented up to 7.1 million illnesses, 3.7 million medical visits, and 109,000 hospitalizations.
- :: A Centers for Disease Control and Prevention study found that vaccines prevented more than 40,000 flu-associated deaths over a nine-year period.

It is especially important to be able to rapidly produce well-matched influenza vaccines using scalable technologies in the event of a future influenza pandemic.

Despite their important role in safeguarding the health of the American people, influenza vaccines are currently produced using more time-consuming, egg-based technology.

:: More rapid non-egg-based production methods would give experts more time to select the most relevant strains.

PROMOTING PUBLIC HEALTH: Improving the influenza vaccine is part of President Trump's longstanding effort to combat public health threats and promote quality care for all Americans.

President Trump has released a National Biodefense Strategy and a Global Health Security Strategy to help combat biological threats and pandemics.

President Trump has made it a priority to increase the quality and accessibility of care for American patients.

- :: This year, the President launched a kidney health initiative to help prevent kidney failure, improve treatment options, and expand access to life-saving transplants.
- :: Trump Administration is working to encourage new, innovative approaches to treating childhood cancer.
- :: President Trump launched an initiative to end the HIV/AIDS epidemic in America over the next decade.
 - :: The Administration is supporting research on new treatments for opioid addiction.

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Emergencies

Ebola - DRC+

Public Health Emergency of International Concern (PHEIC)

Disease Outbreak News (DONs)

Ebola virus disease – Democratic Republic of the Congo 19 September 2019 The intensity of the Ebola virus disease (EVD) transmission in the Democratic Republic of the Congo increased slightly from last week, with 57 new confirmed cases reported in North Kivu and Ituri provinces from 11-17 September 2019 versus 40 in the previous week. In the past week, localised, minor security incidents have impacted the response, including safe and dignified burials (SDB) and vaccination activities in Mambasa and Komanda Health Zones.

In addition, there was a major security incident in Lwemba, within Mandima Health Zone, from 14-17 September. The event was a community response to the death of a local healthcare worker from EVD. Due to the violence that occurred during the incident, all activities have been suspended in the area until further notice. This has a serious impact on the response activities on the ground, and it could lead to gaps or delays in the reporting of new EVD cases in this hotspot area. Overall, these incidents underscore the need for continued and proactive

engagement and sensitizing of local communities throughout areas with EVD transmission and high-risk areas that may not currently be affected...

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POLIO

Public Health Emergency of International Concern (PHEIC)

Polio this week as of 18 September 2019

:: In the Philippines, a case of vaccine-derived poliovirus has been detected and is being further investigated, as outbreak response will be implemented. See 'Philippines' section below for further details.

Summary of new viruses this week:

:: Afghanistan — six wild poliovirus type 1 (WPV1)- positive environmental samples;

:: Nigeria — one circulating vaccine-derived poliovirus type 2 (cVDPV2) case;

:: Angola — seven cVDPV2 cases

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WHO, UNICEF and partners support Philippine Department of Health's polio outbreak response

19 September 2019

Joint News Release

The Philippine Department of Health (DOH) today announced an outbreak of polio in the country. A poliovirus case was confirmed on 16 September 2019 in a 3-year-old girl from Lanao del Sur. In addition, environmental samples from sewage in Manila and waterways in Davao were confirmed to contain the virus.

"We are very concerned that polioviruses are now circulating in Manila, Davao, and Lanao del Sur," said World Health Organization (WHO) Representative in the Philippines, Dr Rabindra Abeyasinghe. "WHO and UNICEF are working closely with the Department of Health to strengthen surveillance and swiftly respond to this outbreak. We urge all parents and caregivers of children under 5 years of age to have them vaccinated so that they are protected against polio for life."

"It is deeply disconcerting that poliovirus has re-emerged in the Philippines after nearly two decades. The outbreak calls for urgent action to protect more children from being infected. It reminds us of the importance of increasing immunization coverage to 95% of children to stop polio virus transmission in the Philippines. Vaccination is the only and best protection against polio that mainly affects children under 5 years of age. As long as one single child remains infected, children across the country and even beyond are at risk of contracting polio," said Oyun Dendevnorov, UNICEF Philippines Representative, "UNICEF is working with Department of Health and WHO to accelerate actions for the health and safety of children in the Philippines, especially in the affected regions."

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Editor's Note:

WHO has posted a <u>refreshed emergencies page</u> which presents an updated listing of Grade 3,2,1 emergencies as below.

WHO Grade 3 Emergencies [to 21 Sep 2019]

Democratic Republic of the Congo

:: Disease Outbreak News (DONs) Ebola virus disease – Democratic Republic of the Congo 19 September 2019

Nigeria - No new digest announcements identified
Mozambique floods - No new digest announcements identified
Somalia - No new digest announcements identified
South Sudan - No new digest announcements identified
Syrian Arab Republic - No new digest announcements identified
Yemen - No new digest announcements identified

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WHO Grade 2 Emergencies [to 21 Sep 2019]

Afghanistan - No new digest announcements identified

<u>Angola</u> - No new digest announcements identified

Burkina Faso [in French] - No new digest announcements identified

Burundi - No new digest announcements identified

Cameroon - No new digest announcements identified

Central African Republic - No new digest announcements identified

Ethiopia - No new digest announcements identified

HIV in Pakistan - No new digest announcements identified

<u>Iran floods 2019</u> - No new digest announcements identified

<u>Iraq</u> - No new digest announcements identified

<u>Libya</u> - No new digest announcements identified

Malawi floods - No new digest announcements identified

Measles in Europe - No new digest announcements identified

MERS-CoV - No new digest announcements identified

Myanmar - No new digest announcements identified

Niger – No new digest announcements identified

occupied Palestinian territory - No new digest announcements identified

Sudan - No new digest announcements identified

<u>Ukraine</u> - No new digest announcements identified

<u>Zimbabwe</u> - No new digest announcements identified

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WHO Grade 1 Emergencies [to 21 Sep 2019]

Kenya

:: Kenya rolls out landmark malaria vaccine introduction 16 September 2019

<u>Chad</u> - No new digest announcements identified

<u>Djibouti</u> - No new digest announcements identified

<u>Mali</u> - No new digest announcements identified

<u>Namibia - viral hepatitis</u> - No new digest announcements identified

<u>Tanzania</u> - No new digest announcements identified

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UN OCHA – L3 Emergencies

The UN and its humanitarian partners are currently responding to three 'L3' emergencies. This is the global humanitarian system's classification for the response to the most severe, large-scale humanitarian crises.

<u>Syrian Arab Republic</u> - *No new digest announcements identified* Yemen - *No new digest announcements identified*

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<u>UN OCHA – Corporate Emergencies</u>

When the USG/ERC declares a Corporate Emergency Response, all OCHA offices, branches and sections provide their full support to response activities both at HQ and in the field. *Editor's Note:*

Ebola in the DRC has bene added as a OCHA "Corporate Emergency" this week: CYCLONE IDAI and Kenneth - No new digest announcements identified EBOLA OUTBREAK IN THE DRC - No new digest announcements identified

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WHO & Regional Offices [to 21 Sep 2019]

News release

More women and children survive today than ever before - UN report

Despite progress, a pregnant woman or newborn dies somewhere in the world every 11 seconds

19 September 2019 New York | Geneva

More women and their children are surviving today than ever before, according to new child and maternal mortality estimates released today by United Nations groups* led by UNICEF and the World Health Organization (WHO).

Since 2000, child deaths have reduced by nearly half and maternal deaths by over one-third, mostly due to improved access to affordable, quality health services...

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Weekly Epidemiological Record, 20 September 2019, vol. 94, 38 (pp. 425-440)

:: Global update on implementation of preventive chemotherapy against neglected tropical diseases in 2018

:: Monthly report on dracunculiasis cases, January- July 2019

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WHO Regional Offices

Selected Press Releases, Announcements

WHO African Region AFRO

- :: <u>Government urges private and public health facilities to enforce best practices in vaccines...</u> 20 September 2019
- :: <u>Speeding up detection to slow down Ebola: Smartphone app is game-changer for contact...</u> 18 September 2019
- :: Tanzanian authorities inform WHO they have no cases of Ebola 18 September 2019
- :: Bauchi State Governor initiates Yellow Fever campaign targeting 500,000 people
- 17 September 2019

WHO Region of the Americas PAHO

- :: PAHO prepares for the UN High-level Meeting on Universal Health Coverage (09/21/2019)
- :: <u>Brazil and Paraguay launch campaign to intensify vaccination in border areas</u> (09/17/2019)
 Brazil and Paraguay have launched a campaign to intensify vaccination in the border areas to increase coverage against measles, yellow fever and other diseases in the border cities of Argentina, Brazil, Paraguay and Uruguay.

WHO South-East Asia Region SEARO

No new digest content identified.

WHO European Region EURO

- :: WHO/Europe and the International Federation of Red Cross and Red Crescent Societies renew commitment to jointly support countries to achieve health for all 19-09-2019
- :: RC69 opens on 16 September with review of progress in public health 13-09-2019 WHO/Europe's annual governance meeting, RC69 takes place on 16–19 September 2019. Over 500 delegates will reflect on a decade of public health progress, and discuss key issues including health equity, health literacy and accelerating primary health care. This year's session also includes the election of the new WHO Regional Director for Europe.

WHO Eastern Mediterranean Region EMRO

No new digest content identified.

WHO Western Pacific Region

:: WHO, UNICEF and partners support Philippine Department of Health's polio outbreak response 19 September 2019
[See Milestones above for detail]

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CDC/ACIP [to 21 Sep 2019]

http://www.cdc.gov/media/index.html https://www.cdc.gov/vaccines/acip/index.html

Latest News

No new digest content identified.

MMWR News Synopsis for Friday, September 20, 2019

Racial/Ethnic Disparities in HIV Pre-Exposure Prophylaxis Among Men Who Have Sex With Men — 23 Urban Areas, 2017

To expand use of HIV pre-exposure prophylaxis (PrEP), interventions to increase PrEP awareness, should encourage health care providers to discuss PrEP, destigmatize PrEP use, and promote racial/ethnic equity in PrEP access. PrEP is a daily oral pill that reduces the risk for sexual acquisition of HIV by about 99% when taken daily as prescribed. Black men and Hispanic men who have sex with men (MSM) are significantly less likely than white MSM to have discussed PrEP with a health care provider. Increased use of PrEP would help reduce racial/ethnic disparities in HIV incidence rates among MSM and support the "U.S. Ending HIV Epidemic: A Plan for America" initiative. CDC analyzed data from more than 10,100 interviews with MSM at high risk for HIV in 23 U.S. cities. The analysis found white MSM (58%) were significantly more likely than Hispanic (44%) and Black (43%) MSM to have reported they discussed PrEP with a health care provider in the past year. A little more than half (55%) of the Black MSM who reported they discussed PrEP with their health care provider also reported they used PrEP, compared with about two-thirds of those who were Hispanic (62%) and who were white (68%). These findings highlight the critical need to address racial and ethnic disparities in PrEP awareness, PrEP discussions with health care providers, and PrEP use among MSM.

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Africa CDC [to 21 Sep 2019] http://www.africacdc.org/

News

<u>Consultative Meeting of the Africa Collaborative to Advance Diagnostics to meet the Continent's Health Agenda</u>

17 September 2019

BACKGROUND Africa's move towards greater integration requires a strong public health strategy. In 2015, the African Union Commission (AUC) developed the Africa Health Strategy 2016-2030, which offers a cohesive and consolidative platform encompassing all commitments in the health sector and provides strategic direction to Member States in their efforts to create better performing health systems. It recognizes existing continental and global commitments and addresses key challenges to reduce Africa's burden of disease.

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China CDC

http://www.chinacdc.cn/en/ No new digest content identified.

National Health Commission of the People's Republic of China

http://en.nhc.gov.cn/

Selected Updates and Press Releases

China sees progresses of community-level healthcare

2019-09-16

Community-level medical infrastructures and ranks of medical workers have been achieving development in recent years, according to the National Health Commission (NHC).

Over 85 mln rural women receive free cervical cancer checks: white paper 2019-09-20

More than 85 million women living in rural China have received free cervical cancer screening services by the end of 2018, said a white paper published by the State Council Information Office on Sept 19.

Free breast cancer screening services were also offered to 20 million rural women by the end of last year, according to the white paper, titled "Equality, Development and Sharing: Progress of Women's Cause in 70 Years Since New China's Founding".

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Announcements

Paul G. Allen Frontiers Group [to 21 Sep 2019]

https://alleninstitute.org/what-we-do/frontiers-group/news-press/

News

<u>How the gut keeps time — and keeps us healthy</u>

September 18, 2019

New study identifies brain-intestine circadian signals that could underlie health problems related to night shift work and poor sleep

BMGF - Gates Foundation [to 21 Sep 2019]

http://www.gatesfoundation.org/Media-Center/Press-Releases SEPTEMBER 17, 2019

Gates Foundation Report Spotlights New Data on Global Inequality, Calls to Prioritize Those Being Left Behind

New Sub-national Data Shows Surprising and Significant Progress, but Huge Gaps Remain, Driven by Gender and Geography

Bill & Melinda Gates Medical Research Institute [to 21 Sep 2019]

https://www.gatesmri.org/

The Bill & Melinda Gates Medical Research Institute is a non-profit biotech organization. Our mission is to develop products to fight malaria, tuberculosis, and diarrheal diseases—three major causes of mortality, poverty, and inequality in developing countries. The world has unprecedented scientific tools at its disposal; now is the time to use them to save the lives of the world's poorest people

No new digest content identified.

CARB-X [to 21 Sep 2019]

https://carb-x.org/

CARB-X is a non-profit public-private partnership dedicated to accelerating antibacterial research to tackle the global rising threat of drug-resistant bacteria.

09.17.2019 |

<u>CARB-X funds Procarta Biosystems to develop oligonucleotide-based antibiotics to combat life-threatening Gram-negative pathogens</u>

CARB-X is awarding Procarta Biosystems, a UK-based biotech company, up to US\$2.2 million in non-dilutive funding with the possibility of \$7.0 million more if certain project milestones are met, to develop a new class of antibiotics to treat Gram-negative ESKAPE pathogens. The new antibiotics are based on Procarta's oligonucleotide antimicrobial platform. While still in preclinical development, if eventually approved for use in patients, Procarta's PRO-202 antibiotics could be used to treat serious infections associated with complicated urinary tract infections (cUTI) and complicated intra-abdominal infections (cIAI).

CEPI – Coalition for Epidemic Preparedness Innovations [to 21 Sep 2019]

http://cepi.net/

News

A World at Risk: Global Preparedness Monitoring Board launches first annual report

18 Sep 2019

By CEPI

[See Milestones above for detail]

Clinton Health Access Initiative, Inc. (CHAI) [to 21 Sep 2019]

https://clintonhealthaccess.org/about/ News & Press Releases No new digest content identified.

EDCTP [to 21 Sep 2019]

http://www.edctp.org/

The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria as well as other poverty-related and neglected infectious diseases in sub-Saharan Africa, with a focus on phase II and III clinical trials Latest news

No new digest content identified.

Emory Vaccine Center [to 21 Sep 2019]

http://www.vaccines.emory.edu/ Website not responding at inquiry

European Medicines Agency [to 21 Sep 2019]

http://www.ema.europa.eu/ema/

News and press releases

News: Meeting highlights from the Committee for Medicinal Products for Human Use

(CHMP) 16-19 September 2019 CHMP, Last updated: 20/09/2019 EMA's human medicines committee (<u>CHMP</u>) recommended seven medicines for approval at its September 2019 meeting.

European Vaccine Initiative [to 21 Sep 2019]

http://www.euvaccine.eu/news-events

Latest news

No new digest content identified.

FDA [to 21 Sep 2019]

https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm No new digest content identified.

Fondation Merieux [to 21 Sep 2019]

http://www.fondation-merieux.org/

Mérieux Foundation event

7th Vaccine Acceptance Meeting

September 23 - 25, 2019 - Les Pensières Center for Global Health, Veyrier du Lac (France) Context

Early in 2019, the World Health Organization labelled reluctance to receive recommended vaccines – despite the availability of vaccination services – as one of the 10 most important threats to global health. At the same time, global headlines reported a 300% increase in measles cases worldwide, with many outbreaks directly linked to vaccine acceptance.

Gavi [to 21 Sep 2019]

https://www.gavi.org/

Latest news

Gavi at the UNGA: People, planet and prosperity

19 September 2019

At the 74th United Nations General Assembly (UNGA), high-level government, UN and civil society representatives will gather in New York to assess progress on the Sustainable Development Goals, just as converging threats to the planet and people are calling for urgent attention.

[See Milestones above for Gavi high-level messages for UN General Assembly]

GHIT Fund [to 21 Sep 2019]

https://www.ghitfund.org/newsroom/press

GHIT was set up in 2012 with the aim of developing new tools to tackle infectious diseases that devastate the world's poorest people. Other funders include six Japanese pharmaceutical No new digest content identified.

Global Fund [to 21 Sep 2019]

https://www.theglobalfund.org/en/news/

News & Stories Feature Story

Rwanda: A Nation Reborn

20 September 2019

Updates

Equal Salary Certification for the Global Fund

20 September 2019

Voices

Next Stop: Universal Health Coverage for all Africans

19 September 2019

News

Global Fund Partnership has Saved 32 Million Lives

19 September 2019

[See Milestones above for more detail]

Updates

Note on Global Fund Programmatic Results

19 September 2019

Updates

Data Explorer Enhancements: Results

19 September 2019

Sourcing & Management of Health Products

Opportunity for Evaluation of Diagnostic Products

17 September 2019

Hilleman Laboratories [to 21 Sep 2019]

http://www.hillemanlabs.org/

No new digest content identified.

Human Vaccines Project [to 21 Sep 2019]

http://www.humanvaccinesproject.org/media/press-releases/

Press Releases

No new digest content identified.

IAVI [to 21 Sep 2019]

https://www.iavi.org/newsroom

No new digest content identified.

International Coalition of Medicines Regulatory Authorities (ICMRA)

http://www.icmra.info/drupal/en/news Statements and Press Releases No new digest content identified.

IFFIm

http://www.iffim.org/library/news/press-releases/ No new digest content identified.

IFRC [to 21 Sep 2019]
http://media.ifrc.org/ifrc/news/press-releases/
Selected Press Releases, Announcements
No new digest content identified.

IVAC [to 21 Sep 2019]

https://www.jhsph.edu/research/centers-and-institutes/ivac/index.html Updates

3 Things We Know About Vaccines in a Climate Change Future

By Molly Sauer Sep WHAT WE KNOW

- 1. It's likely more people will be affected by mosquito-borne diseases like dengue, yellow fever, and malaria
- 2. Diarrheal diseases are likely to increase and some regions may see changes in seasonality
- 3. Robust immunization programs are critical to support climate refugees and mitigate health security concerns...

IVI [to 21 Sep 2019]

http://www.ivi.int/

Selected IVI News & Announcements

IVI co-organizes the 2019 International Vaccine Industry Forum with GIB

September 20, 2019, SEOUL, Korea — The International Vaccine Institute (IVI) joined forces with the Gyeongbuk Institute for Bioindustry (GIB) to organize the '2019 International Vaccine Industry Forum (IVIF 2019)' in Andong, South Korea on September 19. The event was jointly hosted by Gyeongsangbuk-do Province and Andong City to help accelerate the development of the global vaccine industry and a vaccine industry cluster in the city.

The International Vaccine Industry Forum, which has convened every year since 2016, aims to share the latest vaccine industry trends and innovative technology advances, and explore development strategies for the vaccine industry. The event also offers a venue for discussion to promote Andong, home to IVI's branch laboratory, vaccine companies and research facilities, as an emerging global vaccine hub.

Under the overall theme of "Development and Prospect of the Vaccine Industry through Public-Private Cooperation," this year's event entailed in-depth discussions about public and private partnership starting with a keynote speech, followed by two main sessions and a panel discussion...

JEE Alliance [to 21 Sep 2019]

https://www.jeealliance.org/ Selected News and Events No new digest content identified.

MSF/Médecins Sans Frontières [to 21 Sep 2019]

http://www.msf.org/

Latest

Pakistan

Working to turn the tide of hepatitis C in Karachi's Machar Colony

Project Update 20 Sep 2019

Rohingya refugee crisis

Healthcare for struggling refugee communities in Malaysia

Project Update 20 Sep 2019

Syria

Beyond trauma injuries: One of Syria's neglected health needs

Voices from the Field 17 Sep 2019

NIH [to 21 Sep 2019]

http://www.nih.gov/news-events/news-releases

Selected News Releases

No new digest content identified.

PATH [to 21 Sep 2019]

https://www.path.org/media-center/

Selected Announcements

No new digest content identified.

ProMED [Program for Monitoring Emerging Diseases] [to 21 Sep 2019]

International Society for Infectious Diseases

https://www.promedmail.org/announcements/

Selected Announcements/Posts

No new digest content identified.

Sabin Vaccine Institute [to 21 Sep 2019]

http://www.sabin.org/updates/pressreleases

No new digest content identified.

UNAIDS [to 21 Sep 2019]

http://www.unaids.org/en

Selected Press Releases/Reports/Statements

20 September 2019

Reduce, reuse, recycle: young Ghanaians say yes to less

20 September 2019

How climate change is affecting people living with HIV

18 September 2019

Unwavering care for people who inject drugs on the streets of Glasgow

16 September 2019

Interview with UNAIDS PrEP expert Rosalind Coleman

UNICEF [to 21 Sep 2019]

https://www.unicef.org/media/press-releases

Selected Statements, Press Releases, Reports

Press release

29 million babies born into conflict in 2018

UNICEF calls for increased support for parents forced to raise their babies and young children in conflict-affected areas 19/09/2019

Press release

More women and children survive today than ever before – UN report

Despite progress, a pregnant woman or newborn dies somewhere in the world every 11 seconds 19/09/2019

Vaccination Acceptance Research Network (VARN) [to 21 Sep 2019]

https://vaccineacceptance.org/news.html#header1-2r

No new digest content identified.

Vaccine Confidence Project [to 21 Sep 2019]

http://www.vaccineconfidence.org/

Confidence Commentary:

First Global Vaccination Summit sounds the alarm on access and hesitancy

Posted on 15 Sep, 2019 Heidi Larson

One of the most important insights of the European Commission-hosted Vaccination Summit came from Ethan Lindenberger, an 18-year old high school student who decided to get himself vaccinated after his mother chose not to vaccinate him. He spoke passionately about the need to build bridges and recognize that, "People who believe vaccine misinformation are not

bad people... let's not demonise them and build a wall, but rather extend a hand and build the bridges." – HL.

Read full article here

Vaccine Education Center – Children's Hospital of Philadelphia [to 21 Sep 2019]

http://www.chop.edu/centers-programs/vaccine-education-center No new digest content identified.

Wellcome Trust [to 21 Sep 2019]

https://wellcome.ac.uk/news Opinion | 18 September 2019

Opinion | 16 September 2019

<u>How do you get children from disadvantaged backgrounds engaged with science?</u> by Mat Hickman

4 ways that PhD programmes are improving their training culture

by Anne-Marie Coriat

The new PhD programmes in science that we're funding combine scientific excellence with a commitment to improving the working environment for trainees.

The Wistar Institute [to 21 Sep 2019]

https://www.wistar.org/news/press-releases

Press Release Sep. 18, 2019

<u>Identification of a Novel Regulator of Mitochondrial Cell Death Reveals a Promising</u>

Target for Cancer Therapy

PHILADELPHIA — (Sept. 18, 2019) — Researchers at The Wistar Institute have described the role of mitochondrial fission factor (MFF) in controlling survival of cancer cells, suggesting the protein could represent a promising therapeutic target. They also found that expression of MFF is regulated by Myc, a ubiquitous mediator of cell proliferation that contributes to development of many cancer types. These results were published online in the journal EBioMedicine...

World Organisation for Animal Health (OIE) [to 21 Sep 2019]

http://www.oie.int/en/for-the-media/press-releases/2019/ No new digest content identified.

::::::

ARM [Alliance for Regenerative Medicine] [to 21 Sep 2019]

https://alliancerm.org/press-releases/ No new digest content identified.

BIO [to 21 Sep 2019]

https://www.bio.org/insights/press-release

New Executive Order Critical to Protecting Patients and Public Health

President Trump has signed an executive order focused on spurring the development of new vaccine technologies, prioritizing the production of influenza vaccines and identifying strategies for communicating the importance of influenza vaccination.

[See Milestones above for full text]

DCVMN – Developing Country Vaccine Manufacturers Network [to 21 Sep 2019]

http://www.dcvmn.org/

Events

DCVMN 20th Annual General Meeting

21 October 2019 to 23 October 2019 Rio de Janeiro / Brazil

IFPMA [to 21 Sep 2019]

http://www.ifpma.org/resources/news-releases/ Selected Press Releases, Statements, Publications No new digest content identified.

PhRMA [to 21 Sep 2019]

http://www.phrma.org/

Selected Press Releases, Statements

Press Release

PhRMA Names Lori Reilly Chief Operating Officer

Reilly to Lead Federal, State and International Advocacy and Alliance Development

Washington, D.C. (September 17, 2019) — The Pharmaceutical Research and Manufacturers of America (PhRMA) today named Lori M. Reilly, Esq. as chief operating officer (COO), a new position within PhRMA. Reilly has been at PhRMA for nearly 20 years, most recently serving as executive vice president of policy, research and membership.

In this newly created role, Reilly will provide executive level management, leadership and strategic direction to PhRMA and oversee the association's federal, state and international government affairs and alliance development...

Industry Watch [to 21 Sep 2019]

Selected Announcements

:: FDA Accepts Merck's Biologics License Application (BLA) and Grants Priority
Review for V920, the Company's Investigational Vaccine for Ebola Zaire Virus
Merck Continues to Expand Investigational Supply to Support International Ebola Outbreak
Response

September 17, 2019

KENILWORTH, N.J.--(BUSINESS WIRE)--Merck, known as MSD outside the United States and Canada, today announced that the U.S. Food and Drug Administration (FDA) has accepted the Biologics License Application (BLA) and granted priority review for Merck's investigational Ebola vaccine (V920), under review for the prevention of disease caused by the Ebola Zaire virus. The Prescription Drug User Fee Act (PDUFA), or target action date, is set for March 14, 2020. In July 2016, the FDA granted Breakthrough Therapy Designation to V920.

"Merck has worked with government partners and the global health community to accelerate development of our investigational V920 Ebola vaccine. FDA's priority review designation

underscores our long-standing partnership with the U.S. government toward its development and licensure," said Dr. Paula Annunziato, vice president, Merck Research Laboratories. "A top priority for us remains achieving registration of V920 and regulatory approval of our German manufacturing site, so that licensed supply can be produced over time to support global public health preparedness and health security objectives. We look forward to continuing to work with the FDA throughout the review process." ...

* * * *

Journal Watch

Vaccines and Global Health: The Week in Review continues its weekly scanning of key peer-reviewed journals to identify and cite articles, commentary and editorials, books reviews and other content supporting our focu-s on vaccine ethics and policy. Journal Watch is not intended to be exhaustive, but indicative of themes and issues the Center is actively tracking. We selectively provide full text of some editorial and comment articles that are specifically relevant to our work. Successful access to some of the links provided may require subscription or other access arrangement unique to the publisher.

If you would like to suggest other journal titles to include in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org

American Journal of Infection Control

September 2019 Volume 47, Issue 9, p1039-1160 http://www.ajicjournal.org/current [Reviewed earlier]

American Journal of Preventive Medicine

September 2019 Volume 57, Issue 3, p293-428 http://www.ajpmonline.org/current [Reviewed earlier]

American Journal of Public Health

September 2019 109(9) http://ajph.aphapublications.org/toc/ajph/current [Reviewed earlier]

American Journal of Tropical Medicine and Hygiene

Volume 101, Issue 3, 2019 http://www.ajtmh.org/content/journals/14761645/101/3 [Reviewed earlier]

Annals of Internal Medicine

17 September 2019 Vol: 171, Issue 6

http://annals.org/aim/issue

[New issue; No digest content identified]

BMC Cost Effectiveness and Resource Allocation

http://resource-allocation.biomedcentral.com/ (Accessed 21 Sep 2019) [No new digest content identified]

BMJ Global Health

July 2019 - Volume 4 - 4 https://gh.bmj.com/content/4/4 [Reviewed earlier]

BMC Health Services Research

http://www.biomedcentral.com/bmchealthservres/content (Accessed 21 Sep 2019) [No new digest content identified]

BMC Infectious Diseases

http://www.biomedcentral.com/bmcinfectdis/content (Accessed 21 Sep 2019) Research article

Rubella transmission and the risk of congenital rubella syndrome in Liberia: a need to introduce rubella-containing vaccine in the routine immunization program

Rubella is an RNA virus in the genus Rubivirus within the Matonaviridae family. Rubella remains a leading vaccine-preventable cause of birth defects. Most African countries including Liberia do not currently prov...

Authors: Abyot Bekele Woyessa, Mohammed Seid Ali, Tiala K. Korkpor, Roland Tuopileyi II, Henry T. Kohar, John Dogba, April Baller, Julius Monday, Suleman Abdullahi, Thomas Nagbe, Gertrude Mulbah, Mohammed Kromah, Jeremy Sesay, Kwuakuan Yealue, Tolbert Nyenswah and Mesfin Zbelo Gebrekidan

Citation: BMC Infectious Diseases 2019 19:813

Published on: 18 September 2019

Research article

<u>Use of a mobile application for Ebola contact tracing and monitoring in northern</u> <u>Sierra Leone: a proof-of-concept study</u>

The 2014–2016 Ebola epidemic in West Africa was the largest Ebola epidemic to date. Contact tracing was a core surveillance activity. Challenges with paper-based contact tracing systems include incomplete iden...

Authors: Lisa O. Danguah, Nadia Hasham, Matthew MacFarlane, Fatu E. Conteh, Fatoma

Momoh, Andrew A. Tedesco, Amara Jambai, David A. Ross and Helen A. Weiss

Citation: BMC Infectious Diseases 2019 19:810

Published on: 18 September 2019

BMC Medical Ethics

http://www.biomedcentral.com/bmcmedethics/content (Accessed 21 Sep 2019) [No new digest content identified]

BMC Medicine

http://www.biomedcentral.com/bmcmed/content (Accessed 21 Sep 2019) Research article

The case for a universal hepatitis C vaccine to achieve hepatitis C elimination

The introduction of highly effective direct-acting antiviral (DAA) therapy for hepatitis C has led to calls to eliminate it as a public health threat through treatment-as-prevention. Recent studies suggest it ...

Authors: Nick Scott, David P. Wilson, Alexander J. Thompson, Eleanor Barnes, Manal El-Sayed,

Adele Schwartz Benzaken, Heidi E. Drummer and Margaret E. Hellard

Citation: BMC Medicine 2019 17:175 Published on: 18 September 2019

BMC Pregnancy and Childbirth

http://www.biomedcentral.com/bmcpregnancychildbirth/content (Accessed 21 Sep 2019)
[No new digest content identified]

BMC Public Health

http://bmcpublichealth.biomedcentral.com/articles (Accessed 21 Sep 2019) [No new digest content identified]

BMC Research Notes

http://www.biomedcentral.com/bmcresnotes/content (Accessed 21 Sep 2019) [No new digest content identified]

BMJ Open

August 2019 - Volume 9 - 8 http://bmjopen.bmj.com/content/current [Reviewed earlier]

Bulletin of the World Health Organization

Volume 97, Number 9, September 2019, 581-644

https://www.who.int/bulletin/volumes/97/9/en/ [Reviewed earlier]

Child Care, Health and Development

Volume 45, Issue 5 Pages: 613-771 September 2019 https://onlinelibrary.wiley.com/toc/13652214/current [Reviewed earlier]

Clinical Therapeutics

August 2019 Volume 41, Issue 8, p1401-1642 http://www.clinicaltherapeutics.com/current

Drugs and Biologics Update: Artificial Intelligence and Patient-centric Approaches to Advance Pharmaceutical Innovation

[Reviewed earlier]

Clinical Trials

Volume 16 Issue 5, October 2019 https://journals.sagepub.com/toc/ctja/16/5 [Reviewed earlier]

Conflict and Health

http://www.conflictandhealth.com/ [Accessed 21 Sep 2019] [No new digest content identified]

Contemporary Clinical Trials

Volume 84 September 2019

https://www.sciencedirect.com/journal/contemporary-clinical-trials/vol/84/suppl/C Patient Recruitment

Research article Abstract only

Relocation of study participants for rare and ultra-rare disease trials: Ethics and operations

Luke Gelinas, Brian Crawford, Ariella Kelman, Barbara E. Bierer *Abstract*

Clinical trials for investigational new products to treat rare and ultra-rare diseases typically involve a limited number of research sites recruiting from a small pool of patients dispersed over a large geographical area. When remote access is not possible and participants must be present at a trial site, participation in research may require individuals and their families/caregivers to travel great distances, often at significant cost personally and financially and, frequently, for the duration of the trial. This article addresses the ethical and practical issues associated with the practice of sponsors offering financial and other assistance for relocation to trial sites from significant geographical distances, providing both foundational

analysis of the ethical issues as well as actionable policy-level guidance on how to best approach these situations.

Current Genetic Medicine Reports

Volume 7, Issue 3, September 2019 https://link.springer.com/journal/40142/7/3 [Reviewed earlier]

Current Opinion in Infectious Diseases

October 2019 - Volume 32 - Issue 5 https://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx [Reviewed earlier]

Developing World Bioethics

Volume 19, Issue 3 Pages: 123-185 September 2019 https://onlinelibrary.wiley.com/toc/14718847/current [Reviewed earlier]

Development in Practice

Volume 29, Issue 7, 2019 http://www.tandfonline.com/toc/cdip20/current [Reviewed earlier]

Disasters

Volume 43, Issue 4 Pages: 709-954 October 2019 https://onlinelibrary.wiley.com/toc/14677717/current Papers

The ethical contours of research in crisis settings: five practical considerations for academic institutional review boards and researchers

Kathryn Falb, Betsy Laird, Ruwan Ratnayake, Katherine Rodrigues, Jeannie Annan

Pages: 711-726

First Published: 22 August 2019

Abstract

The number of research studies in the humanitarian field is rising. It is imperative, therefore, that institutional review boards (IRBs) consider carefully the additional risks present in crisis contexts to ensure that the highest ethical standards are upheld. Ethical guidelines should represent better the specific issues inherent to research among populations grappling with armed conflict, disasters triggered by natural hazards, or health-related emergencies. This paper seeks to describe five issues particular to humanitarian settings that IRBs should deliberate and on which they should provide recommendations to overcome associated challenges: staged reviews of protocols in acute emergencies; flexible reviews of modification requests; addressing violence and the traumatic experiences of participants; difficulties in attaining meaningful informed consent among populations dependent on aid; and ensuring

reviews are knowledgeable of populations' needs. Considering these matters when reviewing protocols will yield more ethically sound research in humanitarian settings and hold researchers accountable to appropriate ethical standards.

EMBO Reports

Volume 20 Issue 9 1 September 2019 https://www.embopress.org/toc/14693178/current [Reviewed earlier]

Emerging Infectious Diseases

Volume 25, Number 9—September 2019 http://wwwnc.cdc.gov/eid/ [Reviewed earlier]

Epidemics

Volume 28 September 2019 https://www.sciencedirect.com/journal/epidemics/vol/28/suppl/C [Reviewed earlier]

Epidemiology and Infection

Volume 147 - 2019 https://www.cambridge.org/core/journals/epidemiology-and-infection/latest-issue [Reviewed earlier]

Ethics & Human Research

Volume 41, Issue 3 May-June 2019 https://onlinelibrary.wiley.com/toc/25782363/2019/41/3 **Research Burdens, Benefits, and Risks** [Reviewed earlier]

The European Journal of Public Health

Volume 29, Issue 4, August 2019 https://academic.oup.com/eurpub/issue/29/4 [Reviewed earlier]

Genome Medicine

https://genomemedicine.biomedcentral.com/articles
[Accessed 21 Sep 2019]
[No new digest content identified]

Global Health Action

Volume 11, 2018 – Issue 1 https://www.tandfonline.com/toc/zgha20/11/1?nav=tocList [Reviewed earlier]

Global Health: Science and Practice (GHSP)

June 2019 | Volume 7 | Number 2 http://www.ghspjournal.org/content/current [Reviewed earlier]

Global Public Health

Volume 14, 2019 Issue 11 http://www.tandfonline.com/toc/rgph20/current introduction

<u>Introduction to the special issue: Applying a Caribbean perspective to an analysis of</u> HIV/AIDS

Percy Hintzen, John Vertovec, Elena Cyrus, Mark Padilla & Nelson Varas-Díaz

Pages: 1547-1556

Published online: 19 Sep 2019

Globalization and Health

http://www.globalizationandhealth.com/ [Accessed 21 Sep 2019] Review

| 18 September 2019

A multidisciplinary review of the policy, intellectual property rights, and international trade environment for access and affordability to essential cancer medications

Authors: Sangita M. Baxi, Reed Beall, Joshua Yang and Tim K. Mackey Abstract

In 2015, the World Health Organization (WHO) Expert Committee approved the addition of 16 cancer medicines to the WHO Model List of Essential Medicines (EML), bringing the total number of cancer medicines on the list to 46. This change represented the first major revision to the EML oncology section in recent history and reinforces international recognition of the need to ensure access and affordability for cancer treatments. Importantly, many low and middle-income countries rely on the EML, as well as the children's EML, as a guide to establish national formularies, and moreover use these lists as tools to negotiate medicine pricing. However, EML inclusion is only one component that impacts cancer treatment access. More specifically, factors such as intellectual property rights and international trade agreements can interact with EML inclusion, drug pricing, and accessibility. To better understand this dynamic, we conducted an interdisciplinary review of the patent status of EML cancer medicines compared to other EML noncommunicable disease medicines using the 17th, 18th, 19th, 20th, and 21st editions of the list. We also explored the interaction of intellectual property rights with the international trade regime and how trade agreements can and do impact cancer treatment access and affordability. Based on this analysis, we conclude that patent status is simply one

factor in the complex international environment of health systems, IPR policies, and trade regimes and that aligning these oftentimes disparate interests will require shared global governance across the cancer care continuum.

Health Affairs

Vol. 38, No. 9 September 2019 https://www.healthaffairs.org/toc/hlthaff/current Neighborhoods & Health, Medicaid & More [Reviewed earlier]

Health and Human Rights

Volume 21, Issue 1, June 2019 https://www.hhrjournal.org/volume-21-issue-1-june-2019/

Special Section on Global Health Fieldwork Ethics and Human Rights
Special Section on Invoking Health and Human Rights in the United States
[Reviewed earlier]

Health Economics, Policy and Law

Volume 14 - Issue 4 - October 2019 https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue [Reviewed earlier]

Health Policy and Planning

Volume 34, Issue 6, July 2019 https://academic.oup.com/heapol/issue/34/6 [Reviewed earlier]

Health Research Policy and Systems

http://www.health-policy-systems.com/content [Accessed 21 Sep 2019] [No new digest content identified]

Humanitarian Exchange Magazine

Number 75, May 2019

https://odihpn.org/magazine/making-humanitarian-action-work-for-women-and-girls/

Special Feature: Making humanitarian action work for women and girls by HPN May 2019

The theme of this edition of Humanitarian Exchange, co-edited with Women Deliver, is making humanitarian action work for women and girls. Despite gains, including commitments made at the World Humanitarian Summit, there is still much to be done to address the gendered impacts of humanitarian crises and improve gender-sensitive humanitarian action.

In the lead article, <u>Jacqueline Paul</u> advocates for feminist humanitarian action based on evidence that improvements in women's socio-economic status can reduce excess mortality among women after shocks. <u>Jean Kemitare, Juliet Were and Jennate Eoomkham</u> look at the role of local women's rights organisations in preventing and responding to violence against women and girls, and <u>Marcy Hersh and Diana Abou Abbas</u> highlight opportunities for more concrete action on sexual and reproductive health in emergencies.

Citing experience from Vanuatu, <u>Jane Newnham</u> explains how women will choose to use contraceptives even during a humanitarian response, when services and counselling are delivered in an appropriate and responsive way. Drawing on experience in Bangladesh, <u>Tamara Fetters and colleagues</u> challenge the belief that abortion is a non-essential service, or too complicated for humanitarian actors to provide. <u>Darcy Ataman, Shannon Johnson, Justin Cikuru and Jaime Cundy</u> reflect on an innovative programme using music therapy to help survivors of trauma.

Emilie Rees Smith, Emma Symonds and Lauryn Oates highlight lessons from the STAGE education programme in Afghanistan, and Degan Ali and Dega Saleh outline how African Development Solutions is helping women and girls take on leadership and decision-making roles in Somalia. Fiona Samuels and Taveeshi Gupta explore patterns of suicide among young people in Vietnam, with a particular focus on girls, and Subhashni Raj, Brigitte Laboukly and Shantony Moli illustrate the importance of a gendered approach to community-based disaster risk reduction in the South-West Pacific. Nicola Jones, Workneh Yadete and Kate Pincock draw on research in Ethiopia to explore the gender- and age-specific vulnerabilities of adolescents. The edition ends with an article by Julie Rialet-Cislaghi on how humanitarian responses can better address child marriage.

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

Volume 15, Issue 7-8, 2019

http://www.tandfonline.com/toc/khvi20/current

Special Issues: HPV vaccination: from seroprevalence to public health policy and everything in between

[80+ articles in edition focused on NPV vaccine; sample articles be]ow] [Reviewed earlier]

Infectious Agents and Cancer

http://www.infectagentscancer.com/content [Accessed 21 Sep 2019] [No new digest content identified]

Infectious Diseases of Poverty

http://www.idpjournal.com/content [Accessed 21 Sep 2019] [No new digest content identified]

International Health

Volume 11, Issue 5, September 2019

http://inthealth.oxfordjournals.org/content/current

Commentaries

<u>Science, innovation and society: what we need to prepare for the health challenges of the twenty-first century?</u>

Jeremy Farrar

International Health, Volume 11, Issue 5, September 2019, Pages 317–320, https://doi.org/10.1093/inthealth/ihz047

A little over 30 y ago, human immunodeficiency virus (HIV) was first identified as the cause of acquired immune deficiency syndrome (AIDS). Within a decade the nature of the infection, the pathogenesis and a series of combination therapies had been developed that transformed a deadly infection into a challenging but manageable condition. The challenge was then to ensure that everyone who needed these lifesaving therapies had access to them. With more than 20 million people...

The urgent case for expanded development assistance for health

Jeffrey D Sachs

International Health, Volume 11, Issue 5, September 2019, Pages 321–323, https://doi.org/10.1093/inthealth/ihz059

Abstract

The low-income developing countries require increased development assistance for health (DAH) to achieve Sustainable Development Goal 3, 'Healthy Lives for All'. DAH has a proven track record. DAH expanded during 2001–2008, with significant health gains in the LIDCs, but then stopped expanding in the wake of the 2008 financial crisis. The Global Fund to Fight AIDS, TB and Malaria requires around US\$31.8 billion during 2021–2023 to maintain a trajectory to end the three epidemics by 2030, yet donors have so far signaled that they are prepared to offer less than half that sum, around US\$14 billion.

<u>Immunizations and vaccines: a decade of successes and reversals, and a call for vaccine diplomacy'</u>

Peter J Hotez

International Health, Volume 11, Issue 5, September 2019, Pages 331–333, https://doi.org/10.1093/inthealth/ihz024

Abstract

Over the last decade we have seen extraordinary public health gains due to expansions in global vaccination programs led by United Nations (UN) agencies, including Gavi, the Vaccine Alliance, UNICEF and the WHO. These initiatives have reduced childhood deaths from measles, tetanus and other vaccine-preventable diseases by almost one half. There is additional excitement over the potential development and introduction of new vaccines to prevent highly lethal respiratory virus infections, as well as tuberculosis, malaria, HIV/AIDS and several neglected tropical diseases. However, these successes are under threat due to political instability, conflict and an accelerating antivaccine movement. New initiatives in vaccine diplomacy will be required to combat these challenges.

Emergent threats: lessons learnt from Ebola

Peter Piot, Moses J Soka, Julia Spencer

International Health, Volume 11, Issue 5, September 2019, Pages 334–337, https://doi.org/10.1093/inthealth/ihz062

Reflections on the decade of the neglected tropical diseases

Mwelecele Ntuli Malecela

International Health, Volume 11, Issue 5, September 2019, Pages 338–340, https://doi.org/10.1093/inthealth/ihz048

Maternal, newborn, child and adolescent health: challenges for the next decade

Anthony Costello, Zainab Naimy

International Health, Volume 11, Issue 5, September 2019, Pages 349–352, https://doi.org/10.1093/inthealth/ihz051

Humanitarianism under attack

Barry Munslow

International Health, Volume 11, Issue 5, September 2019, Pages 358–360, https://doi.org/10.1093/inthealth/ihz065

Review

International funding for mental health: a review of the last decade

<u>Bernhard H Liese</u>, <u>Rebecca S F Gribble</u>, <u>Marisha N Wickremsinhe</u> International Health, Volume 11, Issue 5, September 2019, Pages 361–369, <u>https://doi.org/10.1093/inthealth/ihz040</u>

Original Articles

Gender equity in mass drug administration for neglected tropical diseases: data from 16 countries

<u>Daniel A Cohn, Maureen P Kelly, Kalpana Bhandari, Kathryn L Zoerhoff, Wilfrid E Batcho</u> ... International Health, Volume 11, Issue 5, September 2019, Pages 370–378, https://doi.org/10.1093/inthealth/ihz012

Medical donations are not always free: an assessment of compliance of medicine and medical device donations with World Health Organization guidelines (2009–2017)

<u>Sally McDonald</u>, <u>Alice Fabbri</u>, <u>Lisa Parker</u>, <u>Jane Williams</u>, <u>Lisa Bero</u> International Health, Volume 11, Issue 5, September 2019, Pages 379–402, <u>https://doi.org/10.1093/inthealth/ihz004</u>

How many life-years have new drugs saved? A three-way fixed-effects analysis of 66 diseases in 27 countries, 2000–2013

Frank R Lichtenberg

International Health, Volume 11, Issue 5, September 2019, Pages 403–416, https://doi.org/10.1093/inthealth/ihz003

Background

We analyzed the role that the launch of new drugs has played in reducing the number of years of life lost (YLL) before three different ages (85, 70 and 55 y) due to 66 diseases in 27 countries.

Conclusions

The estimates imply that, if no new drugs had been launched after 1981, YLL85 in 2013 would have been 2.16 times as high as it actually was. We estimated that pharmaceutical expenditure per life-year saved before age 85 y in 2013 by post-1981 drugs was \$2837. This amount is about 8% of per capita GDP, indicating that post-1981 drugs launched were very cost-effective overall. But the fact that an intervention is cost-effective does not necessarily mean that it is 'affordable.'

International Journal of Community Medicine and Public Health

Vol 6, No 7 (2019) July 2019 https://www.ijcmph.com/index.php/ijcmph/issue/view/52 [Reviewed earlier]

International Journal of Epidemiology

Volume 48, Issue 4, August 2019 https://academic.oup.com/ije/issue/48/4 [Reviewed earlier]

International Journal of Human Rights in Healthcare

Volume 12 Issue 3 2019 https://www.emeraldinsight.com/toc/ijhrh/12/3 [Reviewed earlier]

International Journal of Infectious Diseases

Volume 85, Supplement, S1-S38

https://www.ijidonline.com/issue/S1201-9712(19)X0015-6

Efficacy, Immunogenicity, and Safety Evaluation of an MF59 Adjuvanted Trivalent Influenza Virus Vaccine Compared to Non-adjuvanted Influenza: A Comprehensive Review in Older Adults and Children: Publication of this supplement was supported by Novartis Vaccines and Diagnostics, Inc., and Seqirus, Inc.

Open Access

JAMA

September 17, 2019, Vol 322, No. 11, Pages 1023-1116

http://jama.jamanetwork.com/issue.aspx

Clinical Update

Adult Immunization Update

Beverly E. Sha, MD

free access has multimedia

JAMA. 2019;322(11):1096-1097. doi:10.1001/jama.2019.12739

This JAMA Insights Clinical Update reviews updates in 2019 to the Advisory Committee on Immunization Practices (ACIP) adult immunization schedule, including recommendations for the Shingrix vaccine for prevention of zoster and of the Heplisav-B vaccine for prevention of hepatitis B virus infection.

JAMA Pediatrics

September 2019, Vol 173, No. 9, Pages 807-900 http://archpedi.jamanetwork.com/issue.aspx [Reviewed earlier]

JBI Database of Systematic Review and Implementation Reports

September 2019 - Volume 17 - Issue 9 http://journals.lww.com/jbisrir/Pages/currenttoc.aspx [Reviewed earlier]

Journal of Adolescent Health

September 2019 Volume 65, Issue 3, p309-432 https://www.jahonline.org/issue/S1054-139X(18)X0011-1 [Reviewed earlier]

Journal of Community Health

Volume 44, Issue 5, October 2019 https://link.springer.com/journal/10900/44/5 [Reviewed earlier]

Journal of Development Economics

Volume 140 Pages 1-374 (September 2019) https://www.sciencedirect.com/journal/journal-of-development-economics/vol/140/suppl/C [Reviewed earlier]

Journal of Empirical Research on Human Research Ethics

Volume 14 Issue 4, October 2019 http://journals.sagepub.com/toc/jre/current [Reviewed earlier]

Journal of Epidemiology & Community Health

September 2019 - Volume 73 - 9 https://jech.bmj.com/content/73/9 [New issue; No digest content identified]

Journal of Evidence-Based Medicine

Volume 12, Issue 3 Pages: 185-231 August 2019 https://onlinelibrary.wiley.com/toc/17565391/current [Reviewed earlier]

Journal of Global Ethics

Volume 15, Issue 2, 2019

http://www.tandfonline.com/toc/rjge20/current

Selected papers of the 2018 meetings of International Development Ethics Association & Groupe de Recherche en Economie Théorique et Appliquée [Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)

Volume 30, Number 2, May 2019 https://muse.jhu.edu/issue/40369 [Reviewed earlier]

Journal of Immigrant and Minority Health

Volume 21, Issue 5, October 2019 https://link.springer.com/journal/10903/21/5 [Reviewed earlier]

Journal of Immigrant & Refugee Studies

Volume 17, 2019_ Issue 4 https://www.tandfonline.com/toc/wimm20/current [Reviewed earlier]

Journal of Infectious Diseases

Volume 220, Issue 6, 15 September 2019 https://academic.oup.com/jid/issue/220/6 [Reviewed earlier]

Journal of Medical Ethics

September 2019 - Volume 45 - 9 http://jme.bmj.com/content/current [Reviewed earlier]

Journal of Patient-Centered Research and Reviews

Volume 6, Issue 3 (2019) https://digitalrepository.aurorahealthcare.org/jpcrr/ [Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 8, Issue 3, September 2019

https://academic.oup.com/jpids/issue [Reviewed earlier]

Journal of Pediatrics

September 2019 Volume 212, p1-254 http://www.jpeds.com/current [Reviewed earlier]

Journal of Pharmaceutical Policy and Practice

https://joppp.biomedcentral.com/
[Accessed 21 Sep 2019]

Review
| 18 September 2019

<u>Public procurement of medicines: scoping review of the scientific literature in South</u> America

Authors: Cristiane Mota Soares, Beatriz Nascimento, Luisa Arueira Chaves, Rondineli Mendes Silva, Maria Auxiliadora Oliveira and Vera Lucia Luiza

Journal of Public Health Management & Practice

September/October 2019 - Volume 25 - Issue 5 https://journals.lww.com/jphmp/pages/currenttoc.aspx [Reviewed earlier]

Journal of Public Health Policy

Volume 40, Issue 3, September 2019 https://link.springer.com/journal/41271/40/3 [New issue; No digest content identified]

Journal of Refugee & Global Health

Volume 2, Issue 2 (2019) https://ir.library.louisville.edu/rgh/ [Reviewed earlier]

Journal of the Royal Society – Interface

7 August 2019 Volume 16 Issue 157 https://royalsocietypublishing.org/toc/rsif/current [Reviewed earlier]

Journal of Travel Medicine

Volume 26, Issue 6, 2019 https://academic.oup.com/jtm/issue/26/6

[Reviewed earlier]

Journal of Virology

September 2019; Volume 93,Issue 17 http://jvi.asm.org/content/current [Reviewed earlier]

The Lancet

Sep 21, 2019 Volume 394 Number 10203 p979-1112 https://www.thelancet.com/journals/lancet/issue/current Editorial

iHuman: a futuristic vision for the human experience

The Lancet

Childhood cancer: unequal progress

The Lancet

The mental health imperative of children in conflict

The Lancet

Comment

An Africa free of malaria

Ingwenyama King Mswati III

The malaria eradication challenge

Tedros Adhanom Ghebreyesus

<u>Public health in the Eastern Mediterranean Region: profound challenges, huge</u> opportunities

Ahmed Al-Mandhari

The Lancet Commissions

Malaria eradication within a generation: ambitious, achievable, and necessary

Richard G A Feachem, Ingrid Chen, Omar Akbari, Amelia Bertozzi-Villa, Samir Bhatt, Fred Binka, et al

50 years after a noble but flawed attempt to eradicate malaria in the mid-20th century, the global malaria community is once again seriously considering eradication. Momentum towards eradication has been building for decades, and more than half of the world's countries are now malaria free. Since 2000, a surge of global progress has occurred, facilitated by the roll-out of new technologies and the substantial growth in political and financial commitment by countries, regions, and their global partners. Annual domestic and international spending on malaria increased from roughly US\$1.5 billion in 2000 to \$4.3 billion in 2016. Simultaneously, the number of countries with endemic malaria dropped from 106 to 86, the worldwide annual incidence rate of malaria declined by 36%, and the annual death rate declined by 60%...

...In this report, the Commission concludes that malaria eradication is possible, worthwhile, and affordable, and that the alternatives to eradication are untenable. We identify opportunities

for specific actions that will overcome challenges and accelerate progress, starting with an immediate, firm, global commitment to achieving eradication by 2050.

The Lancet Child & Adolescent Health

Sep 2019 Volume 3 Number 9 p585-662 https://www.thelancet.com/journals/lanchi/issue/current [Reviewed earlier]

Lancet Digital Health

Sep 2019 Volume 1 Number 5e193-e242 https://www.thelancet.com/journals/landig/issue/current [Reviewed earlier]

Lancet Global Health

Sep 2019 Volume 7Number 9e1147-e1286 http://www.thelancet.com/journals/langlo/issue/current [Reviewed earlier]

Lancet Infectious Diseases

Sep 2019 Volume 19Number 9p915-1034, e301-e336 http://www.thelancet.com/journals/laninf/issue/current [Reviewed earlier]

Lancet Respiratory Medicine

Sep 2019 Volume 7 Number 9 p721-826, e26-e28 http://www.thelancet.com/journals/lanres/issue/current [Reviewed earlier]

Maternal and Child Health Journal

Volume 23, Issue 9, September 2019 https://link.springer.com/journal/10995/23/8 [Reviewed earlier]

Medical Decision Making (MDM)

Volume 39 Issue 4, May 2019 http://mdm.sagepub.com/content/current [Reviewed earlier]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy

Volume 97, Issue 3 Pages: 621-880 September 2019 https://onlinelibrary.wiley.com/toc/14680009/current

Opinions

WHO Global Action Plan to Promote the Health of Refugees and Migrants

LAWRENCE O. GOSTIN

Pages: 631-635

First Published: 08 July 2019

Nature

Volume 573 Issue 7774, 19 September 2019 http://www.nature.com/nature/current issue.html Nature Outlook | 18 September 2019

<u>Influenza</u>

Influenza kills up to 500,000 people annually. The influenza virus mutates to evade our immune system and occasionally changes drastically to become a new subtype that can start a pandemic.

Nature Biotechnology

Volume 37 Issue 9, September 2019 https://www.nature.com/nbt/volumes/37/issues/9 [Reviewed earlier]

Nature Genetics

Volume 51 Issue 9, September 2019 https://www.nature.com/ng/volumes/51/issues/9 [Reviewed earlier]

Nature Medicine

Volume 25 Issue 9, September 2019 https://www.nature.com/nm/volumes/25/issues/8 [Reviewed earlier]

Nature Reviews Genetics

Volume 20 Issue 9, September 2019 https://www.nature.com/nrg/volumes/20/issues/9 [Reviewed earlier]

Nature Reviews Immunology

Volume 19 Issue 9, September 2019 https://www.nature.com/nri/volumes/19/issues/9 [Reviewed earlier]

New England Journal of Medicine

September 19, 2019 Vol. 381 No. 12 http://www.nejm.org/toc/nejm/medical-journal [New issue; No digest content identified]

Pediatrics

September 2019, VOLUME 144 / ISSUE 3 https://pediatrics.aappublications.org/content/144/3?current-issue=y [Reviewed earlier]

Pharmaceutics

Volume 11, Issue 9 (September 2019) https://www.mdpi.com/1999-4923/11/9 [New issue; No digest content identified]

PharmacoEconomics

Volume 37, Issue 9, September 2019 https://link.springer.com/journal/40273/37/9 [Reviewed earlier]

PLoS Genetics

https://journals.plos.org/plosgenetics/ (Accessed 21 Sep 2019) [No new digest content identified]

PLoS Medicine

http://www.plosmedicine.org/ (Accessed 21 Sep 2019) [No new digest content identified]

PLoS Neglected Tropical Diseases

http://www.plosntds.org/ (Accessed 21 Sep 2019) [No new digest content identified]

PLoS One

http://www.plosone.org/
[Accessed 21 Sep 2019]
[No new digest content identified]

PLoS Pathogens

http://journals.plos.org/plospathogens/ [Accessed 21 Sep 2019] [No new digest content identified]

PNAS - Proceedings of the National Academy of Sciences of the United States of America

http://www.pnas.org/content/early/ [Accessed 21 Sep 2019] [No new digest content identified]

Prehospital & Disaster Medicine

Volume 34 - Issue 4 - August 2019 https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue [Reviewed earlier]

Preventive Medicine

Volume 126 September 2019 https://www.sciencedirect.com/journal/preventive-medicine/vol/125/suppl/C [Reviewed earlier]

Proceedings of the Royal Society B

21 August 2019 Volume 286 Issue 1909 https://royalsocietypublishing.org/toc/rspb/current [Reviewed earlier]

Public Health

Volume 174 Pages A1-A2, 1-154 (September 2019) https://www.sciencedirect.com/journal/public-health/vol/174/suppl/C [New issue; No digest content identified]

Public Health Ethics

Volume 12, Issue 2, July 2019 http://phe.oxfordjournals.org/content/current [Reviewed earlier]

Public Health Reports

Volume 134 Issue 5, September/October 2019 https://journals.sagepub.com/toc/phrg/134/5 [Reviewed earlier]

Qualitative Health Research

Volume 29 Issue 11, September 2019 http://qhr.sagepub.com/content/current [Reviewed earlier]

Research Ethics

Volume 15 Issue 2, April 2019 http://journals.sagepub.com/toc/reab/current [Reviewed earlier]

Reproductive Health

http://www.reproductive-health-journal.com/content [Accessed 21 Sep 2019] [No new digest content identified]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)

http://www.paho.org/journal/index.php?option=com_content&view=featured&Itemid=101 Latest articles 20 Sep 2019

A four-step process for building sustainable access to diagnosis and treatment of Chagas disease

Special report / English |

20 Sep 2019

<u>Variations in the detection of congenital Zika syndrome associated with changes in protocols</u>

Brief communication | Portuguese |

Risk Analysis

Volume 39, Issue 9 Pages: 1867-2116 September 2019 https://onlinelibrary.wiley.com/toc/15396924/current

Special Issue: Resilient Cyber-Physical-Social Systems

[Reviewed earlier]

Risk Management and Healthcare Policy

https://www.dovepress.com/risk-management-and-healthcare-policy-archive56 [Accessed 21 Sep 2019] [No new digest content identified]

Science

20 September 2019 Vol 365, Issue 6459 http://www.sciencemag.org/current.dtl

Research Articles

<u>Global trends in antimicrobial resistance in animals in low- and middle-income</u> countries

By Thomas P. Van Boeckel, João Pires, Reshma Silvester, Cheng Zhao, Julia Song, Nicola G. Criscuolo, Marius Gilbert, Sebastian Bonhoeffer, Ramanan Laxminarayan Science20 Sep 2019 Full Access

Growing demand for meat in developing economies increases antibiotic consumption and fuels the risk of antibiotic resistance.

Livestock antibiotic resistance

Most antibiotic use is for livestock, and it is growing with the increase in global demand for meat. It is unclear what the increase in demand for antibiotics means for the occurrence of drug resistance in animals and risk to humans. Van Boeckel et al. describe the global burden of antimicrobial resistance in animals on the basis of systematic reviews over the past 20 years (see the Perspective by Moore). There is a clear increase in the number of resistant bacterial strains occurring in chickens and pigs. The current study provides a much-needed baseline model for low- and middle-income countries and provides a "one health" perspective to which future data can be added.

Structured Abstract

INTRODUCTION

The global scale-up in demand for animal protein is the most notable dietary trend of our time. Since 2000, meat production has plateaued in high-income countries but has grown by 68%, 64%, and 40% in Asia, Africa, and South America, respectively. The transition to high-protein diets in low- and middle-income countries (LMICs) has been facilitated by the global expansion of intensive animal production systems in which antimicrobials are used routinely to maintain health and productivity. Globally, 73% of all antimicrobials sold on Earth are used in animals raised for food. A growing body of evidence has linked this practice with the rise of antimicrobial-resistant infections, not just in animals but also in humans. Beyond potentially serious consequences for public health, the reliance on antimicrobials to meet demand for animal protein is a likely threat to the sustainability of the livestock industry, and thus to the livelihood of farmers around the world.

RATIONALE

In LMICs, trends in antimicrobial resistance (AMR) in animals are poorly documented. In the absence of systematic surveillance systems, point prevalence surveys represent a largely untapped source of information to map trends in AMR in animals. We use geospatial models to produce global maps of AMR in LMICs and give policy-makers—or a future international panel—a baseline for monitoring AMR levels in animals and target interventions in the regions most affected by the rise of resistance.

RESULTS

We identified 901 point prevalence surveys from LMICs reporting AMR rates in animals for common indicator pathogens: Escherichia coli, Campylobacter spp., nontyphoidal Salmonella spp., and Staphylococcus aureus. From 2000 to 2018, the proportion of antimicrobial compounds with resistance higher than 50% (P50) increased from 0.15 to 0.41 in chickens and from 0.13 to 0.34 in pigs and plateaued between 0.12 and 0.23 in cattle. Global maps of AMR (available at resistancebank.org) show hotspots of resistance in northeastern India, northeastern China, northern Pakistan, Iran, eastern Turkey, the south coast of Brazil, Egypt,

the Red River delta in Vietnam, and the areas surrounding Mexico City and Johannesburg. Areas where resistance is just starting to emerge are Kenya, Morocco, Uruguay, southern Brazil, central India, and southern China. Uncertainty in our predictions was greatest in the Andes, the Amazon region, West and Central Africa, the Tibetan plateau, Myanmar, and Indonesia. Dense geographical coverage of point prevalence surveys did not systematically correlate with the presence of hotspots of AMR, such as in Ethiopia, Thailand, Chhattisgarh (India), and Rio Grande do Sul (Brazil). The highest resistance rates were observed with the most commonly used classes of antimicrobials in animal production: tetracyclines, sulfonamides, and penicillins. CONCLUSION

The portfolio of antimicrobials used to raise animals for food is rapidly getting depleted, with important consequences for animal health, farmers' livelihoods, and potentially for human health. Regions affected by the highest levels of AMR should take immediate actions to preserve the efficacy of antimicrobials that are essential in human medicine by restricting their use in animal production. In some middle-income countries, particularly in South America, surveillance must be scaled up to match that of low-income African countries that are currently outperforming them despite more limited resources. Policy-makers coordinating the international response to AMR may consider sparing African countries from the most aggressive measures to restrict access to veterinary drugs, which may undermine livestock-based economic development and rightfully be perceived as unfair. However, in regions where resistance is starting to emerge, there is a window of opportunity to limit the rise of resistance by encouraging a transition to sustainable animal farming practices. High-income countries, where antimicrobials have been used on farms since the 1950s, should support this transition—for example, through a global fund to subsidize improvement in farm-level biosafety and biosecurity.

CRISPR-mediated live imaging of genome editing and transcription

By Haifeng Wang, Muneaki Nakamura, Timothy R. Abbott, Dehua Zhao, Kaiwen Luo, Cordelia Yu, Cindy M. Nguyen, Albert Lo, Timothy P. Daley, Marie La Russa, Yanxia Liu, Lei S. Qi Science20 Sep 2019: 1301-1305 Restricted Access

A CRISPR-mediated imaging approach, LiveFISH, enables real-time tracking of DNA and RNA in living cells.

Tracking nucleic acids in living cells

Fluorescence in situ hybridization (FISH) is a powerful molecular technique for detecting nucleic acids in cells. However, it requires cell fixation and denaturation. Wang et al. found that CRISPR-Cas9 protects guide RNAs from degradation in cells only when bound to target DNA. Taking advantage of this target-dependent stability switch, they developed a labeling technique, named CRISPR LiveFISH, to detect DNA and RNA using fluorophore-conjugated guide RNAs with Cas9 and Cas13, respectively. CRISPR LiveFISH improves the signal-to-noise ratio, is compatible with living cells, and allows tracking real-time dynamics of genome editing, chromosome translocation, and transcription.

Abstract

We report a robust, versatile approach called CRISPR live-cell fluorescent in situ hybridization (LiveFISH) using fluorescent oligonucleotides for genome tracking in a broad range of cell types, including primary cells. An intrinsic stability switch of CRISPR guide RNAs enables LiveFISH to accurately detect chromosomal disorders such as Patau syndrome in prenatal amniotic fluid cells and track multiple loci in human T lymphocytes. In addition, LiveFISH tracks the real-time movement of DNA double-strand breaks induced by CRISPR-Cas9—mediated editing and consequent chromosome translocations. Finally, by combining Cas9 and Cas13

systems, LiveFISH allows for simultaneous visualization of genomic DNA and RNA transcripts in living cells. The LiveFISH approach enables real-time live imaging of DNA and RNA during genome editing, transcription, and rearrangements in single cells.

Science Translational Medicine

18 September 2019 Vol 11, Issue 510 https://stm.sciencemag.org/ *Research Articles*

Immune correlates of the Thai RV144 HIV vaccine regimen in South Africa

By Glenda E. Gray, Ying Huang, Nicole Grunenberg, Fatima Laher, Surita Roux, Erica Andersen-Nissen, Stephen C. De Rosa, Britta Flach, April K. Randhawa, Ryan Jensen, Edith M. Swann, Linda-Gail Bekker, Craig Innes, Erica Lazarus, Lynn Morris, Nonhlanhla N. Mkhize, Guido Ferrari, David C. Montefiori, Xiaoying Shen, Sheetal Sawant, Nicole Yates, John Hural, Abby Isaacs, Sanjay Phogat, Carlos A. DiazGranados, Carter Lee, Faruk Sinangil, Nelson L. Michael, Merlin L. Robb, James G. Kublin, Peter B. Gilbert, M. Juliana McElrath, Georgia D. Tomaras, Lawrence Corey

Science Translational Medicine 18 Sep 2019 Full Access

In South Africans, the RV144 HIV vaccine regimen elicited robust immune responses that have been associated with vaccine efficacy.

Taking RV144 beyond Thailand

The RV144 vaccine trial in Thailand is the only HIV vaccine to show efficacy against HIV infection to date. Gray et al. designed the HVTN 097 trial to test this regimen in South Africa, where clade C HIV circulates; this clade is heterologous to the vaccine antigens. They intently examined immune protective responses previously identified in the RV144 trial and found that the vaccine seemed to be even more immunogenic in South Africans. CD4+ T cell responses were stronger and more common in HVTN 097, and the magnitude of protective antibody responses was greater compared to RV144. Their results indicate that the RV144 regimen or others like it could be protective in areas where HIV is endemic.

Social Science & Medicine

Volume 236 September 2019 https://www.sciencedirect.com/journal/social-science-and-medicine/vol/236/suppl/C [Reviewed earlier]

Systematic Reviews

https://systematicreviewsjournal.biomedcentral.com/articles [Accessed 21 Sep 2019] [No new digest content identified]

Travel Medicine and Infectious Diseases

Volume 30 Pages 1-148 (July–August 2019) https://www.sciencedirect.com/journal/travel-medicine-and-infectious-disease/vol/30/suppl/C [Reviewed earlier]

Tropical Medicine & International Health

Volume 24, Issue 9 Pages: i-iv, 1031-1137 September 2019 https://onlinelibrary.wiley.com/toc/13653156/current [Reviewed earlier]

Vaccine

Volume 37, Issue 41 Pages 6017-6132 (24 September 2019) https://www.sciencedirect.com/journal/vaccine/vol/37/issue/41 Discussion Open access

<u>Identify, target, monitor: Experiences of a fresh approach to addressing immunization inequities in Pakistan</u>

Saadia Farrukh, Alyssa Sharkey, Richard Duncan, Paul Rutter, Andreas Hasman Pages 6017-6021

Research article Abstract only

Facilitators and barriers of human papillomavirus vaccine uptake in young females 18–26 years old in Singapore: A qualitative study

Andrea Su En Lim, Raymond Boon Tar Lim Pages 6030-6038

Research article Open access

Optimization of frequency and targeting of measles supplemental immunization activities in Nigeria: A cost-effectiveness analysis

Marita Zimmermann, Kurt Frey, Brittany Hagedorn, A.J. Oteri, ... Guillaume Chabot-Couture Pages 6039-6047

Research article Abstract only

Predictors of tetanus, diphtheria, acellular pertussis and influenza vaccination during pregnancy among full-term deliveries in a medically underserved population Kamini Doraivelu, Sheree L. Boulet, Hope H. Biswas, Jenna C. Adams, ... Denise J. Jamieson Pages 6054-6059

Research article Open access

The cost saving opportunity of introducing a card review into measles-containing vaccination campaigns

Brittany L. Hagedorn, Alya Dabbagh, Kevin A. McCarthy Pages 6093-6101

Vaccines — Open Access Journal

http://www.mdpi.com/journal/vaccines (Accessed 21 Sep 2019) Open Access Review

The Cellular Immune Response to Rabies Vaccination: A Systematic Review

by <u>Lisanne A. Overduin</u>, <u>Jacques J.M. van Dongen</u> and <u>Leonardus G. Visser</u> Vaccines 2019, 7(3), 110; <u>https://doi.org/10.3390/vaccines7030110</u> - 11 Sep 2019

Abstract

The effectiveness of rabies vaccines is conventionally determined by serological testing. In addition to this assessment of humoral immunity, cellular immunity could help assess effectiveness and protection through a broad range of parameters. Therefore, this study aimed to systematically review all literature on the kinetics and composition of the cellular immune response to rabies vaccination in humans. A total of 1360 studies were identified in an extensive literature search. Twenty studies were selected for inclusion. In a primary response, plasma cells are detectable from day 7 to day 14, peaking at day 10. Memory B-cells appear from day 10 up to at least day 28. After revaccination, natural killer (NK) cells are the first detectable cellular parameters. Further research is required to assess cellular parameters in relation to long-term (serological) immunity. This review was registered in the International Prospective Register of Systematic Reviews (PROSPERO) under registration number CRD42019134416.

Value in Health

September 2019 Volume 22, Issue 9, p975-1082 https://www.valueinhealthjournal.com/issue/S1098-3015(19)X0009-1 [New issue; No digest content identified]

Viruses

Volume 11, Issue 8 (August 2019) https://www.mdpi.com/1999-4915/11/8 [Reviewed earlier]

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<u>From Google Scholar & other sources: Selected Journal Articles, Newsletters, Dissertations, Theses, Commentary</u>

Public Health

Volume 177, December 2019, Pages 71-79 Original Research

A systematic approach to map the adolescent human papillomavirus vaccine decision and identify intervention strategies to address vaccine hesitancy

S Marshall, LJ Sahm, AC Moore, A Fleming -

- Highlights
- :: The World Health Organization has declared vaccine hesitancy as one of the top ten threats to global health in 2019.
- :: Unsubstantiated safety concerns with human papillomavirus (HPV) vaccines continue to linger globally.
- :: Theoretically informed behaviour change frameworks can be used to identify factors impacting HPV vaccine uptake.

- :: Awareness and knowledge about HPV and its health sequelae was low among female adolescents, aged 14-16 years.
- :: Education is a key area to address in future intervention studies to reduce HPV vaccine hesitancy.

Journal of Community Health

First Online: 13 September 2019

Original Paper

<u>Association of State Legislation of Human Papillomavirus Vaccination with Vaccine Uptake Among Adolescents in the United States</u>

NA Vielot, AM Butler, JG Trogdon, R Ramadas...

Abstract

We assessed the association of state legislation with adolescent human papillomavirus (HPV) vaccination rates in states that legislated information dissemination or administration of HPV vaccination. Using insurance claims, we calculated monthly HPV vaccination rates (November 2009-December 2017) among adolescents in states that passed HPV vaccination legislation during that period: Missouri (July 2010), Kentucky (February 2012), Indiana (March 2013), Oregon (June 2013). We used segmented regression to estimate levels and trends of HPV vaccination rates, comparing pre-legislation to post-legislation segments, adjusting for seasonal vaccination patterns and changes to the vaccination recommendation among males during the study period. Indiana's legislation allowed pharmacists to administer HPV vaccination; legislation in Kentucky, Missouri, and Oregon included provisions HPV and cervical cancer education. No statistically significant increases in HPV vaccination levels or trends were observed in the post-legislation segments among adolescents overall; however, a significant post-legislation increase in vaccination trends was observed among boys in Missouri ($\beta = 0.16$, p = 0.03). Evidence for a positive impact of legislation on HPV vaccination rates is limited. The scarcity of policies that directly facilitate or promote HPV vaccination, and the breadth of exemptions to school vaccination requirements, may limit the effectiveness of these policies. Continuing efforts to introduce and pass legislation that directly facilitates HPV vaccination, combined with promoting existing evidence-based interventions, can provide opportunities to identify the most effective strategies to increase adolescent HPV vaccination rates.

* * * * *

Media/Policy Watch

This watch section is intended to alert readers to substantive news, analysis and opinion from the general media and selected think tanks and similar organizations on vaccines, immunization, global public health and related themes. *Media Watch* is not intended to be exhaustive, but indicative of themes and issues CVEP is actively tracking. This section will grow from an initial base of newspapers, magazines and blog sources, and is segregated from *Journal Watch* above which scans the peer-reviewed journal ecology.

We acknowledge the Western/Northern bias in this initial selection of titles and invite suggestions for expanded coverage. We are conservative in our outlook in adding news sources which largely report on primary content we are already covering above. Many electronic media sources have tiered, fee-based subscription models for access. We will provide full-text where

content is published without restriction, but most publications require registration and some subscription level.

The Atlantic

http://www.theatlantic.com/magazine/ Accessed 21 Sep 2019 [No new, unique, relevant content]

BBC

http://www.bbc.co.uk/ Accessed 21 Sep 2019

DR Congo to introduce second Ebola vaccine

21 Sep 2019

Authorities in the Democratic Republic of Congo are planning to use a second Ebola vaccine to help control an outbreak that has killed more than 2,100 people.

Devex

https://www.devex.com/ Accessed 21 Sep 2019

Global Views Vaccine hesitancy

Opinion: The real problem with vaccine hesitancy

By Seth Berkley // 18 September 2019

If we stopped vaccinating children, how long would it take before a host of deadly diseases came back with a vengeance? If the news that Albania, Czechia, Greece, and the United Kingdom have all now <u>lost their official measles elimination status</u> is anything to go by, the answer is not long at all.

Immunization coverage doesn't have to drop by much before outbreaks start to occur. And with <u>130 million new children born globally every year</u>, it would take just a year or two before mortality rates for diseases, like diphtheria, tetanus, whooping cough, measles and others, would once again start to soar...

The Economist

http://www.economist.com/ Accessed 21 Sep 2019 [No new, unique, relevant content]

Financial Times

http://www.ft.com/home/uk

Accessed 21 Sep 2019

[No new, unique, relevant content]

Forbes

http://www.forbes.com/ Accessed 21 Sep 2019 Sep 17, 2019

Russia Confirms Explosion At Ex Bioweapons Lab Storing Ebola, Smallpox And Plague

A month after a deadly accident hit a Russian nuclear facility, new reports of an explosion at a state biotech lab housing deadly viruses have now been confirmed. By Zak Doffman Contributor

Foreign Affairs

http://www.foreignaffairs.com/ Accessed 21 Sep 2019 [No new, unique, relevant content]

Foreign Policy

http://foreignpolicy.com/ Accessed 21 Sep 2019 Voice

The World Knows an Apocalyptic Pandemic Is Coming

But nobody is interested in doing anything about it.

By Laurie Garrett | September 20, 2019, 12:48 PM

The ominous analysis was compiled by an independent panel, the Global Preparedness Monitoring Board (GPMB), which was assembled last year in response to a request from the office of the U.N. secretary-general, and convened jointly by the World Bank and World Health Organization (WHO). Co-chaired by the former WHO head and former Norwegian Prime Minister Gro Harlem Brundtland and the head of the international Red Cross, Elhadj As Sy, the GPMB commissioned expert studies and issued a scathing attack on the political, financial, and logistical state of pandemic preparedness affairs...

[See Milestones above for detail]

The Guardian

http://www.guardiannews.com/ Accessed 21 Sep 2019 [No new, unique, relevant content]

New Yorker

http://www.newyorker.com/ Accessed 21 Sep 2019 [No new, unique, relevant content]

New York Times

http://www.nytimes.com/ Accessed 21 Sep 2019 Asia Pacific

Philippines Confirms 2nd Polio Case After Declaring Outbreak

Philippine health officials on Friday confirmed a second case of polio in a 5-year-old child a day after declaring the country's first outbreak in nearly two decades, and announced plans for a massive immunization program.

By The Associated Press

Health

As Congo's Ebola Outbreak Drags On, Untracked Cases Sow Confusion

On tour in Africa, American officials said the U.S. would keep providing aid. But Congo's response has been uneven, and the former health minister has been jailed. By Donald G. McNeil Jr.

U.S.

U.S. Records No New Measles Cases for First Week Since January

Health officials recorded no new cases of measles in the United States last week, marking the first week without new cases of the disease since January, amid an outbreak largely linked to parents who declined to vaccinate their children. By Reuters

Washington Post

http://www.washingtonpost.com/
Accessed 21 Sep 2019
[No new, unique, relevant content]

Think Tanks et al

Brookings

http://www.brookings.edu/ Accessed 21 Sep 2019 [No new relevant content]

Center for Global Development

http://www.cgdev.org/page/press-center Accessed 21 Sep 2019 [No new relevant content]

CSIS

https://www.csis.org/ Accessed 21 Sep 2019 Upcoming Event

Securing Healthy Populations in a New Era of Global Immunization

September 27, 2019

Podcast Episode

Rethinking Vaccine Delivery

September 17, 2019 | By Nellie Bristol

Council on Foreign Relations

http://www.cfr.org/ Accessed 21 Sep 2019 [No new relevant content]

Kaiser Family Foundation

https://www.kff.org/search/?post_type=press-release Accessed 21 Sep 2019 [No new relevant content]

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