

## Center for Vaccine Ethics and Policy

NYU | Wistar Institute | CHOP

### **Vaccines: The Week in Review 28 September 2013 Center for Vaccine Ethics & Policy (CVEP)**

*This weekly summary targets news, events, announcements, articles and research in the global vaccine 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)*

### **Joint Statement on accelerating efforts to achieve the health MDGs**

*WHO, UNFPA, UNAIDS, UNICEF and the UN Secretary General's Special Envoy for Financing the Health MDGs and for malaria on the occasion of the 68th General Assembly of the United Nations*

25 September 2013

*Excerpt*

We have 829 days to go until the December 2015 MDG deadline. Over the past 12 and a half years, the world has made remarkable progress against the goals, especially the health-related MDGs. Child and maternal deaths have been almost halved from 1990 levels. Malaria deaths have dropped 50%, driven largely by the distribution of over 400 million mosquito nets in the past several years. Over 6 million people, of the 9 million who need TB treatment, are now on treatment. HIV, once a death sentence with virtually no one on treatment, has undergone a dramatic shift with almost 10 million people on treatment today – and if we can finish the job and put everyone on treatment, we will irreversibly halt the AIDS epidemic. These results are unmistakable proof that success is possible.

Now we must come together in one final big push to achieve the health MDGs, and lay the strongest of foundations for a post-2015 world.

We all know that the economic environment has been challenging, but despite that, the pace of our work to end maternal and child deaths, malaria deaths, AIDS-related deaths and eliminating new HIV infections among children has quickened over the past 3 years. This week, an unprecedented US\$ 1.15 billion has been freshly mobilized to reach MDGs 4 and 5 – the largest amount ever mobilized for those goals. Funds of this magnitude fill a substantial portion of the remaining financing gap. Last year, at the London FP Summit, some \$2.6 billion funds

were mobilized for family planning. The Global Fund to Fight AIDS, TB and Malaria is working hard to achieve its replenishment figure of \$15 billion...

...It is now time for an unprecedented acceleration of effort to achieve the goals. We know it will take nothing short of a moonshot to accomplish the goals in the time remaining. The lives we must save in this final MDG phase are in the most difficult to reach areas, and are people who are chronically underserved. With a rights-based approach, combined with utilizing the advancements in science (effective antiretroviral therapy, malarial drugs, rapid diagnostics for TB), we can reach more people in need, faster and efficiently. We must do everything we can, to get as far as we can, by December 2015. Anything less will steepen our climb even further post-2015...

[http://www.who.int/mediacentre/news/statements/2013/mdgs\\_20130925/en/index.html](http://www.who.int/mediacentre/news/statements/2013/mdgs_20130925/en/index.html)

**The World Bank Group, UNICEF, USAID and the Government of Norway announced a collective USD\$1.15 billion in funding over the next three years to accelerate progress toward the Millennium Development Goals (MDGs) 4 and 5,** and to ensure essential services and medicines reach women and children who need them in developing countries with the highest burdens of maternal and child deaths.

These commitments "represent one of the largest infusions of funds for maternal and child health from global donors since the MDGs were established in 2000, and signal the global community's determination to support countries in achieving the goals." The funding from these four development partners "will work in a complementary and coordinated way to target a set of high-burden countries, in support of each country's own child and maternal health plan. The resources from the United States, UNICEF, and Norway will largely be used to strengthen existing supply systems, and provide a needed injection of life-saving commodities, to ensure they reach the communities that need them. The resources from the World Bank Group will help countries transform their health service delivery for women and children by explicitly tying payments to health service providers to the successful delivery and independent verification of pre-agreed results..."

[http://www.unicef.org/media/media\\_70444.html](http://www.unicef.org/media/media_70444.html)

**The Global Fund confirmed that the U.S. will host its Fourth Replenishment Conference in early December 2013** through an announcement by Secretary of State John F. Kerry. The conference "will secure funding for 2014-2016, enabling the Global Fund to support programs in countries that fight AIDS, TB and malaria effectively, and to save the lives of millions of people." In April, the U.S. announced a request for US\$1.65 billion for the Global Fund in the budget for 2014. The Global Fund noted that "the architecture of this year's Replenishment Conference signals a commitment to partnership in a 21st Century model, with leaders from implementing countries and leaders from the private sector and leaders from G8 countries, to co-host the event. In addition, thirteen presidents of African countries are acting as champions of the Global Fund Replenishment this year."

[http://www.theglobalfund.org/en/mediacenter/newsreleases/2013-09-25\\_US\\_Will\\_Host\\_Global\\_Fund\\_Replenishment/](http://www.theglobalfund.org/en/mediacenter/newsreleases/2013-09-25_US_Will_Host_Global_Fund_Replenishment/)

Separately, **the Global Fund "congratulated the United Kingdom for demonstrating strong leadership in global health with a major contribution of £1 billion (US\$1.6 billion) for the 2014-2016 period.** The UK commitment "is geared toward encouraging other donors to maximize their own pledges to the Global Fund, effectively unlocking additional

funds with each contribution, as the UK contribution is limited to a maximum of 10 per cent of the total raised for the Global Fund.”

[http://www.theglobalfund.org/en/mediacenter/newsreleases/2013-09-23 UK Commits GBP 1 Billion to the Global Fund/](http://www.theglobalfund.org/en/mediacenter/newsreleases/2013-09-23%20UK%20Commits%20GBP%201%20Billion%20to%20the%20Global%20Fund/)

**Investors led by JPMorgan Chase & Co. (JPM) and the Bill & Melinda Gates Foundation formed the Global Health Investment Fund**, which “will back late-stage development of technologies to fight killer diseases in low-income countries.” A group of investors including the Canadian and German governments and the Children’s Investment Fund Foundation committed \$94 million to the fund. The International Finance Corp., GlaxoSmithKline Plc (GSK), Merck & Co. (MRK), Pfizer Inc. (PFE)’s foundation, Storebrand ASA (STB) are participating.

<http://www.bloomberg.com/news/2013-09-23/jpmorgan-joins-gates-foundation-drugmakers-in-investment-fund.html>

***Global Health Investment Fund – Prospectus Excerpt***

<http://ifcext.ifc.org/IFCExt/spiwebsite1.nsf/DocsByUNIDForPrint/7062F2FE8E6BA8BA85257AAE0066A86A?opendocument>

*General*

The Fund will invest in multiple companies and/or Product Development Partnerships (PDPs) who are advancing the development of promising health products and technologies for diseases that disproportionately affect developing countries.

The project being proposed is a US\$10mm equity investment in a mezzanine fund, the Global Health Investment Fund, LLC (“GHIF” or the “Fund”), sponsored by the Bill and Melinda Gates Foundation. GHIF is seeking to raise approximately US\$100mm for the purpose of improving global health. The Fund would support the development of drugs, vaccines, preventatives, diagnostics and other related technologies aimed at infectious diseases that cause significant morbidity and mortality in developing countries (e.g. neglected infectious diseases), as well as those that provide solutions for maternal, neonatal and child-health challenges.

*Expected Development Impact*

Given the Fund's focus on the late stage in the development of many of the drugs, vaccines and diagnostics in the pipeline, it is reasonable to expect a large development impact on several fronts:

- (i) possible replication of the business model and scale-up of the flow of additional funding into late stage development of drugs for neglected diseases;
- (ii) millions of patients, and especially those in vulnerable population (children and pregnant women) will benefit from the drugs that will be commercialized through this vehicle;
- (iii) by demonstrating the commercial viability of the proposed funding structure, this could prove to be an important catalyst for the development of drugs that otherwise would not be developed; and
- (iv) demonstration effect to other charitable foundations that their money could be multiplied and effects of their charitable giving amplified through this funding mechanism, which is expected to bring positive financial return to investors...

**The HOOKVAC consortium said it was awarded a grant of six million Euros from the European Commission FP7 programme to expand the Sabin Vaccine Institute Product Development Partnership's (Sabin PDP) work to develop and test a vaccine for human hookworm.** Under this grant, the HOOKVAC consortium, which includes partners from the European Union, United States and Africa, will begin the first clinical testing of the human hookworm vaccine in the West African nation of Gabon. The Consortium noted that human hookworm infects 600-700 million of the world's poorest people, primarily those living below the global poverty line, particularly pregnant women and children in sub-Saharan Africa, Southeast Asia, and Latin America. Left untreated, hookworm causes internal blood loss leading to iron-deficiency anemia and malnutrition. Hookworm also contributes to physical and cognitive impairment, poor school performance and attendance, and low birth weights. Ruxandra Draghia-Akli, MD, PhD, director of the Health Directorate at the Research DG of the European Commission, commented, "The European Commission is proud to support the critical work of the consortium for the development of a human hookworm vaccine. Ultimately, we hope that the knowledge, innovations and research expertise resulting from this global collaboration will accelerate the development of the world's first, effective hookworm vaccine and encourage additional European SME partnerships to explore vaccines for NTDs."

26 September 2013 – <http://www.sabin.org/updates/pressreleases/new-global-consortium-advance-first-ever-clinical-testing-human-hookworm>

### **Update: Polio this week - As of 25 September 2013**

Global Polio Eradication Initiative

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

*[Editor's extract and bolded text]*

:: In the Horn of Africa, intensive outbreak response is continuing. The impact of the response is beginning to be seen, as the number of newly-reported cases from Banadir, Somalia (the epicentre of the outbreak) has declined. At the same time, operations are improving as more children are being reached, including in some inaccessible areas of south-central Somalia. The risk this outbreak poses for the entire region was again underscored this week, however, as two further cases from Ethiopia have been confirmed. See 'Horn of Africa' section below, for more information.

:: In Pakistan, 12 new cVDPV2 cases are reported this week, the bulk in North Waziristan, FATA. See 'Pakistan' section for more details....

#### ***Pakistan***

:: ...12 new cVDPV2 cases were reported in the past week, 11 from North Waziristan, Federally Administered Tribal Areas (FATA) and one from Gadap, greater Karachi, Sindh. Onsets of paralysis of the new cases are from 3 July to 21 August. This brings the total number of cVDPV2 cases for 2013 to 24.

:: The cases in North Waziristan are particularly concerning, as it is in an area where immunizations have been suspended by local leaders since last June. Immunizations in neighbouring high-risk areas are being intensified, to further boost population immunity levels in those areas and prevent further spread of this outbreak. North Waziristan is also affected by WPV1 transmission.

:: Additionally, four new environmental samples tested positive for WPV1, from Peshawar, FATA; Gadap, Sindh; Rawalpindi, Punjab; and, Multan, Punjab. Detection of the sample in Multan is particularly concerning, as WPV1 had not been detected in this area since early 2012.

Confirmation of these latest cases in FATA underscores the risk ongoing polio transmission (be it due to WPV or cVDPV) in this area continues to pose to children everywhere, and in particular to children living in areas where access has not been possible for extended periods of time. :: FATA is the major poliovirus reservoir in Pakistan and in Asia, with confirmed circulation of both WPV1 and cVDPV2. More than 350,000 children in this area are regularly missed in inaccessible areas, during immunization activities. Efforts are ongoing to curb transmission in this area, including through vaccination at transit points and conducting Short Interval Additional Dose (SIADs) campaigns in areas that have recently become accessible.

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

:: Seven new WPV1 cases were reported in the past week, five from Somalia and two from Ethiopia. The total number of WPV1 cases for 2013 in the Horn of Africa is 191 (174 from Somalia, 14 from Kenya and three from Ethiopia). The most recent WPV1 case in the region had onset of paralysis on 30 August (from Ethiopia).

:: The two new cases from Ethiopia are both from Somali region, bordering Somalia. It is from this region that the first case from the country had been reported. Active case searches for any additional potential cases is continuing.

:: Because of routes of poliovirus spread in previous Horn of Africa outbreaks, this area of Ethiopia had been considered at 'high risk', and since June had been conducting large-scale immunization campaigns. The response continues to be further strengthened. For example, World Food Programme (WFP) field monitors have been sensitized on AFP surveillance, and a proposal is being evaluated to use community volunteers to further intensify surveillance. Nationally and regionally, public-private partnership coordination is continuing, with National Command Post meetings being held every Monday, chaired by the Health State Minister or Director MCH. Similar coordination meetings are taking place in Somali region.

:: 28 Permanent Vaccination Posts have now been established along the Ethiopia-Somalia border areas and at large transit points.

:: Social mobilization and mass media activities continue to be scaled up in the country, including jingles on TV and radio and banner productions for local levels...

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

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

Disease outbreak news

*No new DON items*

### **WHO Statement on the Third Meeting of the IHR Emergency Committee concerning MERS-CoV**

25 September 2013

*Excerpt, Bolded text by Editor*

The third meeting of the Emergency Committee convened by the Director-General under the International Health Regulations (2005) [IHR (2005)] was held by teleconference on Wednesday, 25 September 2013, from 12:00 to 14:30 Geneva time (CET).

During the informational session, Kingdom of Saudi Arabia and Qatar presented on recent developments in their countries. The WHO Secretariat provided an update on epidemiological developments, Hajj and Umrah and recent WHO activities related to MERS-CoV. The Committee reviewed and deliberated on the information provided.

The Committee concluded that it saw no reason to change its advice to the Director-General. Based on the current information, and using a risk-assessment approach, **it was the**

**unanimous decision of the Committee that the conditions for a Public Health Emergency of International Concern (PHEIC) have not at present been met.**

While not considering the events to constitute a PHEIC, Members of the Committee reiterated their prior advice for consideration by WHO and Member States and emphasized the importance of:

:: strengthening surveillance, especially in countries with pilgrims participating in Umrah and the Hajj;

:: continuing to increase awareness and effective risk communication concerning MERS-CoV, including with pilgrims;

:: supporting countries that are particularly vulnerable, especially in Sub-Saharan Africa taking into account the regional challenges;

:: increasing relevant diagnostic testing capacities;

:: continuing with investigative work, including identifying the source of the virus and relevant exposures through case control studies and other research; and

:: timely sharing of information in accordance with the International Health Regulations (2005) and ongoing active coordination with WHO...

[http://www.who.int/mediacentre/news/statements/2013/mers\\_cov\\_20130925/en/index.html](http://www.who.int/mediacentre/news/statements/2013/mers_cov_20130925/en/index.html)

The **Weekly Epidemiological Record (WER) for 27 September 2013**, vol. 88, 39 (pp. 413–428) includes:

:: Haemophilus influenzae type b (Hib) Vaccination Position Paper – July 2013

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

<http://www.who.int/entity/wer/2013/wer8839.pdf>

**WHO: Recommendation on use of Hib vaccines in all national immunization programmes**

In an updated position paper, WHO continues to recommend the inclusion of Haemophilus influenzae type b (Hib) vaccines in all national immunization programmes. Vaccination remains the only effective means of preventing Hib disease and is becoming increasingly important as Hib antibiotic resistance grows. The use of Hib vaccines should be part of a comprehensive strategy to control pneumonia including: exclusive breastfeeding for six months; hand washing with soap; improved water supply and sanitation; reduction of household air pollution; and improved case management at community and health facility levels.

[WHO Position Paper on Hib vaccination - September 2013](#)

[pdf, 1.27Mb](#)

[http://www.who.int/immunization/newsroom/hib\\_in\\_national\\_immunization\\_programmes/en/index.html](http://www.who.int/immunization/newsroom/hib_in_national_immunization_programmes/en/index.html)

**WHO, FAO, OIE Joint Statement: Elimination of human rabies and rabies control in animals**

28 September is World Rabies Day. This joint statement promises to eliminate human rabies and control the disease in animals. Rabies kills more than 60 000 people annually, most of them children.

[Full details](#)

[Read statement](#)

[Round table discussion–Rabies](#)  
[00:14:31 \[mp3 13.3Mb\]](#)  
[http://www.who.int/neglected\\_diseases/en/index.html](http://www.who.int/neglected_diseases/en/index.html)

**CDC/MMWR Watch** [to 28 September 2013]

September 27, 2013 / Vol. 62 / No. 38

:: [Influenza Vaccination Coverage Among Health-Care Personnel — United States, 2012–13 Influenza Season](#)

:: [Influenza Vaccination Coverage Among Pregnant Women — United States, 2012–13 Influenza Season](#)

:: [Updated Information on the Epidemiology of Middle East Respiratory Syndrome Coronavirus \(MERS-CoV\) Infection and Guidance for the Public, Clinicians, and Public Health Authorities, 2012–2013](#)

:: [Notes from the Field: Department of Defense Response to a Multistate Outbreak of Fungal Meningitis — United States, October 2012](#)

:: [Announcement: Final National and State-Level 2012–13 Influenza Vaccination Coverage Estimates Available Online](#)

**Influenza Vaccination Coverage Among Health-Care Personnel — United States, 2012–13 Influenza Season**

Weekly [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6238a2.htm?s\\_cid=mm6238a2\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6238a2.htm?s_cid=mm6238a2_w)  
September 27, 2013 / 62(38);781-786

*Excerpt, Bolded text by Editor*

Routine influenza vaccination of health-care personnel (HCP) every influenza season can reduce influenza-related illness and its potentially serious consequences among HCP and their patients (1–5). To protect HCP and their patients, the Advisory Committee on Immunization Practices (ACIP) recommends that all HCP be vaccinated against influenza during each influenza season (5). To estimate influenza vaccination coverage among HCP during the 2012–13 season, CDC conducted an opt-in Internet panel survey of 1,944 self-selected HCP during April 1–16, 2013. **This report summarizes the results of that survey, which found that, overall, 72.0% of HCP reported having had an influenza vaccination for the 2012–13 season, an increase from 66.9% vaccination coverage during the 2011–12 season (6).** By occupation type, coverage was 92.3% among physicians, 89.1% among pharmacists, 88.5% among nurse practitioners/physician assistants, and 84.8% among nurses. By occupational setting, vaccination coverage was highest among hospital-based HCP (83.1%) and was lowest among HCP at long-term care facilities (LTCF) (58.9%). Vaccination coverage was higher for HCP in occupational settings offering vaccination on-site at no cost for one (75.7%) or multiple (86.2%) days compared with HCP in occupational settings not offering vaccination on-site at no cost (55.3%). Widespread implementation of comprehensive influenza vaccination strategies that focus on improving access to vaccination services is needed to improve HCP vaccination coverage. Influenza vaccination of HCP in all health-care settings might be increased by providing 1) HCP with information on vaccination benefits and risks for themselves and their patients, 2) vaccinations in the workplace at convenient locations and times, and 3) influenza vaccinations at no cost (7,8)...

**WHO - Humanitarian Health Action**

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

[Read the latest situation report on Syrian Arab Republic, Jordan, Lebanon and Iraq \[pdf, 240MB\]](#)

**UN Watch to 28 September 2013**

Selected meetings, press releases, and press conferences relevant to immunization, vaccines, infectious diseases, global health, etc. <http://www.un.org/en/unpress/>  
*No new relevant content.*

**World Bank/IMF Watch to 28 September 2013**

Selected press releases and other selected content relevant to immunization, vaccines, infectious diseases, global health, etc. <http://www.worldbank.org/en/news/all>  
*No new relevant content.*

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

*Vaccines: 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)*

**Report: Ending Poverty in Our Generation: The Next MDG Framework**

Save the Children

September 2013

<http://www.savethechildren.org/site/c.8rKLIXMGIpI4E/b.8687749/k.CFBF/Post2015.htm>

"The world's current global goals to address extreme poverty – the MDGs – expire in 2015. World leaders have a chance to take this agenda further and finally end extreme poverty in our generation. But it will require more than business as usual – Save the Children's new report explores how addressing income inequality and improving governance would rapidly accelerate progress.

"A historic achievement is within reach. We can be the generation that ends poverty, forever. For the first time, it is feasible to imagine that in the next couple of decades no child will die from preventable causes, every child will be in school and learning, every child will have protection from violence and we will eradicate absolute poverty.

"The Millennium Development Goals (MDGs), one of the most resonant and unifying agreements in political history, reach a turning point in 2015, the deadline for their realization. We must do everything in our power to achieve them, since they provided an important framework to direct political and financial commitments as well as technical breakthroughs for children. We must also find an agreed way forward on work that will remain to be accomplished.

"As a leading independent organization for children, Save the Children is focused on ensuring that the post-2015 framework clearly accounts for the needs and rights of all children..."

**Meeting: The best shot: reaching 22 million missed children. A seminar on accelerating access to vaccination**

MSF

14 October 2013; Oslo, Norway.

"While there have been significant improvements in immunization, more than 1.5 million children die each year of vaccine-preventable diseases. Significant barriers to expanding the reach of vaccines still remain, including the cost of vaccines and the lack of field-adapted products. With more than 22 million children born each year missing their basic immunizations, the international community needs a critical and constructive debate on how to improve universal vaccination coverage.

"The seminar will bring together experienced field practitioners that can share the challenges faced at country level in delivering vaccines with high level policy and decision makers so that we can have a concrete dialogue on what is working and what needs improvement. Speakers include representatives from Médecins Sans Frontières, International Rescue Committee, Duke University, Serum Institute of India, Bill & Melinda Gates Foundation, Harvard University, representatives from country governments, among others."

Programme and registration: <http://www.legerutengrener.no/Vaart-Arbeid/Vaksineseminar>

### **Book: *Existential Challenges to Global Health***

Laurie Garret

Council on Foreign Relations

<http://www.cfr.org/health/existential-challenges-global-health/p31467>

*Overview; Excerpt*

Regardless of which priorities are adopted as targets for the post-2015 world, the constellation of agencies and initiatives that constitute "Global health" face five existential challenges, any one of which could torpedo the lofty, often extraordinarily successful goals and achievements of the collective endeavors. Two of these challenges boil down to money: The search for sustainable support; and the impact inequitable access to funds has on individual health. A third challenge concerns the increasingly obvious mismatch between the structure of "Global health" and the mission's looming priorities. And the fourth and fifth possibly insurmountable challenges reflect the planetary environment within which global health practitioners are operating. Leaders and institutions that are key to Global health have barely recognized these five existential threats, much less develop policy solutions or adaptations...

### ***Journal Watch***

*Vaccines: 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 13, Issue 10, 2013

[http://www.tandfonline.com/toc/uajb20/current#.Uhk8Az\\_hfIY](http://www.tandfonline.com/toc/uajb20/current#.Uhk8Az_hfIY)

[Reviewed earlier; No relevant content]

## **American Journal of Infection Control**

Vol 41 | No. 10 | October 2013 | Pages 853-948

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

### **Viral outbreaks in neonatal intensive care units: What we do not know**

Elisa Civardi, MD, Chryssoula Tzialla, MD, Fausto Baldanti, MD, Luisa Strocchio, MD, Paolo Manzoni, MD, Mauro Stronati, MD

<http://www.ajicjournal.org/article/S0196-6553%2813%2900189-2/abstract>

#### *Abstract*

##### Background

Nosocomial infection is among the most important causes of morbidity, prolonged hospital stay, increased hospital costs, and mortality in neonates, particularly those born preterm. The vast majority of scientific articles dealing with nosocomial infections address bacterial or fungal infections, and viral agents are often disregarded. This analysis reviews the medical literature in an effort to establish the incidence, types of pathogens, and clinical features of noncongenital neonatal viral infections.

##### Methods

This analysis was performed using the worldwide database of health care–associated outbreaks (<http://www.outbreak-database.com>). Items analyzed included causative pathogens, types of infection, source of outbreaks, and measures taken to stop outbreaks.

##### Results

The outbreak database contained a total of 590 neonatal outbreaks, of which 64 were originated by viruses, 44 of which (68.75%) were reported from neonatal intensive care units (NICUs). The 5 most frequent viral agents were rotavirus (23.44%), respiratory syncytial virus (17.19%), enterovirus (15.63%), hepatitis A virus (10.94%), and adenovirus (9.38%).

##### Conclusion

Our analysis of the viral origins of nosocomial infections in NICUs can be a valuable tool in the investigation of neonatal infections. The mortality rates reported in this analysis demonstrate the significance of noncongenital viral infections in NICUs and the need for more effective outbreak prevention strategies.

### **Low level of immunity against hepatitis A among Korean adolescents: Vaccination rate and related factors**

Jung Yeon Heo, MD, Joon Young Song, MD, Ji Yun Noh, MD, Yu Bin Seo, MD, In Sun Kim, MD, Won Suk Choi, MD, Woo Joo Kim, MD, PhD, Gum Joo Cho, MD, Taik Gun Hwang, MD, Hee Jin Cheong, MD, PhD

<http://www.ajicjournal.org/article/S0196-6553%2813%2900667-6/abstract>

#### *Abstract*

##### Background

We evaluated the current vaccination rate and immunity in the Korean adolescent population and analyzed their parents' attitudes toward hepatitis A virus (HAV) vaccination.

##### Methods

Between March and April 2011, sera were collected for immunoglobulin (Ig) G anti-HAV testing from students in their first year of high school from 12 different high schools located in southwestern Seoul. Simultaneously, questionnaires were given to the parents of the students

to evaluate factors related to HAV vaccination, including demographics, HAV vaccination status, reason for getting the vaccination, and awareness regarding HAV.

#### Results

Sera from 2,879 subjects and questionnaires from their parents were collected. The HAV vaccination rate among adolescents aged between 14 and 17 years was 18.9%, and the seroprevalence was 15.4%. Among subjects who reported receiving the HAV vaccination, the IgG anti-HAV seropositivity rate was only 42.2%. For subjects who were not vaccinated, the IgG anti-HAV seropositivity rate was 9.1%. The most significant reason for receiving the vaccination was recommendation from health care providers; the most important source of information regarding the vaccination was public health organizations.

#### Conclusion

HAV vaccination rate and anti-HAV seroprevalence in Korean adolescents was low; the seropositivity rate in the vaccinated group was lower than expected. Actively recommending HAV vaccination in this group is required, and routine, nationwide, government-sponsored vaccination of adolescents against HAV should be considered.

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

Volume 103, Issue S1 (October 2013)

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

[Reviewed earlier; No relevant content]

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

17 September 2013, Vol. 159. No. 6

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

[Reviewed earlier; No relevant content]

#### **BMC Public Health**

(Accessed 28 September 2013)

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

[No new relevant content]

#### **British Medical Bulletin**

Volume 107 Issue 1 September 2013

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

[Reviewed earlier]

#### **British Medical Journal**

28 September 2013 (Vol 347, Issue 7926)

<http://www.bmj.com/content/347/7926>

[No relevant content]

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

Volume 91, Number 9, September 2013, 621-715

<http://www.who.int/bulletin/volumes/91/9/en/index.html>

***Special theme: women's health beyond reproduction - a new agenda***

[Reviewed earlier]

### **Clinical Therapeutics**

Vol 35 | No. 9 | September 2013 | Pages 1253-1474

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

[No relevant content]

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

(Accessed 28 September 2013)

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

[No new relevant content]

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

October 2013 - Volume 26 - Issue 5 pp: v-vi,399-492

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

[Reviewed earlier]

### **Development in Practice**

Volume 23, Issue 4, 2013

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

[Reviewed earlier; No relevant content]

### **Emerging Infectious Diseases**

Volume 19, Number 10—October 2013

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

[Reviewed earlier]

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

Volume 23 Issue 5 October 2013

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

#### **European public health research in Horizon 2020**

[John Browne](#)<sup>1</sup> and [Thorkild I. A. Sørensen](#)<sup>2</sup>

± Author Affiliations

1 Department of Epidemiology and Public Health, University College Cork, Cork, Ireland

2 Faculty of Health and Medical Sciences, University of Copenhagen

Correspondence: John Browne, Department of Epidemiology and Public Health, University College Cork, Cork, Ireland, e-mail: [j.browne@ucc.ie](mailto:j.browne@ucc.ie)

The Directorate General for Research & Innovation of the European Commission (DG-RTD) has provided funding of €425.46 million for public health research since 2000. In September

2012, we were asked to lead as chair (T.I.A.) and rapporteur (J.B.) an Independent Expert Group commissioned by DG-RTD to make recommendations about the future of European public health research in the period 2014–20, the Horizon 2020 funding stream. We here report the main recommendations, supported by all group members.

The group was asked to address four questions:

:: What should the thematic priorities for EU-funded public health research under Horizon 2020 be?

:: How to best structure European Public Health Research in the future?

:: How to develop stronger links and synergies between EU-funded research and national research activities, EU policy agendas and national policy agendas?

:: How to improve the uptake of evidence generated from public health research in the development of public health policy?

An important recommendation is ...

<http://eurpub.oxfordjournals.org/content/23/5/722.extract>

### **Values and ethics amidst the economic crisis**

[Peter Schröder-Bäck](#)<sup>1,2,3</sup>, [Louise Stjernberg](#)<sup>2,4</sup> and [Ann Marie Borg](#)<sup>1</sup>

+ Author Affiliations

<sup>1</sup>Department of International Health, School CAPHRI, Maastricht University, Maastricht, The Netherlands, <sup>2</sup>Working Group "Ethics and Values in Public Health", Association of Schools of Public Health in the European Region (ASPHER), Brussels, Belgium, <sup>3</sup>Section "Ethics in Public Health", European Public Health Association (EUPHA), Utrecht, The Netherlands and <sup>4</sup>School of Health Science, Blekinge Institute of Technology, Karlskrona, Sweden

Correspondence: Peter Schröder-Bäck, Department of International Health, School CAPHRI, Maastricht University, Postbox 616, 6200 MD Maastricht, The Netherlands

#### *Austerity measures and trade-offs*

The current protracted economic crisis is giving rise to the scarcity of public health resources across Europe. In response to budgetary pressures and the Eurozone public debt crisis, decision makers resort to a short-term solution: the introduction of austerity measures in diverse policy fields. Health and social policy tend to be easy targets in this regard, and budget cuts often include a reduction of healthcare expenditure or social welfare benefits.

In fact, in their analysis of the austerity measures being adopted in Europe, Mladovsky et al. have identified that in some countries, we see a shift of public money across sectoral budgets.<sup>1</sup> Against this background, it is argued that 'trade-offs should be understood and made explicit so decision makers can openly weigh evidence against ideology in line with societal values'.<sup>1</sup> But what are these so-called social values that should guide the decisions and policy responses of European decision makers?

<http://eurpub.oxfordjournals.org/content/23/5/723.extract>

### **Eurosurveillance**

Volume 18, Issue 39, 26 September 2013

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

#### ***Rapid communications***

#### **[Taking stock of the first 133 MERS coronavirus cases globally – Is the epidemic changing?](#)**

by PM Penttinen, K Kaasik-Aaslav, A Friaux, A Donachie, B Sudre, AJ Amato-Gauci, ZA Memish, D Coulombier

#### ***Research articles***

## **[High uptake of HPV immunisation in Scotland – perspectives on maximising uptake](#)**

by A Potts, K Sinka, J Love, R Gordon, S McLean, W Malcolm, D Ross, M Donaghy

### **Forum for Development Studies**

Volume 40, Issue 2, 2013

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

[Reviewed earlier; No relevant content]

### **Global Health Governance**

Summer 2013 Archive

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

***Special Series on Universal Health Coverage***

### **Globalization and Health**

[Accessed 28 September 2013]

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

[No new relevant content]

### **Health Affairs**

September 2013; Volume 32, Issue 9

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

*Theme: Navigating The Thorns That Await The ACA*

[No relevant content]

### **Health and Human Rights**

Volume 15, Issue 1

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

*Theme: Realizing the Right to Health Through a Framework Convention on Global Health*

[Reviewed earlier]

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

Volume 8 / Issue 04 / October 2013

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

[Reviewed earlier; No relevant content]

### **Health Policy and Planning**

Volume 28 Issue 28 September 2013

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

[Reviewed earlier]

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

September 2013 Volume 9, Issue 9

<http://www.landesbioscience.com/journals/vaccines/toc/volume/9/issue/9/>

[Reviewed earlier]

**Infectious Agents and Cancer**

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

[Accessed 28 September 2013]

[No new relevant content]

**Infectious Diseases of Poverty**

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

[Accessed 28 September 2013]

[No new relevant content]

**International Journal of Epidemiology**

Volume 42 Issue 4 August 2013

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

[Reviewed earlier; No relevant content]

**International Journal of Infectious Diseases**

Vol 17 | No. 10 | October 2013

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

[No relevant content]

**JAMA**

September 25, 2013, Vol 310, No. 12

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

[No relevant content]

**JAMA Pediatrics**

September 2013, Vol 167, No. 9

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

[Reviewed earlier; No relevant content]

**Journal of Community Health**

Volume 38, Issue 5, October 2013

<http://link.springer.com/journal/10900/38/5/page/1>

[Reviewed earlier]

**Journal of Health Organization and Management**

Volume 27 issue 5 - Latest Issue

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

[No relevant content]

**Journal of Infectious Diseases**

Volume 208 Issue 8 October 15, 2013

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

[Reviewed earlier]

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

July-September 2013 Volume 5 | Issue 3 Page Nos. 91-124

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

[No relevant content]

**Journal of Medical Ethics**

October 2013, Volume 39, Issue 10

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

[No relevant content]

**Journal of Medical Microbiology**

October 2013; 62 (Pt 10)

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

[No relevant content]

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

Volume 2 Issue 3 September 2013

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

[Reviewed earlier]

**Journal of Pediatrics**

Vol 163 | No. 4 | October 2013 | Pages 929-1234

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

[No relevant content]

**Journal of Public Health Policy**

Volume 34, Issue 3 (August 2013)

<http://www.palgrave-journals.com/jphp/journal/v34/n3/index.html>

[No relevant content]

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

December 6, 2013; 10 (89)

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

[No relevant content]

## **Journal of Virology**

October 2013, volume 87, issue 19

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

[No relevant content]

## **The Lancet**

Sep 28, 2013 Volume 382 Number 9898 p1071 – 1152 e6 - 9

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

### ***Comment***

#### **Secure use of individual patient data from clinical trials**

Patrick Vallance, Iain Chalmers

[Preview](#) |

Publishing the results of all clinical trials, whoever funds them, is required for ethical, scientific, economic, and societal reasons.<sup>1</sup> Individuals who take part in trials need to be sure that data they contribute are used to further knowledge, prevent unnecessary duplication of research, and improve the prospects for patients.

### ***Letter***

#### **Poliomyelitis: threats to eradication**

Mohammed Umer Mir, Mehreen Bhamani

[Preview](#) |

The recent isolation of wild poliovirus from Israeli sewage samples<sup>1</sup> (environmental sampling) elucidates an important consideration for polio eradication. The local population has humoral immunity against the poliovirus because of high rates of coverage with inactivated polio vaccine (IPV).<sup>2</sup> But not everyone has mucosal (intestinal) immunity because of removal of oral polio vaccine (OPV) from routine immunisation since 2005, and absence of endemic wild poliovirus conferring natural immunity. People immunised with IPV are protected from disease but the poliovirus replicates in their intestines and is shed with stools for about 3 weeks after initial infection.

## **The Lancet Global Health**

Oct 2013 Volume 1 Number 4 e169 - 237

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

### ***Comment***

#### **The Global Health Innovative Technology (GHIT) Fund: financing medical innovations for neglected populations**

BT Slingsby, Kiyoshi Kurokawa

[Preview](#) |

The newly launched Global Health Innovative Technology (GHIT) Fund, which is multisectoral, interdisciplinary, and not for profit, aims to expedite the generation of novel medical technologies and drugs to diagnose, prevent, and treat high-prevalence infectious diseases

worldwide. The GHIT Fund represents the first public–private partnership to involve a national government, a UN agency, a consortium of pharmaceutical companies, and an international philanthropic foundation (founding partners are the Japanese Ministry of Foreign Affairs; the Japanese Ministry of Health, Labour and Welfare; the UN Development Programme; Astellas Pharma; Daiichi Sankyo Company; Eisai Company; Shionogi & Company; Takeda; and the Bill & Melinda Gates Foundation).

### **The Lancet Infectious Diseases**

Oct 2013 Volume 13 Number 10 p823 - 906

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

#### ***Comment***

#### **Preventive measures against MERS-CoV for Hajj pilgrims**

Philippe Gautret, Samir Benkouiten, Imane Salaheddine, Philippe Parola, Philippe Brouqui  
[Preview](#) |

Assiri and colleagues<sup>1</sup> provide a clinical synopsis of 47 cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection identified between September, 2012, and June, 2013, in Saudi Arabia. Of note is the high rate of underlying comorbidity in patients with MERS (table). Since the first cases were reported in April, 2012, from Jordan, most cases have been reported from Saudi Arabia where the Hajj, the largest religious mass gathering, takes place annually. Given the predicted population movements out of Saudi Arabia, potential for worldwide spread of MERS-CoV exists according to Kahn and colleagues.

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

October 2013; 33 (7)

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

[Reviewed earlier]

### **The Milbank Quarterly**

*A Multidisciplinary Journal of Population Health and Health Policy*

September 2013 Volume 91, Issue 3 Pages 419–65

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

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### **Nature**

Volume 501 Number 7468 pp461-584 26 September 2013

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

[No relevant content]

### **Nature Immunology**

September 2013, Volume 14 No 9 pp879-975

<http://www.nature.com/ni/journal/v14/n9/index.html>

[Reviewed earlier; No relevant content]

**Nature Medicine**

September 2013, Volume 19 No 9 pp1073-1189

<http://www.nature.com/nm/journal/v19/n9/index.html>

[Reviewed earlier]

**Nature Reviews Immunology**

October 2013 Vol 13 No 10

<http://www.nature.com/nri/journal/v13/n10/index.html>

[No relevant content]

**New England Journal of Medicine**

September 26, 2013 Vol. 369 No. 13

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

[No relevant content]

**OMICS: A Journal of Integrative Biology**

October 2013, 17(10)

<http://online.liebertpub.com/toc/omi/17/9>

[No relevant content]

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

August 2013 Vol. 34, No. 2

[http://www.paho.org/journal/index.php?option=com\\_content&view=article&id=129&Itemid=227&lang=en](http://www.paho.org/journal/index.php?option=com_content&view=article&id=129&Itemid=227&lang=en)

[No relevant content]

**The Pediatric Infectious Disease Journal**

October 2013 - Volume 32 - Issue 10 pp: e383-e413,1045-1158

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

[Reviewed earlier]

**Pediatrics**

September 2013, VOLUME 132 / ISSUE 3

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

[Reviewed earlier]

**Pharmaceutics**

Volume 5, Issue 3 (September 2013), Pages 371-

<http://www.mdpi.com/1999-4923/5/3>

[No new relevant content]

### **Pharmacoeconomics**

Volume 31, Issue 9, September 2013

<http://link.springer.com/journal/40273/31/9/page/1>

[Reviewed earlier]

### **PLoS One**

[Accessed 28 September 2013]

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

Research Article

#### **Vaccinating Women Previously Exposed to Human Papillomavirus: A Cost-Effectiveness Analysis of the Bivalent Vaccine**

Hugo C. Turner, Iacopo Baussano, Geoff P. Garnett

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0075552>

#### *Abstract*

Recent trials have indicated that women with prior exposure to Human papillomavirus (HPV) subtypes 16/18 receive protection against reinfection from the HPV vaccines. However, many of the original models investigating the cost effectiveness of different vaccination strategies for the protection of cervical cancer assumed, based on the trial results at that time, that these women received no protection. We developed a deterministic, dynamic transmission model that incorporates the vaccine-induced protection of women with prior exposure to HPV. The model was used to estimate the cost effectiveness of progressively extending a vaccination programme using the bivalent vaccine to older age groups both with and without protection of women with prior exposure. We did this under a range of assumptions on the level of natural immunity. Our modelling projections indicate that including the protection of women with prior HPV exposure can have a profound effect on the cost effectiveness of vaccinating adults. The impact of this protection is inversely related to the level of natural immunity. Our results indicate that adult vaccination strategies should potentially be reassessed, and that it is important to include the protection of non-naive women previously infected with HPV in future studies. Furthermore, they also highlight the need for a more thorough investigation of this protection.

### **PLoS Medicine**

(Accessed 28 September 2013)

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

[No new relevant content]

### **PLoS Neglected Tropical Diseases**

September 2013

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

#### ***Policy Platform***

**[Preparing for Dengue Vaccine Introduction: Recommendations from the 1st Dengue v2V International Meeting](#)**

Joseph Torresi, Roberto Tapia-Conyer, Harold Margolis  
PLOS Neglected Tropical Diseases: published 26 Sep 2013 |  
info:doi/10.1371/journal.pntd.0002261

**[Integration of Water, Sanitation, and Hygiene for the Prevention and Control of Neglected Tropical Diseases: A Rationale for Inter-Sectoral Collaboration](#)**

Matthew C. Freeman, Stephanie Ogden, Julie Jacobson, Daniel Abbott, David G. Addiss, Asrat G. Amnie, Colin Beckwith, Sandy Cairncross, Rafael Callejas, Jack M. Colford Jr, Paul M. Emerson, Alan Fenwick, Rebecca Fishman, Kerry Gallo, Jack Grimes, Gagik Karapetyan, Brooks Keene, Patrick J. Lammie, Chad MacArthur, Peter Lochery, Helen Petach, Jennifer Platt, Sarina Prabasi, Jan Willem Rosenboom, Sharon Roy, Darren Saywell, Lisa Schechtman, Anupama Tantri, Yael Velleman, Jürg Utzinger

PLOS Neglected Tropical Diseases: published 26 Sep 2013 |  
info:doi/10.1371/journal.pntd.0002439

**[Public Acceptance and Willingness-to-Pay for a Future Dengue Vaccine: A Community-Based Survey in Bandung, Indonesia](#)**

Panji Fortuna Hadisoemarto, Marcia C. Castro

PLOS Neglected Tropical Diseases: published 19 Sep 2013 |  
info:doi/10.1371/journal.pntd.0002427

*Abstract*

Background

All four serotypes of dengue virus are endemic in Indonesia, where the population at risk for infection exceeds 200 million people. Despite continuous control efforts that were initiated more than four decades ago, Indonesia still suffers from multi-annual cycles of dengue outbreak and dengue remains as a major public health problem. Dengue vaccines have been viewed as a promising solution for controlling dengue in Indonesia, but thus far its potential acceptability has not been assessed.

Methodology/Principal Findings

We conducted a household survey in the city of Bandung, Indonesia by administering a questionnaire to examine (i) acceptance of a hypothetical pediatric dengue vaccine; (ii) participant's willingness-to-pay (WTP) for the vaccine, had it not been provided for free; and (iii) whether people think vector control would be unnecessary if the vaccine was available. A proportional odds model and an interval regression model were employed to identify determinants of acceptance and WTP, respectively. We demonstrated that out of 500 heads of household being interviewed, 94.2% would agree to vaccinate their children with the vaccine. Of all participants, 94.6% were willing to pay for the vaccine with a median WTP of US\$1.94. In addition, 7.2% stated that vector control would not be necessary had there been a dengue vaccination program.

Conclusions/Significance

Our results suggest that future dengue vaccines can have a very high uptake even when delivered through the private market. This, however, can be influenced by vaccine characteristics and price. In addition, reduction in community vector control efforts may be observed following vaccine introduction but its potential impact in the transmission of dengue and other vector-borne diseases requires further study.

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

(Accessed 28 September 2013)

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

[No new relevant content]

### **Public Health Ethics**

Volume 6 Issue 2 July 2013

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

[Reviewed earlier]

### **Qualitative Health Research**

September 2013; 23 (9)

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

[Reviewed earlier]

### **Risk Analysis**

September 2013 Volume 33, Issue 9 Pages 1565–1757

<http://onlinelibrary.wiley.com/doi/10.1111/risa.2013.33.issue-9/issuetoc>

[Reviewed earlier]

### **Science**

27 September 2013 vol 341, issue 6153, pages 1421-1548

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

[No relevant content]

### **Science Translational Medicine**

25 September 2013 vol 5, issue 204

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

#### **Editorial - POLICY**

#### **Vaccine Economics: What Price Human Life?**

<http://stm.sciencemag.org/content/5/204/204ed16.full>

John J. Mekalanos

In the age of Google “Images,” a few keystrokes reveal the forgotten human experience in the prevaccination era of public health. With only a few search terms—such as polio iron lungs, tetanus spasms, smallpox scars, or meningitis amputations—we receive vivid reminders of the horrendous price of ignorance, paid before we knew how to prevent infectious diseases through vaccination campaigns and childhood immunization. Therefore, it is more than a little ironic when we are told that we cannot “afford” a needed vaccine despite the fact that it will save lives.

Such a telling tale has surfaced in the UK. The UK Joint Committee on Vaccination and Immunisation (JCVI)—which recommends vaccines for inclusion in the country’s childhood immunization program—failed to recommend a recently approved vaccine against bacterial meningitis primarily on the basis of a fallacious argument of low cost-effectiveness (1). The committee’s action undermines an unheralded guideline that has served science and society for

nearly a century: We must develop and deploy vaccines to prevent death and alleviate human suffering, rather than have the anticipated cost benefits drive the process.

The new trend, epitomized by the recent JCVI opinion, prioritizes health care outcomes in economic rather than humanistic terms. This represents a type of health care rationing that threatens not only our immediate well-being but also the long-term viability of an essential business sector—vaccine development and manufacturing. Would anyone be surprised if vaccine developers began to seek more fruitful areas of investment?

#### COURAGE AND CONSEQUENCES

On 24 July 2013, JCVI chose not to recommend for routine use in the UK a vaccine called 4CMenB (licensed in Europe as Bexsero by Novartis) ([1](#)), which very likely protects against a highly infectious form of invasive meningococcal disease (IMD) called MenB. Some 10,000 cases of this bacterial infection occurred in the UK over the past decade, resulting in ~500 deaths and 5000 victims who suffer long-term disabilities ranging from brain damage to limb amputations ([2](#)).

The world burden of MenB is high, particularly in developing countries. Vaccines developed for other forms of IMD are highly effective and have virtually eliminated the disease where they have been introduced and thus have saved countless lives and limbs. The approach used to make earlier non-MenB vaccines (that is, polysaccharide protein conjugation) cannot be applied to MenB because of immunological cross-reaction of the MenB polysaccharide antigen with human polysaccharides. 4CMenB is the first of a new generation of nonconjugate vaccines that are predicted to be protective by inducing bactericidal antibodies to nonpolysaccharide protein surface determinants of the meningococcus—a property that led in part to its licensure in Europe.

The 4CMenB vaccine is safe, but JCVI chose to focus its analysis largely on (i) the vaccine's cost-effectiveness and (ii) the design of the human clinical studies performed to determine the vaccine's ability to protect specifically against MenB. JCVI stated that the 4CMenB vaccine is not cost-effective at any price—meaning that even if a company provided the vaccine for free, the cost of vaccine implementation alone would exceed the value of the vaccine to society. The ability of vaccines to prevent disease has traditionally been determined in clinical trials. But because the occurrence of MenB in the developed world is low and epidemics are hard to predict, classical placebo-controlled clinical trials to determine the ability of 4CMenB to protect against MenB are virtually impossible to conduct. Much larger, population-based studies would be needed to define the vaccine's efficacy, duration of protection, and ability to induce herd immunity (the concept that even unvaccinated individuals benefit because their vaccinated neighbors slow or prevent spread of the microbe in their community). However, such post-deployment studies presuppose that advisory agencies have the courage to recommend a needed and safe vaccine for implementation in a public health setting without prioritizing economic arguments to support the decision.

#### COSTLY DECISIONS

Most importantly, why is cost-benefit analysis driving the 4CMenB decision at all? Some might argue that we can accurately determine the value of young human lives and assess the impact of death and disability using purely economic concepts and algorithms. However, the criteria and mechanisms we use to estimate the value of preventive medical care in general, and vaccine implementation in particular, need more careful scrutiny and debate ([3](#), [4](#)). Such economic criteria are not routinely applied to the implementation of therapies that extend life marginally for patients with terminal illnesses frequently associated with aging. For example, we have no qualms about administering expensive treatments such as surgery and chemotherapy to some very sick cancer patients who will likely see only a minor extension of their life span at

best. Sick adults have strong and loud political advocates that make insurers pick up the bill; healthy (but at-risk) children have far fewer. Clearly a disproportionate amount of our health care dollars goes to end-of-life care. If health care is a zero-sum game, then the societal benefit of such expenditures should be scrutinized no less rigorously than that of an efficacious new vaccine.

In the end, how should society value a young life? Although the absolute numbers of deaths and disabilities prevented by a MenB vaccine might be modest in comparison with other infectious diseases, the humanistic impact is immeasurable. Parents who have lost a young child to MenB or who must care for a meningococcal victim suffering from brain damage or multiple amputations are perhaps the best source of information when it comes to determining a reasonable price tag for prevention of such a devastating disease.

Decades ago, the aggressive use of antibiotics led some leading lights to pronounce the imminent elimination of infectious diseases. These opinions drove industry out of the antibiotic-discovery business and further drove many universities to disband their microbiology departments. Tens of millions of annual infectious-disease deaths later, we now know better: Week after week, news articles chronicle examples of the imminent threat of drug-resistant and emerging pathogens. There is no reason to assume that we will be spared from future new threats that require intervention in the form of vaccines, arguably the most effective public health measure ever put into practice.

The 4CMenB vaccine story is a watershed event in the field of vaccinology in that a badly needed vaccine is being effectively blocked by a policy driven by hypothetical financial concerns of cost-effectiveness. This vaccine took 17 years to develop, and its approval in Europe by regulatory agencies analogous to the U.S. Food and Drug Administration underscores the validity of the science that predicts the vaccine's utility in saving lives. JCVI should consider carefully the effect that its recommendations have on enterprises that protect human health. Such decisions send shock waves through the very industries we must sustain for the public good, as no government agency or academic institution is currently equipped to step into the breach. Vaccinology is not like photography, in which new digital formats simply displaced old Kodachrome film in a matter of a few years. Technological replacements for traditional vaccines such as genetic immunization are nowhere on the horizon. Vaccines have prevented the loss of countless lives and have alleviated human suffering well beyond the capabilities of economists to measure in numerical terms. Policies that block access to vaccines or prioritize vaccine-development efforts purely on the basis of economic considerations are both ethically and strategically flawed.

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Invasive meningococcal infections (England and Wales), annual report for 2011/12. Health Protection Report 7, numbers 18–22 (2013); available at [www.hpa.org.uk/hpr/archives/2013/hpr18-2213.pdf](http://www.hpa.org.uk/hpr/archives/2013/hpr18-2213.pdf).

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S. Black

The role of health economic analyses in vaccine decision making. *Vaccine*, published online 20 August 2013

[CrossRefMedline](#)

### **Social Science & Medicine**

Volume 98, [In Progress](#) (December 2013)

<http://www.sciencedirect.com/science/journal/02779536/93>

[No new relevant content]

### **UN Chronicle**

Vol 1, No.2, 2013

<http://www.un.org/wcm/content/site/chronicle/home/archive/issues2013/security>

[Reviewed earlier]

### **Vaccine**

Volume 31, Issue 42, Pages 4689-4932 (1 October 2013)

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

[Reviewed earlier]

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

(Accessed 28 September 2013)

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

[No new relevant content]

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

(Accessed 28 September 2013)

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

*Vaccines (ISSN 2076-393X), an international open access journal, is published by MDPI online quarterly.*

[No new relevant content]

### **Value in Health**

Vol 16 | No. 6 | September-October 2013 | Pages 907-1110

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

[No relevant content]

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

**[Geographic variation in human papillomavirus vaccination uptake among young adult women in the United States during 2008–2010](#)**

M Rahman, TH Laz, AB Berenson - **Vaccine**, 2013

Abstract Very little is known about geographic variation in human papillomavirus (HPV) **vaccine** uptake among young adult women in the US. To investigate this, we analyzed data from 12 US states collected through the Behavioral Risk Factor Surveillance System ...

### **Social Justice and HIV Vaccine Research in the Age of Pre-Exposure Prophylaxis and Treatment as Prevention.**

TC Bailey, J Sugarman - Current HIV research, 2013

The advent of treatment as prevention (TasP) and pre-exposure prophylaxis (PrEP) as means of HIV prevention raises issues of justice concerning how most fairly and equitably to apportion resources in support of the burgeoning variety of established HIV treatment and ...

### **Highly Divergent Types 2 and 3 Vaccine-Derived Polioviruses Isolated from Sewage in Tallinn, Estonia**

H Al-Hello, J Jorba, S Blomqvist, R Raud, O Kew... - Journal of Virology, 2013

ABSTRACT Highly divergent vaccine-derived polioviruses (VDPVs) have been isolated from sewage in Tallinn, Estonia, since 2002. Sequence analysis of VDPVs of serotypes 2 and 3 showed that they shared common noncapsid region recombination sites, indicating

### ***Specialized program newsletters, online publications***

#### **Op.ti.mize**

PATH-WHO

Issue #17 | September 2013

<http://e2.ma/message/x58uf/tm7peb>

pdf: <http://e2.ma/click/x58uf/tm7peb/5nkyqb>

### **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 28 September 2013

[No new, unique, relevant content]

#### **The Atlantic**

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

*Accessed 28 September 2013*

[No new, unique, relevant content]

### **BBC**

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

*Accessed 28 September 2013*

### **Brookings**

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

*Accessed 28 September 2013*

[No new, unique, relevant content]

### **Council on Foreign Relations**

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

*Accessed 28 September 2013*

[No new, unique, relevant content]

### **Economist**

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

*Accessed 28 September 2013*

[No new, unique, relevant content]

### **Financial Times**

<http://www.ft.com>

*Accessed 28 September 2013*

[No new, unique, relevant content]

### **Forbes**

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

*Accessed 28 September 2013*

[No new, unique, relevant content]

### **Foreign Affairs**

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

*Accessed 28 September 2013*

[No new, unique, relevant content]

### **Foreign Policy**

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

*Accessed 28 September 2013*

### **The Guardian**

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

*Accessed 28 September 2013*

#### **Global Fund's \$15bn must buy results rather than rhetoric**

[The Guardian](#) | 27 September 2013

By Amanda Glassman

### **The Huffington Post**

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

Accessed 28 September 2013

#### **Innovation in the Name of Global Partnership: What the Private Sector Must Bring to the Post-2015 Development Agenda**

Duncan Learnmouth, SVP Developing Countries & Market Access, GlaxoSmithKline

[http://www.huffingtonpost.co.uk/duncan-learnmouth/private-sector-and-global-health\\_b\\_3974481.html](http://www.huffingtonpost.co.uk/duncan-learnmouth/private-sector-and-global-health_b_3974481.html)

### **Le Monde**

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

Accessed 28 September 2013

[No new, unique, relevant content]

### **New Yorker**

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

Accessed 28 September 2013

[No new, unique, relevant content]

### **New York Times**

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

Accessed 28 September 2013

[No new, unique, relevant content]

### **Reuters**

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

Accessed 28 September 2013

[No new, unique, relevant content]

### **Wall Street Journal**

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

Accessed 28 September 2013

### **Washington Post**

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

Accessed 28 September 2013

[No new, unique, relevant content]

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