

# Vaccines and Global Health: The Week in Review 29 October 2016 Center for Vaccine Ethics & Policy (CVEP)

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

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

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

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



#### **Milestones**

#### Editor's Note:

We provide the full text of the preliminary report of the WHO SAGE meeting just concluded. The full meeting report will be published in the WHO Weekly Epidemiological Record on 2 December 2016. The meeting documents — including presentations and background readings — can be found at <a href="http://www.who.int/immunization/sage/meetings/2016/October/en/">http://www.who.int/immunization/sage/meetings/2016/October/en/</a>

# <u>Summary of the October 2016 meeting of the Strategic Advisory Group of Experts</u> on immunization (SAGE)

The Strategic Advisory Group of Experts (SAGE) on immunization1 met on 18-20 October 2016 in Geneva, Switzerland.

# Global Vaccine Action Plan: 2016 mid-term review of progress and recommendations

At the mid-term of the Decade of Vaccines (DoV), SAGE reviewed the progress made towards the achievement of the Global Vaccine Action Plan (GVAP) goals. SAGE assessment was based on the report prepared by the DoV secretariat on progress against each of the GVAP indicators2; including a section on "Sustainable financing and supply for immunization" to detail the activities initiated in response to the WHA resolution on access to affordable vaccines3 adopted in 2014, progress reports from the regions4 and from priority countries5.

At the midpoint of the GVAP, SAGE remains very concerned that progress toward the goals to eradicate polio, eliminate measles and rubella, eliminate maternal and neonatal tetanus, and increase equitable access to lifesaving vaccines is too slow.

Global immunization coverage has increased by only 1% since 2010. In 2015, 68 countries fell short of the target to achieve at least 90% national coverage with the third dose of diphtheriatetanus-pertussis vaccine. Twenty-six of these countries reported no change and 25 reported a net decrease in coverage since 2010.

However, SAGE sees many reasons for hope. Sixteen countries, including some of the countries with the highest numbers of un- or under-vaccinated children, have made measurable progress since 2010. Research and development efforts are accelerating the discovery and testing of an expanded portfolio of vaccine candidates and platform delivery technologies.

SAGE reaffirmed that immunization is one of the world's most effective and cost-effective tools against both the threat of emerging diseases and anti-microbial resistance and has a powerful impact on social and economic development. Finally, SAGE made several important recommendations to countries, immunization partners and the DoV secretariat.

Among those recommendations, SAGE recommends that countries demonstrate stronger leadership and governance of national immunization systems by: 2

a) Ensuring ministers at all levels are strong immunization advocates within their countries and regions, conveying the high return on investment, the urgency and the value of investing more in immunization programmes as an integral part of government-supported Universal Health Coverage packages.

- b) Governments are encouraged to enact laws that guarantee access to immunization, establish National Immunization Technical Advisory Groups or equivalent groups, ensure that sufficient budgets are allocated to immunization each year and create mechanisms to monitor and efficiently manage funds at all levels (including those from the private sector).
- c) National leaders must take courageous decisions to initiate necessary upgrades to systems, protocols, and policies that will ensure high immunization coverage that is sustained. Such upgrades might require redesigning supply chains, information systems and procurement policies, and reassessing roles and responsibilities in case the government decides to implement the decentralization of the health system.
- d) National immunization programme managers should report each year to their National Immunization Technical Advisory Group or equivalent groups on progress made, lessons learnt and remaining challenges toward implementing National Immunization Plans and show how these plans are aligned to Regional and Global Vaccine Action Plan goals.

SAGE recommends that countries secure necessary investments to sustain immunization during polio and Gavi transitions.

- a) All countries should mitigate any risk to sustaining effective immunization programmes when polio funding decreases. All Member States with substantial numbers of staff and resources issued from the Global Polio Eradication Initiative are requested to describe, in their polio transition plan, how they propose to maintain and fund critical immunization, laboratory and surveillance activities that are currently supported with polio funding and staff.
- b) In all countries transitioning from Gavi support, all national and global immunization partners must advocate strongly and persistently for increased domestic financing to sustain immunization gains over time.

## **Yellow fever**

Recent outbreaks of yellow fever in Central Africa highlighted the need to revisit and expand the control strategy as well as the vaccine supply, and the need for vaccine supply surge capacity. Therefore, WHO has initiated the development of a new global strategy to Eliminate Yellow Fever Epidemics (EYE strategy) globally by 2026. There are 3 strategic objectives: protect at risk populations, prevent international spread, and rapidly contain outbreaks. The Strategy outlines four key activities: continued access to affordable vaccines through a sustainable vaccine market; political commitment at global, regional and country levels; robust governance and strong partnerships; and research to support better tools and practices. New aspects of the strategy from previous efforts include the revised country risk category, the aim to protect specific risk populations, the need to address the urban risk, and the establishment of a revolving emergency vaccine stockpile. Following establishment of the EYE strategy, WHO and partners will develop an implementation plan.

SAGE confirmed the need for new strategic thinking and supported the general approach of the EYE strategy. SAGE emphasized the importance to link the EYE strategy to existing programmes/initiatives, e.g. measles-rubella strategy, integrated disease surveillance, and also vector control. It was noted that EYE can serve as a driver to raise awareness and preparedness in urban settings for other outbreak prone diseases. Considering the global spread of Aedes mosquitos, rapid urbanization, and increased international travel, it is critical to have surge capacity in the event of an outbreak. SAGE previously reviewed the evidence for the minimum effective dose (also called fractional dose) in June 2016 in the context of the outbreak in Central Africa and supported its use in this type of

situation. The minimum effective dose, administered as a fraction of the volume of the normal dose, should induce a protective immune response equivalent to a full dose. SAGE was updated on the evidence for minimum effective dose, for which most evidence is limited to one of the yellow fever vaccine products. Available studies suggest that a reduced volume dose was equivalent to the standard dose with respect to all measured immunological and virological parameters as long as the dose contained at least 3000 International Units.

SAGE was also updated on the experience of the minimum effective dose campaign in Kinshasa in August 2016. Logistically and operationally, the use of a minimum effective dose was shown to be feasible and a promising approach to protect at-risk populations that would otherwise be left unprotected.

Based on the available evidence, SAGE reaffirmed that a minimum effective dose can be used as part of an exceptional response in a time when there is a large outbreak and a shortage of vaccine.

### Measles and rubella elimination

SAGE reviewed the findings and the recommendations outlined in the mid-term review of the Measles and Rubella Strategic Plan 2012-2022. SAGE commended the MTR team on their work and endorsed the report and its recommendations.

SAGE stressed the critical role of high quality measles and rubella case-based surveillance for achieving the goals of the measles and rubella strategic plans and that countries should move towards weekly reporting to regions. SAGE stressed the importance of achieving and maintaining high population immunity in order to achieve the regional and global measles and rubella goals.

SAGE recommended that a routine second dose of measles containing vaccine (MCV) should be added to national immunization schedules in all countries regardless of MCV1 coverage. In countries meeting the criteria for rubella containing vaccine introduction into national immunization programmes6, measles and rubella containing vaccines (MRCV) should be used in place of single-antigen MCV.

Maternal and neonatal tetanus elimination (MNTE) and broader tetanus prevention SAGE noted that while there was progress with MNTE, the goal to achieve global elimination by 2015 was missed once again. The failure to achieve this goal is a reminder of the persisting health inequities and the inability of some countries to provide basic health services to the most marginalized and vulnerable populations.

Countries yet to achieve MNTE should establish/update and implement their operational plans to achieve the required action within the timelines stated in the report from the Working Group on MNTE and broader tetanus prevention. Achievement of MNTE by 2020 is feasible with timely availability of financial resources and compact single-dose pre-filled auto-disable injection devices (CPAD) to reach the most marginalized populations.

UNICEF, UNFPA (United Nations Populations Fund) and WHO should work with countries to generate and sustain political interest in the continuing elimination of MNT to guard against complacency once a country has been declared to have eliminated the disease.

All immunization programmes should review and adjust their routine immunization schedules to ensure tetanus protection over the life course (3 priming doses in infancy and 3 booster doses in childhood/adolescence). All countries should also scale up and sustain the coverage of clean delivery and improve clean cord care practices. The 3 booster doses schedule intended to achieve protection throughout adulthood (reproductive age for women), and probably providing lifelong protection should preferably be given during the second year of life, between 4-7 years of age, and between 9-15 years of age.

# **Hepatitis B vaccination**

SAGE reemphasized the importance of introduction of the birth dose and urged all countries to introduce universal birth dose without further delays.

All infants should receive their first dose of hepatitis B vaccine as soon as possible after birth, preferably within 24 hours. However, if this is not feasible the birth dose will still be beneficial in preventing perinatal transmission if given within 7 days, although somewhat less than if given within 24 hours. After 7 days, a late birth dose is effective in preventing horizontal transmission and therefore remains beneficial. Therefore, SAGE recommends that all infants receive the birth dose during the first contact with health facilities any time up to the time of the first primary dose.

# Schedules and strategies for human papillomavirus immunization

Noting the high effectiveness and safety of the human papillomavirus (HPV) vaccine, SAGE recommends that it is promptly introduced for adolescent girls as part of a coordinated and comprehensive strategy to prevent cervical cancer and other diseases caused by HPV. The 5

immunization of multiple cohorts of girls aged 9–14 years is recommended when the vaccine is first introduced. If resources are available, the age range could be expanded up to 18 years. SAGE also discussed polio eradication. It was updated on the tOPV to bOPV switch and the progress with polio eradication and started an initial discussion on post eradication.

The full meeting report will be published in the WHO Weekly Epidemiological Record on 2 December 2016. The meeting documents — including presentations and background readings — can be found at <a href="http://www.who.int/immunization/sage/meetings/2016/October/en/">http://www.who.int/immunization/sage/meetings/2016/October/en/</a>

#### References

1 http://www.who.int/imunization/sage/en/index.html

2

http://www.who.int/entity/immunization/global vaccine action plan/gvap secretariat report 2 016.pdf?ua=1

3 <a href="http://apps.who.int/gb/ebwha/pdf">http://apps.who.int/gb/ebwha/pdf</a> files/WHA68-REC1/A68 R1 REC1-en.pdf

4

http://www.who.int/entity/immunization/global\_vaccine\_action\_plan/2\_Regional\_reports\_annex\_GVAP\_secretariat\_report\_2016.pdf?ua=1

5

http://www.who.int/entity/immunization/global vaccine action plan/3 Country reports annex \_GVAP\_secretariat\_report\_2016.pdf?ua=1

6 Rubella Vaccines: WHO Position Paper. WER No. 29, 2011, 86, Pp. 301-316.

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# <u>ZikaPLAN: 25 Research Organizations Unite to Fight Zika Virus and Build Long-term</u> <u>Outbreak Response Capacity in Latin America</u>

RECIFE, Brazil, October 25, 2016 /PRNewswire/ -- 25 leading research and public health organizations from Latin America, North America, Africa, Asia, and Europe gathered in Recife for the launch of ZikaPLAN (Zika Preparedness Latin American Network). This global initiative, created in response to a Horizon 2020 funding call by the European Commission's Directorate-General Research and Innovation, has been formed to address the Zika virus outbreak and the many research and public health challenges it poses. The initiative takes a comprehensive approach to tackle the Zika threat by:

- :: addressing the knowledge gaps and needs in the current Zika outbreak to better understand the disease, prevent its spread and educate the affected populations,
- :: building a sustainable response capacity in Latin America for Zika and other emerging infectious diseases (EID).

The impact of the Zika outbreak took scientists and public health authorities by surprise and hit the most vulnerable populations the hardest. The severity of the outbreak and mutation of the virus have generated numerous research questions. To take effective measures, health authorities need to know the severity of the disease and its impact on public health, what interventions will work to prevent and stop its spread, and how best to manage and treat those who have been infected. This unprecedented Zika outbreak has also highlighted the need to build local capacities: in some of the regions where the virus struck there was not the necessary research infrastructure to understand the threat and take action quickly.

To bridge these gaps, research organizations in the ZikaPLAN consortium will look at Zika's connection with congenital syndromes and neurological complications, and the pathogenesis of severe cases, through a series of clinical studies. They will explore non-vector and vector transmission and risk factors for geographic spread, measure the burden of disease and investigate how the virus has evolved, comparing current and historic strains. ZikaPLAN will look at novel personal preventive measures, innovation in diagnostics and modelling of vector control and vaccine strategies to inform policy decisions. The social sciences will also play a role in ZikaPLAN, which aims to determine the best communication strategies to keep the affected communities informed.

ZikaPLAN will work closely with two other <u>European Union-funded consortia</u>, ZIKAction and ZikAlliance, to establish a Latin American and Caribbean network. This network will address the broader issue of building local capacity in Latin America to prepare for and rapidly launch a large-scale research response to emerging infectious disease threats. ZikaPLAN will contribute to developing an inter-epidemic research plan, policy recommendations, training, research networks and dissemination strategies that are designed to permanently strengthen local capacities, beyond the four years of the project. The three consortia will set up common bodies for the global management of scientific programs, communication, and ethical, regulatory and legal issues.

ZikaPLAN is receiving a €11.5 million grant from the European Union's Horizon 2020 research and innovation program, under grant agreement number 734584.

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# **Emergencies**

# WHO Grade 3 Emergencies [to 29 October 2016]

<u>Iraq</u>

:: WHO and partners gear up to safeguard lives of displaced persons fleeing Mosul

26 October 2016 -- The World Health Organization, together with national health authorities and health cluster partners, have accelerated preparedness and response measures for internally displaced persons from Mosul by prepositioning 46 mobile medical clinics, 45 mobile health teams and 26 ambulances in a number of prioritized areas around the country. Lifesaving medicines and supplies for more than 350 000 beneficiaries have also been prepositioned, including chronic disease medicines, diarrhoeal disease medicines, and trauma and surgical supplies. Additional essential medicines are being delivered from WHO's logistics hub in Dubai, and are also being procured locally.

<u>Nigeria</u> -*No new announcements identified.* South Sudan - *No new announcements identified.* 

The Syrian Arab Republic - No new announcements identified.

Yemen - No new announcements identified.

# WHO Grade 2 Emergencies [to 29 October 2016]

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.

<u>Ukraine</u> - No new announcements identified.

#### Editor's Note:

While the WHO Emergency webpages above do not capture the announcements below, we add them here for continuity in understanding emergency contexts.

WHO Eastern Mediterranean Region EMRO

:: WHO releases emergency funds to support cholera response in Yemen

27 October 2016 – WHO has released approximately US\$ 1 million from its internal emergency funds to support the ongoing response to the cholera outbreak in Yemen. Since the outbreak was announced by the Ministry of Public Health and Population on 6 October, a total of 1184 suspected cases of cholera, including 6 deaths, have been reported. More than 7.6 million people are currently living in areas affected by the outbreak, and more than 3 million internally displaced persons are especially vulnerable.

: WHO expands the system for detection, alert, and containment of potential epidemics in light of Mosul humanitarian response - 26 October 2016

Baghdad, 26 October 2016 – In coordination with the Iraqi Federal Ministry of Health and Ministry of Health of Kurdistan Regional Government, WHO conducted 3 consecutive training sessions from 28 September to 6 October 2016 in Erbil and Suleimaniyah in the Kurdistan region.

The training focused on the early warning alert and response network system (EWARNS) and was targeted at staff from the new health facilities established to respond to the health needs of newly displaced populations in formal and emergency settlements, and hosting communities.

"We have to monitor communicable diseases trends, patterns and vigilance," said Altaf Musani, WHO Representative to Iraq. "EWARNS will be the tool to measure these trends and help to detect early epidemics in displaced population areas to support the federal and regional ministries of health and health cluster partners with effective epidemic-prone disease prevention and control measures," he added.

This series of trainings marked the entry of new 43 health facilities to the network in Iraq to scale up the number of reporting sites to over 180. 24 health staff from Ninewa Directorate of Health received comprehensive training on EWARNS reporting and are ready for deployment to the new health facilities to resume related EWARNS functions...

:: Major campaign launched to immunize 5.8 million Iraqi children against polio 25 October 2016

[See full coverage under "Polio" below]

# **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.

Iraa -

- :: <u>Iraq: Mosul Humanitarian Response Situation Report #3 (23-25 October 2016)</u> *Highlights*
- ...Over 10,500 people are currently displaced and in need of humanitarian assistance. Partners are providing emergency assistance in camps and host communities. The majority of displaced people are sheltering in host communities.
- ...Population movements are fluctuating as the front lines move, including people returning to their homes following improved security conditions in the immediate area.
- ...Assessments have recorded a significant number of female-headed households, raising concerns around the detention or capture of men and boys.
- ...Almost 14,500 people have received emergency assistance within 24 hours of areas newly-retaken from ISIL becoming accessible to humanitarian partners since the start of military operations.

# <u>Syria</u>

- :: 26 October 2016 <u>Under-Secretary-General for Humanitarian Affairs and Emergency Relief</u> Coordinator Stephen O'Brien Statement to the Security Council on Syria, 26 October 2016

#### Yemen

- No new announcements identified.

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#### Haiti

Haiti's Ministry of Health organizing a vaccination campaign against cholera in areas affected by Hurricane Matthew, supported by PAHO-WHO, UNICEF and other partners

Port-au-Prince, Haiti, 27 Oct. 2016-- The Haitian Ministry of Health (MSPP) is setting up a vaccination campaign against cholera in areas ravaged by Hurricane Matthew, with support from the Pan American Health Organization / World Health Organization (PAHO / WHO).

The decision of WHO and other member of the Global Task Force for Cholera Control to approve the request of the MSPP to bring 1 million doses of oral vaccine against cholera is based on the goal of reducing the burden of cholera cases on health care facilities, and of reducing deaths in the departments of the Sud and Grand'Anse, the areas most affected by Hurricane Matthew.

The target population is estimated at over 820,000 people over one year of age. The vaccination campaign will begin November 8, 2016. Activities will focus on the municipalities most vulnerable to cholera outbreaks in the two southern departments of Grand'Anse and Sud, where there has been significant destruction of water and sanitation supply systems.

Haiti's Minister of Public Health, Dr. Daphne Benoit, said that the emergency vaccination campaign was taking place in tragic circumstances that have affected the populations of the south. "The vaccine is an additional intervention which will help us to save lives, but does not replace the efforts that the government supports in the field of water and sanitation," she emphasized.

PAHO-WHO Representative Dr. Jean-Luc Poncelet stressed the importance of the leadership of MSPP in this vaccination campaign, which "will contribute to limit the suffering of individuals and families affected by Hurricane Matthew." Some municipalities in the south west peninsula have reported outbreaks of cholera since the hurricane hit on October 4, "so it is important to work together and with partners to build local capacity for clinical management of cases in the cholera treatment centers," he said.

Poncelet noted that PAHO-WHO will support the Ministry of Health in activities including development of tools and technical support as well as reception, storage and transport of the vaccines and supplies in departments, municipalities and institutions. PAHO/WHO will also support training of vaccination staff supervisors and operators, and the coordination, collection and analysis of information, monitoring and evaluation.

Since Hurricane Matthew struck Haiti on October 4, significant increases in suspected cases of cholera and deaths have been reported from several places in the departments of Sud and Grand'Anse.

Numerous partners that work in Haiti are supporting the cholera vaccination campaign, including UNICEF, GHESKIO, Partners in Health, US Centers for Disease Control and Prevention (CDC), International Medical Corps and others.

# **UNOG - REGULAR PRESS BRIEFING BY THE INFORMATION SERVICE**

25 October 2016

Haiti

Tarik Jasarevic, for the World Health Organization (WHO), said that 500,0000 cholera vaccines had arrived on 22 October and another 500,000 had arrived on 24 October in Port-au-Prince. The one million vaccines had been sent to Haiti following a decision of the Global Taskforce on Cholera Control, taken on 10 October. Vaccination was expected to start early in the week of 31 October, or even on 30 October, in affected departments of Haiti, Sud and Grand Anse. The objective of the campaign was to reduce the burden of cholera cases on health care facilities and reduce deaths in departments affected by the hurricane, preventing cholera's further spread to neighboring departments, including to the capital Port-au-Prince. WHO was in the process of preparing the campaign and would keep the press informed.

In response to a question, Mr. Jasarevic said that as of 17 October there were 465 suspected cholera cases in Grand Anse and 684 in Sud. There was a decrease and stabilization of admissions in cholera treatment centres operating in the two departments, but the peak of cases followed by a rapid decline was to be expected. A second peak could not be excluded given the current situation with water and sanitation. That is why it was important to proceed with the emergency vaccination campaign, and why the Global Taskforce had decided to send the vaccines.

In response to other questions, he said that there would be a single-dose strategy, allowing to cover twice as many people as if the classical two-dose strategy was to be applied. The protection would be lesser, 60 to 70 per cent for severe cases, and shorter in duration, but the objective was to vaccinate as many people as possible in affected areas and to try to reduce the burden. The target population was all persons over one year of age. The protection with a single dose would be less than a year. Out of the one million doses, 700,000 would be moved to the two departments in question as the target population was 655,000 people so far. Some prioritization would be done to vaccinate in communes where people could be rapidly accessed and where the impact would be the biggest, in urban centres where there was more density and an increased risk of transmission. Some 300,000 vaccines would remain in the capital for the time being...

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**Zika virus** [to 29 October 2016] *Public Health Emergency of International Concern (PHEIC)*<a href="http://www.who.int/emergencies/zika-virus/en/">http://www.who.int/emergencies/zika-virus/en/</a>

[See ZikaPLan announcement in Milestones section above]

Zika situation report – 20 October 2016

Full report: <a href="http://apps.who.int/iris/bitstream/10665/250590/1/zikasitrep200ct16-eng.pdf?ua=1">http://apps.who.int/iris/bitstream/10665/250590/1/zikasitrep200ct16-eng.pdf?ua=1</a> Key Updates

- :: Countries and territories reporting mosquito-borne Zika virus infections for the first time in the past week:
  - ... None
- :: Countries and territories reporting microcephaly and other central nervous system (CNS) malformations potentially associated with Zika virus infection for the first time in the past week:
  - ... None
- :: Countries and territories reporting Guillain-Barré syndrome (GBS) cases associated with Zika virus infection for the first time in the past week:
  - ... None
- :: The Ministry of Health of Viet Nam has reported a case of microcephaly, for which testing is underway to determine the cause.
- :: The WHO Zika Virus Research Agenda has been published. The goal of the Agenda is to support the gathering of evidence to strengthen essential public health guidance to prevent and limit the impact of Zika virus and its complications. The Research Agenda identifies critical areas of research for which WHO is uniquely placed to implement and coordinate global action. [see below]
- :: The quarterly update of the Zika Strategic Response Plan has been published. This update provides key information on the epidemiological situation, response, and updated funding information for WHO and partners.

#### **Analysis**

:: Overall, the global risk assessment has not changed.

### WHO Zika virus research agenda

October 2016 :: 19 pages Languages: English

WHO reference number: WHO/ZIKV/PHR/16.1

PDF: <a href="http://apps.who.int/iris/bitstream/10665/250615/1/WHO-ZIKV-PHR-16.1-eng.pdf?ua=1">http://apps.who.int/iris/bitstream/10665/250615/1/WHO-ZIKV-PHR-16.1-eng.pdf?ua=1</a> Overview

The goal of the WHO Zika Virus Research Agenda is to support the generation of evidence needed to strengthen essential public health guidance and actions to prevent and limit the impact of Zika virus and its complications.

The Research Agenda identifies critical areas of research where WHO is uniquely placed to implement or coordinate global activities. Research and evidence are the foundation for sound health policies.

A document summarizes the ongoing efforts of the World Health Organization and Pan American Health Organization, Institut Pasteur and the networks of Fiocruz, CONSISE and ISARIC to generate standardized clinical and epidemiological research protocols and questionnaires to address key public health questions. Specifically, data collected using the standardized protocols will be used to refine and update recommendations for prevention of Zika virus spread, surveillance and case definitions for microcephaly, to help understand the spread, severity, spectrum and impact on the community of ZIKV and to guide public health measures, particularly for pregnant women and couples planning a pregnancy.

**Zika Open** [to 29 October 2016] [Bulletin of the World Health Organization] :: <u>All papers available here</u>
No new papers identified.

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**EBOLA/EVD** [to 29 October 2016]

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

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

#### Editor's Note:

We note that the Ebola tab - which had been listed along with Zika, Yellow Fever, MERS CoV and other emergencies - has been removed from the WHO "home page". We deduce that WHO has suspended issuance of new Situation Reports after resuming them for several weekly cycles. The most recent report posted is <u>EBOLA VIRUS DISEASE - Situation Report - 10 JUNE 2016.</u> We have not encountered any UN Security Council action changing its 2014 designation of Ebola as a "threat to international peace and security." We will continue to highlight key articles and other developments around Ebola in this space.

**NIH** [to 29 October 2016]

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

October 26, 2016

# **Ebola-affected countries receive NIH support to strengthen research capacity**

The recent Ebola epidemic in West Africa highlighted the need for better global preparedness and response to disease outbreaks. To help address that need in Guinea, Liberia and Sierra Leone — the countries most affected by the epidemic — the National Institutes of Health has established a new program to strengthen the research capacity to study Ebola, Lassa fever, yellow fever and other emerging viral diseases. In the initiative's first funding round, NIH's Fogarty International Center is awarding grants to four U.S. institutions that will partner with West African academic centers to design training programs for their scientists and health researchers.

The collaborations aim to develop research training proposals that would strengthen the skills required to evaluate vaccines, develop new diagnostic tests and treatments, and identify the most effective intervention strategies for disease outbreaks. These planning grants, totaling \$200,000, are intended to help institutions prepare to compete for larger, longer-term Fogarty grants to implement research training programs.

"We hope these awards will catalyze efforts to identify existing resources and plan to address development of sustainable research capacity in the countries that suffered so horribly from Ebola," said Fogarty Director Roger I. Glass, M.D., Ph.D. "By training local researchers in epidemiology and lab skills, and helping them form networks with U.S. scientists, we believe future disease outbreaks can be better contained."...

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**POLIO** [to 29 October 2016]

Public Health Emergency of International Concern (PHEIC)

# Polio this week as of 25 October 2016

:: 24 October marked World Polio Day, providing an opportunity to celebrate progress towards a polio-free world and the tireless efforts of many towards this goal. Rotarians and other partners across the world celebrated the day, by raising critical awareness of the need to complete the job. Click the following links for a selection of global awareness raising events marking World Polio Day: Rotary's annual World Polio Day event; Getting to zero cases by Philanthropy Age; and Spotlight World Polio Day 2016.

: The Strategic Advisory Group of Experts on immunization (SAGE) met last week in Geneva, Switzerland. On polio eradication, the group expressed serious concern at the global supply situation of inactivated polio vaccine (IPV), and strongly recommended that countries consider adopting fractional intradermal use of IPV in both routine and supplementary immunization activities, to reduce the volume of IPV needed to cover a population. More.

:: News from around the polio world:

Afghanistan National Emergency Action Plan 2016-2017; Recognizing Health Care Workers; and, the Fight to End Polio in Afghanistan

:: News from around the polio world:

<u>Polio Programme Supports Anti-Fistula Efforts in Ethiopia</u> <u>Containment: Shutting the Proverbial Door on Polioviruses</u>

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

:: Three new WPV1 positive environmental samples were reported in the past week, all from Balochistan (Quetta, Pishin and Killa Abdullah), with collection dates in mid-September. Continued detection of environmental positives throughout 2016 confirms that virus transmission remains geographically widespread across the country, despite strong improvements being achieved.

:: Efforts continue to further strengthen immunization and surveillance activities in all provinces of the country.

# Major campaign launched to immunize 5.8 million Iraqi children against polio

Baghdad, Iraq, 25 October 2016 – On World Polio Day the Ministry of Health with support from UNICEF and the World Health Organization (WHO) launched a weeklong nationwide campaign to immunize Irag's children against polio.

Under the slogan "two drops can change a life," the 5-day campaign aims to reach an estimated 5.8 million children under the age of 5 in Iraq, regardless of previous vaccination status.

Polio is a highly infectious viral disease that attacks the nervous system. Children under 5 years of age are the most vulnerable to the disease, but timely immunization can prevent infection. "The Government of Iraq is committed to polio eradication, and conducted 16 campaigns to that end in 2014 and 2015 as part of the Middle East polio outbreak response," said UNICEF Representative in Iraq Peter Hawkins.

Since April 2014, no new polio cases have been reported in Iraq, thanks to the Government's strong commitment and the hard work of frontline workers. In May 2015, Iraq was removed from the list of infected countries.

However, the risks of a resurgence persist due to possible surveillance and immunization coverage gaps among Iraq's displaced populations as well as those living in inaccessible areas and informal settlements.

"There is still a risk of polio returning to Iraq," said WHO Representative to Iraq, Altaf Musani. "Polio transmission is ongoing in Pakistan and Afghanistan and new cases of polio have also been confirmed in Nigeria," he said. "Until transmission is stopped globally, we need to maintain high levels of vaccination coverage and keep surveillance systems strong, to be on the alert for the virus," he added.

The Iraq Polio partnership conducted 2 national immunization rounds in February and April this year, reaching over 91% of the targeted population.

This month's vaccination campaign will be conducted by the Iraqi Ministry of Health (with support from WHO and UNICEF, with special attention to the most vulnerable children in internally displaced persons (IDPs) and Syrian refugee camps, informal settlements, host affected communities and newly retaken areas. More than 25 000 vaccinators will go from house to house during the campaign, visiting families.

WHO will cover the operational cost, intra and post campaign monitoring, while UNICEF will provide support for focused social mobilization services. In coordination with the Federal Ministry of Health, the Kurdistan Regional Government Ministry of Health, Zain and Korek Telecommunications Company will contribute into social mobilization and communications campaign with a focus on IDPs.

CDC/ACIP [to 29 October 2016]
http://www.cdc.gov/media/index.html
https://www.cdc.gov/vaccines/acip/
Transcript
MONDAY, OCTOBER 24, 2016

<u>Transcript for CDC Press Conference: Can polio be eradicated despite recent setbacks?</u>

Transcript and audio recording of World Polio Day Press Conference

*Media Advisory* MONDAY, OCTOBER 24, 2016

# Can polio be eradicated despite recent setbacks?

The world is at the brink of a historic moment: eradication of polio, one of the most feared scourges of humanity; yet, recent setbacks threaten this long-awaited achievement. On World...

::::::

Yellow Fever [to 29 October 2016]

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

[See Yellow Fever discussion in SAGE meeting summary in Milestones section above]

# **Yellow fever situation report**

28 October 2016

Read the full situation report

Key updates

Angola epidemiological update (as of 22 September):

- :: The last confirmed case had symptom onset on 23 June.
- :: Two new probable cases without a history of yellow fever vaccination were reported from Kwanza Sul province in the last week.
- :: Phase II of the vaccination campaign is ongoing targeting more than 2 million people in 10 provinces.

Democratic Republic of the Congo epidemiological update (as of 18 September):

- :: The last confirmed non-sylvatic case had symptom onset on 12 July.
- :: A new confirmed, sylvatic case was reported from Bominenge Health Zone in Sud Ubangui province.
- :: 14 probable cases are under investigation
- :: The reactive campaign in Mushenge Health Zone in Kasai province, which began on 20 October, is ongoing.

# Analysis

:: The majority of the probable cases in Angola have been ruled out as yellow fever cases by the Institut Pasteur of Dakar. They will remain classified as probable cases until a full battery of tests has been run to determine other possible causes of illness. Once the final results are received the cases will be reclassified. Coincidentally, a previously scheduled pre-emptive vaccination campaign is ongoing in Kwanza Sul province where 2 new probable cases were reported.

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MERS-CoV [to 29 October 2016]

http://www.who.int/emergencies/mers-cov/en/

No new content identified.

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# WHO & Regional Offices [to 29 October 2016]

### WHO financing dialogue

28 October 2016 – The financing dialogue is a key element of WHO's reform process to better address the increasingly complex challenges of health in the 21st century. From persisting problems to new and emerging health threats, WHO needs the capability and flexibility to respond to this evolving environment. WHO is making some fundamental changes to enable it to respond faster and more effectively to emergencies, as well as to anticipate future health challenges and to minimize their impact

# Over 1 million treated with highly effective hepatitis C medicines

27 October 2016 – Over one million people in low- and middle-income countries have been treated with a revolutionary new cure for hepatitis C since its introduction two years ago. The new medicines have a cure rate of over 95%, fewer side effects than previously available therapies, and can completely cure the disease within three months.

# **Highlights**

# Trachoma: WHO-led alliance awarded for saving the sight of millions

October 2016 – The WHO Alliance for the Global Elimination of Trachoma by the year 2020 (GET2020) has been awarded the Global Partnership Award by the International Agency for the Prevention of Blindness. The award is in recognition of the remarkable work accomplished by the Alliance in implementing the WHO-recommended SAFE strategy.

### New web portal on health law and universal health coverage

October 2016 – With countries working towards universal health coverage and the Sustainable Development Goals, WHO has developed a new portal to help strengthen health laws and regulatory systems. The portal provides guidelines, case studies, research, lessons learned, and other resources on health law topics

### Weekly Epidemiological Record, 28 October 2016, vol. 91, 43 (pp. 501-516)

Progress towards eliminating onchocerciasis in the WHO Region of the Americas: verification of elimination of transmission in Guatemala

Progress report on the elimination of human onchocerciasis, 2015–2016 10 facts on rabies

# :: WHO Regional Offices

Selected Press Releases, Announcements

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

No new content identified.

# **WHO Region of the Americas PAHO**

:: <u>Haiti's Ministry of Health organizing a vaccination campaign against cholera in areas affected</u> by Hurricane Matthew, supported by PAHO-WHO, UNICEF and other partners (10/27/2016)

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

:: Prevent brain stroke - 29 October 2016

# **WHO European Region EURO**

- :: <u>Europe strengthens its role in international outbreak response and calls for GOARN 2.0</u> 27-10-2016
- :: <u>Italian Government provides funding to improve health services in eastern Ukraine</u> 26-10-2016
- :: Lead Poisoning Prevention Week: ban lead paint 26-10-2016

# **WHO Eastern Mediterranean Region EMRO**

- :: WHO releases emergency funds to support cholera response in Yemen 27 October 2016 WHO has released approximately US\$ 1 million from its internal emergency funds to support the ongoing response to the cholera outbreak in Yemen. Since the outbreak was announced by the Ministry of Public Health and Population on 6 October, a total of 1184 suspected cases of cholera, including 6 deaths, have been reported. More than 7.6 million people are currently living in areas affected by the outbreak, and more than 3 million internally displaced persons are especially vulnerable.
- :: <u>New neonatal intensive care unit at Heevi Paediatric Hospital in Iraq gives newborns a fighting chance</u> 26 October 2016
- : WHO expands the system for detection, alert, and containment of potential epidemics in light of Mosul humanitarian response 26 October 2016
- :: <u>Major campaign launched to immunize 5.8 million Iraqi children against polio</u> 25 October 2016

### **WHO Western Pacific Region**

:: WHO stresses the importance of neonatal best practices for a healthy start to life MANILA, 25 October 2016 – The neonatal period is one of the most crucial phases in the survival and development of a child. At the recently concluded session of the WHO Regional Committee for the Western Pacific, Member States widely acknowledged the importance of Early Essential Newborn Care (EENC) in reducing neonatal mortality in the Region, and highlighted significant progress made in countries towards scaling-up EENC.

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CDC/ACIP [to 29 October 2016] http://www.cdc.gov/media/index.html

https://www.cdc.gov/vaccines/acip/

Media Statement

FRIDAY, OCTOBER 28, 2016

CDC, Miami-Dade and Miami Beach collaborate and make progress on better understanding and stopping the Zika outbreak

CDC continues to support local efforts to prevent new infections of Zika in Miami-Dade County. To see the latest situation firsthand, Dr. Frieden traveled to Miami on Tuesday, October 25....

*Media Advisory*WEDNESDAY, OCTOBER 26, 2016

# **CDC Foundation's New Business Pulse Focuses on Reducing Tobacco Use**

"Business Pulse: Tobacco Use", launched today by the CDC Foundation, focuses on how employers can improve employee health by reducing tobacco use and exposure to secondhand smoke.

Transcript

MONDAY, OCTOBER 24, 2016

# <u>Transcript for CDC Press Conference: Can polio be eradicated despite recent setbacks?</u>

Transcript and audio recording of World Polio Day Press Conference

Media Advisory

MONDAY, OCTOBER 24, 2016

# Can polio be eradicated despite recent setbacks?

The world is at the brink of a historic moment: eradication of polio, one of the most feared scourges of humanity; yet, recent setbacks threaten this long-awaited achievement. On World...

# MMWR Weekly October 28, 2016 / No. 42

:: <u>Outbreak of Influenza A(H3N2) Variant Virus Infections Among Persons Attending Agricultural Fairs Housing Infected Swine — Michigan and Ohio, July—August 2016</u>

:: Preparedness for Zika Virus Disease — New York City, 2016

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# **Announcements/Perspectives**

Gavi [to 29 October 2016]

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

*IFFIm press release* (restricted access)

# IFFIm issues US\$ 500 million in 3-year floating rate Vaccine Bonds

Funding to increase immunisation of children in the poorest countries

London, 26 October 2016 – The International Finance Facility for Immunisation Company (IFFIm) today priced a US dollar floating rate benchmark bond issuance. The US\$ 500 million, 3-year Vaccine Bonds provide investors an opportunity to fund immunisation programmes by Gavi, the Vaccine Alliance (Gavi), helping protect millions of children in the world's poorest countries against preventable diseases.

This marks IFFIm's first visit to the international US dollar benchmark market since 2013, and is IFFIm's third transaction in the public dollar markets in addition to its two successful US dollar denominated sukuk transactions. The issuance was lead managed by Citi, Deutsche Bank and J.P. Morgan. The issue maturing on 01 November 2019 has a re-offer of 100% and carries a quarterly coupon of +26 basis points over the 3-month USD Libor rate.

"IFFIm Vaccine Bonds continue to attract investors worldwide who want to "do good and do well," says IFFIm Chair René Karsenti. "IFFIm is very pleased to re-enter the FRN market with

this socially responsible transaction which helps to fund life-saving immunisation programmes for Gavi, the Vaccine Alliance."...

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**Industry Watch** [to 29 October 2016]

:: PaxVax's Vaxchora™ Now Available as the Only U.S. Approved Vaccine for Protection Against Cholera

REDWOOD CITY, Calif., Oct. 24, 2016 /PRNewswire/ -- PaxVax, Inc. announced that Vaxchora<sup>™</sup> is now available in the United States (U.S.) as the country's only vaccine for protection against cholera, a highly contagious intestinal diarrheal infection that can cause death in less than 24 hours if left untreated.1...

Vaxchora, a single-dose vaccine, was approved by the U.S. Food and Drug Administration (FDA) in June 2016 for use in U.S. adults traveling to cholera-affected areas as an active immunization against disease caused by Vibrio cholerae serogroup O1. Also in June 2016, The Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP) voted unanimously to recommend Vaxchora for travelers to areas of active cholera transmission...

"We are excited that Vaxchora is now available to Americans traveling to areas affected by cholera. This is particularly timely in light of the number of U.S. citizens, including members of the U.S. military, joining relief efforts in Haiti," said Nima Farzan, Chief Executive Officer and President of PaxVax. "Vaccinating those traveling to cholera-affected areas can help mitigate its spread and can help protect them against the disease," said Farzan.

PaxVax has also made a donation to international medical organization Partners In Health (<a href="http://www.pih.org">http://www.pih.org</a>) to support the relief efforts in Haiti with specific focus on cholera prevention and treatment.

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Fondation Merieux [to 29 October 2016]

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.

25 October 2016, Lyon (France)

ZikaPLAN: Fondation Mérieux unites with 24 Research Organizations to Fight Zika

Virus and Build Long-term Outbreak Response Capacity in Latin America

[See full ZikaPlan announcement in Milestones section above]

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**European Vaccine Initiative** [to 29 October 2016]

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

24 October 2016

**ADVAC - Advanced Course of Vaccinology is accepting applications** 

Time to register for ADVAC 2017! Until 15 November 2016.

::::::

#### **BMGF - Gates Foundation** [to 29 October 2016]

http://www.gatesfoundation.org/Media-Center/Press-Releases

OCTOBER 27, 2016

# **Global Britain, Global Health**

Bill Gates backs British innovation, challenges UK government to step up investment in science and R&D

LONDON/SEATTLE (October 27, 2016) - Today Bill Gates, Sir Richard Branson, and Secretary of State for International Development, Priti Patel, will join over 1,000 of the world's leading scientists in London to celebrate the Grand Challenges programme that finds solutions to the toughest problems in health and development. Grand Challenges partners have invested more than \$1 billion into more than 2,000 innovations from 87 countries. Also today, a ground-breaking new programme to fight Zika, Dengue and Yellow Fever will be announced...

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**AERAS** [to 29 October 2016]

http://www.aeras.org/pressreleases

No new digest content identified.

# Coalition for Epidemic Preparedness Innovations (CEPI) [to 29 October 2016]

http://cepi.net/

No new digest content identified.

# **EDCTP** [to 29 October 2016]

http://www.edctp.org/

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

# **European Medicines Agency** [to 29 October 2016]

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

"EMA IT systems unavailable from 18:00 Friday 28 October to 6:00 Tuesday 1 November"

#### **FDA** [to 29 October 2016]

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

### **GHIT Fund** [to 29 October 2016]

https://www.ghitfund.org/

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

**Global Fund** [to 29 October 2016]

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

# **Hilleman Laboratories** [to 29 October 2016]

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

# **Human Vaccines Project** [to 29 October 2016]

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

# **IAVI – International AIDS Vaccine Initiative** [to 29 October 2016]

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

**IVI** [to 29 October 2016] http://www.ivi.int/ No new digest content identified

**PATH** [to 29 October 2016] http://www.path.org/news/index.php No new digest content identified

**UNAIDS** [to 29 October 2016] <a href="http://www.unaids.org/en/resources/presscentre/">http://www.unaids.org/en/resources/presscentre/</a> No new digest content identified

<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**

October 2016 Volume 44, Issue 10, p1083-1196, e167-e182 <a href="http://www.ajicjournal.org/current">http://www.ajicjournal.org/current</a> [Reviewed earlier]

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

November 2016 Volume 51, Issue 5, p637-864, e119-e154

http://www.ajpmonline.org/current

Theme: Digital Health: Leveraging New Technologies to Develop, Deploy, and

**Evaluate Behavior Change Interventions** 

Guest Editors: Lucy Yardley, Tanzeem Choudhury, Kevin Patrick

Research Articles

Concomitant Adolescent Vaccination in the U.S., 2007-2012

Jennifer L. Moss, Paul L. Reiter, Noel T. Brewer

p693-705

Published online: June 30, 2016

Abstract
Introduction

Concomitant (same-day) delivery of two or more vaccines to adolescents is effective, safe, and efficient. Increasing concomitant vaccination could improve coverage for recommended adolescent vaccines, but little is known about who receives vaccines concomitantly.

Methods

Data came from healthcare provider–verified records on 70,144 adolescents (aged 13–17 years) in the 2008–2012 versions of the National Immunization Survey–Teen who had received at least one dose of tetanus, diphtheria, and acellular pertussis (Tdap) booster; meningococcal conjugate vaccine (MenACWY); or human papillomavirus (HPV) vaccine. Separately for each vaccine, multivariable logistic regression identified adolescent and household correlates of concomitant versus single vaccination, stratified by adolescent sex. Vaccination took place in 2007–2012, data collection in 2008–2012, and data analysis in 2015.

Results

Among vaccinated adolescents, 51%-65% of girls and 25%-53% of boys received two vaccines concomitantly. Concomitant uptake of each vaccine increased over survey years (e.g., 2012 vs 2008: girls' Tdap booster, OR=1.88, 95% CI=1.56, 2.26; boys' Tdap booster, OR=2.62, 95% CI=2.16, 3.16), with the exception of HPV vaccination among boys. Additionally, concomitant vaccination was less common as adolescents got older and in the Northeast (all p<0.05). For MenACWY and HPV vaccine, concomitant uptake was less common for girls whose mothers had higher versus lower education and for boys who lived in metropolitan versus non-metropolitan areas (all p<0.05).

Conclusions

Missed opportunities for concomitant adolescent vaccination persist, particularly for HPV vaccine. Future interventions targeting groups with low rates of concomitant vaccination could improve population-level coverage with recommended vaccines.

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

Volume 106, Issue 11 (November 2016)

http://ajph.aphapublications.org/toc/ajph/current

AJPH SPECIAL SECTION: WORLD HEALTH ORGANIZATION

**Whither WHO? Our Global Health Leadership** 

Elizabeth Fee

American Journal of Public Health: November 2016, Vol. 106, No. 11: 1903–1904.

# **World Health Organization Reform—A Normative or an Operational Organization?**

Derek Yach

American Journal of Public Health: November 2016, Vol. 106, No. 11: 1904–1906.

# Finance and Governance: Critical Challenges for the Next WHO Director-General

Julio Frenk

American Journal of Public Health: November 2016, Vol. 106, No. 11: 1906–1907.

# **A New Leader for a New World Health**

Ariel Pablos-Mendez, Susanna Baker

American Journal of Public Health: November 2016, Vol. 106, No. 11: 1907–1908.

# <u>The Election of the Next World Health Organization Director-General Explained to a Visitor From Mars</u>

Gilles Dussault

American Journal of Public Health: November 2016, Vol. 106, No. 11: 1908–1909.

#### **World Health Organization: Overhaul or Dismantle?**

Suwit Wibulpolprasert, Mushtaque Chowdhury

American Journal of Public Health: November 2016, Vol. 106, No. 11: 1910–1911.

# At the Roots of The World Health Organization's Challenges: Politics and Regionalization

Elizabeth Fee, Marcu Cueto, Theodore M. Brown

American Journal of Public Health: November 2016, Vol. 106, No. 11: 1912–1917.

#### AJPH PERSPECTIVES FROM THE SOCIAL SCIENCES - ISLAM

# **Islamophobia and Public Health in the United States**

Goleen Samari

American Journal of Public Health: November 2016, Vol. 106, No. 11: 1920–1925.

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

October 2016; 95 (4)

http://www.ajtmh.org/content/current

#### [Reviewed earlier]

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

18 October 2016 Vol: 165, Issue 8 <a href="http://annals.org/issue.aspx">http://annals.org/issue.aspx</a> [Reviewed earlier]

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

http://resource-allocation.biomedcentral.com/ (Accessed 29 October 2016) [No new content]

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

http://www.biomedcentral.com/bmchealthservres/content (Accessed 29 October 2016) [No new relevant content]

# **BMC Infectious Diseases**

http://www.biomedcentral.com/bmcinfectdis/content (Accessed 29 October 2016) Research article

# The impact of active surveillance and health education on an Ebola virus disease cluster — Kono District, Sierra Leone, 2014–2015

During December 2014—February 2015, an Ebola outbreak in a village in Kono district, Sierra Leone, began following unsafe funeral practices after the death of a person later confirmed to be infected with Ebola...

Tasha Stehling-Ariza, Alexander Rosewell, Sahr A. Moiba, Brima Berthalomew Yorpie, Kai David Ndomaina, Kai Samuel Jimissa, Eva Leidman, Dingeman J. Rijken, Colin Basler, James Wood and Dumbuya Manso

BMC Infectious Diseases 2016 16:611 Published on: 27 October 2016

#### **BMC Medical Ethics**

http://www.biomedcentral.com/bmcmedethics/content (Accessed 29 October 2016) [No new content]

#### **BMC Medicine**

http://www.biomedcentral.com/bmcmed/content (Accessed 29 October 2016) Editorial

Medicine and the future of health: reflecting on the past to forge ahead

Dale Fisher, Paul Wicks and Zaheer-Ud-Din Babar

BMC Medicine 2016 14:169 Published on: 25 October 2016

**Abstract** 

The development of new therapies has a rich history, evolves quickly with societal trends, and will have an exciting future. The last century has seen an exponential increase in complex interactions between medical practitioners, pharmaceutical companies, governments and patients. We believe technology and societal expectations will open up the opportunity for more individuals to participate as information becomes more freely available and inequality less acceptable. Corporations must recognize that usual market forces do not function ideally in a setting where health is regarded as a human right, and as modern consumers, patients will increasingly take control of their own data, wellbeing, and even the means of production for developing their own treatments. Ethics and legislation will increasingly impact the processes that facilitate drug development, distribution and administration. This article collection is a cross-journal collaboration, between the Journal of Pharmaceutical Policy and Practice (JoPPP) and BMC Medicine that seeks to cover recent advances in drug development, medicines use, policy and access with high clinical and public health relevance in the future.

# **BMC Pregnancy and Childbirth**

http://www.biomedcentral.com/bmcpregnancychildbirth/content (Accessed 29 October 2016) [No new relevant content]

# **BMC Public Health**

http://bmcpublichealth.biomedcentral.com/articles (Accessed 29 October 2016) [No new relevant content]

### **BMC Research Notes**

http://www.biomedcentral.com/bmcresnotes/content (Accessed 29 October 2016) [No new relevant content]

#### **BMJ Open**

2016, Volume 6, Issue 10 <a href="http://bmjopen.bmj.com/content/current">http://bmjopen.bmj.com/content/current</a> [Reviewed earlier]

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

Volume 94, Number 10, October 2016, 709-784 <a href="http://www.who.int/bulletin/volumes/94/10/en/">http://www.who.int/bulletin/volumes/94/10/en/</a> [Reviewed earlier]

# **Child Care, Health and Development**

November 2016 Volume 42, Issue 6 Pages 775–955 http://onlinelibrary.wiley.com/doi/10.1111/cch.v42.6/issuetoc [Reviewed earlier]

# **Clinical Therapeutics**

October 2016 Volume 38, Issue 10, Supplement, e1-e32 <a href="http://www.clinicaltherapeutics.com/issue/S0149-2918(16)X0014-8">http://www.clinicaltherapeutics.com/issue/S0149-2918(16)X0014-8</a> [Reviewed earlier]

# Complexity

September/October 2016 Volume 21, Issue S1 Pages 1–632 <a href="http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.S1/issuetoc">http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.S1/issuetoc</a> [Reviewed earlier]

### **Conflict and Health**

http://www.conflictandhealth.com/ [Accessed 29 October 2016] [No new content]

# **Contemporary Clinical Trials**

Volume 50, In Progress (September 2016) http://www.sciencedirect.com/science/journal/15517144/50 [Reviewed earlier]

# **Current Opinion in Infectious Diseases**

October 2016 - Volume 29 - Issue 5 pp: v-vi,433-537 <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**

August 2016 Volume 16, Issue 2 Pages 61–120 <a href="http://onlinelibrary.wiley.com/doi/10.1111/dewb.2016.16.issue-2/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/dewb.2016.16.issue-2/issuetoc</a> [Reviewed earlier]

### **Development in Practice**

Volume 24, Number 8 <a href="http://www.developmentinpractice.org/journals/volume-24-number-8">http://www.developmentinpractice.org/journals/volume-24-number-8</a> [Reviewed earlier]

#### **Disasters**

October 2016 Volume 40, Issue 4 Pages 589–815 <a href="http://onlinelibrary.wiley.com/doi/10.1111/disa.2016.40.issue-4/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/disa.2016.40.issue-4/issuetoc</a> [Reviewed earlier]

# **Emerging Infectious Diseases**

Volume 22, Number 10—October 2016 <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 144 - Issue 15 - November 2016 <a href="http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue">http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue</a> [Reviewed earlier]

# The European Journal of Public Health

Volume 26, Issue 5, 1 October 2016 http://eurpub.oxfordjournals.org/content/26/5 [Reviewed earlier]

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

September 2016 | Volume 4 | Issue 3 http://www.ghspjournal.org/content/current [Reviewed earlier]

#### **Global Public Health**

Volume 11, Issue 10, 2016 http://www.tandfonline.com/toc/rgph20/current [Reviewed earlier]

#### **Globalization and Health**

http://www.globalizationandhealth.com/ [Accessed 29 October 2016] Research

<u>Civil society participation in the health system: the case of Brazil's Health Councils</u>

Martha Gabriela Martinez and Jillian Clare Kohler

Globalization and Health 2016 12:64

Published on: 26 October 2016

Abstract Background

Brazil created Health Councils to bring together civil society groups, heath professionals, and government officials in the discussion of health policies and health system resource allocation. However, several studies have concluded that Health Councils are not very influential on healthcare policy. This study probes this issue further by providing a descriptive account of some of the challenges civil society face within Brazil's Health Councils.

Methods

Forty semi-structured interviews with Health Council Members at the municipal, state and national levels were conducted in June and July of 2013 and May of 2014. The geographical location of the interviewees covered all five regions of Brazil (North, Northeast, Midwest, Southeast, South) for a total of 5 different municipal Health Councils, 8 different state Health Councils, and the national Health Council in Brasilia. Interview data was analyzed using a thematic approach.

Results

Health Councils are limited by a lack of legal authority, which limits their ability to hold the government accountable for its health service performance, and thus hinders their ability to fulfill their mandate. Equally important, their membership guidelines create a limited level of inclusivity that seems to benefit only well-organized civil society groups. There is a reported lack of support and recognition from the relevant government that negatively affects the degree to which Health Council deliberations are implemented. Other deficiencies include an insufficient amount of resources for Health Council operations, and a lack of training for Health Council members. Lastly, strong individual interests among Health Council members tend to influence how members participate in Health Council discussions.

Conclusions

Brazil's Health Councils fall short in providing an effective forum through which civil society can actively participate in health policy and resource allocation decision-making processes. Restrictive membership guidelines, a lack of autonomy from the government, vulnerability to government manipulation, a lack of support and recognition from the government and insufficient training and operational budgets have made Health Council largely a forum for consultation. Our conclusions highlight, that among other issues, Health Councils need to have the legal authority to act independently to promote government accountability, membership guidelines need to be revised in order include members of marginalized groups, and better training of civil society representatives is required to help them make more informed decisions.

#### **Health Affairs**

October 2016; Volume 35, Issue 10
<a href="http://content.healthaffairs.org/content/current">http://content.healthaffairs.org/content/current</a>
<a href="Issue Focus: Insurance">Issue Focus: Insurance</a>, The ACA, Care In India & More
<a href="Reviewed earlier">[Reviewed earlier</a>]

### **Health and Human Rights**

Volume 18, Issue 1, June 2016

# http://www.hhrjournal.org/

# Special Section: Tuberculosis and the Right to Health

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

# **Health Economics, Policy and Law**

Volume 11 - Issue 4 - October 2016 <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 9 November 2016 http://heapol.oxfordjournals.org/content/current [Reviewed earlier]

# **Health Research Policy and Systems**

http://www.health-policy-systems.com/content [Accessed 29 October 2016] [No new relevant 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 10, 2016 http://www.tandfonline.com/toc/khvi20/current [Reviewed earlier]

## **Infectious Agents and Cancer**

http://www.infectagentscancer.com/content [Accessed 29 October 2016] [No new content]

### **Infectious Diseases of Poverty**

http://www.idpjournal.com/content [Accessed 29 October 2016] [No new content]

#### **International Health**

Volume 8 Issue 5 September 2016 <a href="http://inthealth.oxfordjournals.org/content/current">http://inthealth.oxfordjournals.org/content/current</a> [Reviewed earlier]

# **International Journal of Epidemiology**

Volume 45 Issue 4 August 2016 <a href="http://ije.oxfordjournals.org/content/current">http://ije.oxfordjournals.org/content/current</a> [Reviewed earlier]

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

October 2016 Volume 51, p1-140 <a href="http://www.ijidonline.com/current">http://www.ijidonline.com/current</a> [Reviewed earlier]

#### **JAMA**

October 25, 2016, Vol 316, No. 16, Pages 1615-1726 http://jama.jamanetwork.com/issue.aspx Viewpoint

# **Systems Strategies for Health Throughout the Life Course**

J. Michael McGinnis, MD, MA, MPP; Angela Diaz, MD, MPH; Neal Halfon, MD, MPH JAMA. 2016;316(16):1639-1640. doi:10.1001/jama.2016.14896

This Viewpoint from the National Academy of Medicine's 2016 Vital Directions initiative discusses strategies to improve the health of populations at each stage of life through incentivizing and measuring health system performance to improve health, creating an interoperable digital health platform, and fostering a culture and practice of continuous health improvement.

### **Viewpoint**

### **Addressing Social Determinants of Health and Health Inequalities**

Nancy E. Adler, PhD; M. Maria Glymour, ScD, MS; Jonathan Fielding, MD, MPH JAMA. 2016;316(16):1641-1642. doi:10.1001/jama.2016.14058

This Viewpoint from the National Academy of Medicine's 2016 Vital Directions initiative emphasizes the importance of refocusing some health policies toward addressing social and behavioral determinants of health and the potential effects of reducing health inequalities and improving the health and longevity of all people in the United States.

### **Viewpoint**

### Preparing for Better Health and Health Care for an Aging Population

John W. Rowe, MD; Terry Fulmer, PhD, RN; Linda Fried, MD JAMA. 2016;316(16):1643-1644. doi:10.1001/jama.2016.12335

This Viewpoint from the National Academy of Medicine's 2016 Vital Directions initiative recommends ways to improve the health and health care of older persons, including

development of new care delivery models for people with chronic conditions and strengthening of the elder care workforce.

# **JAMA Pediatrics**

October 1, 2016, Vol 170, No. 10, Pages 919-1032 <a href="http://archpedi.jamanetwork.com/issue.aspx">http://archpedi.jamanetwork.com/issue.aspx</a> [Reviewed earlier]

# **Journal of Community Health**

Volume 41, Issue 5, October 2016 http://link.springer.com/journal/10900/41/5/page/1 [Reviewed earlier]

# **Journal of Epidemiology & Community Health**

October 2016, Volume 70, Issue 10 <a href="http://jech.bmj.com/content/current">http://jech.bmj.com/content/current</a> [Reviewed earlier]

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

Volume 12, Issue 2, 2016 <a href="http://www.tandfonline.com/toc/rjge20/current">http://www.tandfonline.com/toc/rjge20/current</a> [Reviewed earlier]

# Journal of Global Infectious Diseases (JGID)

July-September 2016 Volume 8 | Issue 3 Page Nos. 95-126 <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 3, August 2016 https://muse.jhu.edu/issue/33980 [Reviewed earlier]

# **Journal of Immigrant and Minority Health**

Volume 18, Issue 6, December 2016 http://link.springer.com/journal/10903/18/5/page/1 [New issue; No relevant content identified]

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

Volume 14, Issue 3, 2016

# http://www.tandfonline.com/toc/wimm20/current

# Special Issue: Social Mobilization and Political Participation in the Diaspora During the "Arab Spring"

[Reviewed earlier]

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

Volume 214 Issue 8 October 15, 2016 http://jid.oxfordjournals.org/content/current [Reviewed earlier]

# The Journal of Law, Medicine & Ethics

Winter 2015 Volume 43, Issue 4 Pages 673–913

http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-4/issuetoc

Special Issue: SYMPOSIUM: Harmonizing Privacy Laws to Enable International

Biobank Research: Part I

[14 articles] [Reviewed earlier]

### **Journal of Medical Ethics**

October 2016, Volume 42, Issue 10 <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 10 (2016): October <a href="http://www.jmir.org/2016/10">http://www.jmir.org/2016/10</a>
[New issue; No relevant content identified]

# **Journal of Medical Microbiology**

Volume 65, Issue 10, October 2016 http://jmm.microbiologyresearch.org/content/journal/jmm/65/10

[New issue; No relevant content identified]

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

Volume 3, Issue 3 (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 29 October 2016

http://jpids.oxfordjournals.org/content/current [Reviewed earlier]

### **Journal of Pediatrics**

November 2016 Volume 178, p1-312 <a href="http://www.jpeds.com/current">http://www.jpeds.com/current</a> [New issue; No relevant content identified]

## **Journal of Public Health Policy**

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

# Journal of the Royal Society - Interface

01 October 2016; volume 13, issue 123 <a href="http://rsif.royalsocietypublishing.org/content/current">http://rsif.royalsocietypublishing.org/content/current</a> [New issue; No relevant content identified]

# **Journal of Virology**

November 2016, volume 90, issue 22 <a href="http://jvi.asm.org/content/current">http://jvi.asm.org/content/current</a> [New issue; No relevant digest content identified]

# **The Lancet**

Oct 29, 2016 Volume 388 Number 10056 p2057-2208 <a href="http://www.thelancet.com/journals/lancet/issue/current">http://www.thelancet.com/journals/lancet/issue/current</a> Special Report

### WHO's Director-General candidates: visions and priorities

Richard Horton, Udani Samarasekera

A new Director-General of WHO will be selected in May, 2017. Richard Horton and Udani Samarasekera asked the six candidates competing for the position about their candidacy. The forthcoming election of the next Director-General of WHO comes at a critical moment not only for the world's only multilateral health agency but also for the precarious trajectory of global health itself. WHO is often criticised for failing to live up to the expectations of the health community. Sometimes, as in the case of how the agency managed the early stages of the Ebola virus outbreak, that criticism is justified. But WHO plays a vital and successful, and frequently neglected, part in setting norms and standards for health in countries. It has a powerful convening role. And, should a Director-General choose to do so, the agency has unprecedented authority to offer leadership in health.

As the world enters a new era—that of the Sustainable Development Goals—the Director-General has an essential voice in shaping the meaning of health in an era of human dislocation, pervasive inequality, mass migration, ecological degradation, climate change, war, and humanitarian crisis. Six excellent candidates for Director-General are standing. All have wide

experience in health, as one would expect, but each offers a very different platform. Some candidates have formidable international experience in global health. Others have forged their reputations nationally. Some have strong technical credentials. Others offer political skills. Some come from countries that should be WHO's greatest concern. Others are from nations that are traditionally seen as donors. Some have expertise in what might be considered the traditional agenda of global health (infectious diseases and women's and children's health). Others bring experience of newer concerns. This great diversity of candidates is a strength. It allows the Executive Board of WHO in January, 2017, and then the World Health Assembly in May, to select a candidate based on a clear diagnosis of the global predicament for health and the solutions needed. To help clarify their experience, visions, and ideas, we invited each candidate to offer a brief manifesto and to answer a series of ten questions to illuminate their positions on what we see as some priorities for the organisation...

Series

Maternal Health

# Diversity and divergence: the dynamic burden of poor maternal health

Wendy Graham, Susannah Woodd, Peter Byass, Veronique Filippi, Giorgia Gon, Sandra Virgo, Doris Chou, Sennen Hounton, Rafael Lozano, Robert Pattinson, Susheela Singh 2164

PDF

Maternal Health

# Beyond too little, too late and too much, too soon: a pathway towards evidencebased, respectful maternity care worldwide

Suellen Miller, Edgardo Abalos, Monica Chamillard, Agustin Ciapponi, Daniela Colaci, Daniel Comandé, Virginia Diaz, Stacie Geller, Claudia Hanson, Ana Langer, Victoria Manuelli, Kathryn Millar, Imran Morhason-Bello, Cynthia Pileggi Castro, Vicky Nogueira Pileggi, Nuriya Robinson, Michelle Skaer, João Paulo Souza, Joshua P Vogel, Fernando Althabe

#### Maternal Health

# The scale, scope, coverage, and capability of childbirth care

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#### **Lancet Global Health**

Oct 2016 Volume 4 Number 10 e663-e760 <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**

Oct 2016 Volume 16 Number 10 p1085-1202 e202-e240 <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 10, October 2016 http://link.springer.com/journal/10995/20/10/page/1 [Reviewed earlier]

# **Medical Decision Making (MDM)**

October 2016; 36 (7) <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
September 2016 Volume 94, Issue 3 Pages 437–694
<a href="http://onlinelibrary.wiley.com/doi/10.1111/milq.2016.94.issue-3/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/milq.2016.94.issue-3/issuetoc</a>
[Reviewed earlier]

### **Nature**

Volume 538 Number 7626 pp427-548 27 October 2016 <a href="http://www.nature.com/nature/current">http://www.nature.com/nature/current</a> issue.html [New issue; No relevant digest content identified]

## **Nature Medicine**

October 2016, Volume 22 No 10 pp1063-1192 http://www.nature.com/nm/journal/v22/n10/index.html [Reviewed earlier]

# **Nature Reviews Immunology**

October 2016 Vol 16 No 10 <a href="http://www.nature.com/nri/journal/v16/n10/index.html">http://www.nature.com/nri/journal/v16/n10/index.html</a> [Reviewed earlier]

## **New England Journal of Medicine**

October 27, 2016 Vol. 375 No. 17 <a href="http://www.nejm.org/toc/nejm/medical-journal">http://www.nejm.org/toc/nejm/medical-journal</a> [New issue; No relevant content identified]

#### **Pediatrics**

October 2016, VOLUME 138 / ISSUE 4 <a href="http://pediatrics.aappublications.org/content/138/4?current-issue=y">http://pediatrics.aappublications.org/content/138/4?current-issue=y</a> [Reviewed earlier]

#### **Pharmaceutics**

Volume 8, Issue 3 (September 2016) <a href="http://www.mdpi.com/1999-4923/8/3">http://www.mdpi.com/1999-4923/8/3</a> [Reviewed earlier

#### **PharmacoEconomics**

Volume 34, Issue 11, November 2016 http://link.springer.com/journal/40273/34/11/page/1 [New issue; No relevant digest content identified]

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

http://currents.plos.org/disasters/ [Accessed 29 October 2016]

**Quality of Life of Persons Injured on 9/11: Qualitative Analysis from the World Trade Center Health Registry** 

October 27, 2016 · Research Article

Introduction: A number of studies published by the World Trade Center Health Registry (Registry) document the prevalence of injuries sustained by victims of the World Trade Center Disaster (WTCD) on 9/11. Injury occurrence during or in the immediate aftermath of this event has been shown to be a risk factor for long-term adverse physical and mental health status. More recent reports of ongoing health and mental health problems and overall poor quality of life among survivors led us to undertake this qualitative study to explore the long-term impact of having both disaster-related injuries and peri-event traumatic exposure on quality of life in disaster survivors.

Methods: Semi-structured, in-depth individual telephone interviews were conducted with 33 Registry enrollees who reported being injured on 9/11/01. Topics included: extent and circumstance of the injury(ies), description of medical treatment for injury, current health and functional status, and lifestyle changes resulting from the WTCD. The interviews were recorded, transcribed, and inductively open-coded for thematic analysis.

Results: Six themes emerged with respect to long term recovery and quality of life: concurrent experience of injury with exposure to peri-event traumatic exposure (e.g., witnessing death or destruction, perceived life threat, etc.); sub-optimal quality and timeliness of short- and long-term medical care for the injury reported and mental health care; poor ongoing health status, functional limitations, and disabilities; adverse impact on lifestyle; lack of social support; and adverse economic impact. Many study participants, especially those reporting more serious injuries, also reported self-imposed social isolation, an inability to participate in or take enjoyment from previously enjoyable leisure and social activities and greatly diminished overall quality of life.

Discussion: This study provided unique insight into the long-term impact of disasters on survivors. Long after physical injuries have healed, some injured disaster survivors report having serious health and mental health problems, economic problems due to loss of livelihood, limited sources of social support, and profound social isolation. Strategies for addressing the long-term health problems of disaster survivors are needed in order to support recovery.

# <u>Developing the Philippines as a Global Hub for Disaster Risk Reduction – A Health Research Initiative as Presented at the 10th Philippine National Health Research System Week Celebration</u>

October 25, 2016 · Discussion

The recent Philippine National Health Research System (PNHRS) Week Celebration highlighted the growing commitment to Disaster Risk Reduction (DRR) in the Philippines. The event was lead by the Philippine Council for Health Research and Development of the Department of Science and Technology and the Department of Health, and saw the participation of national and international experts in DRR, and numerous research consortia from all over the Philippines. With a central focus on the Sendai Framework for Disaster Risk Reduction, the DRR related events recognised the significant disaster risks faced in the Philippines. They also illustrated the Philippine strengths and experience in DRR. Key innovations in science and technology showcased at the conference include the web-base hazard mapping applications 'Project NOAH' and 'FaultFinder'. Other notable innovations include 'Surveillance in Post Extreme Emergencies and Disasters' (SPEED) which monitors potential outbreaks through a syndromic reporting system. Three areas noted for further development in DRR science and technology included: integrated national hazard assessment, strengthened collaboration, and improved documentation. Finally, the event saw the proposal to develop the Philippines into a global hub for DRR. The combination of the risk profile of the Philippines, established national structures and experience in DRR, as well as scientific and technological innovation in this field are potential factors that could position the Philippines as a future global leader in DRR. The purpose of this article is to formally document the key messages of the DRR-related events of the PNHRS Week Celebration.

### **PLoS Currents: Outbreaks**

http://currents.plos.org/outbreaks/ [Accessed 29 October 2016] [No new content]

### **PLoS Medicine**

http://www.plosmedicine.org/ (Accessed 29 October 2016) Perspective

# **Texas and Its Measles Epidemics**

Peter J. Hotez

| published 25 Oct 2016 PLOS Medicine

http://dx.doi.org/10.1371/journal.pmed.1002153

Globally, the situation was even worse. Measles was one of the leading killers of children, causing millions of deaths annually. Building on the successes of the World Health Organization (WHO)'s smallpox eradication campaign, in 1974, the <u>Expanded Program on Immunization (EPI)</u> was launched, followed by <u>Gavi, The Vaccine Alliance</u> in 2000. Global measles death rates began to decline precipitously. According to the Global Burden of Disease Study 2013, measles deaths decreased 83%, from 544,500 measles deaths in 1990 to 95,600 deaths in 2013 [3]. In the US, measles deaths disappeared [2].

Could large-scale measles outbreaks and deaths return to the US? The measles virus is one of the most highly transmissible human infectious disease agents known, with a basic reproduction number (R0) of 12-18 [4]. This number means that a single primary case in a susceptible population would generate on average 12-18 new cases [4]. Because R0 is so high for measles, vaccine coverage among a population needs to be extremely high, typically exceeding 90%-95%, in order to prevent a measles outbreak in a school or similar setting [4]. However, the latest numbers from Texas indicate a serious downward trend in vaccine coverage to the point where there is a high risk that measles outbreaks will return.

According to the Texas Department of State Health Services, there are now almost 45,000 children with nonmedical or "reasons of conscience" exemptions to school immunization laws, almost double the number of exemptions in  $2010 \, [\underline{5,6}]$  and a 19-fold increase compared to  $2003 \, (Fig \, 2) \, [7]$ .

Measles vaccination coverage in certain Texas counties is dangerously close to dropping below the 95% coverage rate necessary to ensure herd immunity and prevent measles outbreaks. For instance, in Gaines County in West Texas, the percentage of exemptions is now 4.83%, while in Briscoe County in the Texas Panhandle, the percentage is 3.55% (<u>Table 1</u>) [5]. In the very large Austin Independent School District (Travis County), the exemption rate is at 2.02% [5]. Especially troubling are many of the private schools, mostly in Travis County—the Austin, Texas area—where exemption rates often exceed 20%, including more than 40% of the Austin Waldorf School [6]. The rising numbers of nonmedical immunization exemptions across the state in combination with pockets of very low coverage in vulnerable populations is extremely troubling.

Although a detailed analysis has not been conducted on the sociology behind the alarming increase in vaccine exemptions in Travis County and elsewhere, a rapidly growing "anti-vaxxer" movement in the state appears to be contributing to the increase in vaccine exemptions. At its epicenter is the Austin-based "Texans for Vaccine Choice," an organization that describes itself as "a political action committee [PAC] dedicated to protecting vaccine choice rights by ensuring the issue remains at the forefront of political discourse, promoting incumbents and candidates who strongly support our values, and drafting legislation to further solidify these rights" [8]. Their website is set up to take parents step-by-step through the exemption process [9]. Dr. Andrew Wakefield, whose outspoken views and writings alleging links between autism and the measles-mumps-rubella (MMR) vaccine have been refuted by the scientific community [10,11], also now resides in Austin, according to The New York Times [12]. Both Texans for Vaccine Choice and Wakefield are heavily promoting the 2016 documentary "Vaxxed: From Cover-Up to Catastrophe," which was directed by Wakefield and alleges links between vaccination and autism and a cover-up by the US Centers for Disease Control and Prevention (CDC) [13].

In 2015, a study in The Journal of the American Medical Association (JAMA) of a large sample of privately insured children, comprising more than 95,000 children with older siblings—including 994 (1%) diagnosed with autism spectrum disorder (ASD) and 1,929 (2%) with older siblings with ASD—found "no harmful association between MMR vaccine receipt and ASD even among children already at higher risk for ASD" [14]. Similarly, in that same year, a large case-control study in Japan investigating the relationship between the risk of ASD onset and early exposure to MMR or thimerosal (a mercury-based preservative used in vaccines) also found no link [15], while a 2014 evidence-based meta-analysis of five cohort cases including more than

1.2 million children and five case-control studies including 9,920 children similarly found no relationship between vaccination and autism, nor any relationship between autism and MMR, thimerosal, or mercury [16].

As both a Texas-based research scientist developing vaccines to prevent poverty-related neglected diseases [17] and as a father of an adult child with autism [18], I am also intrigued by data indicating that the neurobiological changes in children with ASD begin early in pregnancy, well before vaccinations are given [19].

Despite the evidence base refuting links between vaccines and autism, as well as a lack of plausibility for such links, the numbers of vaccine exemptions for reasons of conscience continue to increase. We're at the point at which I believe we might soon see a return of measles outbreaks, possibly far larger than the one that affected a megachurch in Tarrant County, Texas in 2013 [20]. Given that measles peaks in late winter or early spring [1], I predict measles outbreaks in Texas could happen as early as the winter or spring of 2018.

Sadly, the Texas anti-vaxxer movement has become conflated with fringe political elements to create a dangerous and toxic mix of pseudoscience and conspiracy theories. This is now manifesting as a powerful yet misleading, propaganda-filled film documentary, together with an emboldened PAC designed to influence the Texas State Legislature towards anti-vaccine platforms. I worry that, as the most second-most populated state in the US, Texas is seen as a battleground for the anti-vaxxer movement.

But future measles outbreaks in Texas and possible measles deaths are not inevitable. In California, faced with measles outbreaks in Marin and Orange counties, the State Legislature made the bold move of closing loopholes that allow for nonmedical exemptions to vaccines [21]. This measure could prove to be lifesaving in the coming years. We now need to enact something similar for the children of Texas in order to prevent imminent deaths from measles and other vaccine-preventable childhood diseases.

#### Research Article

# The Global Burden of Latent Tuberculosis Infection: A Re-estimation Using Mathematical Modelling

Rein M. G. J. Houben, Peter J. Dodd | published 25 Oct 2016 PLOS Medicine http://dx.doi.org/10.1371/journal.pmed.1002152 Abstract

Background

The existing estimate of the global burden of latent TB infection (LTBI) as "one-third" of the world population is nearly 20 y old. Given the importance of controlling LTBI as part of the End TB Strategy for eliminating TB by 2050, changes in demography and scientific understanding, and progress in TB control, it is important to re-assess the global burden of LTBI. Methods and Findings

We constructed trends in annual risk in infection (ARI) for countries between 1934 and 2014 using a combination of direct estimates of ARI from LTBI surveys (131 surveys from 1950 to 2011) and indirect estimates of ARI calculated from World Health Organisation (WHO) estimates of smear positive TB prevalence from 1990 to 2014. Gaussian process regression was used to generate ARIs for country-years without data and to represent uncertainty. Estimated

ARI time-series were applied to the demography in each country to calculate the number and proportions of individuals infected, recently infected (infected within 2 y), and recently infected with isoniazid (INH)-resistant strains. Resulting estimates were aggregated by WHO region. We estimated the contribution of existing infections to TB incidence in 2035 and 2050. In 2014, the global burden of LTBI was 23.0% (95% uncertainty interval [UI]: 20.4%–26.4%), amounting to approximately 1.7 billion people. WHO South-East Asia, Western-Pacific, and Africa regions had the highest prevalence and accounted for around 80% of those with LTBI. Prevalence of recent infection was 0.8% (95% UI: 0.7%–0.9%) of the global population, amounting to 55.5 (95% UI: 48.2–63.8) million individuals currently at high risk of TB disease, of which 10.9% (95% UI:10.2%–11.8%) was isoniazid-resistant. Current LTBI alone, assuming no additional infections from 2015 onwards, would be expected to generate TB incidences in the region of 16.5 per 100,000 per year in 2035 and 8.3 per 100,000 per year in 2050. Limitations included the quantity and methodological heterogeneity of direct ARI data, and limited evidence to inform on potential clearance of LTBI.

Conclusions

We estimate that approximately 1.7 billion individuals were latently infected with Mycobacterium tuberculosis (M.tb) globally in 2014, just under a quarter of the global population. Investment in new tools to improve diagnosis and treatment of those with LTBI at risk of progressing to disease is urgently needed to address this latent reservoir if the 2050 target of eliminating TB is to be reached.

# **PLoS Neglected Tropical Diseases**

http://www.plosntds.org/ [Accessed 29 October 2016] Review

### Diagnostics in Ebola Virus Disease in Resource-Rich and Resource-Limited Settings

Robert J Shorten, Colin S Brown, Michael Jacobs, Simon Rattenbury, Andrew J. Simpson, Stephen Mepham

| published 27 Oct 2016 PLOS Neglected Tropical Diseases http://dx.doi.org/10.1371/journal.pntd.0004948

### Editorial

### Blue Marble Health and the Global Burden of Disease Study 2013

Peter J Hotez, Ashish Damania, Mohsen Naghavi | published 27 Oct 2016 PLOS Neglected Tropical Diseases http://dx.doi.org/10.1371/journal.pntd.0004744

### Research Article

Integrated Healthcare Delivery: A Qualitative Research Approach to Identifying and Harmonizing Perspectives of Integrated Neglected Tropical Disease Programs

Arianna Rubin Means, Julie Jacobson, Aryc W. Mosher, Judd L. Walson

| published 24 Oct 2016 PLOS Neglected Tropical Diseases

### **PLoS One**

http://www.plosone.org/ [Accessed 29 October 2016]

### Research Article

# <u>Preparation and Response to the 2014 Ebola Virus Disease Epidemic in Nigeria—The Experience of a Tertiary Hospital in Nigeria</u>

Dimie Ogoina, Abisoye Sunday Oyeyemi, Okubusa Ayah, Austin Onabor A, Adugo Midia, Wisdom Tudou Olomo, Onyaye E. Kunle-Olowu | published 27 Oct 2016 PLOS ONE http://dx.doi.org/10.1371/journal.pone.0165271

### Research Article

# <u>Prevalence and Diagnosis of Latent Tuberculosis Infection in Young Children in the Absence of a Gold Standard</u>

Tomas Maria Perez-Porcuna, Hélio Doyle Pereira-da-Silva, Carlos Ascaso, Adriana Malheiro, Samira Bührer, Flor Martinez-Espinosa, Rosa Abellana | published 26 Oct 2016 PLOS ONE

http://dx.doi.org/10.1371/journal.pone.0164181

### Research Article

# <u>The Impact of Internal Migration on under-Five Mortality in 27 Sub-Saharan African Countries</u>

Abukari I. Issaka, Kingsley E. Agho, Andre M. N. Renzaho | published 26 Oct 2016 PLOS ONE http://dx.doi.org/10.1371/journal.pone.0163179

**Abstract** 

Objective

The literature on the impact of internal migration on under-five mortality in sub-Saharan Africa has been limited. This study examined the impact of internal migration on under-five mortality rate in 27 sub-Saharan African countries.

Design

The analysis used cross-sectional data from the most recent Demographic and Health Surveys of 27 sub-Saharan African countries. Information on the number of live births and the number of under-five deaths in the five years preceding the surveys in these countries was examined. Using variables from which migration data were generated, four migration statuses were computed, and the impact of each migration status on under-five mortality was analysed by using multivariate Cox proportional hazards regression models. Results

Of the 96333 live births, 7036 deaths were reported. Adjusting for internal migration status revealed a 20% increase in under-five mortality rate among urban-rural migrant mothers [HR = 1.20; 95% confidence interval (CI): (1.06-1.35)], a 40% increase in under-five mortality rates among rural non-migrant mothers, [HR = 1.40; 95% CI: (1.29-1.53)] and a 43% increase in under-five deaths among rural-urban migrant mothers [HR = 1.43; 95% CI: (1.30-1.58)]. Whilst under-five mortality rate did not change considerably when we adjusted for country and demographic variables, there were significant decreases among rural non-migrant and rural-urban migrant mothers when health care service utilization factors were adjusted for [HR = 1.20; 95% CI: (1.07-1.33) and [HR = 1.29; 95% CI: (1.14-1.45)]. The decreased risk of under-five deaths was not significant among rural non-migrant and rural-urban migrant mothers when socio-economic factors were adjusted for. Other factors for which there were significant risks of under-five deaths included household poverty, lack of health care services Conclusion

Although under-five child mortality rate declined by 52% between 1990 and 2015 (from 179 to 86 per1000 live births) in sub-Saharan Africa, the continent still has the highest rate in the world. This finding highlights the need to consider providing education and health care services in rural areas, when implementing interventions meant to reduce under-five mortality rates among internal migrant mothers.

# **PLoS Pathogens**

http://journals.plos.org/plospathogens/ (Accessed 29 October 2016) [No new relevant content]

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

http://www.pnas.org/content/early/
[No new relevant content]

# **Prehospital & Disaster Medicine**

Volume 31 - Issue 5 - October 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 90, Pages 1-222 (September 2016) http://www.sciencedirect.com/science/journal/00917435/90 [Reviewed earlier]

### **Proceedings of the Royal Society B**

12 October 2016; volume 283, issue 1840 <a href="http://rspb.royalsocietypublishing.org/content/283/1824?current-issue=y">http://rspb.royalsocietypublishing.org/content/283/1824?current-issue=y</a> [New issue; No relevant content]

### **Public Health Ethics**

Volume 9 Issue 29 October 2016 <a href="http://phe.oxfordjournals.org/content/current">http://phe.oxfordjournals.org/content/current</a> [Reviewed earlier]

### **Public Health Reports**

September/October 2016; 131 (5) http://phr.sagepub.com/content/current [Reviewed earlier]

### **Qualitative Health Research**

October 2016; 26 (12)

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

Special Issue: Responses to Care

[New issue; No relevant content identified]

# **Reproductive Health**

http://www.reproductive-health-journal.com/content

[Accessed 29 October 2016]

**Childbirth in Brazil** Volume 13 Supplement 3

Research

Publication of this supplement was funded by the Oswaldo Cruz Foundation. The articles have been through the journal's standard peer review process for supplements. The Supplement Editor declares that he has no competing interests.

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

Recently Published Articles - September

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

Thematic Issue on Climate-smart and Sustainable societies in the Americas

Addressing public health vulnerabilities and promoting sustainable adaptation [Reviewed earlier]

### **Risk Analysis**

September 2016 Volume 36, Issue 9 Pages 1683–1812

http://onlinelibrary.wiley.com/doi/10.1111/risa.2016.36.issue-9/issuetoc

Special Issue: Air Pollution Health Risks

[Reviewed earlier]

### **Risk Management and Healthcare Policy**

Volume 9, 2016

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

[Reviewed earlier]

#### Science

28 October 2016 Vol 354, Issue 6311

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

[New issue: No relevant content identified]

### **Science Translational Medicine**

26 October 2016 Vol 8, Issue 362

http://stm.sciencemag.org/

[New issue: No relevant content identified]

### **Social Science & Medicine**

Volume 169, Pages 1-202 (November 2016)

http://www.sciencedirect.com/science/journal/02779536/169

Review articles

Associations between quantitative measures of women's empowerment and access to care and health status for mothers and their children: A systematic review of evidence from the developing world

Review Article Pages 119-131 Pierre Pratley Abstract

Research on the association between women's empowerment and maternal and child health has rapidly expanded. However, questions concerning the measurement and aggregation of quantitative indicators of women's empowerment and their associations with measures of maternal and child health status and healthcare utilization remain unanswered. Major challenges include complexity in measuring progress in several dimensions and the situational, context dependent nature of the empowerment process as it relates to improvements in maternal and child health status and maternal care seeking behaviors. This systematic literature review summarizes recent evidence from the developing world regarding the role women's empowerment plays as a social determinant of maternal and child health outcomes. A search of quantitative evidence previously reported in the economic, socio-demographic and public health literature finds 67 eligible studies that report on direct indicators of women's empowerment and their association with indicators capturing maternal and child health outcomes. Statistically significant associations were found between women's empowerment and maternal and child health outcomes such as antenatal care, skilled attendance at birth, contraceptive use, child mortality, full vaccination, nutritional status and exposure to violence. Although associations differ in magnitude and direction, the studies reviewed generally support the hypothesis that women's empowerment is significantly and positively associated with maternal and child health outcomes. While major challenges remain regarding comparability between studies and lack of direct indicators in key dimensions of empowerment, these results suggest that policy makers and practitioners must consider women's empowerment as a viable strategy to improve maternal and child health, but also as a merit in itself. Recommendations include collection of indicators on psychological, legal and political dimensions of women's empowerment and development of a comprehensive conceptual framework that can guide research and policy making.

### **Review Article**

<u>Disrespectful intrapartum care during facility-based delivery in sub-Saharan Africa:</u>
<u>A qualitative systematic review and thematic synthesis of women's perceptions and experiences</u>

Pages 157-170

Susan Bradley, Christine McCourt, Juliet Rayment, Divya Parmar Abstract

The psycho-social elements of labour and delivery are central to any woman's birth experience, but international efforts to reduce maternal mortality in low-income contexts have neglected these aspects and focused on technological birth. In many contexts, maternity care is seen as dehumanised and disrespectful, which can have a negative impact on utilisation of services. We undertook a systematic review and meta-synthesis of the growing literature on women's experiences of facility-based delivery in sub-Saharan Africa to examine the drivers of disrespectful intrapartum care. Using PRISMA guidelines, databases were searched from 1990 to 06 May 2015, and 25 original studies were included for thematic synthesis. Analytical themes, that were theoretically informed and cognisant of the cultural and social context in which the dynamics of disrespectful care occur, enabled a fresh interpretation of the factors driving midwives' behaviour. A conceptual framework was developed to show how macro-, meso- and micro-level drivers of disrespectful care interact. The synthesis revealed a prevailing model of maternity care that is institution-centred, rather than woman-centred. Women's experiences illuminate midwives' efforts to maintain power and control by situating birth as a medical event and to secure status by focusing on the technical elements of care, including controlling bodies and knowledge.

Midwives and women are caught between medical and social models of birth. Global policies encouraging facility-based delivery are forcing women to swap the psycho-emotional care they would receive from traditional midwives for the technical care that professional midwives are currently offering. Any action to change the current performance and dynamic of birth relies on the participation of midwives, but their voices are largely missing from the discourse. Future research should explore their perceptions of the value and practice of interpersonal aspects of maternity care and the impact of disrespectful care on their sense of professionalism and personal ethics.

# Original Research Article

# <u>Financing the HIV response in sub-Saharan Africa from domestic sources: Moving beyond a normative approach</u>

Pages 66-76

Michelle Remme, Mariana Siapka, Olivier Sterck, Mthuli Ncube, Charlotte Watts, Anna Vassall Abstract

Despite optimism about the end of AIDS, the HIV response requires sustained financing into the future. Given flat-lining international aid, countries' willingness and ability to shoulder this responsibility will be central to access to HIV care. This paper examines the potential to expand public HIV financing, and the extent to which governments have been utilising these options.

We develop and compare a normative and empirical approach. First, with data from the 14 most HIV-affected countries in sub-Saharan Africa, we estimate the potential increase in public HIV financing from economic growth, increased general revenue generation, greater health and HIV prioritisation, as well as from more unconventional and innovative sources, including borrowing, health-earmarked resources, efficiency gains, and complementary non-HIV investments. We then adopt a novel empirical approach to explore which options are most likely to translate into tangible public financing, based on cross-sectional econometric analyses of 92 low and middle-income country governments' most recent HIV expenditure between 2008 and 2012.

If all fiscal sources were simultaneously leveraged in the next five years, public HIV spending in these 14 countries could increase from US\$3.04 to US\$10.84 billion per year. This could cover resource requirements in South Africa, Botswana, Namibia, Kenya, Nigeria, Ethiopia, and Swaziland, but not even half the requirements in the remaining countries. Our empirical results

suggest that, in reality, even less fiscal space could be created (a reduction by over half) and only from more conventional sources. International financing may also crowd in public financing.

Most HIV-affected lower-income countries in sub-Saharan Africa will not be able to generate sufficient public resources for HIV in the medium-term, even if they take very bold measures. Considerable international financing will be required for years to come. HIV funders will need to engage with broader health and development financing to improve government revenue-raising and efficiencies.

# **Tropical Medicine & International Health**

October 2016 Volume 21, Issue 10 Pages 1197–1345 <a href="http://onlinelibrary.wiley.com/doi/10.1111/tmi.2016.21.issue-10/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/tmi.2016.21.issue-10/issuetoc</a> [Reviewed earlier]

### **Vaccine**

Volume 34, Issue 47, Pages 5697-5818 (11 November 2016) http://www.sciencedirect.com/science/journal/0264410X/34/47 Short Communications

The role of healthcare provider attitudes in increasing willingness to accept seasonal influenza vaccine policy changes

Pages 5704-5707

Jason M. Slaunwhite, Steven M. Smith, Beth A. Halperin, Joanne M. Langley, Scott A. Halperin Abstract

Background

This research explored the role of attitudes in acceptance of organizational change initiatives. Methods

A survey assessed factors associated with health care provider (HCP) likelihood to accept seasonal influenza vaccine policy changes. We evaluated the impact of knowledge and individual attitudes on this outcome measure.

Results

Knowledge of seasonal influenza vaccine and influenza recommendations was a significant predictor of HCP's attitudes toward vaccine at the individual (p < 0.001), organizational (p < 0.05), and legislative level (p < 0.05). Mixed results were obtained when investigating the impact of knowledge on actual willingness to accept vaccine, suggesting that knowledge was only a significant predictor at the organizational (p < 0.05) and legislative levels (p < 0.05). Attitudes fully mediated the impact of knowledge at both the organizational and legislative levels.

Interpretation

Knowledge of seasonal influenza and vaccine recommendations is an important, but insufficient predictor of willingness to accept policy change.

#### Review

<u>Impact of pharmacists as immunizers on vaccination rates: A systematic review and meta-analysis</u>

Review Article Pages 5708-5723 J.E. Isenor, N.T. Edwards, T.A. Alia, K.L. Slayter, D.M. MacDougall, S.A. McNeil, S.K. Bowles Abstract

Background

Underutilization of vaccination programs remains a significant public health concern. Pharmacists serve as educators, facilitators, and in some jurisdictions, as administrators of vaccines. Though pharmacists have been involved with immunizations in various ways for many years, there has yet to be a systematic review assessing the impact of pharmacists as immunizers in these three roles.

Objective

To complete a systematic review of the literature on the impact of pharmacists as educators, facilitators, and administrators of vaccines on immunization rates.

Methods

We identified 2825 articles searching the following databases from inception until October 2015: PubMed, EMBASE, Cochrane Libraries, Cumulative Index to Nursing and Allied Health Literature, International Pharmaceutical Abstracts, Google Scholar. Grey literature was identified through use of the Canadian Agency for Drugs and Technology in Health "Grey Matters" search tool. Content from relevant journals and references of included studies were also searched. Inclusion criteria were clinical or epidemiologic studies in which pharmacists were involved in the immunization process. Studies were excluded if no comparator was reported. Two reviewers independently completed data extraction and bias assessments using standardized forms. Results

Thirty-six studies were included in the review, 22 assessed the role of pharmacists as educators and/or facilitators and 14 assessed their role as administrators of vaccines. All studies reviewed found an increase in vaccine coverage when pharmacists were involved in the immunization process, regardless of role (educator, facilitator, administrator) or vaccine administered (e.g., influenza, pneumococcal), when compared to vaccine provision by traditional providers without pharmacist involvement. Limitations of the results include the large number of non-randomized trials and the heterogeneity between study designs.

Conclusions

Pharmacist involvement in immunization, whether as educators, facilitators, or administrators of vaccines, resulted in increased uptake of immunizations.

PROSPERO Registration: CRD42013005067.

# <u>Seasonal influenza vaccination in China: Landscape of diverse regional</u> reimbursement policy, and budget impact analysis

Original Research Article

Pages 5724-5735

Juan Yang, Katherine E. Atkins, Luzhao Feng, Mingfan Pang, Yaming Zheng, Xinxin Liu, Benjamin J. Cowling, Hongjie Yu

**Abstract** 

Background

To explore the current landscape of seasonal influenza vaccination across China, and estimate the budget of implementing a national "free-at-the-point-of-care" vaccination program for priority populations recommended by the World Health Organization.

Methods

In 2014 and 2016, we conducted a survey across provincial Centers for Disease Control and Prevention to collect information on regional reimbursement policies for influenza vaccination,

estimated the national uptake using distributed doses of influenza vaccines, and evaluated the budget using population size and vaccine cost obtained from official websites and literatures. Results

Regular reimbursement policies for influenza vaccination are available in 61 mutually exclusive regions, comprising 8 provinces, 45 prefectures, and 8 counties, which were reimbursed by the local Government Financial Department or Basic Social Medical Insurance (BSMI). Finance-reimbursed vaccination was offered mainly for the elderly, and school children for free in Beijing, Dongli district in Tianjin, Karamay, Shenzhen and Xinxiang cities. BSMI-reimbursement policies were limited to specific medical insurance beneficiaries with distinct differences in the reimbursement fractions. The average national vaccination coverage was just 1.5-2.2% between 2004 and 2014. A free national vaccination program for priority populations (n = 416 million), would cost government US\$ 757 million (95% CI 726–789) annually (uptake rate = 20%).

Conclusions

An increasing number of regional governments have begun to pay, partially or fully, for influenza vaccination for selected groups. However, this small-scale policy approach has failed to increase national uptake. A free, nationwide vaccination program would require a substantial annual investment. A cost-effectiveness analysis is needed to identify the most efficient methods to improve coverage.

# <u>Willingness to participate in Ebola viral disease vaccine trials and receive vaccination by health workers in a tertiary hospital in Ile-Ife, Southwest Nigeria</u>

Original Research Article

Pages 5758-5761

Samuel A. Olowookere, Emmanuel A. Abioye-Kuteyi, O. Adekanle

*Abstract* 

Background

Ebola viral disease (EVD) epidemic need to be contained through means which include vaccination of susceptible population. Vaccination has eradicated major killer diseases. Objective

The study determined the health workers willingness to participate in EVD vaccine clinical trials and receive EVD vaccine.

Materials and methods

A descriptive cross-sectional study design involving 370 consenting health workers of Obafemi Awolowo University, Ile-Ife that completed a self administered semi-structured questionnaire. Data analysed using descriptive and inferential statistics.

Results

Mean age was  $34.4 \pm 8.6$  years (range, 19–60 years). Most were females (60.3%), and had worked <10 years (74.3%). The health workers were mostly medical doctors (22.7%) and nurses (52.4%). EVD awareness (84.9%) was high among respondents with radio (37.2%) as major source of information. A higher proportion of respondents willing to participate in clinical trials were willing to receive vaccine (93% vs. 68%, p=0.0001). The significant variables associated with willingness to participate in EVD vaccine trials include being male [AOR 1.58, 95%CI 1.04–2.40, p=0.033], medical doctor [AOR 2.28, 95%CI 1.31–3.96, p=0.003] and having safe vaccine [AOR 2.10, 95% 1.58–3.98, p=0.0001] while the significant variable associated with willingness to receive EVD vaccine was vaccine safety [AOR 3.19, 95%CI 2.13–6.03, p=0.029].

Conclusion

Male gender, medical doctor and vaccine safety determine willingness to participate in Ebola vaccine trials while vaccine safety determines willingness to receive vaccine when ready. Researchers should ensure gender equality and vaccine safety in vaccine trials.

# <u>Improving hepatitis B birth dose in rural Lao People's Democratic Republic through the use of mobile phones to facilitate communication</u>

Original Research Article

Pages 5777-5784

Anonh Xeuatvongsa, Siddhartha Sankar Datta, Edna Moturi, Kathleen Wannemuehler, Phanmanisone Philakong, Viengnakhone Vongxay, Vansy Vilayvone, Minal K. Patel *Abstract* 

Background

Hepatitis B vaccine birth dose (HepB-BD) was introduced in Lao People's Democratic Republic to prevent perinatal hepatitis B virus transmission in 2008; high coverage is challenging since only 38% of births occur in a health facility. Healthcare workers report being unaware of home births and thus unable to conduct timely postnatal care (PNC) home visits. A quasi-experimental pilot study was conducted wherein mobile phones and phone credits were provided to village health volunteers (VHV) and healthcare workers (HCWs) to assess whether this could improve HepB-BD administration, as well as birth notification and increase home visits. Methods

From April to September 2014, VHVs and HCWs in four selected intervention districts were trained, supervised, received outreach per diem for conducting home visits, and received mobile phones and phone credits. In three comparison districts, VHVs and HCWs were trained, supervised, and received outreach per diem for conducting home visits. A post-study survey compared HepB-BD coverage among children born during the study and children born one year before. HCWs and VHVs were interviewed about the study. Findings

Among intervention districts, 463 study children and 406 pre-study children were enrolled in the survey; in comparison districts, 347 study children and 309 pre-study children were enrolled. In both arms, there was a significant improvement in the proportion of children reportedly receiving a PNC home visit (intervention p < 0.0001, comparison p = 0.04). The median difference in village level HepB-BD coverage (study cohort minus pre-study cohort), was 57% (interquartile range [IQR] 32–88%, p < 0.0001) in intervention districts, compared with 20% (IQR 0–50%, p < 0.0001) in comparison districts. The improvement in the intervention districts was greater than in the comparison districts (p = 0.0009).

Conclusion

Our findings suggest that the provision of phones and phone credits might be on

# **Evaluation of scanning 2D barcoded vaccines to improve data accuracy of vaccines administered**

Original Research Article

Pages 5802-5807

Ashley Daily, Erin D. Kennedy, Leslie A. Fierro, Jenica Huddleston Reed, Michael Greene, Warren W. Williams, Heather V. Evanson, Regina Cox, Patrick Koeppl, Ken Gerlach Abstract

Background and objective

Accurately recording vaccine lot number, expiration date, and product identifiers, in patient records is an important step in improving supply chain management and patient safety in the

event of a recall. These data are being encoded on two-dimensional (2D) barcodes on most vaccine vials and syringes. Using electronic vaccine administration records, we evaluated the accuracy of lot number and expiration date entered using 2D barcode scanning compared to traditional manual or drop-down list entry methods.

Methods

Conclusion

We analyzed 128,573 electronic records of vaccines administered at 32 facilities. We compared the accuracy of records entered using 2D barcode scanning with those entered using traditional methods using chi-square tests and multilevel logistic regression.

Results

When 2D barcodes were scanned, lot number data accuracy was 1.8 percentage points higher (94.3-96.1%, P < 0.001) and expiration date data accuracy was 11 percentage points higher (84.8-95.8%, P < 0.001) compared with traditional methods. In multivariate analysis, lot number was more likely to be accurate (aOR=1.75; 99% CI, 1.57-1.96) as was expiration date (aOR=2.39; 99% CI, 2.12-2.68). When controlling for scanning and other factors, manufacturer, month vaccine was administered, and vaccine type were associated with variation in accuracy for both lot number and expiration date.

Two-dimensional barcode scanning shows promise for improving data accuracy of vaccine lot number and expiration date records. Adapting systems to further integrate with 2D barcoding could help increase adoption of 2D barcode scanning technology.

# A comparison of language use in pro- and anti-vaccination comments in response to a high profile Facebook post,

Original Research Article
Pages 5808-5814
Kate Faasse, Casey J. Chatman, Leslie R. Martin
Abstract
Background

Vaccinations are important for controlling the spread of disease, yet an increasing number of people are distrustful of vaccines, and choose not to (fully) vaccinate themselves and their children. One proposed contributor to this distrust is anti-vaccination misinformation available on the internet, where people search for and discuss health information. The language people use in these discussions can provide insights into views about vaccination. Methods

Following a prominent Facebook post about childhood vaccination, language used by participants in a comment thread was analysed using LIWC (Linguistic Inquiry and Word Count). Percentage of words used across a number of categories was compared between provaccination, anti-vaccination, and unrelated (control) comments.

Both pro- and anti-vaccination comments used more risk-related and causation words, as well as fewer positive emotion words compared to control comments. Anti-vaccine comments were typified by greater analytical thinking, lower authenticity, more body and health references, and a higher percentage of work-related word use in comparison to pro-vaccine comments, plus more money references than control comments. In contrast, pro-vaccination comments were more authentic, somewhat more tentative, and evidenced higher anxiety words, as well as more references to family and social processes when compared to anti-vaccination comments. Conclusion

Although the anti-vaccination stance is not scientifically-based, comments showed evidence of greater analytical thinking, and more references to health and the body. In contrast, provaccination comments demonstrated greater comparative anxiety, with a particular focus on family and social processes. These results may be indicative of the relative salience of these issues and emotions in differing understandings of the benefits and risks of vaccination. Text-based analysis is a potentially useful and ecologically valid tool for assessing perceptions of health issues, and may provide unique information about particular concerns or arguments expressed on social media that could inform future interventions.

# **Vaccine: Development and Therapy**

https://www.dovepress.com/vaccine-development-and-therapy-archive111 (Accessed 29 October 2016)
[No new relevant content]

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

http://www.mdpi.com/journal/vaccines (Accessed 29 October 2016) [No new relevant content]

### **Value in Health**

September 2016–October 2016 Volume 19, Issue 6, p699-908 http://www.valueinhealthjournal.com/current

**Themed Section: Incorporating Patient Preferences into Regulatory Decision Making** [Reviewed earlier]

\* \* \* \*

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

### **Scientific Reports**

6, Article number: 35742 (2016)

doi:10.1038/srep35742,

<u>Immune Responses to an Oral Cholera Vaccine in Internally Displaced Persons in South Sudan</u>

AS Iyer, M Bouhenia, J Rumunu, A Abubakar...

**Abstract** 

Despite recent large-scale cholera outbreaks, little is known about the immunogenicity of oral cholera vaccines (OCV) in African populations, particularly among those at highest cholera risk. During a 2015 preemptive OCV campaign among internally displaced persons in South Sudan, a year after a large cholera outbreak, we enrolled 37 young children (1–5 years old), 67 older children (6–17 years old) and 101 adults ( $\geq$ 18 years old), who received two doses of OCV (Shanchol) spaced approximately 3 weeks apart. Cholera-specific antibody responses were

determined at days 0, 21 and 35 post-immunization. High baseline vibriocidal titers (>80) were observed in 21% of the participants, suggesting recent cholera exposure or vaccination. Among those with titers ≤80, 90% young children, 73% older children and 72% adults seroconverted (≥4 fold titer rise) after the 1st OCV dose; with no additional seroconversion after the 2nd dose. Post-vaccination immunological endpoints did not differ across age groups. Our results indicate Shanchol was immunogenic in this vulnerable population and that a single dose alone may be sufficient to achieve similar short-term immunological responses to the currently licensed two-dose regimen. While we found no evidence of differential response by age, further immunologic and epidemiologic studies are needed.

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

2016; 3(11): 2987-2992

doi: 10.18203/2394-6040.ijcmph20163507

<u>Cross sectional study of knowledge of cervical cancer and awareness, knowledge and vaccine acceptance human papillomavirus vaccine among school girls of government and private school of Central India</u>

S Parmar, B Waskel, S Dixit, G Shivram, A Patidar...

**Abstract** 

### Background:

Cervical cancer is the second most common cancer worldwide and in India, it is the number one killer cancer among women. About 500,000 women are diagnosed with cervical cancer contributing to around 270,000 deaths, across the globe every year. Out of these, the burden of 230,000 (85%) deaths is owned by developing countries, with bare minimal resources to cope with the situation. In India alone there are an estimated 132,000 new cases and 74,000 deaths each year. The discovery that human papillomavirus (HPV) is responsible for virtually all cervical cancers opens exciting new possibilities for controlling this disease. Methods:

Randomly 300 girls were selected from private and government schools of central India aged between 16-18 years a semi structured questionnaire was provided to asses' knowledge of cervical cancer and awareness, knowledge and vaccine acceptance HPV vaccine among the school girls.

Results:

Total 85% of the students are aware about cervical cancer overall. (80% of Government school students and 90% of the private school students) but only 43% of the students have heard about HPV overall,53% of the students know that cervical cancer is preventable, and 54% of Pvt. School students know that it is preventable. 50% of the students are aware that there are screening methods for cervical cancer, only 3% of the students are aware of all the modes of transmission and 72% are aware about Sexual intercourse is mode of transmission. 39.3% are aware that multiple sexual partners are a risk factor for HPV infection and 38.2% are aware that unprotected sexual intercourse is a risk factor. Only 8.9% are aware that first intercourse at young age is a risk factor and only 13.45% are aware that other STDs are also a risk factor for HPV infection, 55% of the students was aware about availability of vaccine against HPV. 54% of the students are not aware that the vaccine is available in India.

Conclusions:

The low level of knowledge indicates that the larger population of less educated women is in greater lack of awareness. During this survey we accessed a population that has not been widely studied and our observations leads to conclude that the absence of an active national

cervical screening and awareness program has resulted in the lack of basic knowledge about important risk factors for cervix cancer even among the literate population of school girls.

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

2016; 3(11): 3195-3201

doi: 10.18203/2394-6040.ijcmph20163935

Determinants of uptake of pentavalent vaccine in Benin city, Southern Nigeria

EO Ogboghodo, HA Esene, OH Okojie

Abstract

Background:

The Nigerian government in 2012 introduced the pentavalent vaccine into her routine immunization schedule with a view to fast track reduction in child mortality. Despite the advantages of pentavalent vaccine, it has been linked to adverse effects following immunizations including clusters of infant deaths. The objective of the study was to assess knowledge, attitude and experience of care-givers whose under-fives are receiving pentavalent vaccines as determinants of uptake of the vaccine in Benin city.

Methods:

A descriptive cross-sectional study design was utilized for this study. Data was analyzed using IBM SPSS version 21.0 software. The level of significance was set at p<0.05. A total of 720 care-givers with mean age (SD) of  $29.02\pm4.8$  years participated in this study. Results:

The About three-quarters 554 (76.9%) of caregivers had a good knowledge on pentavalent vaccines. Good knowledge increased with increasing level of education and being married ( $p \le 0.001$  and p = 0.015 respectively). Majority, 568 (78.9%), of caregivers had a positive attitude towards the pentavalent vaccination. With increasing level of education, there was an increase in the proportion of caregivers who had a positive attitude towards the vaccine ( $p \le 0.001$ ).

Conclusions:

Two hundred (27.8%) caregivers had children who had experienced at least a side effect following pentavalent vaccination. Of these, 171 (85.5%) were willing to continue with the vaccine despite AEFIs experienced.

\* \* \*

# <u>Media/Policy Watch</u>

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

We acknowledge the Western/Northern bias in this initial selection of titles and invite suggestions for expanded coverage. We are conservative in our outlook in adding news sources which largely report on primary content we are already covering above. Many electronic media sources have tiered, fee-based subscription models for access. We will provide full-text where

content is published without restriction, but most publications require registration and some subscription level.

### The Atlantic

http://www.theatlantic.com/magazine/ Accessed 29 October 2016 [No new, unique, relevant content]

#### **BBC**

http://www.bbc.co.uk/ Accessed 29 October 2016 [No new, unique, relevant content]

#### The Economist

http://www.economist.com/ Accessed 29 October 2016 [No new, unique, relevant content]

### **Financial Times**

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

Accessed 29 October 2016

[No new, unique, relevant content]

### **Forbes**

http://www.forbes.com/ Accessed 29 October 2016 [No new, unique, relevant content]

### **Foreign Affairs**

http://www.foreignaffairs.com/ Accessed 29 October 2016 Trade Oct 28, 2016

What Past Trade Deals Reveal About Drug Pricing - The TPP's Good Medicine?

Thomas J. Bollyky

West Africa November/December 2016

**Ebola: How a People's Science Helped End an Epidemic** 

Nicolas van de Walle

### **Foreign Policy**

http://foreignpolicy.com/ Accessed 29 October 2016 [No new, unique, relevant content]

#### The Guardian

http://www.guardiannews.com/ Global Health

A water-chilled coolbox gets vaccines on tap to the world's poorest

At the Grand Challenges conference in London, innovations in refrigeration and sanitation are among those making a difference to global healthcare

Monday 24 October 2016

A UN vaccine programme in Darfur in 2011. An innovative refrigeration system that doesn't need a constant power supply is helping deliver vaccines to remote communities. Kate Hodal

### **New Yorker**

http://www.newyorker.com/ Accessed 29 October 2016 [No new, unique, relevant content]

#### **New York Times**

http://www.nytimes.com/ Accessed 29 October 2016

# Ban proposes UN fund to help Haitian cholera victims

(10/24),

United Nations Secretary-General Ban Ki-moon has proposed a \$400 million cholera response package to assist Haitians who contracted cholera due to UN peacekeepers in the country. "We want to do this because we think it's the right thing to do for the Haitian people, but frankly speaking, it's the right thing to do for the United Nations," said Jan Eliasson, the UN deputy secretary-general.

### **Sanofi Partners With Brazil to Accelerate Zika Vaccine Work**

(Reuters) - Sanofi has struck a collaboration deal with a leading Brazilian research institute to speed development of a Zika vaccine, consolidating the French drugmaker's position in the race to defeat the mosquito-borne virus. The October 27, 2016

### **Wall Street Journal**

http://online.wsj.com/home-page?\_wsjregion=na,us&\_homepage=/home/us Accessed 29 October 2016 World

### **Billionaires Pony Up More Funds in Fight to Eradicate Polio**

By Betsy McKay

Oct. 24, 2016 8:00 am ET

<u>Bill Gates</u> is getting help from some fellow billionaire philanthropists as he and other health leaders work to overcome setbacks that have delayed the eradication of polio despite a recent sharp decline in the number of cases.

Former New York City Mayor <u>Michael Bloomberg</u>, who <u>donated \$100 million</u> in 2013 to the Global Polio Eradication Initiative, is contributing another \$25 million now to help stamp out the virus, which is highly infectious and can cause paralysis and death. Ray Dalio, chairman and cochief investment officer of Bridgewater Associates LP, who gave \$50 million in 2013, is adding another \$30 million. An anonymous donor is contributing \$15 million.

The \$70 million in new money will help cover costs of the polio-eradication effort that has been extended by about 18 months, Mr. Gates, co-chair of the Bill & Melinda Gates Foundation, said in an interview...

### **Washington Post**

http://www.washingtonpost.com/ Accessed 29 October 2016

### In a first, U.S. trial to test Cuban lung-cancer vaccine

The international collaboration will enroll up to 90 patients in this country. Laurie McGinley | National/health-science | Oct 27, 2016

# Scientists are bewildered by Zika's path across Latin America

24 October 2016

Nearly nine months after Zika was declared a global health emergency, the virus has infected at least 650,000 people in Latin America and the Caribbean, including tens of thousands of expectant mothers. But to the great bewilderment of scientists, the epidemic has not produced the wave of fetal deformities so widely feared when the images of misshapen infants first emerged from Brazil. Instead, Zika has left a puzzling and distinctly uneven pattern of damage across the Americas.

# **UN wants \$200 million to compensate Haiti cholera victims**

24 October 2016

The United Nations says it is looking to raise \$200 million from member states to compensate the families of people who have died from cholera in Haiti. David Nabarro, a special adviser to the secretary-general, said Monday that the money to "provide material assistance" was part of a new U.N. approach to dealing with the disease that is believed to have been introduced to Haiti by U.N. peacekeepers from Nepal. He denied, however, that the proposed assistance amounted to acknowledgement of responsibility on the part of the U.N. for the disease which has sickened nearly 800,000 Haitians and killed some 9,300.

# <u>Think Tanks et al</u>

### **Brookings**

http://www.brookings.edu/ Accessed 29 October 2016 [No new relevant content]

# **Center for Global Development** [to 29 October 2016]

http://www.cgdev.org/page/press-center Accessed 29 October 2016 [No new relevant content]

### **Council on Foreign Relations**

http://www.cfr.org/ Accessed 29 October 2016 [No new relevant content]

### **CSIS**

https://www.csis.org/ Accessed 29 October 2016 [No new relevant content]

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