

## Center for Vaccine Ethics and Policy

NYU | Wistar Institute | CHOP

### Vaccines and Global Health: The Week in Review

12 July 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*

*David R. Curry, MS*

*Editor and*

*Executive Director*

*Center for Vaccine Ethics & Policy*

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

#### **Speech: [WHO assessment of China's national drug regulatory authority for vaccines](#)**

Dr Margaret Chan, Director-General of the World Health Organization

*China's regulatory system on food and drugs from a global perspective*

Beijing, China

4 July 2014

*Excerpt*

Minister Zhang Yong, colleagues and friends, ladies and gentlemen,

Let me begin by extending my warm congratulations for a job well done. I have just announced that the China Food and Drug Administration's regulatory system for vaccines has been assessed by WHO with outstanding results.

You have met established benchmarks that define international requirements for a functional vaccine regulatory system. The improvements made since the previous assessment are most encouraging. CFDA is well on its way towards meeting the highest international standards for a regulatory authority.

I just had a most productive meeting with Minister Zhang Yong. I am delighted to inform you that we signed a declaration of joint commitment. We will work together to make CFDA an advanced, internationally recognized regulator not just of vaccines, but also of medical products and food safety management.

Effective regulatory oversight of vaccines is especially important, as vaccines are used on a population-wide basis, and are usually given to healthy infants. High quality must be assured.

The results of the WHO assessment are good news for China, but also for the rest of the world. The demand for vaccines is increasing at a time when the number of countries producing vaccines is declining. China has the largest vaccine manufacturing capacity in the world.

With the latest seal of approval from WHO, this country is in a position to make high-quality vaccine supplies more abundant, predictable, and affordable. This capacity benefits all countries, but most especially in the developing world. It strengthens China's long history of collaboration to improve health in Africa...

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

:: [Health in South Sudan](#) 5 July 2014

The ongoing outbreak of cholera in parts of Central Equatorial State and Eastern Equatorial State, the rising number of suspected cholera cases in Upper Nile and Unity States and the possible spread to new areas remain a public health concern for health partners. In Torit Hospital, cases increased from 46 to 599 within one week. New alerts of suspected cholera cases have been reported from 37 different locations in South Sudan. WHO, in collaboration with Ministry of Health at National and State level continue to investigate and verify all the alerts.

[Read the latest Health Cluster bulletin pdf, 978kb](#)

[Read the latest cholera situation update](#)

### **WHO: Global Alert and Response (GAR) – Disease Outbreak News [to 12 July 2014]**

<http://www.who.int/csr/don/en/>

:: [Ebola virus disease, West Africa – update](#) 10 July 2014

*Epidemiology and surveillance*

The World Health Organization (WHO) continues to monitor the evolution of the Ebola virus disease (EVD) outbreak in Guinea, Liberia, and Sierra Leone. In Guinea, the current epidemic trend shows low activity of community viral transmission, with only 1 confirmed EVD case reported in the last 7 days. This trend is being closely monitored, particularly in communities that had resistance to recommended outbreak control measure. The epidemic trend in Liberia and Sierra Leone remains precarious with high numbers of new cases and deaths being reported. The current active foci of the EVD outbreak have been identified as Kailahun and Kenema in Sierra Leone and Lofa and Montserrado in Liberia. The respective Ministries of Health are working with WHO and its partners to step up containment measures.

*Health sector response*

As part of the effort to control this outbreak, Dr Keiji Fukuda, the Assistant Director-General for WHO's Health Security cluster and Dr Benido Impouma, the Sub-regional Coordinator for the outbreak response visited Sierra Leone and Guinea from 7–10 July 2014. The WHO's delegation engaged and had dialogue with high-level political and Government authorities aimed to enhance national leadership and commitment. The delegation also held discussions with the national coordination structures for EVD outbreak response, including partners, in order to strengthen coordination, communication, and inter-sectoral collaboration.

A Sub-regional Outbreak Coordination Centre for the response is being established in Conakry, Guinea. The centre will act as a control and coordination platform to consolidate and harmonize the technical support to West African countries and to assist in resource mobilization.

The Sub-regional Centre will be responsible for ensuring effective use and deployment of limited and scarce, but highly critical resources based on prioritization and agreed objectives. The organization and coordination of key support functions and field operations will move closer to outbreak areas, or hot spots.

In addition, the Sub-regional Centre will:

- Ensure sufficient technical and operational support and resources to sustain response activities in the field, facilitate the coordination of the Global Outbreak Alert and Response Network (GOARN) partners and networks, prepare public communications materials and activities, engage in contingency planning, risk assessments, and scaling of operations as required, and secure an environment that enables effective and successful field operations.
- Define operational periods to achieve agreed objectives and ensure the planning, coordination, and optimum use of limited resources, as well as continuity of action and management.
- Direct human and material resources to communications and social mobilization, investigation of alerts and new outbreaks, case finding and contact tracing, surveillance and data management, patient treatment and care, logistics, stockpiling, and movement of personal protective equipment to key locations.
- Provide technical guidance and resources, communications support, decision-making, and reporting for all field teams in the subregion.

WHO does not recommend any travel or trade restrictions be applied to Guinea, Liberia, or Sierra Leone based on the current information available for this event.

#### *Disease update*

New cases and deaths attributable to Ebola virus disease (EVD) continue to be reported by the Ministries of Health in the three West African countries of Guinea, Liberia, and Sierra Leone. Between 6 and 8 July 2014, 44 new cases of EVD, including 21 deaths, were reported from the three countries as follows: Guinea, 1 new case and 2 deaths; Liberia, 11 new cases with 4 deaths; and Sierra Leone 32 new cases and 15 deaths. These numbers include laboratory-confirmed, probable, and suspect cases and deaths of EVD.

As of 8 July 2014, the cumulative number of cases attributed to EVD in the three countries stands at 888, including 539 deaths. The distribution and classification of the cases are as follows: Guinea, 409 cases (296 confirmed, 96 probable, and 17 suspected) and 309 deaths (197 confirmed, 96 probable, and 16 suspected); Liberia, 142 cases (70 confirmed, 32 probable, and 40 suspected) and 88 deaths (44 confirmed, 28 probable, and 16 suspected); and Sierra Leone, 337 cases (298 confirmed, 34 probable, and 5 suspected) and 142 deaths (127 confirmed, 11 probable, and 4 suspected).

:: [\*\*Middle East respiratory syndrome coronavirus \(MERS-CoV\) – update 4 July 2014\*\*](#)

On 30 June and 1 July 2014, the National IHR Focal Point for Saudi Arabia reported an additional 3 laboratory-confirmed cases of infection with Middle East respiratory syndrome coronavirus (MERS-CoV), and a death in a previously reported case....

...WHO does not advise special screening at points of entry with regard to this event nor does it currently recommend the application of any travel or trade restrictions.

#### **UNICEF Watch** [to 12 July 2014]

[http://www.unicef.org/media/media\\_71724.html](http://www.unicef.org/media/media_71724.html)

:: [\*\*Misconceptions fuel Ebola outbreak in West Africa\*\*](#)

GENEVA/DAKAR, Senegal, 11 July 2014 – As the Ebola-related death toll rises above 500 in

West Africa, UNICEF and its partners are expanding their activities across the region to halt the spread of the disease by combating rumours, fears and misconceptions.

**POLIO** [to 12 July 2014]

**GPEI Update: Polio this week - As of 9 July 2014**

Global Polio Eradication Initiative

*Editor's Excerpt and text bolding*

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

:: Intense polio immunization activity is continuing in areas surrounding North Waziristan, Pakistan, to reach families who have not been able to access vaccination for two years. As displaced communities move into other parts of Pakistan and into Afghanistan, vaccination activities are taking place in host communities as well as at transit vaccination posts. Over 800,000 people have been vaccinated within Pakistan as part of these efforts, and over 35,000 in Afghanistan.

***Afghanistan***

:: In the provinces of Paktyka and Khost, efforts are under way to vaccinate children displaced from neighbouring North Waziristan in Pakistan. More than 35,000 displaced children under the age of 10 are reported to have received a dose of bivalent oral polio vaccine (bOPV). Health workers are also searching actively for cases of acute flaccid paralysis (AFP) among the displaced communities to ensure any polio transmission is rapidly detected.

***Nigeria***

:: One new case of wild poliovirus type 1 (WPV1) was reported in the past week, with onset of paralysis on 27 May in Kano state. This is the most recent case in the country, and brings Nigeria's total case count for 2014 to five.

***Pakistan***

:: Two new wild poliovirus type 1 (WPV1) cases were reported in the past week, bringing the country's total case count to 90. Both cases were from Khyber Agency of the Federally Administered Tribal Areas (FATA), and the most recent had onset of paralysis on 16 June.

:: In order to protect those displaced by the military action in North Waziristan, people of all ages are being vaccinated against polio at transit points within the country: over 357,000 to date. Immunization campaigns in parts of Khyber Pakhtunkhwa and FATA have vaccinated a further 500,000 children under the age of five.

***Central Africa***

:: Equatorial Guinea is vaccinating its entire population starting on 23 July Cameroon's last Supplementary Immunization Activities took place starting 27 June. Activities synchronized between both countries are planned in September.

:: Outbreak response activities continue across the sub-region. Cameroon, the Central African Republic, the Democratic Republic of the Congo (DR Congo), Equatorial Guinea, Gabon and the Republic of Congo all have mass vaccination campaigns planned for July. DR Congo, Equatorial Guinea and Gabon are also planning to carry out campaigns in August.

:: Following detection in Brazil of WPV1 related to virus circulating in Equatorial Guinea, the latter is now on the list of "exporting countries". Find out more about the temporary recommendations for these countries at:

<http://www.polioeradication.org/Infectedcountries/PolioEmergenc.aspx>

**[Afghan Taliban bans polio vaccination teams from southern Helmand](#)**

Development marks attitude change of militants, who previously allowed medics into region but now suspect them of spying

[Emma Graham-Harrison](#) in Kabul

The Guardian, Tuesday 8 July 2014 08.00 EDT

*Excerpt*

The Taliban has banned polio vaccination teams from southern Helmand because it suspects them of spying for the government at a time of heavy clashes with government forces, the insurgent group said in a statement on its website.

The announcement is a worrying development, because although Taliban groups across the border in Pakistan have attacked and killed polio vaccinators for years, their Afghan counterparts have mostly supported, or at least tolerated, international efforts to wipe out the disease.

The last time polio vaccinators were blocked from part of Afghanistan, the insurgent group denied any role and said it supported efforts to stop the disease.

Afghanistan is one of just three countries, along with Pakistan and Nigeria, where polio is still endemic. There has been a rise in cases this year, with seven reported so far compared with just three for the same period of 2013, according to the Global Polio Eradication Initiative.

The group said Helmand has been off limits to vaccinators since February, but did not give a reason. The southern province has seen fierce fighting between insurgent and government forces in recent weeks, and the Taliban's statement was the first indication it had chased out polio eradication teams.

"We have stopped vaccination in Helmand for the moment," the Taliban said in a statement posted on its website this week. "The vaccinators were also collecting information about the Taliban and Taliban commanders, they were spying."

The statement said they had asked UN officials for talks but received no response; the UN's humanitarian arm declined to comment when asked about the ban...

The **Weekly Epidemiological Record (WER)** for

:: [11 July 2014, vol. 89, 28 \(pp. 309–320\)](#)

- Human cases of influenza at the human– animal interface, 2013

:: [4 July 2014, vol. 89, 27 \(pp. 297–308\)](#)

- Yellow fever in Africa and South America, 2013

- Monthly report on dracunculiasis cases, January– May 2014

**WHO Europe: [Four countries to benefit from Pandemic Influenza Preparedness \(PIP\) Framework 08-07-2014](#)**

8 July 2014

*Excerpt*

Armenia, Tajikistan, Turkmenistan and Uzbekistan will be the first countries in the WHO European Region to benefit from the PIP Framework, a unique partnership between industry, civil society and governments to improve pandemic preparedness and access to antiviral medicines and vaccines. Member States are responsible for sharing with WHO influenza viruses with pandemic potential through their national influenza centres, and industry's responsibilities include making annual donations to the partnership contribution mechanism....

**GAVI Watch** [to 12 July 2014]

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

**:: [Dengue fever vaccine results published in Lancet](#)**

11 July 2014

Detailed results from the world's first ever large-scale phase III clinical trial for a dengue fever vaccine published in the journal the Lancet.

**:: [India to introduce four new vaccines](#)**

04 July 2014

Government of India's decision to add new vaccines to Universal Immunization Programme will save estimated 100,000 lives annually.

**CDC/MMWR Watch** [to 12 July 2014]

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

**:: [CDC Press Conference on laboratory quality and safety after recent lab incidents - Transcript](#)**

July 11, 2014

**:: [CDC Director to highlight steps being taken to improve laboratory quality and safety after recent lab incidents - Media Advisory](#)**

July 11, 2014

**:: [CDC Media Statement on Newly Discovered Smallpox Specimens - Media Statement](#)**

7/8/2014

MMWR - July 11, 2014 / Vol. 63 / No. 27

**:: [Interim CDC Guidance for Polio Vaccination for Travel to and from Countries Affected by Wild Poliovirus](#)*****Excerpt***

...This report provides an update on CDC policy for polio vaccination of travelers for health protection. It also provides additional interim guidance for physicians whose U.S. resident patients will travel to or reside in affected countries for >4 weeks, to ensure those patients will have evidence of administration of polio vaccine (IPV or OPV) within 12 months of travel that might be required when they depart from countries with active poliovirus transmission. This interim guidance is to ensure compliance with WHO International Health Regulations temporary recommendations for countries designated as "polio-infected" to reduce the risk for exportation of WPV from those countries...

**European Medicines Agency Watch** [to 12 July 2014]

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

*No new relevant content identified.*

**Global Fund Watch** [to 12 July 2014]

<http://www.theglobalfund.org/en/mediacenter/announcements/>

*No new relevant content identified.*

**Industry Watch** [to 12 July 2014]

Selected media releases and other selected content from industry.

**:: [Specialty Vaccine Company PaxVax Announces Positive Efficacy Results for Phase 3 Cholera Challenge Study](#) July 01, 2014**

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

### **WHO: [World Health Statistics 2014](#)**

World Health Statistics 2014 contains WHO's annual compilation of health-related data for its 194 Member States, and includes a summary of the progress made towards achieving the health-related Millennium Development Goals (MDGs) and associated targets.

This year, it also includes highlight summaries on the ongoing commitment to end preventable maternal deaths; on the need to act now to combat rising levels of childhood obesity; on recent trends in both life expectancy and premature deaths; and on the crucial role of civil registration and vital statistics systems in national and global advancement.

### **WHO**

#### **:: [Progress on the health-related Millennium Development Goals \(MDGs\)](#)**

Fact sheet N°290

[English](#) [French](#) [Spanish](#)

DOWNLOAD THE FULL REPORT

[English](#)

#### **:: [Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations](#)**

*People most at risk of HIV are not getting the health services they need*

The guidelines outline steps for countries to reduce new HIV infections and increase access to HIV testing, treatment and care for these five 'key populations'\*. They include a comprehensive range of clinical recommendations but, for these to be effective, WHO also recommends countries need to remove the legal and social barriers that prevent many people from accessing services.

For the first time, WHO strongly recommends men who have sex with men consider taking antiretroviral medicines as an additional method of preventing HIV infection (pre-exposure prophylaxis)\*\* alongside the use of condoms. Rates of HIV infection among men who have sex with men remain high almost everywhere and new prevention options are urgently needed....

#### **:: [Member States commit to reduce preventable deaths from heart disease and stroke, cancer, diabetes and lung disease](#)**

11 July 2014

#### **:: [WHO targets elimination of TB in over 30 countries](#)**

3 July 2014

## **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 7, 2014

<http://www.tandfonline.com/toc/uajb20/current>

[No relevant content]

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

Vol 42 | No. 7 | July 2014 | Pages 697-818

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

[Reviewed earlier]

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

Volume 47, Issue 1, p1-104, e1-e2 July 2014

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

[Reviewed earlier]

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

Volume 104, Issue 8 (August 2014)

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

#### **Sources of Racial/Ethnic Differences in Awareness of HIV Vaccine Trials**

Michael P. Arnold, Michele Andrasik, Stewart Landers, Shelly Karuna, Matthew J. Mimiaga, Steven Wakefield, Kenneth Mayer, Susan Buchbinder, Beryl A. Koblin

American Journal of Public Health: August 2014, Vol. 104, No. 8: e112–e118.

#### *Abstract*

**Objectives.** We explored the relative effects of 2 awareness components—exposure and attention—on racial/ethnic differences in HIV vaccine trial awareness among men who have sex with men (MSM).

**Methods.** Surveys assessing awareness of and attitudes toward HIV vaccine trials were administered to 1723 MSM in 6 US cities. Proxy measures of exposure included use of HIV resources and other health care services, community involvement, income, and residence. Attention proxy measures included research attitudes, HIV susceptibility, and HIV message fatigue. Using logistic regression models, we assessed the extent to which these proxies accounted for racial/ethnic differences in vaccine trial awareness.

**Results.** White MSM reported significantly ( $P < .01$ ) higher rates of HIV vaccine trial awareness (22%) compared with Latino (17%), Black (13%) and “other” (13%) MSM. Venue-based exposure proxies and research-directed attitudinal attention proxies were significantly associated with awareness, but only accounted for the White-Latino disparity in awareness. No proxies accounted for the White-Black or White-“other” differentials in awareness.

Conclusions. Sources of disparities in awareness of HIV vaccine trials remain to be explained. Future trials seeking to promote diverse participation should explore additional exposure and attention mediators.

### **Adolescent Immunization Coverage and Implementation of New School Requirements in Michigan, 2010**

Rachel C. Potter, Stefanie F. DeVita, Patricia A. Vranesich, Matthew L. Boulton

American Journal of Public Health: August 2014, Vol. 104, No. 8: 1526–1533.

#### *Abstract*

**Objectives.** We examined the effect of Michigan's new school rules and vaccine coadministration on time to completion of all the school-required vaccine series, the individual adolescent vaccines newly required for sixth grade in 2010, and initiation of the human papillomavirus (HPV) vaccine series, which was recommended but not required for girls.

**Methods.** Data were derived from the Michigan Care Improvement Registry, a statewide Immunization Information System. We assessed the immunization status of Michigan children enrolled in sixth grade in 2009 or 2010. We used univariable and multivariable Cox regression models to identify significant associations between each factor and school completeness.

**Results.** Enrollment in sixth grade in 2010 and coadministration of adolescent vaccines at the first adolescent visit were significantly associated with completion of the vaccines required for Michigan's sixth graders. Children enrolled in sixth grade in 2010 had higher coverage with the newly required adolescent vaccines by age 13 years than did sixth graders in 2009, but there was little difference in the rate of HPV vaccine initiation among girls.

**Conclusions.** Education and outreach efforts, particularly regarding the importance and benefits of coadministration of all recommended vaccines in adolescents, should be directed toward health care providers, parents, and adolescents.

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

July 2014; 91 (1)

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

### **Safety and Immunogenicity of a Rederived, Live-Attenuated Dengue Virus Vaccine in Healthy Adults Living in Thailand: A Randomized Trial**

Veerachai Watanaveeradej, Robert V. Gibbons, Sriluck Simasathien, Ananda Nisalak, Richard G. Jarman, Angkool Kerdpanich, Elodie Tournay, Rafael De La Barrera, Francis Dessy, Jean-François Toussaint, Kenneth H. Eckels, Stephen J. Thomas, and Bruce L. Innis

Am J Trop Med Hyg 2014 91:119-128; Published online May 27, 2014, doi:10.4269/ajtmh.13-0452

#### *Abstract.*

Safety and immunogenicity of two formulations of a live-attenuated tetravalent dengue virus (TDEN) vaccine produced using rederived master seeds from a precursor vaccine were tested against a placebo control in a phase II, randomized, double blind trial ([NCT00370682](#)). Two doses were administered 6 months apart to 120 healthy, predominantly flavivirus-primed adults (87.5% and 97.5% in the two vaccine groups and 92.5% in the placebo group). Symptoms and signs reported after vaccination were mild to moderate and transient. There were no vaccine-related serious adverse events or dengue cases reported. Asymptomatic, low-level viremia (dengue virus type 2 [DENV-2], DENV-3, or DENV-4) was detected in 5 of 80 vaccine recipients. One placebo recipient developed a subclinical natural DENV-1 infection. All flavivirus-unprimed subjects and at least 97.1% of flavivirus-primed subjects were seropositive to antibodies against

all four DENV types 1 and 3 months post-TDEN dose 2. The TDEN vaccine was immunogenic with an acceptable safety profile in flavivirus-primed adults.

*Disclaimer: E.T., F.D., J.-F.T., and B.L.I. are employees of the GlaxoSmithKline (GSK) group of companies (GSK). F.D., J.-F.T., and B.L.I. own shares and options to shares in GSK. All other authors report no conflict of interest. The opinions or assertions contained herein are the private views of the authors and are not to be construed as reflecting the official views of the US Army, the US Department of Defense, or the Royal Thai Army.*

## **Annals of Internal Medicine**

1 July 2014, Vol. 161. No. 1

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

[No relevant content]

## **BMC Health Services Research**

(Accessed 12 July 2014)

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

[No new relevant content]

## **BMC Infectious Diseases**

(Accessed 12 July 2014)

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

### ***Research article***

### **Spatiotemporal characteristics of pandemic influenza**

Lars Skog, Annika Linde, Helena Palmgren, Hans Hauska and Fredrik Elgh

#### Author Affiliations

BMC Infectious Diseases 2014, 14:378 doi:10.1186/1471-2334-14-378

Published: 9 July 2014

#### ***Abstract*** (provisional)

#### **Background**

Prediction of timing for the onset and peak of an influenza pandemic is of vital importance for preventive measures. In order to identify common spatiotemporal patterns and climate influences for pandemics in Sweden we have studied the propagation in space and time of A(H1N1)pdm09 (10,000 laboratory verified cases), the Asian Influenza 1957-1958 (275,000 cases of influenza-like illness (ILI), reported by local physicians) and the Russian Influenza 1889-1890 (32,600 ILI cases reported by physicians shortly after the end of the outbreak).

#### **Methods**

All cases were geocoded and analysed in space and time. Animated video sequences, showing weekly incidence per municipality and its geographically weighted mean (GWM), were created to depict and compare the spread of the pandemics. Daily data from 1957-1958 on temperature and precipitation from 39 weather stations were collected and analysed with the case data to examine possible climatological effects on the influenza dissemination.

#### **Results**

The epidemic period lasted 11 weeks for the Russian Influenza, 10 weeks for the Asian Influenza and 9 weeks for the A(H1N1)pdm09. The Russian Influenza arrived in Sweden during the winter and was immediately disseminated, while both the Asian Influenza and the

A(H1N1)pdm09 arrived during the spring. They were seeded over the country during the summer, but did not peak until October-November. The weekly GWM of the incidence moved along a line from southwest to northeast for the Russian and Asian Influenza but northeast to southwest for the A(H1N1)pdm09. The local epidemic periods of the Asian Influenza were preceded by falling temperature in all but one of the locations analysed.

#### Conclusions

The power of spatiotemporal analysis and modeling for pandemic spread was clearly demonstrated. The epidemic period lasted approximately 10 weeks for all pandemics. None of the pandemics had its epidemic period before late autumn. The epidemic period of the Asian Influenza was preceded by falling temperatures. Climate influences on pandemic spread seem important and should be further investigated.

#### **BMC Medical Ethics**

(Accessed 12 July 2014)

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

[No new relevant content]

#### **BMC Public Health**

(Accessed 12 July 2014)

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

#### **Research article**

#### **Barriers and facilitators to HPV vaccination of young women in high-income countries: a qualitative systematic review and evidence synthesis**

Harriet Fisher, Caroline Trotter, Matthew Hickman and Suzanne Audrey

#### Author Affiliations

BMC Public Health 2014, 14:700 doi:10.1186/1471-2458-14-700

Published: 9 July 2014

*Abstract* (provisional)

#### Background

Vaccination against Human Papillomavirus (HPV) is recommended for adolescent young women prior to sexual debut to reduce cervical cancer related mortality and morbidity. Understanding factors affecting decision-making of HPV vaccination of young women is important so that effective interventions can be developed which address barriers to uptake in population groups less likely to receive the HPV vaccine.

#### Methods

We undertook a qualitative systematic review and evidence synthesis to examine decision-making relating to the HPV vaccination for young women in high-income countries. A comprehensive search of databases from inception to March 2012 was undertaken to identify eligible studies reporting the perspectives of key stakeholders including policy makers, professionals involved in programme, parents, and young women. Factors affecting uptake of the vaccine were examined at different levels of the socio-ecological model (policy, community, organisational, interpersonal and intrapersonal).

#### Results

Forty-one studies were included. Whether young women receive the HPV vaccine is strongly governed by the decisions of policy makers, healthcare professionals, and parents. These decisions are shaped by: financial considerations; social norms and values relating to sexual

activity, and; trust in vaccination programmes and healthcare providers. Financial constraints may be overcome through universal healthcare systems offering the HPV vaccine free at the point of delivery. In the healthcare setting, judgements by healthcare professionals about whether to recommend the vaccine may restrict a young woman's access to the vaccine irrespective of her own beliefs and preferences. Parents may decide not to allow their daughters to be vaccinated, based on cultural or religious perceptions about sexual activity.

#### Conclusions

Barriers to the uptake of the HPV vaccine have implications for young women's future sexual, physical and reproductive health. Interventions to address barriers to uptake of the vaccine should target appropriate, and multiple, levels of the socio-ecological model. Issues of trust require clear, accessible, and sometimes culturally appropriate, information about the HPV vaccination programme. Although young women are central to the HPV vaccination programme, their views are underrepresented in the qualitative literature. Future research should consider young women's perceptions of, and involvement in, consent and decision-making.

#### **Research article**

#### **Performance of 21 HPV vaccination programs implemented in low and middle-income countries, 2009–2013**

Joël Ladner<sup>1\*</sup>, Marie-Hélène Besson<sup>2</sup>, Mariana Rodrigues<sup>2</sup>, Etienne Audureau<sup>3</sup> and Joseph Saba<sup>2</sup>

#### Author Affiliations

1 Rouen University Hospital, Epidemiology and Public Health Department, Hôpital Charles Nicolle, 1, rue de Germont, 76 031 Rouen, France

2 Axios International, Paris, France

3 Hôpital Henri Mondor Hospital, Public Health, Assistance Publique Hôpitaux de Paris, Paris Est University, Créteil, France

#### *Abstract*

##### Background

Cervical cancer is the third most common cancer in women worldwide, with high incidence in lowest income countries. Vaccination against Human Papilloma Virus (HPV) may help to reduce the incidence of cervical cancer. The aim of the study was to analyze HPV vaccination programs performance implemented in low and middle-income countries.

##### Methods

The Gardasil Access Program provides HPV vaccine at no cost to help national institutions gain experience implementing HPV vaccination. Data on vaccine delivery model, number of girls vaccinated, number of girls completing the three-dose campaign, duration of vaccination program, community involvement and sensitization strategies were collected from each program upon completion. Vaccine Uptake Rate (VUR) and Vaccine Adherence between the first and third doses (VA) rate were calculated. Multivariate linear regressions analyses were fitted.

##### Results

Twenty-one programs were included in 14 low and middle-income countries. Managing institutions were non-governmental organizations (NGOs) (n = 8) or Ministries of Health (n = 13). Twelve programs were school-based, five were health clinic-based and four utilized a mixed model. A total of 217,786 girls received a full course of vaccination.

Mean VUR was 88.7% (SD = 10.5) and VA was 90.8% (SD = 7.3). The mean total number of girls vaccinated per program-month was 2,426.8 (SD = 2,826.6) in school model, 335.1 (SD = 202.5) in the health clinic and 544.7 (SD = 369.2) in the mixed models (p = 0.15).

Community involvement in the follow-up of girls participating in the vaccination campaign was significantly associated with VUR. Multivariate analyses identified school-based ( $\beta = 13.35$ ,

p = 0.001) and health clinic ( $\beta = 13.51$ , p = 0.03) models, NGO management ( $\beta = 14.58$ , p < 10-3) and duration of program vaccination ( $\beta = -1.37$ , p = 0.03) as significant factors associated with VUR.

#### Conclusion

School and health clinic-based models appeared as predictive factors for vaccination coverage, as was management by an NGO; program duration could play a role in the program's effectiveness. Results suggest that HPV vaccine campaigns tailored to meet the needs of communities can be effective. These results may be useful in the development of national HPV vaccination policies in low and middle-income countries.

#### **BMC Research Notes**

(Accessed 12 July 2014)

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

[No new relevant content]

#### **British Medical Bulletin**

Volume 110 Issue 1 June 2014

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

[Reviewed earlier]

#### **British Medical Journal**

12 July 2014 (Vol 348, Issue 7963)

<http://www.bmj.com/content/348/7963>

##### **Editorials**

##### **Making the World Health Assembly fit for the 21st century**

Needs better quality of debate and use of technology

BMJ 2014; 348 doi: <http://dx.doi.org/10.1136/bmj.g4079> (Published 18 June 2014) Cite this as: BMJ 2014;348:g4079

Ilona Kickbusch, professor<sup>1</sup>, Mathias Bonk, global health consultant<sup>2</sup>

Author affiliations

##### **Analysis**

##### **Global rules for global health: why we need an independent, impartial WHO**

BMJ 2014; 348 doi: <http://dx.doi.org/10.1136/bmj.g3841> (Published 18 June 2014) Cite this as: BMJ 2014;348:g3841

Devi Sridhar, senior lecturer<sup>12</sup>, J Frenk, dean<sup>3</sup>, L Gostin, professor<sup>4</sup>, S Moon, lecturer<sup>3</sup>

Author affiliations

Devi Sridhar and colleagues argue that WHO's unique political legitimacy makes it essential to achieving international action on global health and call for governments to re-establish guaranteed core funding

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

Volume 92, Number 7, July 2014, 465-544

<http://www.who.int/bulletin/volumes/92/7/en/>

## ***Editorial***

### **Making history: from a public health emergency to a polio-free world**

R Bruce Aylward a

a. Polio Eradication Initiative, World Health Organization, avenue Appia 20, 1211 Geneva 27, <http://dx.doi.org/10.2471/BLT.14.142273>

On 5 May 2014, the Director-General of the World Health Organization (WHO) declared the second-ever public health emergency of international concern. Polio is the emergency – a disease again posing a public health risk to countries around the world and requiring a coordinated international response.<sup>1</sup>

For some, this declaration seemed a paradox. Polio is nearly eradicated. The virus that once paralysed over 1000 children a day in more than 125 countries paralysed just over one child a day in eight countries in 2013. Two of the three countries that have never stopped polio – Afghanistan and Nigeria – overcame tremendous difficulties to achieve a greater than 50% reduction in cases in 2013 and have kept their case counts in the single digits so far in 2014.<sup>2</sup> On 27 March 2014, India and the entire WHO South East Asia Region were certified polio-free, bringing to 80% the proportion of the world's population that now lives in regions entirely free of indigenous wild polioviruses. It is also increasingly likely that two of the three strains of wild poliovirus have been wiped out. Type 2 virus was last detected in India in 1999 and the type 3 virus has not been detected anywhere in the world since a child in Nigeria was paralysed by the virus in November 2012. Overall, the world remains largely on track to achieve all four of the ambitious objectives set out in the Polio eradication and endgame strategic plan<sup>3</sup> – the Global Polio Eradication Initiative's strategy to end all polio, everywhere, by 2018.

However, this progress could still be undone. Although closer than ever to eradication in 2012, polio made a disturbing comeback in 2013. Both the number of children paralysed by the virus and the number of polio-infected countries nearly doubled.<sup>2</sup> Much of the increase in cases was the result of the international spread of the virus into areas that had long been polio-free. In the first four months of 2014, during what is traditionally the low season for polio transmission, wild poliovirus had already spread internationally in three major epidemiologic zones, thousands of kilometres apart. In Central Asia, the virus spread from Pakistan to Afghanistan; in the Middle East, from the Syrian Arab Republic to Iraq;<sup>5</sup> and in Central Africa, from Cameroon to Equatorial Guinea.

The Emergency Committee convened by WHO under the International Health Regulations concluded that, if left unchecked, this situation could result "in failure to eradicate globally one of the world's most serious vaccine preventable diseases".<sup>1</sup> Further international spread with the onset of the high transmission season in June could potentially be disastrous, as the countries that had been exporting poliovirus have strong economic, political, geographic and/or cultural ties to a high number of fragile states and conflict-torn countries. Not only were such areas at highest risk of new importations, but their low routine immunization rates increased the likelihood of explosive polio outbreaks and even the re-establishment of transmission. This situation is compounded by the inability of some of these countries to mount an effective response against disease outbreaks.

Decisive and immediate action was needed to ensure that the global movement working to end polio once and for all did not suffer a setback from which it could be difficult, if not impossible, to recover. Failure would mean reverting to a strategy of only polio "control", under which the world would soon have to accept more than 200 000 children again being paralysed every year.<sup>4</sup> Ensuring that all residents and long-term visitors travelling from polio-infected countries (and especially from those countries that are actively exporting the virus) are vaccinated sufficiently in advance of departure boosts their own protection and helps protect

children in other countries. The Temporary Recommendations on the vaccination of such travellers are designed to curb the spread of poliovirus from one country to another while intensified eradication activities continue globally.

At the 67th World Health Assembly in May 2014, delegates spoke of the need to ensure that the global community should do whatever is needed to deliver on the commitment made at the World Health Assembly 26 years ago to put a stop to polio forever. Today, as the world inches ever closer to a polio-free future, we are also learning the true costs and challenges of reaching all children with the most basic of health interventions. Overcoming those challenges, and addressing those costs, requires that we all step up our game. The global community is now using everything at its disposal in the fight to end polio. Full implementation of these new Temporary Recommendations can put a halt to the international spread of polio and, for only the second time in history, ensure that a devastating disease is eradicated.

#### *References*

WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus. Geneva: World Health Organization; 2014. Available from: <http://www.who.int/mediacentre/news/statements/2014/polio-20140505/en/> [cited 2014 May 26].

The Global Polio Eradication Initiative. Polio this week [Internet]. Geneva: World Health Organization; 2014. Available from:

<http://www.polioeradication.org/dataandmonitoring/poliothisweek.aspx> [cited 2014 May 26].

Polio eradication and endgame strategic plan 2013–2018. Geneva: World Health Organization; 2010. Available from:

<http://www.polioeradication.org/Resourcelibrary/Strategyandwork/Strategicplan.aspx> [cited 2014 May 26].

Thompson KM, Tebbens RJ. Eradication versus control for poliomyelitis: an economic analysis. *Lancet*. 2007 Apr 21;369(9570):1363-71. [http://dx.doi.org/10.1016/S0140-6736\(07\)60532-7](http://dx.doi.org/10.1016/S0140-6736(07)60532-7) pmid: 17448822

The Global Polio Eradication Initiative. Middle East polio technical bulletin. Geneva: World Health Organization; 2014.

[http://www.polioeradication.org/Portals/0/Document/Aboutus/Governance/IMB/10IMBMeeting/10.1\\_10IMB.pdf](http://www.polioeradication.org/Portals/0/Document/Aboutus/Governance/IMB/10IMBMeeting/10.1_10IMB.pdf) [cited 2014 May 26].

#### **Success factors for reducing maternal and child mortality**

Shyama Kuruvilla, Julian Schweitzer, David Bishai, Sadia Chowdhury, Daniele Caramani, Laura Frost, Rafael Cortez, Bernadette Daelmans, Andres de Francisco, Taghreed Adam, Robert Cohen, Y Natalia Alfonso, Jennifer Franz-Vasdeki, Seemeen Saadat, Beth Anne Pratt, Beatrice Eugster, Sarah Bandali, Pritha Venkatachalam, Rachael Hinton, John Murray, Sharon Arscott-Mills, Henrik Axelson, Blerta Maliqi, Intissar Sarker, Rama Lakshminarayanan, Troy Jacobs, Susan Jacks, Elizabeth Mason, Abdul Ghaffar, Nicholas Mays, Carole Presern, Flavia Bustreo & on behalf of the Success Factors for Women's and Children's Health study groups

#### *Abstract*

Reducing maternal and child mortality is a priority in the Millennium Development Goals (MDGs), and will likely remain so after 2015. Evidence exists on the investments, interventions and enabling policies required. Less is understood about why some countries achieve faster progress than other comparable countries. The Success Factors for Women's and Children's Health studies sought to address this knowledge gap using statistical and econometric analyses of data from 144 low- and middle-income countries (LMICs) over 20 years; Boolean, qualitative comparative analysis; a literature review; and country-specific reviews in 10 fast-track countries for MDGs 4 and 5a. There is no standard formula – fast-track countries deploy tailored

strategies and adapt quickly to change. However, fast-track countries share some effective approaches in addressing three main areas to reduce maternal and child mortality. First, these countries engage multiple sectors to address crucial health determinants. Around half the reduction in child mortality in LMICs since 1990 is the result of health sector investments, the other half is attributed to investments made in sectors outside health. Second, these countries use strategies to mobilize partners across society, using timely, robust evidence for decision-making and accountability and a triple planning approach to consider immediate needs, long-term vision and adaptation to change. Third, the countries establish guiding principles that orient progress, align stakeholder action and achieve results over time. This evidence synthesis contributes to global learning on accelerating improvements in women's and children's health towards 2015 and beyond.

### **Clinical Infectious Diseases (CID)**

Volume 59 Issue 2 July 15, 2014

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

#### **Editor's choice: Middle East Respiratory Syndrome Coronavirus: A Case-Control Study of Hospitalized Patients**

Jaffar A. Al-Tawfiq, Kareem Hinedi, Jihad Ghandour, Hanan Khairalla, Samir Musleh, Alaa Ujayli, and Ziad A. Memish

Clin Infect Dis. (2014) 59 (2): 160-165 doi:10.1093/cid/ciu226

#### *Abstract*

This case-control study of hospitalized patients compared underlying conditions, symptoms, signs, laboratory data, and radiographic presentations between Middle East respiratory syndrome coronavirus (MERS-CoV)–positive and –negative patients. Those with MERS-CoV were more likely to be overweight and to have diabetes mellitus, end-stage renal disease, tachypnea, and a normal white blood cell count on bivariate analysis.

### **Clinical Therapeutics**

Volume 36, Issue 6, p817-992 June 2014

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

[Reviewed earlier]

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

(Accessed 12 July 2014)

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

[No new relevant content]

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

August 2014 - Volume 27 - Issue 4 pp: v-vi,303-401

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

#### **Immunizations following solid-organ transplantation**

Kumar, Deepali

#### *Abstract*

Purpose of review

To highlight the latest evidence for the use of key vaccines that are recommended in organ transplant candidates and recipients.

#### Recent findings

Influenza vaccine is the best studied vaccine; factors affecting immunogenicity of this vaccine include time from transplant, use of mycophenolate mofetil and type of transplant. Newer formulations of influenza vaccine are available, but data for these are limited. Updated recommendations include giving conjugated pneumococcal vaccine to adult transplant candidates and recipients followed by the polysaccharide vaccine to increase serotype coverage. Human papillomavirus vaccine should also be given to transplant recipients, although the immunogenicity may be suboptimal. Quadrivalent meningococcal conjugate vaccine needs to be given in special circumstances such as to patients who are starting eculizumab therapy. Live vaccines in general are contraindicated, although increasing safety data are emerging for Varicella vaccine. Herpes Zoster vaccine may be offered prior to transplant, although the utility of this strategy regarding protection from shingles after transplant is not known. Newer vaccines such as inactivated zoster vaccine and vaccines for the prevention of cytomegalovirus are under study.

#### Summary

Immunization for organ transplant recipients is an important part of pretransplant evaluation and the long-term care of the transplant recipient.

### **Developing World Bioethics**

April 2014 Volume 14, Issue 1 Pages ii–ii, 1–57

<http://onlinelibrary.wiley.com/doi/10.1111/dewb.2014.14.issue-1/issuetoc>

[Reviewed earlier]

### **Development in Practice**

Volume 24, Issue 3, 2014

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

[No relevant content]

### **Emerging Infectious Diseases**

Volume 20, Number 7—July 2014

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

[Reviewed earlier]

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

Volume 24 Issue 3 June 2014

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

[Reviewed earlier]

### **Eurosurveillance**

Volume 19, Issue 27, 10 July 2014

Volume 19, Issue 26, 03 July 2014

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

[No relevant content]

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

May 2014 | Volume 2 | Issue 2

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

[Reviewed earlier]

### **Globalization and Health**

[Accessed 12 July 2014]

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

[No new relevant content]

### **Global Public Health**

Volume 9, Issue 6, 2014

<http://www.tandfonline.com/toc/rgph20/.Uq0DgeKy-F9#.U4onnCjDU1w>

#### **[Sexual and reproductive health and rights in the post-2015 development agenda](#)**

Gita Sena\*

DOI: 10.1080/17441692.2014.917197

pages 599-606

#### *Abstract*

Women's health is currently shaped by the confluence of two important policy trends – the evolution of health system reform policies and from the early 1990s onwards, a strong articulation of a human rights-based approach to health that has emphasised laws and policies to advance gender equality and sexual and reproductive health and rights (SRHR). The drive for sexual and reproductive rights represents an inclusive trend towards human rights to health that goes beyond the right to health services, directing attention to girls' and women's rights to bodily autonomy, integrity and choice in relation to sexuality and reproduction. Such an expanded concept of the right to health is essential if laws, policies and programmes are to respect, protect and fulfil the health of girls and women. However, this expanded understanding has been ghettoised from the more mainstream debates on the right to health and was only partially included in the Millennium Development Goals. The paper argues in favour of a twofold approach in placing SRHR effectively in the context of the post-2015 development agenda: first, firmly ground it in an inclusive approach to the right to health; and second, drawing on two decades of national-level implementation, propose a forward-looking agenda focusing on quality, equality and accountability in policies and in programmes. This can build on good practice while addressing critical challenges central to the development framework itself.

### **Health Affairs**

July 2014; Volume 33, Issue 7

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

*Theme: Using Big Data To Transform Care*

[No specifically relevant content]

## **Health and Human Rights**

Volume 16, Issue 1

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

*Climate Justice and the Right to Health – A Special Issue*

[Reviewed earlier]

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

Volume 9 - Issue 03 - July 2014

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

[Reviewed earlier]

## **Health Policy and Planning**

Volume 29 Issue 4 July 2014

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

[No specifically relevant content]

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

September 2014 Volume 10, Issue 9

<http://www.landesbioscience.com/journals/vaccines/toc/volume/10/issue/6/>

*Special focus: Vaccine acceptance*

### **Commentary**

### **Health care professionals and adolescent vaccination: A call for intervention research**

Gregory D Zimet

<http://dx.doi.org/10.4161/hv.28525>

### **Abstract**

In their recently published research study, Gargano et al. found that a physician's recommendation and parental health beliefs had significant effects on adolescent vaccination rates and on parental intentions to vaccinate. This research replicates the findings of a number of human papillomavirus (HPV) vaccine-focused research studies, but explores new territory by focusing on all recommended adolescent vaccines: meningococcal-conjugate (MCV4), HPV, influenza, and tetanus, diphtheria, and acellular pertussis (Tdap) vaccines. Although Gargano et al.'s study is relatively small in scale and focuses on only one county in Georgia, their results are consistent with many other research reports, suggesting that their findings are robust and replicable. Most published intervention studies have targeted parents and young adults, with little focus on health care professionals. However, given the centrality of physician recommendation in adolescent vaccination, as shown by Gargano et al., it is clear that the time has come to develop and evaluate interventions that help physicians and other health care professionals to more effectively implement strong and routine recommendations for all adolescent platform vaccines.

### **Commentary**

### **Influenza vaccination of healthcare personnel**

Sabine Wicker and Georg Marckmann

<http://dx.doi.org/10.4161/hv.28154>

### *Abstract*

The thought is terrifying—you are admitted to the hospital and you die of a nosocomial infection. What sounds like a horror scenario, happens every day in hospitals all over the world. Nosocomial influenza is associated with considerable morbidity and mortality among patients with underlying diseases (especially immunocompromised patients), the elderly, and neonates. Although vaccination of healthcare personnel (HCP) is the main measure for preventing nosocomial influenza and is consistently recommended by public-health authorities, vaccine uptake among HCP remains low.<sup>1</sup>

### **Review**

#### **What are the factors that contribute to parental vaccine-hesitancy and what can we do about it?**

Sarah E Williams

<http://dx.doi.org/10.4161/hv.28596>

### *Abstract*

Parental refusal or delay of childhood vaccines is increasing. Barriers to vaccination among this population have been described, yet less is known regarding motivating factors. Researchers are beginning to evaluate various approaches to address the concerns of “vaccine-hesitant” parents, but few studies have evaluated the effect of interventions on timely vaccine uptake. Several models for communicating with vaccine-hesitant parents have been reported for healthcare providers; however, the effectiveness and utility of these strategies has not been quantified. This article reviews the known barriers to vaccination reported by vaccine-hesitant parents and the current evidence on strategies to address parental vaccine hesitancy.

### **Commentary**

#### **Impact of a physician recommendation**

Paul M Darden and Robert M Jacobson <http://dx.doi.org/10.4161/hv.29020>

### **Research Paper**

#### **Attitude toward immunization and risk perception of measles, rubella, mumps, varicella, and pertussis in health care workers working in 6 hospitals of Florence, Italy 2011**

Cristina Taddei, Vega Ceccherini, Giuditta Niccolai, Barbara Rita Porchia, Sara Boccalini, Miriam Levi, Emilia Tiscione, Maria Grazia Santini, Simonetta Baretti, Paolo Bonanni and Angela Bechini  
<http://dx.doi.org/10.4161/hv.29398>

### **Research Paper**

#### **Knowledge, attitude, and uptake related to human papillomavirus vaccination among young women in Germany recruited via a social media site**

Dietmar Walter, Patrick Schmich, Matthias Wetzstein, Deléré Yvonne, Ole Wichmann and Cornelius Remschmidt  
<http://dx.doi.org/10.4161/hv.29541>

### **Infectious Agents and Cancer**

[Accessed 12 July 2014]

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

[No new relevant content]

### **Infectious Diseases of Poverty**

[Accessed 12 July 2014]

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

[No new relevant content]

### **International Journal of Epidemiology**

Volume 43 Issue 3 June 2014

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

[Reviewed earlier]

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

Vol 24 Complete | July 2014 | Pages 1-54

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

[Reviewed earlier]

### **JAMA**

July 9, 2014, Vol 312, No. 2

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

**Research Letter / July 9, 2014**

#### **Quadrivalent Human Papillomavirus Vaccine and the Risk of Venous Thromboembolism**

Nikolai Madrid Scheller, MB1; Björn Pasternak, MD, PhD1; Henrik Svanström, MSc1;

Anders Hviid, DrMedSci1

Author Affiliations

JAMA. 2014;312(2):187-188. doi:10.1001/jama.2014.2198.

A potential association between quadrivalent human papillomavirus (HPV) vaccination and venous thromboembolism (VTE) has been reported in 2 postlicensure safety studies.<sup>1,2</sup> An analysis of the Vaccine Adverse Event Reporting System database found disproportionately high reporting of VTE following vaccination,<sup>1</sup> and a study using the Vaccine Safety Datalink reported a doubling of VTE risk.<sup>2</sup>

### **JAMA Pediatrics**

July 2014, Vol 168, No. 7

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

[New issue - No relevant content]

### **Journal of Community Health**

Volume 39, Issue 4, August 2014

<http://link.springer.com/journal/10900/39/4/page/1>

[Reviewed earlier]

### **Journal of Global Ethics**

Volume 10, Issue 1, 2014

<http://www.tandfonline.com/toc/rjge20/current#.U2V-Elf4L0I>

## **Tenth Anniversary Forum: The Future of Global Ethics**

[Reviewed earlier]

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

Volume 6 | Issue 2 Page Nos. 57-92 April-June 2014

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

[Reviewed earlier]

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

Volume 25, Number 2, May 2014

[http://muse.jhu.edu/journals/journal\\_of\\_health\\_care\\_for\\_the\\_poor\\_and\\_underserved/toc/hpu.25.2.html](http://muse.jhu.edu/journals/journal_of_health_care_for_the_poor_and_underserved/toc/hpu.25.2.html)

[Reviewed earlier]

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

Volume 28 issue 4 - Latest Issue

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

[New issue - No relevant content]

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

Volume 16, Issue 3, June 2014

<http://link.springer.com/journal/10903/16/3/page/1>

*Special Topics in Immigrant Health: The Health of Indigenous Mayan Migrants from Yucatán México*

[Reviewed earlier]

## **Journal of Infectious Diseases**

Volume 210 Issue 3 August 1, 2014

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

[New issue - No relevant content]

## **Journal of Medical Ethics**

July 2014, Volume 40, Issue 7

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

[Reviewed earlier]

## **Journal of Medical Microbiology**

July 2014; 63 (Pt 7)

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

[Reviewed earlier]

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

Volume 3 Issue 2 June 2014

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

[Reviewed earlier]

### **Journal of Pediatrics**

Vol 165 | No. 1 | July 2014 | Pages 1-216

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

[Reviewed earlier]

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

Volume 35, Issue 2 (May 2014)

<http://www.palgrave-journals.com/jphp/journal/v35/n2/index.html>

[Reviewed earlier]

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

September 6, 2014; 11 (98)

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

[Reviewed earlier]

### **Journal of Virology**

August 2014, volume 88, issue 15

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

#### **Analysis of HLA A\*02 Association with Vaccine Efficacy in the RV144 HIV-1 Vaccine Trial**

Andrew J. Gartlanda, Sue Lia, John McNevina, Georgia D. Tomarasc, Raphael Gottardo, Holly Janesa, Youyi Fonga, Daryl Morrisa, Daniel E. Geraghtyd, Gustavo H. Kijake, Paul T. Edlefsena, Nicole Frahma, Brendan B. Larsenf, Sodsai Tovanabutrae, Eric Sanders-Buellg, Allan C. deCampa, Craig A. Magareta, Hasan Ahmeda, Jodie P. Goodridgeh, Lennie Chenf, Philip Konopaf, Snehal Nariyaf, Julia N. Stoddardf, Kim Wongf, Hong Zhaof, Wenjie Dengf, Brandon S. Maustf, Meera Bosee, Shana Howelle, Adam Batese, Michelle Lazzaroe, Annemarie O'Sullivanf, Esther Leie, Andrea Bradfielde, Grace Ibitamunoe, Vatcharain Assawadarachaii, Robert J. O'Connelle, Mark S. deSouzai, Sorachai Nitayaphani, Supachai Rerks-Ngarmj, Merlin L. Robbe, John Sidneyk, Alessandro Settek, Susan Zolla-Paznerl, David Montefioric, M. Juliana McElratha, James I. Mullinsf, Jerome H. Kime, Peter B. Gilberta and Tomer Hertza,b  
aVaccine and Infectious Disease Division, Fred Hutchinson Cancer Research Center, Seattle, Washington, USA

bShraga Segal Department of Microbiology, Immunology and Genetics, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel

cDuke Human Vaccine Institute, Duke University School of Medicine, Durham, North Carolina, USA

dClinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, Washington, USA

eU.S. Military HIV Research Program, Silver Spring, Maryland, USA

fDepartment of Microbiology, University of Washington, Seattle, Washington, USA

gHenry M. Jackson Foundation, Seattle, Washington, USA

hDepartment of Immunology, Oslo University Hospital, Oslo, Norway

iRoyal Thai Army Component, AFRIMS, Bangkok, Thailand

jThai Ministry of Public Health, Nonthaburi, Thailand

kLa Jolla Institute for Allergy and Immunology, La Jolla, California, USA

lDepartment of Pathology, New York University, New York, New York, USA

#### **ABSTRACT**

The RV144 HIV-1 vaccine trial demonstrated partial efficacy of 31% against HIV-1 infection. Studies into possible correlates of protection found that antibodies specific to the V1 and V2 (V1/V2) region of envelope correlated inversely with infection risk and that viruses isolated from trial participants contained genetic signatures of vaccine-induced pressure in the V1/V2 region. We explored the hypothesis that the genetic signatures in V1 and V2 could be partly attributed to selection by vaccine-primed T cells. We performed a T-cell-based sieve analysis of breakthrough viruses in the RV144 trial and found evidence of predicted HLA binding escape that was greater in vaccine versus placebo recipients. The predicted escape depended on class I HLA A\*02- and A\*11-restricted epitopes in the MN strain rgp120 vaccine immunogen. Though we hypothesized that this was indicative of postacquisition selection pressure, we also found that vaccine efficacy (VE) was greater in A\*02-positive (A\*02+) participants than in A\*02– participants (VE = 54% versus 3%,  $P = 0.05$ ). Vaccine efficacy against viruses with a lysine residue at site 169, important to antibody binding and implicated in vaccine-induced immune pressure, was also greater in A\*02+ participants (VE = 74% versus 15%,  $P = 0.02$ ). Additionally, a reanalysis of vaccine-induced immune responses that focused on those that were shown to correlate with infection risk suggested that the humoral responses may have differed in A\*02+ participants. These exploratory and hypothesis-generating analyses indicate there may be an association between a class I HLA allele and vaccine efficacy, highlighting the importance of considering HLA alleles and host immune genetics in HIV vaccine trials.

#### **IMPORTANCE**

The RV144 trial was the first to show efficacy against HIV-1 infection. Subsequently, much effort has been directed toward understanding the mechanisms of protection. Here, we conducted a T-cell-based sieve analysis, which compared the genetic sequences of viruses isolated from infected vaccine and placebo recipients. Though we hypothesized that the observed sieve effect indicated postacquisition T-cell selection, we also found that vaccine efficacy was greater for participants who expressed HLA A\*02, an allele implicated in the sieve analysis. Though HLA alleles have been associated with disease progression and viral load in HIV-1 infection, these data are the first to suggest the association of a class I HLA allele and vaccine efficacy. While these statistical analyses do not provide mechanistic evidence of protection in RV144, they generate testable hypotheses for the HIV vaccine community and they highlight the importance of assessing the impact of host immune genetics in vaccine-induced immunity and protection. (This study has been registered at ClinicalTrials.gov under registration no. NCT00223080.)

#### **The Lancet**

Jul 12, 2014 Volume 384 Number 9938 p103 – 206 e22 - 29

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

**NCD Countdown 2025: accountability for the 25 × 25 NCD mortality reduction target**

Robert Beaglehole, Ruth Bonita, Majid Ezzati, George Alleyne, Katie Dain, Sandeep P Kishore, Richard Horton

### *Preview*

In 2012, all countries committed to achieving a 25% reduction in premature mortality from non-communicable diseases (NCDs) by 2025 (the 25 × 25 target). In 2013, countries also agreed to a set of voluntary targets for risk factors and health systems.<sup>1</sup> Unlike the Millennium Development Goals (MDGs), which were directed at low-income and middle-income countries, NCD targets are for all countries. Achieving targets for just six NCD risk factors (tobacco and alcohol use, salt intake, obesity, and raised blood pressure and glucose) will come close to achieving the global 25 × 25 target, especially if a more ambitious tobacco reduction target is adopted.

### **Use of contingency management incentives to improve completion of hepatitis B vaccination in people undergoing treatment for heroin dependence: a cluster randomised trial**

Tim Weaver PhD [a](#), Nicola Metrebian PhD [b](#), Jennifer Hellier MSc [c](#), Prof Stephen Pilling PhD [d](#), Vikki Charles MA [b](#), Nicholas Little MSc [d](#), Dilkushi Poovendran MSc [a](#), Luke Mitcheson DCLinPsy [e](#), Frank Ryan D Psychol [f](#), Owen Bowden-Jones FRCPsych [g](#), John Dunn DM [f](#), Anthony Glasper MRCPsych [h](#), Emily Finch MD [e](#), Prof John Strang MD [b](#) [e](#)

### *Summary*

#### Background

Poor adherence to treatment diminishes its individual and public health benefit. Financial incentives, provided on the condition of treatment attendance, could address this problem. Injecting drug users are a high-risk group for hepatitis B virus (HBV) infection and transmission, but adherence to vaccination programmes is poor. We aimed to assess whether contingency management delivered in routine clinical practice increased the completion of HBV vaccination in individuals receiving opioid substitution therapy.

#### Methods

In our cluster randomised controlled trial, we enrolled participants at 12 National Health Service drug treatment services in the UK that provided opioid substitution therapy and nurse-led HBV vaccination with a super-accelerated schedule (vaccination days 0, 7, and 21). Clusters were randomly allocated 1:1:1 to provide vaccination without incentive (treatment as usual), with fixed value contingency management (three £10 vouchers), or escalating value contingency management (£5, £10, and £15 vouchers). Both contingency management schedules rewarded on-time attendance at appointments. The primary outcome was completion of clinically appropriate HBV vaccination within 28 days. We also did sensitivity analyses that examined vaccination completion with full adherence to appointment times and within a 3 month window. The trial is registered with Current Controlled Trials, number ISRCTN72794493.

#### Findings

Between March 16, 2011, and April 26, 2012, we enrolled 210 eligible participants. Compared with six (9%) of 67 participants treated as usual, 35 (45%) of 78 participants in the fixed value contingency management group met the primary outcome measure (odds ratio 12·1, 95% CI 3·7—39·9;  $p < 0·0001$ ), as did 32 (49%) of 65 participants in the escalating value contingency management group (14·0, 4·2—46·2;  $p < 0·0001$ ). These differences remained significant with sensitivity analyses.

#### Interpretation

Modest financial incentives delivered in routine clinical practice significantly improve adherence to, and completion of, HBV vaccination programmes in patients receiving opioid substitution therapy. Achievement of this improvement in routine clinical practice should now prompt actual

implementation. Drug treatment providers should employ contingency management to promote adherence to vaccination programmes. The effectiveness of routine use of contingency management to achieve long-term behaviour change remains unknown.

Funding

National Institute for Health Research (RP-PG-0707-10149).

## **The Lancet**

Jul 5, 2014 Volume 384 Number 9937 p1-102

*Series*

*The Health of Americans*

### **Challenges of infectious diseases in the USA**

Dr Rima F Khabbaz MD [a](#), Robin R Moseley MAT [a](#), Riley J Steiner MPH [b](#), Alexandra M Levitt PhD [a](#), Beth P Bell MD [c](#)

*Summary*

In the USA, infectious diseases continue to exact a substantial toll on health and health-care resources. Endemic diseases such as chronic hepatitis, HIV, and other sexually transmitted infections affect millions of individuals and widen health disparities. Additional concerns include health-care-associated and foodborne infections—both of which have been targets of broad prevention efforts, with success in some areas, yet major challenges remain. Although substantial progress in reduction of the burden of vaccine-preventable diseases has been made, continued cases and outbreaks of these diseases persist, driven by various contributing factors. Worldwide, emerging and reemerging infections continue to challenge prevention and control strategies while the growing problem of antimicrobial resistance needs urgent action. An important priority for control of infectious disease is to ensure that scientific and technological advances in molecular diagnostics and bioinformatics are well integrated into public health. Broad and diverse partnerships across governments, health care, academia, and industry, and with the public, are essential to effectively reduce the burden of infectious diseases.

Viewpoint

### **Health security in 2014: building on preparedness knowledge for emerging health threats**

Ali S Khan, Nicole Lurie

*Preview*

Ideas, information, and microbes are shared worldwide more easily than ever before. New infections, such as the novel influenza A H7N9 or Middle East respiratory syndrome coronavirus, pay little heed to political boundaries as they spread; nature pays little heed to destruction wrought by increasingly frequent natural disasters. Hospital-acquired infections are hard to prevent and contain, because the bacteria are developing resistance to the therapeutic advances of the 20th century. Indeed, threats come in ever-complicated combinations: a combined earthquake, tsunami, and radiation disaster; blackouts in skyscrapers that require new thinking about evacuations and medically fragile populations; or bombings that require as much psychological profiling as chemical profiling.

### **Global health and the US Centers for Disease Control and Prevention**

Anne Schuchat, Jordan Tappero, John Blandford

*Preview*

Why is an article about global health included in a special issue on health in the USA? About half the produce that Americans consume is cultivated in other countries, 60 million Americans travel or work outside the USA, and most patients with measles and tuberculosis in the USA acquired their infection elsewhere. Emerging diseases, globalisation of foods and medicines, the

rise in antimicrobial resistance, and the ease with which pathogens can be manipulated for good or harm increase each nation's vulnerability and interdependence.

### **The Lancet Global Health**

Jul 2014 Volume 2 Number 7 e364 - 430

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

[Reviewed earlier]

### **The Lancet Infectious Diseases**

Jul 2014 Volume 14 Number 7 p533 – 656

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

[Reviewed earlier]

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

July 2014; 34 (5)

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

[Reviewed earlier]

### **The Milbank Quarterly**

*A Multidisciplinary Journal of Population Health and Health Policy*

June 2014 Volume 92, Issue 2 Pages 167–405

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

[Reviewed earlier]

### **Nature**

Volume 511 Number 7508 pp125-258 10 July 2014

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

#### **Comment**

#### **[Non-communicable diseases: Healthy living needs global governance](#)**

Lawrence O. Gostin calls for action on nutrition, pollution and the built environment to curb non-communicable diseases such as diabetes and cancer.

### **Nature Immunology**

July 2014, Volume 15 No 7 pp589-694

<http://www.nature.com/ni/journal/v15/n6/index.html>

[Reviewed earlier]

### **Nature Medicine**

July 2014, Volume 20 No 7 pp689-793

<http://www.nature.com/nm/journal/v20/n7/index.html>

[New issue - No relevant content]

## **Nature Reviews Immunology**

July 2014 Vol 14 No 7

<http://www.nature.com/nri/journal/v14/n7/index.html>

### **From empiricism to rational design: a personal perspective of the evolution of vaccine development**

Ennio De Gregorio & Rino Rappuoli

#### *Abstract*

Vaccination, which is the most effective medical intervention that has ever been introduced, originated from the observation that individuals who survived a plague or smallpox would not get the disease twice. To mimic the protective effects of natural infection, Jenner — and later Pasteur — inoculated individuals with attenuated or killed disease-causing agents. This empirical approach inspired a century of vaccine development and the effective prophylaxis of many infectious diseases. From the 1980s, several waves of new technologies have enabled the development of novel vaccines that would not have been possible using the empirical approach. The technological revolution in the field of vaccination is now continuing, and it is delivering novel and safer vaccines. In this Timeline article, we provide our views on the transition from empiricism to rational vaccine design.

## **New England Journal of Medicine**

July 10, 2014 Vol. 371 No. 2

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

July 3, 2014 Vol. 371 No. 1

<http://www.nejm.org/toc/nejm/371/1>

[New issues - No relevant content]

## **The Pediatric Infectious Disease Journal**

July 2014 - Volume 33 - Issue 7 pp: 675-788,e162-e182

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

[Reviewed earlier]

## **Pediatrics**

July 2014, VOLUME 134 / ISSUE 1

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

#### **Article**

### **Impact of Vaccination on the Epidemiology of Varicella: 1995–2009**

Roger Baxter, MD<sup>a</sup>, Trung N. Tran, MD, PhD<sup>b</sup>, Paula Ray, MPH<sup>a</sup>, Edwin Lewis, MPH<sup>a</sup>, Bruce Fireman, MA<sup>a</sup>, Steve Black, MD<sup>c</sup>, Henry R. Shinefield, MD<sup>d</sup>, Paul M. Coplan, ScD, MBA<sup>b</sup>, and Patricia Saddier, MD, PhD<sup>b</sup>

#### **Author Affiliations**

<sup>a</sup> Kaiser Permanente Vaccine Study Center, Oakland, California;

<sup>b</sup> Department of Epidemiology, Merck Sharp & Dohme Corp, Whitehouse Station, New Jersey;

<sup>c</sup> Center for Global Health, Cincinnati Children's Hospital, Cincinnati, Ohio; and

<sup>d</sup> University of California San Francisco Medical Center, San Francisco, California

### *Abstract*

**BACKGROUND:** When varicella vaccine was licensed in the United States in 1995, there were concerns that childhood vaccination might increase the number of adolescents susceptible to varicella and shift disease toward older age groups where it can be more severe.

**METHODS:** We conducted a series of 5 cross-sectional studies in 1994 to 1995 (prevaccine), 2000, 2003, 2006, and 2009 in Kaiser Permanente of Northern California to assess changes in varicella epidemiology in children and adolescents, as well as changes in varicella hospitalization in people of all ages. For each study, information on varicella history and varicella occurrence during the past year was obtained by telephone survey from a sample of ~8000 members 5 to 19 years old; varicella hospitalization rates were calculated for the entire membership.

**RESULTS:** Between 1995 and 2009, the overall incidence of varicella in 5- to 19-year-olds decreased from 25.8 to 1.3 per 1000 person-years, a ~90% to 95% decline in the various age categories (5–9, 10–14, and 15–19 years of age). The proportion of varicella-susceptible children and adolescents also decreased in all age groups, including in 15- to 19-year-olds (from 15.6% in 1995 to 7.6% in 2009). From 1994 to 2009, age-adjusted varicella hospitalization rates in the general member population decreased from 2.13 to 0.25 per 100 000, a ~90% decline.

**CONCLUSIONS:** In the 15 years after the introduction of varicella vaccine, a major reduction in varicella incidence and hospitalization was observed with no evidence of a shift in the burden of varicella to older age groups.

### ***Special Article***

#### **An Outbreak of Measles in an Undervaccinated Community**

Pamala Gahr, MPH<sub>a</sub>, Aaron S. DeVries, MD, MPH<sub>a</sub>, Gregory Wallace, MD, MPH<sub>b</sub>, Claudia Miller, MPH<sub>a</sub>, Cynthia Kenyon, MPH<sub>a</sub>, Kristin Sweet, MPH<sub>a</sub>, Karen Martin, MPH<sub>a</sub>, Karen White, MPH<sub>a</sub>, Erica Bagstad, MPH<sub>c</sub>, Carol Hooker, MSc, Gretchen Krawczynski, MPH<sub>c</sub>, David Boxrud, MS<sub>a</sub>, Gongping Liu, PhD<sub>a</sub>, Patricia Stinchfield, MS, CPNP<sub>d</sub>, Julie LeBlanc, MPH<sub>d</sub>, Cynthia Hickman, MPH<sub>a</sub>, Lynn Bahta, RN, PHN<sub>a</sub>, Albert Barskey, MPH<sub>b</sub>, and Ruth Lynfield, MD<sub>a</sub>

#### **Author Affiliations**

aMinnesota Department of Health, St Paul, Minnesota;

bCenters for Disease Control and Prevention, Atlanta, Georgia;

cHennepin County Human Services and Public Health, Hopkins, Minnesota; and

dChildren's Hospital and Clinics of Minnesota, St Paul, Minnesota

### *Abstract*

Measles is readily spread to susceptible individuals, but is no longer endemic in the United States. In March 2011, measles was confirmed in a Minnesota child without travel abroad. This was the first identified case-patient of an outbreak. An investigation was initiated to determine the source, prevent transmission, and examine measles-mumps-rubella (MMR) vaccine coverage in the affected community. Investigation and response included case-patient follow-up, post-exposure prophylaxis, voluntary isolation and quarantine, and early MMR vaccine for non-immune shelter residents >6 months and <12 months of age. Vaccine coverage was assessed by using immunization information system records. Outreach to the affected community included education and support from public health, health care, and community and spiritual leaders. Twenty-one measles cases were identified. The median age was 12 months (range, 4 months to 51 years) and 14 (67%) were hospitalized (range of stay, 2–7 days). The source was a 30-month-old US-born child of Somali descent infected while visiting Kenya. Measles spread in several settings, and over 3000 individuals were exposed. Sixteen case-patients were unvaccinated; 9 of the 16 were age-eligible: 7 of the 9 had safety concerns and 6 were of Somali descent. MMR vaccine coverage among Somali children declined significantly

from 2004 through 2010 starting at 91.1% in 2004 and reaching 54.0% in 2010 ( $\chi^2$  for linear trend 553.79;  $P < .001$ ). This was the largest measles outbreak in Minnesota in 20 years, and aggressive response likely prevented additional transmission. Measles outbreaks can occur if undervaccinated subpopulations exist. Misunderstandings about vaccine safety must be effectively addressed.

### **Pharmaceutics**

Volume 6, Issue 2 (June 2014), Pages 195-

<http://www.mdpi.com/1999-4923/6/2>

[Reviewed earlier]

### **Pharmacoeconomics**

Volume 32, Issue 7, July 2014

<http://link.springer.com/journal/40273/32/7/page/1>

[Reviewed earlier]

### **PLoS One**

[Accessed 12 July 2014]

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

*Research Article*

#### **Safety and Immunogenicity of a Live Oral Recombinant Cholera Vaccine VA1.4: A Randomized, Placebo Controlled Trial in Healthy Adults in a Cholera Endemic Area in Kolkata, India**

Suman Kanungo, Bandana Sen, Thandavarayan Ramamurthy, Dipika Sur, Byomkesh Manna, Gururaja P. Pazhani, Goutam Chowdhury, Puja Jhunjhunwala, Ranjan K. Nandy, Hemanta Koley, Mihir Kumar Bhattacharya, Sanjay Gupta, Gaurav Goel, Bindu Dey, Thungapathra M, G. Balakrish Nair, Amit Ghosh, Dilip Mahalanabis mail

#### *Abstract*

##### **Background**

A live oral cholera vaccine VA 1.4 developed from a non-toxigenic *Vibrio cholerae* O1 El Tor strain using *ctxB* gene insertion was further developed into a clinical product following cGMP and was evaluated in a double-blind randomized placebo controlled parallel group two arm trial with allocation ratio of 1:1 for safety and immunogenicity in men and women aged 18–60 years from Kolkata, India.

##### **Method**

A lyophilized dose of  $1.9 \times 10^9$  CFU ( $n = 44$ ) or a placebo ( $n = 43$ ) reconstituted with a diluent was administered within 5 minutes of drinking 100 ml of a buffer solution made of sodium bicarbonate and ascorbic acid and a second dose on day 14.

##### **Result**

The vaccine did not elicit any diarrhea related adverse events. Other adverse events were rare, mild and similar in two groups. One subject in the vaccine group excreted the vaccine strain on the second day after first dose. The proportion of participants who seroconverted (i.e. had 4-folds or higher rise in reciprocal titre) in the vaccine group were 65.9% (95% CI: 50.1%–79.5%) at both 7 days (i.e. after 1st dose) and 21 days (i.e. after 2nd dose). None of the

placebo recipients seroconverted. Anti-cholera toxin antibody was detected in very few recipients of the vaccine.

#### Conclusion

This study demonstrates that VA 1.4 at a single dose of  $1.9 \times 10^9$  is safe and immunogenic in adults from a cholera endemic region. No additional benefit after two doses was seen.

#### Trial Registration

Clinical Trials Registry-India, National Institute of Medical Statistics (Indian Council of Medical Research) [CTRI/2012/04/002582](http://ctri.nic.in/CTRI/2012/04/002582)

### **PLoS Medicine**

(Accessed 12 July 2014)

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

[No new relevant content]

### **PLoS Neglected Tropical Diseases**

June 2014

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

[No new relevant content]

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

(Accessed 12 July 2014)

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

[No new relevant content]

### **Pneumonia**

Vol 5 (2014)

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

*Special Issue "Pneumonia Diagnosis"*

[Reviewed earlier]

### **Public Health Ethics**

Volume 7 Issue 1 April 2014

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

[Reviewed earlier]

### **Qualitative Health Research**

July 2014; 24 (7)

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

[Reviewed earlier]

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

April 2014 Vol. 35, No. 4

[http://www.paho.org/journal/index.php?option=com\\_content&view=article&id=143&Itemid=236&lang=en](http://www.paho.org/journal/index.php?option=com_content&view=article&id=143&Itemid=236&lang=en)

[Reviewed earlier]

**Risk Analysis**

June 2014 Volume 34, Issue 6 Pages 981–1159

<http://onlinelibrary.wiley.com/doi/10.1111/risa.2014.34.issue-6/issuetoc>

[New issue -No relevant content]

**Science**

11 July 2014 vol 345, issue 6193, pages 113-236

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

*Special Issue - Strategies against HIV/AIDS*

**Perspective**

**A critical question for HIV vaccine development: Which antibodies to induce?**

Susan Zolla-Pazner<sup>1,2</sup>

Author Affiliations

1New York Veterans Affairs Harbor Healthcare System, New York, NY 10010, USA.

2New York University School of Medicine, New York, NY 10016, USA.

**Abstract**

A vaccine against HIV-1 must prevent infection against genetically diverse virus strains. Two approaches are currently being pursued to elicit antibody-mediated protection: vaccines that induce potent and broadly reactive neutralizing antibodies (bnAbs) or vaccines that induce “conventional antibodies,” which are less potent and broadly neutralizing in comparison. Although bnAbs may provide the greatest level of protection, their structural and genetic characteristics make their elicitation through vaccination a major challenge. In contrast, conventional HIV-1 antibodies have been induced by vaccination and correlated with reduced HIV-1 infection in a phase III vaccine trial. Here, I present evidence that both approaches should be pursued with equal vigor.

**Social Science & Medicine**

Volume 115, In Progress (August 2014)

<http://www.sciencedirect.com/science/journal/02779536/115>

[No new relevant content]

**Tropical Medicine and Health**

Vol. 42(2014) No. 2

[https://www.jstage.jst.go.jp/browse/tmh/42/1/\\_contents](https://www.jstage.jst.go.jp/browse/tmh/42/1/_contents)

**Current Trends of Immunization in Nigeria: Prospect and Challenges**

Endurance A. Ophori, Musa Y. Tula, Azuka V. Azih, Rachel Okojie, Precious E. Ikpo

Released: July 12, 2014

### *Abstract*

Immunization is aimed at the prevention of infectious diseases. In Nigeria, the National Programme on Immunization (NPI) suffers recurrent setbacks due to many factors including ethnicity and religious beliefs. Nigeria is made up of 36 states with its federal capital in Abuja. The country is divided into six geo-political zones; north central, north west, north east, south east, south west and south south. The population is unevenly distributed across the country. The average population density in 2006 was estimated at 150 people per square kilometres with Lagos, Anambra, Imo, Abia, and Akwa Ibom being the most densely populated states. Most of the densely populated states are found in the south east. Kano with an average density of 442 persons per square kilometre, is the most densely populated state in the northern part of the country. This study presents a review on the current immunization programme and the many challenges affecting its success in the eradication of childhood diseases in Nigeria.

### **Vaccine**

Volume 32, Issue 34, Pages 4243-4364 (23 July 2014)

<http://www.sciencedirect.com/science/journal/0264410X/32/34>

#### **Report of the Third European Expert Meeting on Rotavirus Vaccination: Progress in rotavirus universal mass vaccination in Europe**

Pages 4243-4248

HI Huppertz, M Borte, V Schuster, C Giaquinto, T Vesikari

#### **Recent progress and concerns regarding the Japanese immunization program: Addressing the "vaccine gap"**

Review Article

Pages 4253-4258

Akihiko Saitoh, Nobuhiko Okabe

### *Abstract*

Recent progress in the Japanese immunization program has partially closed the "vaccine gap," i.e., the deficiencies in that program relative to immunization programs in other developed countries. During the last several years, seven new vaccines (12 new products, excluding influenza vaccines) have been introduced in Japan. Five of these new vaccines are produced outside Japan and four are now included as routine vaccines in the National Immunization Program, which is a new development in the licensing and financial support of imported vaccines. However, along with this progress, important concerns have arisen regarding the Japanese immunization program. A rubella epidemic among adults, in 2012–2013, resulted in more than 40 cases of congenital rubella syndrome as of March 2014. In addition, the temporary withdrawal of the active governmental recommendation for human papilloma virus vaccines, in 2013–2014, highlighted challenges in the current Japanese immunization system. Furthermore, some important vaccines – including vaccines for hepatitis B virus, mumps, varicella, and rotavirus – are still not included in the National Immunization Program and have been categorized as voluntary vaccines since their introduction. The possibility of their inclusion in the National Immunization Program remains a matter for discussion. We hope that future initiatives will further address the vaccine gap and protect Japanese children from vaccine-preventable diseases.

#### **Are we there yet? Assessing achievement of vaccine-preventable disease goals in WHO's Western Pacific Region**

Review Article

Pages 4259-4266

Karen Hennessey, W. William Schluter, Xiaojun Wang, Liliane Boualam, Youngmee Jee, Jorge Mendoza-Aldana, Sigrun Roesel, Sergey Diorditsa, John Ehrenberg

### *Abstract*

Accelerated disease control goals have long been appreciated for their role in galvanizing commitment and bringing a sense of urgency for disease prevention. WHO's Western Pacific Region has 14 on-going communicable disease reduction goals including 1 targeting eradication, 10 targeting elimination, and 3 control initiatives. These goals cover mother-to-child transmission of HIV, congenital syphilis, tuberculosis, leprosy, five parasitic diseases and four vaccine-preventable diseases (VPD). The initiatives have distinct objectives, approaches, and means in which to measure achievement of the goals.

Given the long history and experience with VPD initiatives in the Western Pacific Region, this manuscript focuses on the Region's following initiatives: (1) smallpox eradication, (2) polio eradication, (3) measles elimination, (4) maternal and neonatal tetanus elimination (MNTE), and (5) hepatitis B control.

There is good consistency across the Region's VPD initiatives yet a pattern of more robust and representative data requirements, stricter evaluation criteria, and more formal evaluation bodies are linked to the intensity of the goal – with eradication being the peak. On the other end of this spectrum, the Regional hepatitis B control initiative has established efficient and low-cost approaches for measuring impact and evaluating if the goals have been met. Even within the confines of VPD initiatives there are some deviations in use of terminology and comparisons across other disease control initiatives in the Region are provided.

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

(Accessed 12 July 2014)

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

[No new relevant content]

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

(Accessed 12 July 2014)

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

### **Review**

### **Peptide Vaccine: Progress and Challenges**

Weidang Li 1, Medha D. Joshi 2, Smita Singhania 3, Kyle H. Ramsey 4 and Ashlesh K. Murthy 1  
Authors' affiliations

(This article belongs to the Special Issue Peptide Vaccine)

### **Abstract**

Conventional vaccine strategies have been highly efficacious for several decades in reducing mortality and morbidity due to infectious diseases. The bane of conventional vaccines, such as those that include whole organisms or large proteins, appear to be the inclusion of unnecessary antigenic load that, not only contributes little to the protective immune response, but complicates the situation by inducing allergenic and/or reactogenic responses. Peptide vaccines are an attractive alternative strategy that relies on usage of short peptide fragments to engineer the induction of highly targeted immune responses, consequently avoiding allergenic and/or reactogenic sequences. Conversely, peptide vaccines used in isolation are often weakly immunogenic and require particulate carriers for delivery and adjuvanting. In this article, we discuss the specific advantages and considerations in targeted induction of immune responses

by peptide vaccines and progresses in the development of such vaccines against various diseases. Additionally, we also discuss the development of particulate carrier strategies and the inherent challenges with regard to safety when combining such technologies with peptide vaccines.

## **Value in Health**

Vol 17 | No. 4 | June 2014 | Pages 307-490

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

[Reviewed earlier]

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

### **PharmacoEconomics & Outcomes News**

July 2014, Volume 706, [Issue 1](#), p 12

#### **Men B vaccine: cost perceived as strong barrier to prescribing**

K Taylor

#### ***Excerpt***

Vaccine cost is a significant barrier to Australian family physicians (FPs) recommending non-funded vaccines, such as meningococcal group B (Men B) vaccine.

This is one of the findings of a survey that examine knowledge, attitudes and immunisation practices in relation to invasive meningococcal disease (IMD) and the Men B vaccine among FPs in South Australia.

The analysis of data from 523 respondents showed that high vaccine cost and perceived low socioeconomic status of the patient were identified by many respondents (59% and 61%, respectively) as strong barriers to prescribing non-funded vaccines. Most respondents (63%) were aware that a Men B vaccine was under development, and 93% agreed that this vaccine should be government-funded. The Men B vaccine for children was given the highest mean rank to receive funding out of eight currently non-funded immunisation strategies. FPs with past IMD experience were more likely to give higher priority to funding Men B vaccine for children and adults...

### ***Special Focus Newsletters***

#### **Dengue Vaccine Initiative** 10 July 2014

#### ***Sanofi Pasteur Releases Phase 3 Trial Results of Dengue Vaccine Candidate***

Today, July 10, [Sanofi Pasteur](#) published in [The Lancet](#) the results of the first of two Phase 3 clinical trials for its [dengue](#) vaccine candidate — a [live attenuated](#) tetravalent vaccine. The [study](#) is a randomized, observer-blind, placebo-controlled multicenter trial involving 10,275 children aged two to 14 in Indonesia, Malaysia, the Philippines, Thailand and Vietnam.

:: For DVI's statement click [here](#).

:: For DVI's [blog post](#) click here.

:: For a Q&A by the World Health Organization, click [here](#).

### **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 12 July 2014*

[No new, unique, relevant content]

#### **The Atlantic**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

#### **BBC**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

#### **Brookings**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

#### **Council on Foreign Relations**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

#### **Economist**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

#### **Financial Times**

<http://www.ft.com>

*Accessed 12 July 2014*

[No new, unique, relevant content]

## **Forbes**

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

*Accessed 12 July 2014*

[Vaccine Refusal Myths Drive Up Development Costs, Prices](#)

David Kroll Contributor

3 July 2014

[Africa's Richest Man To Build 11 Health Centers in Nigeria To Combat Polio](#)

Mfonobong Nsehe Contributor

3 July 2014

Africa's wealthiest man Aliko Dangote has pledged to build 11 health centers in Kano, a large commercial state in Nigeria's North-Western region, in an effort to ensure routine immunization and the general physical health of indigenes of the state. According to the Daily Post Nigeria, Dangote, who is the chairman of the Dangote Foundation, made the pledge during a video conference with Bill Gates, co-Chair of the Bill and Melinda Gates Foundation and Rabi'u Musa Kwankwaso, Governor of Kano...

## **Foreign Affairs**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

## **Foreign Policy**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

## **Fortune**

<http://fortune.com/>

*Accessed 12 July 2014*

[Helping the world's poor, via cell phones](#)

*Researchers use cell phone data to address problems in developing countries.*

Preetisha Sen

2 July 2014

*Excerpt*

Cell phones have become ubiquitous even in the world's poorest places. Now, researchers are using data collected by the devices to address third-world problems, according to a report provided exclusively to Fortune.

The report, produced by the Bill & Melinda Gates Foundation in conjunction with strategy consulting firm Cartesian, argues that analyzing mobile data has the potential to improve the lives of the poor in many ways—from expanding access to banking services to tracking the spread of infectious diseases.

Nirant Gupta, an author of the report, says research from Harvard and other large universities prompted the Gates Foundation to further analyze cell phone data in developing countries so that the findings could move from research to implementation...

## **The Guardian**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

### **The Huffington Post**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

### **Le Monde**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

### **New Yorker**

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

*Accessed 12 July 2014*

*Blog: Comment*

[When the Taliban Meets Hobby Lobby](#)

If the Pakistani Taliban organized a closely held American corporation, might its employees be deprived of insurance coverage for vaccines?

by [Steve Coll](#)

2 July 2014

### **New York Times**

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

*Accessed 12 July 2014*

[The Price of Prevention: Vaccine Costs Are Soaring](#)

[ELISABETH ROSENTHAL](#)

2 July 2014

...Vaccination prices have gone from single digits to sometimes triple digits in the last two decades, creating dilemmas for doctors and their patients as well as straining public health budgets

### **Reuters**

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

*Accessed 12 July 2014*

[No new, unique, relevant content]

### **Wall Street Journal**

<http://online.wsj.com/home-page?wsjregion=na,us&homepage=/home/us>

*Accessed 12 July 2014*

[No new, unique, relevant content]

### **Washington Post**

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

*Accessed 12 July 2014*

[Measles outbreak complicates 2 big Amish events](#)

July 1, 2014 Associated Press

Visitors from around the world to two upcoming events in Ohio's Amish country could come away with more than they bargained for, health officials fear - a case of measles from the nation's largest outbreak in two decades...

[Obituaries: Vaccine specialist J. Anthony Morris dies at 95](#)

By [Bart Barnes](#) July 3

J. Anthony Morris, a federal vaccine specialist who was forced into retirement after public disagreements with superior officers over the efficiency of federal vaccine programs and the effectiveness of influenza vaccines, died May 31 at a health-care center in Hyattsville, Md. He was 95...

\* \* \* \*

***Vaccines and Global Health: The Week in Review*** is a service of the Center for Vaccines Ethics and Policy (CVEP) which is solely responsible for its content. Support for this service is provided by its governing institutions – Department of Medical Ethics, NYU Medical School; The Wistar Institute Vaccine Center and the Children's Hospital of Philadelphia Vaccine Education Center. Additional support is provided by the PATH Vaccine Development Program and the International Vaccine Institute (IVI), by the Bill & Melinda Gates Foundation, and by vaccine industry leaders including Janssen, Pfizer, and Sanofi Pasteur U.S. (list in formation), as well as the Developing Countries Vaccine Manufacturers Network (DCVMN). Support is also provided by a growing list of individuals who use this service to support their roles in public health, clinical practice, government, NGOs and other international institutions, academia and research organizations, and industry.

\* \* \* \*