

# Vaccines and Global Health: The Week in Review 2 July 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 <a href="http://centerforvaccineethicsandpolicy.wordpress.com/">http://centerforvaccineethicsandpolicy.wordpress.com/</a>. This blog allows full-text searching of over 8,000 entries.

Comments and suggestions should be directed to
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**Request an email version:** Vaccines and Global Health: The Week in Review is published as a single email summary, scheduled for release each Saturday evening 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

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**Zika virus** [to 2 July 2016]

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

# Zika situation report - 30 June 2016

Full report: http://apps.who.int/iris/bitstream/10665/246155/1/zikasitrep30Jun16-eng.pdf?ua=1

Summary [Initial text]

As of 22 June 2016, 61 countries and territories report continuing mosquito-borne transmission (Fig. 1) of which:

- :: 47 countries are experiencing a first outbreak of Zika virus since 2015, with no previous evidence of circulation, and with ongoing transmission by mosquitoes.
- :: 14 countries reported evidence of Zika virus transmission between 2007 and 2014, with ongoing transmission...

[No change from 23 June 2016]

**Zika Open** [to 2 July 2016] [Bulletin of the World Health Organization] :: All papers available here No new papers identified.

CDC/ACIP [to 2 July 2016]
<a href="http://www.cdc.gov/media/index.html">http://www.cdc.gov/media/index.html</a>
<a href="https://press.ncbi.nlm.ncbi.nlm">Press Release</a>
<a href="https://fress.ncbi.nlm">FRIDAY</a>, JULY 1, 2016

# **CDC Awards Funds for States and Territories to Prepare for Zika**

The Centers for Disease Control and Prevention (CDC) has awarded \$25 million in funding to states, cities, and territories to support efforts to protect Americans from Zika virus infection and...

Media Statement THURSDAY, JUNE 30, 2016

#### CDC adds Anguilla to interim travel guidance related to Zika virus

CDC is working with other public health officials to monitor for ongoing Zika virus transmission. Today, CDC posted a Zika virus travel notice for Anguilla.

Press Release

WEDNESDAY, JUNE 29, 2016

#### New study sheds light on how some survive Ebola

Finding points way to new approaches to Ebola treatment

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# **EBOLA/EVD** [to 2 July 2016]

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

[Editor's Note:

We deduce that WHO has suspended issuance of new Situation Reports after resuming them for several weekly cycles. Most recent report summary 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.

CDC/ACIP [to 2 July 2016]
http://www.cdc.gov/media/index.html
MONDAY, JUNE 27, 2016
Global Health Security in Liberia

CDC works with the Government of Liberia and partners to improve health systems and outcomes by building on existing disease prevention, detection and response capacities, as well as those developed during the response to the Ebola epidemic. Efforts continue to help public health systems created as a result of the epidemic and to support specific programs that meet the needs of Ebola survivors.

Our activities support the <u>Global Health Security Agenda</u> (GHSA), which aims to improve countries' abilities to prevent, detect, and respond to health threats. In Liberia, we are doing this by focusing on key activities to:

- :: build surveillance systems that monitor cases of infectious diseases
- :: improve the safety and quality of national laboratory systems
- :: develop the skills of the public health workforce
- :: establish emergency operations centers that can quickly launch coordinated responses to a public health threat.

The 2014-2015 Ebola epidemic in West Africa was the largest in history. Liberia and the other affected countries suffered significant loss of human life that continues to adversely affect communities and health systems. In the wake of the outbreak, there have been a number of additional cases/clusters of Ebola. CDC assists with detection and control of these cases/clusters, while supporting research and programs designed to meet the needs of survivors. Our experience in Liberia has demonstrated the importance of having systems to detect and respond to health threats, and building capacity before diseases appear...

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**POLIO** [to 2 July 2016]

Public Health Emergency of International Concern (PHEIC)

#### Polio this week as of 29 June 2016

- :: The Expert Review Committee on Polio Eradication and Routine Immunization met in Abuja on 21 22 June, and emphasised that the strategy in Nigeria must now shift from interrupting transmission to staying polio free, sustaining the hard-won gains, strengthening routine immunization and responding to outbreaks of vaccine-derived polioviruses. <u>More</u>
- :: The Pakistan Technical Advisory Group met this week in Islamabad to discuss progress towards interrupting the transmission of polio and to discuss solutions to the upcoming challenges.

:: Surveillance is an essential part of polio eradication efforts in countries around the world. Michel Zaffran, Director of GPEI, explains these crucial efforts to Rotary in <u>this blog post</u>.

# <u>Selected Country Levels Updates</u> [excerpted]

#### Pakistan

:: One new case of wild poliovirus type 1 (WPV1) was reported in the past week in Dera Ismail Khan in Khyber Pakhtunkhwa with onset of paralysis on 6 June. The total number of WPV1 cases for 2016 is now 12, compared to 25 at this time in 2015.

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**Yellow Fever** [to 2 July 2016]

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

# <u>Yellow Fever - Situation Report - 30 June 2016</u>

Full Report:

http://apps.who.int/iris/bitstream/10665/246156/1/yellowfeversitrep30Jun16-eng.pdf?ua=1 [Excerpt]

... The risk of spread

Two additional countries have reported confirmed yellow fever cases imported from Angola: Kenya (two cases) and People's Republic of China (11 cases). These cases highlight the risk of international spread through non-immunised travellers.

Seven countries (Brazil, Chad, Colombia, Ghana, Guinea, Peru and Uganda) are currently reporting yellow fever outbreaks or sporadic cases not linked to the Angolan outbreak...

# **IOM / International Organization for Migration** [to 2 July 2016]

http://www.iom.int/press-room/press-releases 06/28/16

# Yellow Fever Outbreak Confirmed in DR Congo: IOM Trains Border Health Officers

Democratic Republic of Congo - IOM has trained a first group of border health officials to combat an outbreak of yellow fever.

The training was held in the town of Matadi, which borders Angola, and was attended by 25 health officers from Kinshasa's Ndjili Airport, Beach Ngobila on the Congo River and other main border posts in Mbanza Ngungu, Kimpese Lufu, Ango-Ango (Matadi), Boma, Lindu, Yema, Yatch and Moanda.

The workshop was designed to improve participants' understanding of an Integrated Surveillance of Diseases and Response, international health regulations, the management of migration flows during outbreaks, and the registration of suspected cases.

Saturnin Phuati Nganzi, who heads the National Border Hygiene Programme, said: "This first training has equipped my team with the right tools to reinforce existing epidemiological surveillance at the borders."...

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### MERS-CoV [to 2 July 2016]

### **Disease Outbreak News (DONs)**

- :: Middle East respiratory syndrome coronavirus (MERS-CoV) Qatar 29 June 2016
- :: Middle East respiratory syndrome coronavirus (MERS-CoV) Saudi Arabia 22 June 2016

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### WHO & Regional Offices [to 2 July 2016]

# WHO announces head of new Health Emergencies Programme

WHO statement

28 June 2016

WHO has announced the appointment of Dr Peter Salama as the Executive Director of its new Health Emergencies Programme, at the level of Deputy Director-General. He takes up his new post on 27 July 2016.

Dr Salama is from Australia and is currently UNICEF Regional Director for Middle East and North Africa and Global Emergency Coordinator for the Crises in Syria, Iraq and Yemen. He has previously served with UNICEF as Country Representative in Ethiopia and Zimbabwe, as Global Coordinator for Ebola, and as Chief of Global Health.

Prior to joining UNICEF in 2002, he worked with the United States Centers for Disease Control and Prevention (US CDC), Concern Worldwide and MSF. Dr Salama is a medical epidemiologist who brings a wealth of experience in management of humanitarian crises and disease outbreaks. He has worked in public health for more than 20 years and published widely in the fields of maternal and child survival, refugee and forced migration and complex emergencies. WHO's new Health Emergencies Programme is designed to deliver rapid, predictable and comprehensive support to countries and communities as they prepare for, face or recover from emergencies caused by any type of hazard to human health, whether disease outbreaks, natural or man-made disasters or conflicts.

The development of the new Programme is the result of a reform effort, based on recommendations from a range of independent and expert external reports, involving all levels of WHO – country offices, regional offices and headquarters.

The new Programme unifies WHO's standards and processes to strengthen the Organization's response to health emergencies across the full risk management cycle of prevention, preparedness, response and early recovery.

# New checklist to make health estimates more transparent, accurate and reliable June 2016

...The Guidelines for Accurate and Transparent Health Estimates Reporting, or GATHER, is a checklist of 18 best practices that sets the standard for disclosing how health estimates are developed. The GATHER checklist was developed by WHO and researchers from around the

world including the Institute for Health Metrics and Evaluation (IHME) at the University of Washington in Seattle, and was published today in the Lancet and PLOS Medicine.

"When the health and well-being of millions of people is at stake you need to be sure you have the best possible information to make the best possible decisions," said Dr Ties Boerma, Director of WHO's Department of Information, Evidence and Research. "GATHER is a crucial step towards making sure health estimates can stand up to scrutiny."

GATHER includes requirements for disclosing which data are used to calculate estimates, and for making them available to others. It also includes a requirement to disclose how the computer code used to crunch the numbers can be accessed, making it possible for others to reproduce estimates, making them more robust.

Both WHO and IHME have agreed to comply with GATHER when they publish new global health estimates. Journals including the Lancet, PLOS Medicine, the International Journal of Epidemiology and the Bulletin of the World Health Organization plan to ask authors to comply with GATHER, and it is expected that other journals to follow suit. Several estimates compiled by WHO already follow GATHER principles, including child mortality, childhood causes of death and maternal mortality.

# Better transparency improves credibility

GATHER will also help researchers to be more efficient and make better use of research funds; greater transparency will enable researchers to build on the work done by others, instead of wasting months or even years of work trying to reproduce it.

"Transparency gets to the essence of credibility in health science," said Dr Christopher Murray, Director of IHME. "If researchers are not willing to be completely open about their sources of information and methods used for analysis, the credibility of their findings may be questioned. Those who adhere to the guidelines will raise the bar in terms of research excellence. And all of us will benefit from that higher bar."

The production of global health estimates has increased tremendously in the past years, driven mainly by an increasing global demand for data on key indicators, such as those used to measure progress towards the Millennium Development Goals (MDGs).

The Sustainable Development Goals, which are far broader in scope than the MDGs, will only increase the demand for more, better data. Through initiatives such as the Health Data Collaborative, WHO is working with countries and partners to meet that demand.

# Global food safety standards body issues new guidance

28 June 2016 – The international food standards-setting body, the Codex Alimentarius Commission, is meeting to discuss guidelines and standards for a range of issues, including the control of Salmonella in beef and pork, food hygiene to control foodborne parasites, nutrient reference values for food package nutrition labels, safety of food additives, pesticide residues in food, and arsenic levels in rice. The Codex is also considering its future work on antimicrobial resistance

### **Highlights**

# WHO reaches 40 000 people with lifesaving treatments in Syria

June 2016 – As part of the United Nations interagency convoy on 29 June 2016, WHO delivered 43 000 lifesaving treatments to people in need in Arbeen and Zamalka, East Ghouta.

# **Improving access to quality medicines in Africa**

June 2016 -- WHO met with the European Union and the African, Caribbean and Pacific Group of States recently to review a joint 4-year programme to improve access to quality medicines for 15 countries in sub-Saharan Africa. The quality, safety, and pricing of medicines have been addressed by the programme.

# **Commitment to advancing global health security**

June 2016 -- WHO, governments, financial institutions, development partners, and health agencies from across the world have committed to accelerate strengthening and implementation of capacities required to cope with disease outbreaks and other health emergencies.

# Weekly Epidemiological Record (WER) 1 July 2016, vol. 91, 26/27 (pp. 329–340)

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329 Index of countries/areas

329 Index, Volume 91, 2016, Nos. 1-27

331 Health conditions for travellers to Saudi Arabia for the pilgrimage to Mecca (Hajj), 2016 336 Performance of acute flaccid paralysis (AFP) surveillance and incidence of poliomyelitis, 2016

GIN - June 2016 pdf, 1.13Mb 30 June 2016

#### **Disease Outbreak News (DONs)**

- :: Middle East respiratory syndrome coronavirus (MERS-CoV) Qatar 29 June 2016
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# :: WHO Regional Offices

Selected Press Releases, Announcements

#### **WHO African Region AFRO**

:: WHO, governments and health agencies commit to advancing global health security
Bali, Indonesia, 30 June 2016 – The World Health Organization (WHO), governments, financial institutions, development partners, and health agencies from across the world have committed to accelerate strengthening and implementation of capacities required to cope with disease outbreaks and other health emergencies.

:: <u>Fifteen African Countries and Partners Take stock of Progress Made in Access to Medicines -</u> 29 June 2016

#### **WHO Region of the Americas PAHO**

No new digest content identified.

# **WHO South-East Asia Region SEARO**

:: WHO, governments and health agencies commit to advancing global health security 30 June 2016

# WHO European Region EURO

- :: New course builds "soft skills" for greater health equity and well-being in policy 01-07-2016
- :: New report calls for improved maternal nutrition to decrease children's long-term risk of noncommunicable diseases (NCDs) and obesity 29-06-2016
- :: Fight against TB in focus during Regional Director's visit to Slovakia 28-06-2016

# WHO Eastern Mediterranean Region EMRO

:: WHO, governments and health agencies commit to advancing global health security 30 June 2016

# **WHO Western Pacific Region**

:: <u>Global Youth Tobacco Survey underscores urgent need to protect youth from tobacco harms</u> 28 June 2016

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CDC/ACIP [to 2 July 2016]

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

Press Release

FRIDAY, JULY 1, 2016

#### CDC Awards Funds for States and Territories to Prepare for Zika

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Media Advisory

THURSDAY, JUNE 30, 2016

# **Federal Select Agent Program first annual report released**

The Federal Select Agent Program (FSAP) released today its first annual report of data on the regulation and oversight of laboratories that work with biological agents and toxins that have...

Media Statement

THURSDAY, JUNE 30, 2016

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WEDNESDAY, JUNE 29, 2016

# **New study sheds light on how some survive Ebola**

Finding points way to new approaches to Ebola treatment

## MONDAY, JUNE 27, 2016

### **Global Health Security in Liberia**

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#### **Announcements/Milestones/Perspectives**

#### **Gavi** [to 2 July 2016]

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

30 June 2016

# Gavi Board reappoints WHO's Flavia Bustreo as vice-chair

Board also confirms appointment of four new members and two alternates.

Geneva, 30 June 2016 – Dr Flavia Bustreo, WHO's Assistant Director-General for Family, Women's and Children's Health, has been reappointed as Vice-Chair of the Board of Gavi, the Vaccine Alliance. Dr Bustreo has held the role since January 2015, and is also the chair of the Governance Committee.

Dr Bustreo has been instrumental in the early stages of the implementation of Gavi's 2016-2020 strategy, which aims to support developing countries to immunise a further 300 million children against life threatening diseases, leading to 5 to 6 million lives being saved...

The Gavi Board also approved the following appointments:

- :: Irene Koek of the United States as Board Member representing the United States
- :: Helen Rees as an Unaffiliated Board Member
- :: Ramjanam Chaudhary, Minister for Health and Population, Nepal, representing the developing country constituency
- :: David Loew, Executive Vice President and General Manager of Sanofi Pasteur, as a Board Member representing the vaccine industry industrialised countries

Additionally, the Board approved the reappointment of Donal Brown of the United Kingdom as Board Member representing the United Kingdom.

The following Alternate Board Members were also appointed

- :: Jason Lane of the United Kingdom as Alternate Board Member to Donal Brown
- :: Bounkong Syhavong, Minister of Health, Lao PDR, as Alternate Board Member to Ramjanam Chaudhary

### **Gavi welcomes price trend for pentavalent vaccine**

Latest price information published by UNICEF.

Geneva, 26 May 2016 – Gavi, the Vaccine Alliance welcomes the continued trend of decreasing prices for five-in-one pentavalent vaccine. Prices for pentavalent doses to be supplied to Gavi-supported countries over the next two years have been <u>published by UNICEF</u> following the completion of the first stage of a multi-stage tender.

The pentavalent vaccine protects against five major infections in one shot: diphtheria, tetanus, pertussis, hepatitis B and Haemophilus influenza type b (Hib). It remains a cornerstone of Gavi's immunisation efforts and is the first vaccine to have been introduced into the routine immunisation systems of all Gavi-supported countries.

Between 2000 and 2015, more than 200 million children living in the world's poorest countries were protected with the pentavalent vaccine. Gavi estimates that investment in pentavalent vaccination between 2011 and 2020 will avert 5.6 million deaths.

In recent years the pentavalent market has become highly competitive – and more stable – through an increasing number of prequalified vaccines, new vaccine presentations, and production capacity that now exceeds aggregate demand. This increasing competition and the high level of predictable demand from Gavi-supported countries have contributed to a decreasing pricing trend.

Through this tender Gavi seeks to cultivate a healthy vaccine market to ensure that the supply of high-quality, affordable vaccines meets demand and that the developing countries' needs are fully met through continued innovation. The tender also aims to preserve long-term market competition with multiple suppliers and to achieve low and sustainable prices for developing countries, including those that have transitioned from Gavi support. See <a href="UNICEF">UNICEF</a> Request for Proposal section 2.2. for full description of tender objectives.

The multi-phase tender covers the three year period 2017 to 2019. It is an innovative procurement method for vaccines where manufacturers are invited to submit offers and are awarded volumes in phases, with UNICEF publishing prices after finalisation of each phase. The first phase of the tender is now complete, resulting in UNICEF – as the procuring body – awarding a large portion of the forecasted volume in 2017 as well as a portion of volumes in 2018. The second phase will commence in June, when all manufacturers who took part in the first phase of the tender will be able to re-submit offers. At the end of the second phase of the tender UNICEF and Gavi will have a clear picture on whether the full tender objectives for the first 2 years of supply have been met.

# <u>Gavi welcomes contribution of US\$ 76 million from Government of Japan</u> 26 May 2016

New multi-year commitment will help Vaccine Alliance partners towards goal of immunising 300m children by 2020.

**IAVI – International AIDS Vaccine Initiative** [to 2 July 2016]

http://www.iavi.org/

July 1, 2016

# IAVI and Partners Receive Funding from USAID to Advance and Accelerate the Research and Development of an AIDS Vaccine for Africa, with Africa

Africa-centered global partnership will advance pre-clinical and clinical AIDS vaccine research, strengthen local capacity and ownership and support sustainable development of African countries

The International AIDS Vaccine Initiative (IAVI) and its partners have received a five-year cooperative agreement award with a US\$160 million ceiling from the U.S. Agency for International Development (USAID) provided through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). The award is part of USAID's HIV Vaccine and Biomedical Prevention Research Project (HVBP).

Building on long-standing partnerships with USAID and African research centers, this new program to Accelerate the Development of Vaccines and New Technologies to Combat the AIDS Epidemic (ADVANCE) will advance the design and development of HIV vaccines and biomedical prevention tools while ensuring they are effective and accessible for all in need. The new program will increase the impact of research efforts and enhance capacity building and sustainable development in Africa. ADVANCE will increase alignment and synergies, invest in the next generation of researchers and ultimately transfer leadership to African scientists.

Through the ADVANCE Centers of Research Excellence (CORE) network, IAVI will work with eight partners in five African countries, including the Aurum Institute (South Africa), the Kenya AIDS Vaccine Initiative-Institute for Clinical Research, the Kenya Medical Research Institute-Wellcome Trust Research Programme, the Medical Research Council/Uganda Virus Research Institute (UVRI), the UVRI-IAVI HIV Vaccine Program, Projet San Francisco (Rwanda), the University of Kwa-Zulu Natal Human Pathogenesis Programme (South Africa) and the Zambia-Emory HIV Research Project, along with Imperial College London.

ADVANCE will facilitate broader engagement of and strategic collaboration with leading AIDS vaccine researchers and centers of scientific excellence around the world to help speed the development, availability and impact of promising AIDS vaccine candidates and other biomedical prevention innovations to reduce the continuing spread of HIV infection.

"IAVI is delighted to be part of this accomplished international network," says Anatoli Kamali, Regional Director for Africa at IAVI. "ADVANCE will leverage the expertise of African AIDS vaccine researchers and, through strategic partnerships with key global HIV researchers, help expedite the translation of scientific advances into vaccines and other new prevention products that will help control, and hopefully, one day eliminate HIV/AIDS."

"The design and testing of improved candidates, guided by African scientific leadership, will move the world closer to a globally-effective HIV vaccine," says Benny Kottiri, Research Division Chief at USAID. "ADVANCE supports this objective by building vital research capacity in Africa with the intent of resulting in sustainable scientific talent capable of gold-standard clinical research."

The HVBP award is part of USAID's HIV/AIDS biomedical research portfolio that prioritizes investments in HIV vaccine and microbicides research and that works to ensure cost-effective,

sustainable, and integrated HIV and AIDS programming that harnesses the latest science and technological innovations – all in order to achieve the goal of a world where HIV and AIDS are no longer such a burden on health and development.

## **Sabin Vaccine Institute** [to 2 July 2016]

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

June 22, 2016

# Third Sabin Vaccine Institute Colloquium on Sustainable Immunization Financing

Dates: 19-21 July, 2016

Venue: Hotel Yak & Yeti, Kathmandu, Nepal

Participants: Members of Parliament; Ministry of Finance officials; national immunization program managers, Health Planning/Budget Directors from the Ministry of Health from the 21 partner countries of the Sabin Vaccine Institute's Sustainable Immunization Financing Program, as well as global immunization partners.

Countries: Armenia, Cambodia, Cameroon, Democratic Republic of Congo, Georgia, Indonesia, Kenya, Liberia, Madagascar, Mali, Moldova, Mongolia, Nepal, Nigeria, Republic of Congo, Senegal, Sierra Leone, Sri Lanka, Uganda, Uzbekistan, Vietnam *Background* 

Vaccines are an essential public good that governments provide to their citizens. Vaccine costs are rising, often faster than public immunization budgets are expanding. Many countries currently eligible for external financial support are graduating or will soon graduate from this support. These countries must therefore depend on domestic sources to maintain or improve their immunization programs. Over the past few years, many countries have worked to increase domestic funding for national immunization programs. Their efforts have helped build institutional capacity to run vaccination services in the long term and will ultimately enable countries to achieve financial independence, speed up economic growth and save millions of lives. At a three-day colloquium in Kathmandu, Nepal, sponsored by the Sabin Vaccine Institute, senior representatives from 21 countries will assess their progress to date and discuss key priorities for achieving immunization goals by the Decade of Vaccines target year 2020...

#### **IVI - International Vaccine Institute** [to 2 July 2016]

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

June 30, 2016

# <u>International Vaccine Institute and MilliporeSigma to Develop Next-Generation</u> Purification Processes

- Company to provide expertise on clarification and purification
- Collaboration will improve manufacturing processes to deliver greater yield, allowing higher recovery and providing higher purity vaccines

Seoul, South Korea, - The International Vaccine Institute (IVI) and MilliporeSigma has entered into a research agreement to help develop more robust, scalable vaccine manufacturing processes. MilliporeSigma will provide funding and expertise to IVI in the areas of clarification and purification for vaccines that may improve the efficiency of vaccine production.

IVI is a nonprofit international organization committed to the discovery, development and delivery of safe, effective and affordable vaccines for global public health. The new collaboration between MilliporeSigma and IVI is aimed at improving the manufacturing process

to deliver greater yield, allowing higher recovery and purer vaccines. Many vaccine manufacturers in the United States and Western Europe face also high manufacturing costs, and the partnership aims to addresses these challenges.

"Complex manufacturing processes along with poor yield and recovery result in vaccines that are not easily affordable by resource-challenged countries," said Udit Batra, Member of the Executive Board, Merck KGaA, Darmstadt, Germany and CEO, MilliporeSigma. "Through our partnership with IVI, we will help create a more modern, scalable and robust manufacturing process, which in turn will help increase access to life-saving vaccines in developing countries."

"We expect that our collaboration with MilliporeSigma will result in important dividends to a large population of people with unmet medical needs," said Jerome Kim, MD, IVI Director General. "This partnership will help us better address the vaccine needs of low - and middle-income countries and ultimately contribute to our mission."

Initially, the project will focus on a vaccine for typhoid developed by IVI, with the goal of applying findings to the processes for pneumococcal, meningococcal, haemophilus, staphylococcus, streptococcus B and other conjugated polysaccharide vaccines...

# **Global Fund** [to 2 July 2016]

http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=Jun 27, 2016

# <u>UNDP and the Global Fund sign US\$8.7m grant to scale up HIV prevention measures</u> in Afghanistan

The United Nations Development Programme (UNDP) and the Global Fund signed a US\$8.7 million grant to scale up HIV prevention measures and treatment for people most at risk of contracting the virus in Afghanistan, including injecting drugs users and prisoners.

# 27 June 2016

# **Italy Makes Strong Commitment to Global Fund**

ROME - The Government of Italy announced today a pledge of €130 million to the Global Fund to Fight AIDS, Tuberculosis and Malaria for the three-year period beginning in 2017, highlighting Italy's leadership in global health.

The commitment, an increase of 30 percent over Italy's last contribution of €100 million, is a strong signal as the Global Fund prepares for a Replenishment conference in September. With the support of countries like Italy, the Global Fund is accelerating the end of the three diseases while building resilient and sustainable systems for health.

"For Italy, these three epidemics are a cause and a consequence of poverty," said Benedetto Della Vedova, Under-secretary of State for Foreign Affairs and International Cooperation. "It is very important that the Global Fund remains on track to reach 22 million lives saved by the end of 2016. Italy is at the forefront alongside the Global Fund, both politically and financially.

Taking decisive action means putting a strong focus on human rights and on the vulnerable groups most affected by the diseases, starting with children, women and girls. Italy's

International Cooperation strongly supports the Global Fund's commitment to promote gender equality and access to health for all, without discrimination."...

26 June 2016

# France Pledges €1.08 billion to Global Fund

PARIS - The Government of France announced today it will contribute €1.08 billion to the Global Fund to Fight AIDS, Tuberculosis and Malaria for the three-year period beginning in 2017, demonstrating strong leadership in global health.

France is the second leading donor to the Global Fund, and has consistently played a pioneering role in scientific research, promoting human rights and serving people affected by HIV. The new pledge, which represents a sustained commitment of France's previous support, represents a significant contribution to the Global Fund's three-year replenishment.

"This contribution demonstrates the strong commitment of France in the fight against pandemics and to strengthen health systems, especially in African countries," the announcement said.

France has contributed more than €3.8 billion to the Global Fund since it was established in 2002 to accelerate the end of the epidemics...

**PATH** [to 2 July 2016]

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

Announcement | June 24, 2016

PATH announces leader for India country program

Mr. Neeraj Jain to lead PATH in India

**Hilleman Laboratories** [to 2 July 2016]

http://www.hillemanlabs.org/news.aspx

Date: 23/06/2016

<u>Hilleman Laboratories scientist Dr. Ankur Mutreja awarded prestigious - "DBT Cambridge Lectureship"</u>

New Delhi, 23rd June 2016: Recognising an exemplary achievement by one of its scientists, Hilleman Laboratories, a first-of- its-kind joint-venture partnership between MSD and the Wellcome Trust, proudly announces Dr. Ankur Mutreja's appointment at the University of Cambridge under the prestigious "DBT Cambridge Lectureship" programme.

# **European Vaccine Initiative** [to 2 July 2016]

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

News

**EVI** welcomes a new member of the team

28 June 2016

A warm welcome is extended to EVI's new Project Manager, Soazic Gardais, who commenced duties on 27 June 2016.

**FDA** [to 2 July 2016]

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

What's New for Biologics

Summary Basis for Regulatory Action, June 10, 2016 - VAXCHORA (PDF - 258KB)

Posted: 7/1/2016

<u>Early Clinical Trials With Live Biotherapeutic Products: Chemistry, Manufacturing,</u> and Control Information; Guidance for Industry (PDF - 174KB)

Posted: 6/30/2016

<u>Draft Agenda: Part 15 Hearing: Draft Guidances Relating to the Regulation of</u>

**Human Cells, Tissues, or Cellular or Tissue-Based Products** 

Posted: 6/29/2016

**CBER Vacancy: Staff Fellow** 

Posted: 6/27/2016

# FDA Information Regarding FluMist Quadrivalent Vaccine

Posted: 6/27/2016

...Based on data from observational studies showing lower than expected effectiveness of FluMist Quadrivalent from 2013 through 2016, on June 22, 2016, the Advisory Committee on Immunization Practices (ACIP), an advisory committee to the Centers for Disease Control and Prevention (CDC), voted to recommend that FluMist Quadrivalent should not be used during the 2016-2017 influenza season. FDA's considerations regarding this vaccine are noted and explained below....

**NIH** [to 2 July 2016]

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

June 30, 2016

NIH-led effort uses implementation science approaches to reduce mother-to-child HIV transmission

— Studies investigate best practices to ease major disease burden in Sub-Saharan Africa.

June 29, 2016

# Analysis of 1976 Ebola outbreak holds lessons relevant today

Report describes early cases of Ebola.

#### **European Medicines Agency** [to 2 July 2016]

http://www.ema.europa.eu/30/06/2016

### Strengthening interaction with academia

EMA consults academia in preparation of a framework of collaboration

The European Medicines Agency (EMA) has held a <u>workshop with representatives from</u> <u>academia</u> to explore new ways to engage with academics and researchers. The workshop was hosted by EMA's Healthcare Professionals Working Party (HCPWP) on 15th June.

The collaboration between EMA and academia is longstanding. Many representatives from the academic sector contribute their expertise and knowledge as experts in the evaluation of medicines, ensuring that regulatory developments in the evaluation and monitoring of medicines are keeping pace with the speed of scientific development.

"EMA wants to move to a new level of collaboration with academia. Science is progressing fast and we see an unprecedented level of complexity in the development and evaluation of new medicines. Academia play an important role in helping the EU medicines regulatory network to keep abreast of the opportunities and challenges brought by science and to have access to the right expertise to evaluate these innovative medicines," explained EMA Executive Director Guido Rasi at the workshop. "Interaction with EU regulators and a better understanding of the regulatory environment can help academia translate their discoveries into patient-focused medicines. I believe that working more closely together will bring great benefits to public health."

More than forty representatives from academic organisations, including European Research Infrastructures, European learned societies and universities attended the workshop. At the meeting, EMA presented the pillars of a future framework of collaboration with academia to the participants. Objectives of the framework include enhancing academia's understanding of the EU medicines regulatory framework and increasing regulators' understanding of the needs and expectations of academia.

The outcome of the discussion will contribute to the development of the framework which will be presented to EMA's Management Board for adoption at its December 2016 meeting. *Presentations from the workshop are published on the event page.*A full workshop report will be published on the EMA website in the coming weeks.

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**AERAS** [to 2 July 2016]

http://www.aeras.org/pressreleases

No new digest content identified. New quarterly newsletter released via email...no apparent posting on website.

# **BMGF - Gates Foundation** [to 2 July 2016]

http://www.gatesfoundation.org/Media-Center/Press-Releases No new digest content identified.

**EDCTP** [to 2 July 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.

**Fondation Merieux** [to 2 July 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

# **GHIT Fund** [to 2 July 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 2 July 2016]

<u>humanvaccinesproject.org</u> [Website in development]

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# <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

#### UNICEF [to 2 July 2016]

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

The State of the World's Children 2016 Report: A fair chance for every child

UNICEF

June 2016 :: 180 pages

Full report pdf: http://www.unicef.org/publications/index 91711.html#

**FOREWORD** 

Inequity imperils millions of children and threatens the future of the world As we look around the world today, we're confronted with an uncomfortable but undeniable truth: Millions of children's lives are blighted, for no other reason than the country, the community, the gender or the circumstances into which they are born.

And, as the data in this report show, unless we accelerate the pace of our progress in reaching them, the futures of millions of disadvantaged and vulnerable children – and therefore the future of their societies – will be imperilled.

Before they draw their first breath, the life chances of poor and excluded children are often being shaped by inequities. Disadvantage and discrimination against their communities and families will help determine whether they live or die, whether they have a chance to learn and later earn a decent living. Conflicts, crises and climate-related disasters deepen their deprivation and diminish their potential.

But it need not be so. As this report also illustrates, the world has made tremendous progress in reducing child deaths, getting children into school and lifting millions out of poverty. Many of the interventions behind this progress – such as vaccines, oral rehydration salts and better nutrition – have been practical and cost-effective. The rise of digital and mobile technology, and other innovations have made it easier and more cost-effective to deliver critical services in hard-to reach communities and to expand opportunities for the children and families at greatest risk.

For the most part, the constraints on reaching these children are not technical. They are a matter of political commitment. They are a matter of resources. And they are a matter of collective will – joining forces to tackle inequity and inequality head-on by focusing greater investment and effort on reaching the children who are being left behind.

The time to act is now. For unless we accelerate our progress, by 2030:

- :: Almost 70 million children may die before reaching their fifth birthdays 3.6 million in 2030 alone, the deadline year for the Sustainable Development Goals.
- :: Children in sub-Saharan Africa will be 10 times more likely to die before their fifth birthdays than children in high-income countries.
- :: Nine out of 10 children living in extreme poverty will live in sub-Saharan Africa.
- :: More than 60 million primary school-aged children will be out of school roughly the same number as are out of school today. More than half will be from sub-Saharan Africa.
- :: Some 750 million women will have been married as children three quarters of a billion child brides.

These vast inequities and dangers do more than violate the rights and imperil the futures of individual children. They perpetuate intergenerational cycles of disadvantage and inequality that undermine the stability of societies and even the security of nations everywhere.

More than ever, we should recognize that development is sustainable only if it can be carried on – sustained – by future generations. We have an opportunity to replace vicious cycles with virtuous cycles in which today's poor children – if given a fair chance at health, education and protection from harm – can, as adults, compete on a more level playing field with children from wealthier backgrounds. Thus making not only their own lives better, but their societies richer in every sense of the word.

For when we help a boy access the medicine and nutrition he needs to grow up healthy and strong, we not only increase his chances in life, we also decrease the economic and social costs associated with poor health and low productivity.

When we educate a girl, we not only give her the tools and knowledge to make her own decisions and shape her own future, we also help raise the standard of living of her family and her community.

When we provide education, shelter and protection for children caught in conflicts, we help mend their hearts and their minds – so that someday, they will have the ability and the desire to help rebuild their countries.

This report concludes with five ways to strengthen our work, building on what we have learned over the last 25 years – and what we are still learning: Increasing information about those being left behind. Integrating our efforts across sectors to tackle the multiple deprivations that hold so many children back. Innovating to accelerate progress and drive change for the most excluded children and families. Investing in equity and finding new ways of financing efforts to reach the most disadvantaged children. And involving everyone, beginning with communities themselves, and with businesses, organizations and citizens around the world who believe we can change the outcome for millions of children.

We can. Inequity is not inevitable. Inequality is a choice. Promoting equity – a fair chance for every child, for all children – is also a choice. A choice we can make, and must make. For their future, and the future of our world.

# Wellcome Trust [to 2 July 2016]

http://www.wellcome.ac.uk/News/2016/index.htm

*News* 1 July 2016

# Smallpox inoculation had royal seal of approval 70 years before Jenner

A letter from George I, which lay uncatalogued in the <u>Wellcome Library</u> for over 70 years, reveals that the King urged his daughter to inoculate her children against smallpox.

In the letter to Sophia Dorothea, Queen of Prussia, George expresses relief that his grandson has recovered from a recent bout of smallpox. He urges his daughter to protect her other children from the disease.

The letter was written in 1724, 70 years before Jenner began his experiments with cowpox.

At that time inoculation was a new and risky technique. The crude process involved taking pus from someone with smallpox and deliberately infecting a healthy person by putting it into a scrape in their skin. This could give immunity against future, more dangerous, infections, but in some cases proved fatal.

The dangerous and disfiguring disease threatened everyone – including royal families – and terrified people.

Despite Jenner's transformative discoveries in 1796, the threat lasted for a further 250 years until smallpox was eradicated in 1980.

Read more about George's letter in the catalogue entry on the Wellcome Library website

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#### 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: <a href="mailto:david.r.curry@centerforvaccineethicsandpolicy.org">david.r.curry@centerforvaccineethicsandpolicy.org</a>

#### **American Journal of Infection Control**

July 2016 Volume 44, Issue 7, p739-856, e103-e124

http://www.ajicjournal.org/current

Major Articles

# <u>Tetanus, diphtheria, and acellular pertussis vaccination among women of childbearing age—United States, 2013</u>

Alissa C. O'Halloran, Peng-jun Lu, Walter W. Williams, Helen Ding, Sarah A. Meyer p786–793

Published in issue: July 01 2016

**Highlights** 

- -Among women 18-44 years old, 38.4% (Behavioral Risk Factor Surveillance System) and 23.3% (National Health Interview Survey) reported tetanus, diphtheria, and acellular pertussis vaccination.
- -Racial and ethnic disparities were observed based on the results from both surveys.
- -Living in a household with a child was associated with higher coverage.
- -Access to health care was associated with higher coverage.
- -Coverage among all women 18-44 years old varied widely by state. *Abstract*

The incidence of pertussis in the United States has increased since the 1990s. Tetanus, diphtheria, and acellular pertussis (Tdap) vaccination of pregnant women provides passive protection to infants. Tdap vaccination is currently recommended for pregnant women during each pregnancy, but coverage among pregnant women and women of childbearing age has been suboptimal. Data from the 2013 Behavioral Risk Factor Surveillance System (BRFSS) and 2013 National Health Interview Survey (NHIS) were used to determine national and statespecific Tdap vaccination coverage among women of childbearing age by self-reported pregnancy status at the time of the survey. Although this study could not assess coverage of Tdap vaccination received during pregnancy because questions on whether Tdap vaccination was received during pregnancy were not asked in BRFSS and NHIS, demographic and accessto-care factors associated with Tdap vaccination coverage in this population were assessed. Tdap vaccination coverage among all women 18-44 years old was 38.4% based on the BRFSS and 23.3% based on the NHIS. Overall, coverage did not differ by pregnancy status at the time of the survey. Coverage among all women 18-44 years old varied widely by state. Age, race and ethnicity, education, number of children in the household, and access-to-care characteristics were independently associated with Tdap vaccination in both surveys. We identified associations of demographic and access-to-care characteristics with Tdap vaccination that can quide strategies to improve vaccination rates in women during pregnancy.

# <u>Parents' and staff's support for a childcare agency employee mandatory vaccination</u> policy or agency certification program

Terri Rebmann, Jing Wang, Kristin D. Wilson, Philip G. Gilbertson, Mary Wakefield p799–804

Published online: March 24 2016

#### **Abstract**

# Background

Vaccine-preventable diseases pose a significant risk to children in childcare. However, few regulations exist regarding childcare staff vaccination. This study aimed to assess support for a childcare agency staff mandatory vaccination policy.

Methods

Surveys were distributed to staff and parents at 23 St Louis, Mo, childcare agencies during fall 2014. Staff and parents' support for a mandatory vaccination and/or agency certification program were compared using  $\chi 2$  tests. Multivariate logistic regression was conducted using a 2-level nested design and controlling for gender, race, age, and income to determine predictive models for support for a mandatory staff vaccination policy and/or agency certification program. Results

Overall, 354 parents and staff participated (response rate, 32%). Most supported a mandatory staff vaccination policy (80.0%; n = 280) or agency certification program (81.2%; n = 285), and there were no differences between parents versus staff. Determinants of support for a mandatory policy included willingness to receive influenza vaccine annually, belief that vaccines are safe and effective, and support for the policy only if there were no costs. Conclusions

There is strong support for some type of childcare agency staff vaccination policy. Implementing such a policy/program should be a collaborative endeavor that addresses vaccine cost and access.

#### **American Journal of Preventive Medicine**

July 2016 Volume 51, Issue 1, p1-150, e1-e26 <a href="http://www.ajpmonline.org/current">http://www.ajpmonline.org/current</a> [New issue; No relevant content identified]

#### **American Journal of Public Health**

Volume 106, Issue 7 (July 2016) http://ajph.aphapublications.org/toc/ajph/current VACCINES

# <u>Pediatric Care Provider Density and Personal Belief Exemptions From Vaccine</u> Requirements in California Kindergartens

Edward T. Walker, Christopher M. Rea

American Journal of Public Health: July 2016, Vol. 106, No. 7: 1336-1341.

**ABSTRACT** 

Objectives. To understand contextual associations between medical care providers—pediatricians, family medical practitioners, and alternative medicine practitioners—and personal belief exemptions (PBEs) from mandated school entry vaccinations.

Methods. Data on kindergarten PBEs from the California Department of Public Health were analyzed for 2010, 2011, and 2012, with each school sorted into Primary Care Service Areas (PCSAs). Provider data from federal sources and state records of alternative medicine providers, alongside controls for school factors, were used to estimate panel models.

Results. Each 10% increase in the relative proportion of pediatricians in a given PCSA was associated with a statistically significant 11% decrease in PBE prevalence. The same increase in the proportion of family medical practitioners was associated with a 3.5% relative increase.

Access to alternative medicine practitioners was also associated with a significantly higher PBE prevalence.

Conclusions. Medical provider contexts are associated with PBEs, reflecting a combination of contextual effects and self-selection of families into schools and PCSAs that share their preferences. The geographic distribution of child primary care services may be a key factor in a school's health risk associated with lack of immunization or under-immunization.

# **American Journal of Tropical Medicine and Hygiene**

June 2016; 94 (6) <a href="http://www.ajtmh.org/content/current">http://www.ajtmh.org/content/current</a> [Reviewed earlier]

#### **Annals of Internal Medicine**

21 June 2016, Vol. 164. No. 12 <a href="http://annals.org/issue.aspx">http://annals.org/issue.aspx</a> [Reviewed earlier]

#### **BMC Cost Effectiveness and Resource Allocation**

http://resource-allocation.biomedcentral.com/ (Accessed 2 July 2016) [No new content]

#### **BMC Health Services Research**

http://www.biomedcentral.com/bmchealthservres/content (Accessed 2 July 2016) [No new relevant content identified]

#### **BMC Infectious Diseases**

http://www.biomedcentral.com/bmcinfectdis/content (Accessed 2 July 2016) [No new relevant content identified]

#### **BMC Medical Ethics**

http://www.biomedcentral.com/bmcmedethics/content (Accessed 2 July 2016) [No new relevant content identified]

#### **BMC Medicine**

http://www.biomedcentral.com/bmcmed/content (Accessed 2 July 2016) Research article

# <u>Fast and accurate dynamic estimation of field effectiveness of meningococcal</u> vaccines

Lorenzo Argante, Michele Tizzoni and Duccio Medini

Published on: 30 June 2016

Abstract Background

Estimating the effectiveness of meningococcal vaccines with high accuracy and precision can be challenging due to the low incidence of the invasive disease, which ranges between 0.5 and 1 cases per 100,000 in Europe and North America. Vaccine effectiveness (VE) is usually estimated with a screening method that combines in one formula the proportion of meningococcal disease cases that have been vaccinated and the proportion of vaccinated in the overall population. Due to the small number of cases, initial point estimates are affected by large uncertainties and several years may be required to estimate VE with a small confidence interval.

Methods

We used a Monte Carlo maximum likelihood (MCML) approach to estimate the effectiveness of meningococcal vaccines, based on stochastic simulations of a dynamic model for meningococcal transmission and vaccination. We calibrated the model to describe two immunization campaigns: the campaign against MenC in England and the Bexsero campaign that started in the UK in September 2015. First, the MCML method provided estimates for both the direct and indirect effects of the MenC vaccine that were validated against results published in the literature. Then, we assessed the performance of the MCML method in terms of time gain with respect to the screening method under different assumptions of VE for Bexsero. Results

MCML estimates of VE for the MenC immunization campaign are in good agreement with results based on the screening method and carriage studies, yet characterized by smaller confidence intervals and obtained using only incidence data collected within 2 years of scheduled vaccination. Also, we show that the MCML method could provide a fast and accurate estimate of the effectiveness of Bexsero, with a time gain, with respect to the screening method, that could range from 2 to 15 years, depending on the value of VE measured from field data. Conclusions

Results indicate that inference methods based on dynamic computational models can be successfully used to quantify in near real time the effectiveness of immunization campaigns against Neisseria meningitidis. Such an approach could represent an important tool to complement and support traditional observational studies, in the initial phase of a campaign.

#### **BMC Pregnancy and Childbirth**

http://www.biomedcentral.com/bmcpregnancychildbirth/content (Accessed 2 July 2016) [No new relevant content identified]

### **BMC Public Health**

http://bmcpublichealth.biomedcentral.com/articles (Accessed 2 July 2016) [No new relevant content identified]

#### **BMC Research Notes**

http://www.biomedcentral.com/bmcresnotes/content (Accessed 2 July 2016)

Research article

# Local networks of community and healthcare organisations: a mixed methods study

Local collaboration of community organisations and healthcare organisations is seen as relevant for the efficiency and efficacy of health and social care because of their potential role in providing social inv...

Wendy Kemper-Koebrugge, Jan Koetsenruijter, Anne Rogers, Miranda Laurant and Michel Wensing

BMC Research Notes 2016 9:331

Published on: 1 July 2016

# Short Report

# <u>Towards the implementation of large scale innovations in complex health care</u> systems: views of managers and frontline personnel

Increasingly, theorists and academic researchers develop, implement and test frameworks and strategies for improving the safety, effectiveness and efficiency of health care—at scale. The purpose of this research...

Sonia Wutzke, Murray Benton and Raj Verma

BMC Research Notes 2016 9:327

Published on: 28 June 2016

# **BMJ Open**

2016, Volume 6, Issue 7 <a href="http://bmjopen.bmj.com/content/current">http://bmjopen.bmj.com/content/current</a> [New issue; No relevant content identified]

### **Bulletin of the World Health Organization**

Volume 94, Number 6, June 2016, 405-480 <a href="http://www.who.int/bulletin/volumes/94/6/en/">http://www.who.int/bulletin/volumes/94/6/en/</a> [Reviewed earlier]

#### Child Care, Health and Development

May 2016 Volume 42, Issue 3 Pages 297–454 <a href="http://onlinelibrary.wiley.com/doi/10.1111/cch.v42.3/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/cch.v42.3/issuetoc</a> [Reviewed earlier]

#### **Clinical Therapeutics**

June 2016 Volume 38, Issue 6, p1259-1542 <a href="http://www.clinicaltherapeutics.com/current">http://www.clinicaltherapeutics.com/current</a> [Reviewed earlier]

### **Complexity**

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

#### **Conflict and Health**

http://www.conflictandhealth.com/ [Accessed 2 July 2016] [No new content]

# **Contemporary Clinical Trials**

Volume 48, In Progress (May 2016) <a href="http://www.sciencedirect.com/science/journal/15517144/48">http://www.sciencedirect.com/science/journal/15517144/48</a> [Reviewed earlier]

# **Current Opinion in Infectious Diseases**

August 2016 - Volume 29 - Issue 4 pp: v-vi,319-431 <a href="http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx">http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx</a> NOSOCOMIAL AND HEALTHCARE RELATED INFECTIONS

<u>Prevention of common healthcare-associated infections in humanitarian hospitals</u> Murphy, Richard A.; Chua, Arlene C. <u>Abstract</u>

Purpose of review: Humanitarian medical organizations focus on vulnerable patients with increased risk for healthcare-associated infections (HAIs) and are obligated to minimize them in inpatient departments (IPDs). However, in doing so humanitarian groups face considerable obstacles. This report will focus on approaches to reducing common HAIs that the authors have found to be helpful in humanitarian settings.

Recent findings: HAIs are common in humanitarian contexts but there are few interventions or guidelines adapted for use in poor and conflict-affected settings to improve prevention and guide surveillance. Based on existing recommendations and studies, it appears prudent that all humanitarian IPDs introduce a basic infection prevention infrastructure, assure high adherence to hand hygiene with wide accessibility to alcohol-based hand rub, and develop pragmatic surveillance based on clinically evident nosocomial infection. Although microbiology remains out of reach for most humanitarian hospitals, rapid tests offer the possibility of improving the diagnosis of HAIs in humanitarian hospitals in the decade ahead.

Summary: There is a dearth of new studies that can direct efforts to prevent HAIs in IPDs in poor and conflict-affected areas and there is a need for practical, field-adapted guidelines from professional societies, and international bodies to guide infection prevention efforts in humanitarian environments.

#### **Developing World Bioethics**

April 2016 Volume 16, Issue 1 Pages 1–60 <a href="http://onlinelibrary.wiley.com/doi/10.1111/dewb.2016.16.issue-1/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/dewb.2016.16.issue-1/issuetoc</a> [Reviewed earlier]

# **Development in Practice**

Volume 26, Issue 4, 2016 <a href="http://www.tandfonline.com/toc/cdip20/current">http://www.tandfonline.com/toc/cdip20/current</a> [Reviewed earlier]

#### **Disasters**

July 2016 Volume 40, Issue 3 Pages 385–588 <a href="http://onlinelibrary.wiley.com/doi/10.1111/disa.2016.40.issue-3/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/disa.2016.40.issue-3/issuetoc</a> [Reviewed earlier]

# **Emerging Infectious Diseases**

Volume 22, Number 6—June 2016 <a href="http://wwwnc.cdc.gov/eid/">http://wwwnc.cdc.gov/eid/</a> [Reviewed earlier]

# **Epidemics**

Volume 15, <u>In Progress</u> (June 2016) <a href="http://www.sciencedirect.com/science/journal/17554365">http://www.sciencedirect.com/science/journal/17554365</a> [No new relevant content]

#### **Epidemiology and Infection**

Volume 144 - Issue 09 - July 2016 <a href="http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue">http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue</a> [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 26, 30 June 2016 <a href="http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678">http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678</a> [New issue; No relevant content identified]

# **Global Health: Science and Practice (GHSP)**

June 2016 | Volume 4 | Issue 2 http://www.ghspjournal.org/content/current EDITORIALS

# <u>A Convenient Truth: Cost of Medications Need Not Be a Barrier to Hepatitis B</u> Treatment

Drugs that are inexpensive to manufacture and simple to administer greatly expand the potential to help tens of millions of people who need treatment for chronic hepatitis B virus (HBV) infection. Key program implementation challenges include identifying who would benefit from antiviral medication and ensuring long-term and consistent treatment to people who feel well. The best opportunities are where health systems are advanced enough to effectively address these challenges and in settings where HIV service platforms can be leveraged. Research, innovation, and collaboration are critical to implement services most efficiently and to realize economies of scale to drive down costs of health care services, drugs, and diagnostics. Matthew Barnhart

Glob Health Sci Pract 2016;4(2):186-190. First published online June 16, 2016. http://dx.doi.org/10.9745/GHSP-D-16-00128

#### **COMMENTARIES**

# <u>Investing in Family Planning: Key to Achieving the Sustainable Development Goals</u>

Voluntary family planning brings transformational benefits to women, families, communities, and countries. Investing in family planning is a development "best buy" that can accelerate achievement across the 5 Sustainable Development Goal themes of People, Planet, Prosperity, Peace, and Partnership.

Ellen Starbird, Maureen Norton, Rachel Marcus

Glob Health Sci Pract 2016;4(2):191-210. First published online June 9, 2016.

http://dx.doi.org/10.9745/GHSP-D-15-00374

# mHealth for Tuberculosis Treatment Adherence: A Framework to Guide Ethical Planning, Implementation, and Evaluation

Promising mHealth approaches for TB treatment adherence include:

- :: Video observation
- :: Patient- or device-facilitated indirect monitoring
- :: Direct monitoring through embedded sensors or metabolite testing

To mitigate ethical concerns, our framework considers accuracy of monitoring technologies, stigmatization and intrusiveness of the technologies, use of incentives, and the balance of individual and public good.

Michael J DiStefano, Harald Schmidt

Glob Health Sci Pract 2016;4(2):211-221. http://dx.doi.org/10.9745/GHSP-D-16-00018

#### **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 2 July 2016] [No new content]

#### **Health Affairs**

June 2016; Volume 35, Issue 6 http://content.healthaffairs.org/content/current

#### Behavioral Health

[Full issue oriented around mental health themes] [Reviewed earlier]

# **Health and Human Rights**

Volume 18, Issue 1, June 2016 <a href="http://www.hhrjournal.org/">http://www.hhrjournal.org/</a>

# Special Section: Tuberculosis and the Right to Health

in collaboration with the International Human Rights Clinic, University of Chicago Law School [Reviewed earlier]

# **Health Economics, Policy and Law**

Volume 11 - Issue 03 - July 2016 <a href="http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue">http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue</a> [Reviewed earlier]

# **Health Policy and Planning**

Volume 31 Issue 5 June 2016 <a href="http://heapol.oxfordjournals.org/content/current">http://heapol.oxfordjournals.org/content/current</a> [Reviewed earlier]

#### **Health Research Policy and Systems**

http://www.health-policy-systems.com/content [Accessed 2 July 2016] [No new content]

#### **Human Vaccines & Immunotherapeutics** (formerly Human Vaccines)

Volume 12, Issue 5, 2016 <a href="http://www.tandfonline.com/toc/khvi20/current">http://www.tandfonline.com/toc/khvi20/current</a> [Reviewed earlier]

#### **Humanitarian Exchange Magazine**

Number 66 April 2016 <a href="http://odihpn.org/magazine/humanitarian-innovation/">http://odihpn.org/magazine/humanitarian-innovation/</a>

# Special Focus: Humanitarian Innovation

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

### **Infectious Agents and Cancer**

http://www.infectagentscancer.com/content [Accessed 2 July 2016] [No new relevant content]

# **Infectious Diseases of Poverty**

http://www.idpjournal.com/content [Accessed 2 July 2016] Research Article

<u>Progress towards onchocerciasis elimination in the participating countries of the</u>
<u>African Programme for Onchocerciasis Control: epidemiological evaluation results</u>

The African Programme for Onchocerciasis Control (APOC) was created in 1995 to establish community-directed treatment with ivermectin (CDTi) in order to control onchocerciasis as a public health problem in 20 ...

Afework H. Tekle, Honorath G. M. Zouré, Mounkaila Noma, Michel Boussinesq, Luc E. Coffeng, Wilma A. Stolk and Jan H. F. Remme

Infectious Diseases of Poverty 2016 5:66

Published on: 27 June 2016

#### **International Health**

Volume 8 Issue 3 May 2016 <a href="http://inthealth.oxfordjournals.org/content/current">http://inthealth.oxfordjournals.org/content/current</a> [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**

July 2016 Volume 48, p1-124 Open Access <a href="http://www.ijidonline.com/current">http://www.ijidonline.com/current</a> [Reviewed earlier]

#### **JAMA**

June 28, 2016, Vol 315, No. 24 http://jama.jamanetwork.com/issue.aspx Viewpoint

A Yellow Fever Epidemic: A New Global Health Emergency? FREE Daniel Lucey, MD, MPH; Lawrence O. Gostin, JD

#### **JAMA Pediatrics**

June 2016, Vol 170, No. 6 <a href="http://archpedi.jamanetwork.com/issue.aspx">http://archpedi.jamanetwork.com/issue.aspx</a> [Reviewed earlier]

### **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 <a href="http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0I#.VAJEj2N4WF8">http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0I#.VAJEj2N4WF8</a> [Reviewed earlier]

# Journal of Global Infectious Diseases (JGID)

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

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

Volume 27, Number 2, May 2016 Supplement <a href="https://muse.jhu.edu/issue/33442">https://muse.jhu.edu/issue/33442</a>
[Reviewed earlier]

# **Journal of Immigrant and Minority Health**

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

### **Journal of Immigrant & Refugee Studies**

Volume 14, Issue 2, 2016 <a href="http://www.tandfonline.com/toc/wimm20/current">http://www.tandfonline.com/toc/wimm20/current</a> [Reviewed earlier]

#### **Journal of Infectious Diseases**

Volume 213 Issue 11 June 1, 2016 <a href="http://jid.oxfordjournals.org/content/current">http://jid.oxfordjournals.org/content/current</a> [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
<a href="http://jme.bmj.com/content/current">http://jme.bmj.com/content/current</a>
[New issue; No new relevant content identified]

# **Journal of Medical Microbiology**

Volume 65, Issue 6, June 2016

http://jmm.microbiologyresearch.org/content/journal/jmm/65/6;jsessionid=1lt6u71kmvfue.x-sqm-live-02

[New issue; No relevant content identified]

#### **Journal of Patient-Centered Research and Reviews**

Volume 3, Issue 2 (2016) <a href="http://digitalrepository.aurorahealthcare.org/jpcrr/">http://digitalrepository.aurorahealthcare.org/jpcrr/</a> [Reviewed earlier]

#### Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 5 Issue 2 June 2016 <a href="http://jpids.oxfordjournals.org/content/current">http://jpids.oxfordjournals.org/content/current</a> [Reviewed earlier]

### **Journal of Pediatrics**

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

# **Journal of Public Health Policy**

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

# **Journal of the Royal Society – Interface**

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

# Journal of Virology

May 2016, volume 90, issue 9 <a href="http://jvi.asm.org/content/current">http://jvi.asm.org/content/current</a> [Reviewed earlier]

#### The Lancet

Jul 02, 2016 Volume 388 Number 10039 p1-102 http://www.thelancet.com/journals/lancet/issue/current Viewpoint

# Virginity testing in professional obstetric and gynaecological ethics

Amirhossein Moaddab, Laurence B McCullough, Frank A Chervenak, Gary A Dildy, Alireza Abdollah Shamshirsaz

Summary

Doctors around the world might be asked to provide virginity testing. The ethical framework for the assessment of the physician's role in virginity testing is based on the professional responsibility model of ethics in obstetrics and gynaecology and its three core ethical principles: beneficence, respect for autonomy, and justice. Beneficence-based objections are that virginity testing has no clinical indications and has substantial biopsychosocial risks. Autonomy-based objections are that virginity testing might be the result of social and cultural pressures that result in non-voluntary requests and, by being undertaken mainly for the benefit of others and not the female patient, impermissibly violates the patient's human right to privacy.

#### **The Lancet Infectious Diseases**

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

### **Lancet Global Health**

Jun 2016 Volume 4 Number 6 e344-e426 <a href="http://www.thelancet.com/journals/langlo/issue/current">http://www.thelancet.com/journals/langlo/issue/current</a> [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) <a href="http://mdm.sagepub.com/content/current">http://mdm.sagepub.com/content/current</a> [Reviewed earlier]

# The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy
June 2016 Volume 94, Issue 2 Pages 225–435
<a href="http://onlinelibrary.wiley.com/doi/10.1111/1468-0009.2016.94.issue-2/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/1468-0009.2016.94.issue-2/issuetoc</a>
[Reviewed earlier]

#### **Nature**

Volume 534 Number 7609 pp589-732 30 June 2016 http://www.nature.com/nature/current\_issue.html

# Policy: Social-progress panel seeks public comment

Marc Fleurbaey and colleagues explain why and how 300 scholars in the social sciences and humanities are collaborating to synthesize knowledge for policymakers.

...That vision is the mission of a new panel convened last year, the International Panel on Social Progress (IPSP). It comprises more than 300 social-science and humanities scholars coordinated by the Fondation Maison des Sciences de l'Homme in Paris and by Princeton University in New Jersey. The IPSP is preparing a report on directions that could be taken in the twenty-first century to create better societies. We are members of the panel's steering committee, and two of us (R.K. and H.N.) are co-chairs of its scientific council. In the next few months, the IPSP will release the first draft of its report.

We call on researchers, policymakers, think tanks, companies, non-governmental organizations (NGOs) and citizens to provide us with feedback during the comment period. From August to December 2016, interested parties will be able to weigh in on the panel website, <a href="www.ipsp.org">www.ipsp.org</a>, which will host a comment platform, discussion forums and surveys. Informed by these views, we hope that the final report will reflect an open and broad international debate on 'mobilizing utopias'

#### **Nature Medicine**

June 2016, Volume 22 No 6 pp569-692 <a href="http://www.nature.com/nm/journal/v22/n6/index.html">http://www.nature.com/nm/journal/v22/n6/index.html</a> [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 30, 2016 Vol. 374 No. 26

http://www.nejm.org/toc/nejm/medical-journal

**Perspective** 

**Saving the World's Women from Cervical Cancer** [Free full text]

V. Tsu and J. Jerónimo

#### Original Articles

# Seven-Year Efficacy of RTS,S/AS01 Malaria Vaccine among Young African Children

A. Olotu and Others

2519-2529

Free Full Text

Abstract

Background

The candidate malaria vaccine RTS,S/AS01 is being evaluated in order to inform a decision regarding its inclusion in routine vaccination schedules.

Full Text of Background...

Methods

We conducted 7 years of follow-up in children who had been randomly assigned, at 5 to 17 months of age, to receive three doses of either the RTS,S/AS01 vaccine or a rabies (control) vaccine. The end point was clinical malaria (temperature of ≥37.5°C and infection with Plasmodium falciparum of >2500 parasites per cubic millimeter). In an analysis that was not prespecified, the malaria exposure of each child was estimated with the use of information on the prevalence of malaria among residents within a 1-km radius of the child's home. Vaccine efficacy was defined as 1 minus the hazard ratio or the incidence-rate ratio, multiplied by 100, in the RTS,S/AS01 group versus the control group.

Full Text of Methods...

Results

Over 7 years of follow-up, we identified 1002 episodes of clinical malaria among 223 children randomly assigned to the RTS,S/AS01 group and 992 episodes among 224 children randomly assigned to the control group. The vaccine efficacy, as assessed by negative binomial regression, was 4.4% (95% confidence interval [CI], -17.0 to 21.9; P=0.66) in the intention-to-treat analysis and 7.0% (95% CI, -14.5 to 24.6; P=0.52) in the per-protocol analysis. Vaccine efficacy waned over time (P=0.006 for the interaction between vaccination and time), including negative efficacy during the fifth year among children with higher-than-average exposure to malaria parasites (intention-to-treat analysis: -43.5%; 95% CI, -100.3 to -2.8 [P=0.03]; per-protocol analysis: -56.8%; 95% CI, -118.7 to -12.3 [P=0.008]). Full Text of Results...

Conclusions

A three-dose vaccination with RTS,S/AS01 was initially protective against clinical malaria, but this result was offset by rebound in later years in areas with higher-than-average exposure to malaria parasites. (Funded by the PATH Malaria Vaccine Initiative and others; ClinicalTrials.gov number, NCT00872963.)

#### **Pediatrics**

June 2016, VOLUME 137 / ISSUE 6 <a href="http://pediatrics.aappublications.org/content/137/6?current-issue=y">http://pediatrics.aappublications.org/content/137/6?current-issue=y</a> [Reviewed earlier]

#### **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 2 July 2016] Research Article

<u>How Bad Is It? Usefulness of the "7eed Model" for Scoring Severity and Level of</u>
Need in Complex Emergencies

June 28, 2016 ·

Background: Humanitarian assistance is designated to save lives and alleviate suffering among people affected by disasters. In 2014, close to 25 billion USD was allocated to humanitarian assistance, more than 80% of it from governmental donors and EU institutions. Most of these funds are devoted to Complex Emergencies (CE). It is widely accepted that the needs of the affected population should be the main determinant for resource allocations of humanitarian funding. However, to date no common, systematic, and transparent system for needs-based allocations exists. In an earlier paper, an easy-to-use model, "the 7eed model", based on readily available indicators that distinguished between levels of severity among disaster-affected countries was presented. The aim of this paper is to assess the usefulness of the 7eed model in regards to 1) data availability, 2) variations between CE effected countries and sensitivity to change over time, and 3) reliability in capturing severity and levels of need.

Method: We applied the 7eed model to 25 countries with CE using data from 2013 to 2015. Data availability and indicator value variations were assessed using heat maps. To calculate a severity score and a needs score, we applied a standardised mathematical formula, based on the UTSTEIN template. We assessed the model for reliability on previous CEs with a "known" outcome in terms of excess mortality.

Results: Most of the required data was available for nearly all countries and indicators, and availability increased over time. The 7eed model was able to discriminate between levels of severity and needs among countries. Comparison with historical complex disasters showed a correlation between excess mortality and severity score.

Conclusion: Our study indicates that the proposed 7eed model can serve as a useful tool for setting funding levels for humanitarian assistance according to measurable levels of need. The 7eed model provides national level information but does not take into account local variations or specific contextual factors.

#### Research Article

<u>Socio-demographic Predictors for Urban Community Disaster Health Risk Perception</u> <u>and Household Based Preparedness in a Chinese Urban City</u> June 27, 2016

Objectives: There is limited evidence on urban Asian communities' disaster risk perceptions and household level preparedness. Hong Kong is characterized by high population density, and is susceptible to large-scale natural disasters and health crises such as typhoons, fires and infectious disease outbreaks. This research paper investigates the rates and predictors of urban community disaster risk perception, awareness and preparedness, at individual and household levels.

Methods: A randomized cross-sectional, population-based telephone survey study was conducted among the Cantonese-speaking population aged over 15 years in Hong Kong. Descriptive statistics were reported. A stepwise multivariate logistic regression analysis was conducted to determine the independent associations between risk perceptions, socioeconomic factors, household characteristics, and personal background.

Findings: Final study sample comprised of 1002 respondents with a 63% response rate. The majority of respondents (82.3%) did not perceive Hong Kong as a disaster-susceptible city. Half (54.6%) reported beliefs that the local population had lower disaster awareness than other global cities. Infectious disease outbreak (72.4%), typhoon (12.6%), and fire (7.1%) were ranked as the most-likely-to-occur population-based disasters. Although over 77% believed that basic first aid training was necessary for improving individual disaster preparedness, only a quarter (26.1%) of respondents reported participation in training.

Conclusion: Despite Hong Kong's high level of risk, general public perceptions of disaster in Hong Kong were low, and little preparedness has occurred at the individual or household levels. This report has potential to inform the development of related policies and risk communication strategies in Asian urban cities.

#### **PLoS Currents: Outbreaks**

http://currents.plos.org/outbreaks/ (Accessed 2 July 2016) [No new content]

#### **PLoS Medicine**

http://www.plosmedicine.org/ (Accessed 2 July 2016) Editorial

#### A Global Champion for Health—WHO's Next?

The PLOS Medicine Editors | published 28 Jun 2016 | PLOS Medicine http://dx.doi.org/10.1371/journal.pmed.1002059 [Excerpt]

... WHO's next Director-General should be a proven leader and advocate, perhaps from a low-income or middle-income country. The new recruit will be greeted by a full in-tray, and featuring prominently are likely to be the constraints imposed by WHO's current funding mechanisms. A substantial proportion of WHO's existing budget is earmarked for specific projects, leaving the organization with little financial flexibility to respond to unanticipated demands. However, any improved funding mechanism is likely to follow, and be dependent on, organizational reform. According to Kruk, "WHO is both essential and hamstrung...the election of the Director-General should be a moment for member countries and other funders to reflect on whether they want an implementation agency for their favored health agenda, or an independent institution with the intelligence, agility, and operational capacity to tackle the coming global health challenges."

Above all, the incoming leader of WHO will need to be open-minded and creative. More than one of the experts we contacted emphasized the fluid nature of the threats to human health to which WHO should shape the world's response. WHO must be able to lead responses in some areas of global health, but, in other areas, working together with more nimble and focused organizations will be pragmatic. Large-scale infectious disease outbreaks are continuing, and noncommunicable diseases, including cancer, dementia, and mental illnesses, are growing in prevalence and increasing demand for treatment and care. The resources and ingenuity of researchers and clinicians will need to be harnessed, and interventions adapted to new settings, with much greater dynamism. The secular issues of population ageing, conflict, climate change, migration, and others will produce health problems that only an organization with a global reach, responsible to all, can hope to meet. We look forward to welcoming a new leader for WHO with the energy and vision to remold the organization to meet the health needs of the world's people and societies for the 21st century.

Guidelines and Guidance |

# <u>Guidelines for Accurate and Transparent Health Estimates Reporting: the GATHER</u> statement

Gretchen A. Stevens, Leontine Alkema, Robert E. Black, J. Ties Boerma, Gary S. Collins, Majid Ezzati, John T. Grove, Daniel R. Hogan, Margaret C. Hogan, Richard Horton, Joy E. Lawn, Ana Marušić, Colin D. Mathers, Christopher J. L. Murray, Igor Rudan, Joshua A. Salomon, Paul J. Simpson, Theo Vos, Vivian Welch, The GATHER Working Group published 28 Jun 2016 | PLOS Medicine http://dx.doi.org/10.1371/journal.pmed.1002056

Measurements of health indicators are rarely available for every population and period of interest, and available data may not be comparable. The Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER) define best reporting practices for studies that calculate health estimates for multiple populations (in time or space) using multiple information sources. Health estimates that fall within the scope of GATHER include all quantitative population-level estimates (including global, regional, national, or subnational estimates) of health indicators, including indicators of health status, incidence and prevalence of diseases, injuries, and disability and functioning; and indicators of health determinants, including health behaviours and health exposures. GATHER comprises a checklist of 18 items that are essential for best reporting practice. A more detailed explanation and elaboration document, describing the interpretation and rationale of each reporting item along with examples of good reporting, is available on the GATHER website (gather-statement.org).

Research Article

# <u>Agreements between Industry and Academia on Publication Rights: A Retrospective Study of Protocols and Publications of Randomized Clinical Trials</u>

Benjamin Kasenda, Erik von Elm, John J. You, Anette Blümle, Yuki Tomonaga, Ramon Saccilotto, Alain Amstutz, Theresa Bengough, Joerg J. Meerpohl, Mihaela Stegert, Kelechi K. Olu, Kari A. O. Tikkinen, Ignacio Neumann, Alonso Carrasco-Labra, Markus Faulhaber, Sohail M. Mulla, Dominik Mertz, Elie A. Akl, Dirk Bassler, Jason W. Busse, Ignacio Ferreira-González, Francois Lamontagne, Alain Nordmann, Viktoria Gloy, Heike Raatz, Lorenzo Moja, Shanil Ebrahim, Stefan Schandelmaier, Xin Sun, Per O. Vandvik, Bradley C. Johnston, Martin A. Walter, Bernard Burnand, Matthias Schwenkglenks, Lars G. Hemkens, Heiner C. Bucher, Gordon H. Guyatt, Matthias Briel

| published 28 Jun 2016 | PLOS Medicine http://dx.doi.org/10.1371/journal.pmed.1002046 *Abstract* 

Background

Little is known about publication agreements between industry and academic investigators in trial protocols and the consistency of these agreements with corresponding statements in publications. We aimed to investigate (i) the existence and types of publication agreements in trial protocols, (ii) the completeness and consistency of the reporting of these agreements in subsequent publications, and (iii) the frequency of co-authorship by industry employees. Methods and Findings

We used a retrospective cohort of randomized clinical trials (RCTs) based on archived protocols approved by six research ethics committees between 13 January 2000 and 25 November 2003. Only RCTs with industry involvement were eligible. We investigated the documentation of publication agreements in RCT protocols and statements in corresponding journal publications. Of 647 eligible RCT protocols, 456 (70.5%) mentioned an agreement regarding publication of results. Of these 456, 393 (86.2%) documented an industry partner's right to disapprove or at least review proposed manuscripts; 39 (8.6%) agreements were without constraints of publication. The remaining 24 (5.3%) protocols referred to separate agreement documents not accessible to us. Of those 432 protocols with an accessible publication agreement, 268 (62.0%) trials were published. Most agreements documented in the protocol were not reported in the subsequent publication (197/268 [73.5%]). Of 71 agreements reported in publications, 52 (73.2%) were concordant with those documented in the protocol. In 14 of 37 (37.8%) publications in which statements suggested unrestricted publication rights, at least one coauthor was an industry employee. In 25 protocol-publication pairs, author statements in publications suggested no constraints, but 18 corresponding protocols documented restricting agreements.

Conclusions

Publication agreements constraining academic authors' independence are common. Journal articles seldom report on publication agreements, and, if they do, statements can be discrepant with the trial protocol.

## **PLoS Neglected Tropical Diseases**

http://www.plosntds.org/ [Accessed 2 July 2016] Editorial

<u>Southern Europe's Coming Plagues: Vector-Borne Neglected Tropical Diseases</u>
Peter J. Hotez

| published 30 Jun 2016 | PLOS Neglected Tropical Diseases http://dx.doi.org/10.1371/journal.pntd.0004243 [Excerpt]

The factors responsible for promoting the vector-borne NTDs in Southern Europe are under investigation, but there are some key lead possibilities to consider:. *Poverty.* 

Throughout the world's low- and middle-income countries, poverty is a major social determinant promoting the ongoing transmission of NTDs. Previous findings have determined that comparable levels of extreme poverty can also be found among the G20 countries and are also contributing to widespread NTDs [32,33]. It is interesting to note how the emergence or reemergence of Southern Europe's major NTDs roughly coincides with the European debt crisis that began in 2009 when countries such as Greece, Portugal, and Spain experienced difficulties in repaying their government debts without outside assistance. Ultimately, Greece defaulted on its debt to the International Monetary Fund in 2015, thereby precipitating a financial crisis linked to high unemployment. There is an important need to better understand the link between poverty and NTDs. So far, it has been found that NTDs flourish in impoverished settings, but also that NTDs exhibit a unique ability to reinforce poverty through their debilitating effects on workers, women, and growing and developing children.

### Mass human migrations.

Still another key social factor may be the humanitarian crisis linked to hundreds of thousands of people fleeing conflicts in Libya, Syria, and Iraq due to the occupation of ISIS [34]. In so doing, they could be introducing or re-introducing NTDs endemic to the Middle East and North Africa, including the vector-borne NTDs highlighted above. For example, cutaneous leishmaniasis in Syria, where it is often known as "Aleppo Evil," has reached hyperendemic proportions due to breakdowns in health systems and lack of access to essential medicine, with at least tens of thousands of new cases annually [35]. Quite possibly both cutaneous leishmaniasis and sand fly vectors are being routinely re-introduced into Southern Europe.

### Climate change.

Finally, it has been noted that outside of the Arctic region, Europe's single largest temperature increases associated with serious heat waves are now occurring in Southern Europe [36]. The factors promoting climate change include increased greenhouse gas emissions as a result of agriculture; burning of coal, oil, and gas (fossil fuels); landfills; and industrial pollutants [36]. Increased temperatures are helping to facilitate the survival and longevity of insects and snails with the capacity to transmit NTDs. Climate change may also promote the spread of some of Southern Europe's vector-borne NTDs to Northern Europe, including WNV and leishmaniasis [19,37]...

### **PLoS One**

http://www.plosone.org/
[Accessed 2 July 2016]
[No new relevant content identified]

### **PLoS Pathogens**

http://journals.plos.org/plospathogens/

(Accessed 2 July 2016) Pearls

# **Lessons from Nature: Understanding Immunity to HCV to Guide Vaccine Design**

Zachary T. Freeman, Andrea L. Cox | published 30 Jun 2016 | PLOS Pathogens http://dx.doi.org/10.1371/journal.ppat.1005632 [Initial text]

Hepatitis C virus (HCV) is an important global health concern with approximately 185 million people infected  $[\underline{1}]$ . HCV infection most often leads to chronic infection with few early symptoms, but chronically infected individuals can develop liver cirrhosis and hepatocellular carcinoma. Genome-wide association studies in humans have identified innate associated genes and HLA class II as important predictors of spontaneous clearance of HCV  $[\underline{2},\underline{3}]$ , but the correlates of protective immunity are not fully defined. The existence of few models to study protective immunity has hindered vaccine development research. Despite this limitation, significant advancements have been made in our understanding of protective immune responses to HCV using the chimpanzee model and humans exposed to HCV (Fig 1)...

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

http://www.pnas.org/content/early/ (Accessed 2 July 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 2 July 2016 <a href="http://phe.oxfordjournals.org/content/current">http://phe.oxfordjournals.org/content/current</a> [Reviewed earlier]

# **Public Health Reports**

Volume 131, Issue Number 3 May/June 2016

http://www.publichealthreports.org/issuecontents.cfm?Volume=131&Issue=3

# Republicanism Special Symposium

[Reviewed earlier]

### **Qualitative Health Research**

July 2016; 26 (9)

http://qhr.sagepub.com/content/current

Special Issue: Seeking Wellness

[New issue; No relevant content identified]

### **Reproductive Health**

http://www.reproductive-health-journal.com/content [Accessed 2 July 2016]

[No new content]

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

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

### **Risk Analysis**

June 2016 Volume 36, Issue 6 Pages 1069–1286 <a href="http://onlinelibrary.wiley.com/doi/10.1111/risa.2016.36.issue-5/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/risa.2016.36.issue-5/issuetoc</a> [New issue; No relevant content identified]

# **Risk Management and Healthcare Policy**

Volume 9, 2016

https://www.dovepress.com/risk-management-and-healthcare-policy-archive56

[Accessed 2 July 2016]

No new content]

### Science

01 July 2016 Vol 353, Issue 6294

http://www.sciencemag.org/current.dtl

*Feature* 

# **South Africa's bid to end AIDS**

By Jon Cohen

Science01 Jul 2016: 18-21

The tools exist, but the country's epidemic—the largest in the world—won't yield easily.

## Summary

South Africa has more people living with HIV, an estimated 6.6 million, than any country in the world. About half are now receiving antiretroviral (ARV) treatment, which has greatly stressed the country's health care system. Now, South Africa plans to encourage all infected people to learn their status and start treatment as part of the drive to end its epidemic. The cornerstone of the campaign is the fact that HIV-infected people who take ARVs and fully suppress their virus rarely transmit to others. Mathematical models suggest that 73% of the infected population has to achieve this to slow spread and start the epidemic's downward spiral. South Africa has pledged to hit this target by 2020, in keeping with a global goal set by the Joint United Nations Programme on HIV/AIDS, but many experts doubt it can succeed by then—and others question the model itself. When the biannual International AIDS Conference takes place in Durban, South Africa, later this month, these issues likely will be in center stage.

### **Science Translational Medicine**

29 June 2016 Vol 8, Issue 345 http://stm.sciencemag.org/ Perspective

# <u>Multicriteria decision analysis and core values for enhancing vaccine-related decision-making</u>

By Michèle A. Barocchi, Steve Black, Rino Rappuoli Science Translational Medicine29 Jun 2016: 345ps14 Abstract

Vaccines have the potential to transform the health of all individuals and to reduce the health inequality between rich and poor countries. However, to achieve these goals, it is no longer sufficient to prioritize vaccine development using cost-effectiveness as the sole indicator. During a symposium entitled "Mission Grand Convergence—The Role of Vaccines," held in Siena, Italy, in July 2015, key stakeholders agreed that the prioritization of vaccine development and deployment must use multicriteria decision-making based on the following core concepts: (i) mortality and severity of the disease, (ii) vaccine safety considerations, and (iii) economic evaluation that captures the full benefits of vaccination.

### **Social Science & Medicine**

Volume 158, Pages 1-172 (June 2016) http://www.sciencedirect.com/science/journal/02779536/156 Regular articles

### **Long-term health implications of school quality**

Original Research Article

Pages 1-7

Rebecca N. Dudovitz, Bergen B. Nelson, Tumaini R. Coker, Christopher Biely, Ning Li, Lynne C. Wu, Paul J. Chung

Abstract

Objective

Individual academic achievement is a well-known predictor of adult health, and addressing education inequities may be critical to reducing health disparities. Disparities in school quality are well documented. However, we lack nationally representative studies evaluating the impact of school quality on adult health. We aim to determine whether high school quality predicts

adult health outcomes after controlling for baseline health, socio-demographics and individual academic achievement.

Methods

We analyzed data from 7037 adolescents who attended one of 77 high schools in the Unites States and were followed into adulthood from the National Longitudinal Study of Adolescent to Adult Health. Selected school-level quality measures—average daily attendance, school promotion rate, parental involvement, and teacher experience—were validated based on ability to predict high school graduation and college attendance. Individual adult health outcomes included self-rated health, diagnosis of depression, and having a measured BMI in the obese range.

Results

Logistic regressions controlling for socio-demographics, baseline health, health insurance, and individual academic performance demonstrated that school quality significantly predicted all health outcomes. As hypothesized, attending a school with lower average daily attendance predicted lower self-rated health (Adjusted Odds Ratio (AOR) 1.59, p=0.003) and higher odds of depression diagnosis (AOR 1.35, p=0.03); and attending a school with higher parent involvement predicted lower odds of obesity (AOR 0.69, p=0.001). However, attending a school with higher promotion rate also predicted lower self-rated health (AOR1.20, p<0.001). Conclusions

High school quality may be an important, but complex, social determinant of health. These findings highlight the potential inter-dependence of education and health policy.

# **Tropical Medicine & International Health**

June 2016 Volume 21, Issue 6 Pages 691–817 <a href="http://onlinelibrary.wiley.com/doi/10.1111/tmi.2016.21.issue-6/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/tmi.2016.21.issue-6/issuetoc</a> [Reviewed earlier]

### **Vaccine**

Volume 34, Issue 30, Pages 3435-3556 (24 June 2016) http://www.sciencedirect.com/science/journal/0264410X/34/30 Conference report

Emergency deployment of genetically engineered veterinary vaccines in Europe Pages 3435-3440

Bahar Ramezanpour, Jean de Foucauld, Jeroen Kortekaas *Abstract* 

On the 9th of November 2015, preceding the World Veterinary Vaccine Congress, a workshop was held to discuss how veterinary vaccines can be deployed more rapidly to appropriately respond to future epizootics in Europe. Considering their potential and unprecedented suitability for surge production, the workshop focussed on vaccines based on genetically engineered viruses and replicon particles. The workshop was attended by academics and representatives from leading pharmaceutical companies, regulatory experts, the European Medicines Agency and the European Commission. We here outline the present regulatory pathways for genetically engineered vaccines in Europe and describe the incentive for the organization of the precongress workshop. The participants agreed that existing European regulations on the deliberate release of genetically engineered vaccines into the environment should be updated to facilitate quick deployment of these vaccines in emergency situations.

# A national examination of pharmacy-based immunization statutes and their association with influenza vaccinations and preventive health

Original Research Article

Pages 3463-3468

Kevin W. McConeghy, Coady Wing

**Abstract** 

Background

A series of state-level statute changes have allowed pharmacists to provide influenza vaccinations in community pharmacies. The study aim was to estimate the effects of pharmacy-based immunization statutes changes on per capita influenza vaccine prescriptions, adult vaccination rates, and the utilization of other preventive health services.

Methods

A quasi-experimental study that compares vaccination outcomes over time before and after states allowed pharmacy-based immunization. Measures of per capita pharmacy prescriptions for influenza vaccines in each state came from a proprietary pharmacy prescription database. Data on adult vaccination rates and preventive health utilization were studied using multiple waves of the Behavioral Risk Factor Surveillance System (BRFSS). The primary outcomes were changes in per capita influenza vaccine pharmacy prescriptions, adult vaccination rates, and preventive health interventions following changes.

Results

Between 2007 and 2013, the number of influenza vaccinations dispensed in community pharmacies increased from 3.2 to 20.9 million. After one year, adopting pharmacist immunization statutes increased per capita influenza vaccine prescriptions by an absolute difference (AD) of 2.6% (95% CI: 1.1-4.2). Adopting statutes did not lead to a significant absolute increase in adult vaccination rates (AD 0.9%, 95% CI: -0.3, 2.2). There also was no observed difference in adult vaccination rates among adults at high-risk of influenza complications (AD 0.8%, 95% CI: -0.2, 1.8) or among standard demographic subgroups. There also was no observed difference in the receipt of preventive health services, including routine physician office visits (AD -1.9%, 95% CI: -4.9, 1.1). Conclusions

Pharmacists are providing millions of influenza vaccines as a consequence of immunization statutes, but we do not observe significant differences in adult influenza vaccination rates. The main gains from pharmacy-based immunization may be in providing a more convenient way to obtain an important health service.

# <u>Human papillomavirus vaccine series completion: Qualitative information from providers within an integrated healthcare organization</u>

Original Research Article

Pages 3515-3521

Sharon M. Hudson, June Rondinelli, Beth A. Glenn, Melissa Preciado, Chun Chao *Abstract* 

Objective

This qualitative study aimed to identify doctors' and nurses' perceptions of patient-, provider-, and system-level factors associated with human papillomavirus (HPV) vaccine completion that may be targets for intervention.

Methods

We analyzed data from 61 qualitative interviews with pediatricians, family medicine physicians, and immunization nurses at medical centers that had the highest and lowest HPV vaccine completion rates within the same health care system.

Results

In both groups, almost all providers reported strong support for the HPV vaccine. In detailing how they talk to parents and patients about the vaccine, more of the providers working at higher completion centers described using effective communication techniques, including engaging parents and patients in two-way conversation and demonstrating awareness of cultural and practical barriers to completion that families may face. Providers at higher completion centers were also more likely to depict a local medical culture supportive of and committed to HPV vaccine completion, with greater levels of proactivity and teamwork. In contrast, providers working at lower completion medical centers described a lack of proactivity, and the strategies they suggested to improve HPV vaccine completion tended to be approaches that someone other than medical providers would implement. The comments made by these providers sometimes reflected a level of negativity and judgment absent from the comments of providers at higher completion centers.

### Conclusion

Interventions to improve HPV vaccination completion rates should address both individual- and system-level factors. Improving communication skills, encouraging a supportive medical culture, and addressing resource issues is likely to improve vaccine adherence.

**Special Section: National Foundation for Infectious Diseases** (Guest Editor: Raphael Simon)

<u>Introduction to issue of highlighted research presented at the 2015 National Foundation for Infectious Diseases Annual Conference on Vaccine Research</u>

Pages 3522-3524

Walter A. Orenstein, Raphael Simon

### **Vaccine: Development and Therapy**

https://www.dovepress.com/vaccine-development-and-therapy-archive111 (Accessed 2 July 2016)
[No new content]

### **Vaccines — Open Access Journal**

http://www.mdpi.com/journal/vaccines (Accessed 2 July 2016) [No new relevant content]

### Value in Health

June 2016 Volume 19, Issue 4, p297-510 <a href="http://www.valueinhealthjournal.com/current">http://www.valueinhealthjournal.com/current</a> [Reviewed earlier]

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

### **AIDS Research and Human Retroviruses**

Online Ahead of Editing: June 27, 2016

The Landscape of Targeted Immune Responses in the HIV-1 Vaccine Field

Dr. Jeffrey T. Safrit, Dr. Georgia D Tomaras, Dr. Tomas Hanke, Dr. Allan C. deCamp, and Dr. Yegor Voronin

**ABSTRACT** 

We conducted a survey of researchers that are advancing HIV-1 preventive vaccine candidates through early stages of clinical testing. We asked the researchers to identify immune responses that they view as potentially protective against HIV-1 infection. Survey results were visualized to obtain a high-level visual representation of the landscape of current hypotheses in the field. We observed a vibrant field with candidates targeting diverse immunological responses, illustrating the multiple underlying competing and complementing hypotheses as well as divergent approaches to vaccine development. Our analysis provides a unique view at the HIV-1 preventive vaccine field and similar approaches could be used to facilitate strategic planning across multiple stakeholders working on an HIV-1 vaccine.

## **American Society of Tropical Medicine and Hygiene**

Published online June 27, 2016; doi:10.4269/ajtmh.16-0222.

The latest version is at http://ajtmh.org/cgi/doi/10.4269/ajtmh.16-0222

<u>Licensed Dengue Vaccine: Public Health Conundrum and Scientific Challenge</u>

Scott B. Halstead1\*

1Department of Preventive Medicine and Biometrics, Uniformed Services University of the Health Sciences, Bethesda, Maryland

Abstract

A tetravalent live attenuated vaccine composed of chimeras of yellow fever 17D and the four dengue viruses (chimeric yellow fever dengue [CYD]) manufactured by Sanofi Pasteur has completed phase III clinical testing in over 35,000 children 2–16 years of age. The vaccine was recently licensed in four countries. During the first 2 years of observation, CYD vaccine efficacy ranged between 30% and 79% in 10 different countries with an overall efficacy of 56.8%. During year 3, there was an overall efficacy against hospitalization of 16.7%, but a relative risk of hospitalization of 1.6 among children younger than 9 years and 4.95 in children 5 years of age and younger. Vaccination of seronegative children resulted in universal broad dengue neutralizing antibody responses, but poor protection against breakthrough dengue cases. Unless proven otherwise, such breakthrough cases in vaccinated subjects should be regarded as vaccine antibody-enhanced (ADE). The provenance of these cases can be studied serologically using original antigenic sin immune responses in convalescent sera. In conventional dengue vaccine efficacy clinical trials, persons vaccinated as seronegatives may be hospitalized with breakthrough ADE infections, whereas in the placebo group, dengue infection of monotypic immunes results in hospitalization. Vaccine efficacy trial design must identify dengue disease etiology by separately measuring efficacy in seronegatives and seropositives. The reason(s) why CYD vaccine failed to raise protective dengue virus immunity are unknown. To achieve a safe

and protective dengue vaccine, careful studies of monotypic CYD vaccines in humans should precede field trials of tetravalent formulations.

### **Journal of Medical Internet Research**

2016;18(6):e143

DOI: <u>10.2196/jmir.5591</u>

Original Paper

# <u>Feasibility and Limitations of Vaccine Two-Dimensional Barcoding Using Mobile</u> **Devices**

<u>Cameron Bell1, BEng; Julien Guerinet1, BEng; Katherine M Atkinson1,2, BSc; Kumanan Wilson1,3, MD, MSc, FRCP(C)</u>

1Ottawa Hospital Research Institute, Clinical Epidemiology Program, Ottawa, ON, Canada 2Karolinska Institutet, Department of Public Health Sciences, Stockholm, Sweden 3University of Ottawa, Departments of Medicine, Epidemiology and Community Medicine, Ottawa, ON, Canada

**ABSTRACT** 

Background: Two-dimensional (2D) barcoding has the potential to enhance documentation of vaccine encounters at the point of care. However, this is currently limited to environments equipped with dedicated barcode scanners and compatible record systems. Mobile devices may present a cost-effective alternative to leverage 2D vaccine vial barcodes and improve vaccine product-specific information residing in digital health records.

Objective: Mobile devices have the potential to capture product-specific information from 2D vaccine vial barcodes. We sought to examine the feasibility, performance, and potential limitations of scanning 2D barcodes on vaccine vials using 4 different mobile phones. Methods: A unique barcode scanning app was developed for Android and iOS operating systems. The impact of 4 variables on the scan success rate, data accuracy, and time to scan were examined: barcode size, curvature, fading, and ambient lighting conditions. Two experimenters performed 4 trials 10 times each, amounting to a total of 2160 barcode scan attempts.

Results: Of the 1832 successful scans performed in this evaluation, zero produced incorrect data. Five-millimeter barcodes were the slowest to scan, although only by 0.5 seconds on average. Barcodes with up to 50% fading had a 100% success rate, but success rate deteriorated beyond 60% fading. Curved barcodes took longer to scan compared with flat, but success rate deterioration was only observed at a vial diameter of 10 mm. Light conditions did not affect success rate or scan time between 500 lux and 20 lux. Conditions below 20 lux impeded the device's ability to scan successfully. Variability in scan time was observed across devices in all trials performed.

Conclusions: 2D vaccine barcoding is possible using mobile devices and is successful under the majority of conditions examined. Manufacturers utilizing 2D barcodes should take into consideration the impact of factors that limit scan success rates. Future studies should evaluate the effect of mobile barcoding on workflow and vaccine administrator acceptance.

\* \* \*

# 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 2 July 2016

# Zika Is the 'Most Difficult' Emergency Health Response Ever, CDC Official Says

24 June 2016 Julie Beck

How the virus is spread, its disproportionate danger for pregnant women, and the delay in its worst effects combine to make this outbreak particularly tough.

### **BBC**

http://www.bbc.co.uk/ Accessed 2 July 2016 [No new, unique, relevant content]

### The Economist

http://www.economist.com/ Accessed 2 July 2016 [No new, unique, relevant content]

### **Financial Times**

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

Accessed 2 July 2016

[No new, unique, relevant content]

### **Forbes**

http://www.forbes.com/ Accessed 2 July 2016

### The Hunt For A Zika Vaccine: Why The Olympics Should Be Postponed

It will likely be two years or more before a vaccine can come to market ... Kenneth L. Davis, Contributor Jun 30, 2016

### **Foreign Affairs**

http://www.foreignaffairs.com/ Accessed 2 July 2016 [No new, unique, relevant content]

# **Foreign Policy**

http://foreignpolicy.com/ Accessed 2 July 2016 [No new, unique, relevant content]

### The Guardian

http://www.guardiannews.com/

Accessed 2 July 2016

## More people in less space: rapid urbanisation threatens global health

As city populations swell worldwide, our ability to prevent and control infectious disease will come under ever greater strain

28 June 2016

By Seth Berkley

The global population looks set to rise to 9.7 billion people by 2050, when it is expected that more than two-thirds of humanity will be living in urban areas. The global health community is bracing itself. Compared to a more traditional rural existence, the shift in lifestyle and inevitable increase in exposure to pollution will lead to significant long-term rises in non-communicable diseases such as cancer and cardiovascular disease.

Austin Fraktimmediate problems...

### Zika virus vaccine for animals brings hope for human protection

Trial version in US giving successful immunisation to mice could help fight disease, but complications warned for those who have contracted dengue fever 28 June 2016

Ian Sample, Science editor

An experimental vaccine that completely protects animals from the Zika virus has raised hopes for a jab that can bring the fast-spreading disease under control...

### **New Yorker**

http://www.newyorker.com/ Accessed 2 July 2016 [No new, unique, relevant content]

### **New York Times**

http://www.nytimes.com/ Accessed 2 July 2016

# **Low Prices for Vaccines Can Come at a Great Cost**

Austin Frakt 27 June 2016

A \$30,000 price tag for cancer drug therapy that extends life only a few weeks is understandably alarming. But a \$2,000 price tag for all childhood vaccines — credited with eradicating smallpox, preventing a million or more cases of other diseases and averting thousands of deaths each year — is a bargain. In fact, the price of childhood vaccines may be too low for our own good because it contributes to shortages.

Vaccine shortages have popped up in the United States many times <u>over the past 50 years</u>. In 2001, <u>eight of 11</u> recommended childhood vaccines were unavailable or in short supply. A <u>recently published study</u> by the economist <u>David Ridley</u> and other Duke University researchers found that between 2004 and 2014, an average of nearly three out of 22 vaccines were in short supply in the United States. In 2007, one-third of vaccines were. (Looking globally, <u>limited</u>

<u>vaccine supplies</u> hampered the response to a recent <u>yellow fever</u> outbreak that began in Angola and spread elsewhere.)

<u>Vaccine prices have gone up</u> over the years, in large part because of newer vaccines that command higher prices. The number of recommended vaccine doses has <u>also increased</u>, which pushes up the overall cost of full vaccination. Still, vaccines are inexpensive relative to their value. A typical dose costs \$50 and, apart from an annual <u>flu shot</u>, only a few doses are required over a lifetime. According to the Duke study, vaccines with lower prices were more likely to be in short supply than those with higher prices. There were no shortages of vaccines with a price per dose above \$75...

### **Wall Street Journal**

http://online.wsj.com/home-page?\_wsjregion=na,us&\_homepage=/home/us Accessed 2 July 2016 World

### **Refugee Crises in Mideast Spawn Health Threats**

Years of conflict leave millions of displaced people vulnerable to communicable diseases By Nour Malas

Updated June 27, 2016 6:22 p.m. ET

QAB ELIAS, Lebanon—Hundreds of thousands of Syrian refugees scattered in makeshift camps among the farms in the fertile Bekaa Valley are facing an increasingly worrisome threat: disease...

# **Washington Post**

http://www.washingtonpost.com/ Accessed 2 July 2016

# Why researchers are releasing millions of mosquitoes to combat the Zika virus 30 June 2016

In the world's largest mosquito farm, millions of males are being bred at a furious pace for release on an island in Southern China. It's all part of a plan to suppress a mosquito that can transmit the Zika virus. And so far, the results are stunning. The man behind this government-backed experiment is Xi Zhiyong, professor at Sun Yat-sen University in Guangzhou, China. Inside the fluorescent compound, Xi and a team of researchers are experimenting with using the biology of the Aedes mosquito against itself. The process goes like this. Male mosquitoes are infected with Wolbachia bacteria, which does two things: inhibit the Zika virus and disrupt the reproduction process. Researchers then cart the mosquitoes out to Shazai Island, where they are set free...

# A yellow fever epidemic in Angola could turn into a global crisis

26 June 2016

Almost 80 years after the yellow fever vaccine was created in a New York laboratory, a massive outbreak of the disease has killed hundreds of people in this country, where most were never immunized. Now, the virus is jumping across borders into other nations whose populations are also largely unvaccinated. More than 3,000 suspected cases are in Angola and 1,000 are in neighboring Congo, making this the biggest urban epidemic in decades. More than 400 people have died. There are growing concerns that Chinese workers — of whom there are thousands in Angola — will carry the virus to Asia, where nearly all of the rural poor are also unvaccinated...

# Think Tanks et al

### **Brookings**

http://www.brookings.edu/ Accessed 2 July 2016 [No new relevant content]

## **Center for Global Development**

http://www.cgdev.org/ Accessed 2 July 2016 [No new relevant content]

## **Council on Foreign Relations**

http://www.cfr.org/ Accessed 2 July 2016 [No new relevant content]

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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.