Vaccines and Global Health: The Week in Review
9 September 2017
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
David R. Curry, MS
Editor and
Executive Director
Center for Vaccine Ethics & Policy
david.r.curry@centerforvaccineethicsandpolicy.org

***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 before midnight (EST/U.S.). If you would like to receive the email version, please send your request to david.r.curry@centerforvaccineethicsandpolicy.org.*

***Support this knowledge-sharing service:** Your financial support helps us cover our costs and to address a current shortfall in our annual operating budget. Click here to donate and thank you in advance for your contribution.*

Contents *[click on link below to move to associated content]*

A. Milestones :: Perspectives :: Featured Journal Content
B. Emergencies: Polio; Zika; Ebola/EVD; MERS-Cov; Yellow Fever
C. WHO; CDC
D. Announcements
E. Reports/Research/Analysis
E. Journal Watch
F. Media Watch

::::::
::::::

Milestones :: Perspectives

PATH boosts leadership in developing and introducing urgently needed vaccines

PATH's Center for Vaccine Innovation and Access attracts top global talent and additional $120 million investment from the Bill & Melinda Gates Foundation

Seattle, September 6, 2017—Building on decades of innovation in vaccine development and immunization, PATH announced today it has received a $120 million grant from the Bill & Melinda Gates Foundation to further strengthen its PATH Center for Vaccine Innovation and Access (CVIA), which works across every stage of vaccine research, development, and introduction for diseases in low-resource settings.

PATH also announced that several global experts in vaccine development and introduction have joined PATH CVIA to advance these critical vaccine efforts.

"We are excited to continue our long-standing partnership with the Bill & Melinda Gates Foundation to develop and introduce vaccines for the families and communities that need them most," commented Steve Davis, president and CEO of PATH. "We are working on vaccines against over a dozen deadly diseases and partnering with governments and companies around the world to save lives and improve health through vaccine innovation and immunization."

CVIA operates across the entire vaccine development and delivery spectrum—from preclinical research on novel candidates through pivotal clinical evaluations and, ultimately, innovative approaches for new vaccine introduction.

"From specific vaccine successes against Meningitis A and Japanese encephalitis to game-changing immunization supply chain technologies like the vaccine vial monitor, PATH has an impressive track record in saving lives through vaccine innovations," commented Trevor Mundel, president of Global Health for the Bill & Melinda Gates Foundation. "We are delighted to support CVIA, a center of excellence for vaccine development and introduction."…

PATH welcomed new experts in vaccine development and introduction who have joined the CVIA leadership team:

:: Fred Cassels, global head, Enteric and Diarrheal Diseases, served as chief of the Enteric and Hepatic Diseases Branch at the National Institutes of Health.

:: Bruce Innis, global head, Respiratory Infections and Maternal Immunization, brings his experience with GlaxoSmithKline, most recently as vice president and senior vaccine development leader for Influenza and Dengue Vaccines, and previous experience with the US Army as chief of the Department of Virus Diseases at the Walter Reed Army Institute of Research.

:: Harshvardhan (Hersh) Mehta, global head, Development (Chemistry, Manufacturing, and Controls), has over two decades of experience in senior roles for Merck, Sanofi, MedImmune, and Roche.

:: Karen Midthun, global head, Regulatory, served as director of the US Food and Drug Administration's (FDA's) Center for Biologics Evaluation and Research between 2009 and 2016 and served during the prior 16 years in progressively senior roles within FDA.

"It is an honor to welcome these world-renowned vaccine authorities to PATH," commented David C. Kaslow, PATH vice president for Essential Medicines and global head of CVIA. "Together with PATH's existing expertise, these new leaders will help PATH and our partners bring lifesaving and affordable vaccines to people living in the poorest communities around the world."

PATH veterans taking on new roles to round out the CVIA leadership team include:
:: Deborah Atherly, global head, Policy, Access, & Introduction.
:: Ashley Birkett, global head, Malaria Vaccines.
:: Jorge Flores, global head, Clinical.
:: John Konz, global head, Integrated Portfolio & Financial Management.
:: Jessica Milman, managing director, CVIA.
: Katya Spielberg, global head, Finance & Contract Management.

"We're proud of our two decades of developing and delivering vaccines that are saving millions of lives," added Steve Davis, president and CEO of PATH. "With this solid base of funding and this world-class team, PATH can do even more to combat age-old scourges and emerging threats."

::::::
::::::

NCI's Douglas R. Lowy and John T. Schiller to receive 2017 Lasker Award
Wednesday, September 6, 2017
Two scientists at the National Cancer Institute (NCI) will receive the 2017 Lasker-DeBakey Clinical Medical Research Award for their significant research leading to the development of human papillomavirus (HPV) vaccines. The award is the country's most prestigious biomedical research prize, and will be presented to John T. Schiller, Ph.D., of NCI's Center for Cancer Research (CCR), and Douglas R. Lowy, M.D., also in CCR and acting director of NCI. NCI is part of the National Institutes of Health.

Dr. Lowy's and Dr. Schiller's collaborative work to understand and prevent HPV infection has led to the approval of three preventive HPV vaccines by the U.S. Food and Drug Administration.

"I'm incredibly proud of this much-deserved honor bestowed upon John and Doug for their foundational discoveries that led to the creation of HPV vaccines," said NIH Director Francis S. Collins, M.D., Ph.D. "Thanks to their extraordinary efforts, we have the potential to eliminate cervical cancer and greatly reduce other HPV-associated cancers. This award reinforces the critical importance of basic research in the development of medical breakthroughs like the HPV vaccine."

Efforts to develop these vaccines were spurred by an urgent public health need. Infection with certain types of HPV causes almost all cases of cervical cancer, the fourth most common cancer in women worldwide. More than 500,000 women around the world are diagnosed with cervical cancer each year, many of them at relatively young ages. More than 275,000 women die from the disease annually, and most of these deaths occur in developing regions of the world. Without successful interventions, the worldwide incidence and mortality from cervical cancer is

projected to increase indefinitely. HPV infection also causes anal, vulvar, vaginal, penile, and oropharyngeal cancers.

While working to address the need to prevent HPV-caused cancers in the 1990s, a team led by Drs. Schiller and Lowy discovered that the proteins that form the outer shell of HPV could form virus-like particles (VLPs) that closely resemble the original virus but are not infectious. They found that these VLPs could trigger the immune system to produce high levels of protective antibodies that can neutralize the virus in a subsequent infection. The VLPs ultimately became the basis of the three current HPV vaccines: Gardasil, Gardasil 9, and Cervarix.

Drs. Lowy and Schiller say this breakthrough was possible because of earlier discoveries, and that it demonstrates the importance of long-term, publicly supported basic research.

"People have known since the 19th century that cervical cancer behaved as a sexually transmitted disease, but it wasn't until the discoveries of Harald zur Hausen and his colleagues that HPV was found to be the cause. Development of the vaccines built upon decades of publicly supported research," said Dr. Lowy. "We're honored to be included with the other luminaries who have received this prestigious award."

It is estimated that widespread uptake of current HPV vaccines could reduce the incidence and mortality of cervical cancer by more than two-thirds. Researchers are currently working to find ways to encourage uptake of the vaccines by lowering costs and simplifying the logistics of vaccination, especially in the developing world where most cervical cancers occur.

"This year's Lasker Medical Research Awards illustrate the power of biomedical investigation to advance human health, whether scientists probe basic questions that reveal unforeseen truths or pursue goal-directed projects," said Joseph L. Goldstein, M.D., chairman of the Department of Molecular Genetics at University of Texas Southwestern Medical Center, and chair of the Lasker Medical Research Awards Jury. "Douglas Lowy and John Schiller discovered that a single protein from the capsule of papillomaviruses can self-assemble into virus-like particles, paving the way for HPV vaccines that prevent cervical and other cancers." …

::::::
::::::

Emergencies

POLIO

Public Health Emergency of International Concern (PHEIC)
Polio this week as of 6 September 2017 [GPEI]
:: Summary of newly-reported viruses this week: Pakistan: one new wild poliovirus type 1 (WPV1) case from Karachi (pre-notified last week) and four environmental WPV1-positive samples.

::::::
::::::

WHO Grade 3 Emergencies [to 9 September 2017]

Yemen –
Weekly epidemiology bulletin, 28 August–3 September 2017
Highlights
Country and Governorate level (cumulative)
- The cumulative total from 27 April 2017 to 3 September 2017 is 612,009 suspected cases and 2,047 associated deaths (CFR 0.33). 25,883 suspected cases and 11 associated deaths were reported in W35.
- The national attack rate is 215 per 10,000. The five governorates with the highest cumulative attack rates per 10,000 remain Amran (540), Al Mahwit (504), Al Dhale'e (482), Abyan (388) and Hajjah (288).
- Children under 5 years old represent 24% of total suspected cases.
- In total, 11,414 rapid diagnostic tests (RDT) have been performed which represents 18.7% coverage. The coverage for culture is 16.9%.
Conclusions and actions taken
- WHO is on full alert and is following the evolution of the outbreak each day in close collaboration with local health authorities.
- Initial investigations began on 31 August. A key objective is to determine whether the numbers are accurate and whether the increase in suspected cases is, in fact, caused by cholera, another diarrhoeal disease, or another reason.
- Three teams of international medical experts and epidemiologists are conducting investigations in Aden, Al-Hudaydah and Ibb governorates.
- These teams are traveling out to the worst-affected districts in these three governorates, visiting local health authorities and health facilities to determine the reason for this sudden escalation in suspected cases.

Iraq - *No new announcements identified.*
Nigeria - *No new announcements identified.*
South Sudan - *No new announcements identified.*
The Syrian Arab Republic - *No new announcements identified.*

::::::

WHO Grade 2 Emergencies [to 9 September 2017]
Cameroon - *No new announcements identified*
Central African Republic - *No new announcements identified.*
Democratic Republic of the Congo - *No new announcements identified*
Ethiopia - *No new announcements identified.*
Libya - *No new announcements identified.*
Myanmar - *No new announcements identified*
Niger - *No new announcements identified.*
Ukraine - *No new announcements identified.*

::::::
::::::

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.

Syrian Arab Republic

:: 8 Sep 2017 Children caught up in the aftermath of violence in Syria and Iraq need immediate protection and assistance

Iraq - *No new announcements identified.*
Yemen - *No new announcements identified.*

::::::

UN OCHA – Corporate Emergencies

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.

Nigeria

:: Nigeria – North-East Flash Update No. 2 – Cholera Outbreak, 6 September 2017

Ethiopia

:: Key Messages: Ethiopia humanitarian context , 8 September 2017

Third consecutive poor/failed rains exacerbate drought conditions in Ethiopia: Southern and eastern Ethiopia continue to battle the impact of drought caused by the Indian Ocean-related weather systems in 2016, exacerbated by below average spring rains this year - the third consecutive poor/failed rains in the southern and eastern regions. The drought conditions are compounded by disease outbreaks, large scale loss of livelihood assets and displacement.

The number of people requiring food assistance has increased by 3 million: At least 8.5 million people require relief food assistance in the second half of 2017, up from 5.6 million at the beginning of the year. In addition, 3.6 million moderately malnourished children and pregnant and lactating mothers will require supplementary feeding, at least 376,000 children are expected to become severely acutely malnourished and some 10.5 million people will not have regular access to safe drinking water until the end of 2017. Separately, some 4 million Public Works clients of the Productive Safety Net Program (PSNP) will require sustained assistance to the end of 2017. Although not formally included in the Mid-Year Review of Ethiopia's 2017 Appeal, the financial requirements are estimated at US$300 million.

International partners scaling-up operations in support of the Government-led response: The UN and NGO partners have scaled-up response and further strengthened leadership and coordination functions in support of the Government-led response. With available, albeit quickly depleting resources, operational partners are pushing forward with the integrated, adaptable and scaled-up response in response to the rapidly changing humanitarian context and priorities.

Growing needs are outpacing the level of funding: with Government and donor contributions and commitments in 2016 and 2017, the initial projected requirement for Ethiopia's humanitarian response was well funded. But an increase in those needing assistance following the Mid-Year Review means that there will at least be an outstanding gap of US$417.6 million for the rest of the year. Additional funding is urgently needed, especially at this critical juncture

where any further delay in food assistance will have a domino effect on levels of malnutrition, and associated health complications particularly amongst children and the internally displaced.

The impact of back to back droughts underscores the need to prioritize development programming: The Government and its international partners are also investing in long-term development cooperation programs to reduce vulnerability to drought, including through accelerated urban development and industrial transformation. Ethiopia's investments in basic services, including health, education and agriculture extension services, have helped make the poorest and most food insecure more resilient but much remains to be done. Increased joint planning between humanitarian and development systems is essential. Studies have shown that every dollar spent on resilience programming saves three dollars in humanitarian assistance.

:: 4 Sep 2017 Ethiopia Humanitarian Bulletin Issue 35 | 21 August – 3 September 2017

DRC - *No new announcements identified*
Somalia - *No new announcements identified*

::::::
::::::

Cholera

[See WHO Grade 3 Emergencies – Yemen above]

WHO issues updated cholera vaccines position paper
29 August 2017

In an updated position paper on cholera vaccines published in the August edition of the Weekly Epidemiological Record, WHO incorporates recent developments in the field of cholera and provides revised guidance on the target populations for immunization.

::::::

Joint Press Release – Sierra Leone Ministry of Health and Sanitation, WHO, UNICEF, Gavi
Sierra Leone to begin cholera vaccination drive in disaster-affected areas
More than 1 million doses of Gavi-funded cholera vaccines heading to Sierra Leone after severe flooding and landslides
FREETOWN, 5 September 2017 - Half a million people in Sierra Leone will be able to access the life-saving cholera vaccine within weeks, the country's Ministry of Health and Sanitation announced.

The vaccines will be received from the Gavi-funded global stockpile and will target areas particularly affected by August's floods and deadly landslide, which resulted in over 500 confirmed deaths. Hundreds more people were reported missing in the wake of the disaster, according to the Office of National Security, while thousands were displaced from their homes. "Cholera is a devastating disease which spreads quickly and kills fast, and risks can increase after severe flooding," said Dr. Brima Kargbo, Chief Medical Officer at the Ministry of Health and Sanitation. "The oral cholera vaccine is an important tool to better protect the country and affected communities against the disease, which will ultimately save lives."

Two rounds of vaccination are planned to run from September and will be delivered in 25 affected communities by the Government of Sierra Leone with support from Gavi Alliance, the World Health Organization (WHO), UNICEF, the UK Government and other health partners.

"The devastating floods and landslides which ravaged Sierra Leone throughout August have left the country dangerously vulnerable to water-borne disease outbreaks," said Dr. Seth Berkley, CEO of Gavi Alliance. "Access to safe water and sanitation is limited, and the public health system, still recovering after the 2014 Ebola outbreak, is stretched. These lifesaving vaccines, alongside urgent support to improve safe water and sanitation, have the potential to prevent a cholera outbreak before it has the chance to bring more misery to a country that has already suffered enough."

The decision to send cholera vaccines from the global stockpile was taken quickly on 31st August by the International Coordinating Group (ICG) for Vaccine Provision following the deployment of a WHO specialist to the country. The full quantity of the vaccine (1,036,300 doses for two rounds) is set to arrive in Freetown on 7th September through UNICEF's global Supply Division.

WHO recommends that vaccination against cholera be considered in emergencies and other high-risk scenarios where there are increased threats of outbreaks, when combined with standard prevention and control measures for the disease. These measures include readiness to provide adequate testing and treatment, steps to ensure access to safe water and sanitation, and community mobilization to engage the public in preventing infection.

Sierra Leone's last major cholera outbreak, in 2012, killed 392 people and infected more than 25,000 others.

Gavi, WHO, UNICEF and partners are working with the Ministry of Health and Sanitation to help plan and implement the campaign, which will make the vaccine available free-of-cost to disaster-affected populations, while supporting ongoing cholera prevention and preparedness.

::::::

UNICEF [to 9 September 2017]
https://www.unicef.org/media/
Selected News Releases
Growing concern for nearly 1.4 million internally displaced people living in cholera 'hotspots' as outbreak spreads in northeast Nigeria
MAIDUGURI/DAKAR/NEW YORK 7 September 2017 – There is growing concern for the health and wellbeing of 1.4 million displaced people, including 350,000 children under the age of five, living in cholera 'hotspots' in northeast Nigeria, UNICEF warned today.

The outbreak occurs as ongoing violence and military efforts against insurgents in the region have displaced more than 1.7 million people and left over 3.6 million without adequate access to basic water services.

An estimated 28 people have died from cholera, while 837 are suspected to have been infected with the disease, including at least 145 children under the age of five. The outbreak was first

identified in the Muna Garage camp for the displaced in Maiduguri, the state capital of northeast Nigeria's Borno state. The outbreak spread quickly to as many as six other locations across the state. UNICEF and partners have rapidly scaled up their response to the cholera outbreak, as heavy rains multiply the risk of disease and malnutrition for conflict affected children.

"Cholera is difficult for young children to withstand at any time, but becomes a crisis for survival when their resilience is already weakened by malnutrition, malaria and other waterborne diseases," said UNICEF Deputy Representative in Nigeria, Pernille Ironside. "Cholera is one more threat amongst many that children in northeast Nigeria are battling today in order to survive."

A cholera preparedness plan has been in place since before the rains began. Religious leaders, community heads and local volunteers have been mobilised to encourage good hygiene practices and help refer suspected cases to health facilities. Water
is chlorinated at access points in the camps and across host communities in an effort to curb the spread of disease as the rainy season continues.

Since the outbreak was confirmed there has been a closely coordinated water, sanitation and hygiene (WASH) and health rapid response, driven by the Borno State Government with support from WHO, UNICEF and international non-governmental organisations, including the setup of a cholera treatment centre at the Muna Garage Camp.

As the impact of the rains is felt, UNICEF has also scaled up its nutrition and child health programmes across the three northeast Nigerian states most affected by conflict. So far this year, UNICEF has treated over 110,000 children suffering from severe acute malnutrition, distributed nearly 120,000 mosquito nets and provided emergency primary health care services to over three million people in these states. The response continues despite increased security concerns, reduced access because of floods and a heavily damaged health system.

Even in the face of a deadly cholera outbreak, the WASH sector remains critically underfunded. To date, UNICEF has only received 49% of funding needed to provide two million people with access to clean water, one of the main interventions that can protect children from deadly waterborne diseases and offer some protection against the threat of malnutrition.

::::::

Nigeria: MSF Scales Up Efforts to Contain Cholera Outbreak in Maiduguri
September 01, 2017
NEW YORK/MAIDUGURI, NIGERIA, SEPTEMBER 1, 2017—The international medical humanitarian organization Doctors Without Borders/Médecins Sans Frontières (MSF) is scaling up treatment and prevention to curb the spread of cholera in Maiduguri in Borno State, Nigeria.

::::::
::::::

Editor's Note:
We will cluster these recent emergencies as below and continue to monitor the WHO webpages for updates and key developments.

EBOLA/EVD [to 9 September 2017]
http://www.who.int/ebola/en/
- *No new announcements identified.*

MERS-CoV [to 9 September 2017]
http://www.who.int/emergencies/mers-cov/en/
DONS
Middle East respiratory syndrome coronavirus (MERS-CoV) – Saudi Arabia
6 September 2017
Between 13 and 30 August 2017, the National IHR Focal Point of Saudi Arabia reported 12 additional cases of Middle East respiratory syndrome coronavirus (MERS-CoV), including one death and, and one death from a previously reported case…

Yellow Fever [to 9 September 2017]
http://www.who.int/csr/disease/yellowfev/en/
30 August 2017
African Health Ministers pledge firm actions against yellow fever
Victoria Falls, Zimbabwe,: African health ministers currently meeting for the 67th Session of the World Health Organization (WHO) Regional Committee in Zimbabwe have agreed on ten priority actions to guide countries to eliminate Yellow Fever (YF) epidemics by 2026…
Introducing the Framework for implementing the Global Strategy to Eliminate YF on behalf of the WHO Regional Director for Africa, Dr Matshidiso Moeti, the Acting Director for the WHO Health Emergencies Programme, Dr Zabulon Yoti informed the ministers that low YF vaccination rates, limited vaccine supply and emergency stockpile, inadequate implementation of the International Health Regulations (IHR 2005), climate change, rapid urbanization are some of the factors that have put over 440 million people at risk. The World Health Organization estimates that in one of the worst outbreaks in 2013, there were about 170 000 severe YF cases in Africa that led to about 60 000 deaths. The massive pre-emptive vaccination of over 30 million people during the recent outbreak in Angola and DRC was a measure that averted an epidemic that could have been of similar magnitude to that of 2013.
"Yellow Fever is still a serious public health risk within and outside the Region. With a single dose of YF vaccine per person, elimination of YF epidemics is indeed a quick public health gain. Country ownership and leadership is critical to protect people at risk through preventive and routine vaccination," he said…

Zika virus [to 9 September 2017]
http://www.who.int/csr/disease/zika/en/
- *No new announcements identified.*

Sanofi Statement on Zika Vaccine License
Sep 1, 2017
On August 17, 2017, Sanofi Pasteur was informed by The Biomedical Advanced Research and Development Authority (BARDA) within the Office of the Assistant Secretary for Preparedness and Response in the U.S. Department of Health and Human Services that they completed an assessment of all Zika-related projects they are funding and have decided to focus on a more limited set of goals and deliverables.

As a result of their review, Sanofi Pasteur has been notified of BARDA's decision to "de-scope" its contract with Sanofi Pasteur to fund the manufacture and clinical development of an inactivated Zika vaccine and will limit its funding to a case definition and surveillance study as well as any activities required to advance our vaccine development to a point where development would be indefinitely paused but could be restarted if the epidemic re-emerges. Consequently, Sanofi does not intend to continue development of, or seek a license from, the Walter Reed Army Institute of Research for the Zika vaccine candidate at this time.

We are proud of our contributions to the productive collaboration to date, which will result in significant contributions to science and to others who may continue pursuing licensure for an effective and safe Zika vaccine.

One of the ways Sanofi Pasteur will continue to contribute to the field of knowledge on Zika is by completing, with partial BARDA support, the ongoing case definition and surveillance study which will provide guidance on Zika epidemiology and diagnosis that can be applicable to any vaccine subsequently developed to prevent the disease. The case-definition and surveillance study is currently being conducted in 4 countries—Colombia, Honduras, Mexico, and Puerto Rico—and we are looking to enroll 2,400 volunteers.

Given the evolving epidemiology of Zika, which has seen a profound reduction in the number of new Zika cases in the United States and around the world in 2017, as well as the results of the Phase I study, it was necessary to substantially extend our projected vaccine development timelines. Therefore, we respect BARDA's decision to re-purpose limited resources to meet their priorities.

In February 2016, Sanofi Pasteur urgently responded to the WHO's declaration of a public-health emergency of international concern (PHEIC). In doing so, we assumed significant opportunity costs and delayed other internal pipeline priorities to lend our expertise to the Zika global public-health threat. The epidemiology of the disease has changed significantly since that time, but we continue to believe that public-private partnerships are the right model to address these public health challenges and should continue to play a major role in response to emerging infectious diseases.

::::::
::::::

WHO & Regional Offices [to 9 September 2017]

Seventieth session of WHO Regional Committee for South-East Asia
6 September 2017 -- Dr Tedros outlined the priorities of WHO and several fast track initiatives during the transition period.

Highlights
Hurricane Irma: WHO taking measures to provide support
September 2017 – WHO country offices in the Caribbean are taking preventive measures to provide the necessary support to the authorities, and a team of infrastructure, engineering, and administrative specialists has been prepared to support the immediate assessment and response to the impact of countries located on the path of hurricane Irma.

A child's search to treat kidney disease in Yemen

September 2017 – Accessing dialysis has always been tricky in Yemen, the poorest country in the Middle East. And now conflict has created additional challenges, with health facilities facing a shortage of supplies, and travel complicated by checkpoints and insecurity. In the midst of an economic crisis, it is exceptionally difficult for all patients to access the treatment they need.

Transforming primary care services in Kazakhstan

September 2017 – Kazakhstan is on track to achieve the global target of a 25% reduction in premature mortality from noncommunicable diseases by 2025. The main causes of years of life lost due to premature death in 2013 in Kazakhstan were ischaemic heart disease, cerebrovascular disease and self-harm.

::::::

Weekly Epidemiological Record, 8 September 2017, vol. 92, 36 (pp. 521–536)

:: Cholera, 2016
:: Performance of acute flaccid paralysis (AFP) surveillance and incidence of poliomyelitis, 2017
:: The International Health Regulations (IHR) – 10 years of global public health security

::::::

WHO Regional Offices

Selected Press Releases, Announcements

WHO African Region AFRO

:: Osun State distributes over two million Long Lasting Insecticide Treated Nets for malaria control. 08 September 2017
:: South Sudan launches the Expanded Special Project for Elimination of Neglected Tropical Diseases (ESPEN)
:: WHO Intensifies Efforts to Contain Cholera Outbreak in Borno State 08 September 2017
:: WHO deploys Polio personnel to forestall disease outbreaks in Benue state communities affected by floods. 07 September 2017
:: WHO and the Carter Center supports the cash reward programme for reporting of Guinea Worm Disease in Tonj State, South Sudan 07 September 2017
:: South Sudan's malaria toll highlights disease burden in war-torn nation 06 September 2017
:: Looking out for Acute Watery Diarrhoea in Somali region: A day in the life of a World Health Organization (WHO) surveillance officer in Ethiopia's Somali region 05 September 2017
:: Sierra Leone to begin cholera vaccination drive in disaster-affected areas 05 September 2017
:: African Health Ministers pledge firm actions against yellow fever 04 September 2017

WHO Region of the Americas PAHO

:: Measles and Rubella Initiative Champion Award presented to PAHO (09/07/2017)

WHO South-East Asia Region SEARO

:: Prepare well to rapidly detect, respond to vector-borne diseases: WHO
:: Ministry of Health Maldives gets WHO Excellence in Public Health Award

WHO European Region EURO

:: Breakthrough for men's health: WHO and experts kick off development of strategy and report 08-09-2017

For the first time, WHO is undertaking a strategy entirely focused on the health and well-being of men and boys. A group of experts from a range of fields and disciplines related to men's health came together on 5 September 2017 at UN City in Copenhagen, Denmark, to launch the development of the strategy for the WHO European Region.

:: European leaders set new roadmap to achieve 2030 Agenda and improve 900 million people's health and well-being 07-09-2017

Health leaders gather at the annual meeting of the WHO Regional Committee for Europe. In Budapest, Hungary on 11–14 September 2017 they will take decisions on health priorities that will have an impact on the health and well-being of about 900 million people in the WHO European Region, including in the European Union, central and eastern Europe, the Caucasus and central Asia.

:: Towards tobacco-free generations: emerging threats for children in the Region 06-09-2017

Several Member States in the WHO European Region are moving towards becoming "tobacco-free", which means having a smoking prevalence of 5% or less. To achieve this, countries must address a number of tobacco-related issues that specifically impact children, and work to protect children from the harmful effects of tobacco.

::L Ukraine: 20% reduction in smokers since 2010 04-09-2017

The results of the Global Adult Tobacco Survey (GATS) recently released in Ukraine reveal a 20% reduction in the number of smokers over the past 7 years. Following WHO recommendations, Ukraine has strengthened its anti-tobacco legislation resulting in this reduction in the proportion of the population who smoke.

:: The Ashgabat Statement: Europe commits to staying malaria free 04-09-2017

The WHO European Region is marking an important step on the road from malaria control to malaria elimination, and then on to maintaining malaria-free status, with the launch of The Ashgabat Statement: Preventing the re-establishment of malaria transmission in the WHO European Region. The Statement is being formally presented on 4 September in Moscow, Russian Federation.

WHO Eastern Mediterranean Region EMRO

:: Effective preparedness for hajj 2017 (1438 H) pays off: no major public health events reported

3 September 2017, Makkah – The World Health Organization (WHO) today concluded a successful mission to Saudi Arabia to support the Ministry of Health in ensuring a safe hajj season. No disease outbreak or public health event of concern was reported among the nearly 2.4 million pilgrims visiting the holy sites during this year's hajj, in spite of an increased number of pilgrims performing hajj this year.

WHO's mission to Saudi Arabia was conducted as part of a range of activities undertaken by the Organization to support countries in ensuring effective implementation of the core public health capacities required under the International Health Regulations (IHR 2005) to prevent, detect and rapidly respond to any public health threat before it becomes an event of international concern. These activities are also outlined in the Regional Director's roadmap

which details a set of strategic actions to guide WHO's work with Member States for the next five year…

WHO Western Pacific Region
- *No new announcements identified.*

::::::
::::::

CDC/ACIP [to 9 September 2017]
http://www.cdc.gov/media/index.html

MMWR News Synopsis for September 7, 2017
:: **Update: Increase in Human Infections with Novel Avian Influenza A(H7N9) Viruses During the Fifth Epidemic and Pandemic Preparedness — China, October 1, 2016–August 18, 2017**
Avian influenza A(H7N9) viruses remain a pandemic concern. The fifth annual epidemic of Asian Lineage Avian Influenza A(H7N9) Viruses in China is marked by extensive geographic spread in poultry and in humans. The number of human infections reported in the fifth epidemic is almost as many as were reported during the previous four epidemics combined. The increased number of human infections appears to be associated with wider geographic spread and higher prevalence of Asian H7N9 viruses among poultry rather than any increased incidence of poultry-to-human or human-to-human spread. Human infections with Asian H7N9 viruses from poultry are rare, and no efficient or sustained human-to-human transmission has been detected. Among all influenza viruses assessed using CDC's Influenza Risk Assessment Tool, the Asian H7N9 virus is ranked as the influenza virus with the highest potential pandemic risk. Continued vigilance is important to identify changes in the virus that have epidemiologic implications, such as increased transmission from poultry to humans or transmission between humans.

::::::
::::::

Announcements

AERAS [to 9 September 2017]
http://www.aeras.org/pressreleases
No new digest content identified.

BMGF - Gates Foundation [to 9 September 2017]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified.

CEPI – Coalition for Epidemic Preparedness Innovations [to 9 September 2017]
http://cepi.net/
[Undated]
Call: Platform technologies to enable rapid vaccine development for epidemic prone infections

CEPI is pleased to announce its second funding opportunity for the development of vaccines against epidemic infectious diseases.

In this two-step call, CEPI asks for submission of proposals for vaccine platform technologies that enable rapid vaccine development, rapid scale up, and quick time to immunity for reactive use in outbreaks of novel or previously unrecognised viruses. Proposals can include new platforms with the potential for rapidly making a vaccine using materials generally regarded as safe (GRAS), or those compressing the time of an existing (proven) platform to make it more responsive in an unknown threat situation. During the proposed project period, we encourage developers to target the following timelines:

Target a 16-week timeframe from identification of antigen to product release for clinical trials Target a 6-week timeframe from administration of first dose to achievement of clinical benefit (i.e. immune response likely to result in clinical benefit)

Produce 100,000 vaccine doses within 8 weeks to impact an emerging outbreak (i.e. from Go-decision to scale-up to production, fill, finish, and release)

Timeline

Deadline for submission of step 1 proposals: 4 p.m. CEST 17 October 2017

Call text for proposals on platform technology PDF FORMAT - 272KB Download

EDCTP [to 9 September 2017]
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
No new digest content identified.

European Medicines Agency [to 9 September 2017]
http://www.ema.europa.eu/ema/
04/09/2017
Reporting side effects of medicines

EMA launches survey to assess whether patients and doctors are aware of the arrangements for reporting of side effects ...

European Vaccine Initiative [to 9 September 2017]
http://www.euvaccine.eu/news-events
No new digest content identified.

FDA [to 9 September 2017]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
What's New in Biologics
Influenza Virus Vaccine for the 2017-2018 Season
Updated: 9/7/2017

Fondation Merieux [to 9 September 2017]
http://www.fondation-merieux.org/
September 5, 2017, Bamako, Mali
First day of school for the BAMS training in medical applied biology

On 1 October 2007[?2017?], the first year of students – professionals of biological analysis, arrived at the Charles Mérieux Center for Infectious Disease in Bamako in order to follow the new qualified laboratory technicians training: BAMS.

The Mérieux Foundation knows that the improvement of the quality in public health needs the strengthening of capacities in medical biology: it has decided, in partnership with ESTBB, to create the BAMS training.

16 laboratory technicians selected among 85 candidates will follow until May 2008 theoretical and practical teaching in the fields of immunology, biochemistry, bacteriology, parasitology, virology and molecular biology. The teachers of these courses are Malian and French.

The technicians chosen for this first year of BAMS work in different national health centres of reference in Mali and Burkina Faso. The Ministry of Health in Mali accepted that the technicians follow the training because the health professionals were committed to return to work in their original laboratories in order to contribute to the quality of the public health.

Gavi [to 9 September 2017]
http://www.gavi.org/library/news/press-releases/
05 September 2017
Sierra Leone to begin cholera vaccination drive in disaster-affected areas

More than 1 million doses of Gavi-funded cholera vaccines heading to Sierra Leone after severe flooding and landslides.
[See Cholera above for more detail]

GHIT Fund [to 9 September 2017]
https://www.ghitfund.org/
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 9 September 2017]
http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=
No new digest content identified.

Hilleman Laboratories [to 9 September 2017]
http://www.hillemanlabs.org/
No new digest content identified.

Human Vaccines Project [to 9 September 2017]
http://www.humanvaccinesproject.org/media/press-releases/
No new digest content identified.

IAVI [to 9 September 2017]
https://www.iavi.org/
No new digest content identified.

IVAC [to 9 September 2017]
http://www.jhsph.edu/research/centers-and-institutes/ivac/index.html
No new digest content identified.

IVI [to 9 September 2017]
http://www.ivi.int/
September 4, 2017
IVI Hosts 17th International Vaccinology Course in Seoul on September 4-8
:: Aeras Chief Medical Officer Dr. Ann Ginsberg delivers closing plenary speech on TB vaccine development; Korea University Prof. Woo-joo Kim to address Vaccine Preparedness and Response to Emerging Infectious Diseases
:: 112 participants from 19 countries including trainees participate in this year's event hosted jointly by IVI, KOHI
:: 35 experts from international agencies, research institutions, universities, industry and non-profit organizations, including IVI, WHO and U.S. NIH serve as faculty members

MSF/Médecins Sans Frontières [to 9 September 2017]
http://www.doctorswithoutborders.org/news-stories/press/press-releases
Press release
Nigeria: MSF Scales Up Efforts to Contain Cholera Outbreak in Maiduguri
September 01, 2017
NEW YORK/MAIDUGURI, NIGERIA, SEPTEMBER 1, 2017—The international medical humanitarian organization Doctors Without Borders/Médecins Sans Frontières (MSF) is scaling up treatment and prevention to curb the spread of cholera in Maiduguri in Borno State, Nigeria.

NIH [to 9 September 2017]
http://www.nih.gov/news-events/news-releases
September 7, 2017
NIH awards nearly $100 million for Autism Centers of Excellence program
— Program supports large research projects aimed at understanding and developing interventions for autism spectrum disorder

NCI's Douglas R. Lowy and John T. Schiller to receive 2017 Lasker Award
September 6, 2017 — Scientists honored for their research leading to the development of HPV vaccines
[See Milestones above for more detail]

Zika virus selectively infects and kills glioblastoma cells in mice
September 5, 2017 — Researchers describe the impact of ZIKV on glioblastoma cells in human tissue samples and mice

Drug combination reduces risk of HIV infection among teen males
September 5, 2017 — NIH-funded study suggests PrEP therapy, approved for adults, is safe for youth.

PATH [to 9 September 2017]
http://www.path.org/news/index.php
Press release / September 08, 2017
PATH and Walter Reed Army Institute of Research announce largest-ever controlled malaria infection study
Study in adult US volunteers to investigate which changes in the RTS,S malaria vaccine candidate regimen increase protection the most

Press release | September 06, 2017
PATH boosts leadership in developing and introducing urgently needed vaccines
PATH's Center for Vaccine Innovation and Access attracts top global talent and additional $120 million investment from the Bill & Melinda Gates Foundation
[See Milestones above for more detail]

Sabin Vaccine Institute [to 9 September 2017]
http://www.sabin.org/updates/pressreleases
No new digest content identified.

UNAIDS [to 9 September 2017]
http://www.unaids.org/en
No new digest content identified.

The Vaccine Confidence Project [to 9 September 2017]
http://www.vaccineconfidence.org/
No new digest content identified.

Wellcome Trust [to 9 September 2017]
https://wellcome.ac.uk/news
News / Published: 4 September 2017
Wellcome joins £52 million global drive on antibiotic resistance
Wellcome is committing up to £1 million as part of a £52 million (€56.5m) global pledge to tackle antibiotic resistance.
Latest funding for the Global Antibiotic Research and Development Partnership (opens in a new tab) (GARDP) was announced today by the German government.
Other countries and foundations pledging funds include the Netherlands, Switzerland, South Africa, Luxembourg and the UK government.
Jeremy Farrar, Wellcome's Director, said: "We must all work together to address the deadly threat of drug-resistant infections, which already kill 700,000 people a year. Wellcome is delighted to work with Germany and other partners to ensure communities around the world are better protected against this and other serious health threats."…

::::::

BIO [to 9 September 2017]
https://www.bio.org/insights/press-release
No new digest content identified.

DCVMN – Developing Country Vaccine Manufacturers Network [to 9 September 2017]
http://www.dcvmn.org/
25 September 2017 to 28 September 2017
DCVMN Annual General Meeting
Seoul / Korea

IFPMA [to 9 September 2017]
http://www.ifpma.org/resources/news-releases/

No new digest content identified.

PhRMA [to 9 September 2017]
http://www.phrma.org/press-room
No new digest content identified.

* * * *

Reports/Research/Analysis/Commentary/Conferences/Meetings/Book Watch/Tenders

Vaccines and Global Health: The Week in Review has expanded its coverage of new reports, books, research and analysis published independent of the journal channel covered in Journal Watch below. Our interests span immunization and vaccines, as well as global public health, health governance, and associated themes. If you would like to suggest content to be included in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org

Ebola research agenda

Infectious Diseases Data Observatory (IDDO)

Help design a collaborative research agenda to inform and inspire analyses using data from the Ebola data sharing platform. You can contribute your ideas on research priorities which address knowledge gaps with new evidence to improve patient care and outbreak response.

Construction of the Ebola data sharing platform is currently under way with available clinical and laboratory data, and will later include epidemiological data.

We want to hear from you, the research, health and humanitarian communities, about what the priority research questions are. Please download our Ebola Data Sharing Platform: Draft Research Agenda for Public Consultation and contribute to the development of a research agenda which maximises the impact of available data.

Massive Ebola data site planned to combat outbreaks

Nature | News 04 September 2017
Amy Maxmen
An international partnership seeks African leadership to organize information about the disease.

More than 11,000 people died when Ebola tore through West Africa between 2014 and 2016, and yet clinicians still lack data that would enable them to reliably identify the disease when a person first walks into a clinic. To fill that gap and others before the next outbreak hits, researchers are developing a platform to organize and share Ebola data that have so far been scattered beyond reach.

The information system is coordinated by the Infectious Diseases Data Observatory (IDDO), an international research network based at the University of Oxford, UK, and is expected to launch by the end of the year. At a meeting to discuss Ebola on 7–9 September in Conakry, Guinea, the team heading the platform will seek input from West African scientists, health officials and advocacy groups.

"We are looking for West African leadership in this initiative," says Laura Merson, associate director of the IDDO.

Africans must be involved in the platform's creation so that they can not only use the existing data, but also improve their capacity to conduct research during future outbreaks, says John

Amuasi, an infectious-diseases researcher at the Kumasi Centre for Collaborative Research in Tropical Medicine in Ghana and a member of the platform's steering committee. A true partnership would also lessen the general public's mistrust of scientists, he adds….

* * * *

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 focus 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 01, 2017 Volume 45, Issue 9, p939-1056, e91-e102
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
September 2017 Volume 53, Issue 3, p275-404, e79-e122
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
September 2017 107(9
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
Volume 97, Issue 3, 2017
http://www.ajtmh.org/content/current
Editorials
The Fogarty International Center is Essential to Global Health Security
Author: John Edward Porter
https://doi.org/10.4269/ajtmh.17-0597

Let's Eliminate Diseases, Not Institutes: The Case for the Fogarty International Center
Authors: Philip J. Rosenthal, Karen A. Goraleski, N. Regina Rabinovich and Patricia F. Walker

https://doi.org/10.4269/ajtmh.17-0601

Congressman John E. Fogarty: A Champion for Global Health
Author: Mary Fogarty McAndrew
https://doi.org/10.4269/ajtmh.17-0612

Advocating for the Fogarty International Center: An Unsung Hero for Global Health Research and Development
Author: Jamie Bay Nishi
https://doi.org/10.4269/ajtmh.17-0611

Articles
Classification and Visualization of Physical and Chemical Properties of Falsified Medicines with Handheld Raman Spectroscopy and X-Ray Computed Tomography
Authors: Tomoko Kakio, Naoko Yoshida, Susan Macha, Kazunobu Moriguchi, Takashi Hiroshima, Yukihiro Ikeda, Hirohito Tsuboi and Kazuko Kimura
https://doi.org/10.4269/ajtmh.16-0971
Analytical methods for the detection of substandard and falsified medical products (SFs) are important for public health and patient safety. Research to understand how the physical and chemical properties of SFs can be most effectively applied to distinguish the SFs from authentic products has not yet been investigated enough. Here, we investigated the usefulness of two analytical methods, handheld Raman spectroscopy (handheld Raman) and X-ray computed tomography (X-ray CT), for detecting SFs among oral solid antihypertensive pharmaceutical products containing candesartan cilexetil as an active pharmaceutical ingredient (API). X-ray CT visualized at least two different types of falsified tablets, one containing many cracks and voids and the other containing aggregates with high electron density, such as from the presence of the heavy elements. Generic products that purported to contain equivalent amounts of API to the authentic products were discriminated from the authentic products by the handheld Raman and the different physical structure on X-ray CT. Approach to investigate both the chemical and physical properties with handheld Raman and X-ray CT, respectively, promise the accurate discrimination of the SFs, even if their visual appearance is similar with authentic products. We present a decision tree for investigating the authenticity of samples purporting to be authentic commercial tablets. Our results indicate that the combination approach of visual observation, handheld Raman and X-ray CT is a powerful strategy for nondestructive discrimination of suspect samples.

Annals of Internal Medicine
5 September 2017 Vol: 167, Issue 5
http://annals.org/aim/issue
[New issue; No digest content identified]

BMC Cost Effectiveness and Resource Allocation
http://resource-allocation.biomedcentral.com/
(Accessed 9 September 2017)
Research
Cost-effectiveness of human papillomavirus vaccination in Germany

Our model results suggest that routine HPV vaccination of 12-year-old girls with three doses is likely to be cost-effective in Germany. Due to the additional impact on genital warts, the quadrivalent vaccine appeared to be more cost-effective than the bivalent vaccine. A 2-dose schedule of the quadrivalent vaccine might even lead to cost savings when adopting a societal perspective. The cost-effectiveness of additional vaccination of boys was highly dependent on the coverage in girls.
Oliver Damm, Johannes Horn, Rafael T. Mikolajczyk, Mirjam E. E. Kretzschmar, Andreas M. Kaufmann, Yvonne Deleré, Bernhard Ultsch, Ole Wichmann, Alexander Krämer and Wolfgang Greiner
Published on: 4 September 2017

BMJ Global Health
January 2017; volume 2, issue 1
http://gh.bmj.com/content/2/1?current-issue=y
[Reviewed earlier]

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 9 September 2017)
Research article
What do we know about the needs and challenges of health systems? A scoping review of the international literature
While there is an extensive literature on Health System (HS) strengthening and on the performance of specific HSs, there are few exhaustive syntheses of the challenges HSs are facing worldwide. This paper reports the findings of a scoping review aiming to classify the challenges of HSs investigated in the scientific literature. Specifically, it determines the kind of research conducted on HS challenges, where it was performed, in which health sectors and on which populations. It also identifies the types of challenge described the most and how they varied across countries.
Federico Roncarolo, Antoine Boivin, Jean-Louis Denis, Rejean Hébert and Pascale Lehoux
BMC Health Services Research 2017 17:636
Published on: 8 September 2017

Research article
Care-managers' professional choices: ethical dilemmas and conflicting expectations
Care-managers are responsible for the public administration of individual healthcare decisions and decide on the volume and content of community healthcare services given to a population.
Siri Tønnessen, Gøril Ursin and Berit Støre Brinchmann
BMC Health Services Research 2017 17:630
Published on: 7 September 2017

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 9 September 2017)
[No new digest content identified]

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 9 September 2017)
[No new digest content identified]

BMC Medicine
http://www.biomedcentral.com/bmcmed/content
(Accessed 9 September 2017)
Research article
Cost-effectiveness analysis of quadrivalent seasonal influenza vaccines in England
The cost-effectiveness of quadrivalent vaccine programmes is an open question. The original analysis that supported the paediatric programme only considered a trivalent live attenuated vaccine (LAIV). The cost-effectiveness of the QIIV to other patients has not been established. We sought to estimate the cost-effectiveness of these programmes, establishing a maximum incremental total cost per dose of quadrivalent vaccines over trivalent vaccines.
Dominic Thorrington, Edwin van Leeuwen, Mary Ramsay, Richard Pebody and Marc Baguelin
Published on: 8 September 2017

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 9 September 2017)
[No new digest content identified]

BMC Public Health
http://bmcpublichealth.biomedcentral.com/articles
(Accessed 9 September 2017)
Research article
An assessment of healthcare professionals' knowledge about and attitude towards influenza vaccination in Freetown Sierra Leone: a cross-sectional study
Vaccinating healthcare professionals against influenza is considered an effective infection control measure. However, there is a low uptake of influenza vaccine among healthcare professionals around the globe....
Peter Bai James, Inayat Ur Rehman, Abudulai Jawo Bah, Michael Lahai, Christine Princess Cole and Tahir Mehmood Khan
BMC Public Health 2017 17:692
Published on: 5 September 2017

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 9 September 2017)
Original article *Open Access*
International tuberculosis research collaborations within Asia

James S. Molton, Shweta Singh, Ling Jun Chen and Nicholas I. Paton
BMC Research Notes 2017 10:462
Published on: 7 September 2017

Abstract

Background

Asia bears more than half the global tuberculosis (TB) burden. Economic development in the region has increased available funding for biomedical research and opportunity for collaboration. We explored the extent of international tuberculosis research collaborations between institutions within Asia.

Methods

We conducted a Pubmed search for all articles with tuberculosis in the title published during a 12 month period with at least one author affiliation listed in Asia, then identified international collaborations from institution websites and internet searches.

Results

We identified 99 international collaborations involving an institution within Asia, of which only 8 (8.1%) were collaborations between Asian institutions. The remainder were with institutions outside of Asia.

Conclusions

The paucity of intra-Asian international research collaboration represents a lost opportunity to optimise regional research funding, capacity building and the development of an Asia-relevant TB research agenda.

BMJ Open
September 2017 - Volume 7 - 9
http://bmjopen.bmj.com/content/current
[Reviewed earlier]

Bulletin of the World Health Organization
Volume 95, Number 9, September 2017, 609-664
http://www.who.int/bulletin/volumes/95/9/en/
[Reviewed earlier]

Child Care, Health and Development
September 2017 Volume 43, Issue 5 Pages 627–782
http://onlinelibrary.wiley.com/doi/10.1111/cch.v43.5/issuetoc
[Reviewed earlier]

Clinical and Experimental Vaccine Research
Volume 6(2); July 2017
http://ecevr.org/
[Reviewed earlier]

Clinical Therapeutics

August 2017 Volume 39, Issue 8, Supplement, e1-e110
http://www.clinicaltherapeutics.com/issue/S0149-2918(17)X0008-8
The Proceedings of the 13th Congress of the European Association for Clinical Pharmacology and Therapeutics
[Reviewed earlier]

Complexity
November/December 2016 Volume 21, Issue S2 Pages 1–642
http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.S2/issuetoc
[Reviewed earlier]

Conflict and Health
http://www.conflictandhealth.com/
[Accessed 9 September 2017]
[No new digest content identified]

Contemporary Clinical Trials
Volume 60, Pages 1-126 (September 2017)
http://www.sciencedirect.com/science/journal/15517144/60?sdc=1
[New issue; No digest content identified]

Current Opinion in Infectious Diseases
October 2017 - Volume 30 - Issue 5
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
TROPICAL AND TRAVEL-ASSOCIATED DISEASES
Edited by Joseph M. Vinetz and Yukari C. Manabe
Dengue vaccines: implications for dengue control
Robinson, Matthew L.; Durbin, Anna P.
Current Opinion in Infectious Diseases . 30(5):449-454, October 2017.
Abstract:
Purpose of review: Dengue, the most common arbovirus, is an increasingly significant cause of morbidity worldwide. After decades of research, an approved tetravalent dengue vaccine is finally available. Models constructed using recently available vaccine efficacy data allow for a data-driven discussion of the potential impact of dengue vaccine deployment on global control.
Recent findings: Phase 3 efficacy trials demonstrated that the approved dengue vaccine, chimeric yellow fever–dengue–tetravalent dengue vaccine, has an efficacy of 60% against dengue illness of any severity. However, among dengue unexposed recipients, vaccination offers limited efficacy and may increase dengue severity. The WHO consequently recommends dengue vaccination for populations in which 70% of intended recipients are dengue seropositive. Models predict that routine childhood dengue vaccine may reduce dengue burden, but over time, population-level impact may be limited. Additional vaccine candidates in late-stage development may not suffer from the same limitations as chimeric yellow fever–dengue–tetravalent dengue vaccine.

Summary: The efficacy and safety profile of the recently approved dengue vaccine is favorable only in previously dengue exposed recipients, which limits its potential for global control. Future work must evaluate the approved vaccine's long-term durability, efficacy of other late phase vaccine candidates, and potential for vector control efforts to work synergistically with vaccine deployment.

Influenza immunization of pregnant women in resource-constrained countries: an update for funding and implementation decisions

Ortiz, Justin R.; Neuzil, Kathleen M.

Current Opinion in Infectious Diseases . 30(5):455-462, October 2017.

Abstract:

Purpose of review: In 2018, Gavi, the Vaccine Alliance, is expected to review the strategy of maternal influenza immunization for potential investment in low-income countries.

Recent findings: Clinical trial data confirm the efficacy of maternal influenza immunization to prevent influenza disease in both mothers and their infants during the first months of life. Trial and observational data indicate no significant adverse events in mothers or newborns. High-quality disease burden data, particularly for seasonal influenza in low-income and middle-income countries, are limited. Thus, the anticipated impact of maternal influenza immunization programs on severe illness is unclear. However, assessments of the public health value of investment in maternal influenza immunization should extend beyond calculations of disease prevention and include broader effects such as improving health systems for antenatal care delivery, preventing inappropriate antibacterial prescribing, building a platform for other vaccines to be used during pregnancy, and strengthening systems to regulate, procure, and distribute influenza vaccines in response to a future pandemic.

Summary: A global investment in a maternal influenza immunization strategy would prevent influenza disease in pregnant women and their infants. It would also provide additional public health value by strengthening antenatal care systems and improving country pandemic preparedness.

Steady progress toward a malaria vaccine

Lyke, Kirsten E.

Current Opinion in Infectious Diseases . 30(5):463-470, October 2017.

Abstract:

Purpose of review: Great progress has been made in reducing malaria morbidity and mortality, yet the parasite continues to cause a startling 200 million infections and 500000 deaths annually. Malaria vaccine development is pushing new boundaries by steady advancement toward a licensed product.

Recent findings: Despite 50 years of research, the complexity of Plasmoidum falciparum confounds all attempts to eradicate the organism. This very complexity has pushed the boundaries of vaccine development to new heights, yet it remains to be seen if an affordable vaccine can provide durable and high-level protection. Novel vaccines such as RTS,S/AS01E are on the edge of licensure, but old techniques have resurged with the ability to deliver vialed, whole organism vaccines. Novel adjuvants, multistage/multiantigen approaches and transmission blocking vaccines all contribute to a multipronged battle plan to conquer malaria.

Summary: Vaccines are the most cost-effective tools to control infectious diseases, yet the complexity of malaria has frustrated all attempts to develop an effective product. This review concentrates on recent advances in malaria vaccine development that lend hope that a vaccine can be produced and malaria eradicated.

Impact of rotavirus vaccines in low and middle-income countries
Sindhu, Kulandaipalayam Natarajan Chella; Babji, Sudhir; Ganesan, Santhosh Kumar
Current Opinion in Infectious Diseases . 30(5):473-481, October 2017.
Abstract:
Purpose of review: Rotavirus vaccines are playing a pivotal role in improving lives of infants and young children in low and middle-income countries (LMICs). Many of these countries have adopted the vaccine into their routine immunization, whereas others are considering introduction. This article provides an update on the impact of rotavirus vaccines in LMICs on morbidity and mortality in children aged less than 5 years, and their cost-effectiveness.
Recent findings: The WHO, in 2013, updated its recommendation to prioritize introduction of rotavirus vaccines in the routine immunization schedule, without age restrictions. Despite the decreased efficacy of the vaccines in LMICs, data from Sub-Saharan Africa have demonstrated a decrease in rotavirus-related morbidity, with some sites reporting an indirect protective effect on children age ineligible to receive the vaccine. Even with improvements in sanitation, nutritional status in children, and other health-related indices in LMICs, the use of rotavirus vaccines will play an important role in preventing rotavirus-related gastroenteritis. Economic models predict a reduction in economic burden because of rotavirus-related health costs, making vaccine introduction cost-effective in resource-constrained settings.
Summary: Increasing evidence from impact studies shows the significant impact of rotavirus vaccination on hospitalizations and economic burden because of rotavirus gastroenteritis in LMICs. Universal rotavirus vaccination is recommended, and introductions should be monitored by robust surveillance systems to measure effectiveness and impact.

Developing World Bioethics
August 2017 Volume 17, Issue 2 Pages 61–140
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2017.17.issue-2/issuetoc
[Reviewed earlier]

Development in Practice
Volume 27, Issue 6
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Disasters
October 2017 Volume 41, Issue 4 Pages 629–851
http://onlinelibrary.wiley.com/doi/10.1111/disa.2017.41.issue-4/issuetoc
[New issue; No digest content identified]

EMBO Reports
01 September 2017; volume 18, issue 9
http://embor.embopress.org/content/18/9?current-issue=y
Science & Society
The reproducibility "crisis"- Reaction to replication crisis should not stifle innovation

Philip Hunter
[Initial text]
The debate over a reproducibility crisis has been simmering for years now, amplified by growing concerns over a number of reproducibility studies that have failed to replicate previous positive results. Additional evidence from larger meta-analysis of past papers also points to a lack of reproducibility in biomedical research with potentially dire consequences for drug development and investment into research. One of the largest meta-analyses concluded that low levels of reproducibility, at best around 50% of all preclinical biomedical research, were delaying lifesaving therapies, increasing pressure on research budgets and raising costs of drug development [1]. The paper claimed that about US$28 billion a year was spent largely fruitlessly on preclinical research in the USA alone…

Emerging Infectious Diseases
Volume 23, Number 9—September 2017
http://wwwnc.cdc.gov/eid/
[Reviewed earlier]

Epidemics
Volume 19, Pages 1-84 (June 2017)
http://www.sciencedirect.com/science/journal/17554365
[Reviewed earlier]

Epidemiology and Infection
Volume 145 - Issue 12 - September 2017
https://www.cambridge.org/core/journals/epidemiology-and-infection/latest-issue
[Reviewed earlier]

The European Journal of Public Health
Volume 27, Issue 4, 1 August 2017
https://academic.oup.com/eurpub/issue/27/4
[Reviewed earlier]

Global Health Action
Volume 10, 2017 – Supplement 2
http://www.tandfonline.com/toc/zgha20/10/1?nav=tocList
[Reviewed earlier]

Global Health: Science and Practice (GHSP)
June 27, 2017, 5 (2)
http://www.ghspjournal.org/content/current
[Reviewed earlier]

Global Public Health
Volume 12, 2017 Issue 10
http://www.tandfonline.com/toc/rgph20/current
[Reviewed earlier]

Globalization and Health
http://www.globalizationandhealth.com/
[Accessed 9 September 2017]
[No new digest content identified]

Health Affairs
September 2017; Volume 36, Issue 9
http://content.healthaffairs.org/content/current
Issue Focus: Market Concentration
[New issue; No digest content identified]

Health and Human Rights
Volume 19, Issue 1, June 2017
http://www.hhrjournal.org/
[Reviewed earlier]

Health Economics, Policy and Law
Volume 12 - Issue 4 - October 2017
https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue
SPECIAL ISSUE: Healthcare and Health Innovation in Europe: Regulating for public benefit or for commercial profit?
Editorial
Health care and health innovation in Europe: regulating for public benefit or for commercial profit?
Amanda Warren-Jones
DOI: https://doi.org/10.1017/S1744133117000081
Published online: 17 April 2017, pp. 403-40

Articles
Innovation, informed consent, health research and the Supreme Court: Montgomery v Lanarkshire – a brave new world?
Jean V. Mchale
DOI: https://doi.org/10.1017/S174413311700010X
Published online: 27 April 2017, pp. 435-452
Abstract
The Supreme Court decision in Montgomery v Lanarkshire ([2015] UKSC11) has been hailed as a landmark not least because the Court enshrines the doctrine of informed consent formally into English law for the first time in relation to medical treatment. This paper explores the decision

in Montgomery. It examines what its implications may be in the future for the consent process in relation to health research and innovative treatment and whether it may prove a watershed moment leading to changing dialogues and expectations in relation to consent. First, the paper explores the concept of 'informed consent' in clinical research as seen through international, Council of Europe and EU instruments. Second, it considers how English law currently governs the provision of information to research participants in the context of clinical research. It questions whether such an approach will be sustainable in the future. Third, it discusses the decision of the UK Supreme Court in Montgomery v Lanarkshire and asks what might be the impact of this Supreme Court decision in the health research context. It asks whether Montgomery may result in new approaches to consent in health research and innovative treatment.

Health Policy and Planning
Volume 32, Issue 7 September 2017
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Health Research Policy and Systems
http://www.health-policy-systems.com/content
[Accessed 9 September 2017]
Research
The SPARK Tool to prioritise questions for systematic reviews in health policy and systems research: development and initial validation
Groups or institutions funding or conducting systematic reviews in health policy and systems research (HPSR) should prioritise topics according to the needs of policymakers and stakeholders. The aim of this st...
Elie A. Akl, Racha Fadlallah, Lilian Ghandour, Ola Kdouh, Etienne Langlois, John N. Lavis, Holger Schünemann and Fadi El-Jardali
Health Research Policy and Systems 2017 15:77
Published on: 4 September 2017

Research
Doctoral level research and training capacity in the social determinants of health at universities and higher education institutions in India, China, Oman and Vietnam: a survey of needs
Research capacity is scarce in low- and middle-income country (LMIC) settings. Social determinants of health research (SDH) is an area in which research capacity is lacking, particularly in Asian countries. SD...
Farhad Ali, Arun Shet, Weirong Yan, Abdullah Al-Maniri, Salla Atkins and Henry Lucas
Health Research Policy and Systems 2017 15:76
Published on: 2 September 2017

Research
The research–policy–deliberation nexus: a case study approach

Decision-makers tend to make connections with researchers far too late in the game of public policy, expecting to find a retail store in which researchers are busy filling shop-front shelves with a comprehensi...
Camille La Brooy and Margaret Kelaher
Health Research Policy and Systems 2017 15:75
Published on: 2 September 2017

Humanitarian Exchange Magazine
http://odihpn.org/magazine/the-humanitarian-consequences-of-violence-in-central-america/
Number 69 June 2017
The humanitarian consequences of violence in Central America
[Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 13, Issue 8, 2017
http://www.tandfonline.com/toc/khvi20/current
[Reviewed earlier]

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 9 September 2017]
[No new digest content identified]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 9 September 2017]
[No new digest content identified]

International Health
Volume 9, Issue 5, 1 September 2017
http://inthealth.oxfordjournals.org/content/current
EDITORIALS
The Neglected Diseases: Will a 'New World Order' Reverse Global Gains?
Peter J. Hotez
International Health, Volume 9, Issue 5, 1 September 2017, Pages 267–268,
https://doi.org/10.1093/inthealth/ihx037
Extract
The concept of the 'new world order' refers to landmark historical events or changes in political thought, with resultant shifts in global power balances. Major new world order shifts in the 20th century include the formation and then collapse of the League of Nations, creating the United Nations after World War II, the Cold War, and the subsequent collapse of Communism. As we leave the 2010s and enter the 2020s, there are signs that yet another new world order is looming. Today we're witnessing an increasingly globalized Russia and China (through a new

'Belt and Road' initiative), with commensurate reversals or retreats from globalization by the United States, United Kingdom, and some other European nations. In...

Addressing challenges to human health in the Anthropocene epoch—an overview of the findings of the Rockefeller/Lancet Commission on Planetary Health
Andy Haines
International Health, Volume 9, Issue 5, 1 September 2017, Pages 269–271,
https://doi.org/10.1093/inthealth/ihx036
Extract
The report of the Rockefeller Foundation/Lancet Commission on Planetary Health1 described how human health ultimately depends on the state of the natural systems. It is complementary to the work of the Lancet Commission on Climate Change2 and takes a broader perspective on global environmental change, acknowledging that climate change is probably the single most important environmental change, but there are many others that can separately and in combination have wide ranging impacts on human health.

International Journal of Community Medicine and Public Health
Vol 4, No 9 (2017) September 2017
http://www.ijcmph.com/index.php/ijcmph/issue/view/26
[Reviewed earlier]

International Journal of Epidemiology
Volume 46, Issue 3, 1 June 2017
http://ije.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Human Rights in Healthcare
Vol. 10 Issue: 3 2017
http://www.emeraldinsight.com/toc/ijhrh/10/3
Special Issue: Physical and mental health in children and young people: two sides of the same coin
Editor(s): Lee Hudson and Deborah Christie
[Reviewed earlier]

International Journal of Infectious Diseases
September 2017 Volume 62, p1-126
http://www.ijidonline.com/issue/S1201-9712(17)X0008-8
[Reviewed earlier]

JAMA
September 5, 2017, Vol 318, No. 9, Pages 771-878
http://jama.jamanetwork.com/issue.aspx
Viewpoint

The Nuremberg Code 70 Years Later

Jonathan D. Moreno, PhD; Ulf Schmidt, PhD; Steve Joffe, MD, MPH
JAMA. 2017;318(9):795-796. doi:10.1001/jama.2017.10265
Abstract

Seventy years ago, on August 20, 1947, the International Medical Tribunal in Nuremberg, Germany, delivered its verdict in the trial of 23 doctors and bureaucrats accused of war crimes and crimes against humanity for their roles in cruel and often lethal concentration camp medical experiments. As part of its judgment, the court articulated a 10-point set of rules for the conduct of human experiments that has come to be known as the Nuremberg Code. Among other requirements, the code called for the "voluntary consent" of the human research subject, an assessment of risks and benefits, and assurances of competent investigators. These concepts have become an important reference point for the ethical conduct of medical research. Yet, there has in the past been considerable debate among scholars about the code's authorship, scope, and legal standing in both civilian and military science. Nonetheless, the Nuremberg Code has undoubtedly been a milestone in the history of biomedical research ethics.

Research Letter
September 5, 2017

Change in Medical Exemptions From Immunization in California After Elimination of Personal Belief Exemptions

Paul L. Delamater, PhD1; Timothy F. Leslie, PhD2; Y. Tony Yang, ScD, LLM, MPH3
Author Affiliations
JAMA. 2017;318(9):863-864. doi:10.1001/jama.2017.9242

California Senate bill (SB) 277 eliminated the personal belief exemption (PBE) provision from the state's school-entry vaccine mandates prior to the 2016-2017 school year. Previously, vaccine-hesitant parents could acquire a PBE for their child based on philosophical or religious beliefs. Now, the only pathway for an unvaccinated kindergartener to enter a public or private school in California is with a medical exemption (ME), which requires a written statement from a licensed physician describing the medical reasons that immunization is unsafe.1 Previously, MEs were only granted to children with a contraindication to vaccination; however, SB 277 gave physicians broader discretion to grant MEs for reasons other than a contraindication, including family medical history.2,3

JAMA Pediatrics
September 2017, Vol 171, No. 9, Pages 823-924
http://archpedi.jamanetwork.com/issue.aspx
Original Investigation

Public Health and Economic Consequences of Vaccine Hesitancy for Measles in the United States

Nathan C. Lo, BS; Peter J. Hotez, MD, PhD
JAMA Pediatr. 2017;171(9):887-892. doi:10.1001/jamapediatrics.2017.1695
Key Points

Question How does vaccine hesitancy affect annual measles cases and economic costs in the United States?

Findings In this modeling study of children (age 2-11 years), a 5% reduction in measles, mumps, and rubella vaccination coverage resulted in a 3-fold increase in annual measles cases with an additional US$2.1 million in public sector costs.

Meaning Even small declines in vaccination coverage in children owing to vaccine hesitancy may have substantial public health and economic consequences that will be larger when considering unvaccinated infants, adolescents, and adults.

Special Communication
Achieving an Optimal Childhood Vaccine Policy
Douglas J. Opel, MD, MPH; Jason L. Schwartz, PhD; Saad B. Omer, MBBS, PhD; et al.
JAMA Pediatr. 2017;171(9):893-896. doi:10.1001/jamapediatrics.2017.1868
Abstract
Policies to remove parents' ability to opt-out from school immunization requirements on the basis of religious or personal beliefs (ie, nonmedical exemptions) may be a useful strategy to increase immunization rates and prevent outbreaks of vaccine-preventable disease. However, there is uncertainty about the effectiveness of this strategy and the range of possible outcomes. We advocate for a more deliberative process through which a broad range of outcomes is scrutinized and the balance of values underlying the policy decision to eliminate nonmedical exemptions is clearly articulated. We identify 3 outcomes that require particular consideration before policies to eliminate nonmedical exemptions are implemented widely and outline a process for making the values underlying such policies more explicit.

JBI Database of Systematic Review and Implementation Reports
August 2017 - Volume 15 - Issue 8
http://journals.lww.com/jbisrir/Pages/currenttoc.aspx
[Reviewed earlier]

Journal of Community Health
Volume 42, Issue 4, August 2017
https://link.springer.com/journal/volumesAndIssues/10900
[Reviewed earlier]

Journal of Epidemiology & Community Health
September 2017 - Volume 71 - 9
http://jech.bmj.com/content/current
[Reviewed earlier]

Journal of Global Ethics
Volume 13, Issue 1, 2016
http://www.tandfonline.com/toc/rjge20/current
[Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 28, Number 3, August 2017
https://muse.jhu.edu/issue/36769
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 19, Issue 5, October 2017
https://link.springer.com/journal/10903/19/5/page/1
[New issue; No digest content identified]

Journal of Immigrant & Refugee Studies
Volume 15, Issue 3, 2017
http://www.tandfonline.com/toc/wimm20/current
Statelessness, Irregularity, and Protection in Southeast Asia
Introduction to the Special Issue
[Reviewed earlier]

Journal of Infectious Diseases
Volume 216, Issue 4 15 August 2017
https://academic.oup.com/jid/issue
EDITORIAL COMMENTARIES
Editor's Choice
Influenza Vaccines for Older Persons: Progress and Pitfalls
Kathleen M Neuzil; Wilbur H Chen
The Journal of Infectious Diseases, Volume 216, Issue 4, 15 August 2017, Pages 397–398,
https://doi.org/10.1093/infdis/jix285
Extract
Influenza causes annual epidemics of varying severity that affect persons of all ages. In the older adult population, influenza constitutes a particularly important public health burden. In population-based modeling studies in the United States, hospitalization rates are consistently highest among persons aged ≥65 years of age [1]. Similarly, deaths are much more frequent among older persons than younger persons. In a modeling analysis of population-based surveillance data covering the 2010–2011 through the 2012–2013 seasons in the United States, an estimated 71%–85% of influenza-associated deaths occurred among adults aged ≥65 years [2]. Among those 65 years and older, certain factors such as.
VIRUSES
Editor's Choice
The Importance of Frailty in the Assessment of Influenza Vaccine Effectiveness Against Influenza-Related Hospitalization in Elderly People
Melissa K Andrew; Vivek Shinde; Lingyun Ye; Todd Hatchette; François Haguinet ...
The Journal of Infectious Diseases, Volume 216, Issue 4, 15 August 2017, Pages 405–414,
https://doi.org/10.1093/infdis/jix282
Frailty has important impacts on influenza vaccine effectiveness (VE). Here, frailty was the most important confounder of VE, and not accounting for frailty underestimated VE. VE was high in nonfrail older adults, but diminished with increasing frailty.

Journal of Medical Ethics
September 2017 - Volume 43 - 9

http://jme.bmj.com/content/current
[Reviewed earlier]

Journal of Medical Internet Research
Vol 19, No 9 (2017): September
http://www.jmir.org/2017/9
[Reviewed earlier]

Journal of Medical Microbiology
Volume 66, Issue 9, September 2017
http://jmm.microbiologyresearch.org/content/journal/jmm/66/9
[New issue; No digest content identified]

Journal of Patient-Centered Research and Reviews
Volume 4, Issue 3 (2017)
http://digitalrepository.aurorahealthcare.org/jpcrr/
[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 6, Issue 3, 1 September 2017,
https://academic.oup.com/jpids/issue
[Reviewed earlier]

Journal of Pediatrics
September 2017 Volume 188, p1-318
http://www.jpeds.com/current
[New issue; No digest content identified]

Journal of Public Health Management & Practice
September/October 2017 - Volume 23 - Issue 5
http://journals.lww.com/jphmp/pages/default.aspx
[New issue; No digest content identified]

Journal of Public Health Policy
Volume 38, Issue 3, August 2017
https://link.springer.com/journal/41271/38/3/page/1
[Reviewed earlier]

Journal of the Royal Society – Interface
01 September 2017; volume 14, issue 134

http://rsif.royalsocietypublishing.org/content/current
[New issue; No digest content identified]

Journal of Travel Medicine
Volume 24, Issue 4, July-August 2017
https://academic.oup.com/jtm/issue/24/4
[Reviewed earlier]

Journal of Virology
September 2017, volume 91, issue 18
http://jvi.asm.org/content/current
Commentary
Protection against HIV Acquisition in the RV144 Trial
Ronald C. Desrosiers
University of Miami Miller School of Medicine, Miami, Florida, USA
Rozanne M. Sandri-Goldin, Editor
University of California, Irvine
ABSTRACT
Differences of opinion regarding whether there may, or may not, have been protective efficacy in the RV144 vaccine trial have important societal implications

The Lancet
Sep 09, 2017 Volume 390 Number 10099 p1005-1082 e22
http://www.thelancet.com/journals/lancet/issue/current
[New issue; No digest content identified]

Lancet Global Health
Sep 2017 Volume 5 Number 9 e838-e947
http://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

Lancet Infectious Diseases
Sep 2017 Volume 17 Number 9 p883-1002 e280-e305
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Lancet Public Health
Sep 2017 Volume 2 Number 9 e387-e437
http://thelancet.com/journals/lanpub/
[New issue; No digest content identified]

Lancet Respiratory Medicine
Sep 2017 Volume 5 Number 9 p667-760 e29
http://www.thelancet.com/journals/lanres/issue/current
[Reviewed earlier]

Maternal and Child Health Journal
Volume 21, Issue 9, September 2017
https://link.springer.com/journal/10995/21/8/page/1
Special Issue on Long Acting Reversible Contraception (LARC) in the Global Context
[Reviewed earlier]

Medical Decision Making (MDM)
Volume 37, Issue 7, October 2017
http://mdm.sagepub.com/content/current
[New issue; No digest content identified]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
June 2017 Volume 95, Issue 2 Pages 213–446
http://onlinelibrary.wiley.com/doi/10.1111/milq.2017.95.issue-2/issuetoc
[Reviewed earlier]

Nature
Volume 549 Number 7670 pp5-124 7 September 2017
http://www.nature.com/nature/current_issue.html
[New issue; No digest content identified]

Nature Medicine
September 2017, Volume 23 No 9 pp1005-1111
http://www.nature.com/nm/journal/v23/n8/index.html
Editorial
Children first - p1005
doi:10.1038/nm.4404
Drugs administered to children with cancer were typically developed under the assumption that childhood cancers are similar to their tissue-matched adult counterparts. Focusing on identifying and targeting alterations present specifically in childhood tumors will accelerate the development of tailored therapies and improve the prognosis of children with cancer.

Perspective
Functional precision cancer medicine—moving beyond pure genomics - pp1028 - 1035
Anthony Letai
doi:10.1038/nm.4389

The essential job of precision medicine is to match the right drugs to the right patients. In cancer, precision medicine has been nearly synonymous with genomics. However, sobering recent studies have generally shown that most patients with cancer who receive genomic testing do not benefit from a genomic precision medicine strategy. Although some call the entire project of precision cancer medicine into question, I suggest instead that the tools employed must be broadened. Instead of relying exclusively on big data measurements of initial conditions, we should also acquire highly actionable functional information by perturbing—for example, with cancer therapies—viable primary tumor cells from patients with cancer.

Nature Reviews Immunology
September 2017 Vol 17 No 9
http://www.nature.com/nri/journal/v17/n9/index.html
[New issue; No digest content identified]

New England Journal of Medicine
September 7, 2017 Vol. 377 No. 10
http://www.nejm.org/toc/nejm/medical-journal
Original Article
Effectiveness of a Third Dose of MMR Vaccine for Mumps Outbreak Control
Cristina V. Cardemil, M.D., M.P.H., Rebecca M. Dahl, M.P.H., Lisa James, R.N., M.S.N., Kathleen Wannemuehler, Ph.D., Howard E. Gary, Ph.D., Minesh Shah, M.D., M.P.H., Mona Marin, M.D., Jacob Riley, M.S., Daniel R. Feikin, M.D., Manisha Patel, M.D., and Patricia Quinlisk, M.D., M.P.H.
N Engl J Med 2017; 377:947-956 September 7, 2017 DOI: 10.1056/NEJMoa1703309
Conclusions
Students who had received a third dose of MMR vaccine had a lower risk of mumps than did those who had received two doses, after adjustment for the number of years since the second dose. Students who had received a second dose of MMR vaccine 13 years or more before the outbreak had an increased risk of mumps. These findings suggest that the campaign to administer a third dose of MMR vaccine improved mumps outbreak control and that waning immunity probably contributed to propagation of the outbreak. (Funded by the Centers for Disease Control and Prevention.)

Pediatrics
September 2017, VOLUME 140 / ISSUE 3
http://pediatrics.aappublications.org/content/140/3?current-issue=y
[Reviewed earlier]

Pharmaceutics
Volume 9, Issue 3 (September 2017)
http://www.mdpi.com/1999-4923/9/3
[Reviewed earlier]

PharmacoEconomics
Volume 35, Issue 9, September 2017
https://link.springer.com/journal/40273/35/9/page/1
[Reviewed earlier]

PLOS Currents: Disasters
http://currents.plos.org/disasters/
[Accessed 9 September 2017]
[No new digest content identified]

PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/
[Accessed 9 September 2017]
Research Article
Ecological Niche Modeling for Filoviruses: A Risk Map for Ebola and Marburg Virus Disease Outbreaks in Uganda
September 5, 2017 ·
Introduction: Uganda has reported eight outbreaks caused by filoviruses between 2000 to 2016, more than any other country in the world. We used species distribution modeling to predict where filovirus outbreaks are likely to occur in Uganda to help in epidemic preparedness and surveillance.
Methods: The MaxEnt software, a machine learning modeling approach that uses presence-only data was used to establish filovirus – environmental relationships. Presence-only data for filovirus outbreaks were collected from the field and online sources. Environmental covariates from Africlim that have been downscaled to a nominal resolution of 1km x 1km were used. The final model gave the relative probability of the presence of filoviruses in the study area obtained from an average of 100 bootstrap runs. Model evaluation was carried out using Receiver Operating Characteristic (ROC) plots. Maps were created using ArcGIS 10.3 mapping software.
Results: We showed that bats as potential reservoirs of filoviruses are distributed all over Uganda. Potential outbreak areas for Ebola and Marburg virus disease areas were predicted in West, Southwest and Central parts of Uganda, which corresponds to bat distribution and previous filovirus outbreaks areas. Additionally, the models predict the Eastern Uganda region and other areas that have not reported outbreaks before to be potential outbreak hotspots. Rainfall variables were the most important in influencing model prediction compared to temperature variables.
Conclusions: Despite the limitations in the prediction model due to lack of adequate sample records for outbreaks, especially for the Marburg cases, the model outputs provide a risk map to the Uganda surveillance system on filovirus outbreaks. The risk maps for potential filovirus outbreaks will aid in identifying areas to focus the filovirus surveillance for early detection and responses hence curtailing a pandemic. The results from this study also confirm previous findings that suggest that Filoviruses are mainly limited by the amount of rainfall received in an area.

PLoS Medicine
http://www.plosmedicine.org/

(Accessed 9 September 2017)
[No new digest content identified]

PLoS Neglected Tropical Diseases
http://www.plosntds.org/
(Accessed 9 September 2017)
Viewpoints
Rapid and accurate interpretation of dengue diagnostics in the context of dengue vaccination implementation: Viewpoints and guidelines issued from an experts group consultation
Elizabeth A. Hunsperger, Claudia N. Duarte dos Santos, Huong Thi Que Vu, Sutee Yoksan, Vincent Deubel
| published 07 Sep 2017 PLOS Neglected Tropical Diseases
https://doi.org/10.1371/journal.pntd.0005719

PLoS One
http://www.plosone.org/
[Accessed 9 September 2017]
Research Article
Health care utilization in general practice after HPV vaccination—A Danish nationwide register-based cohort study
Lene Wulff Krogsgaard, Claus Høstrup Vestergaard, Oleguer Plana-Ripoll, Tina Hovgaard Lützen, Mogens Vestergaard, Morten Fenger-Grøn, Bodil Hammer Bech, Dorte Rytter
Research Article | published 08 Sep 2017 PLOS ONE
https://doi.org/10.1371/journal.pone.0184658

Ethics approval in applications for open-access clinical trial data: An analysis of researcher statements to clinicalstudydatarequest.com
Derek So, Bartha M. Knoppers
Research Article | published 08 Sep 2017 PLOS ONE
https://doi.org/10.1371/journal.pone.0184491
Abstract
Although there are a number of online platforms for patient-level clinical trial data sharing from industry sponsors, they are not very harmonized regarding the role of local ethics approval in the research proposal review process. The first and largest of these platforms is ClinicalStudyDataRequest.com (CSDR), which includes over three thousand trials from thirteen sponsors including GlaxoSmithKline, Novartis, Roche, Sanofi, and Bayer. CSDR asks applicants to state whether they have received ethics approval for their research proposal, but in most cases does not require that they submit evidence of approval. However, the website does require that applicants without ethical approval state the reason it was not required. In order to examine the perspectives of researchers on this topic, we coded every response to that question received by CSDR between June 2014 and February 2017. Of 111 applicants who stated they were exempt from ethics approval, 63% mentioned de-identification, 57% mentioned the use of existing data, 33% referred to local or jurisdictional regulations, and 20% referred to the approvals obtained by the original study. We conclude by examining the experience of CSDR within the broader context of the access mechanisms and policies currently

being used by other data sharing platforms, and discuss how our findings might be used to help clinical trial data providers design clear and informative access documents.

Volunteer motivators for participating in HIV vaccine clinical trials in Nairobi, Kenya
Borna A. Nyaoke, Gaudensia N. Mutua, Rose Sajabi, Delvin Nyasani, Marianne W. Mureithi, Omu A. Anzala
Research Article | published 07 Sep 2017 PLOS ONE
https://doi.org/10.1371/journal.pone.0183788
Conclusion
The majority of volunteers in the HIV vaccine trials at our site were motivated by social benefits, suggesting that altruism can be a major contributor to participation in HIV vaccine studies. Personal benefits were a secondary motivator for the volunteers. The motivators to volunteer in HIV clinical trials were similar across ages, education level and gender. Education on what is needed (including volunteer participation) to develop an efficacious vaccine could be the key to greater volunteer motivation to participate in HIV vaccine clinical trials.

PLoS Pathogens
http://journals.plos.org/plospathogens/
[Accessed 9 September 2017]
[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 9 September 2017]
Biological Sciences - Immunology and Inflammation:
Increasing the breadth and potency of response to the seasonal influenza virus vaccine by immune complex immunization
Jad Maamary, Taia T. Wang, Gene S. Tan, Peter Palese, and Jeffrey V. Ravetch
PNAS 2017 ; published ahead of print September 5, 2017, doi:10.1073/pnas.1707950114
Significance
Influenza viruses remain a source of substantial morbidity and mortality worldwide. This is, in part, because current approaches to vaccination elicit strain-specific immune responses. Here, we report a method for targeting the Fc receptor, CD23, during vaccination with existing influenza vaccines (TIV) to increase the breadth and potency of the antibody response. Immunization with the TIV in complex with a monoclonal antibody that is broadly reactive against the hemagglutinin glycoprotein and engineered at the Fc domain to engage CD23 elicited antibodies that were 10-fold increased in potency and that protected against the potential pandemic influenza virus subtype H5N1 in vivo. This work demonstrates that broadly protective influenza immunity can be achieved using existing seasonal vaccines.
Abstract
The main barrier to reduction of morbidity caused by influenza is the absence of a vaccine that elicits broad protection against different virus strains. Studies in preclinical models of influenza virus infections have shown that antibodies alone are sufficient to provide broad protection against divergent virus strains in vivo. Here, we address the challenge of identifying an immunogen that can elicit potent, broadly protective, antiinfluenza antibodies by demonstrating

that immune complexes composed of sialylated antihemagglutinin antibodies and seasonal inactivated flu vaccine (TIV) can elicit broadly protective antihemagglutinin antibodies. Further, we found that an Fc-modified, bispecific monoclonal antibody against conserved epitopes of the hemagglutinin can be combined with TIV to elicit broad protection, thus setting the stage for a universal influenza virus vaccine.

Biological Sciences - Genetics:

Identification of individuals by trait prediction using whole-genome sequencing data

Christoph Lippert, Riccardo Sabatini, M. Cyrus Maher, Eun Yong Kang, Seunghak Lee, Okan Arikan, Alena Harley, Axel Bernal, Peter Garst, Victor Lavrenko, Ken Yocum, Theodore Wong, Mingfu Zhu, Wen-Yun Yang, Chris Chang, Tim Lu, Charlie W. H. Lee, Barry Hicks, Smriti Ramakrishnan, Haibao Tang, Chao Xie, Jason Piper, Suzanne Brewerton, Yaron Turpaz, Amalio Telenti, Rhonda K. Roby, Franz J. Och, and J. Craig Venter

PNAS 2017 ; published ahead of print September 5, 2017, doi:10.1073/pnas.1711125114

Significance

By associating deidentified genomic data with phenotypic measurements of the contributor, this work challenges current conceptions of genomic privacy. It has significant ethical and legal implications on personal privacy, the adequacy of informed consent, the viability and value of deidentification of data, the potential for police profiling, and more. We invite commentary and deliberation on the implications of these findings for research in genomics, investigatory practices, and the broader legal and ethical implications for society. Although some scholars and commentators have addressed the implications of DNA phenotyping, this work suggests that a deeper analysis is warranted.

Abstract

Prediction of human physical traits and demographic information from genomic data challenges privacy and data deidentification in personalized medicine. To explore the current capabilities of phenotype-based genomic identification, we applied whole-genome sequencing, detailed phenotyping, and statistical modeling to predict biometric traits in a cohort of 1,061 participants of diverse ancestry. Individually, for a large fraction of the traits, their predictive accuracy beyond ancestry and demographic information is limited. However, we have developed a maximum entropy algorithm that integrates multiple predictions to determine which genomic samples and phenotype measurements originate from the same person. Using this algorithm, we have reidentified an average of >8 of 10 held-out individuals in an ethnically mixed cohort and an average of 5 of either 10 African Americans or 10 Europeans. This work challenges current conceptions of personal privacy and may have far-reaching ethical and legal implications.

Prehospital & Disaster Medicine

Volume 32 - Issue 4 - August 2017

https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue

[Reviewed earlier]

Preventive Medicine

Volume 100, Pages 1-298 (July 2017)

http://www.sciencedirect.com/science/journal/00917435/100?sdc=1

[Reviewed earlier]

Proceedings of the Royal Society B
17 May 2017; volume 284, issue 1854
http://rspb.royalsocietypublishing.org/content/284/1854?current-issue=y
[Reviewed earlier]

Public Health Ethics
Volume 10, Issue 2 July 2017
http://phe.oxfordjournals.org/content/current
Symposium on Daniel Hausman's Valuing Health: Well-Being, Freedom and Suffering
[Reviewed earlier]

Public Health Reports
Volume 132, Issue 5, September/October 2017
http://phr.sagepub.com/content/current
Law and the Public's Health
Squaring State Child Vaccine Policy With Individual Rights Under the Individuals With Disabilities Education Act: Questions Raised in California
Ross D. Silverman, Wendy F. Hensel
First Published August 9, 2017; pp. 593–596

Qualitative Health Research
Volume 27, Issue 11, September 2017
http://qhr.sagepub.com/content/current
[Reviewed earlier]

Reproductive Health
http://www.reproductive-health-journal.com/content
[Accessed 9 September 2017]
[Reviewed earlier]

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
[No new digest content identified]

Risk Analysis
August 2017 Volume 37, Issue 8 Pages 1435–1628
http://onlinelibrary.wiley.com/doi/10.1111/risa.2017.37.issue-8/issuetoc

[Reviewed earlier]

Risk Management and Healthcare Policy
Volume 10, 2017
https://www.dovepress.com/risk-management-and-healthcare-policy-archive56
[Reviewed earlier]

Science
08 September 2017 Vol 357, Issue 6355
http://www.sciencemag.org/current.dtl
Policy Forum
NIH's massive health study is off to a slow start
By Jocelyn Kaiser
Science08 Sep 2017 : 955 Restricted Access
Summary
Nearly 3 years after then-President Barack Obama laid out a vision for perhaps the most ambitious and costly national health study ever, the U.S. National Institutes of Health (NIH) is still grappling with the complexities of the effort. The All of Us study aims to probe links between genes, lifestyle, and health by enrolling 1 million people for a long-term precision medicine study. NIH had once expected that by early 2017 it would enroll at least 10,000 participants for a pilot testing phase; it is up to just 2000. Its national kickoff, once envisioned for 2016 and then mid-2017, has been delayed as staff work out the complex logistics of the study, which is projected to cost $4.3 billion over 10 years. But study leaders say that for an endeavor this complex, delays are inevitable.

Panel urges steps to boost evidence-based policy
By Jeffrey Mervis
Science08 Sep 2017 : 959 Restricted Access
Summary
A blue-ribbon panel has recommended creating a secure, digital portal for researchers who want to study the impact of federal investments on health care, education, housing, labor markets, and other sectors of the U.S. economy. A report out this week by the congressionally mandated Commission on Evidence-Based Policymaking says the new mechanism would provide researchers with one-stop shopping while increasing privacy protection for everyone in the databases created to administer the federal programs. The portal, dubbed the National Secure Data Service, would help develop and implement new safeguards to keep information confidential. Each request for data would be thoroughly vetted, as would the researchers proposing the work. In addition, the data needed for an approved project would be assembled virtually, on a temporary basis, solely for that project. The commission also recommends beefing up the government's capacity to generate and use evidence on how its well programs work, including creating the position of chief evaluation officer, boosting training, and encouraging better coordination among the federal agencies that manage these administrative records.

Science Translational Medicine

06 September 2017 Vol 9, Issue 406
http://stm.sciencemag.org/
[New issue; No digest content identified]

Social Science & Medicine
Volume 180, Pages 1-196 (May 2017)
http://www.sciencedirect.com/science/journal/02779536/180
[Reviewed earlier]

Travel Medicine and Infectious Diseases
May-June, 2017 Volume 17
http://www.travelmedicinejournal.com/
[Reviewed earlier]

Tropical Medicine & International Health
August 2017 Volume 22, Issue 8 Pages 917–1052
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2017.22.issue-8/issuetoc
[Reviewed earlier]

Vaccine
Volume 35, Issue 38, Pages 5081-5224 (12 September 2017)
http://www.sciencedirect.com/science/journal/0264410X/35/38?sdc=1
Meeting report
The Typhoid Vaccine Acceleration Consortium (TyVAC): Vaccine effectiveness study designs: Accelerating the introduction of typhoid conjugate vaccines and reducing the global burden of enteric fever. Report from a meeting held on 26–27 October 2016, Oxford, UK
Pages 5081-5088
James E. Meiring, Malick Gibani, the TyVAC Consortium Meeting Group

Reviews
Targeting a global health problem: Vaccine design and challenges for the control of tick-borne diseases
Review Article
Pages 5089-5094
José de la Fuente, Marinela Contreras, Agustín Estrada-Peña, Alejandro Cabezas-Cruz
Abstract
It has been over twenty years since the first vaccines for the control of tick infestations became commercially available. These vaccines proved their efficacy and the potential of this approach for the control of tick-borne diseases (TBDs), which represent a growing burden for human and animal health worldwide. In all these years, research in this area has produced new tick-derived and pathogen-derived candidate protective antigens. However, the potential of vaccines for the control of TBDs has been underestimated due to major challenges to reduce tick infestations, pathogen infection, multiplication and transmission, tick attachment and feeding time and/or

host pathogen infection. Nevertheless, vaccines constitute the most safe and effective intervention for the control of TBDs in humans, domestic and wild animals.

Challenges in immunisation service delivery for refugees in Australia: A health system perspective

Original Research Article
Pages 5148-5155
A. Mahimbo, H. Seale, M. Smith, A. Heywood

Abstract
Background
Refugees are at risk of being under-immunised in their countries of origin, in transit and post-resettlement in Australia. Whilst studies have focused on identifying barriers to accessibility of health services among refugees, few focus on providers' perspectives on immunisation service delivery to this group. Health service providers are well placed to provide insights into the pragmatic challenges associated with refugee health service delivery, which can be useful in identifying strategies aimed at improving immunisation coverage among this group.
Methods
A qualitative study involving 30 semi-structured interviews was undertaken with key stakeholders in immunisation service delivery across all States and Territories in Australia between December 2014 and December 2015. Thematic analysis was undertaken.
Results
Variability in accessing program funding and vaccines, lack of a national policy for catch-up vaccination, unclear roles and responsibilities for catch-up, a lack of a central immunisation register and insufficient training among general practitioners were seen as the main challenges impacting on immunisation service delivery for refugees.
Conclusions
This study provides insight into the challenges that impact on effective immunisation service delivery for refugees. Deliberate strategies such as national funding for relevant vaccines, improved data collection nationally and increased guidance for general practitioners on catch-up immunisation for refugees would help to ensure equitable access across all age groups.

Oral cholera vaccine coverage in hard-to-reach fishermen communities after two mass Campaigns, Malawi, 2016

Original Research Article
Pages 5194-5200
Delphine Sauvageot, Christel Saussier, Abebe Gobeze, Sikhona Chipeta, Innocent Mhango, Gift Kawalazira, Martin A. Mengel, Dominique Legros, Philippe Cavailler, Maurice M'bang'ombe

Abstract
Context
From December 2015 to August 2016, a large epidemic of cholera affected the fishermen of Lake Chilwa in Malawi. A first reactive Oral Cholera Vaccines (OCV) campaign was organized, in February, in a 2 km radius of the lake followed by a preemptive one, conducted in November, in a 25 km radius. We present the vaccine coverage reached in hard-to-reach population using simplified delivery strategies.
Method
We conducted two-stage random-sampling cross-sectional surveys among individuals living in a 2 km and 25 km radius of Lake Chilwa (islands and floating homes included). Individuals aged 12 months and older from Machinga and Zomba districts were sampled: 43 clusters of 14

households were surveyed. Simplified strategies were used for those living in islands and floating homes: self- delivery and community-supervised delivery of the second dose. Vaccine coverage (VC) for at-least-two-doses was estimated taking into account sampling weights and design effects.
Results
A total of 1176 households were surveyed (2.7% of non-response). Among the 2833 individuals living in the 2 km radius of Lake and the 2915 in the 25 km radius: 457 (16.1%) and 239 (8.2%) lived in floating homes or on islands at some point in the year, respectively. For the overall population, VC was 75.6% and 54.2%, respectively. In the 2 km radius, VC was 92.2% for those living on the lake at some point of the year: 271 (64.8%) used the simplified strategies. The main reasons for non-vaccination were absence during the campaign and vaccine shortage. Few adverse events occurring in the 24 h following vaccination was reported.
Conclusions
We reached a high two-dose coverage of the most at-risk population using simplified delivery strategies. Because of the high fishermen mobility, regular catch-up campaigns or another strategy specifically targeting fishermen need to be assessed for more efficient vaccines use.

Impact of rotavirus vaccination on rotavirus and all-cause gastroenteritis in peri-urban Kenyan children

Original Research Article
Pages 5217-5223
Ernest Apondi Wandera, Shah Mohammad, Martin Bundi, Satoshi Komoto, James Nyangao, Cyrus Kathiiko, Erick Odoyo, Gabriel Miring'u, Koki Taniguchi, Yoshio Ichinose
Abstract
A monovalent rotavirus vaccine (RV1) was introduced into the National Immunization Program in Kenya in July 2014. We examined the impact of the vaccine on hospitalization for all-cause acute gastroenteritis (AGE) and rotavirus-specific AGE and strain distribution at a large referral hospital which serves a predominantly peri-urban population in Central Kenya. Data on rotavirus AGE and strain distribution were derived from ongoing hospital-based AGE surveillance. Hospital administrative data were used to compare trends in all-cause AGE. Pre-vaccine (July 2009–June 2014) and post-vaccine (July 2014–June 2016) periods were compared for changes in hospitalization for all-cause AGE and rotavirus AGE and strain distribution. Following the vaccine introduction, the proportion of children aged <5 years hospitalized for rotavirus declined by 30% (95% CI: 19–45%) in the first year and 64% (95% CI: 49–77%) in the second year. Reductions in rotavirus positivity were most pronounced among the vaccine-eligible group (<12 months) in the first year post-vaccination at 42% (95% CI: 28–56%). Greater reductions of 67% (95% CI: 51–79%) were seen in the second year in the 12–23 months age group. Similarly, hospitalizations for all-cause AGE among children <5 years of age decreased by 31% (95% CI: 24–40%) in the first year and 58% (95% CI: 49–67%) in the second year of vaccine introduction. Seasonal peaks of rotavirus and all-cause AGE were reduced substantially. There was an increased detection of G2P[4], G3P[6] and G3P[8], which coincided temporally with the timing of the vaccine introduction. Thus, introducing the rotavirus vaccine into the routine immunization program in Kenya has resulted in a notable decline in rotavirus and all-cause AGE hospitalizations in Central Kenya. This provides early evidence for public health policy makers in Kenya to support the sustained use of the rotavirus vaccine in routine immunizations.

Vaccine: Development and Therapy

https://www.dovepress.com/vaccine-development-and-therapy-archive111
(Accessed 9 September 2017)
[No new content]

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 9 September 2017)
Review
A Review of the Safety and Efficacy of Vaccines as Prophylaxis for *Clostridium difficile* Infections
by Mackenzie Henderson, Amanda Bragg, Germin Fahim, Monica Shah and Evelyn R. Hermes-DeSantis
Vaccines 2017, 5(3), 25; doi:10.3390/vaccines5030025 - 2 September 2017
Abstract
This review aims to evaluate the literature on the safety and efficacy of novel toxoid vaccines for the prophylaxis of Clostridium difficile infections (CDI) in healthy adults. Literature searches for clinical trials were performed through MEDLINE, ClinicalTrials.gov, and Web of Science using the keywords bacterial vaccines, Clostridium difficile, and vaccine. English-language clinical trials evaluating the efficacy and/or safety of Clostridium difficile toxoid vaccines that were completed and had results posted on ClinicalTrials.gov or in a published journal article were included. Six clinical trials were included. The vaccines were associated with mild self-reported adverse reactions, most commonly injection site reactions and flu-like symptoms, and minimal serious adverse events. Five clinical trials found marked increases in antibody production in vaccinated participants following each dose of the vaccine. Clinical trials evaluating C. difficile toxoid vaccines have shown them to be well tolerated and relatively safe. Surrogate markers of efficacy (seroconversion and geometric mean antibody levels) have shown significant immune responses to a vaccination series in healthy adults, indicating that they have the potential to be used as prophylaxis for CDI. However, more research is needed to determine the clinical benefits of the vaccines.

Value in Health
July–August 2017 Volume 20, Issue 7, p837-1002
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

* * * *

From Google Scholar & other sources: Selected Journal Articles, Newsletters, Dissertations, Theses, Commentary

Journal of Leukocyte Biology
Published online before print September 1, 2017, doi:
The potential of the microbiota to influence vaccine responses
DJ Lynn, B Pulendran -
Abstract

After clean water, vaccines are the primary public health intervention providing protection against serious infectious diseases. Antigen-specific antibody-mediated responses play a critical role in the protection conferred by vaccination; however these responses are highly variable among individuals. In addition, vaccine immunogenicity is frequently impaired in developing world populations, for reasons that are poorly understood. Although the factors that are associated with interindividual variation in vaccine responses are likely manifold, emerging evidence from mouse models and studies in human populations now suggests that the gut microbiome plays a key role in shaping systemic immune responses to both orally and parenterally administered vaccines. Herein, we review the evidence to date that the microbiota can influence vaccine responses and discuss the potential mechanisms through which these effects may be mediated. In addition, we highlight the gaps in this evidence and suggest future directions for research.

* * * *

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 9 September 2017
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 9 September 2017
[No new, unique, relevant content]

The Economist
http://www.economist.com/
Accessed 9 September 2017
[No new, unique, relevant content]

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

Biotech
Secretive Moderna yet to convince on $5bn valuation
Biotech hopes to turn our bodies into 'drug factories' able to create own cure
September 6, 2017

Middle East & North Africa
Yemenis fight for survival in country on the brink of famine
Millions of lives at risk as civil war leads to cholera epidemic and food shortages
September 8, 2017

Forbes
http://www.forbes.com/
Accessed 9 September 2017
Personalized Cancer Vaccine Company Raises $93 Million
Matthew Herper, Forbes Staff
Venture funds seeded by drug giant Eli Lilly and search behemoth Alphabet are giving $92.7 million to a startup that aims to use machine learning to create personalized treatments for lung and stomach cancer… Gritstone Oncology, based in Emeryville, Calif., will use the money to build a 43,000-square-foot manufacturing facility for its treatments, and to fund clinical trials in human beings, which have not begun yet and are expected to start in the middle of next year. Gritstone had previously raised $103 million; Andrew Allen, its chief executive, says that about $15 million of those funds remained. The new funds will take Gritstone through its first clinical trial results, expected at the end of 2019, Allen says…

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 9 September 2017
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/
Accessed 9 September 2017
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 9 September 2017
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 9 September 2017
Elements
Is Zika Gone for Good?
The virus caused widespread illness and fear in 2016, but it has virtually disappeared from the continental United States. Why?
By Jerome Groopman
September 2, 2017

New York Times
http://www.nytimes.com/
Accessed 9 September 2017
For Meningitis B Vaccines, Climbing Revenue, and Plenty of Skepticism
Two drug firms have developed pricey vaccines they are advertising widely on TV, raising concerns among experts that they are stoking parents' fears about a rare disease unnecessarily.
September 07, 2017 - By SHEFALI LUTHRA

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 9 September 2017
Business
Sanofi Stops Work on Two Zika Vaccines
By Peter Loftus
Sep. 6, 2017 5:41 pm ET
Drugmaker Sanofi has ended its development of two Zika virus vaccines, citing a decline in new infections and limits on U.S. government funding.

Washington Post
http://www.washingtonpost.com/
Accessed 9 September 2017
[No new, unique, relevant content]

Think Tanks et al

Brookings
http://www.brookings.edu/
Accessed 9 September 2017
[No new relevant content]

Center for Global Development
http://www.cgdev.org/page/press-center
Accessed 9 September 2017
[No new relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 9 September 2017
[No new relevant content]

CSIS
https://www.csis.org/
Accessed 9 September 2017
[No new relevant content]

* * * *
* * * *

* * * *
* * * *