

Vaccines and Global Health: The Week in Review 18 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.

Comments and suggestions should be directed to
David R. Curry, MS
Editor and
Executive Director
Center for Vaccine Ethics & Policy
david.r.curry@centerforvaccineethicsandpolicy.org

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

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

A. Zika; Ebola/EVD; Polio; MERS-Cov; Yellow Fever

B. WHO: CDC

C. Announcements/Milestones/Perspectives

D. Reports/Research/Analysis

E. Journal Watch

F. Media Watch

::::::

Zika virus [to 18 June 2016]

Public Health Emergency of International Concern (PHEIC) http://www.who.int/emergencies/zika-virus/en/

WHO statement on the third meeting of the International Health Regulations (2005) (IHR(2005)) Emergency Committee on Zika virus and observed increase in neurological disorders and neonatal malformations

WHO statement

14 June 2016

The third meeting of the Emergency Committee (EC) convened by the Director-General under the International Health Regulations (2005) (IHR 2005) regarding microcephaly, other neurological disorders and Zika virus was held by teleconference on 14 June 2016, from 13:00 to 17:15 Central European Time. In addition to providing views to the Director-General on whether the event continued to constitute a Public Health Emergency of International Concern (PHEIC), the Committee was asked to consider the potential risks of Zika transmission for mass gatherings, including the Olympic and Paralympic Games scheduled for August and September 2016, respectively, in Rio de Janeiro, Brazil.

The Committee was briefed on the implementation of the Temporary Recommendations issued by the Director-General on 8 March 2016 and updated on the epidemiology and association of Zika virus infection, microcephaly and Guillain-Barré Syndrome (GBS) since that time. The following States Parties provided information on microcephaly, GBS and other neurological disorders occurring in the presence of Zika virus transmission: Brazil, Cabo Verde, Colombia, France, and the United States of America. Advisors to the Committee provided further information on the potential risks of Zika virus transmission associated with mass gatherings and the upcoming Olympic and Paralympic Games, and the Committee thoroughly reviewed the range of public perspectives, opinions and concerns that have recently been aired on this subject.

The Committee concurred with the international scientific consensus, reached since the Committee last met, that Zika virus is a cause of microcephaly and GBS, and, consequently, that Zika virus infection and its associated congenital and other neurological disorders is a Public Health Emergency of International Concern (PHEIC). The Committee restated the advice it provided to the Director-General in its 2nd meeting in the areas of public health research on microcephaly, other neurological disorders and Zika virus, surveillance, vector control, risk communications, clinical care, travel measures, and research and product development.

The Committee noted that mass gatherings, such as the Olympic and Paralympic Games, can bring together substantial numbers of susceptible individuals, and can pose a risk to the individuals themselves, can result in the amplification of transmission and can, potentially, contribute to the international spread of a communicable disease depending on its epidemiology, the risk factors present and the mitigation strategies that are in place. In the context of Zika virus, the Committee noted that the individual risks in areas of transmission are the same whether or not a mass gathering is conducted, and can be minimized by good public health measures. The Committee reaffirmed and updated its advice to the Director-General on the prevention of infection in international travellers as follows:

:: Pregnant women should be advised not to travel to areas of ongoing Zika virus outbreaks; pregnant women whose sexual partners live in or travel to areas with Zika virus outbreaks should ensure safe sexual practices or abstain from sex for the duration of their pregnancy,

- :: Travellers to areas with Zika virus outbreaks should be provided with up to date advice on potential risks and appropriate measures to reduce the possibility of exposure through mosquito bites and sexual transmission and, upon return, should take appropriate measures, including practicing safer sex, to reduce the risk of onward transmission,
- :: The World Health Organization should regularly update its guidance on travel with evolving information on the nature and duration of risks associated with Zika virus infection.

Based on the existing evidence from the current Zika virus outbreak, it is known that this virus can spread internationally and establish new transmission chains in areas where the vector is present. Focusing on the potential risks associated with the Olympic and Paralympic Games, the Committee reviewed information provided by Brazil and Advisors specializing in arboviruses, the international spread of infectious diseases, travel medicine, mass gatherings and bioethics. The Committee concluded that there is a very low risk of further international spread of Zika virus as a result of the Olympic and Paralympic Games as Brazil will be hosting the Games during the Brazilian winter when the intensity of autochthonous transmission of arboviruses, such as dengue and Zika viruses, will be minimal and is intensifying vector-control measures in and around the venues for the Games which should further reduce the risk of transmission.

The Committee reaffirmed its previous advice that there should be no general restrictions on travel and trade with countries, areas and/or territories with Zika virus transmission, including the cities in Brazil that will be hosting the Olympic and Paralympic Games. **The Committee provided additional advice to the Director-General on mass gatherings and the Olympic and Paralympic Games as follows:**

- :: Countries, communities and organizations that are convening mass gatherings in areas affected by Zika virus outbreaks should undertake a risk assessment prior to the event and increase measures to reduce the risk of exposure to Zika virus,
- :: Brazil should continue its work to intensify vector control measures in and around the cities and venues hosting Olympic and Paralympic Games events, make the nature and impact of those measures publicly available, enhance surveillance for Zika virus circulation and the mosquito vector in the cities hosting the events and publish that information in a timely manner, and ensure the availability of sufficient insect repellent and condoms for athletes and visitors.
- :: Countries with travellers to and from the Olympic and Paralympic Games should ensure that those travellers are fully informed on the risks of Zika virus infection, the personal protective measures that should be taken to reduce those risks, and the action that they should take if they suspect they have been infected. Countries should also establish protocols for managing returning travellers with Zika virus infection based on WHO guidance,
- :: Countries should act in accordance with guidance from the World Health Organization on mass gatherings in the context of Zika virus outbreaks, which will be updated as further information becomes available on the risks associated with Zika virus infection and factors affecting national and international spread.

Based on this advice the Director-General declared the continuation of the Public Health Emergency of International Concern (PHEIC). The Director-General reissued the Temporary Recommendations from the 2nd meeting of the Committee, endorsed the additional advice from the Committee's 3rd meeting, and issued them as Temporary Recommendations

under the IHR (2005). The Director-General thanked the Committee Members and Advisors for their advice.

Zika virus outbreak global response - Updated 17 June 2016

WHO/PAHO and partners have set out their strategic response to Zika which will place a greater focus on preventing and managing medical complications caused by Zika virus infection. To date, US\$121.9 million are necessary to effectively implement the Zika Strategic Response Plan, July 2016 to December 2017.

The revised Zika Strategic Response Plan includes a greater focus on preventing and managing medical complications caused by Zika virus infection and expanding health systems' capacities for that purpose. Risk communication targeting pregnant women, their partners, households and communities will be central to prevention efforts to ensure they have the information they need to protect themselves.

Other elements include integrated vector management, sexual and reproductive health counselling as well as health education and care within the social and legal contexts of each country where Zika virus is being transmitted.

The plan highlights several specific characteristics of the Zika outbreak that require a collaborative, global response and support. These include:

- :: the potential for further international spread of Zika virus given the wide distribution of Aedes mosquitoes that are capable of transmitting Zika virus,
- :: the lack of population immunity in areas where Zika virus is circulating for the first time and which allows the disease to spread quickly,
 - :: the absence of vaccines, specific treatments and rapid diagnostic tests, and
- :: inequalities in access to sanitation, information and health services in affected areas. Read the "Strategic Response Plan"

Zika situation report - 16 June 2016

Full report: http://apps.who.int/iris/bitstream/10665/242439/1/zikasitrep-16Jun2016-eng.pdf?ua=1

Zika Open [to 18 June 2016] [Bulletin of the World Health Organization] :: <u>All papers available here</u> No new papers identified.

CDC/ACIP [to 18 June 2016] http://www.cdc.gov/media/index.html FRIDAY, JUNE 17, 2016

CDC Telebriefing: Zika Update

Transcripts for CDC Telebriefing Zika Screening Blood Donations for Zika Virus to Protect Blood Update

THURSDAY, JUNE 16, 2016.

<u>CDC Begins Reporting Pregnancy and Birth Outcomes of Women Affected by Zika Virus During Pregnancy - Media Statement</u>

The Centers for Disease Control and Prevention (CDC) will begin reporting poor outcomes of pregnancies with laboratory evidence of possible Zika virus infection. Starting today, CDC will report two types of <u>outcomes</u>:

- :: Live-born infants with birth defects and
- :: Pregnancy losses with birth defects

These numbers for US states and the District of Columbia come from the U.S. Zika Pregnancy Registry. In coming weeks, CDC will begin reporting Zika-linked poor pregnancy outcomes in the U.S. territories...

::::::

EBOLA/EVD [to 18 June 2016]

"Threat to international peace and security" (UN Security Council)

[No new Situation Report...last report as below]

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.

::::::

POLIO [to 18 June 2016]

Public Health Emergency of International Concern (PHEIC)

Polio this week as of 15 June 2016

:: The knowledge, skills and infrastructure built to end polio are helping to make dramatic progress on improving children's health more broadly. In <u>this factsheet</u> discover how the eradication infrastructure is expanding the reach of health services, improving disease surveillance and building health worker capacity. By <u>planning now</u>, we can keep the world poliofree and ensure that the investments made in ending polio have a broad and lasting impact on children's health and development, long after polio is gone.

:: Next week, stakeholders of the Global Polio Eradication Initiative including member states and donors will gather in Geneva at the meeting of the <u>Polio Partners Group</u> to review progress and discuss the <u>trivalent to bivalent oral polio vaccine switch</u>, transition planning and the financial resources urgently needed to see eradication through to the end.

Selected Country Levels Updates [excerpted]

Afghanistan

:: One new case of wild poliovirus type 1 (WPV1) was reported in the past week in Shigal Wa Sheltan district of Kunar with onset of paralysis on 29 May. The total number of WPV1 cases for 2016 is now six compared to three at this time last year.

::::::

Yellow Fever [to 18 June 2016]

http://www.who.int/emergencies/yellow-fever/en/

Yellow Fever - Situation Report - 16 June 2016

Full Report:

http://apps.who.int/iris/bitstream/10665/242438/1/yellowfeversitrep-16Jun2016-eng.pdf?ua=1

Lower doses of yellow fever vaccine could be used in emergencies

WHO statement

17 June 2016

The yellow fever vaccine given as one fifth of the regular dose could be used to control an outbreak in case of vaccine shortages.

Experts agreed with this proposal at a meeting convened by WHO to consider potential shortages in yellow fever vaccine due to the outbreak in Angola and Democratic Republic of the Congo.

WHO Strategic Advisory Group of Experts (SAGE) on Immunization reviewed existing evidence that demonstrates that using a fifth of a standard vaccine dose would still provide protection against the disease for at least 12 months and possibly much longer.

Fractional dosing; a short term measure

This approach, known as fractional dosing, is under consideration as a short-term measure, in the context of a potential vaccine shortage for use in emergencies. This approach is not proposed for routine immunization, as there is not yet enough data available to show that lower doses would confer the life-long protection provided by a vaccination with one full dose.

"Yellow fever outbreaks in Angola, Democratic Republic of the Congo and Uganda are placing unprecedented demands on vaccine supply for emergency vaccination campaigns to control the spread of the disease," says Jon Abramson, chair of the WHO Strategic Advisory Group of Experts (SAGE) on Immunization.

"Right now we have enough vaccines in the global stockpile to cope with the ongoing outbreaks if there are no further extensions. However, given the wide spread of the disease in Angola and the potential for it to get out of control in the city of Kinshasa, in the Democratic Republic of the Congo, WHO and partners are seriously considering the use of this dose-sparing strategy to prevent transmission through large-scale vaccination campaigns."

Vaccine shortages in urban outbreaks

At the request of the Emergency Committee regarding yellow fever convened by WHO's Director-General on 19 May, the WHO secretariat has been exploring options, based on existing evidence, on ways to increase vaccine supply in case of urgent need.

SAGE was asked to review the evidence and options presented by WHO. A formal evaluation and recommendations by SAGE on the use of lower doses of yellow fever vaccine are planned for October 2016.

In the interim, SAGE found that the available evidence is sufficient to determine that fractional dosing of yellow fever vaccine to one fifth of the standard dose (0.1ml instead of 0.5ml) could be a safe and effective option for mass vaccination campaigns to control urban outbreaks in situations of acute vaccine shortage.

More research is needed to find out whether fractional doses would be effective in young children, who may have a weaker immune response to yellow fever vaccine.

Practical issues on administering the reduced doses need further investigation, including obtaining the necessary supply of suitable syringes.

International Health Regulations require full dose for travellers

Yellow fever is the only disease specified in the International Health Regulations (IHR) for which countries may require proof of vaccination from travellers as a condition of entry. The IHR were amended in 2014 to indicate that a single dose of the vaccine is sufficient for life-long immunity and therefore extends the validity of vaccination certificates to the life of the person vaccinated. All countries must abide by this new amendment when it enters into force on 11 July 2016.

A yellow fever vaccine given at a fractional dose would not qualify for a yellow fever certificate under the IHR requirements. Travellers will need to obtain the full dose of the vaccine to be eligible for the yellow fever certificate.

Global supply

WHO has prequalified yellow fever vaccines from 4 different vaccine manufacturers which together produce an annual volume of around 80-90 million doses. Prequalification means that vaccines and medicines meet WHO's high standards of quality, safety and efficacy.

The <u>global stockpile</u>, funded by Gavi, the Vaccine Alliance, has 6 million doses for emergency use per year and this has already been depleted twice since February of this year. To date, WHO and partners have sent around 18 million vaccine doses to Angola, Democratic Republic of the Congo and Uganda for emergency use to control the current outbreaks.

In addition to fractional dosing, WHO's SAGE group is looking at ways to prevent yellow fever outbreaks on a long-term basis by strengthening mass vaccination catch-up campaigns in conjunction with improving routine childhood immunization in countries with yellow fever.

WHO's <u>response strategy</u> to the ongoing outbreaks requires coordinated work with partners in five areas: surveillance and risk assessment, vaccination, case management, social mobilization and risk communication and vector control.

Yellow fever global vaccine stockpile in emergencies

16 June 2016

When a major outbreak of yellow fever hits, countries urgently need vaccine supplies to control the spread of the disease. By mid-June 2016, almost 18 million doses of yellow fever vaccine have been distributed in emergency vaccination campaigns in Angola, Democratic Republic of the Congo, and Uganda. If countries do not have sufficient yellow fever vaccine supplies, they can access the global stockpile of emergency vaccines....

Disease Outbreak News (DONs)

:: Yellow fever – Angola 14 June 2016

::::::

MERS-CoV [to 18 June 2016]

No new content identified.

::::::

WHO & Regional Offices [to 18 June 2016]

Highlights

Launch of the 2016 Global Nutrition Report

June 2016 --The Global Nutrition Report examines the world's nutrition and the efforts to improve it. It assesses progress in meeting Global Nutrition Targets established by the World Health Assembly, and provides current information from global, regional and country perspectives. WHO is a Global Nutrition Report Partner.

Weekly Epidemiological Record (WER) 17 June 2016, vol. 91, 24 (pp. 305–316)

Contents

305 New momentum in prevention, control and elimination of cholera in Africa: priority actions identified by affected countries

314 Fact sheet on Zika virus disease (updated on 2 June 2016)

Disease Outbreak News (DONs)

- :: Chikungunya United States of America 14 June 2016
- :: Yellow fever Angola 14 June 2016
- :: Lassa Fever Benin 13 June 2016

Call for nomination for experts to serve on the SAGE working group on polio

15 June 2016

Deadline for application: 8 July 2016

:: WHO Regional Offices

Selected Press Releases, Announcements

WHO African Region AFRO

- :: Yellow fever global vaccine stockpile in emergencies 17 June 2016
- :: WHO African Region Programme Subcommittee meeting begins in Brazzaville, Congo 14 June 2016

WHO Region of the Americas PAHO

No new digest content identified.

WHO South-East Asia Region SEARO

:: WHO South-East Asia Region continues to be polio-free 18 June 2016

WHO European Region EURO

- :: Celebrating 20 years of the Ljubljana Charter 16-06-2016
- :: Slovenia's substantial and sustained health gains revealed in new reports 16-06-2016
- :: Conclusions of the third meeting of the Emergency Committee regarding microcephaly, other neurological disorders and Zika virus 15-06-2016
- :: <u>Blood connects us all blood donation text message service in Sweden</u> 14-06-2016

WHO Eastern Mediterranean Region EMRO

- :: WHO expresses concern over disease outbreaks in its response to Fallujah crisis
 Baghdad, 16 June 2016: WHO Regional Director for the Eastern Mediterranean Dr Ala Alwan
 arrived in Baghdad yesterday to review firsthand WHO's response to the unfolding humanitarian
 crisis in Fallujah city, where more than 42,000 Iraqis have been displaced since the beginning of
 the military operations in the city in May 2016. Tens of thousands of besieged and displaced
 men, women, children and older people face major health risks as they lack adequate access to
 health services.
- :: <u>Emergency Committee on Zika virus and observed increase in neurological disorders and</u> neonatal malformations 14 June 2016
- ::: WHO reaches more people in need with lifesaving treatments in Duma 13 June 2016

WHO Western Pacific Region

:: <u>Tenofovir reduces mother-to-child transmission of hepatitis B: new study</u>
GENEVA, 16 JUNE 2016 - New study findings published today confirm that antiviral therapy with tenofovir in late pregnancy can result in a 3-fold reduction in mother-to-child transmission (MTCT) of hepatitis B virus (HBV), when used in combination with immunoglobulin and HBV vaccine at birth...

::::::

CDC/ACIP [to 18 June 2016]

http://www.cdc.gov/media/index.html

FRIDAY, JUNE 17, 2016

CDC Telebriefing: Zika Update

Transcripts for CDC Telebriefing Zika Screening Blood Donations for Zika Virus to Protect Blood Update

THURSDAY, JUNE 16, 2016.

CDC Begins Reporting Pregnancy and Birth Outcomes of Women Affected by Zika Virus During Pregnancy - Media Statement

The Centers for Disease Control and Prevention (CDC) will begin reporting poor outcomes of pregnancies with laboratory evidence of possible Zika virus infection. Starting today, CDC will report two types of <u>outcomes</u>:

- :: Live-born infants with birth defects and
- :: Pregnancy losses with birth defects

These numbers for US states and the District of Columbia come from the U.S. Zika Pregnancy Registry. In coming weeks, CDC will begin reporting Zika-linked poor pregnancy outcomes in the U.S. territories...

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]

::::::

Announcements/Milestones/Perspectives

IRAQ

REGULAR PRESS BRIEFING BY THE INFORMATION SERVICE 17 June 2016

UNOG – UN Office at Geneva [Excerpts; Text bolding by Editor]

<u>Iraq</u>

Tarik Jasarevic, for the World Health Organization (WHO), introduced Dr Ala Alwan, WHO Regional Director for the Eastern Mediterranean, speaking by phone from Iraq. Dr Alwan had been visiting displaced people from **Fallujah** over the past few days. He said that more than 40,000 people had been displaced in Amiriyat Fallujah, from the outskirts of Fallujah city. The WHO team had visited almost all the camps housing the thousands of families who had left Fallujah during the recent events. Some of the camps were housing people who had fled from Ramadi, following the military operations there. Most of the IDPs in the camps had left Fallujah in recent days. Fallujah had not been accessible to any humanitarian actors in more than a year, which was extremely worrisome. There were still an estimated 30,000 to 40,000 people inside the city. Some of them were beginning to leave today, and there was a flow of different people reaching parts of the region...

...Mothers had told the WHO team that their children had not been vaccinated for the past two years, which was of great concern, as those children were at risk of outbreaks of preventable diseases, such as polio. The team had seen one- to three-year-olds who had never been vaccinated. WHO had started immediately preparing for a massive vaccination campaign against polio and measles to all displaced children from zero to 15 years of age.

A major concern was the spread of diseases due to overcrowding and an inadequate hygiene situation, with a lack of sufficient sanitation. Water was now available in the camps and WHO was trying to monitor the quality of water. The lack of electricity in many places was another complicated issue being discussed with the Government. WHO was working closely with UNICEF on the water and sanitation issues in the camps...

...In response to questions, Dr Alwan said that in the camps WHO was providing routine immunization services, but had also decided that a regular, comprehensive campaign was needed covering the age group from zero to 15 years of age to reduce the possibility of disease outbreaks. WHO wanted to cover all the IDPs, all the children in the camps in existence today and those where the newcomers from Fallujah would go. The current camps in Amiriyat Fallujah were almost completely full now and newcomers were being directed to new camps in two different regions: Khalidiya and the Habbaniyah Tourist City. The immunization campaign would cover all those places.

Dr Alwan also said that the estimated total number of IDPs in the different camps was around 70,000, and it did not include those who would still come out of Fallujah. There was no precise estimation of the number of children as of yet, but it would be over 50 per cent of the population....

AERAS [to 18 June 2016]

http://www.aeras.org/pressreleases

May 23, 2016

Aeras Provides Update on Phase 2 Trial (C-040-404/TUB09) of H4:IC31

Rockville, MD,— The Sanofi Pasteur-Aeras Joint Steering Committee for the Phase 2 trial (C-040-404/TUB09) convened on 14 June 2016 to review and discuss the recommendations of the study's independent Data Monitoring Committee (DMC).

The DMC, which met on 02 June 2016, reviewed unblinded safety and efficacy data and concluded that the trial had been well conducted to date and that the data was of good quality. There were no safety concerns of note. The DMC recommends that follow-up be continued as per protocol with a further DMC review close to the end of follow-up...

Sabin Vaccine Institute [to 18 June 2016]

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

06.16.16

Peer Exchange Builds Momentum for Sustainable Immunization Financing in Africa

Immunization is one of the most cost-effective ways to save lives – preventing over 2 million child deaths each year. With the recent introduction of new vaccines, countries need to spend US\$60 or more per infant to fully immunize, far more than what is traditionally spent on such

programs in low-income countries. As vaccine science advances, nations must adapt their vaccine policies and mobilize more resources. The Sabin Vaccine Institute's Sustainable Immunization Financing (SIF) program highlights the efforts of national institutions and lawmakers in this area. As they increase their domestic immunization budgets, the countries are reducing their dependence on external donors and taking financial ownership of their immunization programs.

SIF works with counterparts in 21 countries across Africa, Asia and Europe to facilitate their efforts to develop, implement and institutionalize solutions for sustainable immunization financing. An integral strategy for this advocacy work is peer-to-peer learning. The SIF Program arranges frequent peer exchanges, which bring together national counterparts to evaluate their current immunization programs and to foster momentum for necessary changes.

On 19-21 April 2016, delegates from five SIF countries convened in Abuja, Nigeria, for the second Anglophone Africa Peer Review Workshop on Sustainable Immunization Financing. The <u>event</u> was co-hosted by Sabin and the Nigeria Immunization Financing Task Team (NIFT) on behalf of the Nigerian Federal Ministry of Health. The workshop was a follow-up to a similar <u>peer exchange workshop</u> held in Nairobi, Kenya, in October 2015...

European Vaccine Initiative [to 18 June 2016]

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

News

<u>VAC2VAC, a new project funded by the Innovative Medicines Initiative (IMI2)</u> 14 June 2016

European public and private organisations are collaborating in VAC2VAC, a new project funded by the Innovative Medicines Initiative (IMI2) to develop and validate quality testing approaches for both human and veterinary vaccines using non-animal methods.

The initiative that started on 1 March 2016 will facilitate the move away from the traditional paradigm of vaccine batch release testing and to accelerate the introduction of a new paradigm based on innovative non-animal techniques, thereby taking into account both vaccine safety and animal welfare.

Full press-release

FDA [to 18 June 2016]

http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm

What's New for Biologics

June 15, 2016 Approval Letter - YF-VAX (PDF - 28KB)

Posted: 6/16/2016

[Sanofi Pasteur]...We have approved your request to supplement your biologics license application for Yellow Fever Vaccine (YF-Vax®) manufactured at your Swiftwater, Pennsylvania f cility, to revise the package insert to align Booster Dosing language with recent changes to International Health Regulations and WHO/ACIP recommendations, and to modify the text throughout the document to clarify and update the presented information...

European Medicines Agency [to 18 June 2016]

http://www.ema.europa.eu/ 17/06/2016

EMA Management Board: highlights of June 2016 meeting

- :: New civil society representatives join the Board; EMA multiannual work plan to 2020 and overarching stakeholder relations management framework adopted
- :: New civil society representatives join the Board [Excerpt]
- ...Overarching framework for stakeholder relations management adopted

The Board adopted EMA's <u>framework for stakeholder relations management</u>, a high level document which outlines the overarching principles for managing EMA's key stakeholder interactions. The framework builds on the Agency's experience in interacting with stakeholder associations representing patients and consumers, healthcare professionals, the pharmaceutical industry and, more recently, academia. The aim of this overarching framework is to streamline interaction activities across the various stakeholder groups and align working methodologies where possible.

The Board also adopted the <u>criteria to be fulfilled by industry stakeholder organisations</u> to be eligible for direct involvement in the Agency's activities. These eligibility criteria stem from the Agency's framework for interaction between EMA and industry stakeholders that was adopted last year, and will come into effect on 15 January 2017...

Global Fund [to 18 June 2016]

http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=17 June 2016

Global Fund and Stop TB Partnership Sign Memorandum of Understanding with Global Drug Facility

GENEVA - The Stop TB Partnership today signed a Memorandum of Understanding with the Global Fund to Fight AIDS, Tuberculosis and Malaria to optimize access to TB health products and pharmaceutical services in countries receiving Global Fund financing for TB.

The Stop TB Partnership's Global Drug Facility (GDF) is the largest supplier of quality assured patient treatments, including first line drugs, second line drugs and pediatric formulations, as well as diagnostics. It is a unique TB medicines procurement mechanism, and provides targeted technical assistance, innovative supply management tools and institutional capacity strengthening to countries for accelerated uptake of new TB products.

The Global Fund and Stop TB Partnership recognize the potential for a more strategic partnership between the Global Fund and Stop TB Partnership's GDF and the mutual benefits to be gained through structured, collaborative engagement to optimize TB markets and improve the supply chain of TB health products to countries supported by the Global Fund.

"By signing this memorandum of understanding, we can strengthen the global response to ending TB and get the diagnostics and medicines to those who need it the most," said Lucica Ditiu, Executive Director of the Stop TB Partnership. "This agreement solidifies the very reasons that our GDF was created and will expand access to quality-assured anti-TB medicines and TB health products, including the introduction of new medicines and tools and regimens." Under the agreement, the Global Fund and Stop TB will align pooled procurement and market shaping strategies, demand forecasting, and continuous performance improvement activities...

Belgium Announces Commitment to the Global Fund

15 June 2016

BRUSSELS – The Government of Belgium announced today a pledge of €19 million to the Global Fund to Fight AIDS, Tuberculosis and Malaria for 2016, a positive signal as the Global Fund prepares for a Replenishment conference later this year.

"Belgium has been an active partner of the Global Fund since its inception and it is very encouraging that they are maintaining their financial commitment with the Global Fund partnership," said Mark Dybul, Executive Director of the Global Fund. "We look forward to continue our work in partnership so that together we can end the three diseases."...

PATH [to 18 June 2016]

http://www.path.org/news/index.php

Announcement | June 13, 2016

PATH launches campaign to highlight and advance the Innovation Effect

Events in Washington, DC and digital campaign focus on the vital role of innovation to tackle global health challenges, and aim to identify actions that power disruptive solutions.

Today, PATH is launching a new conversation and call-to-action to highlight and drive forward the Innovation Effect. The Innovation Effect happens when unique partnerships, disruptive technologies, transformed systems, and data-driven insights combine—in often unexpected ways—creating dramatic improvements in the health and well-being of people around the world.

The campaign will kick off with two events—held with partners from across public and private sectors—and a series of digital activities to drive engagement in Washington, DC, as well as online through #InnovationEffect...

Industry Watch [to 18 June 2016]

:: <u>Systematic Review of 58 Publications of Real-World Use of GARDASIL® Presented</u> at EUROGIN Congress

Studies Published over the Last 10 Years Report Reductions in Cervical Pre-cancers and Other HPV-related Diseases

June 16, 2016

KENILWORTH, N.J.--(BUSINESS WIRE)--Merck (NYSE:MRK), known as MSD outside of the United States and Canada, announced today that in a systematic review conducted of the global impact and effectiveness of GARDASIL® [Human Papillomavirus Quadrivalent (Types 6, 11, 16 and 18) Vaccine, Recombinant], substantial reductions were observed in HPV 6/11/16/18-related infection, genital warts, Pap abnormalities and cervical pre-cancers. This evaluation of 58 effectiveness and impact studies published during the past 10 years examined the use of GARDASIL in routine vaccination programs in Australia, Europe, North America and New Zealand, and will be presented for the first time during an oral session at the European Research Organization on Genital Infection and Neoplasia (EUROGIN) congress in Austria. A paper detailing this review was also published online on June 14 in the journal Clinical Infectious Diseases (CID).

Following introduction of vaccination programs with GARDASIL, the earliest impact of the vaccine was seen in the reduction of genital warts. Reductions in genital warts were observed in all nine countries included in this review (based on 28 publications), with declines occurring as early as one year after vaccine introduction in Australia and Germany. Reductions in HPV 6/11/16/18 infection, assessed in 14 publications from five countries (Australia, Belgium, Germany, Sweden and the United States), were also observed shortly after vaccination; for

example, reductions in HPV 6/11/16/18 infection were seen within four years in several studies from Australia and the United States. Subsequently, as successive birth cohorts began cervical screening, reductions in cervical pre-cancers were observed within 3-5 years of vaccine program implementation in Australia, Canada, Denmark, Sweden and the United States...

:: Biopharma contributes to key global health discussions at WHA69 17 June 2016

- :: New resolutions adopted by the World Health Assembly included rules on relations the World Health Organization can have with the private sector, amongst others; structures for R&D funding and coordination; access to medicines and integrated health services; global sector strategies on HIV, hepatitis and STIs.
- :: Decisions have been taken also on important public health issues: Anti-microbial Resistance (AMR); the implementation of health-related Sustainable Development Goals (SDGs).
- :: Numerous satellite events (including two hosted by the IFPMA and several by IFPMA members) enriched the week of deliberations.

Geneva, 6 June 2016 – The 69th World Health Assembly (23-28 May 2016) concluded with 193 countries taking decisions on a number of important issues that will shape the global health agenda and guide the World Health Organization's (WHO) work in the years to come. As an organization in official relations with the UN, the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA) made three statements at this year's World Health Assembly.

FENSA – After years of complex negotiations, the World Health Organization's (WHO) Framework for Engagement with Non-State Actors (FENSA) was adopted. The resolution asks for immediate implementation of the framework and the full establishment of the register of Non State Actors. It provides the organization with policies and procedures on engaging with non-governmental organizations, private sector entities, philanthropic foundations, and academic institutions. IFPMA has official relations with WHO which will help maintain a close working relationship with the organization.

CEWG – The WHO resolution on research and development funding and coordination (Consultative Expert Working Group/CEWG) saw Member States agree to operationalize the Global Observatory on Health R&D, proposing a way forward to a voluntary pool funding mechanism.

AMR – A report presenting options for establishing a global development and stewardship framework for antimicrobials was noted. Member States highlighted the importance of the "one health" approach to anti-microbial resistance (AMR), strengthening infection prevention and control national strategies, surveillance and laboratory capacities, and the need to regulate the use of antibiotics without hampering access...

::::::

BMGF - Gates Foundation [to 18 June 2016] http://www.gatesfoundation.org/Media-Center/Press-Releases No new digest content identified.

EDCTP [to 18 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

Fondation Merieux [to 18 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

No new digest content identified

Gavi [to 18 June 2016]

http://www.gavialliance.org/library/news/press-releases/

No new digest content identified

GHIT Fund [to 18 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. No new digest content identified

Human Vaccines Project [to 18 June 2016]

humanvaccinesproject.org

[Website in development]

IAVI – International AIDS Vaccine Initiative [to 18 June 2016]

http://www.iavi.org/

No new digest content identified.

IVI - International Vaccine Institute [to 18 June 2016]

http://www.ivi.org/web/www/home

No new digest content identified.

NIH [to 18 June 2016]

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

No new digest content identified

UNICEF [to 18 June 2016]

http://www.unicef.org/media/media 89711.html

No new digest content identified.

<u>Reports/Research/Analysis/Commentary/Conferences/Meetings/Book</u> <u>Watch/Tenders</u>

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

Center for Global Development [to 18 June 2016]

http://www.cgdev.org/page/press-center 6/14/16

Global Health, Aid and Corruption: Can We Escape the Scandal Cycle?

William Savedoff, Amanda Glassman, and Janeen Madan

Global health action has been remarkably successful at saving lives and preventing illness in many of the world's poorest countries. This is a key reason that funding for global health initiatives has increased in the last twenty years. Nevertheless, financial support is periodically jeopardized when scandals erupt over allegations of corruption, sometimes halting health programs altogether.

* * *

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 [Reviewed earlier]

BMC Cost Effectiveness and Resource Allocation

http://resource-allocation.biomedcentral.com/ (Accessed 18 June 2016) [No new content]

BMC Health Services Research

http://www.biomedcentral.com/bmchealthservres/content (Accessed 18 June 2016) Research article

Insufficient access to oral paediatric medicines in Ghana: A descriptive study

Daniel N A Ankrah, Joseph T Turkson, Edith B Boateng, Frank T T Amegavie and Elizabeth Bruce

BMC Health Services Research 2016 16:198

Published on: 17 June 2016

Abstract Background

Among the most vulnerable people in society are children and this is especially so in their access to health care Off-label prescription of paediatric medicines is known to be associated with safety outcomes some of which may be serious. This study identifies frequently prescribed children's medicines that are not readily available in Ghana and are prepared extemporaneously.

Method

All prescriptions for extemporaneous oral preparations for children presented to the local production unit of the Korle-Bu Teaching Hospital from November, 2013 were eligible for the study. Information from such prescriptions was recorded in a systematic format. Presence of the prescribed medicine on the World Health Organization Children's Medicine List was ascertained in addition to the anatomical and therapeutic classification code. The registration of

the prescribed medicine for paediatric use by the Food and Drugs Authority, Ghana was also checked. Descriptive statistics of the data was presented.

Results

In all 622 prescriptions for 35 different paediatric formulations were served. Prescriptions from several health facilities including government hospitals (6.6 %, N=622), private hospitals (2.4 %, N=622) and the University of Ghana hospital (1.1 %, N=622) were all honoured. Some of the prescribed medicines (Baclofen, Clonazepam, Hydroxyurea and Lamotrigine) were neither on the World Health Organization Children's Medicine list nor registered with the Food and Drugs Authority, Ghana. Most prescribed medicines (88.6 %, N=35) were for non-communicable diseases.

Conclusion

Paediatric prescriptions including off-label medicines are prescribed and formulated extemporaneously in this setting. Steps should be taken to improve access and monitor benefit-risk profiles of paediatric medicines in order to improve treatment outcomes among children.

BMC Infectious Diseases

http://www.biomedcentral.com/bmcinfectdis/content (Accessed 18 June 2016) Research article

The incidence, clearance and persistence of non-cervical human papillomavirus infections: a systematic review of the literature

Human papillomavirus (HPV) vaccines were designed to prevent cervical cancer in women and their provision remains a major public health need. However, HPV is also a major cause of non-cervical anogenital and o...

Sylvia Taylor, Eveline Bunge, Marina Bakker and Xavier Castellsagué

BMC Infectious Diseases 2016 16:293

Published on: 14 June 2016

Research article

<u>Changing distribution of age, clinical severity, and genotypes of rotavirus</u>
<u>gastroenteritis in hospitalized children after the introduction of vaccination: a single</u>
center study in Seoul between 2011 and 2014

This study aimed to explore changes in clinical epidemiology and genotype distribution and their association among hospitalized children with rotavirus gastroenteritis after the introduction of vaccines

Jung Ok Shim, Ju Young Chang, Sue Shin, Jin Soo Moon and Jae Sung Ko BMC Infectious Diseases 2016 16:287

DITC THECHOUS DISCUSES 2010 10.2

Published on: 14 June 2016

BMC Medical Ethics

http://www.biomedcentral.com/bmcmedethics/content (Accessed 18 June 2016) [No new content]

BMC Medicine

http://www.biomedcentral.com/bmcmed/content

(Accessed 18 June 2016)

Research article

<u>Maternal antenatal multiple micronutrient supplementation for long-term health</u> <u>benefits in children: a systematic review and meta-analysis</u>

Multiple micronutrient supplementation for pregnant women reduces low birth weight and has been recommended in low- and middle-income countries (LMICs) to improve child survival, growth and health.

Delan Devakumar, Caroline H. D. Fall, Harshpal Singh Sachdev, Barrie M. Margetts, Clive Osmond, Jonathan C. K. Wells, Anthony Costello and David Osrin

BMC Medicine 2016 14:90 Published on: 16 June 2016

BMC Pregnancy and Childbirth

http://www.biomedcentral.com/bmcpregnancychildbirth/content (Accessed 18 June 2016) [No new relevant content identified]

BMC Public Health

http://bmcpublichealth.biomedcentral.com/articles (Accessed 18 June 2016) Research article

<u>Closing the gap in Australian Aboriginal infant immunisation rates - the development and review of a pre-call strategy</u>

Improving timely immunisation is key to closing the inequitable gap in immunisation rates between Aboriginal children and non-Indigenous children. Aboriginal Immunisation Officers were employed in Hunter New E...

Patrick M. Cashman, Natalie A. Allan, Katrina K. Clark, Michelle T. Butler, Peter D. Massey and David N. Durrheim

BMC Public Health 2016 16:514 Published on: 16 June 2016

BMC Research Notes

http://www.biomedcentral.com/bmcresnotes/content (Accessed 18 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

18 June 2016 (vol 352, issue 8062) http://www.bmj.com/content/353/8062
[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

June 2016 Volume 38, Issue 6, p1259-1542 http://www.clinicaltherapeutics.com/current [New issue; No relevant content identified]

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 18 June 2016] Research

<u>Dangerous crossing: demographic and clinical features of rescued sea migrants seen</u> in 2014 at an outpatient clinic at Augusta Harbor, Italy

Alessia Trovato, Anthony Reid, Kudakwashe C. Takarinda, Chiara Montaldo, Tom Decroo, Philip Owiti, Francesco Bongiorno and Stefano Di Carlo

Published on: 15 June 2016

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 [Reviewed earlier]

Emerging Infectious Diseases

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

Epidemics

Volume 15, <u>In Progress</u> (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 24, 16 June 2016

http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
Research Articles

<u>Preparing to introduce the varicella vaccine into the Italian immunisation programme: varicella-related hospitalisations in Tuscany, 2004–2012</u>

by S Boccalini, P Bonanni, A Bechini

Abstract

A universal immunisation programme against varicella in the form of the measles-mumpsrubella-varicella (MMRV) vaccine for toddlers aged 13-15 months was introduced in Tuscany in July 2008. An assessment of the impact of this programme on varicella-related hospitalisations 4 years after its introduction could further support its adoption at a national level. The hospitalisation data were analysed in two periods: pre-vaccination (2004–2007) and vaccination period (2009–2012). The high coverage of the vaccines (84% in 2012) resulted in a significant decline in notifications, from 33,114 (2004-2007) to 13,184 cases (2009-2012), and also of hospitalisations, from 584 (pre-vaccination period) to 325 (vaccination period). The hospitalisation rate was 4.1 per 100,000 (95% confidence intervals (CI): 3.4-4.7) before the introduction of vaccination, which dropped to 2.2 per 100,000 (95% CI: 1.7–2.7) in the vaccination period (hospitalisation risk ratios: 0.54; 95% CI: 0.472-0.619). The reduction was most significant in the youngest age groups. The introduction of universal vaccination has already led to a significant decline in hospitalisations due to varicella after just 4 years of implementation. Hospitalisation rates fell noticeably among younger individuals involved in the vaccination programme. The decrease in hospitalisation rate in the older age groups suggests a possible indirect protection.

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 18 June 2016] Commentary

<u>Measuring success in global health diplomacy: lessons from marketing food to children in India</u>

Global health diplomacy (GHD) focuses on international negotiation; principally between nation states, but increasingly non-state actors However, agreements made at the global level have to be enacted at the n...

Richard Smith and Rachel Irwin Globalization and Health 2016 12:28 Published on: 16 June 2016

Methodology

Assessing the health impact of transnational corporations: its importance and a framework

The adverse health and equity impacts of transnational corporations' (TNCs) practices have become central public health concerns as TNCs increasingly dominate global trade and investment and shape national eco...

Frances E. Baum, David M. Sanders, Matt Fisher, Julia Anaf, Nicholas Freudenberg, Sharon Friel, Ronald Labonté, Leslie London, Carlos Monteiro, Alex Scott-Samuel and Amit Sen Globalization and Health 2016 12:27

Published on: 15 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 18 June 2016] Research

<u>Can a quality improvement project impact maternal and child health outcomes at scale in northern Ghana?</u>

Quality improvement (QI) interventions are becoming more common in low- and middle-income countries, yet few studies have presented impact evaluations of these approaches. In this paper, we present an impact e...

Kavita Singh, Paul Brodish, Ilene Speizer, Pierre Barker, Issac Amenga-Etego, Ireneous Dasoberi, Ernest Kanyoke, Eric A. Boadu, Elma Yabang and Sodzi-Tettey Health Research Policy and Systems 2016 14:45

Published on: 16 June 2016

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

Volume 12, Issue 5, 2016 http://www.tandfonline.com/toc/khvi20/current [Reviewed earlier]

Humanitarian Exchange Magazine

Number 66 April 2016
http://odihpn.org/magazine/humanitarian-innovation/
Focus: Humanitarian Innovation
by Humanitarian Practice Network and Kim Scriven April 2016
[Reviewed earlier]

Infectious Agents and Cancer

http://www.infectagentscancer.com/content [Accessed 18 June 2016] [No new content]

Infectious Diseases of Poverty

http://www.idpjournal.com/content [Accessed 18 June 2016] [No new content]

International Health

Volume 8 Issue 3 May 2016 http://inthealth.oxfordjournals.org/content/current [Reviewed earlier]

International Journal of Epidemiology

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 http://www.ijidonline.com/current [Reviewed earlier]

JAMA

June 14, 2016, Vol 315, No. 22 http://jama.jamanetwork.com/issue.aspx Viewpoint

Is the United States Prepared for a Major Zika Virus Outbreak? FREE

Lawrence O. Gostin, JD; James G. Hodge Jr, JD, LLM [Initial text]

From its initial discovery in Ugandan forests nearly 70 years ago, Zika virus has emerged as a worldwide public health crisis, with active transmission in more than 40 countries in the Americas and Caribbean. On February 1, 2016, the World Health Organization (WHO) declared a Public Health Emergency of International Concern (PHEIC), concerned about clusters of microcephaly and Guillain-Barré syndrome (GBS). A week later, the Centers for Disease Control and Prevention (CDC) triggered the highest "level 1" activation of its emergency operations center, and President Obama requested \$1.86 billion in emergency funding. 1 On April 7, the WHO reported there is scientific consensus that Zika is a cause of microcephaly and GBS.

Although none of the continental states has reported local mosquito-borne transmission, Health Secretary Sylvia Burwell warned that Zika has a "significant potential to affect national security or the health of Americans." The virus severely threatens Puerto Rico, with one-quarter of its 3.5 million inhabitants projected to be infected. The Olympics in Brazil will have an amplifying affect because the competition will be during the Northern summer. Travelers visiting or returning to the United States could likely escalate the spread of Zika. Epidemiologists estimate that Zika could affect a majority of US states including large cities where Aedes species mosquitos are active.

Is the United States prepared for major clusters of Zika? Certainly, a highly functioning health system will help protect the domestic population. Yet there are signs of unpreparedness with insufficient resources and variable legal authorities...

JAMA Pediatrics

June 2016, Vol 170, No. 6 http://archpedi.jamanetwork.com/issue.aspx [New issue; No new relevant content identified]

Journal of Community Health

Volume 41, Issue 3, June 2016 http://link.springer.com/journal/10900/41/3/page/1 [Reviewed earlier]

Journal of Epidemiology & Community Health

June 2016, Volume 70, Issue 6 http://jech.bmj.com/content/current

[Reviewed earlier]

Journal of Global Ethics

Volume 12, Issue 1, 2016 http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0I#.VAJEj2N4WF8 [Reviewed earlier]

Journal of Global Infectious Diseases (JGID)

April-June 2016 Volume 8 | Issue 2 Page Nos. 59-94 http://www.jgid.org/currentissue.asp?sabs=n [New issue; No new relevant content identified]

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

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

Journal of Immigrant and Minority Health

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]

Journal of Infectious Diseases

Volume 213 Issue 11 June 1, 2016 http://jid.oxfordjournals.org/content/current [Reviewed earlier]

The Journal of Law, Medicine & Ethics

Winter 2015 Volume 43, Issue 4 Pages 673–913 http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-4/issuetoc

Special Issue: SYMPOSIUM: Harmonizing Privacy Laws to Enable International

Biobank Research: Part I

[14 articles] [Reviewed earlier]

Journal of Medical Ethics

June 2016, Volume 42, Issue 6
http://jme.bmj.com/content/current
[New issue; No new relevant content identified]

Journal of Medical Microbiology

Volume 65, Issue 5, May 2016 http://jmm.microbiologyresearch.org/content/journal/jmm/65/5;jsessionid=12mb0ac0j4tth.x-sgm-live-02 [Reviewed earlier]

Journal of Patient-Centered Research and Reviews

Volume 3, Issue 2 (2016) http://digitalrepository.aurorahealthcare.org/jpcrr/ [Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 5 Issue 2 June 2016 http://jpids.oxfordjournals.org/content/current [Reviewed earlier]

Journal of Pediatrics

June 2016 Volume 173, p1-272 http://www.jpeds.com/current [New issue; No relevant content identified]

Journal of Public Health Policy

Volume 37, Issue 2 (May 2016) http://www.palgrave-journals.com/jphp/journal/v37/n2/index.html [Reviewed earlier]

Journal of the Royal Society - Interface

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

Journal of Virology

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

The Lancet

Jun 18, 2016 Volume 387 Number 10037 p2479-2574 http://www.thelancet.com/journals/lancet/issue/current Comment

AIDS 2016: from aspiration to implementation

Kenneth H Mayer, Olive Shisana, Chris Beyrer *Summary*

Since AIDS was first recognised in 1981, more than 75 million HIV infections and more than 36 million deaths have occurred.1 HIV infection is no longer an inexorable death sentence but a chronic manageable infection. Key factors responsible for this transformation have been an understanding of the modes of HIV transmission,2 the development of effective combination antiretroviral therapy,3 and the validation of surrogate markers to monitor the response to treatment.4 But currently less than half of all people living with HIV worldwide have access to life-saving antiretroviral therapy,5 at a time when donor interest is uncertain and global funding flattening.

Articles

National spending on health by source for 184 countries between 2013 and 2040

Joseph L Dieleman, Tara Templin, Nafis Sadat, Patrick Reidy, Abigail Chapin, Kyle Foreman, Annie Haakenstad, Tim Evans, Christopher J L Murray, Christoph Kurowski 2521

Summary

Background

A general consensus exists that as a country develops economically, health spending per capita rises and the share of that spending that is prepaid through government or private mechanisms also rises. However, the speed and magnitude of these changes vary substantially across countries, even at similar levels of development. In this study, we use past trends and relationships to estimate future health spending, disaggregated by the source of those funds, to identify the financing trajectories that are likely to occur if current policies and trajectories evolve as expected.

Methods

We extracted data from WHO's Health Spending Observatory and the Institute for Health Metrics and Evaluation's Financing Global Health 2015 report. We converted these data to a common purchasing power-adjusted and inflation-adjusted currency. We used a series of ensemble models and observed empirical norms to estimate future government out-of-pocket private prepaid health spending and development assistance for health. We aggregated each country's estimates to generate total health spending from 2013 to 2040 for 184 countries. We compared these estimates with each other and internationally recognised benchmarks. Findings

Global spending on health is expected to increase from US\$7.83 trillion in 2013 to \$18.28 (uncertainty interval 14.42-22.24) trillion in 2040 (in 2010 purchasing power parity-adjusted dollars). We expect per-capita health spending to increase annually by 2.7% (1.9-3.4) in high-income countries, 3.4% (2.4-4.2) in upper-middle-income countries, 3.0% (2.3-3.6) in lower-middle-income countries, and 2.4% (1.6-3.1) in low-income countries. Given the gaps in current health spending, these rates provide no evidence of increasing parity in health spending. In 1995 and 2015, low-income countries spent \$0.03 for every dollar spent in high-income countries, even after adjusting for purchasing power, and the same is projected for

2040. Most importantly, health spending in many low-income countries is expected to remain low. Estimates suggest that, by 2040, only one (3%) of 34 low-income countries and 36 (37%) of 98 middle-income countries will reach the Chatham House goal of 5% of gross domestic product consisting of government health spending.

Interpretation

Despite remarkable health gains, past health financing trends and relationships suggest that many low-income and lower-middle-income countries will not meet internationally set health spending targets and that spending gaps between low-income and high-income countries are unlikely to narrow unless substantive policy interventions occur. Although gains in health system efficiency can be used to make progress, current trends suggest that meaningful increases in health system resources will require concerted action.

Articles

<u>Development assistance for health: past trends, associations, and the future of international financial flows for health</u>

Joseph L Dieleman, Matthew T Schneider, Annie Haakenstad, Lavanya Singh, Nafis Sadat, Maxwell Birger, Alex Reynolds, Tara Templin, Hannah Hamavid, Abigail Chapin, Christopher J L Murray

2536

Summary

Background

Disbursements of development assistance for health (DAH) have risen substantially during the past several decades. More recently, the international community's attention has turned to other international challenges, introducing uncertainty about the future of disbursements for DAH.

Methods

We collected audited budget statements, annual reports, and project-level records from the main international agencies that disbursed DAH from 1990 to the end of 2015. We standardised and combined records to provide a comprehensive set of annual disbursements. We tracked each dollar of DAH back to the source and forward to the recipient. We removed transfers between agencies to avoid double-counting and adjusted for inflation. We classified assistance into nine primary health focus areas: HIV/AIDS, tuberculosis, malaria, maternal health, newborn and child health, other infectious diseases, non-communicable diseases, Ebola, and sector-wide approaches and health system strengthening. For our statistical analysis, we grouped these health focus areas into two categories: MDG-related focus areas (HIV/AIDS, tuberculosis, malaria, child and newborn health, and maternal health) and non-MDG-related focus areas (other infectious diseases, non-communicable diseases, sector-wide approaches, and other). We used linear regression to test for structural shifts in disbursement patterns at the onset of the Millennium Development Goals (MDGs; ie, from 2000) and the global financial crisis (impact estimated to occur in 2010). We built on past trends and associations with an ensemble model to estimate DAH through the end of 2040.

Findings

In 2015, US\$36·4 billion of DAH was disbursed, marking the fifth consecutive year of little change in the amount of resources provided by global health development partners. Between 2000 and 2009, DAH increased at 11·3% per year, whereas between 2010 and 2015, annual growth was just 1·2%. In 2015, 29·7% of DAH was for HIV/AIDS, 17·9% was for child and newborn health, and 9·8% was for maternal health. Linear regression identifies three distinct periods of growth in DAH. Between 2000 and 2009, MDG-related DAH increased by \$290·4

million (95% uncertainty interval [UI] 174·3 million to 406·5 million) per year. These increases were significantly greater than were increases in non-MDG DAH during the same period (p=0·009), and were also significantly greater than increases in the previous period (p<0·0001). Between 2000 and 2009, growth in DAH was highest for HIV/AIDS, malaria, and tuberculosis. Since 2010, DAH for maternal health and newborn and child health has continued to climb, although DAH for HIV/AIDS and most other health focus areas has remained flat or decreased. Our estimates of future DAH based on past trends and associations present a wide range of potential futures, although our mean estimate of \$64·1 billion (95% UI \$30·4 billion to \$161·8 billion) shows an increase between now and 2040, although with a large uncertainty interval.

Interpretation

Our results provide evidence of two substantial shifts in DAH growth during the past 26 years. DAH disbursements increased faster in the first decade of the 2000s than in the 1990s, but DAH associated with the MDGs increased the most out of all focus areas. Since 2010, limited growth has characterised DAH and we expect this pattern to persist. Despite the fact that DAH is still growing, albeit minimally, DAH is shifting among the major health focus areas, with relatively little growth for HIV/AIDS, malaria, and tuberculosis. These changes in the growth and focus of DAH will have critical effects on health services in some low-income countries. Coordination and collaboration between donors and domestic governments is more important than ever because they have a great opportunity and responsibility to ensure robust health systems and service provision for those most in need.

The Lancet Infectious Diseases

Jun 2016 Volume 16 Number 6 p619-752 e82-e107 http://www.thelancet.com/journals/laninf/issue/current [Reviewed earlier]

Lancet Global Health

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

Maternal and Child Health Journal

Volume 20, Issue 6, June 2016 http://link.springer.com/journal/10995/20/6/page/1 [Reviewed earlier]

Medical Decision Making (MDM)

July 2016; 36 (5) http://mdm.sagepub.com/content/current [New issue; No relevant content identified]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy

June 2016 Volume 94, Issue 2 Pages 225-435

http://onlinelibrary.wiley.com/doi/10.1111/1468-0009.2016.94.issue-2/issuetoc

Original Investigation

The International Health Regulations: The Governing Framework for Global Health Security

LAWRENCE O. GOSTIN1,* and REBECCA KATZ2

Version of Record online: 11 MAY 2016

DOI: 10.1111/1468-0009.1218

Abstract Context

The International Health Regulations (IHR) have been the governing framework for global health security for the past decade and are a nearly universally recognized World Health Organization (WHO) treaty, with 196 States Parties. In the wake of the Ebola epidemic, major global commissions have cast doubt on the future effectiveness of the IHR and the leadership of the WHO.

Methods

We conducted a review of the historical origins of the IHR and their performance over the past 10 years and analyzed all of the ongoing reform panel efforts to provide a series of politically feasible recommendations for fundamental reform.

Findings

We propose a series of recommendations with realistic pathways for change. These recommendations focus on the development and strengthening of IHR core capacities; independently assessed metrics; new financing mechanisms; harmonization with the Global Health Security Agenda, Performance of Veterinary Services (PVS) Pathways, the Pandemic Influenza Preparedness Framework, and One Health strategies; public health and clinical workforce development; Emergency Committee transparency and governance; tiered public health emergency of international concern (PHEIC) processes; enhanced compliance mechanisms; and an enhanced role for civil society.

Conclusions

Empowering the WHO and realizing the IHR's potential will shore up global health security—a vital investment in human and animal health—while reducing the vast economic consequences of the next global health emergency.

Nature

Volume 534 Number 7607 pp296-430 16 June 2016 http://www.nature.com/nature/current_issue.html

Policy: Map the interactions between Sustainable Development Goals

Mans Nilsson, Dave Griggs and Martin Visbeck present a simple way of rating relationships between the targets to highlight priorities for integrated policy.

Nature Medicine

June 2016, Volume 22 No 6 pp569-692 http://www.nature.com/nm/journal/v22/n5/index.html [Reviewed earlier]

Nature Reviews Immunology

June 2016 Vol 16 No 6 http://www.nature.com/nri/journal/v16/n6/index.html [Reviewed earlier]

New England Journal of Medicine

June 16, 2016 Vol. 374 No. 24 http://www.nejm.org/toc/nejm/medical-journal [New issue; No new relevant content identified]

Pediatrics

June 2016, VOLUME 137 / ISSUE 6 http://pediatrics.aappublications.org/content/137/6?current-issue=y Articles

<u>Immunization Data Exchange With Electronic Health Records</u>

Melissa S. Stockwell, Karthik Natarajan, Rajasekhar Ramakrishnan, Stephen Holleran, Kristen Forney, Angel Aponte, David K. Vawdrey

Pediatrics Jun 2016, 137 (6) e20154335; DOI: 10.1542/peds.2015-4335 *Abstract*

OBJECTIVE: To assess the impact of exchange of immunization information between an immunization information system (IIS) and an electronic health record on up-to-date rates, over-immunization, and immunization record completeness for low-income, urban children and adolescents.

METHODS: The New York City Department of Health maintains a population-based IIS, the Citywide Immunization Registry (CIR). Five community clinics in New York City implemented direct linkage of immunization data from the CIR to their local electronic health record. We compared immunization status and overimmunization in children and adolescents 19 to 35 month, 7 to 10 year, and 13 to 17 year-olds with provider visits in the 6-month period before data exchange implementation (2009; n = 6452) versus 6-months post-implementation (2010; n = 6124). We also assessed immunization record completeness with and without addition of CIR data for 8548 children and adolescents with visits in 2012–2013.

RESULTS: Up-to-date status increased from before to after implementation from 75.0% to 81.6% (absolute difference, 6.6%; 95% confidence interval [CI], 5.2% to 8.1%) and was significant for all age groups. The percentage overimmunized decreased from 8.8% to 4.7% (absolute difference, -4.1%; 95% CI, -7.8% to -0.3%) and was significant for adolescents (16.4% vs 1.2%; absolute difference, -15.2%; 95% CI, -26.7 to -3.6). Up-to-date status for those seen in 2012 to 2013 was higher when IIS data were added (74.6% vs 59.5%). CONCLUSIONS: This study demonstrates that data exchange can improve child and adolescent immunization status. Development of the technology to support such exchange and continued focus on local, state, and federal policies to support such exchanges are needed.

Strategies for Improving Vaccine Delivery: A Cluster-Randomized Trial

Linda Y. Fu, Kathleen Zook, Janet A. Gingold, Catherine W. Gillespie, Christine Briccetti, Denice Cora-Bramble, Jill G. Joseph, Rachel Haimowitz, Rachel Y. Moon

Pediatrics Jun 2016, 137 (6) e20154603; DOI: 10.1542/peds.2015-4603 Abstract

OBJECTIVE: New emphasis on and requirements for demonstrating health care quality have increased the need for evidence-based methods to disseminate practice guidelines. With regard to impact on pediatric immunization coverage, we aimed to compare a financial incentive program (pay-for-performance [P4P]) and a virtual quality improvement technical support (QITS) learning collaborative.

METHODS: This single-blinded (to outcomes assessor), cluster-randomized trial was conducted among unaffiliated pediatric practices across the United States from June 2013 to June 2014. Practices received either the P4P or QITS intervention. All practices received a Vaccinator Toolkit. P4P practices participated in a tiered financial incentives program for immunization coverage improvement. QITS practices participated in a virtual learning collaborative. Primary outcome was percentage of all needed vaccines received (PANVR). We also assessed immunization up-to-date (UTD) status.

RESULTS: Data were analyzed from 3,147 patient records from 32 practices. Practices in the study arms reported similar QI activities (\sim 6 to 7 activities). We found no difference in PANVR between P4P and QITS (mean \pm SE, 90.7% \pm 1.1% vs 86.1% \pm 1.3%, P = 0.46). Likewise, there was no difference in odds of being UTD between study arms (adjusted odds ratio 1.02, 95% confidence interval 0.68 to 1.52, P = .93). In within-group analysis, patients in both arms experienced nonsignificant increases in PANVR. Similarly, the change in adjusted odds of UTD over time was modest and nonsignificant for P4P but reached significance in the QITS arm (adjusted odds ratio 1.28, 95% confidence interval 1.02 to 1.60, P = .03).

CONCLUSIONS: Participation in either a financial incentives program or a virtual learning collaborative led to self-reported improvements in immunization practices but minimal change in objectively measured immunization coverage.

Influenza in Infants Born to Women Vaccinated During Pregnancy

Julie H. Shakib, Kent Korgenski, Angela P. Presson, Xiaoming Sheng, Michael W. Varner, Andrew T. Pavia, Carrie L. Byington

Pediatrics Jun 2016, 137 (6) e20152360; DOI: 10.1542/peds.2015-2360

Commentaries

<u>Immunization Delivery and Policy as an Ongoing Model for Systems Improvement</u> Simon J. Hambidge

Pediatrics Jun 2016, 137 (6) e20160962; DOI: 10.1542/peds.2016-0962

Immunization delivery has long served as a model of the interface between health care and public health. The article by Stockwell et al in this issue of Pediatrics1 illustrates the power of

The authors studied the impact of a bidirectional exchange of pediatric immunization information between an electronic health record in a large urban ambulatory care network and a citywide immunization information system. They found that immunization up-to-date status increased in all age groups by 81.6% after implementation of the exchange. Importantly, the percent of overimmunized children decreased from 8.8% to 4.7% and was especially pronounced in adolescents (16.4% overimmunized preimplementation to ...

Pharmaceutics

Volume 8, Issue 2 (June 2016) http://www.mdpi.com/1999-4923/8/2
[New issue: No new relevant content identified]

PharmacoEconomics

Volume 34, Issue 6, June 2016 http://link.springer.com/journal/40273/34/6/page/1 [Reviewed earlier]

PLOS Currents: Disasters

http://currents.plos.org/disasters/ [Accessed 18 June 2016] Discussion

<u>If Numbers Can Speak, Who Listens? Creating Engagement and Learning for Effective Uptake of DRR Investment in Developing Countries</u>

June 13, 2016 ·

Introduction: With a renewed emphasis on evidence-based risk sensitive investment promoted under the Sendai Framework for Disaster Risk Reduction 2015-2030, technical demands for analytical tools such as probabilistic cost-benefit analysis (CBA) will likely increase in the foreseeable future. This begs a number of pragmatic questions such as whether or not sophisticated quantitative appraisal tools are effective in raising policy awareness and what alternatives are available.

Method: This article briefly reviews current practices of analytical tools such as probabilistic cost-benefit analysis and identifies issues associated with its applications in small scale community based DRR interventions.

Results: The article illustrate that while best scientific knowledge should inform policy and practice in principle, it should not create an unrealistic expectation that the state-of-the art methods must be used in all cases, especially for small scale DRR interventions in developing countries, where data and resource limitations and uncertainty are high, and complex interaction and feedback may exist between DRR investment, community response and longer-term development outcome.

Discussion: Alternative and more participatory approaches for DRR appraisals are suggested which includes participatory serious games that are increasingly being used to raise awareness and identify pragmatic strategies for change that are needed to bring about successful uptake of DRR investment and implementation of DRR mainstreaming.

PLoS Currents: Outbreaks

http://currents.plos.org/outbreaks/ (Accessed 18 June 2016) [No new content]

PLoS Medicine

http://www.plosmedicine.org/ (Accessed 18 June 2016)

Essay

<u>Delinking Investment in Antibiotic Research and Development from Sales Revenues:</u> <u>The Challenges of Transforming a Promising Idea into Reality</u>

Kevin Outterson, Unni Gopinathan, Charles Clift, Anthony D. So, Chantal M. Morel, John-Arne Røttingen

| published 14 Jun 2016 | PLOS Medicine

Summary Points

- :: The current business model for antibiotics is plagued by market failures and perverse incentives that both work against conservation efforts and provide insufficient rewards to drive the development of much-needed new treatments for resistant infection.
- :: Many new incentive mechanisms have been proposed to realign incentives and support innovation and conservation over the long term. The most promising of these are based on the idea of delinking rewards from sales volume of the antibiotic—the notion of "delinkage."
- :: Some critical design issues for delinkage remain, such as how to secure access to badly needed new products when resistance renders existing treatments ineffective, an increasingly urgent global problem. The issue of global access to antibiotics is not sufficiently addressed de facto by a delinked mechanism, and, as such, it must be addressed explicitly through specific design features of new mechanisms, including defining the eligibility criteria for delinkage rewards and appropriate management of intellectual property.
- :: The idea of establishing a new business model to drive antibiotic development and improve conservation currently has the world's attention. We must now work quickly to examine the remaining design questions to address this major public health concern for the longer term.

PLoS Neglected Tropical Diseases

http://www.plosntds.org/

Research Article

<u>Antibody Secreting Cell Responses following Vaccination with Bivalent Oral Cholera Vaccine among Haitian Adults</u>

Wilfredo R. Matias, Brie Falkard, Richelle C. Charles, Leslie M. Mayo-Smith, Jessica E. Teng, Peng Xu, Pavol Kovac, Edward T. Ryan, Firdausi Qadri, Molly F. Franke, Louise C. Ivers, Jason B. Harris

| published 16 Jun 2016 | PLOS Neglected Tropical Diseases

http://dx.doi.org/10.1371/journal.pntd.0004753

Abstract

Background

The bivalent whole-cell (BivWC) oral cholera vaccine (Shanchol) is effective in preventing cholera. However, evaluations of immune responses following vaccination with BivWC have been limited. To determine whether BivWC induces significant mucosal immune responses, we measured V. cholerae O1 antigen-specific antibody secreting cell (ASC) responses following vaccination.

Methodology/Principal Findings

We enrolled 24 Haitian adults in this study, and administered doses of oral BivWC vaccine 14 days apart (day 0 and day 14). We drew blood at baseline, and 7 days following each vaccine dose (day 7 and 21). Peripheral blood mononuclear cells (PBMCs) were isolated, and ASCs were enumerated using an ELISPOT assay. Significant increases in Ogawa (6.9 cells per million PBMCs) and Inaba (9.5 cells per million PBMCs) OSP-specific IgA ASCs were detected 7 days following the first dose (P < 0.001), but not the second dose. The magnitude of V. cholerae-

specific ASC responses did not appear to be associated with recent exposure to cholera. ASC responses measured against the whole lipolysaccharide (LPS) antigen and the OSP moiety of LPS were equivalent, suggesting that all or nearly all of the LPS response targets the OSP moiety.

Conclusions/Significance

Immunization with the BivWC oral cholera vaccine induced ASC responses among a cohort of healthy adults in Haiti after a single dose. The second dose of vaccine resulted in minimal ASC responses over baseline, suggesting that the current dosing schedule may not be optimal for boosting mucosal immune responses to V. cholerae antigens for adults in a cholera-endemic area.

Author Summary

The bivalent whole-cell (BivWC) oral cholera vaccine (Shanchol) is effective in preventing cholera. Despite its increasing use as part of comprehensive cholera prevention and control efforts, evaluations of immune responses following vaccination with BivWC have been limited. In this study, we measured the development of cholera-specific antibody secreting cells, markers of mucosal immunity, following vaccination with BivWC among a population of adults in Haiti, where cholera is now endemic. BivWC induced development of robust immune responses following the first dose of vaccine, but similar ASC responses were not detected following the second dose, suggesting that the currently recommended 14-day interval between doses may not be optimal for boosting mucosal immune responses among adults in cholera endemic regions. These findings suggest that additional evaluation of the optimal dosing schedule for oral cholera vaccines is warranted with the goal of improving long-term immunity.

<u>Digital Participatory Surveillance and the Zika Crisis: Opportunities and Caveats</u>

Claudia Pagliari, Santosh Vijaykumar

Viewpoints | published 13 Jun 2016 | PLOS Neglected Tropical Diseases http://dx.doi.org/10.1371/journal.pntd.0004795 Introduction

Managing the global threat of Zika requires innovative solutions. This article examines the potential of Digital Participatory Surveillance to support the management of global disease outbreaks by enabling citizens to report signs of infection. We discuss the status of the current evidence-base, contextual factors influencing user engagement and data quality, challenges for evaluation, and unique aspects of Zika with implications for design. We also suggest priorities for research, development and practice, to help translate the theoretical benefits of these methods into meaningful improvements in outbreak monitoring and public health.

PLoS One

http://www.plosone.org/ [Accessed 18 June 2016] [No new relevant content identified]

PLoS Pathogens

http://journals.plos.org/plospathogens/ (Accessed 18 June 2016) [No new relevant content identified]

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

http://www.pnas.org/content/early/ (Accessed 18 June 2016) [No new relevant content identified]

Prehospital & Disaster Medicine

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

Preventive Medicine

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

Proceedings of the Royal Society B

10 February 2016; volume 283, issue 1824 http://rspb.royalsocietypublishing.org/content/283/1824?current-issue=y [Reviewed earlier]

Public Health Ethics

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

Public Health Reports

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

Qualitative Health Research

June 2016; 26 (7)
http://qhr.sagepub.com/content/current

**Special Issue: Ethnography

[Reviewed earlier]

Reproductive Health

http://www.reproductive-health-journal.com/content [Accessed 18 June 2016]

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

<u>February 2016</u> Vol. 39, No. 2 http://www.paho.org/journal/ [Reviewed earlier]

Risk Analysis

May 2016 Volume 36, Issue 5 Pages 863–1068 http://onlinelibrary.wiley.com/doi/10.1111/risa.2016.36.issue-5/issuetoc [Reviewed earlier]

Risk Management and Healthcare Policy

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

Science

17 June 2016 Vol 352, Issue 6292 http://www.sciencemag.org/current.dtl **Special Issue: Signals in RNA**[New issue; No new relevant content identified]

Science Translational Medicine

15 June 2016 Vol 8, Issue 343 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 [Reviewed earlier]

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 [Reviewed earlier]

Vaccine

Volume 34, Issue 28, Pages 3221-3330 (14 June 2016) http://www.sciencedirect.com/science/journal/0264410X/34/28

Brief report

Effective vaccine communication during the disneyland measles outbreak

Pages 3225-3228

David A. Broniatowski, Karen M. Hilyard, Mark Dredze

Abstract

Vaccine refusal rates have increased in recent years, highlighting the need for effective risk communication, especially over social media. Fuzzy-trace theory predicts that individuals encode bottom-line meaning ("gist") and statistical information ("verbatim") in parallel and those articles expressing a clear gist will be most compelling. We coded news articles (n = 4581) collected during the 2014–2015 Disneyland measles for content including statistics, stories, or bottom-line gists regarding vaccines and vaccine-preventable illnesses. We measured the extent to which articles were compelling by how frequently they were shared on Facebook. The most widely shared articles expressed bottom-line gists, although articles containing statistics were also more likely to be shared than articles lacking statistics. Stories had limited impact on Facebook shares. Results support Fuzzy Trace Theory's predictions regarding the distinct yet parallel impact of categorical gist and statistical verbatim information on public health communication.

Review Article

<u>Using behavior change frameworks to improve healthcare worker influenza</u> vaccination rates: A systematic review

Pages 3235-3242

Kimberly M. Corace, Jocelyn A. Srigley, Daniel P. Hargadon, Dorothy Yu, Tara K. MacDonald, Leandre R. Fabrigar, Gary E. Garber

Abstract

Background

Influenza vaccination of healthcare workers (HCW) is important for protecting staff and patients, yet vaccine coverage among HCW remains below recommended targets. Psychological theories of behavior change may help guide interventions to improve vaccine uptake. Our objectives were to: (1) review the effectiveness of interventions based on psychological theories of behavior change to improve HCW influenza vaccination rates, and (2) determine which psychological theories have been used to predict HCW influenza vaccination uptake. Methods

MEDLINE, EMBASE, CINAHL, PsycINFO, The Joanna Briggs Institute, SocINDEX, and Cochrane Database of Systematic Reviews were searched for studies that applied psychological theories of behavior change to improve and/or predict influenza vaccination uptake among HCW. Results

The literature search yielded a total of 1810 publications; 10 articles met eligibility criteria. All studies used behavior change theories to predict HCW vaccination behavior; none evaluated interventions based on these theories. The Health Belief Model was the most frequently employed theory to predict influenza vaccination uptake among HCW. The remaining predictive studies employed the Theory of Planned Behavior, the Risk Perception Attitude, and the Triandis Model of Interpersonal Behavior. The behavior change framework constructs were successful in differentiating between vaccinated and non-vaccinated HCW. Key constructs identified included: attitudes regarding the efficacy and safety of influenza vaccination, perceptions of risk and benefit to self and others, self-efficacy, cues to action, and social-

professional norms. The behavior change frameworks, along with sociodemographic variables, successfully predicted 85–95% of HCW influenza vaccination uptake.

Conclusion

Vaccination is a complex behavior. Our results suggest that psychological theories of behavior change are promising tools to increase HCW influenza vaccination uptake. Future studies are needed to develop and evaluate novel interventions based on behavior change theories, which may help achieve recommended HCW vaccination targets.

Original Research Article

Communicating to increase public uptake of pandemic flu vaccination in the UK: Which messages work?

Pages 3268-3274

Fiona Mowbray, Afrodita Marcu, Cristina A. Godinho, Susan Michie, Lucy Yardley *Abstract*

Background

Vaccination is considered the most effective preventive measure against influenza transmission, yet vaccination rates during the 2009/10 influenza A/H1N1 pandemic were low across the world, with the majority of people declining to receive the vaccine. Despite extensive research on the predictors of uptake of influenza vaccination, little research has focused on testing the effectiveness of evidence and theory-based messages.

Aims

To examine the persuasiveness of messages promoting vaccination and antiviral use either as health-enhancing or as risk-reducing, as well as messages which conveyed evidence-based information about the costs and benefits of vaccination, or which applied anticipated regret as a motivator for vaccine uptake.

Method

We conducted 11 focus groups with forty-one members of the general population in England including young and older adults, those with lower education, parents, and those with elevated health risk. The data were analysed using thematic analysis.

Results

The factual, evidence-based messages were well received with participants finding them the most convincing and useful, particularly where they gave cost—benefit comparisons. Health-enhancing messages were received with scepticism and concern that the messages were not honest about the potential lack of safety of vaccination. In contrast, risk-reduction messages were perceived as being more balanced and credible. Messages aiming to elicit feelings of anticipated regret for not getting vaccinated were generally perceived as patronising and unprofessional.

Conclusions

Vaccination messages should be kept brief, but convey balanced, evidence-based information, and be transparent in their communication of potential side-effects. The general public seem to prefer messages that are factual and emphasise the costs and benefits of vaccination, particularly with regards to vaccine safety.

Vaccine: Development and Therapy

https://www.dovepress.com/vaccine-development-and-therapy-archive111 (Accessed 18 June 2016)
[No new content]

Vaccines — Open Access Journal

http://www.mdpi.com/journal/vaccines (Accessed 18 June 2016) [No new content]

Value in Health

June 2016 Volume 19, Issue 4, p297-510 http://www.valueinhealthjournal.com/current [New issue; No new relevant content identified]

Dissertations, Theses, Commentary

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

No new content identified

* * * *

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 18 June 2016
[No new, unique, relevant content]

BBC

http://www.bbc.co.uk/ Accessed 18 June 2016 [No new, unique, relevant content]

The Economist

http://www.economist.com/

Accessed 18 June 2016
[No new, unique, relevant content]

Financial Times

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

Accessed 18 June 2016

[No new, unique, relevant content]

Forbes

http://www.forbes.com/ Accessed 18 June 2016 [No new, unique, relevant content]

Foreign Affairs

http://www.foreignaffairs.com/ Accessed 18 June 2016 [No new, unique, relevant content]

Foreign Policy

http://foreignpolicy.com/ Accessed 18 June 2016 [No new, unique, relevant content]

The Guardian

http://www.guardiannews.com/ Accessed 18 June 2016 [No new, unique, relevant content]

New Yorker

http://www.newyorker.com/ Accessed 18 June 2016 [No new, unique, relevant content]

New York Times

http://www.nytimes.com/ Accessed 18 June 2016

As Zika Threat Grows in U.S., Testing Lags for a Vulnerable Group

By MARC SANTORAJ UNE 17, 2016

As the <u>Zika virus</u> swept north from Brazil into the Caribbean, bringing with it frightening risks for pregnant women and their unborn children, United States health officials decided in February that all expectant women who had visited the countries affected should be tested for the disease.

But after <u>the guidelines</u> were put in place, public health officials and doctors in New York City found that large numbers of women, many uninsured or low-income immigrants from the Caribbean and Latin America, were not being screened and tested in a systematic way. The problems facing the city's health care providers in ensuring that all of those who need testing can get it illustrates the monumental challenges involved in reaching those considered

most at risk. And as summer approaches, the reach of mosquitoes that carry the virus is expected to extend to Florida and other states along the Gulf of Mexico...

Polio Strain Found in Hyderabad, India, Prompts Vaccination Drive

15 June 2016

NEW DELHI — The health authorities in the southern Indian state of Telangana have issued a high alert in Hyderabad, the state capital, after finding a strain of <u>polio</u> in sewage water there, a state health official said Wednesday.

A polio vaccination drive will begin on Monday, the health authorities said, with the aim of vaccinating about 300,000 children in parts of Hyderabad and in the Rangareddy district also part of the state of Telangana, according to a statement from India's Ministry of Health and Family Welfare. The Hyderabad metropolitan area has more than 7.7 million people and the Rangareddy district 5.2 million, according India's 2011 census.

"We have to avoid any kind of risk, even though nobody has been affected," said Rajeshwar Tiwari, the principal secretary for the Ministry of Health in Telangana. "We want to remain a polio-free nation."...

Wall Street Journal

http://online.wsj.com/home-page? wsjregion=na,us& homepage=/home/us Accessed 18 June 2016
[No new, unique, relevant content]

Washington Post

http://www.washingtonpost.com/

Accessed 18 June 2016

Mosquitoes don't just spread the Zika virus. They may be helping an older killer reemerge.

As global warming continues, yellow fever may start to spread again. Mara Pillinger | Politics | Jun 16, 2016

<u>Think Tanks et al</u>

Brookings

http://www.brookings.edu/ Accessed 18 June 2016 [No new relevant content]

Center for Global Development

http://www.cgdev.org/ Accessed 18 June 2016 [No new relevant content]

Council on Foreign Relations

http://www.cfr.org/ Accessed 18 June 2016 [No new relevant content]

Vaccines and Global Health: The Week in Review is a service of the Center for Vaccines Ethics and Policy (<u>CVEP</u>) which is solely responsible for its content, and is an open access publication, subject to the terms of the Creative Commons Attribution License (<u>http://creativecommons.org/licenses/by-nc/3.0/</u>). Copyright is retained by CVEP.

CVEP is a program of the GE2P2 Global Foundation – whose mission is 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 <u>Bill & Melinda Gates Foundation</u>; <u>PATH</u>; the <u>International Vaccine Institute</u> (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 (<u>DCVMN</u>).

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.