
**Vaccines and Global Health: The Week in Review**
**28 May 2016**
**Center for Vaccine Ethics & Policy (CVEP)**

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

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

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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 (EDT in the 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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***Editor's Note:***

*The WHA was still in session today as this edition was in completion. We will provide a summary of key resolutions and other actions from WHA and the Executive Board in next week's edition and going forward. Below are the current press release updates on WHA.*

**World Health Assembly - WHA69**
Geneva 23-28 May 2016.
:: Main Documents

**WHO Executive Board EB139**
30–31 May 2016
Main Documents

**Sixty-ninth World Health Assembly update**
*News release*
27 MAY 2016 | GENEVA - Delegates at the World Health Assembly have agreed resolutions and decisions on air pollution, chemicals, the health workforce, childhood obesity, violence, noncommunicable diseases, and the election of the next Director-General…

**World Health Assembly agrees new Health Emergencies Programme**
*News release*
25 MAY 2016 | GENEVA - WHO Member States today agreed to one of the most profound transformations in the Organization's history, establishing a new Health Emergencies Programme. The programme adds operational capabilities for outbreaks and humanitarian emergencies to complement its traditional technical and normative roles.

The new programme is designed to deliver rapid, predictable, and comprehensive support to countries and communities as they prepare for, face or recover from emergencies caused by any type of hazard to human health, whether disease outbreaks, natural or man-made disasters or conflicts.

WHO will provide leadership within the context of the International Health Regulations and health, in relation to the broader humanitarian and disaster-management system. As health cluster lead, it will draw on the respective strengths and expertise of a wide range of partners and Member States.

In order to fulfil these new responsibilities, delegates agreed a budget of US$ 494 million for the Programme for 2016–2017. This is an increase of US$160 million to the existing Programme Budget for WHO's work in emergencies.

Delegates welcomed the progress WHO has made in developing the new Health Emergencies Programme, noting the new implementation plan and timeline, and the establishment of an Independent Oversight and Advisory Committee for the new programme.

They encouraged the ongoing collaboration with the United Nations Office for the Coordination of Humanitarian Affairs to align the management of disease outbreaks and other biological emergencies with the mechanisms and capacities of the Inter-Agency Standing Committee.

They requested the WHO Director-General to report to the Seventieth World Health Assembly on progress made in establishing and operationalizing the programme.

**World Health Assembly agrees resolutions on women, children and adolescents, and healthy ageing**
26 May 2016

**World Health Assembly highlights importance of multisectoral action on health**
24 May 2016

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**Zika virus** [to 28 May 2016]
*Public Health Emergency of International Concern (PHEIC)*
http://www.who.int/emergencies/zika-virus/en/

**WHO public health advice regarding the Olympics and Zika virus**
28 May 2016 - Based on current assessment, cancelling or changing the location of the 2016 Olympics will not significantly alter the international spread of Zika virus. Brazil is one of almost 60 countries and territories which to-date report continuing transmission of Zika by mosquitoes. People continue to travel between these countries and territories for a variety of reasons. The best way to reduce risk of disease is to follow public health travel advice.
…Based on the current assessment of Zika virus circulating in almost 60 countries globally and 39 countries in the Americas, there is no public health justification for postponing or cancelling the games. WHO will continue to monitor the situation and update our advice as necessary….

**Zika situation report- 26 May 2016**
*Read the full situation report*
*Summary*
:: As of 25 May 2016, 60 countries and territories report continuing mosquito-borne transmission of which:
…46 countries are experiencing a first outbreak of Zika virus since 2015, with no previous evidence of circulation, and with ongoing transmission by mosquitos.
…14 countries reported evidence of Zika virus transmission between 2007 and 2014, with ongoing transmission.

:: In addition, four countries or territories have reported evidence of Zika virus transmission between 2007 and 2014, without ongoing transmission: Cook Islands, French Polynesia, ISLA DE PASCUA – Chile and YAP (Federated States of Micronesia).

:: Ten countries have reported evidence of person-to-person transmission of Zika virus, probably via a sexual route.

:: In the week to 25 May 2016, no new country reported on mosquito-borne or person-to-person Zika virus transmission.

:: As of 25 May 2016, microcephaly and other central nervous system (CNS) malformations potentially associated with Zika virus infection or suggestive of congenital infection, have been reported by ten countries or territories. Infection of the mothers took place in eight different

countries, for one additional case the precise country in Latin America is not determined. Spain is the latest country to report a case of microcephaly associated with Zika virus in a returning pregnant traveller.

:: Two cases of microcephaly and other neurological abnormalities are currently under verification in the Bolivarian Republic of Venezuela and Costa Rica.

:: In the context of Zika virus circulation, 13 countries and territories worldwide have reported an increased incidence of Guillain-Barré syndrome (GBS) and/or laboratory confirmation of a Zika virus infection among GBS cases. One GBS case associated with Zika virus infection in a returning traveller to the Netherlands has been reported. A case of GBS from Guadeloupe is under verification.

:: Sequencing of the virus that causes the Zika outbreak in Cabo Verde showed that the virus is of the Asian lineage and the same as the one that circulates in Brazil. The precise implication of this finding is yet to be determined.

:: Based on research to date, there is scientific consensus that Zika virus is a cause of microcephaly and GBS.

:: The global Strategic Response Framework launched by WHO in February 2016 encompasses surveillance, response activities and research. An interim report has been published on some of the key activities being undertaken jointly by WHO and international, regional and national partners in response to this public health emergency. A revised strategy for the period July 2016 to December 2017 is currently being developed with partners and will be published in mid-June.

:: WHO has developed new advice and information on diverse topics in the context of Zika virus. WHO's latest information materials, news and resources to support corporate and programmatic risk communication, and community engagement are available online.

**Zika Open** [to 28 May 2016]
[Bulletin of the World Health Organization]
*:: All papers available here*
*RESEARCH IN EMERGENCIES*
**Accuracy of ultrasound scanning relative to reference tests for prenatal diagnosis of microcephaly in the context of Zika virus infection: a systematic review of diagnostic test accuracy**
- Ezinne C Chibueze, Alex JQ Parsons, Katharina da Silva Lopes, Takemoto Yo, Toshiyuki Swa, Chie Nagata, Nobuyuki Horita, Naho Morisaki, Olukunmi O Balogun, Amarjargal Dagvadorj, Erika Ota, Rintaro Mori, Olufemi T Oladapo
Posted: 25 May 2016
http://dx.doi.org/10.2471/BLT.16.178301

**CDC/ACIP** [to 28 May 2016]
http://www.cdc.gov/media/index.html

THURSDAY, MAY 26, 2016
**CDC adds Argentina to interim travel guidance related to Zika virus**
Today, CDC posted a Zika virus travel notice for Argentina. Local transmission of Zika virus infection (Zika) has been reported in Tucumán Province, Argentina.

THURSDAY, MAY 26, 2016
**CDC Director Addresses National Press Club**
CDC Director Tom Frieden, M.D., M.P.H., discussed the latest news and developments in the Zika virus outbreak today at the National Press Club.

**MMWR May 27, 2016 / Vol. 65 / No. 20**
:: Possible Zika Virus Infection Among Pregnant Women — United States and Territories, May 2016
:: Notice to Readers: Changes in the Presentation of Zika Virus Disease, Non-Congenital Infection, and Addition of Zika Virus Congenital Infection to Notifiable Diseases and Mortality Table I

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**EBOLA/EVD** [to 28 May 2016]
*"Threat to international peace and security" (UN Security Council)*

*[Editor's Note:*
*It appears that weekly Ebola Situation Reports have resumed. We will present the first page summary and risk assessment here.*

**EBOLA VIRUS DISEASE - SITUATION REPORT 26 MAY 2016**
*Summary*
:: The Public Health Emergency of International Concern (PHEIC) related to Ebola in West Africa was lifted on 29 March 2016. A total of 28 616 confirmed, probable and suspected cases have been reported in Guinea, Liberia and Sierra Leone, with 11 310 deaths.

:: In the latest cluster, seven confirmed and three probable cases of Ebola virus disease (EVD) were reported between 17 March and 6 April from the prefectures of N'Zerekore (nine cases) and Macenta (one case) in south-eastern Guinea. In addition, three confirmed cases were reported between 1 and 5 April from Monrovia in Liberia; these cases, the wife and two children of the Macenta case, travelled from Macenta to Monrovia.

:: The index case of this cluster (a 37-year-old female from Koropara sub-prefecture in N'Zerekore) had symptom onset on or around 15 February and died on 27 February without a confirmed diagnosis. The source of her infection is likely to have been due to exposure to infected body fluid from an Ebola survivor.

:: In Guinea, the last case tested negative for Ebola virus for the second time on 19 April. In Liberia, the last case tested negative for the second time on 28 April.

:: The 42-day (two incubation periods) countdown must elapse before the outbreak can be declared over in Guinea and Liberia. This is due to end on 31 May in Guinea and on 9 June in Liberia.

:: Having contained the last Ebola virus outbreak in March 2016, Sierra Leone has maintained heightened surveillance with testing of all reported deaths and prompt investigation and testing of all suspected cases. The testing policy will be reviewed on the 30 June.

*Risk assessment:*
For the outbreak to be declared over, a 42-day countdown must pass after the last case tested negative for Ebola virus for the second time. This countdown is due to elapse on 31 May in Guinea and on 9 June in Liberia. Until then, active surveillance in Guinea and Liberia will continue. The performance indicators suggest that Guinea, Liberia and Sierra Leone still have variable capacity to prevent, detect (epidemiological and laboratory surveillance) and respond to new outbreaks (Table 1). The risk of additional outbreaks originating from exposure to infected survivor body fluids remains and requires sustained

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**POLIO** [to 28 May 2016]
*Public Health Emergency of International Concern (PHEIC)*

**Statement on the 9th IHR Emergency Committee meeting regarding the international spread of poliovirus**
WHO statement
20 May 2016
*[Excerpts; Editor's text bolding]*
The 9th meeting of the Emergency Committee under the International Health Regulations (2005) (IHR) regarding the international spread of poliovirus was convened via teleconference by the Director General on 12th May 2016. As with the seventh and eighth meetings, the Emergency Committee reviewed the data on wild poliovirus as well as circulating vaccine--derived polioviruses (cVDPV). The latter is important as cVDPVs reflect serious gaps in immunity to poliovirus due to weaknesses in routine immunization coverage in otherwise polio-free countries. In addition, any further spread of type 2 cVDPVs is a public health emergency following the globally synchronized withdrawal of type 2 OPV completed 1st May 2016…

…*Conclusion*
**The Committee unanimously agreed that the international spread of poliovirus remains a Public Health Emergency of International Concern (PHEIC), and recommended the extension of the Temporary Recommendations for a further three months**. The Committee considered the following factors in reaching this conclusion:
:: The continued international spread of wild poliovirus during 2015 and 2016 involving Pakistan and Afghanistan.
:: The current special and extraordinary context of being closer to polio eradication than ever before in history.
:: The risk and consequent costs of failure to eradicate globally one of the world's most serious vaccine preventable diseases. Even though globally transmission has fallen and

therefore the likelihood of international spread has also fallen, the consequences and impact of international spread should it occur become more serious, and this possibility is greater if global complacency sets in.

:: The continued necessity of a coordinated international response to improve immunization and surveillance for wild poliovirus, stop its international spread and reduce the risk of new spread.

:: The serious consequences of further international spread for the increasing number of countries in which immunization systems have been weakened or disrupted by conflict and complex emergencies. Populations in these fragile states are vulnerable to outbreaks of polio. Outbreaks in fragile states are exceedingly difficult to control and threaten the completion of global polio eradication during its end stage.

:: The importance of a regional approach and strong crossborder cooperation, as much international spread of polio occurs over land borders, while recognizing that the risk of distant international spread remains from zones with active poliovirus transmission.

:: Additionally with respect to cVDPV:

…cVDPVs also pose a risk for international spread, and if there is no urgent response with appropriate measures, particularly threaten vulnerable populations as noted above;

…the emergence and circulation of VDPVs in four WHO regions demonstrates significant gaps in population immunity at a critical time in the polio endgame;

…**there is a particular urgency of preventing type 2 cVDPVs following the globally synchronized withdrawal of type 2 component of the oral poliovirus vaccine in April 2016;**

**…the ongoing challenges of improving routine immunization in areas affected by insecurity and other emergencies, including Ebola; and**

**…the global shortage of IPV poses fresh challenges…**

…The Committee recognised that the communication message explaining why a PHEIC is being maintained should be carefully prepared. On the one hand the world is applauding the successful switch from tOPV to bOPV and the reduction of new cases of wild poliovirus, while on the other hand a PHEIC is being maintained to ensure that all possible measures are brought to bear to support these final phases of polio eradication. This apparent paradox needs careful explanation.

Based on the advice concerning wild poliovirus and cVDPV, and the reports made by Afghanistan, Pakistan, Nigeria, Lao People's Democratic Republic and Guinea, **the Director General accepted the Committee's assessment and on 20 May 2016 determined that the events relating to poliovirus continue to constitute a PHEIC, with respect to wild poliovirus and cVDPV.** The Director General endorsed the Committee's recommendations for 'States currently exporting wild polioviruses or cVDPV', for 'States infected with wild poliovirus or cVDPV but not currently exporting' and for 'States no longer infected by wild poliovirus, but which remain vulnerable to international spread, and states that are vulnerable to the emergence and circulation of VDPV' and extended the Temporary Recommendations as revised by the Committee under the IHR to reduce the international spread of poliovirus, effective 20 May 2016.

The Director General thanked the Committee Members and Advisors for their advice and requested their reassessment of this situation within the next three months

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**Polio this week as of 25 May 2016**

:: This week, health ministers from around the world are convening in Geneva for the annual World Health Assembly (WHA). Among other public health topics, delegates will review and discuss the latest global polio epidemiology. The GPEI has set up a WHA-specific polio website, with the key documents that are guiding discussions.

:: At the *Women Deliver* conference in Copenhagen focusing on solutions to the health, economic and social challenges facing girls and women, the Government of Canada announced a Can$19.9 million contribution to Nigeria's polio eradication efforts.

:: From 17 April to 1 May, 155 countries and territories participated in the historic trivalent to bivalent oral polio vaccine switch, withdrawing the type two component of the vaccine to protect future generations against circulating vaccine-derived polioviruses. Track the switch live.

*The Trivalent to Bivalent Oral Polio Vaccine Switch*

:: Between 17 April and 1 May, the type 2 component of the oral polio vaccine (OPV) is being removed from use through aglobally synchronized switch from the trivalent to bivalent oral polio vaccine. This is the first stage of objective 2 of the Polio Eradication and Endgame Strategic Plan 2013-2018 to withdraw OPV in a phased manner starting with the type 2 component following the eradication of wild poliovirus type 2 in September 2015.

:: Follow a live update of which countries have undergone the switch. Learn more about why the switch is such an important part of ensuring a polio-free world through this series of videos.

:: The following indicators are being carefully tracked to ensure the switch goes smoothly. As of 24 May:
…155 of 155 (100%) countries and territories have stopped using the trivalent oral polio vaccine.
…Independent monitoring to ensure the switch goes smoothly has begun in 152 countries (100%).
…The National Validation Committee has received switch monitoring data in 145 countries (95%).
…The WHO Regional Offices has received the National Validation Report from 147 countries (95%).

*Selected Country Levels Updates [excerpted]*

***Pakistan***

:: One new case of wild poliovirus type 1 (WPV1) was reported in the past week, from Bannu district in Khyber Pakhtunkhwa (KP) province with onset of paralysis on 26 April. It is the most recent case in the country, and brings the total number of WPV1 cases for 2016 to 11, compared to 23 at this date in 2015.
:: Four new WPV1 environmental positive samples were reported in the past week: two collected from Sindh province in the districts of Khi Gulshan-Iqbal and Jacobabad on 15 and 10 March respectively, one in the Rawalpindi district of Punjab on 14 April, and the most recent in Peshawar district of Khyber Pakhtunkhwa on 22 April. Although four positives were reported

this week, two duplicates were removed, thus the total went from 17 to 19 environmental positives.
:: Efforts continue to further strengthen surveillance activities in all provinces of the country.

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**Yellow Fever** [to 28 May 2016]
http://www.who.int/emergencies/yellow-fever/en/

**Yellow Fever - Situation Report – 26 May 2016**
Full Report:
http://www.who.int/emergencies/yellow-fever/situation-reports/26-may-2016/en/
*Summary:*
*Angola: 2536 suspected cases*
As of 25 May 2016, Angola has reported 2536 suspected cases of yellow fever with 301 deaths. Among those cases, 747 have been laboratory confirmed. Despite vaccination campaigns in Luanda, Huambo and Benguela provinces, circulation of the virus persists in some districts. Vaccination campaigns started on 16 May in Cuanza Sul, Huila and Uige provinces. Lunda Norte has reported, for the first time since the beginning of the outbreak, 5 autochthonous laboratory confirmed cases in 2 districts.
Three countries have reported confirmed yellow fever cases imported from Angola: Democratic Republic of The Congo (DRC) (41 cases), Kenya (2 cases) and People's Republic of China (11 cases). This highlights the risk of international spread through nonimmunised travellers.

*Democratic Republic of The Congo: 48 laboratory confirmed cases*
On 22 March 2016, the Ministry of Health of DRC confirmed cases of yellow fever in connection with Angola. The government officially declared the yellow fever outbreak on 23 April. As of 25 May, DRC has reported three probable cases and 48 laboratory confirmed cases: 41 of those are imported from Angola, reported in Kongo Central, Kinshasa and Kwango (formerly Bandundu) provinces, two are autochthonous cases in Ndjili, Kinshasa and in Matadi, Kongo Central provinces. The possibility of locally acquired infection is under investigation for at least three non-classified cases in both Kongo Central (Muanda district) and Kwango provinces.

*Uganda: 60 suspect cases*
In Uganda, the Ministry of Health notified yellow fever cases in Masaka district on 9 April 2016. As of 25 May, 60 suspected cases, of which seven are laboratory confirmed, have been reported from three districts: Masaka, Rukungiri and Kalangala. According to sequencing results, those clusters are not epidemiologically linked to Angola.

*The risk of spread*
The virus in Angola and DRC is largely concentrated in main cities. The risk of spread and local transmission to other provinces in Angola, DRC and Uganda remains a serious concern. There is also a high risk of potential spread to bordering countries especially those previously classified as low-risk for yellow fever disease (i.e. Namibia, Zambia) and where the population, travellers and foreign workers are not vaccinated against yellow fever.

Confirmed yellow fever cases exported from Angola has been documented in Kenya (two cases) and People's Republic of China (11 cases). This highlights the risk of international spread through non-immunised travellers.

*Risk assessment*
The outbreak in Angola remains of high concern due to:
:: Persistent local transmission in Luanda despite the fact that more than seven million people have been vaccinated.
:: Local transmission has been reported in seven highly populated provinces including Luanda. Luanda Norte is the province that most recently reported yellow fever transmission.
:: The continued extension of the outbreak to new provinces and new districts.
:: High risk of spread to neighbouring countries. As the borders are porous with substantial crossborder social and economic activities, further transmission cannot be excluded. Viraemic travelling patients pose a risk for the establishment of local transmission especially in countries where adequate vectors and susceptible human populations are present.
:: Inadequate surveillance system capable of identifying new foci or areas of cases emerging.
:: High index of suspicion of ongoing transmission in areas hard to reach like Cabinda.

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**MERS-CoV** [to 28 May 2016]

*No new content identified.*

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**WHO & Regional Offices** [to 28 May 2016]

**Weekly Epidemiological Record (WER) 27 May 2016**, vol. 91, 21 (pp. 265–284)
Contents


**Disease Outbreak News (DONs)**
:: Lassa Fever – Nigeria 27 May 2016

**:: WHO Regional Offices**
*Selected Press Releases, Announcements*
**WHO African Region AFRO**
:: WHO AFRO launches new project to help African countries control and eliminate neglected tropical diseases - 23 May 2016

**WHO Region of the Americas PAHO**

:: PAHO honors Canadian and U.S. academics, Brazilian NGO with regional 2016 World No Tobacco Day awards (05/26/2016)
:: PAHO and Lila Downs launch PSAs to promote prenatal care and save lives (05/25/2016)

**WHO South-East Asia Region SEARO**
:: Floods in Sri Lanka WHO Sit Rep 4 26 May 2016 pdf, 852kb

**WHO European Region EURO**
:: Day 2 of the World Health Assembly: Highlights for the European Region 26-05-2016
:: New tool: AirQ+ quantifies health impacts of air pollution 25-05-2016
:: Opening day of World Health Assembly: 2030 Agenda for Sustainable Development in focus 24-05-2016
:: Results of joint FAO/WHO Meeting on Pesticide Residues (JMPR) 24-05-2016

**WHO Eastern Mediterranean Region EMRO**
:: Kuwait supports kidney patients in Syria 24 May 2016

**WHO Western Pacific Region**
*No new content identified.*

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**CDC/ACIP** [to 28 May 2016]
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**MMWR May 27, 2016 / Vol. 65 / No. 20**
:: Possible Zika Virus Infection Among Pregnant Women — United States and Territories, May 2016
:: Notes from the Field: Outbreak of Serogroup B Meningococcal Disease at a University — California, 2016
:: Notes from the Field: Expanded Chemoprophylaxis Offered in Response to a Case of Meningococcal Meningitis in an Elementary School — Indiana, 2015
:: Notice to Readers: Changes in the Presentation of Zika Virus Disease, Non-Congenital Infection, and Addition of Zika Virus Congenital Infection to Notifiable Diseases and Mortality Table I

**June ACIP meeting**
June 22-23, 2016
Deadline for registration:
:: Non-US Citizens: May 20, 2016
:: US Citizens: June 6, 2016
*Registration is NOT required to watch the live meeting webcast or to listen via telephone.*
*Draft June 22-23, 2016 Meeting Agenda[2 pages]*

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## Announcements/Milestones/Perspectives

**IOM, Partners Launch Vaccination Campaigns to Combat Measles in South Sudan**
05/27/16

South Sudan - In response to an increase of measles cases, IOM South Sudan is teaming up with health agencies to vaccinate vulnerable people against the disease. IOM recently led vaccination campaigns for internally displaced persons (IDPs) in Bentiu and Malakal and additional campaigns are in progress.

Following several suspected cases of measles in the UN Protection of Civilians (PoC) sites in Bentiu and Malakal, IOM launched a vaccination campaign for children under five living in both sites. The campaigns vaccinated nearly 45,900 children in Bentiu and 7,300 children in Malakal, reaching over 90 percent of the target group.

The campaigns were implemented in collaboration with International Medical Corps, International Rescue Committee, Médecins Sans Frontières, UNICEF, WHO and World Relief. Led by IMC, the Malakal campaign was also expanded to Malakal town, vaccinating 919 children against the disease.

"The success of these campaigns is due to intensive social mobilization, effective collaboration and leadership of the Health Cluster. But routine immunizations should be strengthened both within and outside of PoC sites to reduce the likelihood of further measles cases, especially among children," said IOM Migration Health Emergency Coordinator Dr. Andrew Mbala.

Measles is a highly contagious disease that can become life threatening if complications, such as pneumonia, arise. Children and displaced populations living in crowded areas are particularly vulnerable to outbreaks of measles and other contagious diseases.

An IOM Health Rapid Response Team is currently on the ground in Yirol East and West counties to provide measles vaccines for another 46,900 children under five. Health actors have reported 31 suspected measles cases in the two counties this year.

At IOM's primary health care clinics in Bentiu and Malakal, as well as in Renk, IOM clinics are providing regular vaccinations against common diseases, such as tuberculosis, cholera and polio. Last week, IOM vaccinated 575 children through routine vaccinations.

To date in 2016, 1,321 suspected measles cases have been reported by the Health Cluster and South Sudan Ministry of Health.

**Gavi** [to 28 May 2016]
http://www.gavialliance.org/library/news/press-releases/
26 May 2016
**Gavi welcomes price trend for pentavalent vaccine**

*Latest price information published by UNICEF.*

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

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

23 May 2016

**World Humanitarian Summit - Gavi's Fragility and Immunisation Policy**

*Gavi to review its response to humanitarian emergencies and fragile settings in 2016.*

Geneva, 23 May 2016 - Gavi, the Vaccine Alliance remains committed to working in fragile settings and has increased its focus on the specific challenges they pose through its current Fragility and Immunisation policy.

Approved in 2012, the policy paths the way for flexible and country tailored approaches, in which approximately one third of Gavi funding is invested (nearly US$ 425 million in 2015). Under the terms of this policy, Gavi will continue to provide vaccines to governments for refugees and internally displaced populations in Gavi-supported countries.

In 2016, Gavi has committed to reviewing its response to humanitarian emergencies and fragile settings to ensure that the Alliance's response is in line with best practices in such environments.

Under Gavi's 2016-2020 strategy, the Vaccine Alliance has committed to reaching the un-reached with life-saving vaccines and investing in building resilient health systems. This includes investment in national laboratory and surveillance capacity strengthening in line with the core capacities of the international health regulations.

Recognising that outbreaks can create urgent needs with humanitarian consequences, existing efforts such as funding vaccine stockpiles for outbreak response will also continue to be enhanced. For example, Gavi has committed to purchasing the first generation Ebola vaccine for a global stockpile once a vaccine(s) is licensed and WHO recommended.

Gavi will remain committed to innovative engagement with partners and countries to help prepare, detect and respond to disease outbreaks and thereby help protect the health of millions of people including in fragile environments.

**Global Fund** [to 28 May 2016]

http://www.theglobalfund.org/

25 May 2016

**Wambo.org to Bring Better Access, Prices, Transparency to Global Health**

GENEVA - The Global Fund to Fight AIDS, Tuberculosis and Malaria and the Government of Canada announced a new online marketplace today that is projected to save at least US$250 million in the coming four years by offering health implementers competitive prices for medicines and health commodities.

Simple and accessible, wambo.org provides up-to-date information on available products, prices, expected delivery time and tracking. Buyers and suppliers can use it as a safe and reliable tool for procuring quality-assured goods in less time and with lower financial risk.

Wambo.org also allows orders to be pooled, enabling even smaller buyers to achieve economies of scale for substantial savings. With an easy-to-use platform, it is set up to be an effective procurement tool for governments and civil society organizations that implement health grants, significantly supporting the common goal of building resilient and sustainable systems for health.

"Canada is taking concrete action to end for good three of the world's most devastating diseases - AIDS, tuberculosis, and malaria - by 2030," said Marie-Claude Bibeau, Canada's Minister of International Development and La Francophonie. "By investing in wambo.org, Canada is leveraging technology to simplify procurement and create significant savings. This innovative platform allows countries to improve efficiency and deliver medicines and health products that will save lives."

The Government of Canada is contributing CAD19 million (US$14.5 million) to help build and expand wambo.org. Canada, a leader in many aspects of global health, is also hosting the Global Fund's Fifth Replenishment in Montreal in September 2016. UNITAID and the Clinton Health Access Initiative (CHAI) are also strategic partners in supporting the development of wambo.org…

**European Vaccine Initiative** [to 28 May 2016]
http://www.euvaccine.eu/news-events
*News*
**New publication emerges from the EMVDA project**
22 May 2016

The following publication relating to the EVI coordinated and EC funded EMVDA project: Immunogenicity of diamorphic and C-terminal fragments of Plasmodium falciparum MSP2 formulated with different adjuvants in mice, was recently published in Vaccine

The abstract is also available on this web site under publications

**UNAIDS** [to 28 May 2016]
http://www.unaids.org/en/resources/presscentre/
23 May 2016
**69th World Health Assembly: speakers at high-level side event call for a Fast-Track response to end the AIDS epidemic among women and adolescent girls**

**PATH** [to 28 May 2016]
http://www.path.org/news/index.php
*Press release* | May 26, 2016
**Kakamega civil society leaders launch new alliance to improve health for women, newborns, and children**

Kakamega, Kenya, May 27, 2016 – Today, twenty local civil society organizations dedicated to improving health and well-being in Kakamega County launched a new alliance to advocate for strengthened county policies and increased investment in maternal, newborn, and child health (MNCH).

Even with progress, Kakamega County has among the highest rates of maternal and child deaths in Kenya…

PATH, an international nonprofit organization that has worked in partnership with local organizations and county governments in Kenya for more than a decade, helped to bring together the alliance. Comprised of community-based organizations with a strong presence in Kakamega County, the alliance will advocate for stronger MNCH policies at the county level…

**European Medicines Agency** [to 28 May 2016]
http://www.ema.europa.eu/
27/05/2016
**Two new combination therapies against chronic hepatitis C**
*Direct-acting antivirals Epclusa and Zepatier recommended for approval*

The European Medicines Agency (EMA) has recommended the granting of marketing authorisations in the European Union (EU) for two new combination therapies against chronic (long-term) hepatitis C virus (HCV) infection, Epclusa (sofosbuvir/velpatasvir) and Zepatier (grazoprevir/elbasvir).

HCV infection is a major European public health challenge. It affects between 0.4% and 3.5% of the population in different EU Member States and is the most common single cause of liver transplantation in the region.

Epclusa and Zepatier belong to a new generation of medicines for chronic HCV infection, direct-acting antivirals, that give high rates of cure of HCV infection and that have, in the past few years, reshaped the way this disease is treated. These medicines block the action of proteins which are essential for viral replication. Epclusa targets the proteins NS5B and NS5A, while Zepatier targets the proteins NS3/4A and NS5A…

27/05/2016
**Improving safety of first-in-human clinical trials**
*EMA starts EU-wide reflection on necessary changes to best practices*

The European Medicines Agency (EMA) has started a review of the guidelines that describe first-in-human clinical trials and the data needed to enable their appropriate design and allow initiation. This is being done in cooperation with the European Commission and the Member States of the European Union (EU).

The review will identify which areas may need to be revised in the light of the tragic incident which took place during a Phase I first-in-human clincial trial in Rennes, France, in January 2016. The trial led to the death of one participant and hospitalisation of five others…

**FDA** [to 28 May 2016]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
*What's New for Biologics*
May 23, 2016 Summary Basis of Regulatory Action - Flucelvax Quadrivalent (PDF - 147KB)
Posted: 5/27/2016
May 25, 2016 Approval Letter - ActHIB (PDF - 32KB)
Posted: 5/26/2016
May 23, 2016 Approval Letter - Flucelvax Quadrivalent (PDF - 53KB)
Posted: 5/24/2016
May 23, 2016 Summary Basis of Regulatory Action - Flucelvax (PDF - 152KB)
Posted: 5/24/2016

May 23, 2016 Approval Letter - Flucelvax (PDF - 53KB)
Posted: 5/24/2016

**AERAS** [to 28 May 2016]
http://www.aeras.org/pressreleases
May 23, 2016
**Aeras Applauds Report and Recommendations by the Review on Antimicrobial Resistance**
*Aeras Applauds the Final Report and Recommendations by the United Kingdom Review on Antimicrobial Resistance*

Rockville, MD,– Aeras applauds the Final Report and Recommendations released this week by the U.K. Review on Antimicrobial Resistance (Review) that highlights the extreme global health threat of antimicrobial resistance (AMR). The Review, led by economist Jim O'Neill, specifically notes the threat of multidrug-resistant tuberculosis (MDR-TB) and the imperative of increased global investment in research and development to save the millions of lives lost each year due to AMR related to tuberculosis (TB) and other infectious diseases.

The final report warns that if new therapies, diagnostics and a new vaccine are not introduced, MDR-TB will be responsible for 2.5 million deaths per year by 2050, or roughly one quarter of the forecasted 10 million deaths related to AMR – equating to one death due to MDR-TB every 12 seconds. An interim paper entitled Vaccines and Alternative Approaches: Reducing our Dependence on Antimicobials, published by the Review in February 2016, also emphasized the overwhelming need for new TB vaccines as an essential component of the global strategy to overcome TB and to address MDR-TB.

A key finding of the final report is that increased public and private investment in research and development will be essential to combatting AMR – saving millions of lives, as well as avoiding the serious economic impact of this global public health emergency…

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**::::::**

**BMGF - Gates Foundation** [to 28 May 2016]
http://www.gatesfoundation.org/Media-Center/Press-Releases
*No new digest content identified*

**EDCTP** [to 28 May 2016]
http://www.edctp.org/
*The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria as well as other poverty-related and neglected infectious diseases in sub-Saharan Africa, with a focus on phase II and III clinical trials.*
*No new digest content identified.*

**Fondation Merieux** [to 28 May 2016]

*Mission: Contribute to global health by strengthening local capacities of developing countries to reduce the impact of infectious diseases on vulnerable populations.*
http://www.fondation-merieux.org/news
*No new digest content identified*

**Human Vaccines Project** [to 28 May 2016]
humanvaccinesproject.org
*[Website in development]*
*No new digest content identified.*

**IVI - International Vaccine Institute** [to 28 May 2016]
http://www.ivi.org/web/www/home
*No new digest content identified.*

**NIH** [to 28 May 2016]
http://www.nih.gov/news-events/news-releases
*No new digest content identified*

**Sabin Vaccine Institute** [to 28 May 2016]
http://www.sabin.org/updates/ressreleases
*No new digest content identified.*

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## ***Reports/Research/Analysis/Commentary/Conferences/Meetings/Book Watch/Tenders***

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

**IVAC [International Vaccine Access Center]** [to 28 May 2016]
http://www.jhsph.edu/research/centers-and-institutes/ivac/about-us/news.html
**GAPS IN VACCINE COVERAGE HIGHLIGHTED WITH NEW REPORT AND ONLINE TOOL**
New report informs WHA dialogue on the leading killers of children: pneumonia and diarrhea
As the 69th World Health Assembly discusses progress on the Global Vaccine Action Plan, a new data visualization platform—from the International Vaccine Access Center (IVAC) at the Johns Hopkins Bloomberg School of Public Health (JHSPH)—provides stark numbers on where shortfalls exist in vaccine introduction and coverage.

The Vaccine Information Epidemiology Window (VIEW-hub) incorporates data on Haemophilus influenzae type B (Hib) vaccine, pneumococcal conjugate vaccine (PCV) and rotavirus vaccine. Despite their effectiveness in preventing pneumonia and diarrhea, these pathogens and the

conditions they cause continue to be leading causes of death worldwide among children under 5 years of age.

VIEW-hub shows where children are unvaccinated because either their country has not introduced the vaccine, or the country's routine immunization services are not reaching them.

For example:
:: 42 percent of the world's infants (56.1 million) are not receiving Hib vaccine;
:: 60 percent (80.7 million) are not receiving PCV;
:: 76 percent (102.8 million) are not receiving rotavirus vaccine.

What's more, 72 percent of the global burden of pneumonia and diarrhea child deaths occur in just 15 countries—India, Nigeria, Pakistan, DRC, Angola, Ethiopia, Indonesia, Chad, Afghanistan, Niger, China, Sudan, Bangladesh, Somalia and the United Republic of Tanzania. The two countries with the greatest absolute burden, Nigeria and India, are in the early stages of introducing these vaccines.

"Asia, in particular, lags in rotavirus vaccine introduction," points out Mathuram Santosham, MD, MPH, senior advisor at IVAC and chair of the Rotavirus Organization of Technical Allies (ROTA) Council. "No country in South or South-East Asia has introduced rotavirus vaccine nationally, and only three—India, Thailand and the Philippines—have introduced sub-nationally."

Even among countries that have introduced Hib, PCV and rotavirus vaccines, coverage is not reaching target levels. According to the Global Action Plan for the Prevention and Control of Pneumonia and Diarrhoea (GAPPD), from WHO and UNICEF, at least 90% of children should be immunized in countries where the vaccines are available.

In Africa, for example, 44 out of the 54 countries have introduced the PCV vaccine. However, only 8 countries have reached very high coverage rates (90-100 percent); close behind are only 9 countries with high coverage rates (80-89 percent), based on the 2015 WHO/UNICEF Estimates of National Immunization Coverage (WUENIC) for 2014. This suggests that governments have made progress in decision making, but are lagging in policy implementation. "If the ultimate goal is to reach as many children as possible with vaccines, introduction data isn't enough," says Kate O'Brien, MD, MPH, Executive Director of IVAC, "we need to look at coverage, how many kids in the country are actually getting the vaccines. New policies to allow vaccines into a country's routine schedule does no good for children if they aren't actually receiving them."

With real-time data updates, VIEW-hub can be used to monitor introduction and implementation, and to develop strategies for accelerating progress on global and country levels. Data sources include the World Health Organization, Centers for Disease Control and Prevention, UNICEF, Gavi, Bill and Melinda Gates Foundation, government Ministry of Health websites and vetted media sources. VIEW-Hub is also monitoring vaccine impact evaluations, including for PCV and rotavirus vaccine. The full report is available here: http://www.jhsph.edu/research/centers-and-institutes/ivac/view-hub/IVAC-VIEWHub-Report-2016May.pdf
*VIEW-hub is supported by grants from Gavi and the Bill and Melinda Gates Foundation.*

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***Editor's Note:***
*The "Vision for Global Health" is one a series of G7 communiques issued by the meeting. We highlight selected language around public health emergencies and mentions of vaccines and immunization from the Vision for Global Health below. We urge readers to review the full document (see link]*

**G7 Japan 2016 - Ise-Shima**
http://www.japan.go.jp/g7/

**G7 Ise-Shima Vision for Global Health** (PDF: 8 pages)
May 27, 2016
…**1-2. Funding mechanism to ensure prompt actions in public health emergencies**
1) Recognizing that WHO should play a key leading and coordinating role in the event of an outbreak, for prompt detection, containment and control of public health emergencies particularly in the early stage, call on the international community to support the Contingency Fund for Emergency (CFE) to enable swift initial response by the WHO.
2) Welcome the World Bank's formal announcement of launching the Pandemic Emergency Financing Facility (PEF) to support a surge response by governments, multilateral agencies and NGOs, and invite the international community including G7 members to extend technical support and financial contributions to this end.
3) Also call upon relevant international organizations to ensure coordination among the PEF and their related funding mechanisms including the CFE.
4) Urge all countries to improve their prevention and preparedness against outbreaks and incorporate measures for enhanced national health security over time.

**1-3. Coordination arrangement on global public health emergencies**
1) Invite the WHO and the Office for the Coordination of Humanitarian Affairs (OCHA) under UN Secretary General to review, strengthen and formalize coordination arrangement among the WHO, the UN and other relevant partners in global public health emergencies, while strengthening existing coordination systems including the Inter Agency Standing Committee (IASC) Cluster System led by OCHA, as envisioned by on-going processes including the final report of and UNSG response to UN High-Level Panel, World Humanitarian Summit and WHO governing body discussions.
2) Invite the WHO and OCHA to update on the progress of these deliberations at the G7 Health Ministers Meeting in September 2016….

**2-1-2. Support for health system strengthening in LICs/LMICs towards UHC**
…3) Support LICs/LMICs's nationally driven and owned efforts toward HSS which might include the following key contributors for the achievement of UHC with better preparedness for and prevention against emergencies;…
…(iii) improving access to affordable, safe, effective, and quality assured, essential medicines, vaccines and technologies to prevent, diagnose and treat medical problems…

**2-2-1. Women, adolescent and children's health**
…4) Reaffirm the importance of immunization as one of key cost-effective measures to prevent the spread of infectious disease and address emerging pandemics and to this end:

(i) continue global efforts to achieve the targets established in the Global Vaccine Action Plan;
(ii) leverage and use immunization records including information sources such as Maternal and Child Health(MCH) handbooks which highlight the importance of immunization and give guidance to families; and
(iii) recognize the tremendous progress achieved towards polio eradication where global eradication is now within reach, and reaffirm our commitment to achieve polio eradication targets laid out in the GPEI Endgame Strategic Plan, and recognize the significant contribution that the polio related assets, resources and infrastructure will have on strengthening health systems and advancing UHC….

**3-4. Improving access to AMR countermeasures**
1) Improve access to effective vaccines, diagnostics, antimicrobials, alternate therapeutics.
2) Support Infection Prevention and Control such as good hygiene - in particular but not only in LICs and LMICs to reduce healthcare - associated infections and health burden of AMR through appropriate training and technologies, and bilateral or multilateral arrangement.
3) Promote R&D partnerships, and measure the effectiveness of such interventions of effective vaccines, diagnostics, antimicrobials,

**4-1-2. Promote R&D on AMR**
1) Promote R&D to combat AMR, such as through "pull" incentives to address specific market failures and funding for basic and applied research and development of new vaccines, diagnostics, antimicrobials, alternative therapeutics as well as IPC, other behavioral interventions, and antimicrobial stewardship programs…

**4-2. Accelerate R&D such as testing and manufacturing and distribution of medical products for public health emergencies**
1) Acknowledge the importance of ensuring mechanisms to accelerate R&D in public health emergencies, and welcome the action to prevent epidemics such as WHO Blueprint, discussions at Global Health Security Initiative and Global Research Collaboration for Infectious Disease Preparedness (GloPID-R).
2) Explore the feasibility of partnerships such as the Vaccine Innovation for Pandemic Preparedness Partnership to conduct a coordinated vaccine research and development.
3) Promote scientifically robust clinical trials on emerging infectious diseases for rapid research responses in cases of outbreak…

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**African Union** [to 28 May 2016]
http://www.au.int/en/
May 26, 2016 | *Press Releases*
**Ministers adopt Africa's key health policies**
Geneva, Switzerland, 21 May 2016- Ahead of the Wold Health Assembly African Ministers of Health met on Saturday and adopted key health policy instruments that will provide the strategic direction for the continent for the next fifteen years. These health policy instruments were finalised by Member State Health experts meeting in Addis Ababa in April this year for consideration by health ministers.

"I am confident that the Africa Health Strategy will provide the strategic direction that is needed to create better performing health sectors and address the major challenges impeding our efforts to reduce the continent's disease burden" said Dr. Mustapha Sidiki Kaloko, the Commissioner for Social Affairs at the African Union Commission.

The revised African Health Strategy provides the overarching superstructure to address Africa's broad health and development agenda in the next 15 years. To strengthen health systems the strategy addresses issues related to health financing, governance and improved multi-sectoral partnerships. The framework also refocuses service delivery, community empowerment and seeks to expand social protection to address equity. The blueprint also prioritises human resources for health, commodity security, regulatory and support environment for provision of quality medicines and technologies, disease surveillance and disaster management.

"I commend the increasing role played by the African Union Commission in positioning health at a very high level on the continental agenda. These health policy instruments are important reference frameworks for addressing the unfinished agenda of the MDGs and for meeting the new SDG agenda" said Dr Matshidiso Moeti, the Regional Director for Africa, World Health Organisation.

During the meeting the Ministers of Health also adopted the Maputo Plan of Action (2016-2030) and the Catalytic Framework to end AIDS, TB and Eliminate Malaria in Africa by 2030. The revised Maputo Plan of Action provides a framework for the full implementation of the continental policy framework on Sexual and Reproductive Health and Rights. The action plan seeks to catalyse the expansion of contraceptive use, reduce levels of unsafe abortion, end child marriage, eradicate harmful traditional practices, eliminate all forms of violence and discrimination against women and girls and ensure access to services by young people.

The Catalytic Framework provides a business model for investing for impact to end AIDS, TB and Eliminate Malaria in Africa by 2030. The framework focusses on three strategic investment areas, each with clear catalytic actions. These areas are health systems strengthening, generation and use of evidence for policy and programme interventions and advocacy and capacity building.

During the meeting the Ministers of Health adopted the concept document on the establishment of the African Health Volunteers Corps which will operate within the umbrella of the recently established Africa Centres for Disease Control and Prevention. Through this dedicated Corps the Africa CDC's capability to assemble, equip, and mobilise a deployable roster of volunteer medical and public health professionals will be assured. This will ensure rapid and effective responses to public health emergencies to Member States and address matters of global concern including health impacts of natural disasters and humanitarian crises.

May 26, 2016 | Press Releases

## Africa agrees on common position to the United Nations High-Level Meeting on Ending AIDS

Geneva, Switzerland, 21 May 2016- Ministers of Health meeting ahead of the World Health Assembly on Saturday deliberated and agreed on a Common African Position (CAP) to the United Nations General Assembly High-Level Meeting on Ending AIDS that will be taking place in New York from 8 to 10 June 2016.

"The Common Africa Position is critical in the political declaration negotiations that are ongoing. It is imperative that Africa negotiates as one block, highly impacted by AIDS, and demand a political declaration that commits to bold strategies that aim to end the AIDS epidemic as a public health threat by 2030", said Dr. Mustapha Sidiki Kaloko, the Commissioner for Social Affairs at the African Union Commission…

**NVPO National Vaccine Program Office**
http://www.hhs.gov/nvpo/nvac/meetings/2016/06-07/index.html
**June 7-8, 2016 NVAC Meeting**
The Great Hall, Humphrey Building
200 Independence Avenue, S.W.
Washington, DC 20201
Call-in Numbers: (U.S.) 1-888-603-9739, (International) 1-212-547-0182
Participant Passcode:
4976996
Webcast Link
Registration
Federal Register Notice

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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**
June 2016 Volume 44, Issue 6, p619-738, e81-e102
http://www.ajicjournal.org/current
*State of the Science Review*
**Evidence-based practices to increase hand hygiene compliance in health care facilities: An integrated review**
Jun Rong Jeffrey Neo, Rana Sagha-Zadeh, Ole Vielemeyer, Ella Franklin
p691–704
Published in issue: June 01 2016
*Highlights*
:: Five key categories of hand hygiene intervention (HHI) emerged: (1) improving awareness with education (knowledge transfer, evaluation, mentoring and feedback), (2) facility design

and planning, (3) unit-level protocols and procedures, (4) institution-wide programs, and (5) multimodal interventions.
:: Although some evidence-based HHI has been developed, sustaining hand hygiene compliance remains challenging.
:: Components like environmental psychology, behavioral economics, and financial rewards should be used to better understand and catalyze improved behavioral change in various contexts and environments to improve hand hygiene.

*Abstract*

Background

Hand hygiene (HH) in health care facilities is a key component to reduce pathogen transmission and nosocomial infections. However, most HH interventions (HHI) have not been sustainable.

Aims

This review aims to provide a comprehensive summary of recently published evidence-based HHI designed to improve HH compliance (HHC) that will enable health care providers to make informed choices when allocating limited resources to improve HHC and patient safety.

Methods

The Medline electronic database (using PubMed) was used to identify relevant studies. English language articles that included hand hygiene interventions and related terms combined with health care environments or related terms were included.

Results

Seventy-three studies that met the inclusion criteria were summarized. Interventions were categorized as improving awareness with education, facility design, and planning, unit-level protocols and procedures, hospital-wide programs, and multimodal interventions. Past successful HHIs may not be as effective when applied to other health care environments. HH education should be interactive and engaging. Electronic monitoring and reminders should be implemented in phases to ensure cost-effectiveness. To create hospitalwide programs that engage end users, policy makers should draw expertise from interdisciplinary fields. Before implementing the various components of multimodal interventions, health care practitioners should identify and examine HH difficulties unique to their organizations.

Conclusions

Future research should seek to achieve the following: replicate successful HHI in other health care environments, develop reliable HHC monitoring tools, understand caregiver-patient-family interactions, examine ways (eg, hospital leadership, financial support, and strategies from public health and infection prevention initiatives) to sustain HHC, and use simulated lab environments to refine study designs.

**American Journal of Preventive Medicine**
June 2016 Volume 50, Issue 6, p677-810, e163-e194
http://www.ajpmonline.org/current

*Research Articles*

**Cost Effectiveness of HIV Prevention Interventions in the U.S.**

Feng Lin, Paul G. Farnham, Ram K. Shrestha, Jonathan Mermin, Stephanie L. Sansom
p699–708
Published online: March 2 2016

*Preview*

The purpose of this study was to assess and compare the cost effectiveness of current HIV prevention interventions in the U.S. using a consistent, standardized methodology.

*Guide to Community Preventive Services*

**Increasing Coverage of Appropriate Vaccinations: A Community Guide Systematic Economic Review**

Verughese Jacob, Sajal K. Chattopadhyay, David P. Hopkins, Jennifer Murphy Morgan, Adesola A. Pitan, John M. Clymer, Community Preventive Services Task Force

p797–808

Published online: February 1 2016

*Abstract*

Context

Population-level coverage for immunization against many vaccine-preventable diseases remains below optimal rates in the U.S. The Community Preventive Services Task Force recently recommended several interventions to increase vaccination coverage based on systematic reviews of the evaluation literature. The present study provides the economic results from those reviews.

Evidence acquisition

A systematic review was conducted (search period, January 1980 through February 2012) to identify economic evaluations of 12 interventions recommended by the Task Force. Evidence was drawn from included studies; estimates were constructed for the population reach of each strategy, cost of implementation, and cost per additional vaccinated person because of the intervention. Analyses were conducted in 2014.

Evidence synthesis

Reminder systems, whether for clients or providers, were among the lowest-cost strategies to implement and the most cost effective in terms of additional people vaccinated. Strategies involving home visits and combination strategies in community settings were both costly and less cost effective. Strategies based in settings such as schools and MCOs that reached the target population achieved additional vaccinations in the middle range of cost effectiveness.

Conclusions

The interventions recommended by the Task Force differed in reach, cost, and cost effectiveness. This systematic review presents the economic information for 12 effective strategies to increase vaccination coverage that can guide implementers in their choice of interventions to fit their local needs, available resources, and budget.

**American Journal of Public Health**

Volume 106, Issue 6 (June 2016)

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

*HPV*

**The Feminization of HPV: Reversing Gender Biases in US Human Papillomavirus Vaccine Policy**

American Journal of Public Health: June 2016, Vol. 106, No. 6: 983–984

Ellen M. Daley, Cheryl A. Vamos, Gregory D. Zimet, Zeev Rosberger, Erika L. Thompson, Laura Merrell

[No abstract]

*PHARMACY IMMUNIZATION*

**Diffusion of Pharmacy-Based Influenza Vaccination Over Time in the United States**

American Journal of Public Health: June 2016, Vol. 106, No. 6: 1099–1100.

Grace J. Chun, Jessica M. Sautter, Brandon J. Patterson, William F. McGhan

*Abstract*

Objectives. To examine pharmacy-based influenza vaccination using diffusion of innovation theory.

Methods. We used 1993 to 2013 Behavioral Risk Factor Surveillance System data to generate weighted prevalence rates of influenza vaccination, stratified by age (18–64 years vs ≥ 65 years) and state of residence. The diffusion of innovation theory adopter categories were residents of states allowing pharmacist vaccination before 1996 ("innovator/early adopters"), between 1996 and 1998 ("early majority"), between 1999 and 2004 ("late majority"), and in 2007 or later ("laggards").

Results. For adults aged 18 to 64 years, vaccination rates were similar before the innovation (1993), diverged as the innovation reached the majority (2003), and were significantly lower for laggard states by 2013. Younger adults' vaccination rates steadily increased from 12% to 16% in 1993 to 29% to 36% in 2013. For older adults, there was no significant difference in vaccination rates between adopter categories in any year and no advantage associated with adoption category.

Conclusions. Key features of pharmacy-based vaccination, including relative advantage and compatibility, are most relevant to younger adults; different interventions are warranted for older adults.

**American Journal of Tropical Medicine and Hygiene**

May 2016; 94 (5)

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

[Reviewed earlier]

**Annals of Internal Medicine**

17 May 2016, Vol. 164. No. 10

http://annals.org/issue.aspx

[Reviewed earlier]

**BMC Cost Effectiveness and Resource Allocation**

http://resource-allocation.biomedcentral.com/

(Accessed 28 May 2016)

[No new content]

**BMC Health Services Research**

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

(Accessed 28 May 2016)

[No new relevant content identified]

**BMC Infectious Diseases**

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

(Accessed 28 May 2016)

*Research article*

**Implementation of coordinated global serotype 2 oral poliovirus vaccine cessation: risks of potential non-synchronous cessation**

*The endgame for polio eradication involves coordinated global cessation of oral poliovirus vaccine (OPV) with cessation of serotype 2 OPV (OPV2 cessation) implemented in late April and early May 2016...*

Radboud J. Duintjer Tebbens, Lee M. Hampton and Kimberly M. Thompson
BMC Infectious Diseases 2016 16:231
Published on: 26 May 2016

*Research article*

**Human papillomavirus infection in Rwanda at the moment of implementation of a national HPV vaccination programme**

*Cervical cancer is the most common female cancer in Rwanda that, in 2011, became the first African country to implement a national vaccination programme against human papillomavirus (HPV).*

Fidele Ngabo, Silvia Franceschi, Iacopo Baussano, M. Chantal Umulisa, Peter J. F. Snijders, Anne M. Uyterlinde, Fulvio Lazzarato, Vanessa Tenet, Maurice Gatera, Agnes Binagwaho and Gary M. Clifford
BMC Infectious Diseases 2016 16:225
Published on: 24 May 2016

**BMC Medical Ethics**

http://www.biomedcentral.com/bmcmedethics/content
(Accessed 28 May 2016)
[No new content]

**BMC Medicine**

http://www.biomedcentral.com/bmcmed/content
(Accessed 28 May 2016)
*Review*

**Research impact: a narrative review**

Trisha Greenhalgh, James Raftery, Steve Hanney and Matthew Glover
BMC Medicine201614:78
DOI: 10.1186/s12916-016-0620-8
*Abstract*

Impact occurs when research generates benefits (health, economic, cultural) in addition to building the academic knowledge base. Its mechanisms are complex and reflect the multiple ways in which knowledge is generated and utilised. Much progress has been made in measuring both the outcomes of research and the processes and activities through which these are achieved, though the measurement of impact is not without its critics. We review the strengths and limitations of six established approaches (Payback, Research Impact Framework, Canadian Academy of Health Sciences, monetisation, societal impact assessment, UK Research Excellence Framework) plus recently developed and largely untested ones (including metrics and electronic databases). We conclude that (1) different approaches to impact assessment are appropriate in different circumstances; (2) the most robust and sophisticated approaches are labour-intensive

and not always feasible or affordable; (3) whilst most metrics tend to capture direct and proximate impacts, more indirect and diffuse elements of the research-impact link can and should be measured; and (4) research on research impact is a rapidly developing field with new methodologies on the horizon.

**BMC Pregnancy and Childbirth**
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 28 May 2016)
[No new relevant content identified]

**BMC Public Health**
http://bmcpublichealth.biomedcentral.com/articles
(Accessed 28 May 2016)
[No new relevant content identified]

**BMC Research Notes**
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 28 May 2016)
[No new relevant content identified]

**BMJ Open**
2016, Volume 6, Issue 5
http://bmjopen.bmj.com/content/current
[Reviewed earlier]

**British Medical Journal**
28 May 2016 (vol 352, issue 8059)
http://www.bmj.com/content/353/8059
[New issue; No relevant content identified]

**Bulletin of the World Health Organization**
Volume 94, Number 5, May 2016, 309-404
http://www.who.int/bulletin/volumes/94/5/en/
***Special theme: the Global strategy for women's, children's and adolescents' health (2016-2030)***
[Reviewed earlier]

**Child Care, Health and Development**
May 2016 Volume 42, Issue 3 Pages 297–454
http://onlinelibrary.wiley.com/doi/10.1111/cch.v42.3/issuetoc
[Reviewed earlier]

**Clinical Therapeutics**
May 2016 Volume 38, Issue 5, p991-1258
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

**Complexity**
May/June 2016 Volume 21, Issue 5 Pages 1–360
http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.5/issuetoc
[New issue; No new relevant content identified]

**Conflict and Health**
http://www.conflictandhealth.com/
[Accessed 28 May 2016]
[No new content]

**Contemporary Clinical Trials**
Volume 48, In Progress (May 2016)
http://www.sciencedirect.com/science/journal/15517144/48
[Reviewed earlier]

**Current Opinion in Infectious Diseases**
June 2016 - Volume 29 - Issue 3 pp: v-v,229-318
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

**Developing World Bioethics**
April 2016 Volume 16, Issue 1 Pages 1–60
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2016.16.issue-1/issuetoc
[Reviewed earlier]

**Development in Practice**
Volume 26, Issue 4, 2016
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

**Disasters**
April 2016 Volume 40, Issue 2 Pages 183–383
http://onlinelibrary.wiley.com/doi/10.1111/disa.2016.40.issue-2/issuetoc
[Reviewed earlier]

**Emerging Infectious Diseases**
Volume 22, Number 6—June 2016
http://wwwnc.cdc.gov/eid/
*Perspective*
**Perspectives on West Africa Ebola Virus Disease Outbreak, 2013–2016** PDF Version [PDF - 2.38 MB - 8 pages]
J. R. Spengler et al.
*Summary*
Many features of this outbreak reinforce the benefit of continued investment in global health security

*Dispatches*
**Post-Ebola Measles Outbreak in Lola, Guinea, January–June 2015** PDF Version [PDF - 438 KB - 3 pages]
J. E. Suk et al.
*Abstract*
During public health crises such as the recent outbreaks of Ebola virus disease in West Africa, breakdowns in public health systems can lead to epidemics of vaccine-preventable diseases. We report here on an outbreak of measles in the prefecture of Lola, Guinea, which started in January 2015.

*Dispatches*
**Changes in Childhood Pneumonia Hospitalizations by Race and Sex Associated with Pneumococcal Conjugate Vaccines** PDF Version [PDF - 636 KB - 4 pages]
A. D. Wiese et al.
*Abstract*
Introduction of pneumococcal conjugate vaccines in the childhood immunization schedule was associated with decreases in all-cause pneumonia hospitalizations among black and white children in Tennessee, USA. Although racial disparities that existed before introduction of these vaccines have been substantially reduced, rates remain higher in boys than in girls among young children.

**Epidemics**
Volume 15, In Progress (June 2016)
http://www.sciencedirect.com/science/journal/17554365
[No new relevant content]

**Epidemiology and Infection**
Volume 144 - Issue 07 - May 2016
http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue
[Reviewed earlier]

**The European Journal of Public Health**

Volume 26, Issue 2, 1 April 2016
http://eurpub.oxfordjournals.org/content/26/2?current-issue=y
[Reviewed earlier]

**Eurosurveillance**
Volume 21, Issue 21, 26 May 2016
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
[New issue; No new relevant content identified]

**Global Health: Science and Practice (GHSP)**
March 2016 | Volume 4 | Issue 1
http://www.ghspjournal.org/content/current
[Reviewed earlier]

**Global Public Health**
Volume 11, Issue 5-6, 2016
http://www.tandfonline.com/toc/rgph20/current
***Special Issue: Participatory Visual Methodologies in Global Public Health***
*Introduction*
**Participatory visual methodologies in global public health**
pages 521-527
Claudia M. Mitchell & Marni Sommer
*ABSTRACT*
This Introduction serves to map out a range of participatory visual approaches, as well as critical issues related to the use of participatory visual methodologies in global health. In so doing, it offers both an overview of these innovative practices in global health and a consideration of some of the key questions that researchers might ask themselves in design and implementation.

**Globalization and Health**
http://www.globalizationandhealth.com/
[Accessed 28 May 2016]
[No new relevant content identified]

**Health Affairs**
May 2016; Volume 35, Issue 5
http://content.healthaffairs.org/content/current
***Prescription Drugs, Global Health & More***
[Reviewed earlier]

**Health and Human Rights**
Volume 17, Issue 2 December 2015

http://www.hhrjournal.org/
***Special Issue: Evidence of the Impact of Human Rights-Based Approaches to Health***
[Reviewed earlier]

**Health Economics, Policy and Law**
Volume 11 - Issue 02 - April 2016
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
[Reviewed earlier]

**Health Policy and Planning**
Volume 31 Issue 5 June 2016
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

**Health Research Policy and Systems**
http://www.health-policy-systems.com/content
[Accessed 28 May 2016]
[Reviewed earlier]

**Human Vaccines & Immunotherapeutics** (formerly Human Vaccines)
Volume 12, Issue 4, 2016
http://www.tandfonline.com/toc/khvi20/current
[Reviewed earlier]

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

**Infectious Agents and Cancer**
http://www.infectagentscancer.com/content
[Accessed 28 May 2016]
[No new content]

**Infectious Diseases of Poverty**
http://www.idpjournal.com/content
[Accessed 28 May 2016]
*Commentary*

**Outwitting dengue threat and epidemics resurgence in Asia-Pacific countries: strengthening integrated dengue surveillance, monitoring and response systems**
*Dengue is still a substantial vector-borne viral disease threat and burden of public health importance worldwide. This situation is complicated by dengue virus unprecedented resurgence and persistence …*
Ernest Tambo, Jun-Hu Chen, Xiao-Nong Zhou and Emad I. M. Khater
Infectious Diseases of Poverty 2016 5:56
Published on: 27 May 2016

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

**International Journal of Epidemiology**
Volume 45 Issue 2 April 2016
http://ije.oxfordjournals.org/content/current
[Reviewed earlier]

**International Journal of Infectious Diseases**
May 2016 Volume 46, p1-126
http://www.ijidonline.com/current
[Reviewed earlier]

**JAMA**
May 24/31, 2016, Vol 315, No. 20
http://jama.jamanetwork.com/issue.aspx
[New issue; No relevant content identified]

**JAMA Pediatrics**
May 2016, Vol 170, No. 5
http://archpedi.jamanetwork.com/issue.aspx
[Reviewed earlier]

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

**Journal of Epidemiology & Community Health**
June 2016, Volume 70, Issue 6

http://jech.bmj.com/content/current
[Reviewed earlier]

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

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

**Journal of Health Care for the Poor and Underserved (JHCPU)**
Volume 27, Number 2, May 2016 Supplement
https://muse.jhu.edu/issue/33442
[Reviewed earlier]

**Journal of Immigrant and Minority Health**
Volume 18, Issue 3, June 2016
http://link.springer.com/journal/10903/18/2/page/1
*[Issue focus on a range of health parameters and challenges among Latino migrants]*

**Journal of Immigrant & Refugee Studies**
Volume 14, Issue 2, 2016
http://www.tandfonline.com/toc/wimm20/current
[Reviewed earlier]

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

**The Journal of Law, Medicine & Ethics**
Winter 2015 Volume 43, Issue 4 Pages 673–913
http://onlinelibrary.wiley.com/doi/10.1111/jlme.2015.43.issue-4/issuetoc
***Special Issue: SYMPOSIUM: Harmonizing Privacy Laws to Enable International Biobank Research: Part I***
[14 articles]
[Reviewed earlier]

**Journal of Medical Ethics**
May 2016, Volume 42, Issue 5
http://jme.bmj.com/content/current
[Reviewed earlier]

**Journal of Medical Microbiology**
Volume 65, Issue 5, May 2016
http://jmm.microbiologyresearch.org/content/journal/jmm/65/5;jsessionid=12mb0ac0j4tth.x-sgm-live-02
[New issue; No new relevant content identified]

**Journal of Patient-Centered Research and Reviews**
Volume 3, Issue 2 (2016)
http://digitalrepository.aurorahealthcare.org/jpcrr/
[Reviewed earlier]

**Journal of the Pediatric Infectious Diseases Society (JPIDS)**
Volume 5 Issue 2 June 2016
http://jpids.oxfordjournals.org/content/current
[Reviewed earlier]

**Journal of Pediatrics**
May 2016 Volume 172, p1-236
http://www.jpeds.com/current
[Reviewed earlier]

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

**Journal of the Royal Society – Interface**
01 April 2016; volume 13, issue 117
http://rsif.royalsocietypublishing.org/content/current
[Reviewed earlier]

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

**The Lancet**
May 28, 2016 Volume 387 Number 10034 p2163-2262 e28
http://www.thelancet.com/journals/lancet/issue/current

*Editorial*

**Eliminating FGM: what can health professionals do?**

The Lancet

*Summary*

Female genital mutilation (FGM)—defined by WHO as "procedures that involve the partial or total removal of external genitalia or other injury to the female genital organs for non-medical reasons"—is internationally recognised as a violation of the human rights of girls and women. Worldwide, more than 200 million girls and women suffer the physical and psychological consequences of FGM. FGM is a harmful practice and can cause several immediate and long-term health consequences such as haemorrhage, post-traumatic stress disorder, painful urination, and complications in childbirth.

*Comment*

**Yellow fever: the resurgence of a forgotten disease**

Margaret Chan

Published Online: 23 May 2016

*Summary*

The possibility that a mosquito bite during pregnancy could cause severe brain damage in newborn babies has alarmed the public and astonished scientists. The Zika outbreak in the Americas shows how a disease that slumbered for six decades in Africa and Asia, never causing an outbreak, can become a global health emergency. The Ebola and Zika outbreaks have revealed gaping holes in our lines of defence: weak health infrastructures and capacities in west Africa and the demise of programmes for mosquito control in the Americas.

*Series*

*France: nation and world*

**Achieving universal health coverage in France: policy reforms and the challenge of inequalities**

Olivier Nay, Sophie Béjean, Daniel Benamouzig, Henri Bergeron, Patrick Castel, Bruno Ventelou 2236

*Summary*

Since 1945, the provision of health care in France has been grounded in a social conception promoting universalism and equality. The French health-care system is based on compulsory social insurance funded by social contributions, co-administered by workers' and employers' organisations under State control and driven by highly redistributive financial transfers. This system is described frequently as the French model. In this paper, the first in The Lancet's Series on France, we challenge conventional wisdom about health care in France. First, we focus on policy and institutional transformations that have affected deeply the governance of health care over past decades. We argue that the health system rests on a diversity of institutions, policy mechanisms, and health actors, while its governance has been marked by the reinforcement of national regulation under the aegis of the State. Second, we suggest the redistributive mechanisms of the health insurance system are impeded by social inequalities in

health, which remain major hindrances to achieving objectives of justice and solidarity associated with the conception of health care in France.
*France: nation and world*
**State humanitarian verticalism versus universal health coverage: a century of French international health assistance revisited**
Laëtitia Atlani-Duault, Jean-Pierre Dozon, Andrew Wilson, Jean-François Delfraissy, Jean-Paul Moatti
2250
*Summary*
The French contribution to global public health over the past two centuries has been marked by a fundamental tension between two approaches: State-provided universal free health care and what we propose to call State humanitarian verticalism. Both approaches have historical roots in French colonialism and have led to successes and failures that continue until the present day. In this paper, the second in The Lancet's Series on France, we look at how this tension has evolved. During the French colonial period (1890s to 1950s), the Indigenous Medical Assistance structure was supposed to bring metropolitan France's model of universal and free public health care to the colonies, and French State imperial humanitarianism crystallised in vertical programmes inspired by Louis Pasteur, while vying with early private humanitarian activism in health represented by Albert Schweitzer. From decolonisation to the end of the Cold War (1960–99), French assistance to newly independent states was affected by sans frontièrisme, Health for All, and the AIDS pandemic. Since 2000, France has had an active role in development of global health initiatives and favoured multilateral action for health assistance. Today, with adoption of the 2030 Sustainable Development Goals and the challenges of non-communicable diseases, economic inequality, and climate change, French international health assistance needs new direction. In the context of current debate over global health as a universal goal, understanding and acknowledging France's history could help strengthen advocacy in favour of universal health coverage and contribute to advancing global equity through income redistribution, from healthy populations to people who are sick and from wealthy individuals to those who are poor.

**The Lancet Infectious Diseases**
May 2016 Volume 16 Number 5 p507-618 e64-e81
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

**Lancet Global Health**
May 2016 Volume 4 Number 5 e287-e343
http://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

**Maternal and Child Health Journal**
Volume 20, Issue 6, June 2016
http://link.springer.com/journal/10995/20/6/page/1
[Reviewed earlier]

**Medical Decision Making (MDM)**
May 2016; 36 (4)
http://mdm.sagepub.com/content/current
[Reviewed earlier]

**The Milbank Quarterly**
A Multidisciplinary Journal of Population Health and Health Policy
March 2016 Volume 94, Issue 1 Pages 1–223
http://onlinelibrary.wiley.com/doi/10.1111/1468-0009.2016.94.issue-1/issuetoc
[Reviewed earlier]

**Nature**
Volume 533 Number 7604 pp437-572 26 May 2016
http://www.nature.com/nature/current_issue.html
[New issue; No new relevant content identified]

**Nature Medicine**
May 2016, Volume 22 No 5 pp447-567
http://www.nature.com/nm/journal/v22/n5/index.html
[Reviewed earlier]

**Nature Reviews Immunology**
June 2016 Vol 16 No 6
http://www.nature.com/nri/journal/v16/n6/index.html
*Perspectives*
*Opinion*
**Harnessing the beneficial heterologous effects of vaccination**
Helen S. Goodridge, S. Sohail Ahmed, Nigel Curtis, Tobias R. Kollmann, Ofer Levy, Mihai G. Netea, Andrew J. Pollard, Reinout van Crevel & Christopher B. Wilson
p392 | doi:10.1038/nri.2016.43
*Abstract*
Clinical evidence strongly suggests that certain live vaccines, in particular bacille Calmette–Guérin (BCG) and measles vaccines, can reduce all-cause mortality, most probably through protection against non-targeted pathogens in addition to the targeted pathogen. The underlying mechanisms are currently unknown. We discuss how heterologous lymphocyte activation and innate immune memory could promote protection beyond the intended target pathogen and consider how vaccinologists could leverage heterologous immunity to improve outcomes in vulnerable populations, in particular the very young and the elderly.

**New England Journal of Medicine**
May 26, 2016 Vol. 374 No. 21
http://www.nejm.org/toc/nejm/medical-journal

[New issue; No new relevant content identified]

**Pediatrics**
May 2016, VOLUME 137 / ISSUE 5
http://pediatrics.aappublications.org/content/137/5?current-issue=y
[Reviewed earlier]

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

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

**PLOS Currents: Disasters**
http://currents.plos.org/disasters/
[Accessed 28 May 2016]
[No new content]

**PLoS Currents: Outbreaks**
http://currents.plos.org/outbreaks/
(Accessed 28 May 2016)
*Research Article*
**Genetically Modified (GM) Mosquito Use to Reduce Mosquito-Transmitted Disease in the US: A Community Opinion Survey**
May 25, 2016 ·
Introduction: Mosquito-borne infectious diseases such as dengue, chikungunya, and now Zika, pose a public health threat to the US, particularly Florida, the Gulf Coast states, and Hawaii. Recent autochthonous transmission of dengue and chikungunya in Florida, the recent dengue outbreak in Hawaii, and the potential for future local spread of Zika in the US, has led to the consideration of novel approaches to mosquito management. One such novel approach, the release of sterile genetically modified mosquitoes, has been proposed as a possible intervention, and a trial release of GM mosquitoes is being considered in one Florida community. However, this proposal has been controversial. The objective of this research was to increase understanding of community knowledge, attitudes, and beliefs regarding mosquito control and GM mosquitoes.
Methods: An 18-question self-administered survey was mailed to all households in the identified Key West, Florida neighborhood where a GM mosquito trial has been proposed. This survey was fielded between July 20, 2015 and November 1, 2015. The main outcome variable was

opposition to the use of GM mosquitoes. Measures included demographic information and opinions on mosquitoes, mosquito control, and vector-borne diseases.
Results: A majority of survey respondents did not support use of GM mosquitoes as a mosquito control method.
Discussion: Reasons for opposition included general fears about possible harmful impacts of this intervention, specific worries about human and animal health impacts from the GM mosquitoes, and environmental concerns about potential negative effects on the ecosystem. Residents were more likely to oppose GM mosquito use if they had a low perception of the potential risks posed by diseases like dengue and chikungunya, if they were female, and if they were less concerned about the need to control mosquitoes in general. These findings suggest a need for new approaches to risk communication, including educational efforts surrounding mosquito control and reciprocal dialogue between residents and public health officials.

**PLoS Medicine**
http://www.plosmedicine.org/
(Accessed 28 May 2016)
*Research Article*
**Epidemiology and Reporting Characteristics of Systematic Reviews of Biomedical Research: A Cross-Sectional Study**
Matthew J. Page, Larissa Shamseer, Douglas G. Altman, Jennifer Tetzlaff, Margaret Sampson, Andrea C. Tricco, Ferrán Catalá-López, Lun Li, Emma K. Reid, Rafael Sarkis-Onofre, David Moher
| published 24 May 2016 | PLOS Medicine
http://dx.doi.org/10.1371/journal.pmed.1002028
*Abstract*
Background
Systematic reviews (SRs) can help decision makers interpret the deluge of published biomedical literature. However, a SR may be of limited use if the methods used to conduct the SR are flawed, and reporting of the SR is incomplete. To our knowledge, since 2004 there has been no cross-sectional study of the prevalence, focus, and completeness of reporting of SRs across different specialties. Therefore, the aim of our study was to investigate the epidemiological and reporting characteristics of a more recent cross-section of SRs.
Methods and Findings
We searched MEDLINE to identify potentially eligible SRs indexed during the month of February 2014. Citations were screened using prespecified eligibility criteria. Epidemiological and reporting characteristics of a random sample of 300 SRs were extracted by one reviewer, with a 10% sample extracted in duplicate. We compared characteristics of Cochrane versus non-Cochrane reviews, and the 2014 sample of SRs versus a 2004 sample of SRs. We identified 682 SRs, suggesting that more than 8,000 SRs are being indexed in MEDLINE annually, corresponding to a 3-fold increase over the last decade. The majority of SRs addressed a therapeutic question and were conducted by authors based in China, the UK, or the US; they included a median of 15 studies involving 2,072 participants. Meta-analysis was performed in 63% of SRs, mostly using standard pairwise methods. Study risk of bias/quality assessment was performed in 70% of SRs but was rarely incorporated into the analysis (16%). Few SRs (7%) searched sources of unpublished data, and the risk of publication bias was considered in less than half of SRs. Reporting quality was highly variable; at least a third of SRs did not report use of a SR protocol, eligibility criteria relating to publication status, years of coverage of the

search, a full Boolean search logic for at least one database, methods for data extraction, methods for study risk of bias assessment, a primary outcome, an abstract conclusion that incorporated study limitations, or the funding source of the SR. Cochrane SRs, which accounted for 15% of the sample, had more complete reporting than all other types of SRs. Reporting has generally improved since 2004, but remains suboptimal for many characteristics.
Conclusions
An increasing number of SRs are being published, and many are poorly conducted and reported. Strategies are needed to help reduce this avoidable waste in research.

*Editorial*

## Health Research and the World Humanitarian Summit—Not a Thousand Miles Apart

The PLOS Medicine Editors

| published 23 May 2016 | PLOS Medicine
http://dx.doi.org/10.1371/journal.pmed.1002027

May 23–24, 2016, marks the first World Humanitarian Summit (WHS), convened in Istanbul by United Nations Secretary-General Ban Ki-Moon following three years of preparatory consultations [1]. In an effort to resolve current humanitarian crises and avert future ones, the event aims to bring together heads of state, leaders of crisis-affected communities, representatives from industry, multilateral and nongovernment organizations, and other groups involved in humanitarian crises. Remarkably, the same dates bring a key meeting for another UN agency: the 69th World Health Assembly, through which member states govern the World Health Organization (WHO), meets May 23–28 in Geneva, more than 1,000 miles away.

Health crises are both cause and consequence of humanitarian crises. As part of the WHS consultation process, WHO has emphasized that "[t]he health and well-being of affected populations is the ultimate goal of humanitarian action" [2]. The Secretary-General's report for the WHS, which includes the five-section Agenda for Humanity, describes the present situation in cataclysmic terms that include global threats to health:
*Brutal and seemingly intractable conflicts have devastated the lives of millions of people…. More countries are slipping into fragility, marked by extreme poverty…. Violent extremism, terrorism and transnational crime are creating persistent instability. Growing economic inequality within countries and the widening gap between the rich and the poor are further marginalizing the most vulnerable people in society. Climate change continues to cause increased humanitarian stress as it exacerbates food insecurity, water scarcity, conflict, migration and other trends. Disasters are becoming more frequent and intense. Pandemics, epidemics and other global health threats continue to emerge frequently, and at worrying levels… [3]*

In the context of this clear common ground, it seems ironic that a scheduling conflict effectively precludes health ministers and WHO leadership from attending both WHA and WHS. As journal editors, we are prompted to ask in turn how the core concerns of our work—medicine and health research—align with the priorities of the Agenda for Humanity.
Medical interventions appear in the Secretary-General's report as part of Core Responsibility 2 ("uphold the norms that safeguard humanity"), in which the human rights of civilians are noted to include access to humanitarian medical services, care for the sick and wounded, and protection against attacks on hospitals and medical workers. We support this identification of medical services as crucially important. Having joined the call in 2014 for an end to deliberate attacks on medical services in conflict settings [4], we can scarcely conceive language sufficient

to condemn the repeated bombing of hospitals in air-strikes that have since become widespread [5–7]. Core Responsibility 3 ("leave no one behind") includes recognition that women and girls in crisis settings, as well as displaced people with disabilities and older people, are particularly at risk of poor access to health programs. Even in a document clearly intended to emphasize critical needs for political leadership and financing, these few mentions of health are notable for their brevity.

Limited mention of health and medicine may reflect the prominence of UN Sustainable Development Goal 3, devoted specifically to health and well-being; to expect each initiative to cover every important topic would invite loss of focus. Even so, moving from medical services to medical research, one finds the word "research" only once in the report's 62 pages of text; the words "science" and "scientific" do not appear at all. Rather, the report emphasizes the need to collect, share, and analyze data for the purpose of assessing need, anticipating crises, and monitoring responses: "All actors should commit to consolidating available data in open and widely accessible databases, with adequate security and privacy protection…to inform joint analysis and a common picture of the most pressing risks. This common picture should be used to set ambitious targets towards implementing and financing preparedness and risk management strategies" [3].

In many crisis situations, a surveillance and monitoring approach may be more appropriate than the classic scientific approach of designing studies to test hypotheses and generate new, generalizable knowledge. At other times, the two approaches may overlap, testing the limits of the scientific method, as we cannot expect data obtained in a crisis situation to attain the methodological rigor of prospectively designed studies in controlled settings. In addition to publishing scientific studies, a journal may raise awareness of issues and thoughtful approaches to solutions. (Recent examples in this journal include essays on the role of physicians in refugee detention centers in Australia [8] and statistical approaches to making the most of limited mortality data on forced migrants, such as those in Southern Sudan and Iraq [9].) Nonetheless, we believe that a scientific approach has more to offer than may be apparent from the wording of the Secretary-General's report. While opportunities to obtain sound data in crises may be fleeting and perilous, and opportunities to replicate conclusions uncertain, the results can still be illuminating and useful.

One of PLOS Medicine's more frequently viewed and cited articles attributed one-third of deaths following the United States invasion of Iraq not to direct violence but to indirect causes such as failures of health, sanitation, and other systems [10]. We believe that this research, based on household survey reports, analyzed against a historical comparison group, and unlikely to be replicated directly, has substantially advanced understanding of the scope of humanitarian crises that follow war. While the results are necessarily estimates, had the investigation not been conducted using established scientific methodology, the reliability of the conclusions would be impossible to assess.

The widespread occurrence of current atrocities and the threat of future devastation demand action. We applaud the potential of WHS to align the necessary agencies and resources. Yet, the very need for such a summit suggests that, despite advances in human rights over recent decades, governments and agencies with the capacity to act still lack evidence for prioritizing and pursuing effective action. In humanitarian crises, collecting and monitoring data will be necessary but not sufficient; a sustainable impact on effects requires an understanding of

causes, and responsible action requires investigation of how best to implement what is understood [11].

While science cannot by itself resolve disasters of such profound political and ethical dimensions, research can bring objectivity and innovation to understanding the causes of humanitarian crises and evaluating approaches to their prevention and resolution. We hope that discussions sparked by the Istanbul Summit will more closely integrate health objectives and clarify the role that original research should play in the global response to humanitarian crises.

**PLoS Neglected Tropical Diseases**
http://www.plosntds.org/
(Accessed 28 May 2016)
*Research Article*
**Projected Impact of Dengue Vaccination in Yucatán, Mexico**
Thomas J. Hladish, Carl A. B. Pearson, Dennis L. Chao, Diana Patricia Rojas, Gabriel L. Recchia, Héctor Gómez-Dantés, M. Elizabeth Halloran, Juliet R. C. Pulliam, Ira M. Longini
Research Article | published 26 May 2016 | PLOS Neglected Tropical Diseases
http://dx.doi.org/10.1371/journal.pntd.0004661

**Old World Cutaneous Leishmaniasis and Refugee Crises in the Middle East and North Africa**
Rebecca Du, Peter J. Hotez, Waleed S. Al-Salem, Alvaro Acosta-Serrano
Editorial | published 26 May 2016 | PLOS Neglected Tropical Diseases
http://dx.doi.org/10.1371/journal.pntd.0004545

**Research Capacity Strengthening in Low and Middle Income Countries – An Evaluation of the WHO/TDR Career Development Fellowship Programme**
Michael Käser, Christine Maure, Beatrice M. M. Halpaap, Mahnaz Vahedi, Sara Yamaka, Pascal Launois, Núria Casamitjana
Research Article | published 25 May 2016 | PLOS Neglected Tropical Diseases
http://dx.doi.org/10.1371/journal.pntd.0004631

**PLoS One**
http://www.plosone.org/
[Accessed 28 May 2016]
*Research Article*
**Efficient Vaccine Distribution Based on a Hybrid Compartmental Model**
Zhiwen Yu, Jiming Liu, Xiaowei Wang, Xianjun Zhu, Daxing Wang, Guoqiang Han
Research Article | published 27 May 2016 | PLOS ONE
http://dx.doi.org/10.1371/journal.pone.0155416

**The Potential Impact of a Hepatitis C Vaccine for People Who Inject Drugs: Is a Vaccine Needed in the Age of Direct-Acting Antivirals?**
Jack Stone, Natasha K. Martin, Matthew Hickman, Margaret Hellard, Nick Scott, Emma McBryde, Heidi Drummer, Peter Vickerman
Research Article | published 25 May 2016 | PLOS ONE

http://dx.doi.org/10.1371/journal.pone.0156213

**PLoS Pathogens**
http://journals.plos.org/plospathogens/
(Accessed 28 May 2016)
[No new relevant content identified]

**PNAS - Proceedings of the National Academy of Sciences of the United States of America**
http://www.pnas.org/content/early/
(Accessed 28 May 2016)
*Physical Sciences - Environmental Sciences:*
**Mobile phone data highlights the role of mass gatherings in the spreading of cholera outbreaks**
Flavio Finger, Tina Genolet, Lorenzo Mari, Guillaume Constantin de Magny, Noël Magloire Manga, Andrea Rinaldo, and Enrico Bertuzzo
PNAS 2016 ; published ahead of print May 23, 2016, doi:10.1073/pnas.1522305113
*Significance*
Big data and, in particular, mobile phone data are expected to revolutionize epidemiology, yet their full potential is still untapped. Here, we take a significant step forward by developing an epidemiological model that accounts for the spatiotemporal patterns of human mobility derived by directly tracking properly anonymized mobile phone users. Such data allow us to investigate, with an unprecedented level of detail, the effect that mass gatherings can have on the spreading of waterborne diseases like cholera. Identifying and understanding transmission hotspots opens the way to the implementation of novel disease control strategies.
*Abstract*
The spatiotemporal evolution of human mobility and the related fluctuations of population density are known to be key drivers of the dynamics of infectious disease outbreaks. These factors are particularly relevant in the case of mass gatherings, which may act as hotspots of disease transmission and spread. Understanding these dynamics, however, is usually limited by the lack of accurate data, especially in developing countries. Mobile phone call data provide a new, first-order source of information that allows the tracking of the evolution of mobility fluxes with high resolution in space and time. Here, we analyze a dataset of mobile phone records of ~150,000 users in Senegal to extract human mobility fluxes and directly incorporate them into a spatially explicit, dynamic epidemiological framework. Our model, which also takes into account other drivers of disease transmission such as rainfall, is applied to the 2005 cholera outbreak in Senegal, which totaled more than 30,000 reported cases. Our findings highlight the major influence that a mass gathering, which took place during the initial phase of the outbreak, had on the course of the epidemic. Such an effect could not be explained by classic, static approaches describing human mobility. Model results also show how concentrated efforts toward disease control in a transmission hotspot could have an important effect on the large-scale progression of an outbreak.

**Pneumonia**
Vol 6 (2015)

https://pneumonia.org.au/index.php/pneumonia/issue/current
[Reviewed earlier]

**Prehospital & Disaster Medicine**
Volume 31 - Issue 03 - June 2016
https://journals.cambridge.org/action/displayIssue?jid=PDM&tab=currentissue
*Special Reports*
**Research and Evaluations of the Health Aspects of Disasters, Part VIII: Risk, Risk Reduction, Risk Management, and Capacity Building**
Marvin L. Birnbaum, Alessandro Loretti, Elaine K. Daily and Ann P. O'Rourke
June 2016, pp 300 - 308
DOI: http://dx.doi.org/10.1017/S1049023X16000285
Published online: 30 March 2016
*Abstract*
There is a cascade of risks associated with a hazard evolving into a disaster that consists of the risk that: (1) a hazard will produce an event; (2) an event will cause structural damage; (3) structural damage will create functional damages and needs; (4) needs will create an emergency (require use of the local response capacity); and (5) the needs will overwhelm the local response capacity and result in a disaster (ie, the need for outside assistance). Each step along the continuum/cascade can be characterized by its probability of occurrence and the probability of possible consequences of its occurrence, and each risk is dependent upon the preceding occurrence in the progression from a hazard to a disaster. Risk-reduction measures are interventions (actions) that can be implemented to: (1) decrease the risk that a hazard will manifest as an event; (2) decrease the amounts of structural and functional damages that will result from the event; and/or (3) increase the ability to cope with the damage and respond to the needs that result from an event. Capacity building increases the level of resilience by augmenting the absorbing and/or buffering and/or response capacities of a community-at-risk. Risks for some hazards vary by the context in which they exist and by the Societal System(s) involved.

*Special Reports*
**Research and Evaluations of the Health Aspects of Disasters, Part IX: Risk-Reduction Framework**
Marvin L. Birnbaum, Elaine K. Daily, Ann P. O'Rourke and Alessandro Loretti
DOI: http://dx.doi.org/10.1017/S1049023X16000352
Published online: 01 April 2016
*Abstract*
A disaster is a failure of resilience to an event. Mitigating the risks that a hazard will progress into a destructive event, or increasing the resilience of a society-at-risk, requires careful analysis, planning, and execution. The Disaster Logic Model (DLM) is used to define the value (effects, costs, and outcome(s)), impacts, and benefits of interventions directed at risk reduction. A Risk-Reduction Framework, based on the DLM, details the processes involved in hazard mitigation and/or capacity-building interventions to augment the resilience of a community or to decrease the risk that a secondary event will develop. This Framework provides the structure to systematically undertake and evaluate risk-reduction interventions. It applies to all interventions aimed at hazard mitigation and/or increasing the absorbing, buffering, or response capacities of a community-at-risk for a primary or secondary event that

could result in a disaster. The Framework utilizes the structure provided by the DLM and consists of 14 steps: (1) hazards and risks identification; (2) historical perspectives and predictions; (3) selection of hazard(s) to address; (4) selection of appropriate indicators; (5) identification of current resilience standards and benchmarks; (6) assessment of the current resilience status; (7) identification of resilience needs; (8) strategic planning; (9) selection of an appropriate intervention; (10) operational planning; (11) implementation; (12) assessments of outputs; (13) synthesis; and (14) feedback. Each of these steps is a transformation process that is described in detail. Emphasis is placed on the role of Coordination and Control during planning, implementation of risk-reduction/capacity building interventions, and evaluation.

**Preventive Medicine**
Volume 86, Pages 1-166 (May 2016)
http://www.sciencedirect.com/science/journal/00917435/86
[Reviewed earlier]

**Proceedings of the Royal Society B**
10 February 2016; volume 283, issue 1824
http://rspb.royalsocietypublishing.org/content/283/1824?current-issue=y
[Reviewed earlier]

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

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

**Qualitative Health Research**
June 2016; 26 (7)
http://qhr.sagepub.com/content/current
***Special Issue: Ethnography***
[Reviewed earlier]

**Reproductive Health**
http://www.reproductive-health-journal.com/content
[Accessed 28 May 2016]
[No new relevant content identified]

**Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)**
February 2016 Vol. 39, No. 2
http://www.paho.org/journal/
[Reviewed earlier]

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

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

**Science**
27 May 2016 Vol 352, Issue 6289
http://www.sciencemag.org/current.dtl
[New issue; No new relevant content identified]

**Science Translational Medicine**
25 May 2016 Vol 8, Issue 340
http://stm.sciencemag.org/
*Editorial*
**Treating the enigmatic "exceptional responders" as patients with undiagnosed diseases**
By Eric D. Perakslis, Isaac S. Kohane
Science Translational Medicine25 May 2016 : 340ed8
"Exceptional responders" teach researchers how to improve therapies and can be assessed in the same way as patients with undiagnosed diseases.

**Social Science & Medicine**
Volume 156, Pages 1-212 (May 2016)
http://www.sciencedirect.com/science/journal/02779536/156
*Review articles*
**Where the lay and the technical meet: Using an anthropology of interfaces to explain persistent reproductive health disparities in West Africa**
Review Article
Pages 175-183
Yannick Jaffré, Siri Suh
*Abstract*

Despite impressive global investment in reproductive health programs in West Africa, maternal mortality remains unacceptably high and obstetric care is often inadequate. Fertility is among the highest in the world, while contraceptive prevalence remains among the lowest. This paper explores the social and technical dimensions of this situation. We argue that effective reproductive health programs require analyzing the interfaces between technical programs and the social logics and behaviors of health professionals and client populations. Significant gaps between health programs' goals and the behaviors of patients and health care professionals have been observed. While public health projects aim to manage reproduction, sexuality, fertility, and professional practices are regulated socially. Such projects may target technical practices, but access to care is greatly influenced by social norms and ethics. This paper shows how an empirical anthropology that investigates the social and technical interfaces of reproduction can contribute to improved global health.

**Tropical Medicine & International Health**
May 2016 Volume 21, Issue 5 Pages 569–690
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2016.21.issue-3/issuetoc
[Reviewed earlier]

**Vaccine**
Volume 34, Issue 25, Pages 2759-2862 (27 May 2016)
http://www.sciencedirect.com/science/journal/0264410X/34/25
[Reviewed earlier]

**Vaccine: Development and Therapy**
https://www.dovepress.com/vaccine-development-and-therapy-archive111
(Accessed 28 May 2016)
[No new content]

**Vaccines — Open Access Journal**
http://www.mdpi.com/journal/vaccines
(Accessed 28 May 2016)
[No new relevant content identified]

**Value in Health**
May 2016 Volume 19, Issue 3
http://www.valueinhealthjournal.com/current
[No new relevant content identified]

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***From Google Scholar & other sources: Selected Journal Articles, Newsletters, Dissertations, Theses, Commentary***

**Journal of Pediatric and Adolescent Gynecology**
Available online 20 May 2016
**Influence of Sources of Information and Parental Attitudes on Human Papillomavirus Vaccine Uptake among Adolescents**
Natasha L. Underwood, MPH, CHES1, Lisa M. Gargano, PhD, MPH1, Samantha Jacobs, MPH2, Katherine Seib, MSPH1, Christopher Morfaw, RN3, Dennis Murray, MD4, James M. Hughes, MD1, 2, Jessica M. Sales, PhD2
*Abstract*
Study Objective
The purpose of this study was to: 1) describe parental sources of information about human papillomavirus (HPV) vaccination for adolescents, 2) understand how parental sources of information about HPV vaccine are associated with adolescent HPV vaccine uptake and 3) understand if the relationship between a greater number of HPV related information sources and HPV vaccine uptake among adolescents is mediated by parental attitudes.
Design, Setting and Participants
We conducted a three-arm randomized controlled trial (RCT) conducted in middle and high schools in eastern Georgia from 2011-2013. As part of the trial, we surveyed parents during the final year to understand their sources of information about HPV vaccine for their adolescent. Data were collected from 360 parents via phone and online surveys.
Main Outcome Measures
Parents responded to a survey that asked them to identify demographic information, parental HPV attitudes, sources of information about HPV vaccination and HPV vaccine uptake.
Results
The majority of the sample was African American (74%, n=267) and 53% of parents (n=192) reported that their adolescent received at least 1 HPV vaccine dose. The top sources of information about HPV vaccine reported by parents were: a doctor or medical professional (80%, n=287) and television (64%, n=232). A mediation analysis shows sources of information about HPV vaccine are associated with parental attitudes, and parental attitudes about HPV vaccine are associated with vaccine uptake among adolescents.
Conclusions
These findings highlight the importance of HPV sources of information on parental attitudes.

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## ***Media/Policy Watch***

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

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

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

**The Atlantic**
http://www.theatlantic.com/magazine/
*Accessed 28 May 2016*
[No new, unique, relevant content]

**BBC**
http://www.bbc.co.uk/
*Accessed 28 May 2016*
[No new, unique, relevant content]

**The Economist**
http://www.economist.com/
*Accessed 28 May 2016*
[No new, unique, relevant content]

**Financial Times**
http://www.ft.com/home/uk
*Accessed 28 May 2016*

**Forbes**
http://www.forbes.com/
*Accessed 28 May 2016*
[No new, unique, relevant content]

**Foreign Affairs**
http://www.foreignaffairs.com/
*Accessed 28 May 2016*
[No new, unique, relevant content]

**Foreign Policy**
http://foreignpolicy.com/
*Accessed 28 May 2016*
[No new, unique, relevant content]

**The Guardian**
http://www.guardiannews.com/
*Accessed 28 May 2016*
[No new, unique, relevant content]

**New Yorker**
http://www.newyorker.com/
Accessed 28 May 2016
[No new, unique, relevant content]

**New York Times**

http://www.nytimes.com/
*Accessed 28 May 2016*
**He Survived Ebola. Now He's Fighting to Keep It From Spreading.**
*A doctor in Guinea tries to train health workers to halt the transmission of the disease — before it comes roaring back*.
By JESSICA BENKO
MAY 26, 2016

**Dr. Susan Desmond-Hellmann, Guide of the Gates Foundation**
| 23 May 2016
On her second anniversary as chief executive of the Bill & Melinda Gates Foundation, a global colossus of philanthropy, Dr. Susan Desmond-Hellmann wrote of progress against smoking in the Philippines, polio across the world and sleeping sickness in Africa. Before joining the foundation, she led development of the cancer drugs Avastin and Herceptin at Genentech, then was chancellor of the University of California, San Francisco. We spoke for an hour at her office in Seattle. A condensed and edited version of the conversation follows.

**Wall Street Journal**
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
*Accessed 28 May 2016*
*Opinion*
**Jeremy Farrar: Preparing the WHO for the Next Outbreak**
24 May 2016
The Ebola outbreak that started in 2013 confirmed what had long been evident: That the structure and approach of the World Health Organization were deeply flawed. The global community was sluggish in reacting to the crisis, with inadequate coordination and confused decision making. Vaccines and treatments that showed promise only came on stream toward the end of the epidemic, and even those owed much to luck…

**Washington Post**
http://www.washingtonpost.com/
*Accessed 28 May 2016*
[No new, unique, relevant content]

## *Think Tanks et al*
**Brookings**
http://www.brookings.edu/
*Accessed 28 May 2016*
[No new relevant content]

**Center for Global Development**
http://www.cgdev.org/
*Accessed 28 May 2016*
[No new relevant content]

**Council on Foreign Relations**
http://www.cfr.org/
*Accessed 28 May 2016*

[No new relevant content]

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

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