Vaccines and Global Health: The Week in Review
11 June 2016
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 http://centerforvaccineethicsandpolicy.wordpress.com/. This blog allows full-text searching of over 8,000 entries.*

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

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Zika virus [to 11 June 2016]
Public Health Emergency of International Concern (PHEIC)
http://www.who.int/emergencies/zika-virus/en/

Zika situation report - 9 June 2016

Full report:
http://apps.who.int/iris/bitstream/10665/208877/1/zikasitrep_9Jun2016_eng.pdf?ua=1
Summary
:: As of 8 June 2016, 60 countries and territories report continuing mosquito-borne transmission of which:
…46 countries are experiencing a first outbreak of Zika virus since 2015, with no previous evidence of circulation, and with ongoing transmission by mosquitos.
…14 countries reported evidence of Zika virus transmission between 2007 and 2014, with ongoing transmission.
:: In addition, four countries or territories have reported evidence of Zika virus transmission between 2007 and 2014, without ongoing transmission: Cook Islands, French Polynesia, ISLA DE PASCUA – Chile and YAP (Federated States of Micronesia).
:: Ten countries have reported evidence of person-to-person transmission of Zika virus, probably via a sexual route.
:: In the week to 8 June 2016, no new country reported mosquito-borne or person-to-person Zika virus transmission.
:: As of 8 June 2016, microcephaly and other central nervous system (CNS) malformations potentially associated with Zika virus infection or suggestive of congenital infection have been reported by eleven countries or territories. Three of those reported microcephaly borne from mothers with a recent travel history to Brazil (Slovenia, United States of America) and Colombia (Spain), for one additional case the precise country of travel in Latin America is not determined.
:: In the context of Zika virus circulation, 13 countries and territories worldwide have reported an increased incidence of Guillain-Barré syndrome (GBS) and/or laboratory confirmation of a Zika virus infection among GBS cases.
:: As of 8 June, Cabo Verde has reported a total of six cases of microcephaly and other neurological abnormalities with serological indication of previous Zika infection.
Based on research to date, there is scientific consensus that Zika virus is a cause of microcephaly and GBS.
:: The global Strategic Response Framework launched by the World Health Organization (WHO) in February 2016 encompasses surveillance, response activities and research. An interim report has been published on some of the key activities being undertaken jointly by WHO and international, regional and national partners in response to this public health emergency. A revised strategy for the period July 2016 to December 2017 is currently being developed with partners and will be published in mid-June.
:: WHO has developed new advice and information on diverse topics in the context of Zika virus. WHO's latest information materials, news and resources to support corporate and programmatic risk communication, and community engagement are available online.

Guidance for health workers
:: Prevention of sexual transmission 7 June 2016

Zika Open [to 11 June 2016]
[Bulletin of the World Health Organization]
:: All papers available here
RESEARCH IN EMERGENCIES
Zika virus infection in pregnancy: a systematic review of disease course and complications
- Ezinne C Chibueze, Veronika Tirado, Katharina da Silva Lopes, Olukunmi O Balogun, Yo

Takemoto,a Toshiyuki Swa, Amarjargal Dagvadorj, Chie Nagata, Naho Morisaki, Clara Menendez, Erika Ota, Rintaro Mori, Olufemi T Oladapo
Posted: 9 June 2016
http://dx.doi.org/10.2471/BLT.16.178426
pdf, 240kb

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EBOLA/EVD [to 11 June 2016]
"Threat to international peace and security" (UN Security Council)

EBOLA VIRUS DISEASE – Situation Report - 10 JUNE 2016
[Excerpt]
Risk assessment:
Guinea and Liberia declared the end of the most recent outbreak of EVD on 1 and 9 June, respectively. The performance indicators suggest that Guinea, Liberia and Sierra Leone still have variable capacity to prevent, detect and respond to new outbreaks (Table 1). The risk of additional outbreaks originating from exposure to infected survivor body fluids remains and requires sustained mitigation through counselling on safe sex practices and testing of body fluids.

End of the most recent Ebola virus disease outbreak in Liberia
AFRO news release
9 June 2016 | Monrovia - Today the World Health Organization (WHO) declares the end of the most recent outbreak of Ebola virus disease in Liberia. This announcement comes 42 days (two 21-day incubation cycles of the virus) after the last confirmed Ebola patient in Liberia tested negative for the disease for the second time. Liberia now enters a 90-day period of heightened surveillance to ensure that any new cases are identified quickly and contained before spreading.
Read the press release by WHO Regional Office for Africa

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POLIO [to 11 June 2016]
Public Health Emergency of International Concern (PHEIC)

Polio this week as of 7 June 2016
:: As of the 7 June, 149 out of 155 countries and territories have submitted a switch validation report, confirming the withdrawal of tOPV from the immunization programme. Visit this website for a live update of the finalisation of the switch.

:: In Lao PDR the second outbreak response assessment (OBRA) concluded that the country is on track towards interrupting virus transmission. cVDPV1 has not been detected in Lao PDR since 11 January 2016, while AFP surveillance continues to improve.

:: GPEI published the 2013 -2019 Financial Resource Requirements with an overview of the required and available funding for the period.
Selected Country Levels Updates [excerpted]
No new cases identified in country reports.

GPEI - Financial Resource Requirements (FRRs) 2013-2019 (AS OF 1 APRIL 2016)
June 2016 :: 36 pages
PDF of full report:
http://www.polioeradication.org/Portals/0/Document/Financing/FRR_EN_A4.pdf
OVERVIEW
This Financial Resource Requirements (FRRs) report is the budget document accompanying the Polio Eradication & Endgame Strategic Plan 2013-2018 (PEESP) of the Global Polio Eradication Initiative (GPEI). The FRRs are updated twice per year based on evolving epidemiology and available funding. The financial needs reflected in this publication represent the requirements for activities to be implemented by the World Health Organization (WHO), the United Nations Children's Fund (UNICEF) and Gavi, the Vaccine Alliance (Gavi) in coordination with national governments, and include agency indirect costs where applicable. The FRRs do not include estimations of costs incurred directly by national governments.

While the FRRs only cover the direct budget requirements for WHO, UNICEF and Gavi to implement activities as per the PEESP, the annual Non-FRR Report captures self-reported donor contributions to areas supportive of polio eradication, but that are outside of the FRRs. Non-FRR contributions are either in kind or in cash and are for activities that directly increase the likelihood of the success of the polio eradication programme, but they are not a part of eradication or other activities included in this FRR document. Non-FRR contributions do not decrease outstanding donor commitments to FRR activities.
For additional financing information, see http://www.polioeradication.org/Financing.aspx

Financing
The Global Polio Eradication Initiative (GPEI) is financed by a wide range of public and private donors, who help meet the costs of the Initiative's eradication activities. **The requirements for 2013-2019 are projected to be approximately US$ 7.0 billion.**

The Financial Resource Requirements series (FRR) provides an overview of the external funding – required and currently available – to finance activities planned by the GPEI for the 2013-2019 period to eradicate all remaining polio disease – due to both wild and vaccine-related polioviruses and prepare for the post-eradication era in keeping with the Polio Eradication and Endgame Strategic Plan 2013-2018 (PEESP) and its four Objectives.

The budgets that underpin the FRR are prepared jointly by the World Health Organization (WHO), UNICEF and the national governments. The external funds to finance the activities primarily flow through WHO and UNICEF with funds for IPV introduction flowing through Gavi, the Vaccine Alliance. The FRR provides an overview of 2016-2019 and the details for 2016. It is updated regularly, based on evolving epidemiology and available funding.

As of April 2016, the 2016-2019 GPEI budget estimates are US$ 3.864 billion for the major cost categories of the four Objectives of the PEESP. The budgets for each of Objective are overseen

by the GPEI's various oversight and management groups. For 2016, the requirements are US$ 1.393 billion…

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Yellow Fever [to 11 June 2016]
http://www.who.int/emergencies/yellow-fever/en/

Yellow Fever - Situation Report – 9 June 2016
Full Report:
http://apps.who.int/iris/bitstream/10665/208880/1/yellowfeversitrep_9Jun2016_eng.pdf?ua=1

Yellow fever vaccination campaign in the Democratic Republic of the Congo
As of 2 June 2016, a total of 1 947 567 people have been vaccinated against Yellow Fever in the provinces of Kinshasa and Kongo Central. The vaccination campaign began on 26 May 2016. Many people have rushed to get vaccinated including many people from districts that were not targetted for vaccination. This is good news because it means people understand the importance of vaccination. However, despite concerted efforts by WHO and partners and manufacturers, global vaccine stocks remain low.

Local partners like the Red Cross in the DRC are supporting the campaign. Here a Red Cross volunteer verifies the vaccination cards of the those wanting to get vaccinated to make sure that they have not been vaccinated before. Almost 2000 vaccinators have been mobilized in about 987 vaccination sites (647 in in Kongo Central and 331 in Kinshasa province), together with support from the provincial authorities, WHO, UNICEF, Save the Children and the GAVI Alliance…

IFRC [to 11 June 2016]
http://www.ifrc.org/en/news-and-media/press-releases/
Red Cross calls for immediate scale-up in response to deadly yellow fever outbreak in Angola
Published: 8 June 2016
Nairobi/Geneva, 8 June 2016 – Concerned by the ongoing spread of the yellow fever outbreak in Angola and beyond, the International Federation of Red Cross and Red Crescent Societies (IFRC) is calling for an immediate scale-up in response.

"Limited vaccine supplies, poor sanitation, inadequate disease surveillance systems and everyday cross-border interaction could turn a national outbreak into a larger crisis, if immediate community-based action is not taken," said Dr Fatoumata Nafo-Traoré, Director, IFRC Africa region.

The outbreak was first detected in Angola in late December 2015. According to the World Health Organization, close to 2,900 suspected cases have since been reported in all 18 provinces, with 325 deaths. Out of the five countries which have reported imported yellow fever cases that originated in Angola, Democratic Republic of the Congo and Congo are now experiencing outbreaks with local transmission.

"Vaccinations are the first and best line of defence," said Dr Nafo-Traoré. "However, given the limited supply of yellow fever vaccine globally, we need to prioritize community engagement as a vital tool to prevent the further spread of the disease."

In Angola and the Democratic Republic of the Congo, the IFRC has deployed Regional Disaster Response Team members, and released start-up funds from its Disaster Relief Emergency Fund to support operations aimed at halting the spread of the virus. Staff and volunteers with the Angola Red Cross have supported the country's vaccination campaign. They have also been conducting social mobilization in communities, as have personnel from the Red Cross of the Democratic Republic of the Congo. Teams conduct door-to-door visits, instructing people on the measures they can take to reduce their risk of falling ill with yellow fever. This includes vector control to eliminate sites where mosquitoes can breed.

In addition to the ground level work currently being carried out by the World Health Organization, UNICEF and other partners, the IFRC is further deploying a Field Assessment Coordination Team to Angola to conduct an in-depth assessment of needs and gaps, primarily focused on improved community surveillance, vector control, and addressing rumours that are spreading about the disease and vaccinations. The expanded emergency operation will focus on newly-affected districts and in border areas.

Dr Adinoyi Adeiza, IFRC health coordinator, Africa region, said: "With our decades of experience of deploying community-based volunteers to help prevent and respond to vector-borne diseases such as malaria, dengue and chikungunya, the Red Cross can play a key role in managing this outbreak."

Five countries have reported imported yellow fever cases confirmed to have come from people who had travelled to Angola: 88 in Congo-Brazzaville; 44 in Democratic Republic of the Congo; two each in Kenya and Sao Tome; and 11 in China. "We are extremely concerned about the further spread of this outbreak, particularly to countries bordering Angola, such as Namibia and Zambia," added Dr Adeiza. "Non-immunized people traveling across these countries could pose a significant risk."

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MERS-CoV [to 11 June 2016]
No new content identified.

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WHO & Regional Offices [to 11 June 2016]

Safe blood transfusions save lives in South Sudan

10 June 2016 -- In places with ongoing conflict, like South Sudan, safe blood transfusions are a life-saving necessity. In the run up to World Blood Donor Day, 14 June 2016, this story highlights the importance of giving blood. The theme of the Day is "Blood connects us all", and

one of its aims is to create wider public awareness of the need for regular blood donation while inspiring those who have not yet donated blood to do so.

Four countries stop mother-to-child transmission of HIV or syphilis
8 June 2016 – WHO congratulates Thailand and Belarus for eliminating mother-to-child transmission of both HIV and syphilis. Likewise, WHO applauds Armenia for eliminating mother-to-child transmission of HIV, and the Republic of Moldova for eliminating mother-to-child transmission of syphilis. A critical factor for country success has been the integration of maternal and child health programmes with sexual health, reproductive health and HIV services.
Read the statement

Highlights
Eliminating lymphatic filariasis
June 2016 -- Maldives and Sri Lanka have eliminated lymphatic filariasis, a disease that was crippling people for decades, forcing them to lead a life of stigma, discrimination and poverty. However, there are still over 1 billion people living in over 50 countries that still have lymphatic filariasis.

End of the most recent Ebola virus disease outbreak in Liberia
June 2016 -- It has been 42 days (two 21-day incubation cycles of the virus) after the last confirmed Ebola patient in Liberia tested negative for the disease for the second time. Liberia now enters a 90-day period of heightened surveillance.

Nearly 2 million people vaccinated against yellow fever in the Democratic Republic of the Congo
June 2016 -- A total of 1 947 567 people have been vaccinated against yellow fever in the Democratic Republic of the Congo. The vaccination campaign began on 26 May 2016, and many people have rushed to be vaccinated, including people from districts not targeted for vaccination.

Weekly Epidemiological Record (WER) 10 June 2016, vol. 91, 23 (pp. 296–304)
Contents

Disease Outbreak News (DONs)
:: 8 June 2016 - Human infection with avian influenza A(H5N6) virus – China

:: WHO Regional Offices
Selected Press Releases, Announcements
WHO African Region AFRO

:: African national regulatory agencies and ethics committees agree to harmonise practices to strengthen clinical trial oversight

Addis Ababa, Ethiopia, 10 June 2016 – Heads of national regulatory agencies and national ethics committees from across Africa have agreed to harmonise their practices to strengthen regulatory oversight of clinical trials.

At the end of a two-day extraordinary meeting of the African Vaccine Regulatory Forum (AVAREF) in Addis Ababa, Ethiopia, consensus was reached to expand AVAREF's scope and membership as well as to promote collaboration, harmonization of regulatory systems and best practices across the continent. This will be accomplished through a new governance structure that will help provide the foundation for the future African Medicines Agency which is scheduled to be launched in 2018.

The World Health Organization (WHO) established the AVAREF in 2006 to address the increased number of clinical trials, limited infrastructure, limited expertise and unclear operating models in African countries. The Forum is comprised of the National Regulatory Agencies (NRAs) and National Ethics Committees of 23 countries targeted for clinical trials of HIV, Malaria and TB vaccines.

"As a network of regulatory authorities and ethics committees, AVAREF has over these years strengthened the capacity of countries in Africa to regulate clinical trials, particularly of vaccines and has contributed to access to important vaccines such as the conjugate meningitis A vaccine, thereby helping to significantly reduce epidemics of meningitis", said Dr Matshidiso Moeti, WHO Regional Director for Africa, in a speech read on her behalf at the landmark event.

"Despite its success, the network still faces some challenges. The time has come for a new vision and blueprint for AVAREF which takes into account the rapidly evolving global and regulatory environment, as well as the opportunities presented by new initiatives", she added.

Currently African countries face significant regulatory challenges including the increased circulation of sub-standard/spurious/falsely labeled/falsified/counterfeit products, lack of technical expertise and capacity within individual NRAs and Ethics Committees, among others. Similarly product developers face challenges associated with disparate application requirements.

In an effort to address these challenges, participants unanimously agreed to expand the existing AVAREF with a new vision to address evolving global and regulatory challenges. The new AVAREF will be a pan-African network to provide robust clinical trial oversight and enhance other regulatory functions to increase access to safe and effective medical products such as medicines, vaccines and diagnostics for the African population. It will also facilitate increased efficiency and build capacity of its membership.

In his remarks, Dr Vincent Ahonkai, Senior Adviser for Regulatory Affairs, from the Bill & Melinda Gates Foundation (BMGF) noted that this vision is a game changer in the continent's regulatory environment. "We are living in an era of cooperative, collaborative networks, and strategic alliances. Building an efficient clinical trial platform is a core component of access to quality health products for Africa. AVAREF aims to build that platform and is a welcome initiative that will benefit the citizens of Africa," he said.

Speaking to reporters at the event, Dr Thomas Nyirenda, Director at the European and Developing Countries Clinical Trials Partnership (EDCTP) said: "Alignment, harmonization and expansion of the scope of AVAREF taking into account other regional initiatives on the African continent is timely and will complement the efforts of EDCTP which has an expanded mandate to fund all phases of clinical trials for products against targeted diseases".

Over 70 participants attended the meeting, including delegates from Member States, Regional Economic Communities, African Union Commission, NEPAD Agency, product developers, development partners and technical experts.

:: WHO declares the end of the most recent Ebola virus disease outbreak in Liberia - 09 June 2016

WHO Region of the Americas PAHO
:: Latin America and the Caribbean approaching half-way mark toward goal of 100% voluntary blood donation (06/10/2016)

WHO South-East Asia Region SEARO
:: Thailand is first country in Asia to eliminate mother-to-child transmission of HIV and syphilis 07 June 2016

WHO European Region EURO
:: One nurse's quest to track down TB on the eastern edge of Greenland 10-06-2016
:: WHO validates elimination of mother-to-child transmission of HIV and syphilis in Armenia, Belarus and the Republic of Moldova 08-06-2016
:: Fighting TB in Greenland 07-06-2016

WHO Eastern Mediterranean Region EMRO
:: Kuwait supports insulin-dependent Syrians 8 June 2016
:: "We came with nothing, we have nothing": thousands flee Fallujah as fighting intensifies 6 June 2016
:: Egypt's deworming campaign targets 2 million school-age children June 2016

WHO Western Pacific Region
No new digest content identified.

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CDC/ACIP [to 11 June 2016]
http://www.cdc.gov/media/index.html

MMWR June 10, 2016 / Vol. 65 / No. 22
:: Elimination of Mother-to-Child Transmission of HIV — Thailand
:: Influenza Activity — United States, 2015–16 Season and Composition of the 2016–17 Influenza Vaccine

June ACIP meeting

June 22-23, 2016
Deadline for registration:
:: Non-US Citizens: May 20, 2016
:: US Citizens: June 6, 2016
Registration is NOT required to watch the live meeting webcast or to listen via telephone.
Draft June 22-23, 2016 Meeting Agenda[2 pages]

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Announcements/Milestones/Perspectives

FDA [to 11 June 2016]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
June 10, 2016
FDA approves vaccine to prevent cholera for travelers
The U.S. Food and Drug Administration today approved Vaxchora, a vaccine for the prevention of cholera caused by serogroup O1 in adults 18 through 64 years of age traveling to cholera-affected areas. Vaxchora is the only FDA-approved vaccine for the prevention of cholera.

… "The approval of Vaxchora represents a significant addition to the cholera-prevention measures currently recommended by the Centers for Disease Control and Prevention for travelers to cholera-affected regions," said Peter Marks, M.D., Ph.D., director of the FDA's Center for Biologics Evaluation and Research.

…Vaxchora is a live, weakened vaccine that is taken as a single, oral liquid dose of approximately three fluid ounces at least 10 days before travel to a cholera-affected area.

Vaxchora's efficacy was demonstrated in a randomized, placebo-controlled human challenge study of 197 U.S. volunteers from 18 through 45 years of age. Of the 197 volunteers, 68 Vaxchora recipients and 66 placebo recipients were challenged by oral ingestion of Vibrio cholerae, the bacterium that causes cholera. Vaxchora efficacy was 90 percent among those challenged 10 days after vaccination and 80 percent among those challenged three months after vaccination. The study included provisions for administration of antibiotics and fluid replacement in symptomatic participants. To prevent transmission of cholera into the community, the study included provisions for administration of antibiotics to participants not developing symptoms.

Two placebo-controlled studies to assess the immune system's response to the vaccine were also conducted in the U.S. and Australia in adults 18 through 64 years of age. In the 18 through 45 year age group, 93 percent of Vaxchora recipients produced antibodies indicative of protection against cholera. In the 46 through 64 years age group, 90 percent produced antibodies indicative of protection against cholera. The effectiveness of Vaxchora has not been established in persons living in cholera-affected areas.

The safety of Vaxchora was evaluated in adults 18 through 64 years of age in four randomized, placebo-controlled, multicenter clinical trials; 3,235 study participants received Vaxchora and

562 received a placebo. The most common adverse reactions reported by Vaxchora recipients were tiredness, headache, abdominal pain, nausea/vomiting, lack of appetite and diarrhea.

The FDA granted the Vaxchora application fast track designation and priority review status. These are distinct programs intended to facilitate and expedite the development and review of medical products that address a serious or life-threatening condition. In addition, the FDA awarded the manufacturer of Vaxchora a tropical disease priority review voucher, under a provision included in the Food and Drug Administration Amendments Act of 2007. This provision aims to encourage the development of new drugs and biological products for the prevention and treatment of certain tropical diseases.

Vaxchora is manufactured by PaxVax Bermuda Ltd., located in Hamilton, Bermuda…

What's New for Biologics
June 10, 2016 Approval Letter - VAXCHORA (PDF - 60KB)
Posted: 6/10/2016

Sabin Vaccine Institute [to 11 June 2016]
http://www.sabin.org/updates/ressreleases
Tuesday, June 7, 2016
Closing Immunity Gaps in Measles and Rubella Elimination
…While many countries are succeeding in the strengthening of their routine immunization programs, over half the world's children are not vaccinated against rubella. Progress is being stifled by a number of hurdles, especially outbreaks, revealing a new challenge of vaccinating older children and adults. The consequences of the devastating outcomes of congenital rubella syndrome are obvious and provide an urgent call for action.

To that end, from May 10-11, 2016, 46 representatives from 23 countries gathered in Siena, Italy, to identify challenges and best practices for achieving high vaccination coverage among older children and adults. Attendees included measles and rubella focal points from national immunization programs, representatives from the U.S. Centers for Diseases Control and Prevention (CDC), the WHO and its regional offices as well as civil society leaders from various international pediatric associations and Lions Club chapters.

The cornerstone of the agenda was sharing experiences and exchanging ideas on strategies and tactical measures to close immunity gaps in these age groups from a country-based perspective. Presentations revealed unique approaches to maintaining high routine coverage, such as Australia's "No Jab, No Pay" law as well as experiences with campaigns when dealing with high influx of migrants or refugees. Discussions and group exercises focused on methods for obtaining high-quality data coverage in all age groups, identifying areas and groups at risk, and implementing effective actions when gaps in immunity are identified.

A coalition of partners supported the meeting, including; American Academy of Pediatrics (AAP), CDC, International Pediatric Association (IPA), Lions Clubs International Foundation, Sabin Vaccine Institute, and the WHO.
Presentations from the meeting can be found here.

GHIT Fund [to 11 June 2016]
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 companies, the Japanese Government and the Bill & Melinda Gates Foundation.
2016.06.06 *Press Room*
GHIT Fund Welcomes Ten New Partnerships With FUJIFILM, Otsuka, GSK, Johnson & Johnson, Kyowa Hakko Kirin, Merck, Mitsubishi Tanabe, Nipro, Sumitomo Dainippon Pharma and Salesforce.com
Expansion will allow continued investments in R&D for neglected diseases, which in just three years has led to over 60 funded partnerships for the product development of new drugs, vaccines and diagnostics, seven of which have entered clinical trials

TOKYO, JAPAN (June 6, 2016)—The Global Health Innovative Technology Fund (GHIT Fund) today welcomed ten new partnerships that include major global pharmaceutical and biotechnology companies—collaborations that will expand investments into research and development (R&D) for neglected diseases worldwide, many of which have already begun to show progress in clinical trials.

The new collaborations include a full funding partnership with FUJIFILM Corporation, an associate partnership with Otsuka Pharmaceutical, affiliate partnerships with GlaxoSmithKline, Johnson & Johnson, Kyowa Hakko Kirin, Merck, Mitsubishi Tanabe Pharma Corporation, Nipro Corporation, Sumitomo Dainippon Pharma, and a sponsorship from Salesforce.com.

"We are excited to welcome these new funding partners—from within Japan and across the globe—who have joined forces with the GHIT Fund because of their own unique commitments to global health, as well as their confidence that working together will transform R&D," GHIT Fund CEO Dr. BT Slingsby said. "The partnerships will not only broaden our scope, but also increase our ability to reach the world's most vulnerable people with lifesaving technology."

GHIT's announcement today also marks its third year investing in R&D for neglected diseases, having now allocated more than US$60 million into upwards of 60 collaborations for product development. Of these investments, 23 have resulted in partnerships to screen Japan's unique compound libraries, resulting in 18 potential drug candidates. GHIT grants in 2015 alone have also led to five projects advancing into its innovative hit-to-lead platform (HTLP), as well as four novel candidates entering clinical trials for the first time—two in Phase I (first-in-human) and two in Phase II (including one proof-of-concept)…

Fondation Merieux [to 11 June 2016]
Mission: Contribute to global health by strengthening local capacities of developing countries to reduce the impact of infectious diseases on vulnerable populations.
http://www.fondation-merieux.org/news
9 June 2016, Paris (France)
Professor Francine Ntoumi Winner of the 2016 Christophe Mérieux Prize
The 2016 Christophe Mérieux prize has been awarded to Professor Francine Ntoumi of the Faculty of Science and Engineering of Brazzaville (Congo) at a ceremony that took place at the Institut de France on 8th June, to encourage her work in infectious diseases in Central Africa.

European Vaccine Initiative [to 11 June 2016]
http://www.euvaccine.eu/news-events
News
New EVI Board member
07 June 2016
EVI is pleased to welcome Samuel McConkey on the Board as representative of the Royal College of Surgeons in Ireland (RCSI). His predecessor Ruairí Brugha will be remembered for his valuable input and commitment for which EVI is most grateful.
Samuel McConkey knows EVI very well as he served for several years as an independent expert on the EVI Scientific Advisory Committee (SAC).

PATH [to 11 June 2016]
http://www.path.org/news/index.php
Announcement | June 07, 2016
PATH selects Nigerian entrepreneur to serve as a PATH advocacy Innovation Champion
PATH today announced the selection of Adepeju Jaiyeoba—a young, Nigerian-trained lawyer, entrepreneur, and maternal and child health advocate—to serve as an honorary Innovation Champion. In this role, Jaiyeoba will work in partnership with PATH's Advocacy and Public Policy team to raise awareness of the health challenges facing women and children in low- and middle-income countries and how to accelerate development and access to lifesaving health technologies…

NIH [to 11 June 2016]
http://www.nih.gov/news-events/news-releases
June 6, 2016
Newly launched Genomic Data Commons to facilitate data and clinical information sharing
— Part of the National Cancer Moonshot, GDC to centralize, standardize accessible data.

Industry Watch [to 11 June 2016]
:: **Pro Golfer Jim Furyk Teams Up With Pfizer To Raise Awareness For Pneumococcal Pneumonia And The Importance Of Older Adult Vaccination**
June 09, 2016 07:30 AM Eastern Daylight Time
Furyk Takes Time to Coach His Coach, His Father, and Other Adults 65 and Older About the Risk for Potentially Serious Infectious Diseases, Like Pneumococcal Pneumonia

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AERAS [to 11 June 2016]
http://www.aeras.org/pressreleases
No new digest content identified.

BMGF - Gates Foundation [to 11 June 2016]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified.

EDCTP [to 11 June 2016]
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 11 June 2016]
http://www.ema.europa.eu/
No new digest content identified.

Gavi [to 11 June 2016]
http://www.gavialliance.org/library/news/press-releases/
No new digest content identified

Human Vaccines Project [to 11 June 2016]
humanvaccinesproject.org
[Website in development]
No new digest content identified.

IVI - International Vaccine Institute [to 11 June 2016]
http://www.ivi.org/web/www/home
No new digest content identified.

UNICEF [to 11 June 2016]
http://www.unicef.org/media/media_89711.html
No new digest content identified.

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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

IAVI – International AIDS Vaccine Initiative [to 11 June 2016]

http://www.iavi.org/
June 8, 2016

Ending AIDS Will Require Innovation in HIV Prevention – Especially a Vaccine

UN High Level Meeting highlights successes and continued needs in the global fight for a world without AIDS

New York – IAVI has joined world leaders, researchers and advocates gathered at UN Headquarters for a three-day conference aimed at accelerating progress toward an ambitious goal—to end AIDS by 2030. Delegates to the High-Level Meeting on Ending AIDS have called for accelerated action against the disease through intensified prevention, treatment, care and support programs that will help reduce new infections and increase life expectancy, quality of life and the dignity of all people living with, at risk of, and affected by HIV/AIDS and their families.

"The global fight against HIV/AIDS is one of the greatest challenges of modern times. The delegates in New York, as well as civil society, governments, international agencies, researchers and health care professionals around the world deserve to be congratulated for unprecedented solidarity, political will, innovation and funding that have enabled remarkable progress in treatment and prevention," says Mark Feinberg, IAVI's President and CEO. "And while we must make maximum use of all available tools, there is an urgent need to continue to invest in new prevention tools, including a vaccine, as well as a cure. Only a comprehensive response will rid the world of HIV/AIDS once and for all."

Current trends suggest that existing treatment and prevention options are not sufficient to stanch the AIDS epidemic. "We need innovation in HIV prevention," says Feinberg. "We must better understand people's constraints and preferences in using HIV prevention, and make sure they can access and adhere to existing methods. But we will also need new approaches that better reflect people's lives. Vaccines have proven to be the most effective tool to help control and eradicate infectious diseases."

While remarkable progress has been made, the HIV/AIDS epidemic is far from being over. While 17 million people were receiving antiretroviral treatment by the end of 2015, nearly 20 million people living with HIV worldwide still didn't have access to treatment. Ambitious targets have helped save millions of lives and reduce new annual infections by more than 30% since 2000. However, infection rates have leveled around 2 million for more than five years now despite more-than-doubled treatment rates. In 2015, new HIV infections increased for the first time in 15 years, by 5 percent, to 2.1 million globally.

Sub-Saharan Africa was home to two-thirds of the world's new HIV infections in 2015. Women there are shouldering a disproportionate share of the burden, and infection rates among that demographic as well as the large and fast-growing group of young people remain alarmingly high. Meanwhile, new HIV infections in Eastern Europe and Central Asia rose by 57 percent in 2015 alone.

Global Fund [to 11 June 2016]
http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=
10 June 2016
Global Fund Welcomes PEPFAR's Focus on Key Populations
GENEVA – The Global Fund to Fight AIDS, Tuberculosis and Malaria applauded an announcement by the U.S. President's Emergency Plan for AIDS Relief, known as PEPFAR, to create a US$100 million investment fund to expand access to HIV prevention and treatment services for key populations.
Announced during the 2016 United Nations High-Level Meeting on Ending AIDS, the Key Populations Investment Fund will aim to close the gap that exist for key populations in the HIV response by supporting investments that reduce stigma and discrimination, empower communities in the design and delivery of services and increase data quality on key populations…

High-Level Meeting on Ending AIDS

Political Declaration on HIV and AIDS: On the Fast-Track to Accelerate the Fight against HIV and to End the AIDS Epidemic by 2030
UN General Assembly Seventieth session
Agenda item 11
Implementation of the Declaration of Commitment on HIV/AIDS and the political declarations on HIV/AIDS
[Selected paragraphs referencing vaccines]
48: Welcome the important progress achieved in research for new biomedical tools for prevention, notably regarding Treatment as Prevention, pre-exposure prophylaxis (PrEP) and ARV-based microbicides and voluntary medical male circumcision, but also recognize that research and development must be accelerated, including for long-acting formulations of PrEP, preventive and therapeutic HIV vaccines, and curative interventions;..

60 (e): Work towards achieving universal health coverage that comprises equitable and universal access to quality health-care services, including sexual and reproductive health, and social protection, and includes financial risk protection, and access to safe, effective, quality and affordable essential medicines and vaccines for all, including the development of new service delivery models to improve efficiency, lower costs, and ensure delivery of more integrated services for HIV, TB, viral hepatitis, sexually transmitted infections, non-communicable diseases, including cervical cancer, drug dependence, food and nutrition support, maternal, child and adolescent health, men's health, mental health and sexual and reproductive health, and to address gender-based and sexual violence, in order to equip fragile communities to cope with these issues as well as future disease outbreaks;…

64 (d): Strongly urge increased investments in comprehensive research and development to enable access to improved and affordable point-of-care diagnostics, A/70/L.52
23/26 16-09119

prevention commodities, including preventive and therapeutic vaccines, and female-initiated prevention commodities, more tolerable, efficacious and affordable health technologies and products, including simpler and more effective drug formulations for children, adolescents and

adults, second-and third-line therapy, new drugs and diagnostics for tuberculosis, viral load monitoring tools, microbicides and a functional cure, while seeking to ensure that sustainable systems for vaccine procurement and equitable distribution are also developed, and in this context, encourage other forms of incentives for research and development such as the exploration of new incentive systems including those in which research and development costs are delinked from product prices…

Press release
Bold commitments to action made at the United Nations General Assembly High-Level Meeting on Ending AIDS
The new Political Declaration adopted by United Nations Member States charts a course to end AIDS as a public health threat by 2030
UNITED NATIONS, NEW YORK, 10 June 2016—United Nations Member States have committed to implementing a bold agenda to end the AIDS epidemic by 2030 during the United Nations General Assembly High-Level Meeting on Ending AIDS, held in New York, United States of America, from 8 to 10 June. The progressive, new and actionable Political Declaration includes a set of specific, time-bound targets and actions that must be achieved by 2020 if the world is to get on the Fast-Track and end the AIDS epidemic by 2030 within the framework of the Sustainable Development Goals.

The High-Level Meeting on Ending AIDS was convened by the President of the General Assembly and co-facilitated by Switzerland and Zambia. At the opening, the President of the General Assembly, Mogens Lykketoft, urged Member States to commit to action.

"All stakeholders must now step up to the plate. Today is the day that we collectively say that we will end the AIDS epidemic by 2030," said Mr Lykketoft. "We must pay greater attention to equality and inclusion, uphold human rights and speak out against stigma and discrimination." During the opening plenary, the United Nations Secretary-General, Ban Ki-moon, said that the AIDS response had been a "source of innovation and inspiration," and the Executive Director of UNAIDS outlined the progress made in recent years, with 17 million people accessing antiretroviral treatment and significant declines in AIDS-related deaths and new HIV-infections among children.

"For the first time in history we can say that in Africa there are more people initiating HIV treatment than there are new HIV infections," said UNAIDS Executive Director Michel Sidibé. He also underlined the importance of inclusion, saying, "The doors of the United Nations should be open to all."

In addition to the plenary sessions around 600 participants, including 10 Heads of State and Government and more than 60 ministers, people living with HIV, representatives of civil society, representatives of international organizations and the private sector, scientists and researchers took part in five official panels and more than 30 side events to translate the new Political Declaration into action and results.

The five official panels were under the following themes:
:: AIDS within the Sustainable Development Goals: leveraging the end of AIDS for social transformation and sustainable development.
:: Financing and sustaining the end of AIDS: the window of opportunity.

:: Getting ahead of the looming treatment crisis: an action agenda for getting to 90–90–90.
:: Leaving no one behind: ending stigma and discrimination through social justice and inclusive societies.
:: Children, adolescent girls and young women: preventing new HIV infections.

Participants called for access to comprehensive sexuality education and harm reduction services as well as strengthening outreach to young women and adolescent girls and key populations, including men who have sex with men, sex workers, people who inject drugs, transgender people and prisoners as well as migrants.

During the High-Level Meeting on Ending AIDS, major announcements were made in support of ending the epidemic by 2030:

:: The United States of America announced the launch of a new US$ 100 million Key Populations Investment Fund to increase access to HIV services for sex workers, gay men and other men who have sex with men, people who inject drugs, transgender people and prisoners. The new fund will focus on reducing stigma and discrimination, empowering community leadership in the design and delivery of services and increasing the quality of data on key populations.

:: Yusuf K. Hamied, Chair of the Indian pharmaceutical company CIPLA, announced a package of assistance to African countries to facilitate the local production of medicines in Africa.

:: UNAIDS and the United States President's Emergency Plan for AIDS Relief (PEPFAR) released a final report on the progress made since the Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive was launched at the last United Nations General Assembly High-Level Meeting on HIV and AIDS, in 2011.

There has been a 60% decline in new HIV infections among children since 2009 in the 21 countries in sub-Saharan Africa that have been most affected by the epidemic. To build on the enormous progress made in stopping new HIV infections among children, UNAIDS, PEPFAR and partners released a framework for ending AIDS among children, adolescents and young women—Start Free, Stay Free, AIDS-Free. The initiative sets ambitious targets to eliminate new infections among children, ensure access to treatment for all children living with HIV and prevent new HIV infections among adolescents and young women in order to put the world on a path to ending the AIDS epidemic among young women, adolescents and children.

:: Armenia, Belarus and Thailand joined Cuba in receiving official certificates of validation from the World Health Organization for eliminating new HIV infections among children. Thailand is the first country with a major HIV epidemic (450 000 people living with HIV in 2014) to receive such validation.

Events were held on the wider health agenda, including learning the lessons learned from responding to emerging epidemics, such as AIDS, Ebola and Zika, and on empowering adolescent girls and young women to access integrated health-care services, which was organized by the Organisation of African First Ladies against HIV/AIDS.

Addressing the Challenges of Influenza Vaccination on US College Campuses
A report by the National Foundation for Infectious Diseases
May 2016 :: 10 pages
Overview
According to the Centers for Disease Control and Prevention (CDC), annual vaccination is the best way to reduce the chances that an individual will get influenza (flu). Yet on US college campuses, flu vaccination rates remain strikingly low, hovering between eight and 39 percent,1, 2, 3, 4 and falling dramatically short of the 70 percent Healthy People 2020 target recommendation5 as well as the American College Health Association (ACHA) Healthy Campus 2020 target goal of approximately 50 percent.6

Motivating college students to get an annual flu vaccination remains a public health challenge; therefore, the National Foundation for Infectious Diseases (NFID) convened a College Influenza Stakeholder Summit that included subject matter experts from academia, student organizations, professional medical associations, patient advocacy organizations, and industry (see page 8 for a complete list of participating organizations) to better understand the causes behind this vaccination gap. By bringing together these experts, the Summit sought to better understand the key barriers that prevent college students from getting an annual flu vaccine, as well as to identify strategies which would help students both recognize their risk and motivate them to get vaccinated.

* * * *

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
June 2016 Volume 44, Issue 6, p619-738, e81-e102
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
June 2016 Volume 50, Issue 6, p677-810, e163-e194
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
Volume 106, Issue 6 (June 2016)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
June 2016; 94 (6)
http://www.ajtmh.org/content/current
[Reviewed earlier]

Annals of Internal Medicine
7 June 2016, Vol. 164. No. 11
http://annals.org/issue.aspx
[New issue; No relevant content identified]

BMC Cost Effectiveness and Resource Allocation
http://resource-allocation.biomedcentral.com/
(Accessed 11 June 2016)
Research
Mothers' willingness to pay for HPV vaccines in Anambra state, Nigeria: a cross sectional contingent valuation study
Ifeoma Blessing Umeh, Sunday Odunke Nduka and Obinna Ikechukwu Ekwunife
Published: 6 June 2016
Abstract
Background
Human papilloma virus (HPV) vaccination in Nigeria will require substantial financing due to high cost of HPV vaccine and inexistence of structures to support adolescent vaccination. Alternative sources are needed to sustain the government funded HPV vaccination programme. This study assessed Nigerian mothers' willingness-to-pay (WTP) for HPV vaccine. We also compared the difference between the average WTP and estimated costs of vaccinating a pre-adolescent girl (CVG).
Methods
We conducted a quantitative, cross-sectional, survey-based study in which 50 questionnaires were distributed to each of 10 secondary schools located in two rural and one urban city in Anambra state. The questionnaires were then randomly distributed to girls aged 9–12 years of age to give to their mothers. Contingent valuation approach using the payment card technique was used to estimate the average maximum WTP among the survey participants. Correlates of WTP for HPV vaccination were obtained using multivariate logistic regression. Estimated CVG was obtained by adapting cost of HPV vaccine delivery in Tanzania to the Nigerian setting.
Results
A total of 438 questionnaires (88 %) were returned. The average WTP was US$ 11.68. This is opposed to estimated delivery cost of US$ 18.16 and US$ 19.26 for urban and rural populations respectively at vaccine price offered by the Vaccine Alliance (Gavi) and US$ 35.16 and US$ 36.26 for urban and rural populations respectively at the lowest obtainable public sector vaccine

price. Demand for HPV vaccine was deemed high (91.6 %) and was significantly associated with respondents previously diagnosed of HPV infection.
Conclusion
Demand for HPV vaccine was high although short of estimated CVG. High demand for vaccine should be capitalized upon to increase vaccine uptake. Education on cervical cancer and provider-initiated vaccination should be promoted to increase vaccine uptake. Co-payment could be a feasible financing strategy in the event of national HPV vaccination.

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 11 June 2016)
[No new relevant content identified]

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 11 June 2016)
Research article
A survey of tuberculosis infection control practices at the NIH/NIAID/DAIDS-supported clinical trial sites in low and middle income countries
Health care associated transmission of Mycobacterium tuberculosis (TB) is well described. A previous survey of infection control (IC) practices at clinical research sites in low and middle income countries (LMIC)...
Catherine Godfrey, Gail Tauscher, Sally Hunsberger, Melissa Austin, Lesley Scott, Jeffrey T. Schouten, Anne F. Luetkemeyer, Constance Benson, Robert Coombs and Susan Swindells
BMC Infectious Diseases 2016 16:269
Published on: 10 June 2016

Research article
Global research trends of Middle East respiratory syndrome coronavirus: a bibliometric analysis
Middle East respiratory syndrome coronavirus (MERS-CoV) is a virus that causes severe viral pneumonia in humans, known to have a high mortality rate and a similarity in clinical symptoms with severe acute resp...
Sa'ed H. Zyoud
BMC Infectious Diseases 2016 16:255
Published on: 7 June 2016

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 11 June 2016)
Research article
Steps toward improving ethical evaluation in health technology assessment: a proposed framework

While evaluation of ethical aspects in health technology assessment (HTA) has gained much attention during the past years, the integration of ethics in HTA practice still presents many challenges. In response ...
Nazila Assasi, Jean-Eric Tarride, Daria O'Reilly and Lisa Schwartz
BMC Medical Ethics 2016 17:34
Published on: 6 June 2016

Debate
Citizen science or scientific citizenship? Disentangling the uses of public engagement rhetoric in national research initiatives
The language of "participant-driven research," "crowdsourcing" and "citizen science" is increasingly being used to encourage the public to become involved in research ventures as both subjects and scientists. ...
J. Patrick Woolley, Michelle L. McGowan, Harriet J. A. Teare, Victoria Coathup, Jennifer R. Fishman, Richard A. Settersten, Sigrid Sterckx, Jane Kaye and Eric T. Juengst
BMC Medical Ethics 2016 17:33
Published on: 4 June 2016

BMC Medicine
http://www.biomedcentral.com/bmcmed/content
(Accessed 11 June 2016)
Research article
Impact of interventions to improve the quality of peer review of biomedical journals: a systematic review and meta-analysis
The peer review process is a cornerstone of biomedical research. We aimed to evaluate the impact of interventions to improve the quality of peer review for biomedical publications.
Rachel Bruce, Anthony Chauvin, Ludovic Trinquart, Philippe Ravaud and Isabelle Boutron
BMC Medicine 2016 14:85
Published on: 10 June 2016

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
Research article
Religious beliefs and practices in pregnancy and labour: an inductive qualitative study among post-partum women in Ghana
Religiosity in health care delivery has attracted some attention in contemporary literature. The religious beliefs and practices of patients play an important role in the recovery of the patient.
Lydia Aziato, Philippa N. A. Odai and Cephas N. Omenyo
BMC Pregnancy and Childbirth 2016 16:138
Published on: 6 June 2016

BMC Public Health
http://bmcpublichealth.biomedcentral.com/articles
(Accessed 11 June 2016)
[No new relevant content identified]

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 11 June 2016)
[No new relevant content identified]

BMJ Open
2016, Volume 6, Issue 6
http://bmjopen.bmj.com/content/current
[Reviewed earlier]

British Medical Journal
11 June 2016 (vol 352, issue 8061)
http://www.bmj.com/content/353/8061
[New issue; No relevant content identified]

Bulletin of the World Health Organization
Volume 94, Number 6, June 2016, 405-480
http://www.who.int/bulletin/volumes/94/6/en/
[Reviewed earlier]

Child Care, Health and Development
May 2016 Volume 42, Issue 3 Pages 297–454
http://onlinelibrary.wiley.com/doi/10.1111/cch.v42.3/issuetoc
[Reviewed earlier]

Clinical Therapeutics
May 2016 Volume 38, Issue 5, p991-1258
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

Complexity
May/June 2016 Volume 21, Issue 5 Pages 1–360
http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.5/issuetoc
[Reviewed earlier]

Conflict and Health
http://www.conflictandhealth.com/
[Accessed 11 June 2016]
[No new content]

Contemporary Clinical Trials
Volume 48, In Progress (May 2016)
http://www.sciencedirect.com/science/journal/15517144/48
[Reviewed earlier]

Current Opinion in Infectious Diseases
June 2016 - Volume 29 - Issue 3 pp: v-v,229-318
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

Developing World Bioethics
April 2016 Volume 16, Issue 1 Pages 1–60
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2016.16.issue-1/issuetoc
[Reviewed earlier]

Development in Practice
Volume 26, Issue 4, 2016
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Disasters
July 2016 Volume 40, Issue 3 Pages 385–588
http://onlinelibrary.wiley.com/doi/10.1111/disa.2016.40.issue-3/issuetoc
Papers
Barriers to the long-term recovery of individuals with disabilities following a disaster (pages 387–410)
Laura M. Stough, Amy N. Sharp, J. Aaron Resch, Curt Decker and Nachama Wilker
Version of Record online: 17 NOV 2015 | DOI: 10.1111/disa.12161
Abstract
This study examines how pre-existing disabling conditions influenced the recovery process of survivors of Hurricane Katrina. It focuses specifically on the barriers that hindered the recovery process in these individuals. Focus groups were convened in four Gulf Coast states with 31 individuals with disabilities who lived in or around New Orleans, Louisiana, prior to Hurricane Katrina in August 2005. Qualitative data were analysed using grounded theory methodology. Five themes emerged as the most significant barriers to recovery: housing; transportation; employment; physical and mental health; and accessing recovery services. While these barriers to recovery were probably common to most survivors of the disaster, the research results suggest that disability status enhanced the challenges that participants experienced in negotiating the recovery process and in acquiring resources that accommodated their disabilities. The findings indicate that, when disaster recovery services and resources did not accommodate the needs of individuals with disabilities, recovery was hindered. Recovery efforts

should include building accessible infrastructure and services that will allow for participation by all.

Disaster preparedness in a complex urban system: the case of Kathmandu Valley, Nepal (pages 411–431)
Samuel Carpenter and François Grünewald
Version of Record online: 17 NOV 2015 | DOI: 10.1111/

Mental and social health in disasters: the Sphere standards and post-tsunami psychosocial interventions in Asia (pages 432–451)
Silja E.K. Henderson, Peter Elsass and Peter Berliner
Version of Record online: 17 NOV 2015 | DOI: 10.1111/disa.12159
disa.12164
Abstract
The primary objective of this paper is to examine and inform the mental health and psychosocial support standards of the 2011 edition of the Sphere Project's *Humanitarian Charter and Minimum Standards in Humanitarian Response*. This is done through a qualitative analysis of internal evaluation documents, reflecting four long-term humanitarian psychosocial programmes in different countries in post-tsunami Asia. The analysis yielded three overall conclusions. First, the Sphere standards on mental health and psychosocial support generally are highly relevant to long-term psychosocial interventions after disasters such as the Indian Ocean tsunami of 26 December 2004, and their application in such settings may improve the quality of the response. Second, some of the standards in the current Sphere handbook may lack sufficient guidance to ensure the quality of humanitarian response required. Third, the long-term intervention approach poses specific challenges to programming, a problem that could be addressed by including additional guidance in the publication.

Towards a natural disaster intervention and recovery framework (pages 494–517)
Peter M. Lawther
Version of Record online: 17 NOV 2015 | DOI: 10.1111/disa.12163

Emerging Infectious Diseases
Volume 22, Number 6—June 2016
http://wwwnc.cdc.gov/eid/
[Reviewed earlier]

Epidemics
Volume 15, In Progress (June 2016)
http://www.sciencedirect.com/science/journal/17554365
[No new relevant content]

Epidemiology and Infection
Volume 144 - Issue 09 - July 2016
http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue
[Reviewed earlier]

The European Journal of Public Health
Volume 26, Issue 3, 1 June 2016
http://eurpub.oxfordjournals.org/content/26/3?current-issue=y
[Reviewed earlier]

Eurosurveillance
Volume 21, Issue 23, 09 June 2016
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
Editorials
Zika virus, the new kid on the block
by M Zambon

Sexual transmission of Zika virus in an entirely asymptomatic couple returning from a Zika epidemic area, France, April 2016
by T Fréour, S Mirallié, B Hubert, C Splingart, P Barrière, M Maquart, I Leparc-Goffart

Sexual transmission of Zika virus in Germany, April 2016
by C Frank, D Cadar, A Schlaphof, N Neddersen, S Günther, J Schmidt-Chanasit, D Tappe

Global Health: Science and Practice (GHSP)
March 2016 | Volume 4 | Issue 1
http://www.ghspjournal.org/content/current
[Reviewed earlier]

Global Public Health
Volume 11, Issue 5-6, 2016
http://www.tandfonline.com/toc/rgph20/current
Special Issue: Participatory Visual Methodologies in Global Public Health
[Reviewed earlier]

Globalization and Health
http://www.globalizationandhealth.com/
[Accessed 11 June 2016]
Debate
Addressing the impact of economic sanctions on Iranian drug shortages in the joint comprehensive plan of action: promoting access to medicines and health diplomacy
The U.S Congress initiated sanctions against Iran after the 1979 U.S. Embassy hostage crisis in Tehran, and since then the scope of multilateral sanctions imposed by the United States, the European Union, and ...
Sogol Setayesh and Tim K. Mackey
Globalization and Health 2016 12:31
Published on: 8 June 2016

Commentary
The Trans-Pacific Partnership Agreement and health: few gains, some losses, many risks
In early October 2015, 12 nations signed the Trans-Pacific Partnership Agreement (TPPA), promoted as a model '21st century' trade and investment agreement that other countries would eventually join. There are gro...
Ronald Labonté, Ashley Schram and Arne Ruckert
Globalization and Health 2016 12:25
Published on: 6 June 2016

Health Affairs
June 2016; Volume 35, Issue 6
http://content.healthaffairs.org/content/current
Behavioral Health
[New issue; No new relevant content identified]

Health and Human Rights
Volume 17, Issue 2 December 2015
http://www.hhrjournal.org/
Special Issue: Evidence of the Impact of Human Rights-Based Approaches to Health
[Reviewed earlier]

Health Economics, Policy and Law
Volume 11 - Issue 03 - July 2016
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
[Reviewed earlier]

Health Policy and Planning
Volume 31 Issue 5 June 2016
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Health Research Policy and Systems
http://www.health-policy-systems.com/content
[Accessed 11 June 2016]
Research
The role of researchers in disseminating evidence to public health practice settings: a cross-sectional study
Allese B. McVay, Katherine A. Stamatakis, Julie A. Jacobs, Rachel G. Tabak and Ross C. Brownson
Published on: 10 June 2016
Abstract

Background
Evidence-based public health interventions, which research has demonstrated offer the most promise for improving the population's health, are not always utilized in practice settings. The extent to which dissemination from researchers to public health practice settings occurs is not widely understood. This study examines the extent to which public health researchers in the United States are disseminating their research findings to local and state public health departments.
Methods
In a 2012, nationwide study, an online questionnaire was administered to 266 researchers from the National Institutes of Health, the Centers for Disease Control and Prevention, and universities to determine dissemination practices. Logistic regression analyses were used to examine the association between dissemination to state and/or local health departments and respondent characteristics, facilitators, and barriers to dissemination.
Results
Slightly over half of the respondents (58%) disseminated their findings to local and/or state health departments. After adjusting for other respondent characteristics, respondents were more likely to disseminate their findings to health departments if they worked for a university Prevention Research Center or the Centers for Disease Control and Prevention, or received their degree more than 20 years ago. Those who had ever worked in a practice or policy setting, those who thought dissemination was important to their own research and/or to the work of their unit/department, and those who had expectations set by their employers and/or funding agencies were more likely to disseminate after adjusting for work place, graduate degree and/or fellowship in public health, and the year the highest academic degree was received.
Conclusions
There is still room for improvement in strengthening dissemination ties between researchers and public health practice settings, and decreasing the barriers researchers face during the dissemination process. Researchers could better utilize national programs or workshops, knowledge brokers, or opportunities provided through academic institutions to become more proficient in dissemination practices.

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 12, Issue 5, 2016
http://www.tandfonline.com/toc/khvi20/current
Review
A review of clinical models for the evaluation of human TB vaccines
pages 1177-1187
Matthew K. O'Shea & Helen McShane
Open access
DOI:10.1080/21645515.2015.1134407
ABSTRACT
While much progress has been made in the fight against the scourge of tuberculosis (TB), we are still some way from reaching the ambitious targets of eliminating it as a global public health problem by the mid twenty-first century. A new and effective vaccine that protects against pulmonary TB disease will be an essential element of any control strategy. Over a dozen vaccines are currently in development, but recent efficacy trial data from one of the most advanced candidates have been disappointing. Limitations of current preclinical animal models exist, together with a lack of a complete understanding of host immunity to TB or robust

correlates of disease risk and protection. Therefore, in the context of such obstacles, we discuss the lessons identified from recent efficacy trials, current concepts of biomarkers and correlates of protection, the potential of innovative clinical models such as human challenge and conducting trials in high-incidence settings to evaluate TB vaccines in humans, and the use of systems vaccinology and novel technologies including transcriptomics and metabolomics, that may facilitate their utility.

Research Papers

Economic evaluation of pediatric influenza immunization program compared with other pediatric immunization programs: A systematic review

pages 1202-1216

Edward Gibson, Najida Begum, Birgir Sigmundsson, Alfred Sackeyfio, Judith Hackett & Sankarasubramanian Rajaram

Open access

DOI:10.1080/21645515.2015.1131369

ABSTRACT

This study compared the economic value of pediatric immunisation programmes for influenza to those for rotavirus (RV), meningococcal disease (MD), pneumococcal disease (PD), human papillomavirus (HPV), hepatitis B (Hep B), and varicella reported in recent (2000 onwards) cost-effectiveness (CE) studies identified in a systematic review of PubMed, health technology, and vaccination databases. The systematic review yielded 51 economic evaluation studies of pediatric immunisation — 10 (20%) for influenza and 41 (80%) for the other selected diseases. The quality of the eligible articles was assessed using Drummond's checklist. Although inherent challenges and limitations exist when comparing economic evaluations of immunisation programmes, an overall comparison of the included studies demonstrated cost-effectiveness/cost saving for influenza from a European-Union-Five (EU5) and United States (US) perspective; point estimates for cost/quality-adjusted life-years (QALY) from dominance (cost-saving with more effect) to ≤45,444 were reported. The economic value of influenza programmes was comparable to the other vaccines of interest, with cost/QALY in general considerably lower than RV, Hep B, MD and PD. Independent of the perspective and type of analysis, the economic impact of a pediatric influenza immunisation program was influenced by vaccine efficacy, immunisation coverage, costs, and most significantly by herd immunity. This review suggests that pediatric influenza immunisation may offer a cost effective strategy when compared with HPV and varicella and possibly more value compared with other childhood vaccines (RV, Hep B, MD and PD

Economic evaluation of vaccines in Canada: A systematic review

pages 1257-1264

Ayman Chit, Jason K. H. Lee, Minsup Shim, Van Hai Nguyen, Paul Grootendorst, Jianhong Wu, Robert Van Exan & Joanne M. Langley

Open access

DOI:10.1080/21645515.2015.1137405

ABSTRACT

Background: Economic evaluations should form part of the basis for public health decision making on new vaccine programs. While Canada's national immunization advisory committee does not systematically include economic evaluations in immunization decision making, there is increasing interest in adopting them. We therefore sought to examine the extent and quality of economic evaluations of vaccines in Canada.

Objective: We conducted a systematic review of economic evaluations of vaccines in Canada to determine and summarize: comprehensiveness across jurisdictions, studied vaccines, funding sources, study designs, research quality, and changes over time.
Methods: Searches in multiple databases were conducted using the terms "vaccine," "economics" and "Canada." Descriptive data from eligible manuscripts was abstracted and three authors independently evaluated manuscript quality using a 7-point Likert-type scale scoring tool based on criteria from the International Society for Pharmacoeconomics and Outcomes Research (ISPOR).
Results: 42/175 articles met the search criteria. Of these, Canada-wide studies were most common (25/42), while provincial studies largely focused on the three populous provinces of Ontario, Quebec and British Columbia. The most common funding source was industry (17/42), followed by government (7/42). 38 studies used mathematical models estimating expected economic benefit while 4 studies examined post-hoc data on established programs. Studies covered 10 diseases, with 28/42 addressing pediatric vaccines. Many studies considered cost-utility (22/42) and the majority of these studies reported favorable economic results (16/22). The mean quality score was 5.9/7 and was consistent over publication date, funding sources, and disease areas.
Conclusions: We observed diverse approaches to evaluate vaccine economics in Canada. Given the increased complexity of economic studies evaluating vaccines and the impact of results on public health practice, Canada needs improved, transparent and consistent processes to review and assess the findings of the economic evaluations of vaccines.

Review
Knowledge, attitudes, beliefs and behaviors of general practitioners/family physicians toward their own vaccination: A systematic review
pages 1282-1292
Fanny Collange, Pierre Verger, Odile Launay & Céline Pulcini
DOI:10.1080/21645515.2015.1138024
ABSTRACT
Context: General practitioners and family physicians (GP/FPs) play a key role in the vaccination of the public in many countries and serve as role models for their patients through their own health behaviors. Objectives and Methods: a) To search for and document recommended/mandated vaccines for GP/FPs in high-income countries; b) To systematically search and review the literature on these physicians' knowledge, attitudes, beliefs, and behaviors (KABB) toward their own vaccination with the recommended/mandated vaccines and the factors determining it. Results: a) The 14 countries included recommended or mandated as many as 12 vaccines; b) The systematic review identified 11 studies published in the last 10 y. All considered seasonal influenza vaccination but differed in the variables investigated. Discussion/Conclusions: This review highlights the need for further studies on this topic, including qualitative and interventional studies (based on behavior change theories). These should cover occupational vaccines and determinants known to be associated with vaccine hesitancy.

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Number 66 April 2016
http://odihpn.org/magazine/humanitarian-innovation/
Special Focus: Humanitarian Innovation

by Humanitarian Practice Network and Kim Scriven April 2016
[Reviewed earlier]

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http://www.infectagentscancer.com/content
[Accessed 11 June 2016]
[No new relevant content identified]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 11 June 2016]
Commentary
Malaria: Global progress 2000 – 2015 and future challenges
2015 was the target year for malaria goals set by the World Health Assembly and other international institutions to reduce malaria incidence and mortality. A review of progress indicates that malaria programme...
Richard E. Cibulskis, Pedro Alonso, John Aponte, Maru Aregawi, Amy Barrette, Laurent Bergeron, Cristin A. Fergus, Tessa Knox, Michael Lynch, Edith Patouillard, Silvia Schwarte, Saira Stewart and Ryan Williams
Infectious Diseases of Poverty 2016 5:61
Published on: 9 June 2016

Research Article
Rapid assessment of knowledge, attitudes, practices, and risk perception related to the prevention and control of Ebola virus disease in three communities of Sierra Leone
Hai Jiang, Guo-Qing Shi, Wen-Xiao Tu, Can-Jun Zheng, Xue-Hui Lai, Xin-Xu Li, Qiang Wei, Mei Li, Li-Quan Deng, Xiang Huo, Ming-Quan Chen, Feng Xu, Long-Jie Ye, Xi-Chen Bai, Tong-Nian Chen, Shao-Hua Yin…
Infectious Diseases of Poverty 2016 5:53
Published on: 6 June 2016

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Volume 8 Issue 3 May 2016
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[Reviewed earlier]

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Volume 45 Issue 2 April 2016
http://ije.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Infectious Diseases

May 2016 Volume 46, p1-126
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[Reviewed earlier]

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June 7, 2016, Vol 315, No. 21
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Volume 41, Issue 3, June 2016
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[Reviewed earlier]

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June 2016, Volume 70, Issue 6
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Volume 12, Issue 1, 2016
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April-June 2016 Volume 8 | Issue 2 Page Nos. 59-94
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[New issue; No new relevant content identified]

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Volume 27, Number 2, May 2016 Supplement
https://muse.jhu.edu/issue/33442
[Reviewed earlier]

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Volume 18, Issue 3, June 2016
http://link.springer.com/journal/10903/18/2/page/1
[Issue focus on a range of health parameters and challenges among Latino migrants]

Journal of Immigrant & Refugee Studies
Volume 14, Issue 2, 2016
http://www.tandfonline.com/toc/wimm20/current
[Reviewed earlier]

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Volume 213 Issue 11 June 1, 2016
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[Reviewed earlier]

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Winter 2015 Volume 43, Issue 4 Pages 673–913
http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-4/issuetoc
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Volume 65, Issue 5, May 2016
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[New issue; No new relevant content identified]

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Volume 3, Issue 2 (2016)
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May 2016 Volume 172, p1-236
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Journal of Public Health Policy
Volume 37, Issue 2 (May 2016)
http://www.palgrave-journals.com/jphp/journal/v37/n2/index.html
[Reviewed earlier]

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01 June 2016; volume 13, issue 119
http://rsif.royalsocietypublishing.org/content/current
[New issue; No relevant content identified]

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May 2016, volume 90, issue 9
http://jvi.asm.org/content/current
[Reviewed earlier]

The Lancet
Jun 11, 2016 Volume 387 Number 10036 p2351-2478 e29
http://www.thelancet.com/journals/lancet/issue/current
Editorial
Dear Mr Ban Ki-moon
The Lancet

We have greatly admired your leadership as Secretary-General of the UN. Over your 10 years heading the world's most important international organisation, you have played an exemplary part in strengthening the global health agenda—championing awareness of women's and children's health, global warming, and humanitarianism. But there is one issue that concerns us deeply.

In 2010, UN soldiers from Nepal were deployed to help after Haiti's devastating earthquake and cholera contaminated sewage was discarded from their camp into the country's major river. This triggered the largest cholera outbreak in the world, leaving more than 30 000 Haitians dead and more than 2 million affected.

6 years later a cholera epidemic still rages—14 000 new cases and 150 deaths are reported this year alone. The UN has yet to accept responsibility for introducing cholera into Haiti, despite two investigations establishing these facts.

We applaud the considerable work that the UN has done since 2010 to improve hygiene standards for peacekeepers and support immunisation campaigns. But we are distressed by

reports that less than 20% of the funds pledged by the UN after the outbreak to eradicate cholera have been raised.

Calls for you to do more are intensifying. 2000 letters were sent to the UN by Haitians with stories of hardship. Diaspora leaders have urged the UN to install water and sanitation infrastructure to control cholera and to compensate victims. Failing to accept the UN's responsibilities sets a poor example for the Haitian government to assume theirs, they say. Your own human rights advisers have implored you to respond. Instead, the UN continues to say it is immune from these claims.

It is disappointing that the UN's silence has forced the matter into the US courts. The UN has enormous power to act. But its power to ignore is what prevails here.

We hope you can address this issue. Please endorse the facts. Please acknowledge the injustice. Please apologise for the indifference. Responsibility is not about vengeance, but about accountability from which needed reparation and reconciliation can flow. The UN has long emphasised the need for accountability—we urge you to make this a final act in your celebrated career as Secretary-General.

Articles

Global burden of diseases, injuries, and risk factors for young people's health during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013

Ali H Mokdad, Mohammad Hossein Forouzanfar, Farah Daoud, Arwa A Mokdad, Charbel El Bcheraoui, Maziar Moradi-Lakeh, Hmwe Hmwe Kyu, Ryan M Barber, Joseph Wagner, Kelly Cercy, Hannah Kravitz, Megan Coggeshall, Adrienne Chew, Kevin F O'Rourke, Caitlyn Steiner, Marwa Tuffaha, Raghid Charara, Essam Abdullah Al-Ghamdi, Yaser Adi, Rima A Afifi, Hanan Alahmadi, Fadia AlBuhairan, Nicholas Allen, Mohammad AlMazroa, Abdulwahab A Al-Nehmi, Zulfa AlRayess, Monika Arora, Peter Azzopardi, Carmen Barroso, Mohammed Basulaiman, Zulfiqar A Bhutta, Chris Bonell, Cecilia Breinbauer, Louisa Degenhardt, Donna Denno, Jing Fang, Adesegun Fatusi, Andrea B Feigl, Ritsuko Kakuma, Nadim Karam, Elissa Kennedy, Tawfik A M Khoja, Fadi Maalouf, Carla Makhlouf Obermeyer, Amitabh Mattoo, Terry McGovern, Ziad A Memish, George A Mensah, Vikram Patel, Suzanne Petroni, Nicola Reavley, Diego Rios Zertuche, Mohammad Saeedi, John Santelli, Susan M Sawyer, Fred Ssewamala, Kikelomo Taiwo, Muhammad Tantawy, Russell M Viner, Jane Waldfogel, Maria Paola Zuñiga, Mohsen Naghavi, Haidong Wang, Theo Vos, Alan D Lopez, Abdullah A Al Rabeeah, George C Patton, Christopher J L Murray

Summary

Background

Young people's health has emerged as a neglected yet pressing issue in global development. Changing patterns of young people's health have the potential to undermine future population health as well as global economic development unless timely and effective strategies are put into place. We report the past, present, and anticipated burden of disease in young people aged 10–24 years from 1990 to 2013 using data on mortality, disability, injuries, and health risk factors.

Methods

The Global Burden of Disease Study 2013 (GBD 2013) includes annual assessments for 188 countries from 1990 to 2013, covering 306 diseases and injuries, 1233 sequelae, and 79 risk factors. We used the comparative risk assessment approach to assess how much of the burden of disease reported in a given year can be attributed to past exposure to a risk. We estimated attributable burden by comparing observed health outcomes with those that would have been observed if an alternative or counterfactual level of exposure had occurred in the past. We

applied the same method to previous years to allow comparisons from 1990 to 2013. We cross-tabulated the quantiles of disability-adjusted life-years (DALYs) by quintiles of DALYs annual increase from 1990 to 2013 to show rates of DALYs increase by burden. We used the GBD 2013 hierarchy of causes that organises 306 diseases and injuries into four levels of classification. Level one distinguishes three broad categories: first, communicable, maternal, neonatal, and nutritional disorders; second, non-communicable diseases; and third, injuries. Level two has 21 mutually exclusive and collectively exhaustive categories, level three has 163 categories, and level four has 254 categories.

Findings

The leading causes of death in 2013 for young people aged 10–14 years were HIV/AIDS, road injuries, and drowning (25·2%), whereas transport injuries were the leading cause of death for ages 15–19 years (14·2%) and 20–24 years (15·6%). Maternal disorders were the highest cause of death for young women aged 20–24 years (17·1%) and the fourth highest for girls aged 15–19 years (11·5%) in 2013. Unsafe sex as a risk factor for DALYs increased from the 13th rank to the second for both sexes aged 15–19 years from 1990 to 2013. Alcohol misuse was the highest risk factor for DALYs (7·0% overall, 10·5% for males, and 2·7% for females) for young people aged 20–24 years, whereas drug use accounted for 2·7% (3·3% for males and 2·0% for females). The contribution of risk factors varied between and within countries. For example, for ages 20–24 years, drug use was highest in Qatar and accounted for 4·9% of DALYs, followed by 4·8% in the United Arab Emirates, whereas alcohol use was highest in Russia and accounted for 21·4%, followed by 21·0% in Belarus. Alcohol accounted for 9·0% (ranging from 4·2% in Hong Kong to 11·3% in Shandong) in China and 11·6% (ranging from 10·1% in Aguascalientes to 14·9% in Chihuahua) of DALYs in Mexico for young people aged 20–24 years. Alcohol and drug use in those aged 10–24 years had an annual rate of change of >1·0% from 1990 to 2013 and accounted for more than 3·1% of DALYs.

Interpretation

Our findings call for increased efforts to improve health and reduce the burden of disease and risks for diseases in later life in young people. Moreover, because of the large variations between countries in risks and burden, a global approach to improve health during this important period of life will fail unless the particularities of each country are taken into account. Finally, our results call for a strategy to overcome the financial and technical barriers to adequately capture young people's health risk factors and their determinants in health information systems.

Funding

Bill & Melinda Gates Foundation.

The Lancet Commissions

Our future: a Lancet commission on adolescent health and wellbeing

George C Patton, Susan M Sawyer, John S Santelli, David A Ross, Rima Afifi, Nicholas B Allen, Monika Arora, Peter Azzopardi, Wendy Baldwin, Christopher Bonell, Ritsuko Kakuma, Elissa Kennedy, Jaqueline Mahon, Terry McGovern, Ali H Mokdad, Vikram Patel, Suzanne Petroni, Nicola Reavley, Kikelomo Taiwo, Jane Waldfogel, Dakshitha Wickremarathne, Carmen Barroso, Zulfiqar Bhutta, Adesegun O Fatusi, Amitabh Mattoo, Judith Diers, Jing Fang, Jane Ferguson, Frederick Ssewamala, Russell M Viner

Summary

Unprecedented global forces are shaping the health and wellbeing of the largest generation of 10 to 24 year olds in human history. Population mobility, global communications, economic development, and the sustainability of ecosystems are setting the future course for this

generation and, in turn, humankind.1,2 At the same time, we have come to new understandings of adolescence as a critical phase in life for achieving human potential. Adolescence is characterised by dynamic brain development in which the interaction with the social environment shapes the capabilities an individual takes forward into adult life.

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Jun 2016 Volume 16 Number 6 p619-752 e82-e107
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[Reviewed earlier]

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Jun 2016 Volume 4 Number 6 e344-e426
http://www.thelancet.com/journals/langlo/issue/current
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Volume 20, Issue 6, June 2016
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[Reviewed earlier]

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May 2016; 36 (4)
http://mdm.sagepub.com/content/current
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A Multidisciplinary Journal of Population Health and Health Policy
March 2016 Volume 94, Issue 1 Pages 1–223
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Nature
Volume 534 Number 7606 pp152-290 9 June 2016
http://www.nature.com/nature/current_issue.html
Letters
The Brazilian Zika virus strain causes birth defects in experimental models
Fernanda R. Cugola, Isabella R. Fernandes, Fabiele B. Russo, Beatriz C. Freitas, João L. M. Dias + et al.
The Zika virus can cross the placenta and cause intrauterine growth restriction, including microcephaly, in the SJL strain of mice; the virus can also infect human brain organoids, inducing cell death by apoptosis and disrupting cortical layers.

Nature Medicine
June 2016, Volume 22 No 6 pp569-692
http://www.nature.com/nm/journal/v22/n5/index.html
Opinion
Use the Bayh-Dole Act to lower drug prices for government healthcare programs - p576
Alfred B Engelberg & Aaron S Kesselheim
doi:10.1038/nm0616-576
As drug prices have increased, there is also greater pressure to find ways to ensure access to medicines. An existing provision of the Bayh-Dole Act could help to lower costs for qualifying drugs in federal programs such as Medicare and Medicaid.

Article
Protection against malaria at 1 year and immune correlates following PfSPZ vaccination - pp614 - 623
Andrew S Ishizuka, Kirsten E Lyke, Adam DeZure, Andrea A Berry, Thomas L Richie, Floreliz H Mendoza, Mary E Enama, Ingelise J Gordon, Lee-Jah Chang, Uzma N Sarwar, Kathryn L Zephir, LaSonji A Holman, Eric R James, Peter F Billingsley, Anusha Gunasekera, Sumana Chakravarty, Anita Manoj, MingLin Li, Adam J Ruben, Tao Li, Abraham G Eappen, Richard E Stafford, Natasha K C, Tooba Murshedkar, Hope DeCederfelt, Sarah H Plummer, Cynthia S Hendel, Laura Novik, Pamela J M Costner, Jamie G Saunders, Matthew B Laurens, Christopher V Plowe, Barbara Flynn, William R Whalen, J P Todd, Jay Noor, Srinivas Rao, Kailan Sierra-Davidson, Geoffrey M Lynn, Judith E Epstein, Margaret A Kemp, Gary A Fahle, Sebastian A Mikolajczak, Matthew Fishbaugher, Brandon K Sack, Stefan H I Kappe, Silas A Davidson, Lindsey S Garver, Niklas K Björkström, Martha C Nason, Barney S Graham, Mario Roederer, B Kim Lee Sim, Stephen L Hoffman, Julie E Ledgerwood & Robert A Seder
doi:10.1038/nm.4110
Fifty-five percent of individuals vaccinated with an attenuated Plasmodium falciparum sporozoite vaccine remained without parasitemia after controlled human malaria infection one year later; immune correlate analysis in humans and non-human primates suggest a role for liver-resident T cells.

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June 2016 Vol 16 No 6
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June 9, 2016 Vol. 374 No. 23
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Perspective
Saving Tiny Tim — Pediatrics and Childhood Poverty in the United States
Perri Klass, M.D.
N Engl J Med 2016; 374:2201-2205 June 9, 2016 DOI: 10.1056/NEJMp1603516

Free Full Text

Perspective
The Hell of Syria's Field Hospitals
Samer Attar, M.D.
N Engl J Med 2016; 374:2205-2207 June 9, 2016 DOI: 10.1056/NEJMp1603673
Free Full Text

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May 2016, VOLUME 137 / ISSUE 5
http://pediatrics.aappublications.org/content/137/5?current-issue=y
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Volume 8, Issue 2 (June 2016)
http://www.mdpi.com/1999-4923/8/2
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Volume 34, Issue 6, June 2016
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http://currents.plos.org/disasters/
[Accessed 11 June 2016]
Brief Report
Needs of Internally Displaced Women and Children in Baghdad, Karbala, and Kirkuk, Iraq
June 10, 2016 ·
Background: The continuing conflict in Iraq has now created an estimated four million internally displaced persons (IDPs). The bulk of recently displaced persons are in Central Iraq, often in insecure and difficult situations.
Objective: To determine the health status and health needs of women and children, age 15 and under, among a sample of this IDP population in Kirkuk, Baghdad, and Karbala governorates.
Methods: Data were collected from the senior female in 1216 families which contained 3665 children living in 45 makeshift settlements.
Findings: The majority of IDPs were living in tents or religious centers. Repeated displacements were common. Kidnappings were reported by 5.2% of families, and 7.9% of families reported a death of a family member during or after displacement. Intentional violence accounted for 72.3% of deaths. Only a third of children in school at the time of displacement continued in school. On average, households had received assistance on 3.2 occasions since displacement, food being the most common form. Access to health services was difficult. Some form of transport was often required. Few women knew where to secure antenatal services and many

did not know where childhood immunization services were available. During or after displacement 307 women had delivered or were currently pregnant. Complications of pregnancies were common, with a quarter reporting anemia, and 22.1% experiencing hemorrhage. Both communicable and non-communicable diseases (NCDs) were common in the women and children in the survey. Scabies, diarrhea and lice were common among children. Among women, hypertension accounted for 36.6% of NCDs and type 2 diabetes for 15.9%. Domestic violence directed against women was reported in 17.4% of families and against children in 26.6%
Interpretation: Women and children in IDP settlements of Central Iraq experience many vulnerabilities involving their health, education and their environment, in addition to living in physical danger. While some external assistance was received, much more is needed to meet the needs of a displaced population which is unlikely to return home soon.

PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/
(Accessed 11 June 2016)
Research Article
FLIRT-ing with Zika: A Web Application to Predict the Movement of Infected Travelers Validated Against the Current Zika Virus Epidemic
June 10, 2016 ·
Introduction: Beginning in 2015, Zika virus rapidly spread throughout the Americas and has been linked to neurological and autoimmune diseases in adults and babies. Developing accurate tools to anticipate Zika spread is one of the first steps to mitigate further spread of the disease. When combined, air traffic data and network simulations can be used to create tools to predict where infectious disease may spread to and aid in the prevention of infectious diseases. Specific goals were to: 1) predict where travelers infected with the Zika Virus would arrive in the U.S.; and, 2) analyze and validate the open access web application's (i.e., FLIRT) predictions using data collected after the prediction was made.
Method: FLIRT was built to predict the flow and likely destinations of infected travelers through the air travel network. FLIRT uses a database of flight schedules from over 800 airlines, and can display direct flight traffic and perform passenger simulations between selected airports. FLIRT was used to analyze flights departing from five selected airports in locations where sustained Zika Virus transmission was occurring. FLIRT's predictions were validated against Zika cases arriving in the U.S. from selected airports during the selected time periods. Kendall's τ and Generalized Linear Models were computed for all permutations of FLIRT and case data to test the accuracy of FLIRT's predictions.
Results: FLIRT was found to be predictive of the final destinations of infected travelers in the U.S. from areas with ongoing transmission of Zika in the Americas from 01 February 2016 – 01 to April 2016, and 11 January 2016 to 11 March 2016 time periods. MIA-FLL, JFK-EWR-LGA, and IAH were top ranked at-risk metro areas, and Florida, Texas and New York were top ranked states at-risk for the future time period analyzed (11 March 2016 – 11 June 2016). For the 11 January 2016 to 11 March 2016 time period, the region-aggregated model indicated 7.24 (95% CI 6.85 – 7.62) imported Zika cases per 100,000 passengers, and the state-aggregated model suggested 11.33 (95% CI 10.80 – 11.90) imported Zika cases per 100,000 passengers.
Discussion: The results from 01 February 2016 to 01 April 2016 and 11 January 2016 to 11 March 2016 time periods support that modeling air travel and passenger movement can be a powerful tool in predicting where infectious diseases will spread next. As FLIRT was shown to

significantly predict distribution of Zika Virus cases in the past, there should be heightened biosurveillance and educational campaigns to medical service providers and the general public in these states, especially in the large metropolitan areas.

Radiological Characterization of Cerebral Phenotype in Newborn Microcephaly Cases from 2015 Outbreak in Brazil
June 8, 2016 · *Research Article*
Introduction: Brazil is facing, since October of 2015, an outbreak of microcephalic fetuses. This outbreak is correlated with the beginning of circulation of Zika virus (ZIKV) in the country. Although it is clear that the size of the head is diminished in these fetuses, the brain phenotype associated with these malformations is unknown.
Methods: We collected computed tomography images of the microcephaly cases from the region of Natal, Rio Grande do Norte, from September 2015 to February 2016.
Findings: The microcephalies derived from the current outbreak are associated with intracerebral calcifications, malformation of the ventricular system, migratory disorders in the telencephalon and, in a lower frequency, malformation of the cerebellum and brainstem.
Discussion: The characteristics described herein are not usually found in other types of microcephaly. We suggest that this work can be used as a guideline to identify microcephaly cases associated to the current outbreak.

PLoS Medicine
http://www.plosmedicine.org/
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PLoS Neglected Tropical Diseases
http://www.plosntds.org/
Viewpoints
Dengue Vaccine: Considerations before Rollout in Colombia
Christian Julian Villabona-Arenas, Raquel Elvira Ocazionez Jimenez, Cinthy Lorena Jimenez Silva
Viewpoints | published 09 Jun 2016 | PLOS Neglected Tropical Diseases
http://dx.doi.org/10.1371/journal.pntd.0004653

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http://www.plosone.org/
[Accessed 11 June 2016]
[No new relevant content identified]

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PNAS - Proceedings of the National Academy of Sciences of the United States of America
http://www.pnas.org/content/early/
(Accessed 11 June 2016)
Biological Sciences - Applied Biological Sciences:
Directed vaccination against pneumococcal disease
Yi Li, Andrew Hill, Marie Beitelshees, Shuai Shao, Jonathan F. Lovell, Bruce A. Davidson, Paul R. Knight III, Anders P. Hakansson, Blaine A. Pfeifer, and Charles H. Jones
PNAS 2016 ; published ahead of print June 6, 2016, doi:10.1073/pnas.1603007113
Significance
Pneumococcal disease represents a global health problem, especially for the young, the elderly, and the resource-limited. Disease progression begins with asymptomatic nasopharyngeal bacterial colonization before subsequent dissemination and disease (pneumonia, sepsis, and middle ear infection). Analysis of this transition from colonization to disease provided antigens that were tested in this study for directed vaccination against only the virulent subset of pneumococci. In so doing, a "smart" vaccine was sought that would address this disease broadly, effectively, and selectively.
Abstract
Immunization strategies against commensal bacterial pathogens have long focused on eradicating asymptomatic carriage as well as disease, resulting in changes in the colonizing microflora with unknown future consequences. Additionally, current vaccines are not easily adaptable to sequence diversity and immune evasion. Here, we present a "smart" vaccine that leverages our current understanding of disease transition from bacterial carriage to infection with the pneumococcus serving as a model organism. Using conserved surface proteins highly expressed during virulent transition, the vaccine mounts an immune response specifically against disease-causing bacterial populations without affecting carriage. Aided by a delivery technology capable of multivalent surface display, which can be adapted easily to a changing clinical picture, results include complete protection against the development of pneumonia and sepsis during animal challenge experiments with multiple, highly variable, and clinically relevant pneumococcal isolates. The approach thus offers a unique and dynamic treatment option readily adaptable to other commensal pathogens.

Pneumonia
Vol 6 (2015)
https://pneumonia.org.au/index.php/pneumonia/issue/current
[Reviewed earlier]

Prehospital & Disaster Medicine
Volume 31 - Issue 03 - June 2016
https://journals.cambridge.org/action/displayIssue?jid=PDM&tab=currentissue
[Reviewed earlier]

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Volume 87, Pages 1-238 (June 2016)
http://www.sciencedirect.com/science/journal/00917435/86

[Reviewed earlier]

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10 February 2016; volume 283, issue 1824
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[Reviewed earlier]

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Volume 9 Issue 1 April 2016
http://phe.oxfordjournals.org/content/current
[Reviewed earlier]

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Volume 131 , Issue Number 3 May/June 2016
http://www.publichealthreports.org/issuecontents.cfm?Volume=131&Issue=3
[Reviewed earlier]

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June 2016; 26 (7)
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[Reviewed earlier]

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February 2016 Vol. 39, No. 2
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May 2016 Volume 36, Issue 5 Pages 863–1068
http://onlinelibrary.wiley.com/doi/10.1111/risa.2016.36.issue-5/issuetoc
[Reviewed earlier]

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Volume 9, 2016
https://www.dovepress.com/risk-management-and-healthcare-policy-archive56
[Reviewed earlier]

Science
10 June 2016 Vol 352, Issue 6291
http://www.sciencemag.org/current.dtl
[New issue; No new relevant content identified]

Science Translational Medicine
08 June 2016 Vol 8, Issue 342
http://stm.sciencemag.org/
[New issue; No new relevant content identified]

Social Science & Medicine
Volume 157, Pages 1-192 (May 2016)
http://www.sciencedirect.com/science/journal/02779536/156
Commentary
What does India need to do to address childhood malnutrition at scale?
Pages 186-188
Zulfiqar A. Bhutta

Improving household-level nutrition-specific and nutrition–sensitive conditions key to reducing child undernutrition in India
Pages 189-192
Daniel J. Corsi, Iván Mejía-Guevara, S.V. Subramanian

Regular Articles
Risk factors for chronic undernutrition among children in India: Estimating relative importance, population attributable risk and fractions
Original Research Article
Pages 165-185
Daniel J. Corsi, Iván Mejía-Guevara, S.V. Subramanian
Highlights
:: Research on risk factors for child undernutrition has been single-factorial and downstream.
:: We assessed the relative and joint contribution of multiple factors for growth and development.
:: Maternal stature, education, household wealth, dietary diversity, and maternal BMI were the top 5 risk factors.
:: Together these five 5 factors accounted for more than 65% of the PAR for child undernutrition.
:: Strategies focused on social circumstances and direct investments in nutrition specific-programs are required.

Tropical Medicine & International Health
June 2016 Volume 21, Issue 6 Pages 691–817
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2016.21.issue-6/issuetoc
Reviews
Tuberculosis and diabetes: current state and future perspectives (pages 694–702)
Damiano Pizzol, Francesco Di Gennaro, Kajal D. Chhaganlal, Claudia Fabrizio, Laura Monno, Giovanni Putoto and Annalisa Saracino
Version of Record online: 18 MAY 2016 | DOI: 10.1111/tmi.12704
Abstract
This review outlines the association between tuberculosis and diabetes, focusing on epidemiology, physiopathology, clinical aspects, diagnosis and treatment, and evaluates future perspectives, with particular attention to developing countries.

Mortality risk and associated factors in HIV-exposed, uninfected children (pages 720–734)
Shino Arikawa, Nigel Rollins, Marie-Louise Newell and Renaud Becquet
Version of Record online: 19 APR 2016 | DOI: 10.1111/tmi.12695
Abstract
Objective
With increasing maternal antiretroviral treatment (ART), the number of children newly infected with HIV has declined. However, the possible increased mortality in the large number of HIV-exposed, uninfected (HEU) children may be of concern. We quantified mortality risks among HEU children and reviewed associated factors.
Methods
Systematic search of electronic databases (PubMed, Scopus). We included all studies reporting mortality of HEU children to age 60 months and associated factors. Relative risk of mortality between HEU and HIV-unexposed, uninfected (HUU) children was extracted where relevant. Inverse variance methods were used to adjust for study size. Random-effects models were fitted to obtain pooled estimates.
Results
A total of 14 studies were included in the meta-analysis and 13 in the review of associated factors. The pooled cumulative mortality in HEU children was 5.5% (95% CI: 4.0–7.2; I2 = 94%) at 12 months (11 studies) and 11.0% (95% CI: 7.6–15.0; I2 = 93%) at 24 months (four studies). The pooled risk ratios for the mortality in HEU children compared to HUU children in the same setting were 1.9 (95% CI: 0.9–3.8; I2 = 93%) at 12 months (four studies) and 2.4 (95% CI: 1.1–5.1; I2 = 93%) at 24 months (three studies).
Conclusion
Compared to HUU children, mortality risk in HEU children was about double at both age points, although the association was not statistically significant at 12 months. Interpretation of the pooled estimates is confounded by considerable heterogeneity between studies. Further research is needed to characterise the impact of maternal death and breastfeeding on the survival of HEU infants in the context of maternal ART, where current evidence is limited.

Ethical challenges in designing and conducting medicine quality surveys (pages 799–806)

Patricia Tabernero, Michael Parker, Raffaella Ravinetto, Souly Phanouvong, Shunmay Yeung, Freddy E. Kitutu, Phaik Yeong Cheah, Mayfong Mayxay, Philippe J. Guerin and Paul N. Newton
Version of Record online: 20 MAY 2016 | DOI: 10.1111/tmi.12707
Abstract
Objectives
In this paper we discuss the main ethical challenges related to the conduct of medicine quality surveys and make suggestions on how to address them.
Method
Most evidence-based information regarding medicine quality derives from surveys. However, existing research ethical guidelines do not provide specific guidance for medicine quality surveys. Hence, those conducting surveys are often left wondering how to judge what counts as best practice. A list of the main ethical challenges in the design and conduct of surveys is presented.
Results and conclusions
It is vital that the design and conduct of medicine quality surveys uphold moral and ethical obligations and analyse the ethical implications and consequences of such work. These aspects include the impact on the local availability of and access to medicines; the confidentiality and privacy of the surveyors and the surveyed; questions as to whether outlet staff personnel should be told they are part of a survey; the need of ethical and regulatory approvals; and how the findings should be disseminated. Medicine quality surveys should ideally be conducted in partnership with the relevant national Medicine Regulatory Authorities. An international, but contextually sensitive, model of good ethical practice for such surveys is needed.

Vaccine
Volume 34, Issue 27, Pages 3007-3220 (8 June 2016)
http://www.sciencedirect.com/science/journal/0264410X/34/27
Commentary
Clinical trials: The mathematics of falling vaccine efficacy with rising disease incidence
Pages 3007-3009
M. Gabriela M. Gomes, Stephen B. Gordon, David G. Lalloo
Open Access
[Initial text]
Reports of unexplained discrepancies in the efficacy of vaccines, as estimated from randomised controlled trials in different parts of the world, are commonplace in the literature [1], [2], [3] and [4]. Moreover, there is a consistent trend for lower vaccine efficacy when measured in settings where the disease of interest has a higher incidence, leading to questions about the appropriateness of pooled estimates. Here, we examine the mathematical basis for such trends and propose a measure of efficacy that is valid across settings. The approach relies on fitting mechanistic models, which specify pathogen exposures and host responses, to global vaccine trial data stratified by local disease incidence. Such models enable the estimation of vaccine protection per exposure to the pathogen. A strategy to estimate per-exposure vaccine efficacy will enable more accurate estimates of vaccine efficacy across a range of disease incidence [5]…

Reviews

Do we have enough evidence how seasonal influenza is transmitted and can be prevented in hospitals to implement a comprehensive policy?

Review Article
Pages 3014-3021
Roger E. Thomas

Abstract

Purpose

To identify if there is enough evidence at low risk-of-bias to prevent influenza transmission by vaccinating health-care workers (HCWs), patients and visitors; screening for laboratory-proven influenza all entering hospitals; screening asymptomatic individuals; identifying influenza supershedders; hand-washing and mask-wearing by HCWs, patients and visitors; and cleaning hospital rooms and equipment.

Principal Results

Vaccination reduces influenza episodes of vaccinated (4.81/100 HCW) compared to unvaccinated (7.54/100) HCWs/influenza season. A Cochrane review found for inactivated vaccines the Number Needed to Vaccinate (NNV) = 71 (95%CI 64%, 80%) for adults 18–60 (same age as HCWs) to prevent laboratory-proven influenza. There are no RCTs of screening HCWs, patients, visitors and influenza supershedders to prevent transmission. None of four RCTs of HCWs mask-wearing (two directly observed, two not) showed an effect because they were underpowered either due to small size or low circulation of influenza. Hospital rooms and equipment can effectively be cleaned of influenza by many chemicals and hydrogen peroxide vapor machines but the cleaning cycle needs shortening to increase the likelihood of adoption.

Major Conclusions

HCW vaccination is a partial solution with current vaccination levels. There are no RCTs of screening HCWs, patients and visitors demonstrating preventing influenza transmission. Only one study costed furloughing HCWs with influenza and no RCTs have identified benefits of isolating influenza supershedders. RCTs of directly- and electronically continuously-observed mask-wearing and hand-hygiene and RCTs of incentives for meticulous hygiene are required. RCTs of engineering solutions (external venting, frequent room air changes) are needed. A wide range of chemicals effectively cleans hospital rooms and equipment from influenza. Hydrogen peroxide vapor is effective against influenza and a wide range of bacterial pathogens with patient room changes, and clean areas cleaners do not clean but its cleaning cycle needs shortening to increase the likelihood of adoption of cleaning rooms vacated by influenza patients.

Assessing the impact of vaccination programmes on burden of disease: Underlying complexities and statistical methods

Review Article
Pages 3022-3029
Nicole Mealing, Andrew Hayen, Anthony T. Newall

Abstract

It is important to assess the impact a vaccination programme has on the burden of disease after it is implemented. For example, this may reveal herd immunity effects or vaccine-induced shifts in the incidence of disease or in circulating strains or serotypes of the pathogen. In this article we summarise the key features of infectious diseases that need to be considered when trying to detect any changes in the burden of diseases at a population level as a result of vaccination efforts. We outline the challenges of using routine surveillance databases to monitor infectious diseases, such as the identification of diseased cases and the availability of

vaccination status for cases. We highlight the complexities in modelling the underlying patterns in infectious disease rates (e.g. presence of autocorrelation) and discuss the main statistical methods that can be used to control for periodicity (e.g. seasonality) and autocorrelation when assessing the impact of vaccination programmes on burden of disease (e.g. cosinor terms, generalised additive models, autoregressive processes and moving averages). For some analyses, there may be multiple methods that can be used, but it is important for authors to justify the method chosen and discuss any limitations. We present a case study review of the statistical methods used in the literature to assess the rotavirus vaccination programme impact in Australia. The methods used varied and included generalised linear models and descriptive statistics. Not all studies accounted for autocorrelation and seasonality, which can have a major influence on results. We recommend that future analyses consider the strength and weakness of alternative statistical methods and justify their choice.

Relationship status impacts primary reasons for interest in the HPV vaccine among young adult women

Original Research Article
Pages 3119-3124
Erika L. Thompson, Cheryl A. Vamos, William M. Sappenfield, Diane M. Straub, Ellen M. Daley

Abstract
Introduction
The HPV vaccine prevents HPV-related cancers and genital warts, which cause significant morbidity and mortality in the US. The vaccine is targeted toward 11–12 year old males and females, but is recommended for "catch-up" vaccination until age 26 for females. Young adult females (18–26 years) represent a unique group that may face distinct barriers to HPV vaccination, one of which is relationship status. The purpose of this study was to assess how relationship status impacts interest in HPV vaccination and primary reasons for non-vaccination among 18–26 year old young adult women.
Methods
The National Health Interview Survey 2010 was examined among unvaccinated females, 18–26 years (N = 1457). A survey-weighted logistic regression analysis with conversion to prevalence ratios assessed how interest in the HPV vaccine (yes/no) was influenced by relationship status (married, living with a partner, other, single) among young adult women. A Rao-Scott chi-square test examined differences between primary reasons for non-vaccination and relationship status among HPV vaccine uninterested women.
Results
Among unvaccinated women, 31.4% were interested in the HPV vaccine. Women who were living with a partner (PR = 1.45, 95%CI 1.06–1.90) and single (PR = 1.42, 95%CI 1.11–1.76) were significantly more likely than married women to be interested in the HPV vaccine, while controlling for socio-demographic and other known risk factors. Additionally, primary reasons for non-vaccination differed based on relationship status among uninterested women ($p < 0.01$). Women who were married were more likely to cite not needing the vaccine compared to never married women ($p < 0.05$).
Conclusion
Relationship status in young adulthood impacts HPV vaccine interest and decision-making among a national sample of women. Primary reasons for non-interest in the vaccine may be shaped by attitudes and knowledge about the HPV vaccine that differ by relationship status. Future research is needed to elucidate ways to overcome relationship status as a barrier to HPV vaccination.

Cost-effectiveness of seasonal inactivated influenza vaccination among pregnant women

Original Research Article
Pages 3149-3155
Jing Xu, Fangjun Zhou, Carrie Reed, Sandra S. Chaves, Mark Messonnier, Inkyu K. Kim

Abstract
Objective
To evaluate the cost-effectiveness of seasonal inactivated influenza vaccination among pregnant women using data from three recent influenza seasons in the United States.
Design, setting, and participants
We developed a decision-analytic model following a cohort of 5.2 million pregnant women and their infants aged <6 months to evaluate the cost-effectiveness of vaccinating women against seasonal influenza during pregnancy from a societal perspective. The main outcome measures were quality-adjusted life-year (QALY) gained and cost-effectiveness ratios. Data sources included surveillance data, epidemiological studies, and published vaccine cost data. Sensitivity analyses were also performed. All costs and outcomes were discounted at 3% annually.
Main outcome measures
Total costs (direct and indirect), effects (QALY gains, averted case numbers), and incremental cost-effectiveness of seasonal inactivated influenza vaccination among pregnant women (cost per QALY gained).
Results
Using a recent benchmark of 52.2% vaccination coverage among pregnant women, we studied a hypothetical cohort of 2,753,015 vaccinated pregnant women. With an estimated vaccine effectiveness of 73% among pregnant women and 63% among infants <6 months, QALY gains for each season were 305 (2010–2011), 123 (2011–2012), and 610 (2012–2013). Compared with no vaccination, seasonal influenza vaccination during pregnancy was cost-saving when using data from the 2010–2011 and 2012–2013 influenza seasons. The cost-effectiveness ratio was greater than $100,000/QALY with the 2011–2012 influenza season data, when CDC reported a low attack rate compared to other recent seasons.
Conclusions
Influenza vaccination for pregnant women can reduce morbidity from influenza in both pregnant women and their infants aged <6 months. Seasonal influenza vaccination during pregnancy is cost-saving during moderate to severe influenza seasons.

Vaccine: Development and Therapy
https://www.dovepress.com/vaccine-development-and-therapy-archive111
(Accessed 11 June 2016)
[No new content]

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 11 June 2016)
[No new content]

Value in Health
May 2016 Volume 19, Issue 3
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

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

Gynecologic Oncology
June 2016 Volume 141, Supplement 1, Page 167
Knowledge about the HPV vaccine among employees at a tertiary cancer center: Room for improvement
K.R. Dahlstrom, E.M. Sturgis, R.A. DePinho, E. Hawk, G. Baum, E. Tamez, R. Bello, L.D. Stevens, L.M. Ramondetta
Objectives: Despite the availability of several US Food and Drug Administration–approved vaccines that prevent human papillomavirus (HPV)–related cancers, vaccination rates for girls and boys in the United States remain low. The aim of this study was to determine the knowledge and attitudes of employees at a tertiary cancer center toward HPV vaccination.

Gynecologic Oncology
June 2016 Volume 141, Supplement 1, Page 196
Resident physicians' contribution to human papillomavirus vaccine uptake: Are residents offering the vaccine to eligible patients?
T. Zigras, H. Sauer, S. Kashani
Objectives: The goal of the study was to determine if resident physicians are vaccinating eligible patients with the human papillomavirus (HPV) vaccine. A comparison of the primary care specialties in the United States was undertaken to compare utilization of the vaccine, education during training, and foundation of knowledge. Family medicine, internal medicine, pediatrics, and obstetrics and gynecology were compared.

The Cochrane Library
First published: 2 June 2016
Influenza vaccination for healthcare workers who care for people aged 60 or older living in long-term care institutions
RE Thomas, T Jefferson, TJ Lasserson
Abstract
Background
A systematic review found that 3% of working adults who had received influenza vaccine and 5% of those who were unvaccinated had laboratory-proven influenza per season; in healthcare workers (HCWs) these percentages were 5% and 8% respectively. Healthcare workers may transmit influenza to patients.
Objectives

To identify all randomised controlled trials (RCTs) and non-RCTs assessing the effects of vaccinating healthcare workers on the incidence of laboratory-proven influenza, pneumonia, death from pneumonia and admission to hospital for respiratory illness in those aged 60 years or older resident in long-term care institutions (LTCIs).

Search methods

We searched CENTRAL (2015, Issue 9), MEDLINE (1966 to October week 3, 2015), EMBASE (1974 to October 2015) and Web of Science (2006 to October 2015), but Biological Abstracts only from 1969 to March 2013 and Science Citation Index-Expanded from 1974 to March 2013 due to lack of institutional access in 2015.

Selection criteria

Randomised controlled trials (RCTs) and non-RCTs of influenza vaccination of healthcare workers caring for individuals aged 60 years or older in LTCIs and the incidence of laboratory-proven influenza and its complications (lower respiratory tract infection, or hospitalisation or death due to lower respiratory tract infection) in individuals aged 60 years or older in LTCIs.

Data collection and analysis

Two authors independently extracted data and assessed risk of bias. Effects on dichotomous outcomes were measured as risk differences (RDs) with 95% confidence intervals (CIs). We assessed the quality of evidence with GRADE.

Main results

We identified four cluster-RCTs and one cohort study (n = 12,742) of influenza vaccination for HCWs caring for individuals ≥ 60 years in LTCIs. Four cluster RCTs (5896 residents) provided outcome data that addressed the objectives of our review. The studies were comparable in their study populations, intervention and outcome measures. The studies did not report adverse events. The principal sources of bias in the studies related to attrition, lack of blinding, contamination in the control groups and low rates of vaccination coverage in the intervention arms, leading us to downgrade the quality of evidence for all outcomes due to serious risk of bias.

Offering influenza vaccination to HCWs based in long term care homes may have little or no effect on the number of residents who develop laboratory-proven influenza compared with those living in care homes where no vaccination is offered (RD 0 (95% CI -0.03 to 0.03), two studies with samples taken from 752 participants; low quality evidence). HCW vaccination probably leads to a reduction in lower respiratory tract infection in residents from 6% to 4% (RD -0.02 (95% CI -0.04 to 0.01), one study of 3400 people; moderate quality evidence). HCW vaccination programmes may have little or no effect on the number of residents admitted to hospital for respiratory illness (RD 0 (95% CI -0.02 to 0.02, one study of 1059 people; low quality evidence). We decided not to combine data on deaths from lower respiratory tract infection (two studies of 4459 people) or all cause deaths (four studies of 8468 people). The direction and size of difference in risk varied between the studies. We are uncertain as to the effect of vaccination on these outcomes due to the very low quality of evidence. Adjusted analyses, which took into account the cluster design, did not differ substantively from the pooled analysis with unadjusted data.

Authors' conclusions

Our review findings have not identified conclusive evidence of benefit of HCW vaccination programmes on specific outcomes of laboratory-proven influenza, its complications (lower respiratory tract infection, hospitalisation or death due to lower respiratory tract illness), or all cause mortality in people over the age of 60 who live in care institutions. This review did not find information on co-interventions with healthcare worker vaccination: hand-washing, face masks, early detection of laboratory-proven influenza, quarantine, avoiding admissions,

antivirals and asking healthcare workers with influenza or influenza-like illness (ILI) not to work. This review does not provide reasonable evidence to support the vaccination of healthcare workers to prevent influenza in those aged 60 years or older resident in LTCIs. High quality RCTs are required to avoid the risks of bias in methodology and conduct identified by this review and to test further these interventions in combination.

Pediatric Infectious Disease Journal
Post Acceptance: May 31, 2016
doi: 10.1097/INF.0000000000001241
Safety and Immunogenicity of MMR (R) II (Combination Measles-Mumps-Rubella Vaccine) in Clinical Trials of Healthy Children Conducted Between 1988 and 2009.
Kuter, Barbara J. PhD, MPH; Brown, Michelle BS; Wiedmann, Richard T. MS; Hartzel, Jonathan PhD; Musey, Luwy MD
Abstract
Background: M-M-R(R)II, a combination measles, mumps, and rubella vaccine, was licensed in the United States in 1978 based on data from several clinical trials that demonstrated that the safety and immunogenicity of the vaccine were comparable to the component monovalent vaccines and to the previous trivalent combination vaccine.
Methods: Safety and immunogenicity data from 23 postlicensure clinical trials conducted with M-M-R(R)II between 1988 and 2009 were summarized. A total of 12,901 children who received only a first dose, 920 children who received a first and second dose, and 400 children who received only a second dose were evaluated.
Results: The vaccine was generally well-tolerated among children who received a first and/or second dose of M-M-R(R)II. During the 28-42 day follow-up after dose 1 and dose 2, the median rate of temperatures >=102[degrees]F (oral equivalent) was 24.8% and 13.0% and the median rate of measles/rubella-like rash was 3.2% and 0.5%, respectively. The median rate of injection-site reactions during the first 5 days postdose 1 and postdose 2 was 17.3% and 42.7%, respectively.
The seroconversion rates (ELISA) after dose 1 were remarkably consistent from study to study between 1988 and 2009 (92.8-100% for measles, 97.7-100% for mumps, and 92.8-100% for rubella). A trend test showed that there was no change in the immunogenicity of the vaccine over the 21-year period.
Conclusions: The results of this analysis demonstrate that M-M-R(R)II is well-tolerated and immunogenic. The vaccine performed consistently over 21 years of evaluation in clinical trials.

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Media/Policy Watch

This section is intended to alert readers to substantive news, analysis and opinion from the general media 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 11 June 2016
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 11 June 2016
[No new, unique, relevant content]

The Economist
http://www.economist.com/
Accessed 11 June 2016
[No new, unique, relevant content]

Financial Times
http://www.ft.com/home/uk
Accessed 11 June 2016
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 11 June 2016
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 11 June 2016
Essay June 5, 2016
The Innovative Finance Revolution
Private Capital for the Public Good
By Georgia Levenson Keohane and Saadia Madsbjerg
…To help ensure that this money would be spent in the most cost-effective way, IFFIm partnered with Gavi, the Vaccine Alliance, a nonprofit that is funded in part by the Bill & Melinda Gates Foundation and that specializes in large-scale immunization programs and creative ways to fund them. IFFIm's bond issues helped Gavi increase its annual budget from $227 million in 2006 to $1.5 billion in 2015 and expand programs such as a polio eradication initiative that has financed the development and testing of new vaccines and the stockpiling of proven ones in places such as the Democratic Republic of the Congo and India.
A 2011 evaluation of IFFIm conducted by the health-care consulting company HLSP (now part of Mott MacDonald) credited IFFIm with saving at least 2.75 million lives and improving the quality of millions more….

Foreign Policy

http://foreignpolicy.com/
Accessed 11 June 2016
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 11 June 2016
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 11 June 2016
June 10, 2016
The Mistrust of Science
By Atul Gawande
Science has never been more powerful, but it is under attack.
…Vaccine fears, for example, have persisted despite decades of research showing them to be unfounded. Some twenty-five years ago, a statistical analysis suggested a possible association between autism and thimerosal, a preservative used in vaccines to prevent bacterial contamination. The analysis turned out to be flawed, but fears took hold. Scientists then carried out hundreds of studies, and found no link. Still, fears persisted. Countries removed the preservative but experienced no reduction in autism—yet fears grew. A British study claimed a connection between the onset of autism in eight children and the timing of their vaccinations for measles, mumps, and rubella. That paper was retracted due to findings of fraud: the lead author had falsified and misrepresented the data on the children. Repeated efforts to confirm the findings were unsuccessful. Nonetheless, vaccine rates plunged, leading to outbreaks of measles and mumps that, last year, sickened tens of thousands of children across the U.S., Canada, and Europe, and resulted in deaths.
People are prone to resist scientific claims when they clash with intuitive beliefs. They don't see measles or mumps around anymore. They do see children with autism. And they see a mom who says, "My child was perfectly fine until he got a vaccine and became autistic."…

New York Times
http://www.nytimes.com/
Accessed 11 June 2016
Africa
Fake Vaccination Papers Let Yellow Fever Spread in Angola
By REUTERS JUNE 10, 2016, 9:48 A.M. E.D.T.
LUANDA — The world's worst yellow fever outbreak in decades took hold in an Angolan slum because its early victims were Eritrean migrants whose false vaccination papers sent doctors off on the wrong path for weeks, international health officials said.
The flare-up of the mosquito-borne disease has killed 325 people in Angola, spread as far as China - which has close commercial links with oil-rich Angola - and raised fears of the world running out of vaccine, but it might have been stopped in its tracks if it had been identified quickly in Luanda.
Since the outbreak was identified in January, 10.5 million Angolans - 40 percent of the population - have been vaccinated and the World Health Organization (WHO) plans to cover the rest of the war-scarred country by the end of the year.

But with a reported case this week of the disease jumping via a mosquito from one person to another in Kinshasa, a city of over 12 million in neighbouring Democratic Republic of Congo, there are concerns about global vaccine supplies running out.

Luanda WHO representative Hernando Agudelo said he and government experts thought they were dealing with a mystery disease when unexplained deaths first surfaced in Km 30, part of the capital's sprawling Viana district, in mid-December.

"The first people that we found with this strange way of dying, this syndrome, they had vaccination cards," Agudelo told Reuters. "The first meeting with the minister, we were analysing 'What the hell is it?'"…

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 11 June 2016
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 11 June 2016
Vaccine developer gets $7.5 million in government loans to expand in Montgomery
Novavax to add 850 new jobs while remaining in Gaithersburg, officials said.
Bill Turque | Local-Politics | Jun 8, 2016

Think Tanks et al

Brookings
http://www.brookings.edu/
Accessed 11 June 2016
[No new relevant content]

Center for Global Development
http://www.cgdev.org/
Accessed 11 June 2016
[No new relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 11 June 2016
[No new relevant content]

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Navigation: A. Ebola/EVD; Polio; MERS-Cov B. WHO; CDC C. Announcements/Milestones/Perspectives
D. Reports/Research/Analysis E. Journal Watch F. Media Watch

CVEP is a program of GE2P2 Global – comprising a foundation and public benefit corporation – operating with a mission to advance ethical and scientific rigor in research and evidence generation for governance, policy and practice in health, human rights action, humanitarian response, heritage stewardship, education and sustainable development – serving governments, international agencies, INGOs, civil society organizations (CSOs), commercial entities, consortia and alliances.

Support for this service is provided by the Bill & Melinda Gates Foundation; PATH; the International Vaccine Institute (IVI); and industry resource members Crucell/Janssen/J&J, Pfizer, Sanofi Pasteur U.S.,Takeda, Valera (list in formation), and the Developing Countries Vaccine Manufacturers Network (DCVMN).

Support is also provided by a growing list of individuals who use this membership service to support their roles in public health, clinical practice, government, NGOs and other international institutions, academia and research organizations, and industry.

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