

# Vaccines and Global Health: The Week in Review 21 January 2017 Center for Vaccine Ethics & Policy (CVEP)

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

Vaccines and Global Health: The Week in Review is also **posted in pdf form** and as a set of blog posts at <a href="https://centerforvaccineethicsandpolicy.net">https://centerforvaccineethicsandpolicy.net</a>. This blog allows full-text searching of over 8,000 entries. Comments and suggestions should be directed to

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

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**Milestones :: Perspectives** 

## Global partnership launched to prevent epidemics with new vaccines

Media release, Davos 18 Jan 2017 – Coalition for Epidemic Preparedness Innovations A global coalition to create new vaccines for emerging infectious diseases, designed to help give the world an insurance policy against epidemics, launches today at the World Economic Forum in Davos, Switzerland.

With an initial investment of US\$460m from the governments of Germany, Japan and Norway, plus the Bill & Melinda Gates Foundation and the Wellcome Trust, CEPI - the Coalition for Epidemic Preparedness Innovations will seek to outsmart epidemics by developing safe and effective vaccines against known infectious disease threats that could be deployed rapidly to contain outbreaks, before they become global health emergencies.

CEPI also hopes to shorten the time it takes to develop new vaccines to protect against viruses that emerge suddenly as public health threats, as Zika did recently, by capitalising on exciting developments in adaptable vaccine technology and investing in facilities that could respond quickly to previously unknown pathogens.

Today's financial commitments mean that CEPI has raised almost half of the \$1bn it needs for its first five years, and it is now calling for proposals from researchers and companies around the world to support the development of vaccines against its first target diseases.

CEPI will initially target the MERS-CoV, Lassa and Nipah viruses, which have known potential to cause serious epidemics. It aims to develop two promising vaccine candidates against each of these diseases before any epidemic, so these are available without delay if and when an outbreak begins. CEPI will also scope out potential support for vaccines against multiple strains of the Ebola and Marburg viruses, and Zika.

To achieve all these goals, CEPI will need significant additional investment, and the initial CEPI funders are calling today for other governments and philanthropic organisations to join them in helping to protect the world against future epidemics. CEPI is looking to complete its fundraising by the end of 2017.

Erna Solberg, Prime Minister of Norway, said: "Just over a year ago 193 states adopted the Sustainable Development Goals – the roadmap for the future we want. Epidemics threaten that future. They can ruin societies on a scale only matched by wars and natural disasters. They respect no borders and don't care if we are rich or poor. Protecting the vulnerable is protecting ourselves. This is why we all must work together to be better prepared – and why my Government is fully committed to ensure that CEPI achieves its mission."

Bill Gates, Co-chair of the Bill and Melinda Gates Foundation, said: "Ebola and Zika showed that the world is tragically unprepared to detect local outbreaks and respond quickly enough to prevent them from becoming global pandemics. Without investments in research and development, we will remain unequipped when we face the next threat.

"The ability to rapidly develop and deliver vaccines when new 'unknown' diseases emerge offers our best hope to outpace outbreaks, save lives and avert disastrous economic consequences.

CEPI is a great example of how supporting innovation and R&D can help the world to address some of its most pressing health challenges."

Dr Jeremy Farrar, Director of the Wellcome Trust, said: "We know from Ebola, Zika and SARS that epidemics are among the significant threats we face to life, health and prosperity. Vaccines can protect us, but we've done too little to develop them as an insurance policy. CEPI is our chance to learn the lessons of recent tragedies, and outsmart epidemics with new vaccine defences. If others join us in supporting CEPI, we can realise our goal of creating a safer world."

CEPI is a direct response to calls from four independent expert reports into the Ebola epidemic for a new system for stimulating the development of vaccines against epidemic threats. It was founded by the governments of India and Norway, the Bill & Melinda Gates Foundation, Wellcome and the World Economic Forum, which has played a key convening role, bringing together stakeholders at the 2016 Davos meeting and other events.

CEPI is also backed by major pharmaceutical corporations, the World Health Organization and Médecins Sans Frontières / Doctors Without Borders, as well as philanthropies and leading academic vaccine research groups.

The Government of India is currently finalising the level of a significant funding commitment to CEPI. In addition to financing for vaccine development that will be available through CEPI's pooled fund, the European Commission will contribute to CEPI's objectives and plans to co-fund actions with CEPI, such as through the Innovative Medicines Initiative (IMI).

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Wellcome Trust [to 21 January 2017]

https://wellcome.ac.uk/news News / Published: 18 January 2017 Global fund to outsmart epidemics

Wellcome is committing \$100m to a new partnership to create vaccines for epidemic diseases.

<u>CEPI – the Coalition for Epidemic Preparedness Innovation</u> – launches on Thursday 19

January at the World Economic Forum in Davos, Switzerland.

A collaboration between government, industry, philanthropy and civil society, CEPI will finance and coordinate development of vaccines against known infectious diseases.

Wellcome is a founding partner of CEPI and is providing \$100m over five years - part of \$460m funding from initial investors.

CEPI needs to raise \$1bn in its first five years. Wellcome is joining initial funders in calling on other governments and philanthropic organisations to add their support...

News / Published: 17 January 2017

## **Ebola vaccine development: still more to be done**

A panel of international experts has called for continued commitment to Ebola vaccine development to fully prepare for the next outbreak.

The Ebola vaccine developed during the West African epidemic is the first to be shown to be shown to be safe and effective against the disease. But the third report from Wellcome and the

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University of Minnesota's CIDRAP Ebola Team B stresses that there are still critical gaps in preparedness for the next inevitable outbreak.

Safe, effective and durable multivalent Ebola vaccines are critical for preventing outbreaks and quickly halting future outbreaks when they occur.

They are also necessary to prove that vaccines against other neglected or emerging infectious diseases can be successfully developed.

"The success of future efforts will depend on our continued action with the Ebola vaccine," says Wellcome's Director Jeremy Farrar, who co-chaired the report. "We must maintain the sense of urgency that has pushed this work forward in previous years."

Today's report identifies three main areas where work is still needed if Ebola is to no longer be a public health threat:

- :: tracking progress to ensure multivalent Ebola vaccines are readily available and can be rapidly deployed
- : identifying where additional effort is needed to overcome challenges and barriers
- :: creating high-level recommendations for a robust Ebola virus disease prevention programme that includes prophylactive vaccination of frontline workers and provides vaccine stockpiles.

The group also recommends creating an international consortium to champion Ebola vaccines.

The <u>final results from the trials</u> of the rVSV-ZEBOV vaccine were published in December 2016 and confirm that it provides a high level of protection against the disease.

The vaccine, made by Merck, Sharpe & Dohme, was developed rapidly during the epidemic but came too late to have a significant impact on the outbreak.

Report available on the CIDRAP website.

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#### **BIO Applauds Launch of Coalition for Epidemic Preparedness Innovations**

Coalition aims to fill critical gaps in global infectious disease readiness January 19, 2017 03:00 AM Eastern Standard Time

WASHINGTON--(BUSINESS WIRE)--The Biotechnology Innovation Organization (BIO) applauds today's launch of <u>the Coalition for Epidemic Preparedness Innovations</u> (CEPI), a new alliance to finance and coordinate the development of vaccines to prevent and contain infectious disease epidemics, at the World Economic Forum in Davos, Switzerland.

"CEPI's public-private partnership model has the potential to close those gaps, particularly those which the private sector alone is unable to address due to the lack of a sufficient potential market for such technologies."

"Vaccines have long been one of the most important and effective public health interventions, preventing millions of illnesses and deaths around the world. However, as we have seen in recent years with devastating Ebola and Zika virus pandemics, critical gaps remain in the global public health arsenal to combat emerging infectious diseases," said BIO President and CEO Jim Greenwood. "CEPI's public-private partnership model has the potential to close those gaps, particularly those which the private sector alone is unable to address due to the lack of a sufficient potential market for such technologies."

"Only by working together can we address barriers to vaccine development and prevent and contain infectious global health epidemics. Working alone, industry players face barriers to vaccine development. CEPI's collaborative approach is vital in helping biotechs and other industry leaders pursue innovative efforts to help prepare against future pandemics and fight against global public health threats," said Nima Farzan, PaxVax President and CEO and the

Biotechnology Innovation Organization (BIO) delegate on the board of the Coalition for Epidemic Preparedness Innovations.

"Innovative vaccines companies are eager to partner with CEPI to tackle the many daunting challenges in epidemic preparedness facing the global health community. By combining the resources, expertise and global reach of many public, private and philanthropic global health stakeholders, CEPI will make possible progress on a scale not previously possible," said Julie Gerberding, M.D., M.P.H., and Executive Vice President for Strategic Communications, Global Public Policy and Population Health for Merck & Co Inc. Dr. Gerberding also serves on the Board of Directors for CEPI...

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## 22 Biopharma Companies Partner and Launch First-of-its-kind Global Initiative to Address Rise of Non-Communicable Diseases

18 January 2017

- :: Global, multi-stakeholder collaboration, called Access Accelerated, to be delivered in partnership with World Bank Group and Union for International Cancer Control (UICC)
- :: Initial three-year commitment will catalyze, develop, measure and replicate sustainable programs in low and lower-middle income countries
- : Collective funding of \$50 million and increased individual company program commitments to address NCDs

Davos, Switzerland, January 18, 2017 — Today at the World Economic Forum, twenty-two leading biopharmaceutical companies launched Access Accelerated, a global initiative to advance access to non-communicable disease (NCD) prevention and care in low and lower-middle income countries (LICs and LMICs).

NCDs have reached a point of crisis, particularly in lower and middle income countries, where nearly 80 percent of NCD-related deaths occur. The goal of Access Accelerated, in partnership with the World Bank Group and the Union for International Cancer Control (UICC), is to work towards the United Nations Sustainable Development Goal (SDG) target to reduce premature deaths from NCDs by one-third by 2030.

"Through the commitment and expertise of the Access Accelerated partners, we will work towards a shared vision where no person dies prematurely from a preventable, treatable disease," said Ian Read, Chief Executive Officer of Pfizer and President of The International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), on behalf of the initiative. "If the current trend in NCDs in low- and lower-middle countries is not reversed, there is a real possibility we will undermine the progress we have made in health around the world. To reach our goal, we need to catalyze new partnerships, learn quickly and advance the resources and knowledge that will enable countries to tackle NCDs."

Building on long-standing individual company investments in global health, Access Accelerated will address a variety of access barriers to NCD prevention, treatment and care. Efforts will be evaluated with the support of independent experts at Boston University to establish a framework for progress, measure effectiveness and deliver ongoing reporting.

With the World Bank Group the initiative will identify solutions to address financing, regulatory and service delivery barriers at country level. Additionally, the World Bank Group will conduct pilots in primary care to improve NCD outcomes in several countries.

"The rapid increase in NCDs in developing countries is a serious threat to our goal of improving the health of the world's poorest citizens and achieving universal health coverage," said Tim Evans, Senior Director of Health, Nutrition and Population at the World Bank Group. "Tackling this successfully will take coordinated effort by governments, civil society, the private sector and international partners. This new effort is an opportunity for all players to test and scale up innovative ways to deliver effective care for NCDs, with a strong focus on primary health care."..

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#### 140th session of the Executive Board

23 January–1 February 2017, Geneva *FOLLOW LIVE: Executive Board* 

The Executive Board will open at 09:30 on Monday 23 January 2017 and can be watched live via webcast. The discussions will be translated into the six UN official languages: Arabic, Chinese, English, French, Russian and Spanish.

During the meeting, WHO's Executive Board will draw up a short list of 5 candidates on Tuesday 24 January. The following day the Executive Board members will then interview the five candidates and up to three of them to go forward to the World Health Assembly in May 2017.

<u>Live web stream (begins 09:30 CET on Monday 23 January 2017)</u>

Provisional agenda

Main Documents [Selected]

EB140/7

Health emergencies

WHO response in severe, large-scale emergencies

#### EB140/9

Research and development for potentially epidemic diseases

A blueprint for research and development preparedness and rapid research response

#### EB140/13

Poliomyelitis

#### EB140/14

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

#### EB140/15

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

## EB140/16

Review of the Pandemic Influenza Preparedness Framework

#### EB140/25

Global vaccine action plan

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#### **Emergencies**

## WHO Grade 3 Emergencies [to 21 January 2017]

### **The Syrian Arab Republic** -

:: Joint Statement on Syria 16 January 2017

#### <u>Iraq</u> –

:: Read the health situation report from Mosul pdf, 646kb 14 January 2016

South Sudan - No new announcements identified.

Nigeria - See measles immunization campaign announcement above.

Yemen - No new announcements identified.

## WHO Grade 2 Emergencies [to 21 January 2017]

<u>Cameroon</u> - 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.

Ukraine - No new announcements identified.

#### **UN OCHA – L3 Emergencies**

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

#### <u> Iraq</u>

:: <u>Iraq: Mosul Humanitarian Response Situation Report No. 16 (9 January - 15 January 2017)</u> [EN/AR/KU]

#### **Syria**

- :: Syrian Arab Republic: Aleppo Situation Report No. 14 (20 January 2017)
- :: 16 Jan 2017 <u>Joint statement on Syria WFP, UNICEF, OCHA, WHO, UNHCR</u> [See full text below]

#### **Yemen**

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:: 18 Jan 2017 Yemen: Cholera Outbreak Situation Report | As of 15 Jan 2017

## **Corporate Emergencies**

#### <u>Haiti</u>

:: Haiti: Hurricane Matthew Situation Report No. 32 (17 January 2017)

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#### Joint Statement on Syria- WFP, UNICEF, OCHA, WHO, UNHCR

WFP Executive Director Ertharin Cousin

UNICEF Executive Director Anthony Lake

Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator Stephen O'Brien

WHO Director-General Dr Margaret Chan

United Nations High Commissioner for Refugees Filippo Grandi

DAVOS, Switzerland, January 16, 2017– While efforts to fully implement a ceasefire in Syria continue, we again appeal for immediate, unconditional, and safe access to reach the children and families who are still cut off from humanitarian aid across the country.

In Syria today, there are 15 besieged areas where up to 700,000 people, including an estimated 300,000 children, still remain trapped. Nearly five million people, including more than two million children, live in areas that are extremely difficult to reach with humanitarian assistance due to fighting, insecurity and restricted access.

All over Syria, people continue to suffer because they lack the most basic elements to sustain their lives – and because of the continued risk of violence. We – indeed, the world – must not stand silent while parties to the conflict continue to use denial of food, water, medical supplies, and other forms of aid as weapons of war.

Children are at heightened risk of malnutrition, dehydration, diarrhoea, infectious diseases, and injury. Many need support after being exposed to traumatic events, violence and other violations. Tragically, far too many children have known little but conflict and loss in their young lives.

The horrors of the siege of the eastern districts of Aleppo have disappeared from the public consciousness – but we must not let the needs, the lives and the futures of Syria's people fade from the world's conscience.

We must not let 2017 repeat the tragedies of 2016 for Syria.

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#### Editor's Note:

We will cluster these recent emergencies as below and continue to monitor the WHO pages for updates and key developments.

**Yellow Fever** [to 21 January 2017]

## http://www.who.int/emergencies/yellow-fever/en/ No new digest content identified for this edition.

## **EBOLA/EVD** [to 21 January 2017]

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

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

## MERS-CoV [to 21 January 2017]

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

Disease Outbreak News [DONs]

:: Middle East respiratory syndrome coronavirus (MERS-CoV) – Saudi Arabia 17 January 2017

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**Zika virus** [to 21 January 2017]

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

#### Zika situation report – 20 January 2017

Full report: <a href="http://apps.who.int/iris/bitstream/10665/253604/1/zikasitrep20Jan17-eng.pdf?ua=1">http://apps.who.int/iris/bitstream/10665/253604/1/zikasitrep20Jan17-eng.pdf?ua=1</a>
...Analysis

Overall, the global risk assessment has not changed. Zika virus continues to spread geographically to areas where competent vectors are present. Although a decline in cases of Zika infection has been reported in some countries, or in some parts of countries, vigilance needs to remain high.

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**POLIO** [to 21 January 2017]

Public Health Emergency of International Concern (PHEIC)

#### Polio this week as of 17 January 2017

:: <u>Independent Monitoring Board (IMB)</u> – changes to its membership: The IMB, established in 2010 to independently monitor progress towards a polio-free world, is undertaking changes to its membership. Under the guidance of the IMB and its chair, Sir Liam Donaldson, polio has been restricted to areas of just three countries: Pakistan, Afghanistan and Nigeria. To help achieve a polio-free world, the structure and composition of the IMB is now being revisited, in particular to strengthen its remit to focus solely on Objective 1 of the Polio Endgame Plan – detection and interruption of poliovirus transmission. At the request of the Polio Oversight Board (POB), Sir Liam will continue to chair the IMB and will form a selection committee to identify a new set of members. A call for nomination will be issued over the coming weeks. The GPEI owe a great debt of gratitude for the invaluable contribution that the current members of the IMB have made to this historic endeavour, and we look forward to working with the new, re-structured IMB to lead us over the finish line.

**Country Updates** [Selected Excerpts]

## Afghanistan

- :: One new wild poliovirus type 1 (WPV1) case was reported in the past week from Bermal district, Paktika province, with onset of paralysis on 16 December 2016. This brings the total number of WPV1 cases for 2016 to 13. More than half of the country's cases in 2016 are from Bermal district.
- :: One new environmental WPV1 positive sample was reported in the past week from Jalalabad, Nangarhar, collected on 26 December 2016.

#### Pakistan

- :: One new wild poliovirus type 1 (WPV1) case was reported in the past week, from Killa Abdullah, Balochistan, with onset of paralysis on 22 December 2016. This brings the total number of WPV1 cases for 2016 to 20.
- :: One new circulating vaccine-derived poliovirus type 2 (cVDPV2) positive environmental sample was reported in the past week, from Quetta, Balochistan, collected on 28 December 2016. This isolate is linked to an ongoing, <u>confirmed cVDPV2 outbreak</u> currently affecting Quetta.

#### Nigeria

:: A circulating vaccine-derived poliovirus type 2 (cVDPV2) has been detected from Bodinga Local Government Area (LGA), Sokoto state. Two genetically-related viruses were isolated from an acute flaccid paralysis (AFP) case with onset of paralysis on 28 October 2016, and from a healthy community contact, collected on 24 November.

#### Lake Chad Basin

:: The detection of wild poliovirus type 1 (WPV1) and vaccine-derived poliovirus type 2 (VDPV2) in Nigeria poses a risk to the neighbouring countries of the Lake Chad basin and hence an outbreak response plan is being implemented as part of the response to the Nigeria outbreak.

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WHO & Regional Offices [to 21 January 2017]

#### 140th session of the Executive Board

23 January-1 February 2017, Geneva

[see selected main documents summary and live webcast information above]

## Finding priorities for health research and development

20 January 2017 – Today's investments in health R&D are poorly aligned with global public health needs. As little as 1% of all funding for health R&D is allocated to diseases such as malaria and tuberculosis, although they account for more than 12% of the global disease burden. The WHO Global Observatory on Health R&D builds on existing data to enable decisions on R&D priorities.

## Disease Outbreak News [DONs]

- :: Human infection with avian influenza A(H7N9) virus China 18 January 2017
- :: Middle East respiratory syndrome coronavirus (MERS-CoV) Saudi Arabia 17 January 2017
- :: <u>Human infection with avian influenza A(H7N9) virus China</u> 17 January 2017

## Weekly Epidemiological Record, 20 January 2017, vol. 92, 3 (pp. 21–36)

- :: Maternal and neonatal tetanus elimination: validation in Punjab Province, Pakistan, November 2016
- :: Monthly report on dracunculiasis cases, January- November 2016

## :: WHO Regional Offices

Selected Press Releases, Announcements

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

No new digest content identified.

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

:: Overweight affects almost half the population of all countries in Latin America and the Caribbean except for Haiti (01/18/2017)

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

No new digest content identified.

#### **WHO European Region EURO**

- :: Global Health Case Challenge: fighting antibiotic resistance 19-01-2017
- :: Cold weather increases health risks for refugees and migrants in Serbia and other countries in the Region 18-01-2017

## WHO Eastern Mediterranean Region EMRO

:: <u>Joint Statement on Syria</u> 16 January 2017 [See full text above]

## **WHO Western Pacific Region**

No new digest content identified.

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**CDC/ACIP** [to 21 January 2017]

http://www.cdc.gov/media/index.html https://www.cdc.gov/vaccines/acip/ THURSDAY, JANUARY 19, 2017

<u>South African Study Provides Compelling New Evidence on Role of Person-to Person Transmission in Drug-Resistant TB Epidemics</u>

A study published today in The New England Journal of Medicine provides compelling evidence that extensively drug-resistant tuberculosis (XDR TB) is spread from person-to-person in the KwaZulu-Natal province, South Africa...

#### MMWR Weekly January 20, 2017/No. 1

[Excerpts]

:: West Nile Virus and Other Nationally Notifiable Arboviral Diseases — United States, 2015

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:: <u>Coverage with Tetanus, Diphtheria, and Acellular Pertussis Vaccine and Influenza Vaccine</u> Among Pregnant Women — Minnesota, March 2013–December 2014

## Register for upcoming February ACIP meeting

February 22-23, 2017

Deadline for registration:

:: Non-US Citizens: February 1, 2017; US Citizens: February 13, 2017

Registration is NOT required to watch the live meeting webcast or to listen via telephone.

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#### **Announcements**

Gavi [to 21 January 2017]

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

18 January 2017

## **Google & Gavi partner to scale up high-tech innovations for vaccine delivery**

New funding through Gavi will help start-up Nexleaf Analytics provide real-time data solutions for cold chain equipment performance and maintenance in developing countries.

Davos, 18 January 2017 – <u>Google.org</u> and Gavi announced a new partnership today to help tech start-up <u>Nexleaf Analytics</u> strengthen vaccine cold chain equipment for developing countries. Google.org's contribution of US\$ 2 million, which will be matched by <u>the Bill & Melinda Gates Foundation</u>'s funding to the <u>Gavi Matching Fund</u>, will be used to help countries to make evidence-based decisions on the purchase and maintenance of vaccine refrigerators.

Over the next years the volume of vaccines in Gavi-supported countries is expected to rise significantly. Vaccines are highly sensitive to high and low temperatures, and <u>high-performing</u> and well-maintained cold chain technologies are essential for ensuring vaccine potency...

18 January 2017

## <u>Deutsche Post DHL Group and Gavi forge global partnership to improve delivery of</u> life-saving vaccines

Organisations to collaborate on addressing supply chain challenges to improve developing country access to life-saving vaccines.

Test programme announced with Kenyan Health Ministry: DHL and Gavi to provide efficient transport management solution for vaccine distribution.

Davos, Switzerland, 18 January 2017 - Deutsche Post DHL Group, the leading global mail and logistics company, and Gavi, the Vaccine Alliance, today announced a global partnership to help improve vaccine supply chains in developing countries.

As immunisation programmes expand to deliver <u>new, life-saving vaccines</u> to more people, often in remote areas, they are increasingly constrained by outdated supply chains. With vaccine volumes continuing to increase and the persistence of often weak or broken health systems, there is a critical need for improvements in immunisation supply chain infrastructure.

Over the next three years, the new partnership will be vital in helping to provide countries with efficient supply chain solutions to improve healthcare delivery. Deutsche Post DHL Group's industry-leading logistics expertise in life sciences and healthcare, combined with the global DHL transportation network, will help countries overcome challenges, and make the vaccine supply chain more efficient...

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18 January 2017

## <u>Gavi and Unilever's Lifebuoy join forces to tackle preventable diseases and save children's lives</u>

Ground-breaking partnership will raise awareness of the power of immunisation and of handwashing with soap to accelerate child survival efforts

Davos, Switzerland, 18 January 2017 – Gavi, the Vaccine Alliance and Lifebuoy, Unilever's leading health soap brand, have launched an <u>innovative partnership</u> to protect children under five from illnesses and premature death. By promoting handwashing with soap and immunisation together - two of the most cost-effective child survival interventions - the partnership aims to improve and save many young lives in India.

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## Fondation Merieux [to 21 January 2017]

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

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

18 January 2017, Dakar (Senegal)

<u>Senegal Welcomes Major West African Experts in Clinical Biology: 4th International Steering Committee of West African Laboratory Network of Biomedical Analysis Laboratories</u>

Some 70 participants, including the leading figures in clinical biology of Benin, Burkina Faso, Guinea, Mali, Niger, Senegal and Togo, are gathering in Dakar in Senegal, January 18-20 for the 4th International Steering Committee of the West African laboratory network of biomedical analysis laboratories (RESAOLAB). They are sharing their results in fighting against epidemics and improving laboratory services.

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**FDA** [to 21 January 2017]

http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm January 19, 2017

<u>Statement from FDA Commissioner Robert Califf, M.D. announcing FDA Oncology</u> Center of Excellence launch

January 18, 2017

<u>Statement from FDA Commissioner Robert Califf, M.D. announcing new draft guidances on medical product communications</u>

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**EDCTP** [to 21 January 2017]

http://www.edctp.org/

The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria as well as other poverty-related and neglected infectious diseases in sub-Saharan Africa, with a focus on phase II and III clinical trials.

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## 17 January 2017

#### Switzerland fully associated to Horizon 2020 per 1 January 2017

Switzerland became an Associated Country for the <u>full Horizon 2020 programme</u> as of 1 January 2017. Consequently, Switzerland has regained the possibility to fully participate in the European & Developing Countries Clinical Trials Partnership. Swiss legal entities may participate and receive funding in EDCTP2 actions\*. Switzerland may also become a full member of the EDCTP Association, the legal implementation structure for the second EDCTP programme....

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**FDA** [to 21 January 2017]

http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm January 19, 2017

<u>Statement from FDA Commissioner Robert Califf, M.D. announcing FDA Oncology</u> Center of Excellence launch

January 18, 2017

<u>Statement from FDA Commissioner Robert Califf, M.D. announcing new draft</u> quidances on medical product communications

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**Industry Watch** [to 21 January 2017]

:: MSD for Mothers Commits \$10 Million and Business Expertise to the Global Financing Facility to Help End Preventable Deaths of Mothers

Represents a Critical Step toward Meeting the Sustainable Development Goals for Women, Children and Adolescent Health

January 19, 2017 01:30 AM Eastern Standard Time

DAVOS, Switzerland--(BUSINESS WIRE)--MSD, known as Merck & Co., Inc., Kenilworth, N.J., U.S.A., inside the United States and Canada, announced today its \$10 million commitment to the Global Financing Facility (GFF) in support of *Every Woman Every Child* to improve maternal and child health in low- and lower-middle-income countries worldwide through its MSD for Mothers initiative. Through the GFF – a multi-stakeholder partnership hosted by the World Bank Group – countries are aiming to make a much greater impact on the lives of their most vulnerable citizens, with the goal of preventing an estimated 3.8 million maternal deaths, 101 million child deaths and 21 million stillbirths by 2030...

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AERAS [to 21 January 2017] http://www.aeras.org/pressreleases No new digest content identified.

**BMGF - Gates Foundation** [to 21 January 2017] <a href="http://www.gatesfoundation.org/Media-Center/Press-Releases">http://www.gatesfoundation.org/Media-Center/Press-Releases</a> <a href="https://www.gatesfoundation.org/Media-Center/Press-Releases">No new digest content identified</a>.

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## **DCVMN** [to 21 January 2017]

http://www.dcvmn.org/

No new digest content identified.

## **European Vaccine Initiative** [to 21 January 2017]

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

No new digest content identified.

#### **GHIT Fund** [to 21 January 2017]

https://www.ghitfund.org/

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

## **Global Fund** [to 21 January 2017]

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

## Hilleman Laboratories [to 21 January 2017]

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

## **Human Vaccines Project** [to 21 January 2017]

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

## **IAVI – International AIDS Vaccine Initiative** [to 21 January 2017]

https://www.iavi.org/

No new digest content identified

#### **IFPMA** [to 21 January 2017]

http://www.ifpma.org/resources/news-releases/

No new digest content identified

#### **IVI** [to 21 January 2017]

http://www.ivi.int/

No new digest content identified.

## **NIH** [to 21 January 2017]

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

No new digest content identified.

#### PATH [to 21 January 2017]

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

No new digest content identified.

## **The Vaccine Confidence Project** [to 21 January 2017]

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

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

*Vaccines and Global Health: The Week in Review* has expanded its coverage of new reports, books, research and analysis published independent of the journal channel covered in Journal Watch below. Our interests span immunization and vaccines, as well as global public health, health governance, and associated themes. If you would like to suggest content to be included in this service, please contact David Curry at: <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: david.r.curry@centerforvaccineethicsandpolicy.org

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

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

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

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

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

Volume 107, Issue 1 (January 2017) <a href="http://ajph.aphapublications.org/toc/ajph/current">http://ajph.aphapublications.org/toc/ajph/current</a> [Reviewed earlier]

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

January 2017; 96 (1)
<a href="http://www.ajtmh.org/content/current">http://www.ajtmh.org/content/current</a>
[Reviewed earlier]

## **Annals of Internal Medicine**

17 January 2017 Vol: 166, Issue 2 <a href="http://annals.org/issue.aspx">http://annals.org/issue.aspx</a>
[New issue; No new digest content identified]

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

http://resource-allocation.biomedcentral.com/ (Accessed 21 January 2017) [No new content]

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

http://www.biomedcentral.com/bmchealthservres/content (Accessed 21 January 2017) [No new digest content identified]

#### **BMC Infectious Diseases**

http://www.biomedcentral.com/bmcinfectdis/content (Accessed 21 January 2017) [No new digest content identified]

#### **BMC Medical Ethics**

http://www.biomedcentral.com/bmcmedethics/content (Accessed 21 January 2017) [No new digest content identified]

#### **BMC Medicine**

http://www.biomedcentral.com/bmcmed/content (Accessed 21 January 2017) [No new digest content identified]

## **BMC Pregnancy and Childbirth**

http://www.biomedcentral.com/bmcpregnancychildbirth/content (Accessed 21 January 2017) [No new digest content identified]

#### **BMC Public Health**

http://bmcpublichealth.biomedcentral.com/articles (Accessed 21 January 2017) Study protocol

<u>Effects of community health volunteers on infectious diseases of children under five in Volta Region, Ghana: study protocol for a cluster randomized controlled trial</u>

In many low- and middle-income countries, community health volunteers (CHVs) are employed as a key element of the public health system in rural areas with poor accessibility. However, few studies have assessed...

Yeonji Ma, Heunghee Kim, Yinseo Cho, Jaeeun Lee, Joseph Kwami Degley, Abdul-Ghaffa Adam, Gyuhong Lee, Hoonsang Lee and Seungman Cha

BMC Public Health 2017 17:95 Published on: 19 January 2017'

#### Research article

## <u>Community-based health care is an essential component of a resilient health</u> system: evidence from Ebola outbreak in Liberia

Trained community health workers (CHW) enhance access to essential primary health care services in contexts where the health system lacks capacity to adequately deliver them. In Liberia, the Ebola outbreak fur...

Kendra Siekmans, Salim Sohani, Tamba Boima, Florence Koffa, Luay Basil and Saïd Laaziz BMC Public Health 2017 17:84

Published on: 17 January 2017

#### **BMC Research Notes**

http://www.biomedcentral.com/bmcresnotes/content (Accessed 21 January 2017) [No new digest content identified]

#### **BMJ Open**

2017, Volume 7, Issue 1 <a href="http://bmjopen.bmj.com/content/current">http://bmjopen.bmj.com/content/current</a> [Reviewed earlier]

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

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

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

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

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## **Clinical Therapeutics**

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

## Complexity

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

#### **Conflict and Health**

http://www.conflictandhealth.com/ [Accessed 21 January 2017] [No new digest content identified]

## **Contemporary Clinical Trials**

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

## **Current Opinion in Infectious Diseases**

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

## **Developing World Bioethics**

December 2016 Volume 16, Issue 3 Pages 121–180 <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>

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

[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**

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

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## [Reviewed earlier]

## **Emerging Infectious Diseases**

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

#### **Epidemics**

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

## **Epidemiology and Infection**

Volume 145 - Issue 1 - January 2017 <a href="http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue">http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue</a> [Reviewed earlier]

## The European Journal of Public Health

Volume 26, Issue 6, 1 December 2016 <a href="http://eurpub.oxfordjournals.org/content/26/6">http://eurpub.oxfordjournals.org/content/26/6</a> [Reviewed earlier]

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

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

#### **Global Public Health**

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

### **Globalization and Health**

http://www.globalizationandhealth.com/ [Accessed 21 January 2017] [No new digest content identified]

## **Health Affairs**

January 2017; Volume 36, Issue 1 <a href="http://content.healthaffairs.org/content/current">http://content.healthaffairs.org/content/current</a>

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## Issue Focus: Coverage Expansion, Accountable Care & More

Global Health

## <u>Large Reductions In Amenable Mortality Associated With Brazil's Primary Care Expansion And Strong Health Governance</u>

Thomas Hone, Davide Rasella, Mauricio Barreto, Rifat Atun, Azeem Majeed, and Christopher Millett

**Abstract** 

Strong health governance is key to universal health coverage. However, the relationship between governance and health system performance is underexplored. We investigated whether expansion of the Brazilian Estratégia de Saúde da Família (ESF; family health strategy), a community-based primary care program, reduced amenable mortality (mortality avoidable with timely and effective health care) and whether this association varied by municipal health governance. Fixed-effects longitudinal regression models were used to identify the relationship between ESF coverage and amenable mortality rates in 1,622 municipalities in Brazil over the period 2000–12. Municipal health governance was measured using indicators from a public administration survey, and the resulting scores were used in interactions. Overall, increasing ESF coverage from 0 percent to 100 percent was associated with a reduction of 6.8 percent in rates of amenable mortality, compared with no increase in ESF coverage. The reductions were 11.0 percent for municipalities with the highest governance scores and 4.3 percent for those with the lowest scores. These findings suggest that strengthening local health governance may be vital for improving health services effectiveness and health outcomes in decentralized health systems.

## ANALYSIS & COMMENTARY: Global Health: A Pivotal Moment Of Opportunity And Peril

Lawrence O. Gostin and Eric A. Friedman Health Aff January 2017 36:159-165; doi:10.1377/hlthaff.2016.1492 Abstract

A growing tide of populism in Europe and the United States, combined with other factors, threatens the solidarity upon which the global health movement is based. The highest-profile example of the turn toward populism is US president-elect Donald Trump, whose proposals would redefine US engagement in global health, development, and environmental efforts. In this challenging landscape, three influential global institutions—the United Nations, the World Health Organization, and the World Bank—are undergoing leadership transitions. This new global health leadership should prioritize global health security, including antimicrobial resistance, health system strengthening, and action on mass migration and climate change. They will need to work as a team, leveraging the World Health Organization's technical competence and mandate to set health norms and standards, the United Nations' political clout, and the World Bank's economic strength. Human rights, including principles of equality, participation, and accountability, should be their foremost guide, such as holding a United Nations special session on health inequities and advancing the Framework Convention on Global Health. The need for predictable and innovative financing and high ethical standards to prevent conflicts of interest can further guide global health leaders.

## **Health and Human Rights**

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

## Special Section: Universal Health Coverage and Human Rights

[Reviewed earlier]

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

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

### **Health Policy and Planning**

Volume 31 Issue 21 January 2017 <a href="http://heapol.oxfordjournals.org/content/current">http://heapol.oxfordjournals.org/content/current</a> [Reviewed earlier]

## **Health Research Policy and Systems**

http://www.health-policy-systems.com/content [Accessed 21 January 2017] Research

Development and validation of SEER (Seeking, Engaging with and Evaluating Research): a measure of policymakers' capacity to engage with and use research Capacity building strategies are widely used to increase the use of research in policy development. However, a lack of well-validated measures for policy contexts has hampered efforts to identify priorities for capacity building and to evaluate the impact of strategies. We

aimed to address this gap by developing SEER (Seeking, Engaging with and Evaluating Research), a self-report measure of individual policymakers' capacity to engage with and use research.

Sue E. Brennan, Joanne E. McKenzie, Tari Turner, Sally Redman, Steve Makkar, Anna Williamson, Abby Haynes and Sally E. Green Published on: 17 January 2017

#### **Humanitarian Exchange Magazine**

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

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

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

#### **Infectious Agents and Cancer**

http://www.infectagentscancer.com/content

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[Accessed 21 January 2017] [No new digest content identified]

## **Infectious Diseases of Poverty**

http://www.idpjournal.com/content [Accessed 21 January 2017] Scoping Review

Towards interruption of schistosomiasis transmission in sub-Saharan Africa: developing an appropriate environmental surveillance framework to guide and to support 'end game' interventions

J. Russell Stothard, Suzy J. Campbell, Mike Y. Osei-Atweneboana, Timothy Durant, Michelle C. Stanton, Nana-Kwadwo Biritwum, David Rollinson, Dieudonné R. Eloundou Ombede and Louis-Albert Tchuem-Tchuenté

Infectious Diseases of Poverty 2017 6:10

Published on: 14 January 2017

**Abstract** 

Schistosomiasis is a waterborne parasitic disease in sub-Saharan Africa, particularly common in rural populations living in impoverished conditions. With the scale-up of preventive chemotherapy, national campaigns will transition from morbidity- to transmission-focused interventions thus formal investigation of actual or expected declines in environmental transmission is needed as 'end game' scenarios arise. Surprisingly, there are no international or national guidelines to do so in sub-Saharan Africa. Our article therefore provides an introduction to key practicalities and pitfalls in the development of an appropriate environmental surveillance framework. In this context, we discuss how strategies need to be adapted and tailored to the local level to better guide and support future interventions through this transition. As detection of egg-patent infection in people becomes rare, careful sampling of schistosome larvae in freshwater and in aquatic snails with robust species-specific DNA assays will be required. Appropriate metrics, derived from observed prevalence(s) as compared with predetermined thresholds, could each provide a clearer insight into contamination- and exposure-related dynamics. Application could be twofold, first to certify areas currently free from schistosomiasis transmission or second to red-flag recalcitrant locations where extra effort or alternative interventions are needed.

### **International Health**

Volume 9, Issue 1 1 January 2017 http://inthealth.oxfordjournals.org/content/current COMMENTARY

Sustainable development goals and the human resources crisis

Joseph Freer

Abstract

Achieving universal health coverage by 2030 requires that lessons from the Millennium Development Goals must be heeded. The most important lesson is that the workforce underpins every function of the health system, and is the rate-limiting step. The three dimensions that continue to limit the success of the development agenda are availability, distribution and performance of health workers – and the Sustainable Development Goals cannot be achieved without addressing all three. Hence, the traditional response of scaling up supply is inadequate:

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a paradigm shift is required in the design of systems that can properly identify, train, allocate and retain health workers.

#### Original Articles

Dedicated health systems strengthening of the Global Fund to Fight AIDS, **Tuberculosis, and Malaria: an analysis of grants** 

Victoria Y. Fan; Feng-Jen J. Tsai; Zubin C. Shroff; Branden Nakahara; Nabil Vargha ... Abstract

Background

This study aims to understand the determinants of the Global Fund to Fight AIDS, Tuberculosis, and Malaria's dedicated channel for health systems strengthening (HSS) funding across countries and to analyze their health system priorities expressed in budgets and performance indicators.

Methods

We obtained publicly available data for disease-specific and HSS grants from the Global Fund over 2004–2013 prior to the new funding model. Regression analysis was employed to assess the determinants of dedicated HSS funding across 111 countries. Documents for 27 dedicated HSS grants including budgets and performance indicators were collected, and activities were analyzed by health system functions.

Results

HSS funding per capita is significantly associated with TB and HIV funding per capita, but not per capita income and health worker density. Of 27 dedicated HSS grants, 11 had line-item budgets publicly available, in which health workforce and medical products form the majority (89% or US\$132 million of US\$148 million) of funds. Yet these areas accounted for 41.7% (215) of total 516 performance indicators.

Conclusions

Health worker densities were not correlated with HSS funding, despite the emphasis on health workforce in budgets and performance indicators. Priorities in health systems in line-item budgets differ from the numbers of indicators used.

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

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

## **International Journal of Epidemiology**

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

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

December 2016 http://www.ijidonline.com/issue/S1201-9712(16)X0011-2 Volume 53, Supplement, p1-176 International Meeting on Emerging Diseases and Surveillance (IMED) 2016

## <u>Highlights from the 6th International Meeting on Emerging Diseases and Surveillance (IMED 2016) Vienna, Austria from Nov 3 to 7, 2016</u>

Britta Lassmann, Lawrence C. Madoff

#### **JAMA**

January 17, 2017, Vol 317, No. 3, Pages 229-330 <a href="http://jama.jamanetwork.com/issue.aspx">http://jama.jamanetwork.com/issue.aspx</a>
[New issue; No new digest content identified]

#### **JAMA Pediatrics**

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

## **Journal of Community Health**

Volume 42, Issue 1, February 2017 http://link.springer.com/journal/10900/42/1/page/1 Original Paper

## <u>Human Papillomavirus Vaccine Uptake in Texas Pediatric Care Settings: A Statewide</u> Survey of Healthcare Professionals

Mehwish Javaid, Dana Ashrawi, Rachel Landgren, Lori Stevens, Rosalind Bello, Lewis Foxhall, , Melissa Mims, Lois Ramondetta

**Abstract** 

The purpose of this study was to identify barriers to and facilitators of human papillomavirus (HPV) vaccination in children aged 9-17 years across Texas. A literature review informed the development of a web-based survey designed for people whose work involves HPV vaccination in settings serving pediatric patients. The survey was used to examine current HPV vaccine recommendation practices among healthcare providers, barriers to HPV vaccination, reasons for parent/caregiver vaccine refusal, staff and family education practices, utilization of reminder and recall systems and status of vaccine administration (payment, ordering and stocking). 1132 responses were received representing healthcare providers, administrative and managerial staff. Respondents identified perceived barriers to HPV vaccination as parental beliefs about lack of necessity of vaccination prior to sexual debut, parental concerns regarding safety and/or side effects, parental perceptions that their child is at low risk for HPV-related disease, and parental lack of knowledge that the vaccine is a series of three shots. Of responding healthcare providers, 94 % (n=582) reported they recommend the vaccine for 9-12 year olds; however, same-day acceptance of the vaccine is low with only 5 % (n=31) of providers reporting the HPV vaccine is "always" accepted the same day the recommendation is made. Healthcare providers and multidisciplinary care teams in pediatric care settings must work to identify gaps between recommendation and uptake to maximize clinical opportunities. Training in methods to communicate an effective HPV recommendation and patient education tailored to address identified barriers may be helpful to reduce missed opportunities and increase on-time HPV vaccinations.

Original Paper

## Improving Human Papillomavirus (HPV) Vaccination in the Postpartum Setting

Reni Soon, Stephen Sung, May Rose Dela Cruz, John J. Chen, Mark Hiraoka Abstract

Although the HPV vaccine has been shown to be highly effective in preventing cervical dysplasia, vaccination rates remain low. The objective of this study was to assess the effectiveness of an electronic medical record (EMR) prompt on HPV vaccination rates in the postpartum setting. We conducted a pre-post intervention study among postpartum women ages 18-26 seen at an outpatient clinic from 09/01/2012-08/31/2013 (pre-intervention) and from 10/01/2013-03/31/2014 (post-intervention). The intervention was a drop-down menu that was inserted into the EMR postpartum note template inquiring about the patient's HPV vaccination status and whether or not the vaccine was administered at that visit. HPV vaccination uptake was compared pre and post-intervention. Of the 278 postpartum visits during the study period, 241 were eligible for analysis. There was a significant increase of the HPV vaccine uptake, from 1.2 % (2/173) among pre-intervention visits to 26.5 % (18/68) among post-intervention visits (p < 0.001). After adjusting for age, ethnicity, insurance, and religion, HPV vaccination was significantly higher at postpartum visits during the intervention period, with an adjusted OR=93.49 [95 % CI 15.29-571.52]. Among visits in which the vaccine was not given, HPV vaccination was not discussed in 46 % and patients refused the vaccine in 40% of visits. An EMR prompt in the postpartum note could be an effective way to promote HPV vaccination in the postpartum setting. It will likely take a combination of strategies to optimize vaccination uptake.

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

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

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

Volume 12, Issue 3, 2016 <a href="http://www.tandfonline.com/toc/rjge20/current">http://www.tandfonline.com/toc/rjge20/current</a> **Theme Issue: Refugee Crisis: The Borders of Human Mobility** 

[Reviewed earlier]

### Journal of Global Infectious Diseases (JGID)

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

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

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

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

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

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

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

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

Volume 215 Issue 1 January 1, 2017 <a href="http://jid.oxfordjournals.org/content/current">http://jid.oxfordjournals.org/content/current</a> <a href="mailto:EDITORIAL COMMENTARIES">EDITORIAL COMMENTARIES</a>

## Vaccines Against Respiratory Syncytial Virus: The Time Has Come

J Infect Dis. (2017) 215 (1): 4-7 doi:10.1093/infdis/jiw455 Janet A. Englund and Helen Y. Chu *Extract* 

Respiratory syncytial virus (RSV) remains the single most important cause of respiratory tract disease in infants, both in the United States [1] and worldwide [2]. This virus is responsible for bronchiolitis in infants and for clinical disease often indistinguishable from influenza in elderly or immunocompromised hosts. RSV disease was first characterized by astute clinicians such as John Adams in the 1940s, as the cause of primary viral pneumonitis in infants in winter months [3]. RSV was subsequently propagated in Robert Chanock's laboratory in the late 1950s [4], confirming the laboratory and clinical findings of disease caused by "chimpanzee coryza" virus described earlier by Morris et al in 1956 [5]. Over the next 50 years, innovative clinical studies by Caroline Breese Hall, Paul Glezen, Ann Falsey, and many others demonstrated the ubiquity, importance, and potential severity of RSV infection in preterm infants, young children, immunocompromised patients, and elderly individuals [6–8]. The article by Langley et al [9] in this issue of The Journal of Infectious Diseases adds considerably to our knowledge regarding vaccines against RSV, a saga that has been ongoing for decades with remarkably little success [10].

There is still no approved vaccine against RSV. The tragic outcome of a formalin-inactivated, alum-precipitated RSV vaccine candidate in the 1960s has resulted in a near moratorium on RSV vaccine research since that time [11, 12]. The early formalin-inactivated vaccine candidate not only failed to protect young seronegative infants against RSV disease but resulted in severe enhanced respiratory disease in vaccine recipients after...

#### MAJOR ARTICLES AND BRIEF REPORTS

A Randomized, Controlled, Observer-Blinded Phase 1 Study of the Safety and Immunogenicity of a Respiratory Syncytial Virus Vaccine With or Without Alum Adjuvant

J Infect Dis. (2017) 215 (1): 24-33 doi:10.1093/infdis/jiw453

Joanne M. Langley, Naresh Aggarwal, Azhar Toma, Scott A. Halperin, Shelly A. McNeil, Laurence Fissette, Walthere Dewé, Maarten Leyssen, Jean-François Toussaint, and Ilse Dieussaert *Abstract* 

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## Background.

Respiratory syncytial virus (RSV) is a leading cause of childhood bronchiolitis and pneumonia, particularly in early infancy. Immunization of pregnant women could boost preexisting immune responses, providing passive protection to newborns through placental transfer of anti-RSV antibody.

Methods.

In this first-in-humans clinical trial of a purified recombinant RSV protein F vaccine engineered to preferentially maintain prefusion conformation (RSV-PreF), 128 healthy men 18–44 years old were randomized to one dose of a RSV-PreF vaccine containing 10, 30, or 60  $\mu$ g of RSV-PreF antigen, with or without alum adjuvant, or control, and followed for one year for safety and immunogenicity outcomes.

Results.

Injection site pain was the most common adverse event, reported by up to 81.3% of participants. The highest RSV neutralizing antibody responses were in the 30  $\mu$ g RSV-PreF/alum, 60  $\mu$ g RSV-PreF/alum, and 60  $\mu$ g RSV-PreF/nonadjuvant groups. Responses were evident on day 7, and 30 days after vaccination these participants had RSV-A neutralizing antibody titers of  $\geq$ 1:512, and >70% had titers of 1:1024, with titers increasing by 3.2–4.9 fold. Responses remained high on day 60 but waned on days 180 and 360. Conclusions.

The RSV-PreF vaccine elicited rapid RSV neutralizing antibody responses in healthy young men, with an acceptable adverse event profile.

#### MAJOR ARTICLES AND BRIEF REPORTS

## <u>Significant Correlation Between the Infant Gut Microbiome and Rotavirus Vaccine</u> <u>Response in Rural Ghana</u>

J Infect Dis. (2017) 215 (1): 34-41 doi:10.1093/infdis/jiw518

Vanessa C. Harris, George Armah, Susana Fuentes, Katri E. Korpela, Umesh Parashar, John C. Victor, Jacqueline Tate, Carolina de Weerth, Carlo Giaquinto, Willem Joost Wiersinga, Kristen D. C. Lewis, and Willem M. de Vos

Abstract

Background.

Rotavirus (RV) is the leading cause of diarrhea-related death in children worldwide and 95% of RV-associated deaths occur in Africa and Asia where RV vaccines (RVVs) have lower efficacy. We hypothesize that differences in intestinal microbiome composition correlate with the decreased RVV efficacy observed in poor settings.

Methods.

We conducted a nested, case-control study comparing prevaccination, fecal microbiome compositions between 6-week old, matched RVV responders and nonresponders in rural Ghana. These infants' microbiomes were then compared with 154 age-matched, healthy Dutch infants' microbiomes, assumed to be RVV responders. Fecal microbiome analysis was performed in all groups using the Human Intestinal Tract Chip.

Results.

We analyzed findings in 78 Ghanaian infants, including 39 RVV responder and nonresponder pairs. The overall microbiome composition was significantly different between RVV responders and nonresponders (FDR, 0.12), and Ghanaian responders were more similar to Dutch infants than nonresponders (P=.002). RVV response correlated with an increased abundance of Streptococcus bovis and a decreased abundance of the Bacteroidetes phylum in comparisons

between both Ghanaian RVV responders and nonresponders (FDR, 0.008 vs 0.003) and Dutch infants and Ghanaian nonresponders (FDR, 0.002 vs 0.009). Conclusions.

The intestinal microbiome composition correlates significantly with RVV immunogenicity and may contribute to the diminished RVV immunogenicity observed in developing countries.

## The Journal of Law, Medicine & Ethics

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

Special Issue: SYMPOSIUM: Harmonizing Privacy Laws to Enable International Biobank Research: Part I

[14 articles] [Reviewed earlier]

## **Journal of Medical Ethics**

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

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

Vol 19, No 1 (2017): January <a href="http://www.jmir.org/2017/1">http://www.jmir.org/2017/1</a>
[New issue; No new digest content indentified]

## **Journal of Medical Microbiology**

Volume 65, Issue 12, December 2016 http://jmm.microbiologyresearch.org/content/journal/jmm/65/12 [Reviewed earlier]

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

Volume 3, Issue 4 (2016) <a href="http://digitalrepository.aurorahealthcare.org/jpcrr/">http://digitalrepository.aurorahealthcare.org/jpcrr/</a> [Reviewed earlier]

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

Volume 5 Issue 21 January 2017 <a href="http://jpids.oxfordjournals.org/content/current">http://jpids.oxfordjournals.org/content/current</a> [Reviewed earlier]

#### **Journal of Pediatrics**

January 2017 Volume 180, p1-300

## http://www.jpeds.com/current [Reviewed earlier]

## **Journal of Public Health Policy**

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

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

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

## **Journal of Travel Medicine**

Volume 24, Issue 1, January 2017 <a href="http://jtm.oxfordjournals.org/content/24/1">http://jtm.oxfordjournals.org/content/24/1</a> [Reviewed earlier]

## Journal of Virology

January 2017, volume 91, issue 2 http://jvi.asm.org/content/current [Reviewed earlier]

#### **The Lancet**

Jan 21, 2017 Volume 389 Number 10066 p225-330 http://www.thelancet.com/journals/lancet/issue/current Comment

## CEPI—a new global R&D organisation for epidemic preparedness and response

Børge Brende, Jeremy Farrar, Diane Gashumba, Carlos Moedas, Trevor Mundel, Yasuhisa Shiozaki, Harsh Vardhan, Johanna Wanka, John-Arne Røttingen *Summary* 

The outbreak of Ebola virus disease in west Africa in 2013–16 showed that the world is not sufficiently prepared to detect and respond to epidemic threats. It exposed a systemic need for stronger operational and strategic capabilities in infectious disease response, and for the development of more effective tools and technologies to manage, treat, and prevent disease. Evaluations of the Ebola response highlight that the global community must rethink how vaccines, diagnostics, and drugs for emerging infections are developed given their lack of commercial profitability, especially since outbreaks are most likely to occur in resource-constrained environments.

Comment

Access to Medicine Index—what about sustainability?

Summary

A pharmaceutical company representative described the Access to Medicine Index 2016 as "a force for good, and not yet another stick with which to beat industry".1 The Access to Medicine Index 2016,1 which will be presented at a public meeting later this month at the time of the WHO Executive Board meeting in Geneva, ranks the top 20 research-based pharmaceutical companies on their efforts to improve access to medicine in low-income and middle-income countries (LMICs). And those companies with high ranking tout their success to their stockholders and the media.

#### Review

Neglected tropical diseases: progress towards addressing the chronic pandemic
David H Molyneux, Lorenzo Savioli, Dirk Engels
Summary

The concept of neglected tropical diseases (NTDs) emerged more than a decade ago and has been recognised as a valid way to categorise diseases that affect the poorest individuals. Substantial progress in control and elimination has been achieved and policy momentum has been generated through continued bilateral, philanthropic, and non-governmental development organisation (NGDO) support, and donations of drugs from pharmaceutical companies. WHO has defined a Roadmap to reach 2020 targets, which was endorsed by member states in a World Health Assembly Resolution in 2013. NTDs have been included within the Sustainable Development Goal targets and are a crucial component of universal health coverage, conceptualised as "leaving no one behind". WHO reported that more than 1 billion people in 88 countries have benefited from preventive chemotherapy in 2014. The research agenda has defined the need for affordable products (diagnostics, drugs and insecticides). However challenges such as insecurity and weak health systems continue to prevail in the poorest countries, inhibiting progress in scaling up and also in achieving Roadmap goals.

#### **Lancet Global Health**

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

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

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

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

Volume 21, Issue 1, January 2017 http://link.springer.com/journal/10995/20/12/page/1 Commentary

Enhancing HIV Treatment Access and Outcomes Amongst HIV Infected Children and Adolescents in Resource Limited Settings

Ameena Ebrahim Goga, Yagespari Singh, Michelle Singh, Nobuntu Noveve, Vuyolwethu Magasana, Trisha Ramraj, Fareed Abdullah, Ashraf H. Coovadia, Sanjana Bhardwaj, Gayle G. Sherman

#### **Abstract**

#### Introduction

Increasing access to HIV-related care and treatment for children aged 0–18 years in resource-limited settings is an urgent global priority. In 2011–2012 the percentage increase in children accessing antiretroviral therapy was approximately half that of adults (11 vs. 21 %). We propose a model for increasing access to, and retention in, paediatric HIV care and treatment in resource-limited settings.

#### Methods

Following a rapid appraisal of recent literature seven main challenges in paediatric HIV-related care and treatment were identified: (1) lack of regular, integrated, ongoing HIV-related diagnosis; (2) weak facility-based systems for tracking and retention in care; (3) interrupted availability of dried blood spot cards (expiration/stock outs); (4) poor quality control of rapid HIV testing; (5) supply-related gaps at health facility-laboratory interface; (6) poor uptake of HIV testing, possibly relating to a fatalistic belief about HIV infection; (7) community-associated reasons e.g. non-disclosure and weak systems for social support, resulting in poor retention in care.

#### Results

To increase sustained access to paediatric HIV-related care and treatment, regular updating of Policies, review of inter-sectoral Plans (at facility and community levels) and evaluation of Programme implementation and impact (at national, subnational, facility and community levels) are non-negotiable critical elements. Additionally we recommend the intensified implementation of seven main interventions: (1) update or refresher messaging for health care staff and simple messaging for key staff at early childhood development centres and schools; (2) contact tracing, disclosure and retention monitoring; (3) paying particular attention to infant dried blood spot (DBS) stock control; (4) regular quality assurance of rapid HIV testing procedures; (5) workshops/meetings/dialogues between health facilities and laboratories to resolve transport-related gaps and to facilitate return of results to facilities; (6) community leader and health worker advocacy at creches, schools, religious centres to increase uptake of HIV testing and dispel fatalistic beliefs about HIV; (7) use of mobile communication technology (m-health) and peer/community supporters to maintain contact with patients.

#### **Discussion and Conclusion**

We propose that this package of facility, community and family-orientated interventions are needed to change the trajectory of the paediatric HIV epidemic and its associated patterns of morbidity and mortality, thus achieving the double dividend of improving HIV-free survival.

### Original Paper

## <u>State-Level Immunization Information Systems: Potential for Childhood Immunization Data Linkages</u>

Jill E. Fuller, Emmanuel B. Walter Jr., Nancy Dole, Richard O'Hara, Amy H. Herring, Maureen S. Durkin, Bonny Specker, Betty Wey

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

January 2017; 37 (1) <a href="http://mdm.sagepub.com/content/current">http://mdm.sagepub.com/content/current</a> [Reviewed earlier]

## **The Milbank Quarterly**

A Multidisciplinary Journal of Population Health and Health Policy
December 2016 Volume 94, Issue 4 Pages 695–928
<a href="http://onlinelibrary.wiley.com/doi/10.1111/milq.2016.94.issue-4/issuetoc">http://onlinelibrary.wiley.com/doi/10.1111/milq.2016.94.issue-4/issuetoc</a>
[Reviewed earlier]

#### **Nature**

Volume 541 Number 7637 pp259-430 19 January 2017 <a href="http://www.nature.com/nature/current">http://www.nature.com/nature/current</a> issue.html

## Trump's vaccine-commission idea is biased and dangerous

Scientists must fight back with the truth about the debunked link between vaccines and autism Critics call Donald Trump unpredictable. "Who knows what he will do next?" has become a popular rhetorical question in US politics. And yet, quite often his actions are entirely predictable. The difficulty comes in comprehending them.

A prime example is last week's revelation by environmental lawyer Robert F. Kennedy Jr that president-elect Trump may put together a commission to study "vaccine safety and scientific integrity". (Trump's team has countered that there are no definite plans to do so.) Kennedy says he would head the commission; he has in the past argued — unconvincingly — that a preservative in some childhood vaccines is linked to autism spectrum disorder, despite abundant evidence to the contrary.

Trump's embrace of the tiresome and discredited anti-vaccination movement is no secret. He has tweeted and publicly discussed his concerns that childhood vaccines may be linked to autism. He has previously met with like-minded activists, including Andrew Wakefield, a father of the 'anti-vaxxer' crusade who has been barred from practising medicine in the United Kingdom for professional misconduct.

Given the people Trump has chosen to listen to, his suggestion of a Kennedy-headed vaccine commission should be no surprise. But it remains difficult to grasp how someone in his position, with unlimited access to the world's best resources on vaccine safety, would selectively choose to overlook them all: the studies, the commissions, the scientists who have spent a lifetime studying vaccines. What good is another investigation of speculation already so thoroughly analysed and debunked — unless it is being set up to reach a different conclusion? It is a clear waste of money and effort. Much more frustratingly, it fuels an anti-vaccination movement that puts children and elderly people at risk.

Trump surely knows that there is already a federal commission to evaluate vaccine safety. The US Centers for Disease Control and Prevention (CDC) has an Advisory Committee on Immunization Practices that reports to the government on vaccine safety. Vaccines are also regulated by the US Food and Drug Administration — and often have particularly stringent safety requirements because they are used in healthy children.

There is already ample evidence that vaccines do not elevate the risk of autism. A 2015 study of more than 95,000 children found no association between the measles, mumps and rubella vaccine and an increased risk of autism — even among children with a family history of the disorder (A. Jain et al. J. Am. Med. Assoc. 313, 1534–1540; 2015). As for Kennedy's argument

about vaccine preservatives, the CDC has repeatedly tried — and failed — to find a link between that preservative, called thimerosal, and autism. In 2004, the US Institute of Medicine reported that a review of the literature had also found no such link (see go.nature.com/2jwe4ba). And in the United States, the argument is now moot: thimerosal was removed from most childhood vaccines administered in the country, as a precautionary measure, beginning in 2001. Autism diagnoses continued unabated.

All the evidence shows that it is actually misconceptions about vaccines — such as those promoted by Trump — that cause serious harm. The United States has already experienced a series of outbreaks of preventable diseases. In 2014, measles affected 667 people in the country, primarily those who were unvaccinated. The outbreaks are expensive, too: in 2011, it cost public-health institutions up to US\$5.3 million to cope with 16 measles outbreaks that made 107 people ill.

If Trump moves ahead with his vaccine commission, he will give a sense of legitimacy to opponents of childhood vaccination. This could undercut efforts in some states, such as Texas and Michigan, to strengthen vaccination requirements for schoolchildren.

In the wake of the news about the commission, the American Medical Association moved to reassert the safety of vaccines. The American Academy of Pediatrics said that it would welcome the chance to discuss vaccine safety with Trump.

Scientists, medics and commentators who have fought vaccine disinformation in the past must take a deep breath and return to the fray. There is no need to wait for this commission to be announced officially. There is no need to wait until it issues its findings. There is no cause to be surprised if it shows little regard for science — or even if it targets scientists who speak out in favour of vaccination. Those who claim a link between vaccines and autism can do so only by discrediting the scientific evidence and, often, the scientists who gathered it. Kennedy's reference to investigating vaccine safety "and scientific integrity" provides ample warning of what is to come. Scientists should get their retaliation in first. Lives are at stake.

#### **Editorials**

#### Replication studies offer much more than technical details

They demonstrate the practice of science at its best.

Purists will tell you that science is about what scientists don't know, which is true but not much of a basis on which to develop new cancer drugs. Hence the importance of knowledge: how crucial this mutation or that cell-surface receptor really is to cancer growth. These are the findings that launch companies and clinical trials — provided, of course, that they have been published in research papers in peer-reviewed journals.

As we <u>report in a News story this week</u>, a systematic effort to check some of these findings by repeating an initial five published cancer studies has reported that none could be completely reproduced. The significance of this divergence — how the specific experiments were selected and what the results mean for the broader agenda of reproducibility in research — is already hotly contested.

Perhaps the most influential aspect of the exercise, called the Reproducibility Project: Cancer Biology, has nothing to do with those arguments. It lies beneath the surface, in the peer

reviews of the project teams' replication plans, which were published before the studies began. These reviews can be read as part of the editorial decision letters linked to each replication plan, or 'registered report' (see qo.nature.com/2jte08a)...

#### **Nature Medicine**

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

## **Nature Reviews Immunology**

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

## **New England Journal of Medicine**

January 19, 2017 Vol. 376 No. 3 <a href="http://www.nejm.org/toc/nejm/medical-journal">http://www.nejm.org/toc/nejm/medical-journal</a> [New issue; No new digest content identified]

#### **Pediatrics**

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

#### **Pharmaceutics**

Volume 9, Issue 1 (March 2017) http://www.mdpi.com/1999-4923/9/1 [New issue; No new digest content identified]

### **PharmacoEconomics**

Volume 35, Issue 1, January 2017 http://link.springer.com/journal/40273/35/1/page/1 [Reviewed earlier]

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

http://currents.plos.org/disasters/
[Accessed 21 January 2017]

Brief Report

The Solidarity and Health Neutrality of Physicians in War & Peace
January 20, 2017

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The wars in the Middle East have led to unprecedented threats and attacks on patients, healthcare workers, and purposeful targeting of hospitals and medical facilities. It is crucial that every healthcare provider, both civilian and military, on either side of the conflict become aware of the unique and inherent protections afforded to them under International Humanitarian Law. However, these protections come with obligations. Whereas Governments must guarantee these protections, when violated, medical providers have equal duty and obligations under the Law to ensure that they will neither commit nor assist in these violations nor take part in any act of hostility. Healthcare providers must not allow any inhuman or degrading treatment of which they are aware and must report such actions to the appropriate authorities. Failure to do so leads to risks of moral, ethical and legal consequences as well as penalties for their actions and inactions. There must be immediate recognition by all parties of the neutrality of health care workers and their rights and responsibilities to care for any sick and injured patient, regardless of their nationality, race, religion, or political point of view.

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

http://currents.plos.org/outbreaks/ [Accessed 21 January 2017] [No new digest content identified]

### **PLoS Medicine**

http://www.plosmedicine.org/ (Accessed 21 January 2017) [No new digest content identified]

## **PLoS Neglected Tropical Diseases**

http://www.plosntds.org/ (Accessed 21 January 2017) [No new digest content identified]

#### **PLoS One**

http://www.plosone.org/ [Accessed 21 January 2017] Research Article

<u>Childhood Vaccine Acceptance and Refusal among Warao Amerindian Caregivers in Venezuela; A Qualitative Approach</u>

Jochem Burghouts, Berenice Del Nogal, Angimar Uriepero, Peter W. M. Hermans, Jacobus H. de Waard, Lilly M. Verhagen

Research Article | published 20 Jan 2017 PLOS ONE http://dx.doi.org/10.1371/journal.pone.0170227

Abstract

Objectives

Acceptance of childhood vaccination varies between societies, affecting worldwide vaccination coverage. Low coverage rates are common in indigenous populations where parents often

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choose not to vaccinate their children. We aimed to gain insight into reasons for vaccine acceptance or rejection among Warao Amerindians in Venezuela.

Methods

Based on records of vaccine acceptance or refusal, in-depth interviews with 20 vaccine-accepting and 11 vaccine-declining caregivers were performed. Parents' attitudes were explored using a qualitative approach.

Results

Although Warao caregivers were generally in favor of vaccination, fear of side effects and the idea that young and sick children are too vulnerable to be vaccinated negatively affected vaccine acceptance. The importance assigned to side effects was related to the perception that these resembled symptoms/diseases of another origin and could thus harm the child. Religious beliefs or traditional healers did not influence the decision-making process.

Conclusions

Parental vaccine acceptance requires educational programs on the preventive nature of vaccines in relation to local beliefs about health and disease. Attention needs to be directed at population-specific concerns, including explanation on the nature of and therapeutic options for side effects.

## <u>Do Thai Physicians Recommend Seasonal Influenza Vaccines to Pregnant Women? A Cross-Sectional Survey of Physicians' Perspectives and Practices in Thailand</u>

Prabda Praphasiri, Darunee Ditsungneon, Adena Greenbaum, Fatimah S. Dawood, Pornsak Yoocharoen, Deborah M. Stone, Sonja J. Olsen, Kim A. Lindblade, Charung Muangchana Research Article | published 18 Jan 2017 PLOS ONE http://dx.doi.org/10.1371/journal.pone.0169221

## A Systematic Review of Ebola Treatment Trials to Assess the Extent to Which They Adhere to Ethical Guidelines

Thomas Richardson, Andrew McDonald Johnston, Heather Draper Research Article | published 17 Jan 2017 PLOS ONE http://dx.doi.org/10.1371/journal.pone.0168975

Abstract Background

Objective: To determine to what extent each trial met criteria specified in three research frameworks for ethical trial conduct.

Design: Systematic review and narrative analysis

Methods and findings

Data sources: MEDBASE and EMBASE databases were searched using a specific search strategy. The Cochrane database for systematic reviews, the PROSPERO database and trial registries were examined. A grey literature search and citation search were also carried out.

Eligibility criteria for selecting studies: Studies were included where the intervention was being used to treat Ebola in human subjects regardless of study design, comparator or outcome measured. Studies were eligible if they had taken place after the 21st March 2014. Unpublished as well as published studies were included.

Included studies: Sixteen studies were included in the data synthesis. Data was extracted on study characteristics as well as any information relating to ten ethical areas of interest specified in the three research frameworks for ethical trial conduct and an additional criterion of whether the study received ethics approval from a research ethics committee.

Synthesis of results: Eight studies were judged to fully comply with all eleven criteria. The other eight studies all had at least one criteria where there was not enough information available to draw any conclusions. In two studies there were ethical concerns regarding the information provided in relation to at least one ethical criteria.

Description of the effect: One study did not receive ethical approval as the authors argued that treating approximately one hundred patients consecutively for compassionate reasons did not constitute a clinical trial. Furthermore, after the patients were treated, physicians in Sierra Leone did not release reports of treatment results and so study conclusions had to be made based on unpublished observations. In another study the risk-benefit ratio of the trial drug does not appear to be favourable and the pre-trial evidence base for its effectiveness against Ebola is speculative.

#### Conclusions

Some limited and appropriate deviation from standard research expectations in disaster situations is increasingly accepted. However, this is not an excuse for poor ethics oversight and international regulations are in place which should not be ignored. New guidelines are needed that better define the boundaries between using medicines for compassionate use and conducting a clinical trial. Greater support should be offered for local research ethics committees in affected areas so that they can provide robust ethical review. Further systematic reviews should be carried out in epidemics of any novel infectious diseases to assess if comparable findings arise.

## **PLoS Pathogens**

http://journals.plos.org/plospathogens/ [No new digest content identified]

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

http://www.pnas.org/content/early/ [Accessed 21 January 2017] [No new digest content identified]

## **Prehospital & Disaster Medicine**

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

#### **Preventive Medicine**

Volume 94, Pages 1-72 (January 2017) http://www.sciencedirect.com/science/journal/00917435/94 [Reviewed earlier]

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

10 February 2016; volume 283, issue 1824

## http://rspb.royalsocietypublishing.org/content/283/1824?current-issue=y [No new digest content identified]

#### **Public Health Ethics**

Volume 9 Issue 21 January 2017 <a href="http://phe.oxfordjournals.org/content/current">http://phe.oxfordjournals.org/content/current</a> [Reviewed earlier]

## **Public Health Reports**

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

## **Qualitative Health Research**

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

[Reviewed earlier]

## **Reproductive Health**

http://www.reproductive-health-journal.com/content [Accessed 21 January 2017] [No relevant content identified]

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

Recently Published Articles -

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

Special Issue on HIV/AIDS in the Americas

[Reviewed earlier]

#### **Risk Analysis**

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

## **Risk Management and Healthcare Policy**

Volume 9, 2016 <a href="https://www.dovepress.com/risk-management-and-healthcare-policy-archive56">https://www.dovepress.com/risk-management-and-healthcare-policy-archive56</a> [Reviewed earlier]

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#### Science

20 January 2017 Vol 355, Issue 6322 <a href="http://www.sciencemag.org/current.dtl">http://www.sciencemag.org/current.dtl</a>

Feature

#### **Taming rabies**

By Erik Stokstad

Science20 Jan 2017: 238-242 Full Access

The best way to stop people from dying of rabies is to protect dogs. Can that strategy work in the world's poorest countries?

Summary

An estimated 59,000 people die from rabies around the world every year. Their horrible suffering—including convulsions, terror, and aggression—and the fact that many victims are children led the World Health Organization and others to announce a goal to eliminate rabies deaths worldwide by 2030. The plan calls for cheaper and faster treatment for people. But its long-term bet is on vaccinating domestic dogs, which cause more than 99% of infections. The challenges are enormous in sub-Saharan Africa, where poor countries can hardly pay for millions of dogs to be vaccinated, and their governments often have trouble organizing vaccination campaigns across vast rural areas. In pilot projects underway in Tanzania, Kenya, and a few other African countries, scientists are testing strategies for reaching and vaccinating dogs more efficiently and quantifying the economic benefits of potentially expensive national campaigns. For Africa as a whole, rabies elimination might cost between \$800 million to \$1.55 billion. The price could come down, however, from dog vaccine banks, for example, and other ways to make vaccines cheaper and more easily distributed.

### **Perspectives**

## **Technology beats corruption**

By Rema Hanna

Science20 Jan 2017: 244-245 Full Access

Biometric smart cards help to reduce corruption in cash transfer programs in India Summary

More than 1.9 billion individuals in the developing world benefit from social safety net programs: noncontributory transfer programs that distribute cash or basic in-kind products to the poor. But despite their importance, high levels of corruption often stifle the effectiveness of these programs. If cash transfer programs are particularly prone to graft, then in-kind programs should be preferred in practice. In a recent paper, Muralidharan et al. report evidence to the contrary by showing that use of a modern banking technology—biometric smart cards—can help to drastically reduce corruption in cash transfer programs (1).

#### Review

# <u>Human tissues in a dish: The research and ethical implications of organoid technology</u>

By Annelien L. Bredenoord, Hans Clevers, Juergen A. Knoblich Science20 Jan 2017

Abstract

Growing functional human tissues and organs would provide much needed material for regeneration and repair. New technologies are taking us in that direction. In addition to their use in regenerative medicine, stem cells that grow and morph into organ-like structures known

as organoids can be used in drug development and toxicology testing. The potential developments and possibilities are numerous and affect not only biomedicine but also areas of ongoing ethical debate, such as animal experimentation, research on human embryos and fetuses, ethics review, and patient consent. Bredenoord et al. review how organoids affect existing ethical debates and how they raise novel ethical dilemmas and professional responsibilities.

#### **Science Translational Medicine**

18 January 2017 Vol 9, Issue 373 <a href="http://stm.sciencemag.org/">http://stm.sciencemag.org/</a>
[New issue; No new relevant content identified]

### **Social Science & Medicine**

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

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

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

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

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

### **Vaccine**

Volume 35, Issue 4, Pages 503-712 (23 January 2017) http://www.sciencedirect.com/science/journal/0264410X/35/4 Brief report

<u>Interest in an Ebola vaccine among a U.S. national sample during the height of the 2014–2016 Ebola outbreak in West Africa</u>

Pages 508-512

Julia E. Painter, Ralph J. DiClemente, Michael E. von Fricken Abstract

To better understand the association between Ebola-related attitudes and interest in receiving an Ebola virus vaccine, a survey was administered to a U.S. national sample using GfK's KnowledgePanel®. Among participants (N = 1417), 34.1% expressed interest in an Ebola vaccine for themselves. In the subset of participants with children aged 0–17 (N = 410), 38.1% expressed interest in an Ebola vaccine for their child. In multivariable analyses, vaccine interest for oneself was associated with perceived susceptibility to Ebola (p = 0.009), beliefs that the U.S. government should spend money to control Ebola (p = 0.002), and beliefs Ebola posed a

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national threat (p = 0.007). Vaccine interest for one's child was associated with perceived severity of Ebola (p = 0.018) and beliefs that the U.S. government should spend money to control Ebola (p = 0.003). Findings highlight the influence of personal and national threat beliefs on vaccine interest. Understanding the impact of threat beliefs may benefit vaccine campaign development during future pandemic threats

#### Reviews

# <u>Effectiveness of MF59-adjuvanted seasonal influenza vaccine in the elderly: A systematic review and meta-analysis</u>

**Review Article** 

Pages 513-520

Alexander Domnich, Lucia Arata, Daniela Amicizia, Joan Puig-Barberà, Roberto Gasparini, Donatella Panatto

**Abstract** 

Background

In the elderly, traditional influenza inactivated vaccines are often only modestly immunogenic, owing to immunosenescence. Given that adjuvantation is a means of enhancing the immune response, the trivalent inactivated vaccine adjuvanted with MF59 (MF59-TIV) was specifically designed to overcome this problem. Considering that, for ethical reasons, the absolute effectiveness of an influenza vaccine in the elderly cannot be demonstrated in placebocontrolled studies, the present study aimed to assess the effectiveness of MF59-TIV in preventing influenza-related outcomes in the elderly.

#### Methods

We conducted a systematic review of observational studies aimed at evaluating the effectiveness of MF59-TIV against influenza-related outcomes. Results of single studies were pooled whenever possible.

#### Results

Of the 1993 papers screened, 11 (6 case-control, 3 cohort and 2 prospective case-control) studies were identified. Hospitalization due to pneumonia/influenza and laboratory-confirmed influenza were reported in more than one study, while other outcomes (influenza-like illness, cardio- and cerebrovascular accidents) were investigated only by one study each. Pooled analysis of four case-control studies showed an adjusted MF59-TIV effectiveness of 51% (95% CI: 39–61%) against hospitalizations for pneumonia/influenza among community-dwelling seniors. Pooled results of the adjusted vaccine effectiveness against laboratory-confirmed influenza were also high (60.1%), although the 95% CI passed through zero (–1.3 to 84.3%). Other single community-based studies showed very high effectiveness of MF59-TIV in preventing hospitalizations for acute coronary [87% (95% CI: 35–97%)] and cerebrovascular [93% (95% CI: 52–99%)] events. MF59-TIV proved highly effective [94% (95% CI: 47–100%] in reducing influenza-like illness among institutionalized elderly. Furthermore, MF59-TIV displayed greater efficacy than non-adjuvanted vaccines in preventing hospitalizations due to pneumonia/influenza [adjusted risk ratio 0.75 (95% CI: 0.57–0.98)] and laboratory-confirmed influenza [adjusted odds ratio 0.37 (0.14–0.96)].

### Conclusions

Our results suggest that MF59-TIV is effective in reducing several influenza-related outcomes among the elderly, especially hospitalizations due to influenza-related complications.

<u>Pregnancy as a risk factor for severe outcomes from influenza virus infection: A systematic review and meta-analysis of observational studies</u>

Review Article

Pages 521-528

Dominik Mertz, Johanna Geraci, Judi Winkup, Bradford D. Gessner, Justin R. Ortiz, Mark Loeb Abstract

Background

Pregnancy is considered to be an important risk factor for severe complications following influenza virus infection. As a consequence, WHO recommendations prioritize pregnant women over other risk groups for influenza vaccination. However, the risk associated with pregnancy has not been systematically quantified.

**Purpose** 

Systematic review and meta-analysis of observational studies that reported on pregnancy as a risk factor for severe outcomes from influenza virus infection.

Data source

MEDLINE, EMBASE, CINAHL, and CENTRAL up to April 2014.

Data selection

Studies reporting on outcomes in pregnant women with influenza in comparison to non-pregnant patients with influenza. Outcomes included community-acquired pneumonia, hospitalization, admission to intensive care units (ICU), ventilatory support, and death. Data extraction

Two reviewers conducted independent screening and data extraction. A random effects model was used to obtain risk estimates. Ecological studies were summarized descriptively. Data synthesis

A total of 142 non-ecological and 10 ecological studies were included. The majority of studies (n = 136, 95.8%) were conducted during the 2009 influenza A (pH1N1) pandemic. There was a higher risk for hospitalization in pregnant versus non-pregnant patients infected with influenza (odds ratio [OR] 2.44, 95% CI 1.22–4.87), but no significant difference in mortality (OR 1.04, 95% CI 0.81–1.33) or other outcomes. Ecologic studies confirmed the association between hospitalization risk and pregnancy and 4 of 7 studies reported higher mortality rates in pregnant women.

Limitations

No studies were identified in which follow-up began prior to contact with the healthcare system and lack of adjustment for confounding factors.

Conclusions

We found that influenza during pregnancy resulted in a higher risk of hospital admission than influenza infection in non-pregnant individuals, but that the risk of mortality following influenza was similar in both pregnant and non-pregnant individuals.

# Real-time dynamic modelling for the design of a cluster-randomized phase 3 Ebola vaccine trial in Sierra Leone

Original Research Article

Pages 544-551

A. Camacho, R.M. Eggo, N. Goeyvaerts, A. Vandebosch, R. Mogg, S. Funk, A.J. Kucharski, C.H. Watson, T. Vangeneugden, W.J. Edmunds

**Abstract** 

Background

Declining incidence and spatial heterogeneity complicated the design of phase 3 Ebola vaccine trials during the tail of the 2013–16 Ebola virus disease (EVD) epidemic in West Africa. Mathematical models can provide forecasts of expected incidence through time and can account

for both vaccine efficacy in participants and effectiveness in populations. Determining expected disease incidence was critical to calculating power and determining trial sample size. Methods

In real-time, we fitted, forecasted, and simulated a proposed phase 3 cluster-randomized vaccine trial for a prime-boost EVD vaccine in three candidate regions in Sierra Leone. The aim was to forecast trial feasibility in these areas through time and guide study design planning. Results

EVD incidence was highly variable during the epidemic, especially in the declining phase. Delays in trial start date were expected to greatly reduce the ability to discern an effect, particularly as a trial with an effective vaccine would cause the epidemic to go extinct more quickly in the vaccine arm. Real-time updates of the model allowed decision-makers to determine how trial feasibility changed with time.

#### Conclusions

This analysis was useful for vaccine trial planning because we simulated effectiveness as well as efficacy, which is possible with a dynamic transmission model. It contributed to decisions on choice of trial location and feasibility of the trial. Transmission models should be utilised as early as possible in the design process to provide mechanistic estimates of expected incidence, with which decisions about sample size, location, timing, and feasibility can be determined.

## Knowledge and recommendation regarding routine childhood vaccinations among pediatric healthcare providers in Israel

Original Research Article

Pages 633-638

Rana Shibli, Rivka Shemer, Liat Lerner-Geva, Shmuel Rishpon

Abstract

Background

A recommendation by pediatric healthcare providers (HCPs) is a major factor influencing parents' decision to vaccinate their children. Consequently, it is important to understand the motives behind the HCPs' recommendations to vaccinate children according to the routine immunization program.

Objectives

To study the association of pediatric HCPs' knowledge about and attitudes towards childhood vaccinations and of their professional and demographic characteristics, with two variables: 1. Their recommendations to parents regarding adherence to the routine immunization program. 2. Their choices concerning routine immunization of their own children.

Study design and settings

We conducted a cross-sectional study of pediatric nurses and physicians working at Mother-Child Health Clinics (MCHCs) in Haifa and Tel-Aviv districts and at a hospital in Hadera City, Israel.

Methods

A structured, anonymous self-administered questionnaire was used.

Results

The overall response rate was 60%, totaling 218 participants. 92% of whom were nurses. Misconceptions related to vaccine safety were found among a high percentage of the participants. The HCPs knowledge level was associated with the HCPs vaccinating their own children according to the recommended immunization program (OR=1.32; CI95% 1.06–1.64), but not with their recommendation to parents to adhere to the program. No association was found between attitudes and these variables. Workplace (MCHCs versus hospital) correlated

with the above mentioned two dependent variables (OR=1.89; CI95% 1.21–2.97 and OR=2.42; CI95% 1.73–3.4, respectively).

Conclusions

Amplifying the knowledge of HCPs and addressing their concern about vaccinations can improve their adherence to the routine immunization program regarding their own children. This may lead to better adherence of other parents who are frequently interested in the HCPs' behavior and consider them as a role model. In general, there is a need to emphasize the HCP's responsibility for the successful implementation of the immunization program in the community and at hospitals.

# <u>Primary care physicians' perspective on financial issues and adult immunization in the Era of the Affordable Care Act</u>

Original Research Article

Pages 647-654

Laura P. Hurley, Megan C. Lindley, Mandy A. Allison, Lori A. Crane, Michaela Brtnikova, Brenda L. Beaty, Megan Snow, Carolyn B. Bridges, Allison Kempe

**Abstract** 

Background

Financial barriers to adult vaccination are poorly understood. Our objectives were to assess among general internists (GIM) and family physicians (FP) shortly after Affordable Care Act (ACA) implementation: (1) proportion of adult patients deferring or refusing vaccines because of cost and frequency of physicians not recommending vaccines for financial reasons; (2) satisfaction with reimbursement for vaccine purchase and administration by payer type; (3) knowledge of Medicare coverage of vaccines; and (4) awareness of vaccine-specific provisions of the ACA.

Methods

We administered an Internet and mail survey from June to October 2013 to national networks of 438 GIMs and 401 FPs.

Results

Response rates were 72% (317/438) for GIM and 59% (236/401) for FP. Among physicians who routinely recommended vaccines, up to 24% of GIM and 30% of FP reported adult patients defer or refuse certain vaccines for financial reasons most of the time. Physicians reported not recommending vaccines because they thought the patient's insurance would not cover it (35%) or the patient could be vaccinated more affordably elsewhere (38%). Among physicians who saw patients with this insurance, dissatisfaction ('very dissatisfied') was highest for payments received from Medicaid (16% vaccine purchase, 14% vaccine administration) and Medicare Part B (11% vaccine purchase, 11% vaccine administration). Depending on the vaccine, 36–71% reported not knowing how Medicare covered the vaccine. Thirty-seven percent were 'not at all aware' and 19% were 'a little aware' of vaccine-specific provisions of the ACA. Conclusions

Patients are refusing and physicians are not recommending adult vaccinations for financial reasons. Increased knowledge of private and public insurance coverage for adult vaccinations might position physicians to be more likely to recommend vaccines and better enable them to refer patients to other vaccine providers when a particular vaccine or vaccines are not offered in the practice.

<u>Impact of the national rotavirus vaccination programme on acute gastroenteritis in England and associated costs averted</u>

Original Research Article

Pages 680-686

Sara L. Thomas, Jemma L. Walker, Justin Fenty, Katherine E. Atkins, Alex J. Elliot, Helen E. Hughes, Julia Stowe, Shamez Ladhani, Nick J. Andrews

**Abstract** 

Background

Introduction of infant oral rotavirus vaccination in the UK in July 2013 has resulted in decreased hospitalisations and Emergency Department (ED) visits for acute gastroenteritis (AGE), for both adults and children. We investigated reductions in AGE incidence seen in primary care in the two years after vaccine introduction, and estimated the healthcare costs averted across healthcare settings in the first year of the vaccination programme.

Methods

We used primary care data from the Clinical Practice Research Datalink and age-stratified time-series analyses to derive adjusted incidence rate ratios (IRRa) for AGE in the first two years of the post-vaccination era (July 2013-April 2015) compared to the pre-vaccination era (July 2008-June 2013). We estimated cases averted among children aged <5 years in the first year of the vaccination programme by comparing observed numbers of AGE cases in 2013–2014 to numbers predicted from the time-series models. We then estimated the healthcare costs averted for general practice consultations, ED visits and hospitalisations.

In general practice, AGE rates in infants (the target group for vaccination) decreased by 15% overall after vaccine introduction (IRRa = 0.85; 95%CI=0.76–0.95), and by 41% in the months of historically high rotavirus circulation (IRRa=0.59; 95%CI=0.53–0.66). Rates also decreased in other young children and to a lesser degree in older individuals, indicating herd immunity. Across all three settings (general practice, EDs, and hospitalisations) an estimated 87,376 (95% prediction interval: 62,588–113,561) AGE visits by children aged <5 years were averted in 2013–14, associated with an estimated £12.5 million (9,209–16,198) reduction in healthcare costs.

### Conclusions

The marked decreases in the general practice AGE burden after rotavirus vaccine introduction mirror decreases seen in other UK healthcare settings. Overall, these decreases are associated with substantial averted healthcare costs.

#### Vaccine

Volume 35, Issue 3, Pages 411-502 (11 January 2017) http://www.sciencedirect.com/science/journal/0264410X/35/3 Letter to the Editor

Ensuring access to oral cholera vaccine to those who need them most

Francisco J. Luquero, Anne Ballard, David A. Sack [No abstract]

Pneumonia prevention: Cost-effectiveness analyses of two vaccines among refugee children aged under two years, Haemophilus influenzae type b-containing and pneumococcal conjugate vaccines, during a humanitarian emergency, Yida camp,

South Sudan
Original Research Article
Pages 435-442

Lisa M. Gargano, Rana Hajjeh, Susan T. Cookson Abstract

By September 2013, war between Sudan and South Sudan resulted in >70,000 Sudanese refugees and high pneumonia incidence among the 20,000 refugees in Yida camp, South Sudan. Using Médecins Sans Frontières (MSF)-provided data and modifying our decision-tree models, we estimated if administering Haemophilus influenzae type b (Hib)-containing (pentavalent vaccine, also with diphtheria pertussis and tetanus [DPT] and hepatitis B) and pneumococcal conjugate (PCV) vaccines were cost-effective against hospitalized pneumonia. Among children <2 years old, compared with no vaccination, one- and two-doses of combined Hib-containing and PCV would avert an estimated 118 and 125 pneumonia cases, and 8.5 and 9.1 deaths, respectively. The cost per Disability-Adjusted-Life-Year averted for administering combined one- and two-doses was US\$125 and US\$209, respectively. MSF demonstrated that it was possible to administer these vaccines during an emergency and our analysis found it was highly cost-effective, even with just one-dose of either vaccine. Despite unknown etiology, there is strong field and now economic rationale for administering Hib and PCV during at least one humanitarian emergency.

# <u>Vaccine coverage and adherence to EPI schedules in eight resource poor settings in the MAL-ED cohort study</u>

Original Research Article

Pages 443-451

Christel Hoest, Jessica C. Seidman, Gwenyth Lee, James A Platts-Mills, Asad Ali, Maribel Paredes Olortegui, Pascal Bessong, Ram Chandyo, Sudhir Babji, Venkata Raghava Mohan, Dinesh Mondal, Mustafa Mahfuz, Estomih R Mduma, Emanuel Nyathi, Claudia Abreu, Mark A. Miller, William Pan, Carl J. Mason, Stacey L. Knobler, the MAL-ED Network Investigators *Abstract* 

#### Background

Launched in 1974, the Expanded Program on Immunization (EPI) is estimated to prevent twothree million deaths annually from polio, diphtheria, tuberculosis, pertussis, measles, and tetanus. Additional lives could be saved through better understanding what influences adherence to the EPI schedule in specific settings.

#### Methods

The Etiology, Risk Factors and Interactions of Enteric Infections and Malnutrition and the Consequences for Child Health and Development (MAL-ED) study followed cohorts in eight sites in South Asia, Africa, and South America and monitored vaccine receipt over the first two years of life for the children enrolled in the study. Vaccination histories were obtained monthly from vaccination cards, local clinic records and/or caregiver reports. Vaccination histories were compared against the prescribed EPI schedules for each country, and coverage rates were examined in relation to the timing of vaccination. The influence of socioeconomic factors on vaccine timing and coverage was also considered.

#### Results

Coverage rates for EPI vaccines varied between sites and by type of vaccine; overall, coverage was highest in the Nepal and Bangladesh sites and lowest in the Tanzania and Brazil sites. Bacillus Calmette-Guérin coverage was high across all sites, 87–100%, whereas measles vaccination rates ranged widely, 73–100%. Significant delays between the scheduled administration age and actual vaccination date were present in all sites, especially for measles vaccine where less than 40% were administered on schedule. A range of socioeconomic factors

were significantly associated with vaccination status in study children but these results were largely site-specific.

Conclusions

Our findings highlight the need to improve measles vaccination rates and reduce delayed vaccination to achieve EPI targets related to the establishment of herd immunity and reduction in disease transmission.

Special Section: Immunology and vaccinology of respiratory syncytial virus infections (Guest Editors: D. Altmann and C. Chiu)

## **Vaccine: Development and Therapy**

https://www.dovepress.com/vaccine-development-and-therapy-archive111 (Accessed 21 January 2017)
[No new content]

## **Vaccines — Open Access Journal**

http://www.mdpi.com/journal/vaccines

(Accessed 21 January 2017)

## A Protective Vaccine against Chlamydia Genital Infection Using Vault Nanoparticles without an Added Adjuvant

Vaccines 2017, 5(1), 3; doi:10.3390/vaccines5010003 - 19 January 2017 by <u>Janina Jiang</u>, <u>Guangchao Liu</u>, <u>Valerie A. Kickhoefer</u>, <u>Leonard H. Rome</u>, <u>Lin-Xi Li</u>, <u>Stephen J. McSorley</u> and <u>Kathleen A. Kelly</u> *Abstract* 

Chlamydia trachomatis genital infection is the most common sexually transmitted bacterial disease, causing a significant burden to females due to reproductive dysfunction. Intensive screening and antibiotic treatment are unable to completely prevent female reproductive dysfunction, thus, efforts have become focused on developing a vaccine. A major impediment is identifying a safe and effective adjuvant which induces cluster of differentiation 4 (CD4) cells with attributes capable of halting genital infection and inflammation. Previously, we described a natural nanocapsule called the vault which was engineered to contain major outer membrane protein (MOMP) and was an effective vaccine which significantly reduced early infection and favored development of a cellular immune response in a mouse model. In the current study, we used another chlamydial antigen, a polymorphic membrane protein G-1 (PmpG) peptide, to track antigen-specific cells and evaluate, in depth, the vault vaccine for its protective capacity in the absence of an added adjuvant. We found PmpG-vault immunized mice significantly reduced the genital bacterial burden and histopathologic parameters of inflammation following a C. muridarum challenge. Immunization boosted antigen-specific CD4 cells with a multiple cytokine secretion pattern and reduced the number of inflammatory cells in the genital tract making the vault vaccine platform safe and effective for chlamydial genital infection. We conclude that vaccination with a Chlamydia-vault vaccine boosts antigen-specific immunities that are effective at eradicating infection and preventing reproductive tract inflammation.

## **Value in Health**

December 2016 Volume 19, Issue 8, p909-1074 <a href="http://www.valueinhealthjournal.com/current">http://www.valueinhealthjournal.com/current</a>

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

### **Journal of Nursing Education and Practice**

Online Published: January 15, 2017

<u>Predictors of Human Papillomavirus Vaccine uptake or intent among parents of preadolescents and adolescents</u>

Kimberlee Dayal, Sarah Robinson, Jessica Schoening, Mary Catherine Smith, Son Chae Kim ABSTRACT

Aim: The aim of this study was to examine predictors of human papillomavirus (HPV) vaccine uptake or intent among parents of pre-adolescents and adolescents.

Methods: A cross-sectional descriptive study was conducted among parents of girls aged 9 to 18 years, visiting two primary care clinics in central Texas from September to November 2015. Pearson's product-moment correlation procedures and path analyses based on Health Belief Model were performed.

Results: Path analysis showed that provider recommendation for HPV vaccination (Beta=-0.37; p < .001) and perceived HPV vaccine harm (Beta=-0.48; p < .001) had statistically significant direct effects on HPV vaccine uptake or intent. The perceived HPV vaccine effectiveness was directly influenced by HPV knowledge (Beta=-0.39; p < .001), empowerment in parent-provider relationships (Beta=-0.30; p = .006) and parental college education (Beta=-0.23; p = .039). Conclusions: Together with parental empowerment fostering an equal partnership with providers, targeted education to improve parental HPV knowledge may convince them of the HPV vaccine effectiveness. This, in turn, may help them put the perceived HPV vaccine harm in proper perspective and allow them to make informed decisions regarding the timely HPV vaccination of their children. Because provider recommendation is one of the most important contributing factors for HPV vaccine uptake or intent, parental education and recommendations from nurses will help reduce the knowledge gaps and empower parents to make the timely decisions to vaccinate their children.

#### **Health Education Research**

(2017) cyw055 DOI: https://doi.org/10.1093/her/cyw055

<u>Hispanic mothers' beliefs regarding HPV vaccine series completion in their adolescent daughters</u>

AM Roncancio, KK Ward, CC Carmack, BT Muñoz... - 2017 Abstract

Rates of human papillomavirus (HPV) vaccine series completion among adolescent Hispanic females in Texas in 2014 ( $\sim$ 39%) lag behind the Healthy People 2020 goal (80%). This qualitative study identifies Hispanic mothers' salient behavioral, normative and control beliefs regarding having their adolescent daughters complete the vaccine series. Thirty-two mothers of girls (aged 11–17) that had received at least one dose of the HPV vaccine, completed in-depth interviews. Six girls had received one dose of the HPV vaccine, 10 girls had received two doses, and 16 girls had received all three doses. The questions elicited salient: (i) experiential and instrumental attitudes (behavioral beliefs); (ii) supporters and non-supporters (normative

beliefs) and (iii) facilitators and barriers (control beliefs). Directed content analysis was employed to select the most salient beliefs. Mothers: (i) expressed salient positive feelings (e.g. good, secure, happy and satisfied); (ii) believed that completing the series resulted in positive effects (e.g. protection, prevention); (iii) believed that the main supporters were themselves, their daughter's father and doctor with some of their friends not supporting series completion and (iv) believed that vaccine affordability, information, transportation, ease of scheduling and keeping vaccination appointments and taking their daughter's immunization card to appointments were facilitators. This study represents the first step in building theory-based framework of vaccine series completion for this population. The beliefs identified provide guidance for health care providers and intervention developers.

## **Papillomavirus Research**

Available online 17 January 2017 In Press, Accepted Manuscript

Reasons for Acceptance or Refusal of Human Papillomavirus Vaccine in a California Pediatric Practice

B Brown, MI Gabra, H Pellman *Abstract* 

Despite the effectiveness and availability of the Human Papillomavirus (HPV) vaccine, HPV remains the most common sexually transmitted infection in the United States and has the lowest initiation rate of any routinely recommended teen vaccine. In January 2015, we surveyed parents at a Southern California pediatric private practice about reasons they accept or refuse HPV vaccine for their children. Of the 200 consecutive parents that had HPV vaccine initiation recommended for their child, 123 (61.5%) children were male and 38.5% were female. The overall age range of children was 10–17 years (median 12 years). Of the 164 (82.0%) who accepted the vaccine, a higher percentage were male (88.6% vs 71.4%, p=0.001). The most common reasons for accepting was strength of provider recommendation (84.2%) and available information (63.4%). The most common (55.6%) reason for refusing was wanting to learn more about the vaccine. These results further support the importance of both the strength of physician recommendation and improving public education about the vaccine.

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## Media/Policy Watch

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

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

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

#### The Atlantic

http://www.theatlantic.com/magazine/

Accessed 21 January 2017

## **The Shadow Network of Anti-Vax Doctors**

Both mainstream and alternative doctors help patients avoid or delay vaccines. Trump's rhetoric might empower them further.

Jan 18, 2017

Olga Khazan

... Brandeis is one of a sizable number of doctors who allow their patients to avoid or delay vaccines if they are concerned about their health effects. It's unknown how many of these physicians there are, but dozens of names—some even organized by state—come up on earthy mommy blogs and other web communities. "We are hoping to find a pediatrician/pediatric group in the ... area who is an MD, but open-minded to alternative medicine, as well as less aggressive vaccination schedules," wrote one California parent on the Berkeley Parents Network in December.

These doctors—and patients who seek them out—could be emboldened if President-elect Donald Trump goes through with the appointment of Robert F. Kennedy, an environmental activist and vocal vaccine skeptic, to lead a commission "on vaccine safety and scientific integrity," as <a href="was reported last week">was reported last week</a>. Trump met with Kennedy in Trump Tower on January 10, and Kennedy <a href="last-environmental-group">later told</a> his environmental-group colleagues that he would be taking a leave to chair the vaccine commission. (Trump's team said later that no decision had been made yet.)...

#### **BBC**

http://www.bbc.co.uk/ Accessed 21 January 2017 [No new, unique, relevant content]

#### The Economist

http://www.economist.com/ Accessed 21 January 2017 [No new, unique, relevant content]

## **Financial Times**

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

Accessed 21 January 2017

[No new, unique, relevant content]

#### **Forbes**

http://www.forbes.com/ Accessed 21 January 2017

## <u>Letting Seriously III Patients Try Drugs Whose Safety, Efficacy Hasn't Been Proven</u> <u>Could Be Deadly</u>

Rita Rubin, Contributor

One potential candidate for Food and Drug Administration commissioner has supported the idea of allowing drugs on the market as long as they're safe but before they've been proven to

be effective. But a new FDA report lists 22 examples of therapies and vaccines whose early promise didn't pan out.

## **Foreign Affairs**

http://www.foreignaffairs.com/ Accessed 21 January 2017 [No new, unique, relevant content]

### **Foreign Policy**

http://foreignpolicy.com/ Accessed 21 January 2017 [No new, unique, relevant content]

#### The Guardian

http://www.guardiannews.com/ Accessed 21 January 2017 [No new, unique, relevant content]

## **Huffington Post**

http://www.huffingtonpost.com/ Accessed 21 January 2017

## **Americans Aren't With Donald Trump On Vaccines**

Public health experts and the general public think the president-elect is wrong that shots are unsafe.

19 January 2017

President-elect <u>Donald Trump</u>'s skepticism about the safety of childhood vaccines contrasts not only with the scientific consensus, but also with the opinions of Americans — fewer than one-quarter of whom think immunization should be a matter of personal choice.

By a more than 2-1 margin, 54 percent to 26 percent, Americans say that the science supporting the safety of childhood vaccination is "indisputable," rather than something that requires future debate, a <a href="mailto:new HuffPost/YouGov survey">new HuffPost/YouGov survey</a> finds, although partisan divides on the issue are widening.

Two-thirds of Americans say that the issue of vaccinating children is a matter of public health, with just 24 percent considering it a matter of personal choice. A 56 percent majority of those polled say they have at least a fair amount of trust in the government to set vaccination policies.

Among public health experts, there's little disagreement that immunization is safe and effective and one of the greatest public health achievements in modern times...

#### **New Yorker**

http://www.newyorker.com/ Accessed 21 January 2017 [No new, unique, relevant content]

#### **New York Times**

http://www.nytimes.com/ Accessed 21 January 2017

## **How the Response to Zika Failed Millions**

16 January 2017

#### **Wall Street Journal**

http://online.wsj.com/home-page? wsjregion=na,us& homepage=/home/us Accessed 21 January 2017

## **Gates Foundation Joins Fight Against Epidemics**

Jan. 18, 2017 5:59 pm ET

### **Washington Post**

http://www.washingtonpost.com/ Accessed 21 January 2017

## Researchers struggle to replicate 5 influential cancer experiments from top labs

Experiments should be reproducible, but most of these weren't, a research team finds. The original scientists criticize the new results.

Joel Achenbach and Laurie McGinley | National/health-science | Jan 18, 2017

## Think Tanks et al

## **Brookings**

http://www.brookings.edu/ Accessed 21 January 2017 [No new relevant content]

#### **Center for Global Development**

http://www.cgdev.org/page/press-center

Accessed 21 January 2017

[No new relevant content]

## **Council on Foreign Relations**

http://www.cfr.org/ Accessed 21 January 2017 [No new relevant content]

#### **CSIS**

https://www.csis.org/ Accessed 21 January 2017 [No new relevant content]

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

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