

# Vaccines and Global Health: The Week in Review 14 January 2017 Center for Vaccine Ethics & Policy (CVEP)

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

Vaccines and Global Health: The Week in Review is also **posted in pdf form** and as a set of blog posts at <a href="http://centerforvaccineethicsandpolicy.wordpress.com/">http://centerforvaccineethicsandpolicy.wordpress.com/</a>. This blog allows full-text searching of over 8,000 entries.

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

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## **Milestones :: Perspectives**

#### 140th session of the Executive Board

23 January–1 February 2017, Geneva

Main Documents [Selected]

EB140/7

Health emergencies

WHO response in severe, large-scale emergencies

#### EB140/9

Research and development for potentially epidemic diseases A blueprint for research and development preparedness and rapid research response

## EB140/13

Poliomyelitis

#### EB140/14

Implementation of the International Health Regulations (2005) Draft global implementation plan

#### EB140/15

Implementation of the International Health Regulations (2005)
Public health implications of the implementation of the Nagoya Protocol

#### EB140/16

Review of the Pandemic Influenza Preparedness Framework

#### EB140/25

## Global vaccine action plan

[Excerpt] ANNEX

A SUMMARY OF THE 2016 ASSESSMENT REPORT OF THE GLOBAL VACCINE ACTION PLAN BY THE STRATEGIC ADVISORY GROUP OF EXPERTS ON IMMUNIZATION [1]

- 1. At the midpoint of the Global Vaccine Action Plan, or GVAP (2012–2020), the Strategic Advisory Group of Experts on Immunization (SAGE) remains gravely concerned that progress toward the goals to eradicate polio, eliminate measles and rubella, eliminate maternal and neonatal tetanus, and increase equitable access to life saving vaccines is too slow.
- 2. Despite improvements in individual countries and a strong global rate of new vaccine introduction, global average immunization coverage has increased by only 1% since 2010.
- 3. In 2015, 68 countries fell short of the target to achieve at least 90% national coverage with the third dose of diphtheria-tetanus-pertussis vaccine. Not only that, 26 countries reported no change in coverage levels and 25 countries reported a net decrease in coverage since 2010.
- 4. The 16 countries that have made measurable progress since 2010 are to be commended for reaching more people, especially vulnerable and marginalized members of society with immunization. Some of the countries with the highest numbers of unvaccinated people have

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made the most progress, including the Democratic Republic of the Congo, Ethiopia and India, and even though coverage targets have not been achieved in these countries, they are moving forward in the right direction.

- 5. The 111 countries that entered the decade with high immunization coverage and sustained it through 2015 are already setting their sights on more aggressive goals, additional vaccines, and more equitable coverage. Immunization programmes in these countries can lead the way by increasing access to other public health interventions and providing a platform for the delivery of preventive health services throughout the life course. Vaccine research and development is progressing rapidly, and an expanding pipeline of new vaccines underscores the need to build health systems that can reliably reach new target age groups.
- 6. The members of the SAGE are steadfast and passionate believers in the power of immunization to give individuals and their families a better start in life and to protect people from a growing array of debilitating illnesses. Immunization is one of the world's most effective and cost-effective tools against the threat of emerging diseases and has a powerful impact on social and economic development. Recognizing the role that immunization plays in ensuring good health and the role that good health plays in achieving sustainable development, the SAGE has supported the inclusion of immunization indicators to measure progress toward the Sustainable Development Goals.
- 7. The next four years present unprecedented opportunities for countries to leverage the attention and support that immunization receives and apply it for the benefit of people everywhere. Strident efforts on the part of all countries and immunization stakeholders are required to catch up and achieve GVAP goals by 2020...

| [1] | http://w | ww.w | ho.int/ei | ntity/immunization/glob | al vaccine | action | plan/SAGE | <b>GVAP</b> | <u>Assessme</u> |
|-----|----------|------|-----------|-------------------------|------------|--------|-----------|-------------|-----------------|
|     | -        |      |           | (accessed 10 Novemb     |            |        | •         |             |                 |

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#### **Emergencies**

#### Millions of children to receive measles vaccine in north-eastern Nigeria

12 January 2017 – A mass vaccination campaign to protect more than 4 million children against a measles outbreak in conflict-affected states in north-eastern Nigeria is planned to start this week. The two-week campaign, which starts on 13 January, will target all children aged from 6 months to 10 years in accessible areas in Borno, Yobe and Adamawa States.

"This measles vaccination campaign is an emergency intervention to protect more than 4 million children against a highly contagious and sometimes deadly disease," says Dr Wondimagegnehu Alemu, WHO Representative in Nigeria. "Massive disruption to health services in conflict-affected areas for many years has deprived these children of essential childhood vaccinations. In addition, many of them have severe malnutrition, making them extremely vulnerable to serious complications and death from measles."

Polio programme provides crucial support

WHO is supporting the 3 state Primary Healthcare Development Agencies to prepare for the campaign; working with partners including UNICEF, the United States Centers for Disease Control (CDC) and other health nongovernmental organizations. WHO is providing expertise in areas including logistics, data management, training, social mobilization, monitoring and evaluation, supportive supervision (human resource) and waste management.

"Nigeria's well-established polio vaccination programme provides a strong underpinning for the campaign," says Dr Alemu. "Population data from the polio programme has been essential to guide planning for the measles campaign. We are also able to make use of staff that have vast experience in providing health services in very difficult and risky areas."

High insecurity, difficult terrain and lack of functioning health facilities add to the enormous logistical challenges of organizing a large mass vaccination campaign that requires assembling and training more than 4000 vaccination teams and ensuring the vaccine is kept within cold chain conditions (+2° to 8° C) in a climate where average daytime temperatures are above 30° C.

The vaccination teams for this campaign are made up of 7 people including a supervisor, vaccinators (health workers), record keepers, community mobilizers and town criers. The teams will also give children deworming medication and vitamin A supplements at the same time as the measles vaccination.

To prevent double vaccinations especially in schools and camps for displaced people, vaccination cards will be issued to all vaccinated children as well as the use of pen markers to mark their thumbs...

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## WHO Grade 3 Emergencies [to 14 January 2017]

## The Syrian Arab Republic -

:: Survey raises concerns about hepatitis C infection in Syria

10 January 2017 – A survey of more than 20 000 people in Syria has found a concerning number of people infected with hepatitis C, especially among people who are at higher risk.

Iraq - No new announcements identified.

South Sudan - No new announcements identified.

Nigeria - See measles immunization campaign announcement above.

Yemen - No new announcements identified.

## WHO Grade 2 Emergencies [to 14 January 2017]

Cameroon - No new announcements identified.

Central African Republic - No new announcements identified.

Democratic Republic of the Congo - No new announcements identified.

Ethiopia - No new announcements identified.

Libya - No new announcements identified.

Myanmar - No new announcements identified.

Niger - No new announcements identified.

#### **UN OCHA – L3 Emergencies**

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

### <u>Iraq</u>

:: <u>Iraq</u>: Mosul Humanitarian Response Situation Report #15 (2 - 8 January 2017) [EN/AR/KU]

#### <u>Syria</u>

:: 14 Jan 2017 Syrian Arab Republic: Wadi Barada Situation Report No. 1 (14 January 2017)

#### Yemen

:: 9 Jan 2017 Yemen Humanitarian Bulletin Issue 19 (31 December 2016)

## Corporate Emergencies

#### Haiti

- :: Haiti: Hurricane Matthew Situation Report No. 31 (09 January 2017)
- ... 807,395 Individuals living in high-risk areas, including the hurricane zone, received cholera vaccine Source: UNICEF

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#### Editor's Note:

We will cluster these recent emergencies as below and continue to monitor the WHO pages for updates and key developments. No new digest content identified for this edition.

## Yellow Fever [to 14 January 2017]

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

Disease Outbreal News [DONs]

## <u>Yellow fever - Brazil</u>

13 January 2017

On 6 January 2017, the Brazil Ministry of Health (MoH) reported 12 suspected cases of yellow fever from six municipalities in the state of Minas Gerais...

On 12 January, the Brazil IHR NFP provided an update on the event informing that a total of 110 suspected cases, including 30 deaths, had been reported from 15 municipalities of Minas Gerais...

#### Public Health Response

Health authorities at the federal, state, and municipal levels are implementing several measures to respond to the outbreak:

- :: The Ministry of Health has deployed technical teams to the state of Minas Gerais to assist the state and municipal secretary of health with surveillance and outbreak investigation, vector control, and coordination of health care services;
- :: A house-to-house immunization campaign is being conducted in the rural areas of affected municipalities;

- :: Preparedness activities are being conducted in states bordering Minas Gerais, for a potential introduction of yellow fever;
- :: The local press is working together with the MoH to keep the public constantly informed on the situation.

#### WHO Risk Assessment

Yellow fever outbreak has previously been detected in Minas Gerais. The most recent outbreak occurred in 2002–2003, when 63 confirmed cases, including 23 deaths (CFR: 37%), were detected.

The current yellow fever outbreak is taking place in an area with relatively low vaccination coverage, which could favor the rapid spread of the disease...

## **EBOLA/EVD** [to 14 January 2017]

http://www.who.int/ebola/en/

"Threat to international peace and security" (UN Security Council) No new digest content identified for this edition.

## MERS-CoV [to 14 January 2017]

http://www.who.int/emergencies/mers-cov/en/ No new digest content identified for this edition.

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**Zika virus** [to 14 January 2017]

http://www.who.int/emergencies/zika-virus/en/

#### Zika situation report – 05 January 2017

Full report: <a href="http://apps.who.int/iris/bitstream/10665/252762/1/zikasitrep5Jan17-eng.pdf?ua=1">http://apps.who.int/iris/bitstream/10665/252762/1/zikasitrep5Jan17-eng.pdf?ua=1</a> <u>Key Updates</u>

:: This is the last weekly situation report. Going forward, the reports will be published every two weeks. The next report will be issued on 19 January.

#### WHO's response to Zika virus and its associated complications – Report to donors:

December 2016

WHO, 2016 :: 11 pages

[Excerpt]

On 1 February 2016 WHO Director-General Margaret Chan declared that the spread of Zika virus and its associated complications constituted a public health emergency of international concern (PHEIC). On 14 February, WHO launched a global Strategic Response Framework and Joint Operations Plan, subsequently updated on 15 July, in which WHO and partners set out their strategy for preventing, detecting, and responding to Zika virus and its complications. Support from donors has ensured that this strategy has been realised.

Between February and November 2016 WHO/PAHO received US\$ 23.9 million in direct contributions from 13 donors (Annex 1). This document highlights some of WHO's key activities during this period, and points to priority areas for funding through to December 2017, including

investment in research and development to foster a better understanding of Zika virus epidemiology, and how we can prevent and treat the adverse health outcomes associated with Zika virus infection.

The figure below shows how funds were received over time to pay for the response outlined in the Zika Strategic Response Plan. Funds from the WHO Contingency Fund for Emergencies (CFE) were disbursed within 24 hours of the declaration of the PHEIC, and were crucial in the early stages of the response, enabling a full Incident Management Structure (IMS) to be implemented in WHO headquarters in Geneva and all WHO regional offices. Without this bridge funding the response would have been delayed until the first contributions from Japan and Australia were received, 6 weeks after the declaration of the PHEIC. Eleven months after the declaration of the PHEIC, and thanks to the generosity of donors, funding has been secured..

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**POLIO** [to 14 January 2017]

Public Health Emergency of International Concern (PHEIC)

## Polio this week as of 11 January 2017

:: Summary of newly-reported viruses this week (see country-specific section below for further details): Pakistan: one circulating vaccine-derived poliovirus type 2 (cVDPV2) isolated from an acute flaccid paralysis (AFP) case; three positive environmental samples (two wild poliovirus type 1 – WPV1, and one cVDPV2).

## **Country Updates** [Selected Excerpts] **Pakistan**

- :: Two new WPV1-positive environmental samples were reported in the past week, from Multan, Punjab (collected on 8 December) and Karachi-Landhi (greater Karachi), Sindh (collected on 14 December).
- :: One new circulating vaccine-derived poliovirus type 2 (cVDPV2) case was reported in the past week, from Quetta, Balochistan, with onset of paralysis on 17 December.
- :: One new cVDPV2-positive environmental sample was reported in the past week, from Quetta (collected on 20 December).
- :: The isolates from both the cVDPV2 case and environmental sample are linked to an ongoing, confirmed cVDPV2 outbreak currently affecting Quetta. The case is the first associated with this outbreak previous isolates of this strain had been found only in environmental samples.
- :: An outbreak response is currently ongoing. Last week, a campaign using monovalent oral polio vaccine type 2 (mOPV2) was implemented in Quetta and surrounding areas, followed this week by an activity with inactivated polio vaccine (IPV). The Ministry of Health, supported by the World Health Organization (WHO) and partners, is further strengthening active search for cases of acute flaccid paralysis (AFP), and conducting an in-depth field investigation to more clearly ascertain the extent of circulation of the cVDPV2.

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WHO & Regional Offices [to 14 January 2017]

#### 140th session of the Executive Board

23 January–1 February 2017, Geneva [see selected main documents summary above]

## Tobacco control can save billions of dollars and millions of lives

10 January 2017 – Policies to control tobacco use, including tobacco tax and price increases, can generate significant government revenues for health and development work, according to a new landmark global report from WHO and the National Cancer Institute of the United States of America.

### **Highlights**

## **Dracunculiasis eradication: Mali reports zero cases in 2016**

January 2017 – In 2016, a total of 25 human cases of dracunculiasis (guinea-worm disease) were reported to WHO; Mali reported zero cases for the first time. In 2015, Mali reported 5 human cases.

## <u>Consultation: Global Accelerated Action for the Health of Adolescents (AA-HA!)</u> <u>Implementation Guidance Draft</u>

January 2017 – The first draft of the Global AA-HA! Implementation Guidance is now available for review by individuals and institutions. If you have feedback, please respond by 15th January 2017 so that your comments can influence and be incorporated into the final document.

## Response to trauma cases saves hundreds of lives in Iraq

January 2017 – Since 17 October 2016, WHO has supported the Government of Iraq and the Kurdish Regional Government with emergency lifesaving health services, including emergency medicines and other medical supplies like trauma and surgery kits.

## Weekly Epidemiological Record, 13 January 2017, vol. 92, 2 (pp. 13-20)

Global Advisory Committee on Vaccine Safety, 30 November – 1 December 2016

#### :: WHO Regional Offices

Selected Press Releases, Announcements

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

:: Millions of children to receive measles vaccine in north-eastern Nigeria

A mass vaccination campaign to protect more than 4 million children (4 766 214) against a measles outbreak in conflict-affected states in north-eastern Nigeria is planned to start this week.

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

:: Tobacco control can save billions of dollars and millions of lives (01/10/2017)

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

:: <u>Countries in South-East Asia Region combat polio vaccine shortage, committed to remain polio-free</u> 13 January 2017

On the sixth anniversary of the last case of wild poliovirus in the South-East Asia Region, World Health Organization commends countries in the Region for their continued efforts to

protect children against this crippling virus and maintain the Region's polio-free status, despite challenging conditions.

Amid a global shortage of injectable inactivated polio vaccine (IPV), countries in the WHO South-East Asia Region are opting to use fractional doses of IPV, an evidence-based intervention that not only ensures continued protection of children against all types of polioviruses, but also helps save vaccine – a move bound to positively impact global vaccine supply in the coming years.

India became the first country globally to introduce fractional doses of IPV in childhood immunization programme in eight of its 36 states / union territories in early 2016. The initiative is now being scaled up nationwide. Sri Lanka followed suit in July 2016. Bangladesh has decided to introduce fractional IPV doses this year. Other countries in the Region are also considering a shift to the use of fractional IPV doses in their immunization schedule...

## **WHO European Region EURO**

- :: <u>Kick-off meeting of UN European coalition on health identifies 4 workstreams for joint action</u> 13-01-2017
- :: What can countries expect during the 2016-2017 influenza season? 13-01-2017

## WHO Eastern Mediterranean Region EMRO

:: Survey raises concerns about hepatitis C infection in Syria 10 January 2017

## **WHO Western Pacific Region**

| :: | <b>Tobacco</b> | control | can | save | billions | of | dollars | and | millions | of lives | 10 JANUARY | 2017 |
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CDC/ACIP [to 14 January 2017] http://www.cdc.gov/media/index.html https://www.cdc.gov/vaccines/acip/

#### MMWR Weekly January 13, 2017/No. 1

[Excerpts]

- :: <u>State Laws Requiring Hand Sanitation Stations at Animal Contact Exhibits—United States,</u> March–April 2016
- :: <u>Guidance for Assessment of Poliovirus Vaccination Status and Vaccination of Children Who</u>
  <u>Have Received Poliovirus Vaccine Outside the United States</u>

## **Register for upcoming February ACIP meeting**

February 22-23, 2017

Deadline for registration:

:: Non-US Citizens: February 1, 2017; US Citizens: February 13, 2017 Registration is NOT required to watch the live meeting webcast or to listen via telephone.

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#### **Announcements**

**IVI** [to 14 January 2017] <a href="http://www.ivi.int/">http://www.ivi.int/</a> [Undated]

## IVI, Rotary International Join Forces to Vaccinate against Cholera in At-risk Populations in Nepal

:: Campaign to vaccinate about 27,000 people to prevent endemic cholera

:: IVI Director General commends Rotary's leadership and support, announces intent to provide additional vaccinations in developing countries through international collaboration

The International Vaccine Institute (IVI), Rotary International (District 3640, District 3710), Rotary Club of Seoul Southwest in Korea, and Rotary Club of Nagarjun in Nepal announced on January 9 their global health partnership that recently completed vaccination of about 27,000 people at risk of cholera in Nepal.

The vaccinations have been conducted in Banke, an area in southwest Nepal that borders with India, to protect people against cholera, a potentially fatal and highly contagious diarrheal disease. Cholera is endemic in Nepal, and people in the area are at high risk of cholera due to lack of clean water and limited sanitation and hygiene.

The vaccination campaign used a two-dose oral cholera vaccine, developed by IVI through a public-private partnership with groups that include the Bill & Melinda Gates Foundation and the governments of Korea and Sweden. Notably, the vaccine 'Euvichol' is produced by the Korean vaccine manufacturer EuBiologics who worked with IVI on its development and production following technology transfer from IVI. The vaccine is prequalified by the World Health Organization and is the first Korean-made cholera vaccine for global public health.

To ensure the vaccine reaches vulnerable populations, IVI collaborated with Rotary International and Nepalese health authorities to conduct the vaccination campaign, targeting residents one year old and up. The first round occurred on early December, and the second round in mid- to late December.

The vaccination campaign was led by Rotary Club of Seoul Southwest and International Rotary Districts 3640 and 3710, and was supported through a Global Grant from the Rotary Foundation. Collaborators in Nepal included the Nepalese Ministry of Health, Group for Technical Assistance (GTA), and other partners. The campaign was also supported by a number of Korean donors, including the Export Import Bank of Korea, the Kim & Chang CSR Committee, and Sartorius Korea Biotech...

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**PATH** [to 14 January 2017] <a href="http://www.path.org/news/index.php">http://www.path.org/news/index.php</a> Announcement | January 12, 2017

PATH welcomes grant to advance Group B Streptococcus vaccine development

Award from the Bill & Melinda Gates Foundation will support maternal immunization strategies PATH has received a five-year, \$29.3 million grant from the Bill & Melinda Gates Foundation to support the development of a vaccine against Group B Streptococcus (GBS), a leading cause

of sepsis and meningitis in young infants worldwide. A vaccine to prevent the bacterial infection—which often affects babies just a few hours old—could potentially save countless lives in the low-resource countries most impacted by the disease. Grant funds will support the research and development of a polyvalent, conjugate vaccine protecting against the most common kinds (or serotypes) of GBS...

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**NIH** [to 14 January 2017]

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

January 11, 2017

## **New Drug Formulary Will Help Expedite Use of Agents in Clinical Trials**

— NCI Formulary could ultimately translate into speeding the availability of more-effective treatment options to patients with cancer.

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## **European Medicines Agency** [to 14 January 2017]

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

13/01/2017

## Meeting highlights from the Pharmacovigilance Risk Assessment Committee (PRAC) 9-12 January 2017

At its monthly meeting, the European Medicines Agency's (EMA) Pharmacovigilance Risk Assessment Committee (PRAC) discussed two ongoing safety reviews.

More information on all safety reviews currently under evaluation is provided in the table below. The Committee did not start or conclude a referral.

The PRAC also focused on the broad range of its responsibilities which cover all aspects of the risk management of the use of medicines. Information on all topics discussed by the PRAC is available below in the agenda for the meeting. A record of the discussions held this week will be provided in the minutes of this meeting, which will be published following the next PRAC meeting at the beginning of February...

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## **European Vaccine Initiative** [to 14 January 2017]

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

09 January 2017

#### **EVI welcomes a new member to the team**

EVI extends a warm welcome to María del Mar Castro. Ms del Mar Castro joins EVI with a fellowship from the European and Developing Countries' Clinical Trials Partnership (EDCTP)/ Tropical Diseases Research-World Health Organization (TDR/WHO). She began her one-year Clinical Research and Development fellowship on 09 January 2017.

#### 09 January 2017

## A new paper related to the MVVC project has recently been published in Molecular Therapy

The article "Viral Vector Malaria Vaccines Induce High-Level T Cell and Antibody Responses in West African Children and Infants "was published by Carly Bliss et al. in Molecular Therapy.

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## **Industry Watch** [to 14 January 2017]

## :: Joaquin Duato Named PhRMA Board Chairman

Washington, DC (January 9, 2017) – The Pharmaceutical Research and Manufacturers of America (PhRMA) today announced Joaquin Duato, worldwide chairman, pharmaceuticals, Johnson & Johnson, has been named chairman of PhRMA's board of directors. Duato formerly held the position of chairman-elect of the PhRMA board and succeeds George Scangos, who has stepped down as CEO of Biogen...

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**AERAS** [to 14 January 2017]

http://www.aeras.org/pressreleases
No new digest content identified.

## **BMGF - Gates Foundation** [to 14 January 2017]

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

## **Coalition for Epidemic Preparedness Innovations (CEPI)** [to 14 January 2017]

http://cepi.net/

No new digest content identified.

#### **EDCTP** [to 14 January 2017]

http://www.edctp.org/

The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria as well as other poverty-related and neglected infectious diseases in sub-Saharan Africa, with a focus on phase II and III clinical trials. No new digest content identified.

#### **FDA** [to 14 January 2017]

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

#### **Fondation Merieux** [to 14 January 2017]

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

Mission: Contribute to global health by strengthening local capacities of developing countries to reduce the impact of infectious diseases on vulnerable populations.

No new digest content identified.

#### Gavi [to 14 January 2017]

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

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## **GHIT Fund** [to 14 January 2017]

https://www.ghitfund.org/

GHIT was set up in 2012 with the aim of developing new tools to tackle infectious diseases that devastate the world's poorest people. Other funders include six Japanese pharmaceutical companies, the Japanese Government and the Bill & Melinda Gates Foundation. No new digest content identified.

## **Global Fund** [to 14 January 2017]

http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=No new digest content identified.

## **Hilleman Laboratories** [to 14 January 2017]

http://www.hillemanlabs.org/ No new digest content identified

## **Human Vaccines Project** [to 14 January 2017]

http://www.humanvaccinesproject.org/media/press-releases/ No new digest content identified.

### **IAVI – International AIDS Vaccine Initiative** [to 14 January 2017]

https://www.iavi.org/
No new digest content identified

## **IFPMA** [to 14 January 2017]

http://www.ifpma.org/resources/news-releases/ No new digest content identified

#### **UNICEF** [to 14 January 2017]

http://www.unicef.org/media/media 89711.html No new digest content identified

#### The Vaccine Confidence Project [to 14 January 2017]

http://www.vaccineconfidence.org/ No new digest content identified

## **Wellcome Trust** [to 14 January 2017]

https://wellcome.ac.uk/news No new digest content identified.

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

Vaccines and Global Health: The Week in Review has expanded its coverage of new reports, books, research and analysis published independent of the journal channel covered in Journal Watch below. Our interests span immunization and vaccines, as well as global public health,

health governance, and associated themes. If you would like to suggest content to be included in this service, please contact David Curry at: <a href="mailto:david.r.curry@centerforvaccineethicsandpolicy.org">david.r.curry@centerforvaccineethicsandpolicy.org</a>

No new content identified.

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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**

January 2017 Volume 45, Issue 1, p1-104, e1-e22 <a href="http://www.ajicjournal.org/current">http://www.ajicjournal.org/current</a> [Reviewed earlier]

## **American Journal of Preventive Medicine**

January 2017 Volume 52, Issue 1, p1-134, e1-e32 <a href="http://www.ajpmonline.org/current">http://www.ajpmonline.org/current</a> [Reviewed earlier]

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

Volume 107, Issue 1 (January 2017) http://ajph.aphapublications.org/toc/ajph/current [Reviewed earlier]

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

January 2017; 96 (1) <a href="http://www.ajtmh.org/content/current">http://www.ajtmh.org/content/current</a> *Editorials* 

<u>Evidence-Based Policies on Migration and Global Health are Essential to Maintain</u> <u>the Health of Those Inside and Outside the United States</u>

Philip J. Rosenthal, Daniel G. Bausch, Stephen Higgs, N. Regina Rabinovich, David R. Hill, Christopher V. Plowe, Karen A. Goraleski, and Patricia F. Walker Am J Trop Med Hyg 2017 96:5-6; doi:10.4269/ajtmh.961ed *Excerpt* 

...In addition to maintaining a humane and evidence-based U.S. policy on migration, we must continue to engage and invest in programs that improve the health of vulnerable populations worldwide. Reaching out to enhance the well-being of those whose lives has been torn apart by war and oppression should be a fundamental and perhaps defining American principle. Programs for populations in need around the world should not be considered antiquated historical notions or reflective of an outmoded inscription on the Statue of Liberty. Indeed, U.S. government leaders from both sides of the political aisle have championed programs aimed at global health, including the creation of the Peace Corps by President John F. Kennedy in 1961, and the President's Emergency Plan for AIDS Relief and President's Malaria Initiative by President George W. Bush in 2003 and 2005, respectively. Additional efforts have been shared with other developed countries, notably the Global Fund to Fight AIDS, Tuberculosis, and Malaria. These well-managed programs have offered enormous benefits to the citizens of the developing world, but they have also directly benefitted the United States, by helping to control some of the most important infectious diseases that threaten all of us, by building diplomatic bridges of good will with populations around the world, and by exemplifying the best of American values of kindness and compassion...

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

3 January 2017 Vol: 166, Issue 1 <a href="http://annals.org/issue.aspx">http://annals.org/issue.aspx</a> [Reviewed earliewr]

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

http://resource-allocation.biomedcentral.com/ (Accessed 14 January 2017) [No new content]

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

http://www.biomedcentral.com/bmchealthservres/content (Accessed 14 January 2017) [No new digest content identified]

#### **BMC Infectious Diseases**

http://www.biomedcentral.com/bmcinfectdis/content (Accessed 14 January 2017) Research article

## Mumps transmission in social networks: a cohort study

Mumps emerged among highly vaccinated populations in the Netherlands. This offered a unique opportunity to study mumps virus transmission. In particular the extent to which asymptomatic infections in vaccinate...

Susan Hahné, Tessa Schurink, Jacco Wallinga, Jeroen Kerkhof, Marianne van der Sande, Rob van Binnendijk and Hester de Melker

BMC Infectious Diseases 2017 17:56

Published on: 10 January 2017

#### Research article

## <u>Seasonal influenza vaccination in pregnant women: knowledge, attitudes, and behaviors in Italy</u>

The aims of this study were to assess the knowledge, attitudes, and behaviors towards seasonal influenza and its vaccination among pregnant women.

Francesco Napolitano, Paola Napolitano and Italo Francesco Angelillo

BMC Infectious Diseases 2017 17:48

Published on: 9 January 2017

#### **BMC Medical Ethics**

http://www.biomedcentral.com/bmcmedethics/content (Accessed 14 January 2017) [No new digest content identified]

#### **BMC Medicine**

http://www.biomedcentral.com/bmcmed/content (Accessed 14 January 2017) [No new digest content identified]

## **BMC Pregnancy and Childbirth**

http://www.biomedcentral.com/bmcpregnancychildbirth/content (Accessed 14 January 2017)
[No new digest content identified]

#### **BMC Public Health**

http://bmcpublichealth.biomedcentral.com/articles (Accessed 14 January 2017) Research article

## An audit of the quality of online immunisation information available to Australian parents

The Internet is increasingly a source of health information for parents, who use the Internet alongside health care providers for immunisation information. Concerns have been raised about the reliability of on...

K. E. Wiley, M. Steffens, N. Berry and J. Leask BMC Public Health 2017 17:76

Published on: 13 January 2017

#### **BMC Research Notes**

http://www.biomedcentral.com/bmcresnotes/content (Accessed 14 January 2017) [No new digest content identified]

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#### **BMJ Open**

2017, Volume 7, Issue 1 http://bmjopen.bmj.com/content/current [Reviewed earlier]

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

Volume 95, Number 1, January 2017, 1-84 http://www.who.int/bulletin/volumes/94/11/en/ [Reviewed earlier]

## **Child Care, Health and Development**

January 2017 Volume 43, Issue 1 Pages 1–159 <a href="http://onlinelibrary.wiley.com/doi/10.1111/cch.v43.1/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/cch.v43.1/issuetoc</a> [Reviewed earlier]

## **Clinical Therapeutics**

December 2016 Volume 38, Issue 12, p2509-2710 <a href="http://www.clinicaltherapeutics.com/issue/S0149-2918(16)X0012-4">http://www.clinicaltherapeutics.com/issue/S0149-2918(16)X0012-4</a> [Reviewed earlier]

#### Complexity

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

#### **Conflict and Health**

http://www.conflictandhealth.com/ [Accessed 14 January 2017] [No new digest content identified]

## **Contemporary Clinical Trials**

Volume 52, Pages 1-100 (January 2017) http://www.sciencedirect.com/science/journal/15517144/52 [Reviewed earlier]

#### **Current Opinion in Infectious Diseases**

February 2017 - Volume 30 - Issue 1 pp: v-vi,1-142 <a href="http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx">http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx</a> [Reviewed earlier]

## **Developing World Bioethics**

December 2016 Volume 16, Issue 3 Pages 121–180

http://onlinelibrary.wiley.com/doi/10.1111/dewb.2016.16.issue-2/issuetoc

Special Issue: Ethics of Health Systems Research in Low and Middle Income Countries

[Reviewed earlier]

### **Development in Practice**

Volume 24, Number 8

http://www.developmentinpractice.org/journals/volume-24-number-8

[Reviewed earlier]

#### **Disasters**

January 2017 Volume 41, Issue 1 Pages 1–208 <a href="http://onlinelibrary.wiley.com/doi/10.1111/disa.2017.41.issue-1/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/disa.2017.41.issue-1/issuetoc</a> [Reviewed earlier]

## **Emerging Infectious Diseases**

Volume 23, Number 1—January 2017 <a href="http://wwwnc.cdc.gov/eid/">http://wwwnc.cdc.gov/eid/</a> [Reviewed earlier]

## **Epidemics**

Volume 17, In Progress (December 2016) <a href="http://www.sciencedirect.com/science/journal/17554365">http://www.sciencedirect.com/science/journal/17554365</a> [Reviewed earlier]

## **Epidemiology and Infection**

Volume 145 - Issue 1 - January 2017 <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 6, 1 December 2016 http://eurpub.oxfordjournals.org/content/26/6 Editorials

<u>Lonely and bored stiff: challenging phase for ethnic minority and migrant health in</u>
<u>Europe</u> Restricted Access

Charles Agyemang Eur J Public Health (2016) 26 (6): 898-899 DOI:

http://dx.doi.org/10.1093/eurpub/ckw112 First published online: 13 October 2016 (2 pages)

#### Viewpoint

## <u>Environmental and public health tracking to advance knowledge for planetary health</u>

Behrooz Behbod, Paolo Lauriola, Giovanni Leonardi, Helen Crabbe, Rebecca Close, Brigit Staatsen, Lisbeth E. Knudsen, Kees de Hoogh, Sylvia Medina, Jan C. Semenza, Tony Fletcher Eur J Public Health (2016) 26 (6): 900 DOI: http://dx.doi.org/10.1093/eurpub/ckw176 First published online: 15 October 2016 (1 pages)

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

December 2016 | Volume 4 | Issue 4 http://www.ghspjournal.org/content/current [Reviewed earlier]

#### **Global Public Health**

Volume 12, 2017 Issue 2 <a href="http://www.tandfonline.com/toc/rgph20/current">http://www.tandfonline.com/toc/rgph20/current</a> [Reviewed earlier]

#### **Globalization and Health**

http://www.globalizationandhealth.com/ [Accessed 14 January 2017] [No new digest content identified]

### **Health Affairs**

December 2016; Volume 35, Issue 12 <a href="http://content.healthaffairs.org/content/current">http://content.healthaffairs.org/content/current</a> <a href="Issue Focus: Oral Health & More">Issue Focus: Oral Health & More</a> <a href="Reviewed earlier">[Reviewed earlier</a>]

## **Health and Human Rights**

Volume 18, Issue 2, December 2016 <a href="http://www.hhrjournal.org/">http://www.hhrjournal.org/</a>

Special Section: Universal Health Coverage and Human Rights

[Reviewed earlier]

#### **Health Economics, Policy and Law**

Volume 12 - Issue 1 - January 2017 <a href="https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue">https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue</a> [Reviewed earlier]

## **Health Policy and Planning**

Volume 31 Issue 14 January 2017 <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 14 January 2017] [No new content]

### **Humanitarian Exchange Magazine**

Number 67 September 2016 http://odihpn.org/magazine/humanitarian-innovation/ *Refugees and vulnerable migrants in Europe* [Reviewed earlier]

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

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

## **Infectious Agents and Cancer**

http://www.infectagentscancer.com/content [Accessed 14 January 2017] [No new digest content identified]

### **Infectious Diseases of Poverty**

http://www.idpjournal.com/content [Accessed 14 January 2017] Research Article

## <u>Domestic trends in malaria research and development in China and its global influence</u>

Yang-Mu Huang, Lu-Wen Shi, Rui She, Jing Bai, Shi-Yong Jiao and Yan Guo

Published on: 10 January 2017 Abstract

Background

Though many countries, including China, are moving towards malaria elimination, malaria remains a major global health threat. Due to the spread of antimalarial drug resistance and the need for innovative medical products during the elimination phase, further research and development (R&D) of innovative tools in both epidemic and elimination areas is needed. This study aims to identify the trends and gaps in malaria R&D in China, and aims to offer suggestions on how China can be more effectively involved in global malaria R&D. Methods

Quantitative analysis was carried out by collecting data on Chinese malaria-related research programmes between 1985 and 2014, invention patents in China from 1985 to 2014, and articles published by Chinese researchers in PubMed and Chinese databases from 2005 to 2014. All data were screened and extracted for numerical analysis and were categorized into basic sciences, drug/drug resistance, immunology/vaccines, or diagnostics/detection for chronological and subgroup comparisons.

#### Results

The number of malaria R&D activities have shown a trend of increase during the past 30 years, however these activities have fluctuated within the past few years. During the past 10 years, R&D on drug/drug resistance accounted for the highest percentages of research programmes (32.4%), articles (55.0% in PubMed and 50.6% in Chinese databases) and patents (45.5%). However, these R&D activities were mainly related to artemisinin. R&D on immunology/vaccines has been a continuous interest for China's public entities, but the focus remains on basic science. R&D in the area of high-efficiency diagnostics has been rarely seen or reported in China.

#### Conclusions

China has long been devoted to malaria R&D in multiple areas, including drugs, drug resistance, immunology and vaccines. R&D on diagnostics has received significantly less attention, however, it should also be an area where China can make a contribution. More focus on malaria R&D is needed, especially in the area of diagnostics, if China would like to contribute in a more significant way to global malaria control and elimination.

#### **International Health**

Volume 8 Issue 6 November 2016 <a href="http://inthealth.oxfordjournals.org/content/current">http://inthealth.oxfordjournals.org/content/current</a> [Reviewed earlier]

#### **International Journal of Community Medicine and Public Health**

Vol 4, No 1 (2017) January 2017 <a href="http://www.ijcmph.com/index.php/ijcmph/issue/view/1">http://www.ijcmph.com/index.php/ijcmph/issue/view/1</a> [New issue; No relevant content identified]

## **International Journal of Epidemiology**

Volume 45 Issue 5 October 2016 http://ije.oxfordjournals.org/content/current [Reviewed earlier]

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

December 2016 Volume 53, p1-68 <a href="http://www.ijidonline.com/issue/S1201-9712(16)X0011-2">http://www.ijidonline.com/issue/S1201-9712(16)X0011-2</a> [Reviewed earlier]

## **JAMA**

January 10, 2017, Vol 317, No. 2, Pages 103-222

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

**Viewpoint** 

## Revised CIOMS International Ethical Guidelines for Health-Related Research Involving Humans

Johannes J. M. van Delden, MD, PhD; Rieke van der Graaf, PhD JAMA. 2017;317(2):135-136. doi:10.1001/jama.2016.18977 Abstract

The Council for International Organizations of Medical Sciences (CIOMS) was established jointly by the World Health Organization (WHO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1949 as an international, nongovernmental, nonprofit organization and now includes 45 international, national, and associate member organizations, representing many of the biomedical disciplines, national academies of sciences, and medical research councils. CIOMS recently released a new version of its International Ethical Guidelines for Health-Related Research Involving Humans. These guidelines were developed in collaboration with WHO and based on authoritative ethical guidance documents, such as the World Medical Association's Declaration of Helsinki and UNESCO's Universal Declaration on Bioethics and Human Rights. The aim of the guidelines is to provide internationally vetted ethical principles and detailed commentary on how these principles should be applied, with particular attention to conducting research in low- and middle-income countries (LMICs).

#### **JAMA Pediatrics**

January 1, 2017, Vol 171, No. 1, Pages 3-100 <a href="http://archpedi.jamanetwork.com/issue.aspx">http://archpedi.jamanetwork.com/issue.aspx</a> [Reviewed earlier]

## **Journal of Community Health**

Volume 41, Issue 6, December 2016 http://link.springer.com/journal/10900/41/6/page/1 [Reviewed earlier]

## **Journal of Epidemiology & Community Health**

January 2017, Volume 71, Issue 1 <a href="http://jech.bmj.com/content/current">http://jech.bmj.com/content/current</a> [Reviewed earlier]

#### **Journal of Global Ethics**

Volume 12, Issue 3, 2016 <a href="http://www.tandfonline.com/toc/rjge20/current">http://www.tandfonline.com/toc/rjge20/current</a>

Theme Issue: Refugee Crisis: The Borders of Human Mobility

[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)

October-December 2016 Volume 8 | Issue 4 Page Nos. 127-162 <a href="http://www.jgid.org/currentissue.asp?sabs=n">http://www.jgid.org/currentissue.asp?sabs=n</a> [Reviewed earlier]

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

Volume 27, Number 4, November 2016 <a href="https://muse.jhu.edu/issue/35214">https://muse.jhu.edu/issue/35214</a> [Reviewed earlier]

## **Journal of Immigrant and Minority Health**

Volume 18, Issue 6, December 2016 http://link.springer.com/journal/10903/18/6/page/1 [Reviewed earlier]

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

Volume 14, Issue 4, 2016 http://www.tandfonline.com/toc/wimm20/current [Reviewed earlier]

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

Volume 214 Issue 12 December 15, 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**

January 2017, Volume 43, Issue 1 <a href="http://jme.bmj.com/content/current">http://jme.bmj.com/content/current</a> [Reviewed earlier]

#### Journal of Medical Internet Research

Vol 18, No 12 (2016): December <a href="http://www.jmir.org/2016/12">http://www.jmir.org/2016/12</a> [Reviewed earlier]

## **Journal of Medical Microbiology**

Volume 65, Issue 12, December 2016 <a href="http://jmm.microbiologyresearch.org/content/journal/jmm/65/12">http://jmm.microbiologyresearch.org/content/journal/jmm/65/12</a> [Reviewed earlier]

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

Volume 3, Issue 4 (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 14 January 2017 <a href="http://jpids.oxfordjournals.org/content/current">http://jpids.oxfordjournals.org/content/current</a> [Reviewed earlier]

#### **Journal of Pediatrics**

January 2017 Volume 180, p1-300 <a href="http://www.jpeds.com/current">http://www.jpeds.com/current</a> [Reviewed earlier]

#### **Journal of Public Health Policy**

Volume 37, Issue 2 Supplement, November 2016 <a href="http://link.springer.com/journal/41271/37/2/suppl/page/1">http://link.springer.com/journal/41271/37/2/suppl/page/1</a> [Reviewed earlier]

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

01 January 2017; volume 14, issue 126 <a href="http://rsif.royalsocietypublishing.org/content/current">http://rsif.royalsocietypublishing.org/content/current</a> [No new digest content identified]

#### **Journal of Travel Medicine**

Volume 24, Issue 1, January 2017 http://jtm.oxfordjournals.org/content/24/1 Original Article

<u>Pre-travel advice, attitudes and hepatitis A and B vaccination rates among travellers</u> <u>from seven countries</u>

Anita E. Heywood, Hans Nothdurft, Dominique Tessier, Melissa Moodley, Lars Rombo, Cinzia Marano, Laurence De Moerlooze J Travel Med (2017) 24 (1): taw069 DOI: http://dx.doi.org/10.1093/jtm/taw069 First published online: 13 October 2016 (8 pages)

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#### Editor's Choice

## Refusal of recommended travel-related vaccines among U.S. international travellers in Global TravEpiNet

Sara M. Lammert, Sowmya R. Rao, Emily S. Jentes, Jessica K. Fairley, Stefanie Erskine, Allison T. Walker, Stefan H. Hagmann, Mark J. Sotir, Edward T. Ryan, Regina C. LaRocque J Travel Med (2017) 24 (1): taw075 DOI: <a href="http://dx.doi.org/10.1093/jtm/taw075">http://dx.doi.org/10.1093/jtm/taw075</a> First published online: 30 October 2016 (7 pages)

#### **Journal of Virology**

January 2017, volume 91, issue 2 http://jvi.asm.org/content/current Vaccines and Antiviral Agents

## One-Health: a Safe, Efficient, Dual-Use Vaccine for Humans and Animals against Middle East Respiratory Syndrome Coronavirus and Rabies Virus

Christoph Wirblich, Christopher M. Coleman, Drishya Kurup, Tara S. Abraham, John G. Bernbaum, Peter B. Jahrling, Lisa E. Hensley, Reed F. Johnson, Matthew B. Frieman, and Matthias J. Schnell

J. Virol. January 2017 91:e02040-16; Accepted manuscript posted online 2 November 2016 , doi:10.1128/JVI.02040-16

*ABSTRACT* 

Middle East respiratory syndrome coronavirus (MERS-CoV) emerged in 2012 and is a highly pathogenic respiratory virus. There are no treatment options against MERS-CoV for humans or animals, and there are no large-scale clinical trials for therapies against MERS-CoV. To address this need, we developed an inactivated rabies virus (RABV) that contains the MERS-CoV spike (S) protein expressed on its surface. Our initial recombinant vaccine, BNSP333-S, expresses a full-length wild-type MERS-CoV S protein; however, it showed significantly reduced viral titers compared to those of the parental RABV strain and only low-level incorporation of full-length MERS-CoV S into RABV particles. Therefore, we developed a RABV-MERS vector that contained the MERS-CoV S1 domain of the MERS-CoV S protein fused to the RABV G protein C terminus (BNSP333-S1). BNSP333-S1 grew to titers similar to those of the parental vaccine vector BNSP333, and the RABV G-MERS-CoV S1 fusion protein was efficiently expressed and incorporated into RABV particles. When we vaccinated mice, chemically inactivated BNSP333-S1 induced high-titer neutralizing antibodies. Next, we challenged both vaccinated mice and control mice with MERS-CoV after adenovirus transduction of the human dipeptidyl peptidase 4 (hDPP4) receptor and then analyzed the ability of mice to control MERS-CoV infection. Our results demonstrated that vaccinated mice were fully protected from the MERS-CoV challenge, as indicated by the significantly lower MERS-CoV titers and MERS-CoV and mRNA levels in challenged mice than those in unvaccinated controls. These data establish that an inactivated RABV-MERS S-based vaccine may be effective for use in animals and humans in areas where MERS-CoV is endemic.

IMPORTANCE Rabies virus-based vectors have been proven to be efficient dual vaccines against rabies and emergent infectious diseases such as Ebola virus. Here we show that inactivated rabies virus particles containing the MERS-CoV S1 protein induce potent immune responses against MERS-CoV and RABV. This novel vaccine is easy to produce and may be useful to protect target animals, such as camels, as well as humans from deadly MERS-CoV and RABV infections. Our results indicate that this vaccine approach can prevent disease, and the RABV-

based vaccine platform may be a valuable tool for timely vaccine development against emerging infectious diseases.

#### The Lancet

Jan 14, 2017 Volume 389 Number 10065 p127-224 <a href="http://www.thelancet.com/journals/lancet/issue/current">http://www.thelancet.com/journals/lancet/issue/current</a> [No new digest content identified]

#### **Lancet Global Health**

Jan 2017 Volume 5 Number 1 e1-e114 <a href="http://www.thelancet.com/journals/langlo/issue/current">http://www.thelancet.com/journals/langlo/issue/current</a> [Reviewed earlier]

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

Jan 2017 Volume 17 Number 1 p1-116 e1-e29 <a href="http://www.thelancet.com/journals/laninf/issue/current">http://www.thelancet.com/journals/laninf/issue/current</a> [Reviewed earlier]

#### **Maternal and Child Health Journal**

Volume 20, Issue 12, December 2016 http://link.springer.com/journal/10995/20/12/page/1 **Special Issue: Mountain MCH** [Reviewed earlier]

#### **Medical Decision Making (MDM)**

January 2017; 37 (1) <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
December 2016 Volume 94, Issue 4 Pages 695–928
<a href="http://onlinelibrary.wiley.com/doi/10.1111/milq.2016.94.issue-4/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/milq.2016.94.issue-4/issuetoc</a>
Op-Eds

A Very Long Journey: A Decade's Quest for Quarantine Regulations (pages 724–728)

LAWRENCE O. GOSTIN

Version of Record online: 19 DEC 2016 | DOI: 10.1111/1468-0009.12226

Review Article

<u>Instruments Measuring Integrated Care: A Systematic Review of Measurement Properties (pages 862–917)</u>

.

MARY ANN C. BAUTISTA, MILAWATY NURJONO, YEE WEI LIM, EZRA DESSERS and HUBERTUS JM VRIJHOEF

Version of Record online: 19 DEC 2016 | DOI: 10.1111/1468-0009.12233

Policy Points:

- :: Investigations on systematic methodologies for measuring integrated care should coincide with the growing interest in this field of research.
- :: A systematic review of instruments provides insights into integrated care measurement, including setting the research agenda for validating available instruments and informing the decision to develop new ones.
- :: This study is the first systematic review of instruments measuring integrated care with an evidence synthesis of the measurement properties.
- :: We found 209 index instruments measuring different constructs related to integrated care; the strength of evidence on the adequacy of the majority of their measurement properties remained largely unassessed

#### **Nature**

Volume 541 Number 7636 pp133-252 12 January 2017 <a href="http://www.nature.com/nature/current">http://www.nature.com/nature/current</a> issue.html [New issue; No relevant content identified]

#### **Nature Medicine**

January 2017, Volume 23 No 1 pp1-135 http://www.nature.com/nm/journal/v23/n1/index.html [Reviewed earlier]

#### **Nature Reviews Immunology**

January 2017 Vol 17 No 1 <a href="http://www.nature.com/nri/journal/v16/n12/index.html">http://www.nature.com/nri/journal/v16/n12/index.html</a> [Reviewed earlier]

## **New England Journal of Medicine**

January 12, 2017 Vol. 376 No. 2 <a href="http://www.nejm.org/toc/nejm/medical-journal">http://www.nejm.org/toc/nejm/medical-journal</a> <a href="http://www.nejm.org/toc/nejm/medical-journal">Perspective</a>

#### **Eliminating Cholera Transmission in Haiti**

Louise C. Ivers, M.D., M.P.H.

N Engl J Med 2017; 376:101-103 January 12, 2017 DOI: 10.1056/NEJMp1614104 Interview with Dr. Louise Ivers on cholera transmission and vaccination efforts in post-hurricane Haiti. (6:48) <u>Listen Download</u>

When Hurricane Matthew struck on October 4, 2016, it left 1.4 million people in southern Haiti in need of urgent humanitarian assistance; it destroyed homes and health care facilities, flooded water sources with runoff, ruined crops, killed livestock, and displaced hundreds of

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thousands of people. Looming as the next act in the disaster is a resurgence in endemic cholera.

Cholera had not been recorded in Haiti until it was introduced in 2010. The introduction of Vibrio cholerae into a population that had never been exposed to cholera and that had extremely limited access to safe water and sanitation had a predictable effect: an explosive cholera epidemic that has killed at least 10,000 people and caused nearly 800,000 reported cases throughout the country. 1

Now in its seventh year, the epidemic has taken an immeasurable toll on individuals, communities, and the health system in Haiti, and the resources for controlling it have been too limited. In 2015, Haiti reported more cases of cholera per population than any other country. In 2016, there were 29,000 cases of cholera in the first 9 months of the year — already a disaster before the hurricane hit. And as is so often the case, the poor have suffered the most. New approaches are needed to address the ongoing problem and mitigate suffering from cholera in Haiti. The hurricane's aftermath adds urgency to this problem.

On October 13 and 14, 2016, the minister of health and population of Haiti, Daphnee Benoit, convened an expert panel at the U.S. National Institutes of Health to consult on the control of cholera in Haiti with specific reference to the use of vaccines in the aftermath of Hurricane Matthew. Two weeks after Hurricane Matthew, the number of cholera cases had grown, and many were concerned about the impact on human life. The consultation resulted in the following consensus.

The response to Hurricane Matthew must first and foremost address the victims' need for humanitarian relief, through provision of food, shelter, and clean water to those who lack these lifesaving essentials. Rallying emergency clean-water activities to combat the known risk of cholera in the immediate phase is an important strategy. We should assume, at least initially, that there has been further contamination of freshwater sources in Haiti's southern peninsula. Ensuring that people have access to and use effectively chlorinated water, with safe water storage at home (or in shelters), is a critical lifesaving objective.

There is a simultaneous need to ensure that cholera treatment centers and oral rehydration posts are functional. After the hurricane, many of these facilities will have to be rebuilt; resupplied with rehydration fluids, antibiotics, and zinc for children; and supported with staff to perform effective case finding in the community and rapid treatment of the sick. These strategies have not changed since the beginning of the cholera epidemic in 2010, although in recent years resources to implement them have dwindled.

When the cholera epidemic began in Haiti, and for some years afterward, there was a lack of consensus on the role that oral cholera vaccine (OCV) could play in the response. One clear issue, however, was that the supply of vaccine was very limited, and there was limited experience in using OCVs in response to outbreaks. Furthermore, the fact that the most affordable vaccine had not yet met prequalification requirements of the World Health Organization (WHO) meant that the United Nations Children's Fund (UNICEF) and other United Nations agencies could not purchase it.

Since that time, a number of developments have enhanced our ability to control the epidemic in Haiti. Two safe, effective OCVs are now available at an affordable cost (\$1.70 to \$1.85 per dose), are prequalified by the WHO, and are available in increasing quantities. The products are essentially the same vaccine, made by different manufacturers. Shanchol (Shantha Biotechnics, India) was prequalified in 2011. In 2013, a 2-million-dose OCV stockpile was established as a public good to manage the vaccine. Euvichol (Eubiologics, South Korea) was prequalified by the WHO in 2015, and the manufacturer recently announced that it could produce 25 million single-dose vials per year that remain stable at 37°C for 30 days, avoiding waste and enabling delivery to the most remote areas without requiring a stringent cold chain. Other OCVs are available (VaxChora, PaxVax, United States; Dukoral, Valneva, Sweden) but at this time are not considered practical for major public health use in resource-poor settings.

Finally, a series of studies with OCVs in Haiti have demonstrated the efficacy of the Shanchol vaccine in both urban and rural settings, the feasibility of achieving high coverage rates, and the low cost of delivering this vaccine to the population. In one of the poorest urban slums of Haiti, not a single case of culture-confirmed cholera occurred between September 2013 and August 2016 in persons who had received a combined intervention ensuring household chlorination and cholera vaccination. 2-4 This research complements other recent OCV studies from Guinea and South Sudan.

This information fundamentally changes the way health authorities should now consider the use of OCV in controlling cholera. Mass vaccination in Haiti would save lives, and modeling suggests that such an intervention, coupled with targeted, effective water, sanitation, and hygiene interventions, could substantially control, if not eliminate, the disease within a few years of the program's introduction, at an affordable cost. This medium-term plan will have to be undertaken in concert with a long-term effort to realize the human right of access to clean water, a goal that will require a substantial budget and years, if not decades, to accomplish.

Control of cholera was a problem in Haiti for the 6 years before Hurricane Matthew — not only because there were insufficient resources, but also owing to the enormity of the challenge of redressing the population's severely constrained access to clean water and sanitation. One million doses of OCV were requested by the Haitian Ministry of Public Health and Population and authorized as part of the emergency response to Hurricane Matthew. 5 Two shipments of 500,000 doses arrived in Haiti on October 24 and 25, 2016, and the vaccines have been deployed by the Ministry of Health and its partners for urgent use. We of the Special Consulting Group to the Minister of Health and Population of Haiti commend the mass-vaccination approach in the hurricane-affected areas of the south of Haiti as one part of a comprehensive emergency response. In light of recent data on vaccine efficacy, the feasibility of vaccinating in outbreak settings, and the increased availability of safe, effective, and low-cost vaccines, we urge, in addition to an emergency response to cholera in the hurricane-affected communities, that intense and reinvigorated support be provided to the government's National Plan for the Elimination of Cholera in Haiti, including a nationwide two-dose oral cholera vaccination campaign.

Over the past six decades, several public health programs in Haiti (e.g., those focused on HIV care and treatment and control of neglected tropical diseases) have provided models for the world. The increased availability of OCVs and their rollout in a national program could provide an opportunity for the government of Haiti and the international community to demonstrate

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another successful strategy: comprehensive national OCV coverage combined with targeted water, sanitation, and hygiene interventions could eliminate the transmission of cholera in Haiti over the next 3 to 5 years at an affordable cost (some estimates suggest approximately \$66 million). This goal is surely one to aspire to, given the human cost of maintaining the status quo.

Eliminating cholera transmission in Haiti with a combined, integrated approach at the population level would be a major achievement for the government and people of Haiti. It would also have broad implications for the control of cholera in other affected populations around the world. The time for ambitious action on cholera control and elimination in Haiti is now.

#### **Pediatrics**

January 2017, VOLUME 139 / ISSUE <a href="http://pediatrics.aappublications.org/content/139/1?current-issue=y">http://pediatrics.aappublications.org/content/139/1?current-issue=y</a> [Reviewed earlier]

#### **Pharmaceutics**

Volume 8, Issue 4 (December 2016) <a href="http://www.mdpi.com/1999-4923/8/4">http://www.mdpi.com/1999-4923/8/4</a> [No new digest content identified]

#### **PharmacoEconomics**

Volume 35, Issue 1, January 2017 <a href="http://link.springer.com/journal/40273/35/1/page/1">http://link.springer.com/journal/40273/35/1/page/1</a> [Reviewed earlier]

#### **PLOS Currents: Disasters**

http://currents.plos.org/disasters/ [Accessed 14 January 2017] Discussion

## The Politics of Global Public Health in Fragile States and Ungoverned Territories January 9, 2017

The reasons for global health crises and how the world responds to them have dramatically changed over the last half century. Increasingly, natural disasters result in failure of public health and security systems leading to preventable conflict, unconventional war and unprecedented population migration. While scientific expertise exists to mitigate these failures in fragile states and ungoverned territories, inactions are mired by the lack of political will, international legal mandates, and capacity to strategically monitor multidisciplinary public health indicator failures.

## **PLoS Currents: Outbreaks**

http://currents.plos.org/outbreaks/ [Accessed 14 January 2017]

#### Research Article

## Strategic Interactions in Antiviral Drug Use During an Influenza Pandemic

January 12, 2017

Background: The evolution of antiviral drug resistance during influenza pandemics has created widespread concern. Use of antiviral drugs is a main contributor to the evolution of drugresistant strains. Moreover, there are recent examples of influenza viruses acquiring drug resistance seemingly without incurring a fitness penalty that reduces their transmission rate. This creates the possibility of strategic (game theoretical) interaction between jurisdictions making decisions about use of antiviral drug stockpiles.

Methods: We developed and analyzed a 2-player 2-strategy game theoretical model. Each 'player' (an authority in a health jurisdiction) can choose to treat with antiviral drugs at a low rate or a high rate. High treatment rates are more likely to cause emergence of a drug-resistant strain, and once a drug-resistant strain has evolved, it can spread between the two jurisdictions. We determine the Nash equilibria of the game.

Results: We show that there is a coordination game between the jurisdictions, where both players choosing a low treatment rate, or both choosing a high treatment rate, are the only stable outcomes. The socially optimal outcome occurs if both players cooperate by choosing a low treatment rate, thereby avoiding generating drug-resistant mutants. However, such cooperation may fail to materialize if the jurisdictions are closely connected through travel; if the drug-resistant mutant is tolerated (not seen as undesirable); or if the antiviral drug has partial efficacy against transmission of the drug-resistant strain.

Conclusions: Inter-jurisdictional cooperation could be essential during a severe influenza pandemic, but we know little about how jurisdictions will interact in a scenario where highly pathogenic, drug-resistant mutant strains are able to transmit as effectively as non-resistant strains. Therefore, strategic multi-population interactions during influenza pandemics should be further studied.

## **PLoS Medicine**

http://www.plosmedicine.org/ (Accessed 14 January 2017) [No new digest content identified]

#### **PLoS Neglected Tropical Diseases**

http://www.plosntds.org/ (Accessed 14 January 2017) Research Article

<u>Forecasting Zika Incidence in the 2016 Latin America Outbreak Combining</u>
<u>Traditional Disease Surveillance with Search, Social Media, and News Report Data</u>

Sarah F. McGough, John S. Brownstein, Jared B. Hawkins, Mauricio Santillana | published 13 Jan 2017 PLOS Neglected Tropical Diseases http://dx.doi.org/10.1371/journal.pntd.0005295

#### **PLoS One**

http://www.plosone.org/ [Accessed 14 January 2017]

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#### Research Article

## <u>Decreasing Seroprevalence of Measles Antibodies after Vaccination – Possible Gap in Measles Protection in Adults in the Czech Republic</u>

Jan Smetana, Roman Chlibek, Irena Hanovcova, Renata Sosovickova, Libuse Smetanova, Peter Gal, Petr Dite

Research Article | published 13 Jan 2017 PLOS ONE http://dx.doi.org/10.1371/journal.pone.0170257

#### Research Article

## Racial and Ethnic Disparities in Influenza Vaccination among Adults with Chronic Medical Conditions Vary by Age in the United States

Degan Lu, Yanru Qiao, Natalie E. Brown, Junling Wang Research Article | published 12 Jan 2017 PLOS ONE http://dx.doi.org/10.1371/journal.pone.0169679

## **PLoS Pathogens**

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

## Fighting Ebola: A Window for Vaccine Re-evaluation?

Keith J. Chappell, Daniel Watterson | published 12 Jan 2017 PLOS Pathogens http://dx.doi.org/10.1371/journal.ppat.1006037

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

http://www.pnas.org/content/early/ [Accessed 14 January 2017] [No new digest content identified]

### **Prehospital & Disaster Medicine**

Volume 31 - Issue 6 - December 2016 <a href="https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue">https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue</a> [Reviewed earlier]

#### **Preventive Medicine**

Volume 94, Pages 1-72 (January 2017) http://www.sciencedirect.com/science/journal/00917435/94 [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 [No new digest content identified]

#### **Public Health Ethics**

Volume 9 Issue 14 January 2017 <a href="http://phe.oxfordjournals.org/content/current">http://phe.oxfordjournals.org/content/current</a> [Reviewed earlier]

#### **Public Health Reports**

Volume 132, Issue 1, January/February 2017 <a href="http://phr.sagepub.com/content/current">http://phr.sagepub.com/content/current</a> [Reviewed earlier]

#### **Qualitative Health Research**

Volume 27, Issue 2, January 2017 http://qhr.sagepub.com/content/current

Special Issue: Violence

[Reviewed earlier]

## **Reproductive Health**

http://www.reproductive-health-journal.com/content [Accessed 14 January 2017] [No relevant content identified]

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

Recently Published Articles -

http://www.paho.org/journal/index.php?option=com content&view=featured&Itemid=101

#### Special Issue on HIV/AIDS in the Americas

Editorial | Published 13 January

## What will it take to end AIDS in the Americas?

[¿Qué se necesita para terminar con el sida en la Región de las Américas?] Carissa F. Etienne

Overview Published 13 January |

## HIV/AIDS prevention, care and treatment in the Region of the Americas: achievements, challenges and perspectives

[Prevención, atención y tratamiento de la infección por el VIH/sida en la Región de las Américas: logros, retos y perspectivas]

Freddy Pérez, Giovanni Ravasi, J.Peter Figueroa, Beatriz Grinsztejn, Mary Kamb, Omar Sued, and Massimo Ghidinelli

#### **Risk Analysis**

December 2016 Volume 36, Issue 12 Pages 2187–2314 <a href="http://onlinelibrary.wiley.com/doi/10.1111/risa.2017.36.issue-12/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/risa.2017.36.issue-12/issuetoc</a> [New issue; No new relevant content identified]

## **Risk Management and Healthcare Policy**

Volume 9, 2016

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

#### Science

13 January 2017 Vol 355, Issue 6321 <a href="http://www.sciencemag.org/current.dtl">http://www.sciencemag.org/current.dtl</a>
[New issue; No new relevant content identified]

#### **Science Translational Medicine**

11 January 2017 Vol 9, Issue 372 <a href="http://stm.sciencemag.org/">http://stm.sciencemag.org/</a>
[New issue; No new relevant content identified]

#### **Social Science & Medicine**

Volume 171, Pages 1-102 (December 2016) <a href="http://www.sciencedirect.com/science/journal/02779536/170">http://www.sciencedirect.com/science/journal/02779536/170</a> [Reviewed earlier]

#### **Travel Medicine and Infectious Diseases**

November-December, 2016 Volume 14, Issue 6 <a href="http://www.travelmedicinejournal.com/">http://www.travelmedicinejournal.com/</a> [Reviewed earlier]

#### **Tropical Medicine & International Health**

January 2017 Volume 22, Issue 1 Pages 1–121 <a href="http://onlinelibrary.wiley.com/doi/10.1111/tmi.2017.22.issue-1/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/tmi.2017.22.issue-1/issuetoc</a> [Reviewed earlier]

#### Vaccine

Volume 35, Issue 2, Pages 201-410 (5 January 2017) http://www.sciencedirect.com/science/journal/0264410X/35/2

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Original Research Article

## <u>Post-licensure</u>, <u>phase IV</u>, <u>safety study of a live attenuated Japanese encephalitis recombinant vaccine in children in Thailand</u>

Original Research Article

Pages 299-304

Tawee Chotpitayasunondh, Pornpimol Pruekprasert, Thanyawee Puthanakit, Chitsanu Pancharoen, Auchara Tangsathapornpong, Peninnah Oberdorfer, Pope Kosalaraksa, Olarn Prommalikit, Suwimon Tangkittithaworn, Phirangkul Kerdpanich, Chonnamet Techasaensiri, Joanna Korejwo, Sunate Chuenkitmongkol, Guy Houillon

**Abstract** 

Background

Japanese encephalitis is a mosquito-borne viral disease endemic in most countries in Asia. A recombinant live, attenuated Japanese encephalitis virus vaccine, JE-CV, is licensed in 14 countries, including Thailand, for the prevention of Japanese encephalitis in adults and children. Methods

This was a prospective, phase IV, open-label, multicentre, safety study of JE-CV conducted from November 2013 to April 2015, to evaluate rare serious adverse events (AEs). JE-CV was administered to 10,000 healthy children aged 9 months to <5 years in Thailand as a primary (Group 1) or booster (Group 2) vaccination. Serious AEs (SAEs), including AEs of special interest, up to 60 days after administration were evaluated. Immediate Grade 3 systemic AEs up to 30 min after JE-CV administration were also described. Results

The median age of participants was 1.1 years in Group 1 and 3.8 years in Group 2. SAEs were reported in 204 (3.0%) participants in Group 1 and 59 (1.9%) participants in Group 2. Among a total of 294 SAEs in 263 participants, only three events occurring in two participants were considered related to vaccination. All three cases were moderate urticaria, none of which met the definition of AEs of special interest for hypersensitivity. AEs of special interest were reported in 28 (0.4%) participants in Group 1 and 4 (0.1%) participants in Group 2; none were considered related to vaccination. Febrile convulsion was the most frequently reported AE of special interest: 25 (0.4%) participants in Group 1; and 2 (<0.1%) in Group 2. There were no cases of Japanese encephalitis reported. No Grade 3 immediate systemic AEs were reported after any JE-CV vaccination.

Conclusions

Our study did not identify any new safety concerns with JE-CV and confirms its good safety profile.

This study was registered on www.clinicaltrials.gov (NCT01981967; Universal Trial Number: U1111-1127-7052)

## <u>Kinetics of antibody-secreting cell and fecal IgA responses after oral cholera vaccination in different age groups in a cholera endemic country</u>

Original Research Article

Pages 321-328

Marjahan Akhtar, Firdausi Qadri, Taufiqur R. Bhuiyan, Sarmin Akter, Tanzeem A. Rafique, Arifuzzaman Khan, Laila N. Islam, Amit Saha, Ann-Mari Svennerholm, Anna Lundgren *Abstract* 

Immune responses to oral enteric vaccines in children and infants may be influenced by factors such as age, previous priming with related microorganisms and breast feeding. In this study, we aimed to determine optimal time points to assess immune responses to oral enteric vaccines

in different clinical specimens. This was done by investigating antibody secreting cell (ASC) and fecal antibody responses on different days after vaccination using the licensed oral cholera vaccine Dukoral, containing cholera toxin B-subunit (rCTB) and inactivated Vibrio cholerae bacteria, as a model vaccine.

Two vaccine doses were given 2 weeks apart to infants (6–11 months), young children (12–18 months), toddlers (19 months–5 years) and adults in a cholera endemic country (Bangladesh). IgA ASC responses, as determined by the antibodies in lymphocyte supernatant (ALS) assay, plasma IgA and IgG responses and secretory IgA (SIgA) responses in extracts of fecal samples were evaluated 4/5 and 7 days after each vaccination.

After the first vaccine dose, anti-CTB ALS IgA responses in adults and toddlers were high and comparable on day 5 and 7, while responses were low and infrequent in young children. After the second dose, highest ALS responses were detected on day 5 among the time points studied in all age groups and the responses declined until day 7. In contrast, plasma IgA and IgG anti-CTB responses were high both on day 5 and 7 after the second dose. Fecal SIgA responses in young children and infants were highest on day 7 after the second dose.

Our results suggest that ASC/ALS responses to two doses of the oral cholera vaccine Dukoral and related oral vaccines should be analyzed earlier than previously recommended (day 7) at all ages. Fecal antibody responses should preferably be analyzed later than ASC/ALS responses to detect the highest antibody responses.

## Beyond expectations: Post-implementation data shows rotavirus vaccination is likely cost-saving in Australia

Original Research Article

Pages 345-352

J.F. Reyes, J.G. Wood, P. Beutels, K. Macartney, P. McIntyre, R. Menzies, N. Mealing, A.T. Newall

**Abstract** 

Background

Universal vaccination against rotavirus was included in the funded Australian National Immunisation Program in July 2007. Predictive cost-effectiveness models assessed the program before introduction.

Methods

We conducted a retrospective economic evaluation of the Australian rotavirus program using national level post-implementation data on vaccine uptake, before-after measures of program impact and published estimates of excess intussusception cases. These data were used as inputs into a multi-cohort compartmental model which assigned cost and quality of life estimates to relevant health states, adopting a healthcare payer perspective. The primary outcome was discounted cost per quality adjusted life year gained, including or excluding unspecified acute gastroenteritis (AGE) hospitalisations.

Results

Relative to the baseline period (1997–2006), over the 6 years (2007–2012) after implementation of the rotavirus program, we estimated that  $\sim$ 77,000 hospitalisations (17,000 coded rotavirus and 60,000 unspecified AGE) and  $\sim$ 3 deaths were prevented, compared with an estimated excess of 78 cases of intussusception. Approximately 90% of hospitalisations prevented were in children <5 years, with evidence of herd protection in older age groups. The program was cost-saving when observed changes (declines) in both hospitalisations coded as rotavirus and as unspecified AGE were attributed to the rotavirus vaccine program. The adverse

impact of estimated excess cases of intussusception was far outweighed by the benefits of the program.

Conclusion

The inclusion of herd impact and declines in unspecified AGE hospitalisations resulted in the value for money achieved by the Australian rotavirus immunisation program being substantially greater than predicted by pre-implementation models, despite the potential increased cases of intussusception. This Australian experience is likely to be relevant to high-income countries yet to implement rotavirus vaccination programs.

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

https://www.dovepress.com/vaccine-development-and-therapy-archive111 (Accessed 14 January 2017)
[No new content]

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

http://www.mdpi.com/journal/vaccines (Accessed 14 January 2017) [No new content]

#### **Value in Health**

December 2016 Volume 19, Issue 8, p909-1074 <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>

#### **Papillomavirus Research**

<u>In Press, Accepted Manuscript</u> — <u>Note to users</u> Available online 6 January 2017

Human papillomavirus (HPV) in young woman in Britain: Population-based evidence of the effectiveness of the bivalent immunisation programme and burden of quadrivalent and 9-valent vaccine types

C Tanton, D Mesher, S Beddows, K Soldan, S Clifton... - Papillomavirus Research, 2017 Abstract

Background

In 2008, the UK introduced an HPV immunisation programme in girls. Population-based prevalence estimates of bivalent (HPV-16/18), quadrivalent (HPV-6/11/16/18) and 9-valent (HPV-6/11/16/18/31/33/45/52/58) vaccine types, and comparison over time, are needed to monitor impact, evaluate effectiveness and guide decision-making on vaccination strategies. Methods

The third National Survey of Sexual Attitudes and Lifestyles (Natsal-3) in 2010-12, tested urine for HPV from 2,569 sexually-experienced women aged 16–44. We report type-specific HPV prevalence and compare results with 1,798 women in Natsal-2 (1999–2001) using age-adjusted prevalence ratios (APR).

**Findings** 

In Natsal-3, 4.2% of women aged 16-44y were positive for HPV-16/18 and 2.9% for HPV-6/11. In 16–20 year olds, 4.5%, 10.8% and 20.7% had at least one bivalent, quadrivalent or 9-valent vaccine type, respectively. Three-dose vaccine coverage was 52.0% in women aged 18-20y. In this age group, HPV-16/18 prevalence was lower in Natsal-3 than Natsal-2 (5.8% vs 11.2%; APR=0.48[95%CI: 0.24–0.93]), however, prevalences of HPV-6/11, HPV-31/33/45 and HPV-52/58 were unchanged. HPV-16/18 prevalence was also unchanged in women aged 21-44y (APR=0.85[0.61–1.19).

Interpretation

These probability surveys provide evidence of the impact of the bivalent immunisation programme. Reductions were specific to HPV-16/18 and to the age group eligible for vaccination. However, substantial vaccine-preventable HPV remains.

#### **Journal of the American Pharmacists Association**

Article in Press

<u>Interventions to improve dissemination and implementation of Hepatitis B</u> <u>vaccination in patients with diabetes</u>

<u>Thomas Matta</u>, <u>Katherine O'Neal</u>, <u>Jeremy Johnson</u>, <u>Sandra Carter</u>, <u>Michelle Lamb</u>, <u>Lourdes</u> Planas

DOI: <a href="http://dx.doi.org/10.1016/j.japh.2016.11.004">http://dx.doi.org/10.1016/j.japh.2016.11.004</a>

Abstract
Objective

The purpose of this study was to assess provider awareness of routine vaccinations recommended for patients with diabetes and to determine whether pharmacist-led interventions are associated with increased provider implementation of recommendations for hepatitis B vaccination.

Methods

This study was conducted in 3 phases at 2 outpatient clinics affiliated with an academic institution. In phase 1, adults with diabetes who visited the clinics between January and November 2012 and who were eligible for the hepatitis B vaccine were identified. In phase 2, medical residents were surveyed twice for vaccine recommendations and reasons for (not) recommending the hepatitis B vaccine, specifically. Residents were then provided a pharmacist-led in-service about hepatitis B vaccine recommendations. The third phase was initiated in April 2013, following postintervention observation from December 2012 through March 2013. Results

Forty-eight of 100 (48%) medical residents attended the in-service and completed both surveys, with 77% indicating they did not recommend the hepatitis B vaccine. During phase 1, 1441 patients were identified, 0.6% (n = 8) of whom had received at least the first dose of the series. In phase 3, 946 patients were identified with 1.7% (n = 16) having received at least the first dose (P = 0.007).

Conclusion

An attempt to disseminate updated recommendations to providers via educational in-service was successful in increasing the percentage of eligible patients vaccinated with the hepatitis B vaccine.

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## Media/Policy Watch

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

We acknowledge the Western/Northern bias in this initial selection of titles and invite suggestions for expanded coverage. We are conservative in our outlook in adding news sources which largely report on primary content we are already covering above. Many electronic media sources have tiered, fee-based subscription models for access. We will provide full-text where content is published without restriction, but most publications require registration and some subscription level.

#### The Atlantic

http://www.theatlantic.com/magazine/ Accessed 14 January 2017 [No new, unique, relevant content]

#### **BBC**

http://www.bbc.co.uk/ Accessed 14 January 2017 [No new, unique, relevant content]

#### The Economist

http://www.economist.com/ Accessed 14 January 2017 [No new, unique, relevant content]

#### **Financial Times**

http://www.ft.com/home/uk Accessed 14 January 2017 [No new, unique, relevant content]

#### **Forbes**

http://www.forbes.com/
Accessed 14 January 2017

AMA And Family Doctors Rip Trump Vaccine Commission
Jan 10, 2017
Bruce Japsen, Contributor

The American Medical Association and the American Academy of Family Physicians Tuesday night blasted the Trump administration idea that a new commission on vaccine safety was needed.

### **Foreign Affairs**

http://www.foreignaffairs.com/ Accessed 14 January 2017 [No new, unique, relevant content]

#### **Foreign Policy**

http://foreignpolicy.com/ Accessed 14 January 2017

### **Donald Trump and the Anti-Vaxxer Conspiracy Theorists**

The president-elect's dangerous views on the safety of vaccines threaten the lives of millions of Americans.

11 January 2017

By Laurie Garrett

Things are getting down and dirty now. And millions of lives are at stake. I cannot possibly state strongly enough how dangerous it is that President-elect Donald Trump has embraced the notion that vaccination is the cause of autism.

Robert F. Kennedy Jr., a celebrated vaccine skeptic, met with Trump on Jan. 10. Speaking to reporters outside Trump Tower in Manhattan after the meeting, <u>Kennedy said</u> he will chair a commission "on vaccine safety and scientific integrity" at Trump's request, because, "we ought to be debating the science."...

#### The Guardian

http://www.guardiannews.com/ Accessed 14 January 2017 Opinion

#### Trump's vaccine conspiracy theories are a threat to your children

Vaccines have been shown safe and effective. When he hints otherwise, the president-elect is gambling with young lives

13 January 2017

Celine Gounder

Whether Trump is creating a commission on vaccine safety or autism, the message is clear. Trump is offering prominent support to the conspiracy theory that vaccines cause autism. The science on vaccines is very clear: they are safe and effective.

## **New Yorker**

http://www.newyorker.com/ Accessed 14 January 2017

## **Trump's Dangerous Support for Conspiracies About Autism and Vaccines**

By Michael Specter January 11, 2017

## **New York Times**

http://www.nytimes.com/ Accessed 14 January 2017

## Anti-Vaccine Activist Says Trump Wants Him to Lead Panel on Immunization Safety 10 January 2017

#### **Wall Street Journal**

http://online.wsj.com/home-page? wsjregion=na,us& homepage=/home/us Accessed 14 January 2017 [No new, unique, relevant content]

#### **Washington Post**

http://www.washingtonpost.com/

The United States already has a vaccine safety commission. And it works really well, experts say.

The federal panel was established more than 50 years ago and consists of medical and scientific experts as well as a consumer representative.

Lena H. Sun | National/health-science | Jan 13, 2017

## The race to develop a vaccine: Scientists inch closer to preventing Zika

12 January 2017

Several companies and U.S. government institutions are racing to develop a vaccine to prevent infection from the Zika virus. The vaccine candidates to date, which use a variety of approaches, are in different stages of development...

## The Post's View: <u>If Trump keeps stoking vaccine fears, he will endanger children's</u> lives

The president-elect's meeting with a leading vaccine skeptic sent a troubling signal about a critical children's health issues.

Editorial Board | Editorial-Opinion | Jan 12, 2017

PRESIDENT-ELECT Donald Trump's transition team tried to tamp down the report from leading vaccine skeptic Robert F. Kennedy Jr. that Mr. Trump <u>had asked him to lead a new panel</u> on the safety of childhood inoculations. The president-elect, we were told, is only exploring the possibility of forming a government commission on autism. But by even entertaining the idea, Mr. Trump — who has <u>his own troubling history</u> when it comes to vaccine safety — gives new life to debunked conspiracy theories tying autism to vaccines. That in turn endangers children's lives.

Mr. Trump met Tuesday with Mr. Kennedy, a longtime opponent of mandatory vaccination laws who once characterized the shots children receive to guard against illness as a holocaust. The meeting at Trump Tower, which Mr. Kennedy told reporters was requested by Mr. Trump, caused immediate and understandable concern in the medical community.

"It gives it a quasi-legitimacy that I frankly find frightening," <u>William Schaffner</u>, a professor of preventive medicine and infectious diseases at Vanderbilt University, told the New York Times. Theories about a link between vaccines and conditions such as autism have been <u>thoroughly discredited</u> in numerous scientific studies that have established — without any question — the safety of vaccines.

Yet Mr. Trump, 10 days away from taking the oath of office for president, thought it important enough to meet with a leading proponent of conspiracy theories about vaccines, someone who, by the way, <a href="holds a law">holds a law</a> — not a medical — degree. Mr. Trump's past comments about vaccines — "massive combined inoculations to small children is the cause for big increase in autism," <a href="het he tweeted in 2012">he tweeted in 2012</a> — betray an ignorant distrust of vaccines.

If Mr. Trump wants to make attacking autism a priority, he should be applauded. But he needs to go about it responsibly. Experts will tell him that the diagnosis of autism is more prevalent than in the past not because there is an "epidemic," as he once claimed, but because the definition of autism spectrum disorder <a href="has grown more inclusive">has grown more inclusive</a>. And they will assure him there is no connection to vaccines. He will endanger the health of millions of children if he fans doubts about vaccine safety.

## Think Tanks et al

## **Brookings**

http://www.brookings.edu/ Accessed 14 January 2017 [No new relevant content]

## **Center for Global Development**

http://www.cgdev.org/page/press-center Accessed 14 January 2017 [No new relevant content]

### **Council on Foreign Relations**

http://www.cfr.org/ Accessed 14 January 2017 Op-Ed Donald Trump and the Anti-Vaxxer Conspiracy Theorists by Laurie Garrett January 11, 2017 [See Foreign Policy above]

#### **CSIS**

https://www.csis.org/ Accessed 14 January 2017 [No new relevant content]

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