

## Center for Vaccine Ethics and Policy

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### **Vaccines and Global Health: The Week in Review 22 February 2014 Center for Vaccine Ethics & Policy (CVEP)**

*This weekly summary 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: 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 3,500 entries.*

*Comments and suggestions should be directed to*

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#### **WHO: 140,000 people to get cholera vaccine in South Sudan**

News release - *Excerpt*

22 February 2014 | GENEVA - WHO is working with the South Sudan Government and partners to provide vaccines to protect nearly 140,000 people living in temporary camps in South Sudan against cholera.

The vaccines come from an emergency stockpile managed by WHO, the International Federation of the Red Cross and Red Crescent Societies (IFRC), Médecins Sans Frontières (MSF) and UNICEF. It is the first time the stockpile, created in 2013 by WHO, is being activated.

Although currently there is not a cholera outbreak, people displaced by the recent conflict and living in the camps are at risk due to poor sanitary conditions and overcrowding.

Starting today, 94,000 people will be vaccinated in the Minkaman camp, Awerial County, targeting displaced people and host communities, followed by vaccination campaigns in camps based in Juba, covering an additional 43 000 people.

Two doses of vaccine are required for an individual to be protected. The campaign begins with an initial round of vaccinations followed by - after a required 14 day interval - a second round of doses, which will complete the vaccination. For such a campaign to be effective, it is vital that a second dose is administered and this factor has led to the decision to begin with Minkaman, Awerial County, and Juba camps.

"Minkaman camp in Awerial County and Juba camp have been selected because of the relative stability of the situation and easier access in those places," says Dr Abdinasir Abubakar, from WHO's Disease Surveillance and Response team, in South Sudan. "We are also looking at other camps, and once the accessibility and security improves, we will expand the cholera vaccination campaigns into these areas. We will be reviewing the situation day by day." ...

<http://www.who.int/mediacentre/news/releases/2014/cholera-vaccine-20140221/en/>

### **Update: Polio this week - As of 19 February 2014**

Global Polio Eradication Initiative

Full report: <http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx>

*[Editor's extract and bolded text]*

:: In Pakistan, six new wild poliovirus type 1 (WPV1) and two new circulating vaccine-derived poliovirus type 2 (cVDPV2) cases are reported, all from the Federally Administered Tribal Areas (FATA) and Khyber Pakhtunkhwa (KP). Five of the cases are from North Waziristan and Peshawar, largely considered the 'engine' for polio transmission in the country.

#### ***Afghanistan***

:: One new WPV1 case was reported in the past week from 2014. The total number of WPV1 cases remains 14 for 2013 and is now three for 2014. The most recent WPV1 case had onset of paralysis on 31 January 2014 from Kunar province, Eastern Region

#### ***Pakistan***

:: Six new WPV1 cases were reported in the past week, four from North Waziristan, FATA and one from Bannu and Peshawar, respectively, in KP. The total number of cases for 2013 remains 93. The total number of cases in 2014 is now 15. The most recent case had onset of paralysis on 31 January (WPV1 from FR Bannu, FATA).

:: Two new cVDPV2 cases were reported in the past week. The total number of cVDPV2 cases for 2013 remains 45, and three for 2014. The most recent cVDPV2 case had onset of paralysis on 24 January (from FR Bannu, FATA).

:: North Waziristan is the district with the largest number of children being paralyzed by poliovirus in the world (both wild and cVDPV2). Immunization activities have been suspended by local leaders since June 2012. It is critical that children in all areas are vaccinated and protected from poliovirus. Immunizations in neighbouring high-risk areas are being intensified, to further boost population immunity levels in those areas and prevent further spread of this outbreak.

:: The densely populated Peshawar valley is considered to be the main 'engine' of poliovirus transmission, alongside North Waziristan, due to large-scale population movements through Peshawar from across this region, and into other areas of Pakistan. The quality of operations must be urgently improved in Peshawar, and immunizations resumed in North Waziristan.

:: However, at the same time, concerning trends have been noted in greater Karachi, Sindh and in Quetta, Balochistan. Environmental positives isolates from every major city of Punjab confirm widespread virus circulation

#### ***Horn of Africa***

:: Two new WPV1 cases from Somalia were reported in the past week. Onset of paralysis for both cases was in June 2013. The cases were reported late due to a laboratory processing backlog. The total number of WPV1 cases in the Horn of Africa is now 215 (192 from Somalia, 14 from Kenya and nine from Ethiopia). The most recent WPV1 case in the region had onset of paralysis on 20 December 2013 (from Bari, Somalia).

:: Outbreak response across the Horn of Africa is continuing. Recommendations from the recently held Horn of Africa Technical Advisory Group (TAG), which convened two weeks ago in Nairobi, are now actively being incorporated into outbreak response planning. The TAG had underscored that the initial response to the outbreak was appropriate, however expressed grave concern that gaps in SIA quality and surveillance remained in key infected areas of the

region. Consequently, the group concluded there is a serious risk of the outbreak continuing and of further spread both within and beyond countries of the Horn of Africa. The group recommended that infected countries should focus efforts on high-risk and infected areas, by conducting high-quality SIAs no more than four weeks apart.

### ***Middle East***

:: In Syria, one new WPV1 case was reported in the past week from Hasakeh governorate. The total number of laboratory-confirmed WPV1 cases is now 24. The most recent case had onset of paralysis on 17 December and was reported from Mara, Edleb governorate.

:: Additionally, there are 13 cases confirmed from contested areas but not yet reflected in official figures.

***Editor's Note:*** Please see *Journal Watch* below for:

*Editorials*

### **[The polio eradication end game: what it means for Europe](#)**

D Heymann 1,2, Q Ahmed3

*Eurosurveillance*

Volume 19, Issue 7, 20 February 2014

### **Gunmen kidnap six-member polio team in Pakistan**

[The Global Post/AFP via Agence France-Presse](#)

February 17, 2014 14:12

*The kidnapping is the latest setback to efforts to eradicate the disease in Pakistan. It followed a bombing on Sunday targeting a polio team in Peshawar which killed a policeman.*

*Excerpt*

A Pakistani health worker administers a polio vaccination to a child during a polio immunization campaign in Peshawar on Feb. 2, 2014

Masked gunmen kidnapped a six-member polio vaccination team — a doctor, two local employees of the World Health Organization (WHO) and three guards — in northwest [Pakistan](#) on Monday, an official said.

Local administration official Niamat Ullah Khan said the team was seized some 190 miles southwest of Peshawar, in Ping village at the border of South Waziristan.

A local official of the WHO in Peshawar confirmed the incident...

<http://www.globalpost.com/dispatch/news/regions/asia-pacific/pakistan/140217/gunmen-kidnap-six-member-polio-team-pakistan>

**Rotary announced US\$36 million in new grants supporting polio eradication.** The grants include \$6.8 million for Afghanistan, \$7.7 million for Nigeria and \$926,000 for Pakistan. Grant amounts "are based on requests from eradication initiative partners UNICEF and the World Health Organization, which work with the governments of polio-affected countries to plan and carry out immunization activities." UNICEF will use a grant of \$2.73 million to bolster vaccination activities throughout the Horn of Africa as part of an on-going response to an outbreak that began in 2013 and has now infected more than 200 children. The other countries where Rotary funds will be used to fight polio are Burkina Faso, \$2.1 million; Cameroon, \$3.4 million; Democratic Republic of Congo, \$3.9 million; Niger, \$2.3 million; Somalia, \$1.3 million; South Sudan, \$2.6 million; and Sudan, \$1.2 million. WHO also received \$934,000 to study the impact of introducing injectable, inactivated polio vaccine into the immunization program as part of the initiative's endgame plan, as the goal of global eradication nears. Unrelated to this round of grants, Rotary released \$500,000 in December 2013 as an emergency response to the

polio outbreak in strife-torn Syria, which had not reported polio since 1999. Through Jan. 31, there were 23 confirmed cases in Syria since October 2013, all traceable to the polio strain circulating in Pakistan.

<http://www.prnewswire.com/news-releases/rotary-releases-us359-million-to-fight-polio-in-africa-and-asia-246011091.html>

The **Weekly Epidemiological Report (WER) for 21 February 2014**, vol. 89, 8 (pp. 61–72) includes:

:: Preventive chemotherapy: planning, requesting medicines, and reporting

:: WHO Strategic Advisory Group of Experts (SAGE) on immunization: request for nominations

:: Monthly report on dracunculiasis cases, January– December 2013

<http://www.who.int/entity/wer/2014/wer8908.pdf?ua=1>

### **WHO: Global Alert and Response (GAR) – *Disease Outbreak News***

[http://www.who.int/csr/don/2013\\_03\\_12/en/index.html](http://www.who.int/csr/don/2013_03_12/en/index.html)

:: **Human infection with avian influenza A(H7N9) virus** – update [18 February 2014](#)

On 14, 15 and 16 February 2014, the National Health and Family Planning Commission (NHFPC) of China notified WHO of nine additional laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus, including one death...

:: Human infection with avian influenza A(H7N9) virus – update [17 February 2014](#)

:: Human infection with avian influenza A(H7N9) virus – update [17 February 2014](#)

### **WHO: Humanitarian Health Action**

<http://www.who.int/hac/en/index.html>

*No new content identified.*

### **UNICEF Watch** [to 22 February 2014]

[http://www.unicef.org/media/media\\_67204.html](http://www.unicef.org/media/media_67204.html)

*No new relevant content identified.*

### **GAVI Watch** [to 22 February 2014]

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

#### **[GAVI has now opened its 2014 round of applications for new vaccines and health system strengthening support](#)**

*New in 2014*

Applications for both [New Vaccine Support](#) (NVS) and [Health System Strengthening](#) (HSS) will now be accepted through the same application and review timelines. The [General Guidelines](#) document offers an introduction to the principles, policies and processes that are applicable to all types of GAVI support.

Visit [the updated section of the French website](#) for all materials in French.

Countries are requested to submit an 'Expression of Interest' (EOI) as the first step in the application process. Submission of the EOI will be made mandatory starting with the September cut-off date for applications.

Country applications will be accepted on a rolling basis, so if a country misses a cut-off date, the application will be reviewed by the subsequent Independent Review Committee (IRC)

**CDC/MMWR Watch** [to 22 February 2014]

[http://www.cdc.gov/mmwr/mmwr\\_wk.html](http://www.cdc.gov/mmwr/mmwr_wk.html)

**[CDC Telebriefing: Update on Flu Activity and Vaccine Effectiveness Estimates - Transcript](#)**

Thursday, February 20, 2014, 12:00 PM

Telebriefing on articles that appear in today's Morbidity and Mortality Weekly Report on Flu activity and 2013–14 Seasonal Influenza Vaccine Effectiveness.

**MMWR Weekly**

February 21, 2014 / Vol. 63 / No. 7

**[:: Interim Estimates of 2013–14 Seasonal Influenza Vaccine Effectiveness — United States, February 2014](#)**

February 21, 2014 / 63(07);137-142

Brendan Flannery, PhD1, Swathi N. Thaker, PhD1, Jessie Clippard, MPH1, Arnold S. Monto, MD2, Suzanne E. Ohmit, DrPH2, Richard K. Zimmerman, MD3, Mary Patricia Nowalk, PhD3, Manjusha Gaglani, MBBS4, Michael L. Jackson, PhD5, Lisa A. Jackson, MD5, Edward A. Belongia, MD6, Huong Q. McLean, PhD6, LaShondra Berman, MS1, Angie Foust, MA1, Wendy Sessions, MPH1, Sarah Spencer, PhD1, Alicia M. Fry, MD1

*Excerpt*

In the United States, annual vaccination against seasonal influenza is recommended for all persons aged  $\geq 6$  months (1). Each season since 2004–05, CDC has estimated the effectiveness of seasonal influenza vaccine to prevent influenza-associated, medically attended acute respiratory illness (ARI). This report uses data from 2,319 children and adults enrolled in the U.S. Influenza Vaccine Effectiveness (Flu VE) Network during December 2, 2013–January 23, 2014, to estimate an interim adjusted effectiveness of seasonal influenza vaccine for preventing laboratory-confirmed influenza virus infection associated with medically attended ARI. **During this period, overall vaccine effectiveness (VE) (adjusted for study site, age, sex, race/ethnicity, self-rated health, and days from illness onset to enrollment) against influenza A and B virus infection associated with medically attended ARI was 61%. The influenza A (H1N1)pdm09 (pH1N1) virus that emerged to cause a pandemic in 2009 accounted for 98% of influenza viruses detected. VE was estimated to be 62% against pH1N1 virus infections and was similar across age groups.** As of February 8, 2014, influenza activity remained elevated in the United States, the proportion of persons seeing their health-care provider for influenza-like illness was lower than in early January but remained above the national baseline, and activity still might be increasing in some parts of the country (2). CDC and the Advisory Committee on Immunization Practices routinely recommend that annual influenza vaccination efforts continue as long as influenza viruses are circulating (1). Persons aged  $\geq 6$  months who have not yet been vaccinated this season should be vaccinated. Antiviral medications are an important second line of defense to treat influenza illness and should be used as recommended (3) among suspected or confirmed influenza patients, regardless of patient vaccination status. Early antiviral treatment is recommended for persons with suspected influenza with severe or progressive illness (e.g., hospitalized persons) and those at high risk for complications from influenza, no matter how severe the illness.

**[:: Influenza-Associated Intensive-Care Unit Admissions and Deaths — California, September 29, 2013–January 18, 2014](#)**

:: [Update: Influenza Activity — United States, September 29, 2013–February 8, 2014](#)  
:: [Notes from the Field: Varicella-Associated Death of a Vaccinated Child with Leukemia — California, 2012](#)

### **European Medicines Agency Watch [to 22 February 2014]**

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

*No new relevant content.*

### **UN Watch [to 22 February 2014]**

Selected meetings, press releases, and press conferences relevant to immunization, vaccines, infectious diseases, global health, etc. <http://www.un.org/en/unpress/>

*No new relevant content.*

### **World Bank/IMF Watch [to 22 February 2014]**

Selected media releases and other selected content relevant to immunization, vaccines, infectious diseases, global health, etc. <http://www.worldbank.org/en/news/all>

*No new relevant content.*

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

*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](mailto:david.r.curry@centerforvaccineethicsandpolicy.org)

### **WHO Fact sheet N°378: Immunization coverage:**

Updated February 2014

*Excerpt*

Key facts

:: Immunization prevents illness, disability and death from vaccine-preventable diseases including diphtheria, measles, pertussis, pneumonia, polio, rotavirus diarrhoea, rubella and tetanus.

:: Global vaccination coverage is holding steady.

:: Immunization currently averts an estimated 2 to 3 million deaths every year.

:: But an estimated 22.6 million infants worldwide are still missing out on basic vaccines.

Overview

Immunization averts an estimated 2 to 3 million deaths every year from diphtheria, tetanus, pertussis (whooping cough), and measles. Global vaccination coverage—the proportion of the world's children who receive recommended vaccines—has remained steady for the past few years. For example, the percentage of infants fully vaccinated against diphtheria-tetanus-pertussis (DTP3) has held steady at 83% for the last three years.

During 2012, about 110.6 million infants worldwide got three doses of DTP3 vaccine, protecting them against infectious diseases that can cause serious illness and disability or be fatal. By 2012, 131 countries had reached at least 90% coverage of DTP3...

<http://www.who.int/mediacentre/factsheets/fs378/en/>

### **WHO Fact sheet N°286: Measles**

Updated February 2014

*Excerpt*

Key facts

:: Measles is one of the leading causes of death among young children even though a safe and cost-effective vaccine is available.

:: In 2012, there were 122 000 measles deaths globally – about 330 deaths every day or 14 deaths every hour.

:: Measles vaccination resulted in a 78% drop in measles deaths between 2000 and 2012 worldwide.

:: In 2012, about 84% of the world's children received one dose of measles vaccine by their first birthday through routine health services – up from 72% in 2000.

:: Since 2000, more than 1 billion children in high risk countries were vaccinated against the disease through mass vaccination campaigns – about 145 million of them in 2012...

<http://www.who.int/mediacentre/factsheets/fs286/en/>

### ***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](mailto:david.r.curry@centerforvaccineethicsandpolicy.org)*

### **The American Journal of Bioethics**

[Volume 14](#), Issue 2, 2014

[http://www.tandfonline.com/toc/uajb20/current#.Uv\\_UyrQt6F9](http://www.tandfonline.com/toc/uajb20/current#.Uv_UyrQt6F9)

[Reviewed earlier]

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

Vol 42 | No. 2 | February 2014 | Pages 93-214

<http://www.ajicjournal.org/current>

[Reviewed earlier; No relevant content]

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

Vol 46 | No. 3 | March 2014 | Pages 219-330

<http://www.ajpmonline.org/current>

[Reviewed earlier; No relevant content]

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

Volume 104, Issue 3 (March 2014)

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

[Reviewed earlier; No relevant content]

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

February 2014; 90 (2)

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

[Reviewed earlier]

### **Annals of Internal Medicine**

18 February 2014, Vol. 160. No. 4

<http://annals.org/issue.aspx>

[No relevant content]

### **BMC Public Health**

(Accessed 22 February 2014)

<http://www.biomedcentral.com/bmcpublichealth/content>

#### ***Research article***

#### **Local discrepancies in measles vaccination opportunities: results of population-based surveys in Sub-Saharan Africa**

Lise Grout, Nolwenn Conan, Aitana Juan Giner, Northan Hurtado, Florence Fermon, Alexandra NčGoran, Emmanuel Grellety, Andrea Minetti, Klaudia Porten and Rebecca F Grais

[Author Affiliations](#)

BMC Public Health 2014, 14:193 doi:10.1186/1471-2458-14-193

Published: 21 February 2014

<http://www.biomedcentral.com/1471-2458/14/193/abstract>

*Abstract* (provisional)

Background

The World Health Organization recommends African children receive two doses of measles containing vaccine (MCV) through routine programs or supplemental immunization activities (SIA). Moreover, children have an additional opportunity to receive MCV through outbreak response immunization (ORI) mass campaigns in certain contexts. Here, we present the results of MCV coverage by dose estimated through surveys conducted after outbreak response in diverse settings in Sub-Saharan Africa. .

Methods

We included 24 household-based surveys conducted in six countries after a non-selective mass vaccination campaign. In the majority (22/24), the survey sample was selected using probability proportional to size cluster-based sampling. Others used Lot Quality Assurance Sampling.



## Results

In total, data were collected on 60,895 children from 2005 to 2011. Routine coverage varied between countries (>95% in Malawi and Kirundo province (Burundi) while <35% in N'Djamena (Chad) in 2005), within a country and over time. SIA coverage was <75% in most settings. ORI coverage ranged from >95% in Malawi to 71.4% [95%CI: 68.9-73.8] in N'Djamena (Chad) in 2005.

In five sites, >5% of children remained unvaccinated after several opportunities. Conversely, in Malawi and DRC, over half of the children eligible for the last SIA received a third dose of MCV.

## Conclusions

Control pre-elimination targets were still not reached, contributing to the occurrence of repeated measles outbreak in the Sub-Saharan African countries reported here. Although children receiving a dose of MCV through outbreak response benefit from the intervention, ensuring that programs effectively target hard to reach children remains the cornerstone of measles control.

## **Research article**

### **Systematic review on what works, what does not work and why of implementation of mobile health (mHealth) projects in Africa**

Clara B Aranda-Jan, Neo Mohutsiwa-Dibe and Svetla Loukanova

#### Author Affiliations

For all author emails, please [log on](#).

BMC Public Health 2014, 14:188 doi:10.1186/1471-2458-14-188

Published: 21 February 2014

<http://www.biomedcentral.com/1471-2458/14/188/abstract>

*Abstract* (provisional)

#### Background

Access to mobile phone technology has rapidly expanded in developing countries. In Africa, mHealth is a relatively new concept and questions arise regarding reliability of the technology used for health outcomes. This review documents strengths, weaknesses, opportunities, and threats (SWOT) of mHealth projects in Africa.

#### Methods

A systematic review of peer-reviewed literature on mHealth projects in Africa, between 2003 and 2013, was carried out using PubMed and OvidSP. Data was synthesized using a SWOT analysis methodology. Results were grouped to assess specific aspects of project implementation in terms of sustainability and mid/long-term results, integration to the health system, management process, scale-up and replication, and legal issues, regulations and standards.

#### Results

Forty-four studies on mHealth projects in Africa were included and classified as: "patient follow-up and medication adherence" (n = 19), "staff training, support and motivation" (n = 2), "staff evaluation, monitoring and guidelines compliance" (n = 4), "drug supply-chain and stock management" (n = 2), "patient education and awareness" (n = 1), "disease surveillance and intervention monitoring" (n = 4), "data collection/transfer and reporting" (n = 10) and "overview of mHealth projects" (n = 2). In general, mHealth projects demonstrate positive health-related outcomes and their success is based on the accessibility, acceptance and low-cost of the technology, effective adaptation to local contexts, strong stakeholder collaboration, and government involvement. Threats such as dependency on funding, unclear healthcare system responsibilities, unreliable infrastructure and lack of evidence on cost-effectiveness challenge their implementation. mHealth projects can potentially be scaled-up to help tackle

problems faced by healthcare systems like poor management of drug stocks, weak surveillance and reporting systems or lack of resources.

Conclusion

mHealth in Africa is an innovative approach to delivering health services. In this fast-growing technological field, research opportunities include assessing implications of scaling-up mHealth projects, evaluating cost-effectiveness and impacts on the overall health system.

### **British Medical Bulletin**

Volume 108 Issue 1 December 2013

<http://bmb.oxfordjournals.org/content/current>

[Reviewed earlier]

### **British Medical Journal**

22 February 2014 (Vol 348, Issue 7946)

<http://www.bmj.com/content/348/7946>

[No relevant content]

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

Volume 92, Number 2, February 2014, 77-152

<http://www.who.int/bulletin/volumes/92/2/en/index.html>

[Reviewed earlier]

### **Clinical Therapeutics**

Vol 36 | No. 2 | 01 February 2014 | Pages 151-308

<http://www.clinicaltherapeutics.com/current>

[No relevant content]

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

(Accessed 22 February 2014)

<http://www.resource-allocation.com/>

[No new relevant content]

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

February 2014 - Volume 27 - Issue 1 pp: v-vi,1-114

<http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx>

[Reviewed earlier; No relevant content]

### **Developing World Bioethics**

December 2013 Volume 13, Issue 3 Pages ii-ii, 105-170

<http://onlinelibrary.wiley.com/doi/10.1111/dewb.2013.13.issue-3/issuetoc>

[Reviewed earlier]

## **Development in Practice**

Volume 23, Issue 8, 2013

<http://www.tandfonline.com/toc/cdip20/current>

[Reviewed earlier; No relevant content]

## **Emerging Infectious Diseases**

Volume 20, Number 3—March 2014

<http://www.cdc.gov/ncidod/EID/index.htm>

### **Invasive Fungal Infections after Natural Disasters**

K. Benedict and B. J. Park

Fungal infections in persons affected by natural disasters are a potentially overlooked public health problem.

## **The European Journal of Public Health**

Volume 24 Issue 1 February 2014

<http://eurpub.oxfordjournals.org/content/current>

[Reviewed earlier; No relevant content]

## **Eurosurveillance**

Volume 19, Issue 7, 20 February 2014

<http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678>

### ***Editorials***

#### **The polio eradication end game: what it means for Europe**

D Heymann 1,2, Q Ahmed3

- London School of Hygiene and Tropical Medicine, London, United Kingdom
- Chatham House Centre on Global Health Security, London United Kingdom
- State University of New York (SUNY) at Stony Brook, New York, United States

This edition of Eurosurveillance provides a series of articles related to polio that present a microcosm of some of the issues that have plagued polio eradication since the programme first began, and it also provides many of the solutions.

Had these and other issues been clearly understood in 1988 when the World Health Assembly passed the resolution that committed all countries to polio eradication by the year 2000, the decision to eradicate would have been more difficult. But fortunately, buoyed by the then recent success in the eradication of smallpox, active debate on whether to use inactivated or live polio vaccines, awareness that many countries had already interrupted polio transmission, and unawareness of the difficult eradication end game, the resolution was passed by consensus of the World Health Organization (WHO)'s member states [1]. Although progress towards eradication has been slower than anticipated in 1988, paralytic polio has decreased from an estimated 1,000 children per day during 1988, to approximately 400 during 2013. Today there remain only three countries with endemic polio, Afghanistan, Nigeria and Pakistan, and the recent risk assessment from the European Centre for Disease Prevention and Control (ECDC) reminds us that Europe must remain vigilant with strong surveillance and sustained laboratory capacity [2].

The series of polio articles in this edition begins with the article by Hindiyeh et al. [3] describing direct sewage testing for wild poliovirus antigen, using a multiplex quantitative reverse-transcription PCR (qRT-PCR) for rapid detection of the virus, directly on concentrated sewage samples. When compared to cell culture of the same sewage specimens, which is the initial process in the gold standard testing protocol for confirmation of polio, sensitivity and specificity of the multiplex system were shown to be high. Results were obtained in 24 to 48 hours, rather than the usual five to seven days required for the culture-based protocol.

The time from collection of a stool sample to analysis for polio virus in polio eradication programmes has often been weeks, not days, causing delays in response, more widespread transmission, and greater and more costly containment efforts. Recently though, times from specimen collection to outbreak control have decreased considerably by strengthening transport systems from the field to the laboratory, and modifying the testing protocol [4]. At the same time, there is active research and development of new testing algorithms that can provide more rapid results [5]. Hindiyeh et al. have concluded that their qRT-PCR system could be a promising application for testing of RNA extracted directly from processed stool samples from children with acute flaccid paralysis (AFP), and it remains to be seen whether further study will be conducted along these lines [3].

The article by Manor et al. [6] describes the discovery of a silent introduction of wild poliovirus, in the absence of detection of AFP in children (the standard surveillance methodology), by what they describe as an early warning system of sewage monitoring for poliovirus. They point out that this silent introduction occurred in a highly immune population in which inactivated polio vaccine (IPV) has been used exclusively since 2005, and that AFP surveillance alone had not detected this introduction and circulation. The authors suggest that there is a fundamental role for environmental surveillance in routine monitoring as an early warning system in polio-free countries, possibly more sensitive than surveillance for AFP. Shulman et al. [7] add greater perspective in their report on genetic sequencing of these wild polioviruses. It suggests that they were linked to strains that were circulating in South Asia and Egypt in 2012 and concludes that there had been one, or perhaps more than one, importation event.

Indeed, environmental monitoring in sewage has been used by many countries during the past decade, and it has identified wild poliovirus imported in 2007 to Switzerland from Chad, and in 2013 to Egypt from Pakistan [8,9]. Environmental surveillance has been a mainstay of polio eradication in several developing countries as well, for example in Egypt and India, and its wider role in the polio eradication end game continues to be assessed [10].

Van der Maas et al. [11] and Yakovenko et al. [12] discuss the importance of maintaining high polio immunity levels in order to prevent re-establishment of circulation of wild poliovirus, and the vulnerability of countries with lower than optimal population immunity in the general population or with pockets of low coverage such as those in certain religious and other groups. They clearly call attention to the fact that the circulation of wild poliovirus in one country is a threat to all others, and that vaccination coverage, using either IVP or oral polio vaccine (OPV), must be maintained until the circulation of all wild poliovirus has been interrupted. Yakovenko et al. also underscore the fact that adults are at risk from imported polio virus, having isolated wild poliovirus from adults with AFP in the Tajikistan outbreak [12].

A recent polio outbreak also provided a clear demonstration that adults are at risk of paralytic polio during outbreaks. Because adult populations in Namibia had not been vaccinated against polio in the period before independence, and had not developed immunity by exposure to poliovirus because of high quality water and sanitation systems, an importation of wild poliovirus led to an outbreak of paralytic polio in adults in 2006 [13].

Other issues that have been important to polio eradication such as circulating vaccine derived poliovirus (cVDPV) are not discussed in this series, although the ease with which the poliovirus recombines in nature was demonstrated by studies of viral sequences in the Tajikistan outbreak [12]. However, this omission from the series does not minimise the importance of cVDPV as a challenge to polio eradication that the end game will take into account [14]. The decision in Israel to reintroduce OPV after failure to interrupt transmission with IPV, foretells the complexity the end game will face in the event of a reintroduction after eradication has occurred. Outbreak containment strategies for all countries are actively being assessed for application during the post-eradication period [15].

Although solutions to most of the technical problems in polio eradication are either available or under development, risk communication and gaining trust in polio vaccination in the absence of paralytic disease remain a major challenge. This is clearly demonstrated by the experience described by Kaliner et al. [16] in developing trust and paving the way for the supplementary immunisation activities that reintroduce OPV several years after having switched to IPV in routine vaccination programmes.

The importance of trust and risk communication has likewise been clearly demonstrated in the past, when in 2003 polio vaccination was stopped in northern Nigeria because of false rumours, many of which were circulating on the world wide web, that the vaccine was being used in a plot by some Western nations to permanently sterilise young Muslim girls, and in some instances that it was associated with the introduction of AIDS [17]. Although there may have been other reasons than concern over vaccine safety, the governor of one northern state in Nigeria interrupted polio eradication activities, and other northern Nigerian states followed. Within months, polio had spread from Nigeria to neighbouring countries, to Saudi Arabia and Yemen, and from there on to Indonesia [18].

All of the countries affected were members of the Organization of the Islamic Conference who, at their October 2003 summit in Malaysia, adopted a resolution that endorsed and promoted stronger polio eradication activities [19]. Religious leaders became involved as well, and promoted polio vaccination through a series of fatwas and other declarations. Countries that had been free of polio, again had children paralysed by poliovirus, and increased their surveillance and conducted supplementary immunisation activities to prevent the virus from becoming endemic again. They were successful in containing wild poliovirus and interrupting its transmission, but at great financial cost to the countries and the polio partnership.

This series of articles on polio is a timely reminder that polio eradication has not yet been completed, and they confirm that eradication is technically feasible. But obstacles to polio eradication remain. Killings of polio workers in Pakistan and northern Nigeria have caused fear among polio workers, and pose a risk to the life of those who vaccinate door to door. These incidents have prompted a call for action from the Muslim world to counter opposition to the polio eradication programme recently published in *The Lancet* [20].

Civil unrest, such as that caused by the killing of polio workers, has occurred in the past, but was never targeted specifically at polio eradication. In Sudan in 2005, for example, the United Nations called for days of tranquillity so that polio and other vaccinations could continue [21]. But the solution to violence targeted at the global eradication of polio and at vaccination programmes in general, requires more than vaccine supplies, door-to-door vaccination, and meticulous surveillance. It requires collective ownership and solidarity by all countries, and it may need a prominent and accepted figure in all countries where opposition has been observed, to step forward as a leader and bring polio eradication to completion.

In the meantime, European countries must continue to maintain high levels of polio vaccination coverage, and sustained surveillance of AFP with laboratory support, in order to ensure that wild poliovirus, if imported, is rapidly detected and completely contained.

### ***Miscellaneous***

#### **Note from the editors: Polio – good news and bad news**

by Eurosurveillance editorial team

### ***Research articles***

#### **Development and validation of a real time quantitative reverse transcription-polymerase chain reaction (qRT-PCR) assay for investigation of wild poliovirus type 1-South Asian (SOAS) strain reintroduced into Israel, 2013 to 2014**

by MY Hindiyeh, J Moran-Gilad, Y Manor, D Ram, LM Shulman, D Sofer, E Mendelson

#### **Molecular epidemiology of silent introduction and sustained transmission of wild poliovirus type 1, Israel, 2013**

by LM Shulman, E Gavrilin, J Jorba, J Martin, CC Burns, Y Manor, J Moran-Gilad, D Sofer, MY Hindiyeh, R Gamzu, E Mendelson, I Grotto, for the Genotype - Phenotype Identification (GPI) group

#### **Immunity against poliomyelitis in the Netherlands, assessed in 2006 to 2007: the importance of completing a vaccination series**

by NA van der Maas, L Mollema, GA Berbers, DM van Rooijen, HG van der Avoort, MA Conyn-Van Spaendonck, HE de Melker, FR van der Klis

### ***Surveillance and outbreak reports***

#### **Intensified environmental surveillance supporting the response to wild poliovirus type 1 silent circulation in Israel, 2013**

by Y Manor, LM Shulman, E Kaliner, M Hindiyeh, D Ram, D Sofer, J Moran-Gilad, B Lev, I Grotto, R Gamzu, E Mendelson

#### **The 2010 outbreak of poliomyelitis in Tajikistan: epidemiology and lessons learnt**

by ML Yakovenko, AP Gmyl, OE Ivanova, TP Eremeeva, AP Ivanov, MA Prostova, OY Baykova, OV Isaeva, GY Lipskaya, AK Shakaryan, OM Kew, JM Deshpande, VI Agol

### ***Perspectives***

#### **Silent reintroduction of wild-type poliovirus to Israel, 2013 – risk communication challenges in an argumentative atmosphere**

by E Kaliner, J Moran-Gilad, I Grotto, E Somekh, E Kopel, M Gdalevich, E Shimron, Y Amikam, A Leventhal, B Lev, R Gamzu

## **Forum for Development Studies**

Volume 40, Issue 3, 2013

<http://www.tandfonline.com/toc/sfds20/current>

[Reviewed earlier; No relevant content]

## **Globalization and Health**

[Accessed 22 February 2014]

<http://www.globalizationandhealth.com/>

### ***Research***

#### **Expanding the scope of medical mission volunteer groups to include a research component**

John Rovers, Michael Andreski, John Gitua, Abdoulaye Bagayoko and Jill DeVore

### [Author Affiliations](#)

Globalization and Health 2014, 10:7 doi:10.1186/1744-8603-10-7

Published: 20 February 2014

<http://www.globalizationandhealth.com/content/10/1/7/abstract>

*Abstract* (provisional)

#### Background

Serving on volunteer groups undertaking medical mission trips is a common activity for health care professionals and students. Although volunteers hope such work will assist underserved populations, medical mission groups have been criticized for not providing sustainable health services that focus on underlying health problems. As members of a volunteer medical mission group, we performed a bed net indicator study in rural Mali. We undertook this project to demonstrate that volunteers are capable of undertaking small-scale research, the results of which offer locally relevant results useful for disease prevention programs. The results of such projects are potentially sustainable beyond the duration of a mission trip.

#### Methods

Volunteers with Medicine for Mali interviewed 108 households in Nana Kenieba, Mali during a routine two-week medical mission trip. Interviewees were asked structured questions about family demographics, use of insecticide treated bed nets the previous evening, as well as about benefits of net use and knowledge of malaria. Survey results were analyzed using logistic regression.

#### Results

We found that 43.7% of households had any family member sleep under a bed net the previous evening. Eighty seven percent of households owned at least one ITN and the average household owned 1.95 nets. The regression model showed that paying for a net was significantly correlated with its use, while low perceived mosquito density, obtaining the net from the public sector and more than four years of education in the male head of the household were negatively correlated with net use. These results differ from national Malian data and peer-reviewed studies of bed net use.

#### Conclusions

We completed a bed net study that provided results that were specific to our service area. Since these results were dissimilar to peer-reviewed literature and Malian national level data on bed net use, the results will be useful to develop locally specific teaching materials on malaria prevention. This preventive focus is potentially more sustainable than clinical services for malaria treatment. Although we were not able to demonstrate that our work is sustainable, our study shows that volunteer groups are capable of undertaking research that is relevant to their service area.

### ***Short report***

#### **Regional variation in the allocation of development assistance for health**

Michael Hanlon, Casey M Graves, Benjamin PC Brooks, Annie Haakenstad, Rouselle Lavado, Katherine Leach-Kemon and Joseph L Dieleman

### [Author Affiliations](#)

Globalization and Health 2014, 10:8 doi:10.1186/1744-8603-10-8

Published: 20 February 2014

<http://www.globalizationandhealth.com/content/10/1/8/abstract>

*Abstract* (provisional)

#### Background

The Global Burden of Disease (GBD) 2010 Study has published disability-adjusted life year (DALY) data at both regional and country levels from 1990 to 2010. Concurrently, the Institute

for Health Metrics and Evaluation (IHME) has published estimates of development assistance for health (DAH) at the country-disease level for this same period of time.

Findings: We use disease burden data from the GBD 2010 study and financing data from IHME to calculate ratios of DAH to DALYs across regions and diseases. We examine the magnitude of these ratios and how they have varied over time. We hypothesize that the variation in this ratio across regions would be relatively small. However, from 2006 to 2010, we find there was considerable variation in the levels of DAH per DALY across regions. For total funding, the relative standard deviation (standard deviation as a percentage of the mean) across regions was 50%. For DAH specific to HIV/AIDS, malaria and tuberculosis, the relative standard deviations were 50%, 200% and 60%, respectively. While these deviations are high, with the exception of malaria, they have decreased since the 1990s.

#### Conclusions

There are no evident explanations for so much variation in funding across regions, especially holding the purpose of the funding constant. This suggests donors' allocation processes have not been particularly sensitive to disease burdens. To maximize health gains, donors should explicitly incorporate new disease burden data along with the relative costs and efficacy of interventions into their allocation process.

### **Global Health Governance**

Summer 2013

<http://blogs.shu.edu/ghg/category/complete-issues/summer-2013/>

[No new relevant content]

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

February 2014 | Volume 2 | Issue 1

<http://www.ghspjournal.org/content/current>

#### **Meningococcal vaccine introduction in Mali through mass campaigns and its impact on the health system**

[Sandra Mounier-Jacka](#), [Helen Elizabeth Denise Burchetta](#), [Ulla Kou Griffithsa](#), [Mamadou Konateb](#), [Kassibo Sira Diarrab](#)

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*The meningococcal A vaccine campaign led to major disruption of routine vaccination services and reduced other services, notably antenatal care.*

<http://www.ghspjournal.org/content/2/1/117.abstract>

#### *Abstract*

Objective: To evaluate the impact of the meningococcal A (MenA) vaccine introduction in Mali through mass campaigns on the routine immunization program and the wider health system. Methods: We used a mixed-methods case-study design, combining semi-structured interviews with 31 key informants, a survey among 18 health facilities, and analysis of routine health facility data on number of routine vaccinations and antenatal consultations before, during, and after the MenA vaccine campaign in December 2010. Survey and interview data were collected at the national level and in 2 regions in July and August 2011, with additional interviews in January 2012.



Findings: Many health system functions were not affected—either positively or negatively—by the MenA vaccine introduction. The majority of effects were felt on the immunization program. Benefits included strengthened communication and social mobilization, surveillance, and provider skills. Drawbacks included the interruption of routine vaccination services in the majority of health facilities surveyed (67%). The average daily number of children receiving routine vaccinations was 79% to 87% lower during the 10-day campaign period than during other periods of the month. Antenatal care consultations were also reduced during the campaign period by 10% to 15%. Key informants argued that, with an average of 14 campaigns per year, mass campaigns would have a substantial cumulative negative effect on routine health services. Many also argued that the MenA campaign missed potential opportunities for health systems strengthening because integration with other health services was lacking.

Conclusion: The MenA vaccine introduction interrupted routine vaccination and other health services. When introducing a new vaccine through a campaign, coverage of routine health services should be monitored alongside campaign vaccine coverage to highlight where and how long services are disrupted and to mitigate risks to routine services.

### **Global Public Health**

[Volume 9](#), Issue 1-2, 2014

<http://www.tandfonline.com/toc/rgph20/current#.Uq0DgeKy-F9>

Theme: HIV Scale-up

[No relevant content]

### **Health Affairs**

February 2014; Volume 33, Issue 2

<http://content.healthaffairs.org/content/current>

*Theme: Early Evidence, Future Promise Of Connected Health*

[Reviewed earlier]

### **Health and Human Rights**

Volume 15, Issue 2

<http://www.hhrjournal.org/>

[Reviewed earlier]

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

Volume 9 - Issue 01 - January 2014

<http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue>

[Reviewed earlier; No relevant content]

### **Health Policy and Planning**

Volume 29 Issue 1 January 2014

<http://heapol.oxfordjournals.org/content/current>

[Reviewed earlier]

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

March 2014 Volume 10, Issue 3

<http://www.landesbioscience.com/journals/vaccines/toc/volume/10/issue/3/>

[No relevant content]

**Infectious Agents and Cancer**

<http://www.infectagentscancer.com/content>

[Accessed 22 February 2014]

[No new relevant content]

**Infectious Diseases of Poverty**

<http://www.idjournal.com/content>

[Accessed 22 February 2014]

[No new relevant content]

**International Journal of Epidemiology**

Volume 42 Issue 6 December 2013

<http://ije.oxfordjournals.org/content/current>

[Reviewed earlier]

**International Journal of Infectious Diseases**

Vol 17 | No. 12 | December 2013

<http://www.ijidonline.com/current>

[Reviewed earlier; No relevant content]

**JAMA**

February 19, 2014, Vol 311, No. 7

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

[No relevant content]

**JAMA Pediatrics**

February 2014, Vol 168, No. 2

<http://archpedi.jamanetwork.com/issue.aspx>

[Reviewed earlier]

**Journal of Community Health**

Volume 39, Issue 1, February 2014

<http://link.springer.com/journal/10900/39/1/page/1>

**Online First**

## **Understanding HPV Vaccine Uptake Among Cambodian American Girls**

[Victoria M. Taylor](#), [Nancy J. Burke](#), [Linda K. Ko](#), [Channdara Sos](#), [Qi Liu](#), [H. Hoai Do](#), [Jocelyn Talbot](#), [Yutaka Yasui](#), [Roshan Bastani](#)

<http://link.springer.com/article/10.1007/s10900-014-9844-8>

### *Abstract*

Cervical cancer incidence rates vary substantially among racial/ethnic groups in the United States (US) with women of Southeast Asian descent having the highest rates. Up to 70 % of cervical cancers could be prevented by widespread use of the human papillomavirus (HPV) vaccine. However, there is a lack of information about HPV vaccine uptake among Southeast Asian girls in the US. We conducted a telephone survey of Cambodian women with daughters who were age-eligible for HPV vaccination. Survey items addressed HPV vaccination barriers, facilitators and uptake. Our study group included 86 Cambodian mothers who lived in the Seattle metropolitan area. The proportions of survey participants who reported their daughter had initiated and completed the HPV vaccine series were only 29 and 14 %, respectively. Higher levels of vaccine uptake were significantly associated with mothers having heard about the HPV vaccine from a health professional and having received a recent Pap test. Commonly cited barriers to HPV vaccination included lack of knowledge about the HPV vaccine, not having received a physician recommendation for HPV vaccination and thinking the HPV vaccine is unnecessary in the absence of health problems. Linguistically and culturally appropriate HPV educational programs should be developed and implemented in Cambodian American communities. These programs should aim to enhance understanding of disease prevention measures, increase knowledge about the HPV vaccine and empower women to ask their daughter's doctors for HPV vaccination.

## **Journal of Health Organization and Management**

Volume 27 issue 6 - Latest Issue

<http://www.emeraldinsight.com/journals.htm?issn=1477-7266&show=latest>

[Reviewed earlier; No relevant content]

## **Journal of Infectious Diseases**

Volume 209 Issue 5 March 1, 2014

<http://jid.oxfordjournals.org/content/current>

[Reviewed earlier]

## **Journal of Global Ethics**

Volume 9, Issue 3, 2013

[http://www.tandfonline.com/toc/rjge20/current#.UqNh2OKy\\_Kc](http://www.tandfonline.com/toc/rjge20/current#.UqNh2OKy_Kc)

[Reviewed earlier; No relevant content]

## **Journal of Global Infectious Diseases (JGID)**

October-December 2013 Volume 5 | Issue 4 Page Nos. 125-186

<http://www.jgid.org/currentissue.asp?sabs=n>

[No relevant content]

### **Journal of Medical Ethics**

March 2014, Volume 40, Issue 3

<http://jme.bmj.com/content/current>

[No relevant content]

### **Journal of Medical Microbiology**

February 2014; 63 (Pt 2)

<http://jmm.sgmjournals.org/content/current>

[No relevant content]

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

Volume 3 Issue 1 March 2014

<http://jpids.oxfordjournals.org/content/current>

#### **Update From the Advisory Committee on Immunization Practices**

[Elizabeth P. Schlaudecker](#)<sup>1</sup>, [Mark H. Sawyer](#)<sup>2</sup> and [David W. Kimberlin](#)<sup>3</sup>

Author Affiliations

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3Division of Pediatric Infectious Diseases, University of Alabama at Birmingham

*Excerpt*

The Advisory Committee on Immunization Practices (ACIP) is composed of medical and public health experts and one community representative that meets 3 times a year to develop vaccine recommendations for the civilian population in the United States. The Advisory Committee on Immunization Practices recommendations become official recommendations of the Centers for Disease Control and Prevention (CDC) when adopted by the CDC Director and published in the Morbidity and Mortality Weekly Report (<http://www.cdc.gov/vaccines/hcp/acip-recs/recs-by-date.html>). Members of ACIP include people with expertise in vaccines, public health, and various aspects of medicine and preventive medicine

(<http://annals.org/article.aspx?articleid=744177>)

Members of the Pediatric Infectious Diseases Society frequently serve on this committee and on ACIP work groups, and our society serves as one of 31 ex officio organizations that participates as a nonvoting representative. The American Academy of Pediatrics (AAP) Committee on Infectious Diseases works closely with the ACIP to maximize harmonization between the CDC and the AAP. The ACIP last met at the CDC on October 23–24, 2013. During this meeting, there were 3 votes taken: meningococcal vaccine for high-risk infants; child/adolescent immunization schedule; and adult immunization schedule. Several other topics were discussed. All ACIP vaccine recommendations will have Grading of Recommendations, Assessment, Development and Evaluation methods applied

(<http://www.cdc.gov/vaccines/acip/recs/GRADE/table-refs.html> ...

#### **Automated Screening of Hospitalized Children for Influenza Vaccination**

Ari H. Pollack, Matthew P. Kronman, Chuan Zhou, and Danielle M. Zerr

J Ped Infect Dis (2014) 3 (1): 7-14 doi:10.1093/jpids/pit044

<http://jpids.oxfordjournals.org/content/3/1/7.abstract>

## *Abstract*

### Background

This study was designed to determine whether an automated hospital-based influenza vaccination screening program leveraging the electronic medical record (EMR) increases vaccination rates.

### Methods

We performed a retrospective cohort study of all children  $\geq 6$  months old admitted to medical, surgical, rehabilitation, or psychiatry services during influenza seasons between 2003 and 2012 at a tertiary care pediatric hospital. We compared influenza vaccination rates before (preintervention phase) and after (intervention phase) the introduction of an automated EMR intervention that utilized a nursing-based electronic screening tool to determine eligibility for influenza vaccine and facilitated vaccine ordering without requiring involvement of a physician or other provider.

### Results

Overall, 42 716 (72.8%) of the 58,648 subjects admitted during the study period met inclusion criteria. The intervention phase included 20,651 admissions, of which 11 194 (54.2%) were screened. Screening increased significantly over time in the intervention phase (19.8%–77.1%;  $P < .001$ ). In-hospital influenza vaccination rates increased from a mean of 2.1% ( $n = 472$ ) of all subjects preintervention phase to 8.0% ( $n = 1645$ ) in the intervention phase (odds ratio = 6.8; 95% confidence interval, 6.14–7.47). Of the 11 194 screened subjects, 5505 (49.2%) were found to have already been vaccinated at the time of screening. The screening process identified 478 (4.3%) subjects who were unable to receive vaccine for medical reasons, and an additional 2865 (25.6%) whose caregiver refused the vaccine.

### Conclusions

An automated, hospital-based influenza vaccination program integrated into the EMR can increase vaccinations of hospitalized patients and provide insight into the vaccination history and declination reasons for children not receiving the vaccine.

## **Journal of Pediatrics**

Vol 164 | No. 3 | March 2014 | Pages 431-678

<http://www.jpeds.com/current>

[No relevant content]

## **Journal of Public Health Policy**

Volume 35, Issue 1 (February 2014)

<http://www.palgrave-journals.com/jphp/journal/v35/n1/index.html>

### ***Special Section: Preventing Addictions***

[Reviewed earlier; No relevant content]

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

April 6, 2014; 11 (93)

<http://rsif.royalsocietypublishing.org/content/current>

[No relevant content]

## **Journal of Virology**

March 2014, volume 88, issue 5

<http://jvi.asm.org/content/current>

[Reviewed earlier; No relevant content]

## **The Lancet**

Feb 22, 2014 Volume 383 Number 9918 p669 - 754

<http://www.thelancet.com/journals/lancet/issue/current>

[No relevant content]

## **The Lancet Global Health**

Feb 2014 Volume 2 Number 2 e58 – 116

<http://www.thelancet.com/journals/langlo/issue/current>

[Reviewed earlier]

## **The Lancet Infectious Diseases**

Feb 2014 Volume 14 Number 2 p87 – 172

<http://www.thelancet.com/journals/laninf/issue/current>

[Reviewed earlier]

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

February 2014; 34 (2)

<http://mdm.sagepub.com/content/current>

[Reviewed earlier; No relevant content]

## **The Milbank Quarterly**

*A Multidisciplinary Journal of Population Health and Health Policy*

December 2013 Volume 91, Issue 4 Pages 659–868

[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1468-0009/currentissue](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue)

[Reviewed earlier; No relevant content]

## **Nature**

Volume 506 Number 7488 pp265-402 20 February 2014

[http://www.nature.com/nature/current\\_issue.html](http://www.nature.com/nature/current_issue.html)

### ***Nature | Column: World View***

#### **WHO plans for neglected diseases are wrong**

*Research and development into diseases affecting the world's poorest people will not benefit from the agency's policy, warns [Mary Moran](#).*

19 February 2014

<http://www.nature.com/news/who-plans-for-neglected-diseases-are-wrong-1.14739>

*Excerpt*

After more than a decade of trying to find a way to fund research on diseases that affect the developing world, the World Health Organization (WHO) made a decisive move last month when it announced its first pilot projects. As Nature reported (see [Nature 505, 142; 2014](#)), the WHO hopes that these projects will break the stalemate over research on neglected conditions such as kala-azar, a deadly parasitic disease that afflicts hundreds of thousands of the world's poorest people.

The WHO is taking giant strides, but they are in the wrong direction. The projects are based on flawed logic and will waste time and money. Worse, this initiative could actively damage existing projects to develop such medicines. The WHO pilot should be stopped.

I do not make these claims lightly. I was involved in the WHO analysis, drafting and recommendations, and know how difficult it has been.

The pilot projects are the culmination of a ten-year negotiation that aimed to achieve two goals: to make commercial medicines more affordable for the developing world, and to stimulate public (non-profit) development of medicines for neglected diseases...

### **Nature Immunology**

February 2014, Volume 15 No 2 pp111-205

<http://www.nature.com/ni/journal/v15/n2/index.html>

[Reviewed earlier; No relevant content]

### **Nature Medicine**

February 2014, Volume 20 No 2

<http://www.nature.com/nm/index.html>

[Reviewed earlier; No relevant content]

### **Nature Reviews Immunology**

February 2014 Vol 14 No 2

<http://www.nature.com/nri/journal/v14/n2/index.html>

[Reviewed earlier; No relevant content]

### **New England Journal of Medicine**

February 20, 2014 Vol. 370 No. 8

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

#### ***Health Law, Ethics, and Human Rights***

#### **Informed Consent, Comparative Effectiveness, and Learning Health Care**

Ruth R. Faden, Ph.D., M.P.H., Tom L. Beauchamp, Ph.D., and Nancy E. Kass, Sc.D.

N Engl J Med 2014; 370:766-768 [February 20, 2014](#) DOI: 10.1056/NEJMhle1313674

<http://www.nejm.org/doi/full/10.1056/NEJMhle1313674>

The authors argue that in a learning health care system with ethically robust oversight policies, a streamlined consent process could replace formal written informed-consent procedures for many studies, and patient consent would not be required at all for some trials.

#### ***Health Law, Ethics, and Human Rights***

#### **Informed Consent for Pragmatic Trials — The Integrated Consent Model**

Scott Y.H. Kim, M.D., Ph.D., and Franklin G. Miller, Ph.D.

N Engl J Med 2014; 370:769-772 [February 20, 2014](http://www.nejm.org/doi/full/10.1056/NEJMh1312508) DOI: 10.1056/NEJMh1312508  
<http://www.nejm.org/doi/full/10.1056/NEJMh1312508>

The authors argue that informed consent is ethically necessary in pragmatic trials that randomly assign individual patients to treatments, even when treatment options are within the standard of care. They propose integration of a streamlined consent process into routine practice.

### **OMICS: A Journal of Integrative Biology**

January 2014, 18(1)

<http://online.liebertpub.com/toc/omi/17/12>

[Reviewed earlier; No relevant content]

### **The Pediatric Infectious Disease Journal**

February 2014 - Volume 33 - Issue 2 pp: 121-231,e29-e66

<http://journals.lww.com/pidj/pages/currenttoc.aspx>

[Reviewed earlier; No relevant content]

### **Pediatrics**

February 2014, VOLUME 133 / ISSUE 2

<http://pediatrics.aappublications.org/current.shtml>

[Reviewed earlier; No relevant content]

### **Pharmaceutics**

Volume 6, Issue 1 (March 2014), Pages 1-

<http://www.mdpi.com/1999-4923/6/1>

[Reviewed earlier; No relevant content]

### **Pharmacoeconomics**

Volume 32, Issue 2, February 2014

<http://link.springer.com/journal/40273/32/2/page/1>

[Reviewed earlier; No relevant content]

### **PLoS One**

[Accessed 22 February 2014]

<http://www.plosone.org/>

#### **Research Article**

#### **The Effects of Anti-Vaccine Conspiracy Theories on Vaccination Intentions**

Daniel Jolley mail, Karen M. Douglas mail

Published: February 20, 2014

DOI: 10.1371/journal.pone.0089177

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0089177>

*Abstract*



The current studies investigated the potential impact of anti-vaccine conspiracy beliefs, and exposure to anti-vaccine conspiracy theories, on vaccination intentions. In Study 1, British parents completed a questionnaire measuring beliefs in anti-vaccine conspiracy theories and the likelihood that they would have a fictitious child vaccinated. Results revealed a significant negative relationship between anti-vaccine conspiracy beliefs and vaccination intentions. This effect was mediated by the perceived dangers of vaccines, and feelings of powerlessness, disillusionment and mistrust in authorities. In Study 2, participants were exposed to information that either supported or refuted anti-vaccine conspiracy theories, or a control condition. Results revealed that participants who had been exposed to material supporting anti-vaccine conspiracy theories showed less intention to vaccinate than those in the anti-conspiracy condition or controls. This effect was mediated by the same variables as in Study 1. These findings point to the potentially detrimental consequences of anti-vaccine conspiracy theories, and highlight their potential role in shaping health-related behaviors.

### **PLoS Medicine**

(Accessed 22 February 2014)

<http://www.plosmedicine.org/>

[No new relevant content]

### **PLoS Neglected Tropical Diseases**

January 2014

<http://www.plosntds.org/article/browseIssue.action>

[Reviewed earlier]

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

<http://www.pnas.org/content/early/>

(Accessed 22 February 2014)

#### **Distance to health services affects local-level vaccine efficacy for pneumococcal conjugate vaccine (PCV) among rural Filipino children**

[Elisabeth Dowling Roota,1](#), [Marilla Lucerob](#), [Hanna Nohynekc](#), [Peter Anthamattend](#), [Deborah S. K. Thomasd](#), [Veronica Tallob](#), [Antti Tanskanenc,e](#), [Beatriz P. Quiambaob](#), [Taneli Puumalainenf](#), [Socorro P. Lupisanb](#), [Petri Ruutug](#), [Erma Ladesmab](#), [Gail M. Williamsh](#), [Ian Rileyh](#), and [Eric A. F. Simõesi](#)

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Edited by Burton H. Singer, University of Florida, Gainesville, FL, and approved January 21, 2014 (received for review July 22, 2013)

<http://www.pnas.org/content/early/2014/02/13/1313748111.short>

#### *Significance*

Although pneumococcal conjugate vaccines (PCVs) are widely available in industrialized nations, the cost of these vaccines and the strategy of universal vaccination of infants, as endorsed by the World Health Organization, are daunting obstacles to the adoption of these vaccines in developing countries. Using spatial epidemiological methods to examine the spatial variation in vaccine efficacy (VE) in an 11-valent PCV trial in Bohol, Philippines, we suggest an alternative strategy to universal vaccination. Our main finding suggests that areas with poor access to

healthcare have the highest VE. An alternative vaccination strategy could target vaccination to areas where children are most likely to benefit, rather than focus on nationwide immunization.

#### *Abstract*

Pneumococcal conjugate vaccines (PCVs) have demonstrated efficacy against childhood pneumococcal disease in several regions globally. We demonstrate how spatial epidemiological analysis of a PCV trial can assist in developing vaccination strategies that target specific geographic subpopulations at greater risk for pneumococcal pneumonia. We conducted a secondary analysis of a randomized, placebo-controlled, double-blind vaccine trial that examined the efficacy of an 11-valent PCV among children less than 2 y of age in Bohol, Philippines. Trial data were linked to the residential location of each participant using a geographic information system. We use spatial interpolation methods to create smoothed surface maps of vaccination rates and local-level vaccine efficacy across the study area. We then measure the relationship between distance to the main study hospital and local-level vaccine efficacy, controlling for ecological factors, using spatial autoregressive models with spatial autoregressive disturbances. We find a significant amount of spatial variation in vaccination rates across the study area. For the primary study endpoint vaccine efficacy increased with distance from the main study hospital from -14% for children living less than 1.5 km from Bohol Regional Hospital (BRH) to 55% for children living greater than 8.5 km from BRH. Spatial regression models indicated that after adjustment for ecological factors, distance to the main study hospital was positively related to vaccine efficacy, increasing at a rate of 4.5% per kilometer distance. Because areas with poor access to care have significantly higher VE, targeted vaccination of children in these areas might allow for a more effective implementation of global programs.

#### **Pneumonia**

Vol 2 (2013)

<https://pneumonia.org.au/index.php/pneumonia/issue/current>

[Reviewed earlier]

#### **Public Health Ethics**

Volume 6 Issue 3 November 2013

<http://phe.oxfordjournals.org/content/current>

[Reviewed earlier]

#### **Qualitative Health Research**

February 2014; 24 (2)

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

Special Issue: Communication

[No relevant content]

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

[December 2013](#) Vol. 34, No. 6

[http://www.paho.org/journal/index.php?option=com\\_content&view=article&id=134&Itemid=230&lang=en](http://www.paho.org/journal/index.php?option=com_content&view=article&id=134&Itemid=230&lang=en)

[Reviewed earlier]

### **Risk Analysis**

January 2014 Volume 34, Issue 1 Pages 1–201

<http://onlinelibrary.wiley.com/doi/10.1111/risa.2014.34.issue-1/issuetoc>

[Reviewed earlier; No relevant content]

### **Science**

21 February 2014 vol 343, issue 6173, pages 809-940

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

[No relevant content]

### **Science Translational Medicine**

19 February 2014 vol 6, issue 224

<http://stm.sciencemag.org/content/current>

[No relevant content]

### **Social Science & Medicine**

Volume 106, [In Progress](#) (April 2014)

<http://www.sciencedirect.com/science/journal/02779536/106>

#### **Challenges of health measurement in studies of health disparities**

Review Article

Pages 143-150

Sarah A. Burgard, Patricia V. Chen

#### *Abstract*

Health disparities are increasingly studied in and across a growing array of societies. While novel contexts and comparisons are a promising development, this commentary highlights four challenges to finding appropriate and adequate health measures when making comparisons across groups within a society or across distinctive societies. These challenges affect the accuracy with which we characterize the degree of inequality, limiting possibilities for effectively targeting resources to improve health and reduce disparities. First, comparisons may be challenged by different distributions of disease and second, by variation in the availability and quality of vital events and census data often used to measure health. Third, the comparability of self-reported information about specific health conditions may vary across social groups or societies because of diagnosis bias or diagnosis avoidance. Fourth, self-reported overall health measures or measures of specific symptoms may not be comparable across groups if they use different reference groups or interpret questions or concepts differently. We explain specific issues that make up each type of challenge and show how they may lead to underestimates or inflation of estimated health disparities. We also discuss approaches that have been used to address them in prior research, note where further innovation is needed to solve lingering problems, and make recommendations for improving future research. Many of our examples are drawn from South Africa or the United States, societies characterized by substantial

socioeconomic inequality across ethnic groups and wide disparities in many health outcomes, but the issues explored throughout apply to a wide variety of contexts and inquiries.

### **Vaccine**

Volume 32, Issue 11, Pages 1227-1322 (5 March 2014)

<http://www.sciencedirect.com/science/journal/0264410X/32>

[Reviewed earlier]

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

(Accessed 22 February 2014)

<http://www.dovepress.com/vaccine-development-and-therapy-journal>

[No new relevant content]

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

(Accessed 22 February 2014)

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

[No new relevant content]

### **Value in Health**

Vol 17 | No. 1 | January – February 2014 | Pages 1-140

<http://www.valueinhealthjournal.com/current>

[Reviewed earlier; No relevant content]

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

### **The Influence of Deductible Health Plans on Receipt of the Human Papillomavirus Vaccine Series**

[Douglas W. Roblin](#), Ph.D.[a, b](#), [Debra P. Ritzwoller](#), Ph.D.[c](#), [Daniel I. Rees](#), Ph.D.[d](#), [Nikki M. Carroll](#), M.S.[c](#), [Anping Chang](#), M.S.[a](#), [Matthew F. Daley](#), M.D., M.P.H.[c](#)

[Journal of Adolescent Health](#)

Volume 54, Issue 3, March 2014, Pages 275–281

<http://www.sciencedirect.com/science/article/pii/S1054139X13007957>

#### *Abstract*

#### Purpose

To evaluate whether enrollment in deductible health plans (DHP) with higher patient cost-sharing requirements than traditional health maintenance organization plans (HMP) decreased initiation and completion of the human papillomavirus (HPV) vaccine series recommended for prevention of cervical cancer.

#### Methods

This was a retrospective observational study of 9- to 26-year-old females at Kaiser Permanente Georgia and Kaiser Permanente Colorado who were HPV vaccine naive at time of enrollment in

a self-pay DHP or HMP in 2007. Estimates of rates of initiation and completion of the HPV vaccine series from plan enrollment in 2007 through December 2009 were obtained using Cox proportional hazards regressions (accounting for censoring) on samples matched on the propensity to enroll in a DHP versus HMP.

#### Results

Initiation of the HPV vaccine series was 22.2% and 24.4% in the DHP and HMP groups, respectively, at Kaiser Permanente Georgia; completion was 12.3% and 14.4% in the DHP and HMP groups, respectively. Human papillomavirus vaccine series initiation was higher at Kaiser Permanente Colorado, but completion was lower. In the Cox proportional hazards regressions, rates of initiation and completion of the HPV vaccine series did not differ significantly ( $p \leq .05$ ) by plan type (DHP vs. HMP) at both sites. The primary care visit rate included in these regressions had a significant, positive association with initiation and completion of the HPV vaccine series.

#### Conclusions

Enrollment in a DHP versus an HMP did not directly affect initiation or completion of the HPV vaccine series among age-eligible females. Independent of plan type, more frequent primary care visits increased initiation and completion rates.

### **Evidence-informed frameworks for cost-effective cancer care and prevention in low, middle, and high-income countries**

Dr [Kalipso Chalkidou](#) PhD [a](#), [Patricio Marquez](#) MD [b](#), [Preet K Dhillon](#) PhD [c](#), [Yot Teerawattananon](#) MD [d](#), [Thunyarat Anothaisintawee](#) PhD [e](#), Prof [Carlos Augusto Grabois Gadelha](#) PhD [f](#), Prof [Richard Sullivan](#) MD [g](#)

The Lancet Oncology, Early Online Publication, 14 February 2014

doi:10.1016/S1470-2045(13)70547-3

<http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045%2813%2970547-3/fulltext>

#### *Summary*

Evidence-informed frameworks for cost-effective cancer prevention and management are essential for delivering equitable outcomes and tackling the growing burden of cancer in all resource settings. Evidence can help address the demand side pressures (ie, pressures exerted by people who need care) faced by economies with high, middle, and low incomes, particularly in the context of transitioning towards (or sustaining) universal health-care coverage. Strong systems, as opposed to technology-based solutions, can drive the development and implementation of evidence-informed frameworks for prevention and management of cancer in an equitable and affordable way. For this to succeed, different stakeholders—including national governments, global donors, the commercial sector, and service delivery institutions—must work together to address the growing burden of cancer across economies of low, middle, and high income.

### **The influence of social norms on the dynamics of vaccinating behaviour for paediatric infectious diseases**

[Tamer Oraby](#)<sup>1</sup>, [Vivek Thampi](#)<sup>1</sup> and [Chris T. Bauch](#)<sup>1,2</sup>

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<sup>2</sup>Department of Applied Mathematics, University of Waterloo, Waterloo, Ontario, Canada

[Proceedings of the Royal Society B](#)

7 April 2014 vol. 281 no. 1780 20133172

*Abstract*

Mathematical models that couple disease dynamics and vaccinating behaviour often assume that the incentive to vaccinate disappears if disease prevalence is zero. Hence, they predict that vaccine refusal should be the rule, and elimination should be difficult or impossible. In reality, countries with non-mandatory vaccination policies have usually been able to maintain elimination or very low incidence of paediatric infectious diseases for long periods of time. Here, we show that including injunctive social norms can reconcile such behaviour-incidence models to observations. Adding social norms to a coupled behaviour-incidence model enables the model to better explain pertussis vaccine uptake and disease dynamics in the UK from 1967 to 2010, in both the vaccine-scare years and the years of high vaccine coverage. The model also illustrates how a vaccine scare can perpetuate suboptimal vaccine coverage long after perceived risk has returned to baseline, pre-vaccine-scare levels. However, at other model parameter values, social norms can perpetuate depressed vaccine coverage during a vaccine scare well beyond the time when the population's baseline vaccine risk perception returns to pre-scare levels. Social norms can strongly suppress vaccine uptake despite frequent outbreaks, as observed in some small communities. Significant portions of the parameter space also exhibit bistability, meaning long-term outcomes depend on the initial conditions. Depending on the context, social norms can either support or hinder immunization goals.

### ***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.

#### **Al Jazeera**

<http://www.aljazeera.com/Services/Search/?q=vaccine>

*Accessed 22 February 2014*

[No new, unique, relevant content]

#### **The Atlantic**

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

*Accessed 22 February 2014*

[Why Global Health Security Is Imperative](#)

Thomas R. Frieden Feb 13 2014, 10:01 AM ET

Comment from the CDC director on today's announcement that the U.S. will commit \$40 million to global health security

#### **BBC**

<http://www.bbc.co.uk/>

*Accessed 22 February 2014*

[No new, unique, relevant content]

### **Brookings**

<http://www.brookings.edu/>

*Accessed 22 February 2014*

[No new, unique, relevant content]

### **Council on Foreign Relations**

<http://www.cfr.org/>

*Accessed 22 February 2014*

[No new, unique, relevant content]

### **Economist**

<http://www.economist.com/>

*Accessed 22 February 2014*

[No new, unique, relevant content]

### **Financial Times**

<http://www.ft.com>

*Accessed 22 February 2014*

[No new, unique, relevant content]

### **Forbes**

<http://www.forbes.com/>

*Accessed 22 February 2014*

[No new, unique, relevant content]

### **Foreign Affairs**

<http://www.foreignaffairs.com/>

*Accessed 22 February 2014*

[No new, unique, relevant content]

### **Foreign Policy**

<http://www.foreignpolicy.com/>

*Accessed 22 February 2014*

[No new, unique, relevant content]

### **The Guardian**

<http://www.guardiannews.com/>

*Accessed 22 February 2014*

[No new, unique, relevant content]

### **The Huffington Post**

<http://www.huffingtonpost.com/>

*Accessed 22 February 2014*

[No new, unique, relevant content]

## **Le Monde**

<http://www.lemonde.fr/>

Accessed 22 February 2014

[No new, unique, relevant content]

## **New Yorker**

<http://www.newyorker.com/>

Accessed 22 February 2014

[No new, unique, relevant content]

## **New York Times**

<http://www.nytimes.com/>

Accessed 22 February 2014

[No new, unique, relevant content]

## **Reuters**

<http://www.reuters.com/>

Accessed 22 February 2014

[No new, unique, relevant content]

## **Wall Street Journal**

<http://online.wsj.com/home-page>

Accessed 22 February 2014

[No new, unique, relevant content]

## **Washington Post**

<http://www.washingtonpost.com/>

Accessed 22 February 2014

[No new, unique, relevant content]

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