#### Center for Vaccine Ethics and Policy

NYU | Wistar Institute | CHOP

## Vaccines: The Week in Review 22 September 2012 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 <a href="http://centerforvaccineethicsandpolicy.wordpress.com/">http://centerforvaccineethicsandpolicy.wordpress.com/</a>. 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* 

**The Decade of Vaccine Collaboration (DoVC) made two announcements regarding the continuing development of GVAP (Global Vaccine Action Plan).** The first was a request for further input on GVAP's Monitoring & Evaluation (M&E) indicators, noting that the "final set of GVAP indicators" will be presented to the WHO's Strategic Advisory Group of Experts (SAGE) during its November 2012 meeting, to the WHO Executive Board in January 2013 and at the World Health Assembly in May 2013. The DoVC said that "as with the GVAP itself, a wider consultation process is requested to secure further input to the indicators before they are finalized for WHO review." A matrix with the M&E indicators, including operational definitions, data sources, baselines, targets and milestones is available here: <a href="http://www.dovcollaboration.org/wp-content/uploads/2012/09/Indicator-work-sheet-11-Sep-2012.xlsx">http://www.dovcollaboration.org/wp-content/uploads/2012/09/Indicator-work-sheet-11-Sep-2012.xlsx</a> Feedback should be directed to Laurie Werner (<a href="http://werner@path.org">werner@path.org</a>) by Friday, 5 October 2012.

The second announcement related to defining an accountability framework. The DoVC said that "accountability refers to the cyclical process of assessing progress, documenting success, identifying problems and taking prompt action when and where appropriate. The WHO is taking the lead on strengthening and expanding existing immunization review mechanisms to include the Decade of Vaccines and the GVAP's indicators." At the global level, the DoVC announced that "the primary mechanism is the WHO Strategic Advisory Group of Experts (SAGE)." The announcement noted that "WHO Regional Immunization Technical Advisory Groups and existing mechanisms at the national level, such as the Interagency Coordinating Committees (ICCs) and the National Immunization Technical Advisory Groups (NITAGs), could take on a role similar to that which SAGE has at the global level."

http://www.dovcollaboration.org/dov-collaboration-updates/september-2012-dov-collaboration-update/

PAHO Member States elected Dr. Carissa Etienne as the new Director of the Pan American Health Organization during the 28th Pan American Sanitary Conference. Dr. Etienne begins her five-year term on 1 February 2013, succeeding Dr. Mirta Roses Periago of Argentina, who has been PAHO Director since 2003. Dr. Etienne, a native of Dominica, is currently Assistant Director General, Health Systems and Services, at WHO in Geneva. From 2003 to 2008, she served as Assistant Director of PAHO. Dr. Etienne commented, "Our Region is strong. We now see political stability and economic prosperity in the Region at unprecedented levels. At the same time, there are millions of people, some of them in our wealthiest Member States, who do not have access to the social determinants of health or the health care they desperately need. Seventy-four million are living in conditions of extreme poverty. This is a reflection of the inequities that afflict many of our Member States and our Region and present a challenge to us all to strive for social justice, to ensure social inclusion, and to be proactive in addressing the needs of vulnerable and marginalized peoples." Dr. Etienne said her vision of the Americas is one of "societies free of inequality, where people have access to healthy social determinants and environments that allow them to live long, dignified, healthy, and productive lives. This includes access to universal health services without fear of being impoverished." Dr. Etienne holds degrees in medicine and surgery from the University of the West Indies as well as a master's in community health and an honorary diploma in public health from the London School of Hygiene and Tropical Medicine.

http://new.paho.org/hq/index.php?option=com\_content&view=article&id=7208&Itemid=1926

PAHO member country representatives "discussed options for maintaining support from the GAVI Alliance for acquisition of new vaccines, strengthening health systems and other vaccine-related interventions in six countries that have been benefiting from this support." The discussions occurred during the 28th Pan American Sanitary Conference, held at PAHO headquarters, in Washington D.C. PAHO said that four countries in the Americas-Bolivia, Cuba, Guyana and Honduras— began a "graduation process" in 2011 when their gross national income surpassed US\$1,500 per capita, the threshold for GAVI eligibility. GAVI support for their national immunization programs is scheduled to be phased out over the next four years. From 2000 to -2012, the GAVI Alliance provided US\$62 million in support for vaccination programs for these four countries and for Nicaragua and Haiti, which continue to be eligible for GAVI support. Country representatives noted that "despite their new status as 'graduating countries,' they continue to face important challenges in maintaining the strong performance of their national immunization programs. They called on GAVI to explore different options for continued support. Some countries face a simultaneous phase-out of the resources from the Global Fund for AIDS, Tuberculosis and Malaria, making the transition particularly challenging in the current economic climate."

http://new.paho.org/hq/index.php?option=com\_content&view=article&id=7213%3Alowincome-countries-of-the-americas-seek-continued-gavi-support-for-their-national-immunizationprograms&catid=1443%3Anews-front-page-items&lang=en&Itemid=1926 GAVI said that Health Minister Professor Chen Zhu "marked the Chinese Government's first high-level meeting with the GAVI Alliance on Monday by signaling China's willingness to expand collaboration with the Alliance." Minister Chen, meeting with GAVI CEO Dr. Seth Berkley in Beijing, "indicated his Government's interest in sponsoring and engaging with multilateral aid efforts in the public health sector, such as the GAVI Alliance. In parallel, the Minister is keen for China to work closely with GAVI to help its domestic vaccine manufacturers meet international standards." Dr. Berkley commented, "Both China and India are two countries that need to produce large quantities of vaccines to immunise their very large birth cohorts. GAVI looks forward to working with Chinese manufacturers in producing affordable life-saving vaccines in sufficient quantities to enable their distribution to children throughout Africa and Asia." GAVI added that "with Chinese vaccine companies growing fast, Minister Chen expressed his confidence in their future capacity to meet large-scale demand. However, the Minister added that the Chinese Government places even greater emphasis on the research and development of new vaccines, with plans to establish a vaccine centre at the national Centre for Disease Control (CDC)."

http://www.gavialliance.org/library/news/gavi-features/2012/china-ready-to-expandcollaboration-with-gavi/

The **Weekly Epidemiological Record (WER) for 21 September 2012**, vol. 87, 38 (pp. 357–368) includes:

- Outbreak news – Ebola, Democratic Republic of Congo – update

- Update on vaccine-derived polioviruses detected worldwide, April 2011– June 2012 http://www.who.int/entity/wer/2012/wer8738.pdf

#### Update: Polio this week - As of 19 Sep 2012

Global Polio Eradication Initiative

#### [Editor's Extract]

Next week (on 27 September), UN Secretary General Ban Ki-moon will host a high-level event on polio eradication, in the margins of the UN General Assembly in New York. The event, 'Our Commitment to the Next Generation: The Legacy of a Polio-free World' will bring together leaders of the remaining endemic countries, donor governments, development agencies, spearheading partners and representatives of the media, to draw attention to the urgent need for focus and commitment to eradicate the remaining 1% of polio cases worldwide.

The event will be followed by a global civil society festival on 29 September, bringing together top artists with an audience of 60,000 to a concert in New York's Central Park, to catalyse further action to end polio and extreme poverty. For more, please visit <u>www.globalfestival.com</u>

#### Nigeria

- Four new cases were reported in the past week (two WPV1s from Kano and two WPV1s from Jigawa), bringing the total number of cases for 2012 to 88. The most recent case had onset of paralysis on 20 August (WPV1 from Jigawa).

- Additionally, two new cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) were reported from Kano state, the most recent of which had onset of paralysis on 1 August. Nigeria remains the only country in the world with ongoing circulation of all three serotypes: WPV1, WPV3 and cVDPV2...

#### Pakistan

- Five new cases were reported in the past week (all WPV1s, four from Khyber Pakhtunkhwa – KP, and one from Punjab), bringing the total number of cases for 2012 to 35. The most recent case had onset of paralysis on 30 August (WPV1 from KP).

- These latest cases are not in the traditional reservoir areas of KP and FATA (mainly centred around Peshawar and Khyber Agency), but are from adjacent districts in north-eastern KP. A mop-up outbreak response is currently being planned in the area...

#### Horn of Africa

- Following confirmation two weeks ago of a cVDPV type 2 case in a Somali refugee camp in Dadaab, Kenya (linked to last year's cVDPV type 2 in south-central Somalia), a further cVDPV2 case was reported from Kismayo, south-central Somalia. This case had onset of paralysis on 23 July.

- An immunization response is currently being planned, to reach more than 800,000 children in eastern Kenya, including in the Dadaab refugee camps (target age groups in the camps will be <15 years)...

http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx

## WHO: Global Alert and Response (GAR)

- 18 September 2012

Cholera in Sierra Leone - update - <u>18 September 2012</u> Ebola outbreak in Democratic Republic of Congo – update http://www.who.int/csr/don/en/index.html

## Conferences/Reports/Research/Analysis/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: <u>david.r.curry@centerforvaccineethicsandpolicy.org</u>

## Meeting: 10th International Rotavirus Symposium

Bangkok, Thailand

Meeting website: www.rotavirus2012.org

The Sabin Institute said that more than 350 leading scientific, public and private sector experts convened to discuss progress and next steps in reducing the global incidence of rotavirus, the most common cause of diarrheal hospitalizations and deaths among children worldwide. Rotavirus takes the lives of approximately 188,000 Asian children under five each year. Vaccines are the best way to prevent rotavirus because interventions that prevent other forms of diarrhea – including improved hygiene, sanitation and safe drinking water – do not adequately prevent the spread of rotavirus. Combining rotavirus vaccines with other diarrhea protection and treatment methods such as oral rehydration therapy, zinc supplementation, breastfeeding and improved hygiene, sanitation and nutrition can significantly reduce child illnesses and deaths. Dr. Ciro de Quadros, executive vice president of the Sabin Vaccine

Institute and co-chair of the Rotavirus Organization of Technical Allies (ROTA Council), said, "Rotavirus continues to pose a serious and unnecessary threat to children all over the world because there is insufficient access to existing vaccines. That is why we continue to press for expanded access to safe and effective rotavirus vaccines in order to achieve our ultimate objective of saving lives and reducing illness and needless suffering." http://www.sabin.org/news-resources/in-news/2012/09/21/experts-convene-address-major-

cause-childhood-illness-and-death

#### Meeting: CDC - ACIP Meeting

24-25 October 2012 Draft agenda as of 17 September 2012: <u>http://www.cdc.gov/vaccines/acip/meetings/downloads/agenda-archive/agenda-2012-10.pdf</u>

## Meeting: WHO - Strategic Advisory Group of Experts (SAGE) on Immunization

6-8 November 2012, Geneva Draft agenda as of 6 September 2012 <u>http://www.who.int/entity/immunization/sage/Annotated\_draft\_Agenda\_6-8\_Nov\_SAGE\_2012\_September\_6.pdf</u>

## Reference: <u>Health in the Americas 2012 Edition - Regional Outlook and Country</u> <u>Profiles</u>

In *Health in the Americas, 2012* the Pan American Sanitary Bureau presents and analyzes the data and information from every country in the Region of the Americas. In drafting the publication, it has used data from many domestic and international, as well as unofficial, sources, trying as much as possible to identify and eliminate any discrepancies.

- <u>High resolution version of Health in the Americas 2012 Edition for print</u> <u>http://new.paho.org/saludenlasamericas/index.php?</u> <u>option=com\_content&view=article&id=9&Itemid=14&lang=en</u>

#### 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: <u>david.r.curry@centerforvaccineethicsandpolicy.org</u>

## **American Journal of Public Health**

Volume 102, Issue 10 (October 2012)

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

## Contribution of communication inequalities to disparities in human papillomavirus vaccine awareness and knowledge.

Kontos EZ, Emmons KM, Puleo E, Viswanath K. Source

Emily Z. Kontos is with Harvard School of Public Health, Department of Society, Human Development and Health, Boston, MA. Karen M. Emmons and K. Viswanath are with Harvard School of Public Health, Department of Society, Human Development and Health, and Dana-Farber Cancer Institute, Medical Oncology, Boston. Elaine Puleo is with University of Massachusetts, Amherst School of Public Health and Health Sciences, Amherst. Abstract

Objectives. We examined the association of Internet-related communication inequalities on human papillomavirus (HPV) vaccine awareness and infection knowledge. Methods. We drew data from National Cancer Institute's 2007 Health Information National Trends Survey (n = 7674). We estimated multivariable logistic regression models to assess Internet use and Internet health information seeking on HPV vaccine awareness and infection knowledge. Results. Non-Internet users, compared with general Internet users, had significantly lower odds of being aware of the HPV vaccine (odds ratio [OR] = 0.42; 95% confidence interval [CI] = (0.34, 0.51) and knowing that HPV causes cervical cancer (OR = 0.70; 95% CI = 0.52, 0.95). Among general health information seekers, non-Internet seekers compared with Internet information seekers exhibit significantly lower odds of HPV vaccine awareness (OR = 0.59; 95%) CI = 0.46, 0.75), and of knowing about the link between HPV infection and cervical cancer (OR = 0.79; 95% CI = 0.63, 0.99) and the sexual transmission of HPV (OR = 0.71; 95% CI = 0.57, 0.89). Among cancer information seekers, there were no differences in outcomes between Internet seekers and non-Internet seekers. Conclusions. Use of a communication channel, such as the Internet, whose use is already socially and racially patterned, may widen observed disparities in vaccine completion rates.

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

18 September 2012, Vol. 157. No. 6 http://www.annals.org/content/current [No relevant content]

## **British Medical Bulletin**

Volume 103 Issue 1 September 2012 http://bmb.oxfordjournals.org/content/current [Reviewed earlier]

## **British Medical Journal**

22 September 2012 (Vol 345, Issue 7875) http://www.bmj.com/content/345/7875 *Editorial* Fighting neglected tropical diseases in the southern United States Peter J Hotez *Extract*  Poverty and lack of awareness need to be tackled

The neglected tropical diseases are a group of chronic parasitic and related infections such as hookworm, schistosomiasis, lymphatic filariasis, Chagas disease, and leishmaniasis that often affect the "bottom billion" in Africa, Asia, and Latin America.1 Extreme poverty, defined by the World Bank as average daily consumption of  $1.25 (\pounds 0.8; \& 1.0)$  or less, is the main social factor associated with a high prevalence of these diseases.1 The World Health Organization, the World Bank, and professionals have advocated strongly for global programmes to deliver packages of essential drugs to treat the tropical diseases with the highest prevalence, such as tuberculosis and malaria, while simultaneously developing new or improved drugs and vaccines.2 Diseases such as Chagas disease, cysticercosis, leishmaniasis, and dengue are listed in the 17 tropical diseases being targeted by WHO for control or elimination in low and middle income countries.3 4 Others, such as toxocariasis, a chronic parasitic infection that causes asthma and epilepsy,5 6 and trichomoniasis, a sexually transmitted disease associated with vaginal HIV-1 shedding,7 are not. That these diseases affect literally millions of Americans living in poverty,8 with prevalence rates of selected tropical diseases in some areas of the US comparable to rates in low and middle income countries, is less well known...

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

Volume 90, Number 9, September 2012, 633-712 http://www.who.int/bulletin/volumes/90/9/en/index.html [Reviewed earlier]

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

(Accessed 22 September 2012) http://www.resource-allocation.com/ [No new relevant content]

## **Emerging Infectious Diseases**

Volume 18, Number 10—October 2012 http://www.cdc.gov/ncidod/EID/index.htm [No relevant content]

## Eurosurveillance

Volume 17, Issue 38, 20 September 2012 <u>http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678</u> [No relevant content]

## **Global Health Governance**

Volume V, Issue 2: Spring 2012 [Reviewed earlier]

#### **Globalization and Health**

[Accessed 22 September 2012] http://www.globalizationandhealth.com/ [No new relevant content]

#### **Health Affairs**

September 2012; Volume 31, Issue 9 http://content.healthaffairs.org/content/current Theme: Payment Reform To Achieve Better Health Care [No relevant content]

Health and Human Rights Vol 14, No 1 (2012) http://hhrjournal.org/index.php/hhr [Reviewed earlier]

#### Health Economics, Policy and Law

Volume 7 - Issue 03 - July 2012 http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue [Reviewed earlier]

#### **Health Policy and Planning**

Volume 27 Issue 6 September 2012 <u>http://heapol.oxfordjournals.org/content/current</u> [Reviewed earlier]

**Human Vaccines & Immunotherapeutics** (formerly Human Vaccines) Volume 8, Issue 9 September 2012 <u>http://www.landesbioscience.com/journals/vaccines/toc/volume/8/issue/9/</u> [Reviewed earlier]

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

October 2012, Vol. 16, No. 10 http://www.ijidonline.com/ [No relevant content]

#### JAMA

September 19, 2012, Vol 308, No. 11 http://jama.ama-assn.org/current.dtl [No relevant content]

### Journal of Health Organization and Management

Volume 26 issue 6 - Published: 2012 http://www.emeraldinsight.com/journals.htm?issn=1477-7266&show=latest [Reviewed earlier; No relevant content]

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

Volume 206 Issue 8 October 15, 2012 http://www.journals.uchicago.edu/toc/jid/current

## VIRUSES

#### **Editor's choice: Influenza Vaccination for Immunocompromised Patients: Systematic Review and Meta-analysis by Etiology**

J Infect Dis. (2012) 206(8): 1250-1259 doi:10.1093/infdis/jis487 Charles R. Beck, Bruce C. McKenzie, Ahmed B. Hashim, Rebecca C. Harris, University of Nottingham Influenza and the ImmunoCompromised (UNIIC) Study Group,, and Jonathan S. Nguyen-Van-Tam *Abstract* 

Many national guidelines recommend annual influenza vaccination of immunocompromised patients, although the decision to vaccinate is usually at clinical discretion. We conducted a systematic review and meta-analyses to assess the evidence for influenza vaccination in this group, and we report our results by etiology. Meta-analyses showed significantly lower odds of influenza-like illness after vaccination in patients with human immunodeficiency virus (HIV) infection, patients with cancer, and transplant recipients and of laboratory-confirmed influenza in HIV-positive patients, compared with patients receiving placebo or no vaccination. Pooled odds of seroconversion and seroprotection were typically lower in HIV-positive patients, patients with cancer, and transplant recipients and a decrease in the percentage of CD4+ cells in HIV-positive patients was found although not accompanied by worsening of clinical symptoms. Clinical judgment remains important when discussing the benefits and safety profile with immunocompromised patients.

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

July-September 2012 Volume 4 | Issue 3 Page Nos. 139-186 <u>http://www.jgid.org/currentissue.asp?sabs=n</u> [Reviewed earlier]

## **Journal of Medical Ethics**

September 2012, Volume 38, Issue 9 http://jme.bmj.com/content/current [Reviewed earlier]

## **Journal of Medical Microbiology**

October 2012; 61 (Pt 10)

http://jmm.sgmjournals.org/content/current [Reviewed earlier; No relevant content]

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

Volume 1 Issue 3 September 2012 http://jpids.oxfordjournals.org/content/current [Reviewed earlier; No relevant content]

#### The Lancet

Sep 22, 2012 Volume 380 Number 9847 p1031 - 1120 http://www.thelancet.com/journals/lancet/issue/current [No relevant content]

#### The Lancet Infectious Disease

Sep 2012 Volume 12 Number 9 p647 - 736 http://www.thelancet.com/journals/laninf/issue/current [Reviewed earlier]

#### Medical Decision Making (MDM)

September–October 2012; 32 (5) http://mdm.sagepub.com/content/current Special Issue: Recommendations of the ISPOR-SMDM Joint Modeling Good Research Practices Task Force Note from the Editors

Michael Drummond, PhD; Mark Helfand, MD, MPH; C. Daniel Mullins, PhD

This issue contains seven articles that offer guidance for modeling studies for health outcomes research. To ensure that good research practices on modeling techniques remain useful for all current modeling techniques as well as to foster the use of model-based results to inform health care decisions, a Modeling Good Research Practices Task Force was created. The task force members consist of individuals from the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) and the Society for Medical Decision Making (SMDM), and the journals of both societies, Value in Health and Medical Decision Making, agreed to publish the task force reports on the same date in both journals after a period of peer review. Thus, the seven articles from the ISPOR-SMDM Task Force are being published simultaneously in Value in Health and Medical Decision, as part of the guidance development process, the manuscripts underwent review by a panel of reviewers. In addition, the membership of each society was invited to comment on them. The original journal submissions included the comments of the reviewers as well as the authors' responses to those comments...

#### The Milbank Quarterly

*A Multidisciplinary Journal of Population Health and Health Policy* September 2012 Volume 90, Issue 3 Pages 417–629 http://onlinelibrary.wiley.com/doi/10.1111/milq.2012.90.issue-3/issuetoc [No relevant content]

#### Nature

Volume 489 Number 7416 pp335-466 20 September 2012 http://www.nature.com/nature/current\_issue.html [No relevant content]

#### **Nature Immunology**

September 2012, Volume 13 No 9 pp797-899 http://www.nature.com/ni/journal/v13/n9/index.html [Reviewed earlier; No relevant content]

#### **Nature Medicine**

September 2012, Volume 18 No 9 pp1305-1445 http://www.nature.com/nm/journal/v18/n9/index.html [Reviewed earlier; No relevant content]

#### **Nature Reviews Immunology**

September 2012 Vol 12 No 9 http://www.nature.com/nri/journal/v12/n9/index.html [Reviewed earlier]

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

September 20, 2012 Vol. 367 No. 12 http://content.nejm.org/current.shtml

### Correspondence

#### Vaccination Policies and Rates of Exemption from Immunization, 2005–2011

N Engl J Med 2012; 367:1170-1171<u>September 20, 2012</u> To the Editor:

We computed the annual change in the rates of nonmedical exemptions from school immunization requirements and compared these rates between states that allow philosophical exemptions and states that allow only religious exemptions. We also compared states with respect to how difficult it is to obtain nonmedical exemptions because of certain administrative procedures. We used data compiled by the Centers for Disease Control and Prevention (CDC) for school years 2005–2006 through 2010–2011.1 State-specific categories of difficulty in obtaining exemptions were based on several factors: whether completion of a standardized form was permissible, as opposed to a letter from a parent; where the parent obtained the form (i.e., school vs. health department); whether the form had to be notarized; and whether a letter from a parent, if required, needed to be worded a specific way, resulting in extra effort on the part of the parent.

Over the study period, unadjusted rates for nonmedical exemptions in states that allowed philosophical exemptions were 2.54 times as high as rates in states that allowed only religious

exemptions (incidence rate ratio [IRR], 2.54; 95% confidence interval [CI], 1.68 to 3.83) (see Table S1 in the <u>Supplementary Appendix</u>, available with the full text of this letter at NEJM.org). Although the absolute rates were higher in states that allowed philosophical exemptions, the average annual rate increase among states that allowed only religious exemptions (IRR for change per year, 1.20; 95% CI, 1.11 to 1.30) was higher than the rate in states that allowed philosophical exemptions (IRR for change per year, 1.20; 95% CI, 1.11 to 1.30) was higher than the rate in states that allowed philosophical exemptions (IRR for change per year, 1.10; 95% CI, 1.05 to 1.14).

During the study period, unadjusted rates of nonmedical exemptions in states with easy exemption policies were 2.31 times as high as rates in states with difficult exemption policies (IRR, 2.31; 95% CI, 1.39 to 3.85). By 2011, the nonmedical exemption rate in states with easy exemption criteria increased to 3.3%, an average annual increase of 13% (IRR for change per year, 1.13; 95% CI, 1.05 to 1.21) (Figure 1Figure 1 Rates of Nonmedical Exemptions from School Immunization, According to Type of Exemption and Ease of Obtaining One, 2006–2011., and Table S1 in the Supplementary Appendix). In contrast, nonmedical exemption rates in states with difficult exemption criteria increased by 8% annually to 1.3% in 2011 (IRR for change per year, 1.08; 95% CI, 1.02 to 1.14). In states with exemption criteria of medium difficulty, rates increased by 18% annually to 2.0% in 2011 (IRR for change per year, 1.18; 95% CI, 1.10 to 1.26). For all analyses, adjusted results were qualitatively similar to unadjusted results (Table S1 in the Supplementary Appendix).

In an earlier analysis of data from 1991 through 2004, we found an increase in exemption rates only in states with philosophical exemptions and in states with easy exemption procedures. Even in these states the average rate of increase was lower than that found during the current study period.<sup>3</sup> Our results show that nonmedical exemptions have continued to increase, and the rate of increase has accelerated.

Saad B. Omer, M.B., B.S., Ph.D.; Jennifer L. Richards, M.P.H.; Michelle Ward, A.B.; Robert A. Bednarczyk, Ph.D.; Rollins School of Public Health, Emory University, Atlanta, GA

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

September 2012, 16(9 http://online.liebertpub.com/toc/omi/16/7-8 [No relevant content]

#### The Pediatric Infectious Disease Journal

September 2012 - Volume 31 - Issue 9 pp: A7-A8,889-1002,e141-e175 http://journals.lww.com/pidj/pages/currenttoc.aspx [Reviewed earlier]

#### Pediatrics

September 2012, VOLUME 130 / ISSUE 3 http://pediatrics.aappublications.org/current.shtml [Reviewed earlier]

#### **Pharmacoeconomics**

October 1, 2012 - Volume 30 - Issue 10 pp: 859-980 http://adisonline.com/pharmacoeconomics/pages/currenttoc.aspx

#### Leading Article

## **Private Manufacturers' Thresholds to Invest in Comparative Effectiveness Trials**

Basu, Anirban; Meltzer, David Pharmacoeconomics. 30(10):859-868, October 1, 2012. doi: 10.2165/11597730-00000000-00000 *Abstract:* 

The recent rush of enthusiasm for public investment in comparative effectiveness research (CER) in the US has focussed attention on these public investments. However, little attention has been given to how changing public investment in CER may affect private manufacturers' incentives for CER, which has long been a major source of CER. In this work, based on a simple revenue maximizing economic framework, we generate predictions on thresholds to invest in CER for a private manufacturer that compares its own product to a competitor's product in head-to-head trials. Our analysis shows that private incentives to invest in CER are determined by how the results of CER may affect the price and quantity of the product sold and the duration over which resulting changes in revenue would accrue, given the time required to complete CER and the time from the completion of CER to the time of patent expiration. We highlight the result that private incentives may often be less than public incentives to invest in CER and may even be negative if the likelihood of adverse findings is sufficient. We find that these incentives imply a number of predictions about patterns of CER and how they will be affected by changes in public financing of CER and CER methods. For example, these incentives imply that incumbent patent holders may be less likely to invest in CER than entrants and that public investments in CER may crowd out similar private investments. In contrast, newer designs and methods for CER, such as Bayesian adaptive trials, which can reduce ex post risk of unfavourable results and shorten the time for the production of CER, may increase the expected benefits of CER and may tend to increase private investment in CER as long as the costs of such innovative designs are not excessive. Bayesian approaches to design also naturally highlight the dynamic aspects of CER, allowing less expensive initial studies to guide decisions about future investments and thereby encouraging greater initial investments in CER. However, whether the potential effects we highlight of public funding of CER and of Bayesian approaches to trial design actually produce changes in private investment in CER remains an empirical question.

#### **PLoS One**

[Accessed 22 September 2012] http://www.plosone.org/article/browse.action;jsessionid=577FD8B9E1F322DAA533C413369CD6 F3.ambra01?field=date [No new relevant content]

## **PLoS Medicine**

(Accessed 22 September 2012) http://www.plosmedicine.org/article/browse.action?field=date [No new relevant content]

## **PLoS Neglected Tropical Diseases**

August 2012

http://www.plosntds.org/article/browseIssue.action [No relevant content]

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

(Accessed 22 September 2012) http://www.pnas.org/content/early/recent [No new relevant content]

## **Public Health Ethics**

Volume 5 Issue 2 July 2012 http://phe.oxfordjournals.org/content/current

Behavior Change or Empowerment: On the Ethics of Health-Promotion Strategies

Public Health Ethics (2012) 5(2): 140-153 doi:10.1093/phe/phs022 Per-Anders Tengland

#### Abstract

There are several strategies to promote health in individuals and populations. Two general approaches to health promotion are behavior change and empowerment. The aim of this article is to present those two kinds of strategies, and show that the behavior-change approach has some moral problems, problems that the empowerment approach (on the whole) is better at handling. Two distinct 'ideal types' of these practices are presented and scrutinized. Behavior change interventions use various kinds of theories to target people's behavior, which they do through information, persuasion, coercion and manipulation. Empowerment is a collaborative method where those 'facilitated' participate in the change process. Some ethical problems with the behavior-change model are that it does not sufficiently respect the right to autonomy of the individuals involved and risks reducing their ability for autonomy, and that it risks increasing health inequalities. Empowerment, on the other hand, respects the participant's right to autonomy, tends to increase the ability for autonomy, as well as increasing other coping skills, and is likely to reduce inequalities. A drawback with this approach is that it often takes longer to realize.

## Why One Should Do One's Bit: Thinking about Free Riding in the Context of Public Health Ethics

Public Health Ethics (2012) 5(2): 154-160 doi:10.1093/phe/phs023

Mariëtte van den Hoven

#### Abstract

Vaccination programmes against infectious diseases aim to protect individuals from serious illness but also offer collective protection once a sufficient number of people have been immunized. This so-called 'herd immunity' is important for individuals who, for health reasons, cannot be immunized or who respond less well to vaccines. For these individuals, it is pivotal that others establish group protection. However, herd immunity can be compromised when people deliberately decide not to be immunized and benefit from the herd's protection. These agents are often referred to as free riders: their omissions are deemed to be unfair to those who do contribute to the collective's health. This article addresses the unfairness of such 'free riding'. An argument by Garett Cullity is examined, which asserts that the unfairness of moral free riding lies neither in one's intentions, nor in one's reluctance to embrace a public good. This argument offers a strong basis for justifiably arguing that free riding is unfair. However, it

is then argued that other considerations also need to be taken into account before simply holding free riding against non-compliers.

### **Trends in Molecular Medicine**

Volume 18, Issue 9, Pages 503-574 (September 2012) http://www.sciencedirect.com/science/journal/14714914 [Reviewed earlier]

#### Science

21 September 2012 vol 337, issue 6101, pages 1425-1572 http://www.sciencemag.org/current.dtl

#### News

#### **Chronic Disease Vaccines Need Shot in the Arm**

#### **Bijal Trivedi**\*

It's difficult enough to develop and obtain approval for a traditional vaccine against a bacterium or virus, let alone create one that rouses the immune system to target molecules that drive a chronic disease such as obesity. Potential vaccines for hypertension, asthma, Alzheimer's disease, obesity, and smoking (because it is a risk factor for heart disease, cancer, stroke, and more) have all been hyped in recent years and then suffered high-profile failures. Vaccine developers also face the problem that society largely views addiction and obesity as moral failures rather than chronic diseases. It's difficult to persuade drug companies and the general population to invest in treating something they view as a failure of willpower with an intervention like a vaccine. But researchers aren't giving up.

http://www.sciencemag.org/content/337/6101/1479.summary

#### Review

## Can Noncommunicable Diseases Be Prevented? Lessons from Studies of Populations and Individuals

#### Majid Ezzati\*, Elio Riboli

MRC-HPA, Centre for Environment and Health and Department of Epidemiology and Biostatistics, School of Public Health, Imperial College London, London W2 1PG, UK. Noncommunicable diseases (NCDs)—mainly cancers, cardiovascular diseases, diabetes, and chronic respiratory diseases—are responsible for about two-thirds of deaths worldwide, mostly in low- and middle-income countries. There is an urgent need for policies and strategies that prevent NCDs by reducing their major risk factors. Effective approaches for large-scale NCD prevention include comprehensive tobacco and alcohol control through taxes and regulation of sales and advertising; reducing dietary salt, unhealthy fats, and sugars through regulation and well-designed public education; increasing the consumption of fresh fruits and vegetables, healthy fats, and whole grains by lowering prices and improving availability; and implementing a universal, effective, and equitable primary-care system that reduces NCD risk factors, including cardiometabolic risk factors and infections that are precursors to NCDs, through clinical interventions.

http://www.sciencemag.org/content/337/6101/1482.abstract

**Perspective** Double Burden of Noncommunicable and Infectious Diseases in Developing Countries I. C. Bygbjerg Copenhagen School of Global Health, Department of International Health, Immunology and Microbiology, Faculty of Health Sciences, University of Copenhagen, 5 Øster Farimagsgade, DK-1014, Copenhagen K, Denmark. E-mail: <u>iby@sund.ku.dk</u>.

#### Abstract

On top of the unfinished agenda of infectious diseases in low- and middle-income countries, development, industrialization, urbanization, investment, and aging are drivers of an epidemic of noncommunicable diseases (NCDs). Malnutrition and infection in early life increase the risk of chronic NCDs in later life, and in adult life, combinations of major NCDs and infections, such as diabetes and tuberculosis, can interact adversely. Because intervention against either health problem will affect the other, intervening jointly against noncommunicable and infectious diseases, rather than competing for limited funds, is an important policy consideration requiring new thinking and approaches.

## http://www.sciencemag.org/content/337/6101/1499.abstract

### Editorial

#### **Prevention and Cost Control**

#### Ezekiel Emanuel

Ezekiel Emanuel is the Vice Provost for Global Initiatives and chair of the Department of Medical Ethics and Health Policy at the University of Pennsylvania, Philadelphia, PA.

Prevention is the key to cost control and improving the quality of health care in many nations. Most people think of prevention as vaccines and screening tests. But it is tertiary prevention—keeping people with established diseases from becoming worse—that holds the greatest promise for strengthening the health care system. Why? Health care costs are unevenly distributed across populations. In the United States, 50% of the population uses hardly any health care, whereas 10% consumes nearly two-thirds of all health care spending. The latter are patients with one or more chronic conditions, such as congestive heart failure, diabetes, or cancer. To control costs, we must prevent the conditions of this 10% of patients from worsening.

http://www.sciencemag.org/content/337/6101/1433.summary

## **Science Translational Medicine**

19 September 2012 vol 4, issue 152 http://stm.sciencemag.org/content/current [No relevant content]

## Vaccine

Volume 30, Issue 45 pp. 6341-6508 (5 October 2012) <u>http://www.sciencedirect.com/science/journal/</u> <u>The impact of new vaccine introduction on immunization and health systems: A</u> <u>review of the published literature</u>

## Review Article

Pages 6347-6358

Terri B. Hyde, Holly Dentz, Susan A. Wang, Helen E. Burchett, Sandra Mounier-Jack, Carsten F. Mantel, The New Vaccine Introduction Impact Published Literature Working Gro *Abstract* 

We conducted a systematic review of the published literature to examine the impact of new vaccine introduction on countries' immunization and broader health systems. Six publication

databases were searched using 104 vaccine and health system-related search terms. The search yielded 15,795 unique articles dating from December 31, 1911 to September 29, 2010. Based on review of the title and abstract, 654 (4%) of these articles were found to be potentially relevant and were referred for full review. After full review, 130 articles were found to be relevant and included in the analysis. These articles represented vaccines introduced to protect against 10 different diseases (hepatitis A, hepatitis B, Haemophilus influenzae type b disease, human papilloma virus infection, influenza, Japanese encephalitis, meningococcal meningitis, Streptococcus pneumoniae disease, rotavirus diarrhea and typhoid), in various formulations and combinations. Most reviewed articles (97 [75%]) reported experiences in high-income countries. New vaccine introduction was most efficient when the vaccine was introduced into an existing delivery platform and when introduced in combination with a vaccine already in the routine childhood immunization schedule (i.e., as a combination vaccine). New vaccine introduction did not impact coverage of vaccines already included in the routine childhood immunization schedule. The need for increased cold chain capacity was frequently reported. New vaccines facilitated the introduction and widespread use of auto-disable syringes into the immunization and the broader health systems. The importance of training and education for health care workers and social mobilization was frequently noted. There was evidence in high-income countries that new vaccine introduction was associated with reduced health-care costs. Future evaluations of new vaccine introductions should include the systematic and objective assessment of the impacts on a country's immunization system and broader health system, especially in lower-income countries.

## Economic impact of the 2009–2010 Guam mumps outbreak on the public health sector and affected families

Original Research Article

Pages 6444-6448

Abdirahman Mahamud, A. Parker Fiebelkorn, George Nelson, Annette Aguon, John McKenna, Gissela Villarruel, Kathleen Gallagher, Ismael R. Ortega-Sánc

Abstract

Background

The United States Territory of Guam reported a large mumps outbreak of 505 cases during 2009–2010. We assessed the economic impact of the outbreak from the perspectives of the local public health sector and affected families.

Methods

Using standard cost analysis methods, we retrospectively identified all public health personnel involved in the outbreak response and surveyed them about their outbreak-related activities. We then estimated the costs of outbreak-related personnel hours and materials. We also assessed out-of-pocket costs and costs incurred for work-time missed for persons with mumps and their families. We defined the analysis period as February 25–October 22, 2010. Results

Seventy-six public health personnel were involved in outbreak response activities. Overall, the response required approximately 8264 person-hours, 2380 miles driven, and 3000 doses of measles-mumps-rubella vaccine ordered. The cost to the public health sector was 256,785 U.S. dollars (USD). Families of 102 persons with mumps were interviewed. An estimated 761 USD per person with mumps was spent by families; 88% of this cost was due to missed days of work. The estimated total cost to families of the 470 persons with mumps during the analysis period was 357,670 USD. Total outbreak-related costs were 614,455 USD. Conclusions

The costs reported underscore the impact of mumps outbreaks in highly vaccinated populations and the need for effective mumps prevention and control strategies.

**Barriers to HPV immunization for African American adolescent females** 

Original Research Article

Pages 6472-6476

Tamara Hamlish, Laura Clarke, Kenneth A. Alexander

Abstract

Purpose

The objective of this study was to identify motivations and barriers to HPV vaccination and culturally relevant and meaningful opportunities for vaccine promotion among African American mothers and adolescent daughters. Qualitative methods were employed to identify barriers to HPV immunization and understand mothers' motivations to vaccinate their daughters. We conducted in-depth interviews with 19 mother–daughter pairs focused on 5 key areas: health history, prior vaccine experience, knowledge of HPV and HPV vaccine, relationship with physician, and experience of cervical dysplasia and cervical cancer (CD/CC). Results

Four key factors drive HPV immunization among African-American mothers of adolescent daughters. First, mothers' CD/CC disease experiences motivated a strong commitment to protect daughters from the trauma of CD/CC. Second, limited understanding of HPV and its connection to CD/CC made it difficult for mothers to assess the risk of infection or explain the medical benefits of the vaccine to their daughters. Third, mothers anticipate the sexual debut of adolescent daughters and advocate for healthcare interventions to protect them. Mothers were not deterred by multiple visits to complete the vaccine series; they likened HPV immunization to injectable contraceptives that require a series of injections and offer protection from the unintended consequences of sexual activity. Finally, mothers trusted physicians to initiate discussion and offer unconditional endorsement generated doubt about the vaccine among mothers and missed opportunities for immunization.

## Conclusions

Our initial results indicate that physicians can engage in culturally relevant vaccine promotion in urban, underserved African American communities by initiating discussions of HPV immunization that (1) acknowledge mothers' own CD/CC experiences, (2) support parenting strategies that aim to protect daughters from the unintended consequences of sexual activity, and (3) make explicit the connection between CD/CC and HPV infection, and between prevention of HPV infection and HPV immunization.

## Vaccine: Development and Therapy

(Accessed 22 September 2012) http://www.dovepress.com/vaccine-development-and-therapy-journal [No new relevant content]

## Value in Health

Vol 15 | No. 6 | September-October 2012 | Pages 791-990 http://www.valueinhealthjournal.com/current [No relevant content]

## From Google Scholar: Dissertations, Theses, Selected Journal Articles

[No new relevant content]

### Progress Toward a Human Vaccine Against Coccidioidomycosis

GT Cole, BJ Hurtgen, CY Hung - Current Fungal Infection Reports, 2012 Abstract Coccidioidomycosis (San Joaquin Valley fever) is a human respiratory disease caused by a soil-borne mold, and is recognized as an intransigent microbial infection by physicians who treat patients with the potentially life-threatening, disseminated form of this ...

#### Need for a safe vaccine against respiratory syncytial virus infection

JY Kim, J Chang - Korean Journal of Pediatrics, 2012 Abstract Human respiratory syncytial virus (HRSV) is a major cause of severe respiratory tract illnesses in infants and young children worldwide. Despite its importance as a respiratory pathogen, there is currently no licensed vaccine for HRSV. Following failure of ...

Genetical Engineering News | 17 September 2012

BioPerspectives

#### **Not-So-Diplomatic Immunity**

Navigating the Legal and Psychological Minefields of Developing an Entirely New Class of Vaccines Zachary N. Russ

http://www.genengnews.com/gen-articles/not-so-diplomatic-immunity/4477/

## <u>Media Watch</u>

Beginning in June 2012, *Vaccines: The Week in Review* expanded 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 CVERP 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. Most publications require either a registration or a feebased subscription for access. We will provide full-text where content is published without restriction, but most publications require registration and some subscription level.

## Economist

http://www.economist.com/ Accessed 22 September 2012 [No new unique, relevant content]

## **Financial Times**

http://www.ft.com Accessed 22 September 2012 [No new unique, relevant content]

#### Forbes

http://www.forbes.com/ Accessed 22 September 2012 [No new unique, relevant content]

#### **Foreign Affairs**

http://www.foreignaffairs.com/ September/October 2012 Volume 91, Number 5 *Accessed 22 September 2012* [No new unique, relevant content]

#### **Foreign Policy**

http://www.foreignpolicy.com/ Accessed 22 September 2012] [No new unique, relevant content]

#### The Guardian

http://www.guardiannews.com/ Accessed 22 September 2012 [No new unique, relevant content]

#### **The Huffington Post**

http://www.huffingtonpost.com/ Accessed 22 September 2012 [No new unique, relevant content]

#### **New Yorker**

http://www.newyorker.com/ Accessed 22 September 2012 [No new unique, relevant content]

#### **New York Times**

http://www.nytimes.com/ Accessed 22 September 2012 [No new unique, relevant content]

#### Wall Street Journal

http://online.wsj.com/home-page Accessed 22 September 2012 [No new unique, relevant content]

#### Washington Post

http://www.washingtonpost.com/ Accessed 22 September 2012 [No new unique, relevant content]

Twitter Watch [accessed 22 September 2012 17:08]

Items of interest from a variety of twitter feeds associated with immunization, vaccines and global public health. This capture is highly selective and is by no means intended to be exhaustive.

#### UN Foundation @unfoundation

Download the <u>@ShotAtLife</u> <u>#MobileApp</u>: Incredible information for all parents http://shotatlife.org/mobile 3:28 PM - 22 Sep 12

#### WHO @WHO

Dr Chan: Noncommunicable diseases: A slow-motion disaster http://goo.gl/R6cyj #NCDs 1:59 PM - 22 Sep 12

#### UN Development @UNDP

Join the Global Conversation! Watch the <u>#SGSGlobal</u> live stream in 7 languages here: http://on.undp.org/dU4Tx | Starting 1pmEST 11:14 AM - 22 Sep 12

#### PAHO/WHO @pahowho

Health situation in the Americas: #HealthIndicators2012 http://new.paho.org/hg/index.php? option=com content&view=article&id=7170&Itemid=2395&lang=en#.UFzbx9aVngE.twitter #TT4Health @who

5:28 PM - 21 Sep 12

#### PAHO/WHO @pahowho

Important step 2 improve international humanitarian aid in the health sector during disasters http://goo.gl/BbziY #PSC28 @pahodisasters

Pan American Sanitary Conference approves resolution on coordination...

A resolution that seeks to improve coordination of international humanitarian assistance in case of disasters in the Region was approved by the 28th Pan American Sanitary Conference. The ministers...

12:34 PM - 21 Sep 12

#### TB Alliance @TBAlliance

Sanofi and TB Alliance announce new collaboration http://shar.es/uKMeW @SanofiUS Goal is to select novel clinical development candidates 8:06 AM - 20 Sep 12

> \* \*

Vaccines: 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 PATH Vaccine Development Program and the International Vaccine Institute (IVI), and by vaccine industry leaders including GSK, Merck, Pfizer, and sanofi pasteur (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.

\* \* \* \*