

Center for Vaccine Ethics and Policy

NYU | Wistar Institute | CHOP

Vaccines: The Week in Review 19 January 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

Editor's Notes:

- A pdf version of this issue is available on our blog: <http://centerforvaccineethicsandpolicy.wordpress.com/>

The Minamata Convention on Mercury was approved on Saturday, 19 January 2013. The new Convention "provides controls and reductions across a range of products, processes and industries where mercury is used, released or emitted. These range from medical equipment such as thermometers and energy-saving light bulbs to the mining, cement and coal-fired power sectors. The treaty, which has been four years in negotiation and which will be open for signature at a special meeting in Japan in October, also addresses the direct mining of mercury, export and import of the metal and safe storage of waste mercury..." Achim Steiner, UN Under-Secretary General and Executive Director of the UN Environment Programme (UNEP) which convened the negotiations among over 140 member states in Geneva, said at the close: "After complex and often all night sessions here in Geneva, nations have today laid the foundations for a global response to a pollutant whose notoriety has been recognized for well over a century." **Vaccines where mercury is used as a preservative have been excluded from the treaty** as have products used in religious or traditional activities.

- Background to the fifth session of the Intergovernmental Negotiating Committee to prepare a global legally binding instrument on mercury (INC5)

<http://unep.org/hazardoussubstances/Mercury/Negotiations/INC5/tabid/3471/Default.aspx>

- Global Mercury Assessment 2013

http://www.unep.org/publications/contents/pub_details_search.asp?ID=6282

- Time to Act http://www.unep.org/publications/contents/pub_details_search.asp?ID=6281

<http://www.unep.org/NewsCentre/default.aspx?DocumentID=2702&ArticleID=9373&l=en>

Editor's Note: See GAVI CEO Seth Berkley's op-ed on the treaty in the New York Times below in Media Watch.

PATH said it "coordinated advocacy efforts" to ensure the final treaty language did not restrict access to vaccines containing thiomersal. PATH noted that it worked in partnership with WHO, UNICEF, the GAVI Alliance, civil society organizations, as well as animal health experts, to educate country representatives involved in the deliberations. In finalizing the treaty language, many country delegations "made strong statements about the essential role of thiomersal-containing vaccines in protecting health." More than 140 countries and 900 delegates participated in the final negotiations, which were hosted by the United Nations Environment Programme in Geneva, Switzerland.

Posted January 18, 2013.

<http://www.path.org/news/an130118-mercury-treaty.php>

IOM Research: *Childhood Immunization Schedule and Safety: Stakeholder Concerns, Scientific Evidence, and Future Studies*

January 16, 2013

[Board on Population Health and Public Health Practice](#)

Abstract [Bolted language by Editor]

Vaccines are among the most safe and effective public health interventions to prevent serious disease and death. Because of the success of vaccines, most Americans today have no firsthand experience with such devastating illnesses as polio or diphtheria. Health care providers who vaccinate young children follow a schedule prepared by the U.S. Advisory Committee on Immunization Practices. Under the current schedule, children younger than six may receive as many as 24 immunizations by their second birthday. New vaccines undergo rigorous testing prior to receiving FDA approval; however, like all medicines and medical interventions, vaccines carry some risk.

Driven largely by concerns about potential side effects, there has been a shift in some parents' attitudes toward the child immunization schedule. HHS asked the IOM to identify research approaches, methodologies, and study designs that could address questions about the safety of the current schedule.

This report is the most comprehensive examination of the immunization schedule to date. The IOM committee uncovered no evidence of major safety concerns associated with adherence to the childhood immunization schedule. Should signals arise that there may be need for investigation, however, the report offers a framework for conducting safety research using existing or new data collection systems.

<http://www.iom.edu/Reports/2013/The-Childhood-Immunization-Schedule-and-Safety.aspx>

The U.S. Food and Drug Administration said it approved Flublok, described as the first trivalent influenza vaccine made using an insect virus (baculovirus) expression system and recombinant DNA technology. Flublok is approved for the prevention of seasonal influenza in people 18 through 49 years of age. The FDA announcement noted that unlike current flu vaccines, Flublok does not use the influenza virus or eggs in its production. Flublok's novel manufacturing technology allows for production of large quantities of the

influenza virus protein, hemagglutinin (HA) – the active ingredient in all inactivated influenza vaccines that is essential for entry of the virus into cells in the body. The majority of antibodies that prevent influenza virus infection are directed against HA. While the technology is new to flu vaccine production, it is used to make vaccines that have been approved by the FDA to prevent other infectious diseases. Karen Midthun, M.D., director of the FDA's Center for Biologics Evaluation and Research, said, "This approval represents a technological advance in the manufacturing of an influenza vaccine. The new technology offers the potential for faster start-up of the vaccine manufacturing process in the event of a pandemic, because it is not dependent on an egg supply or on availability of the influenza virus."

<http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm335891.htm>

The Johns Hopkins School of Public Health reported that the "Deans of twelve of the most eminent American schools of public health sent a [letter](#) to President Barack Obama vigorously protesting the precedent that was set when the Central Intelligence Agency (CIA) used the guise of a vaccination campaign to hunt for Osama Bin Laden in Pakistan." The announcement noted that "this disguising of an intelligence-gathering effort as a humanitarian public health service has resulted in serious collateral consequences that affect the public health community. In September of 2012, after working for 30 years in Pakistan, Save the Children was ordered to remove all expatriate staff from the country...Last month, eight polio vaccination workers were assassinated, resulting in the suspension of U.N. polio eradication efforts in Pakistan."

The letter expresses concern that the "humanitarian space" historically afforded aid workers may be greatly curtailed by the precedent set by the CIA in Pakistan. The deans state that, "international public health work builds peace and is one of the most constructive means by which our past, present, and future public health students can pursue a life of fulfillment and service. Please do not allow that outlet of common good to be closed to them because of political and/or security interests that ignore the type of unintended negative public health impacts we are witnessing in Pakistan." Those signing the letter included Deans: Buekens from Tulane, Curran from Emory, Finnegan from Univ. of Minnesota, Frenk from Harvard, Fried from Columbia, Frumkin from Univ. of Washington, Goldman from George Washington, Haymann from UCLA, [Klag](#) from John Hopkins, Philbert from Univ. of Michigan, Rimer from UNC Chapel Hill, and Shortell from UC Berkeley.

January 8, 2013

<http://www.jhsph.edu/news/news-releases/2013/klag-CIA-vaccination-cover-pakistan.html>

Speech: *The place of health on the post-2015 development agenda*

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

Opening remarks at an informal Member State consultation on health in the post-2015 development agenda

Geneva, Switzerland

14 December 2012

http://www.who.int/dg/speeches/2012/mdgs_post2015/en/index.html

Speech: *Biological security as part of health security*

Dr Margaret Chan, Director-General of the World Health Organization
Opening remarks at a meeting on Global health security collaboration between the Global Partnership against the Spread of Weapons and Materials of Mass Destruction and international organizations

Geneva, Switzerland

17 December 2012

Extract

"...I am pleased to share this session with the heads of OIE and FAO. Let me congratulate these two agencies on the successful eradication of rinderpest.

Implementation of the International Health Regulations is not an exclusive function of the health sector. The need to engage non-health as well as health sectors was explicitly recognized earlier this year when the World Health Assembly adopted a resolution on implementation of the Regulations.

As discussions about the Regulations revealed, WHO Member States are worried about the continuing lack of capacity, in many countries, to respond to emerging and re-emerging infections.

Too many countries are not yet able to detect an unusual disease event and investigate it, find the cause, report to WHO, gear up their health systems for heightened surveillance, and marshal the appropriate equipment, supplies, and other logistical support. These weaknesses come from a lack of routine surveillance systems, a lack of laboratory capacity, a lack of resources, and a severe shortage of epidemiologists and other specialists.

One statistic tells a disturbing story. Some 85 countries, representing 65% of the world's population, do not have reliable systems of vital registration. This means that causes of death are neither investigated nor recorded.

This is why many emerging diseases, including highly fatal ones, can smoulder undetected for weeks if not months. Outbreaks frequently become visible only after amplification of infection in a hospital or clinic leads to an explosion of cases that is too big to miss.

In other instances, new diseases, were recognized only after people fell ill and were air-evacuated for treatment to countries with sophisticated diagnostic capacity. This is what happened with the novel coronavirus. Such lapses in vigilance weaken our collective security...

http://www.who.int/dg/speeches/2012/health_security_20121217/en/index.html

Update: Polio this week - As of 16 January 2013

Global Polio Eradication Initiative

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

[Editor's Extract and bolded text]

- 13 January 2013 marked two years since the last wild poliovirus (WPV) case in India....
- The WHO Executive Board (EB), meeting in Geneva, Switzerland from 21-29 January, will consider a report on progress in polio eradication, remaining challenges and the new eradication and endgame strategy. The full report in [English](#).

Nigeria

- One new WPV case was reported in the past week (WPV1 from Kano), bringing the total number of WPV cases for 2012 to 122. The most recent WPV case had onset of paralysis on 3 December 2012 (WPV1 from Federal Capital Territory – FCT).

- Two new cases of cVDPV2, both occurring in Sokoto, were reported in the past week, bringing the total number of cVDPV2 cases for 2012 to 8. The most recent cVDPV2 case had onset of paralysis on 24 November 2012 (from Kebbi).

Pakistan

- District officials are assessing security conditions locally, in close consultation with law enforcement. A decentralized approach to vaccination activities is being used due to insecurity for polio workers.

The **Weekly Epidemiological Record (WER) for 18 January 2013**, vol. 88, 3 (pp 29–36) includes:

- Progress in global control and regional elimination of measles, 2000–2011

<http://www.who.int/entity/wer/2013/wer8803.pdf>

WHO - Global Alert and Response (GAR)

Disease Outbreak News - Most recent news items

No new reports

WHO - Humanitarian Health Action

No new reports

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

WHO: Measles deaths decline, but elimination progress stalls in some regions

Improved vaccination rates critical for success

17 January 2013 | GENEVA - The number of measles deaths globally decreased by 71% between 2000 and 2011, from 542,000 to 158,000. Over the same period, new cases dropped 58% from 853,500 in 2000 to 355,000 in 2011. Although the WHO Region of the Americas has sustained measles elimination since 2002, and the WHO Western Pacific Region is on track to achieve elimination, large outbreaks of measles are jeopardizing progress in the remaining regions that have these goals. Estimated global coverage with a first dose of measles vaccine increased from 72% in 2000 to 84% in 2011. The number of countries providing the second dose through routine services increased from 97 in 2000 to 141 in 2011. Since 2000, with support from the Measles & Rubella Initiative, more than 1 billion children have been reached through mass vaccination campaigns — about 225 million of them in 2011.

An estimated 20 million children worldwide did not receive the first dose of vaccine in 2011. More than half of these children live in five countries:

- the Democratic Republic of the Congo (DRC) (0.8 million)
- Ethiopia (1 million)
- India (6.7 million)
- Nigeria (1.7 million)
- Pakistan (0.9 million)

Measles outbreaks

In 2011, large measles outbreaks were reported in all these countries and several others.

http://www.who.int/mediacentre/news/notes/2013/measles_20130117/en/index.html

- The **MMWR for January 18, 2013** / Vol. 62 / No. 2 includes:
- [Global Control and Regional Elimination of Measles, 2000–2011](#)
 - [Early Estimates of Seasonal Influenza Vaccine Effectiveness — United States, January 2013](#)

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: david.r.curry@centerforvaccineethicsandpolicy.org

WHO: Second Report on NTDs - [Sustaining the Drive to Overcome the Global Impact of Neglected Tropical Diseases](#)

16 January 2013 | Geneva

"The World Health Organization's second report on neglected tropical diseases published today highlights unprecedented progress during the past two years. Renewed momentum has shifted the world closer to eliminating many of these conditions that take their greatest toll among the poor, thanks to a new global strategy, a regular supply of quality-assured, cost-effective medicines and support from global partners."

Full report:

http://www.who.int/iris/bitstream/10665/77950/1/9789241564540_eng.pdf

Report: *Pharmaceutical R&D Projects to Discover Cures for Patients with Neglected Conditions*

IFPMA

January 2013

Announcement text

The IFPMA (International Federation of Pharmaceutical Manufacturers & Associations) released its 2012 status report on pharmaceutical R&D to address neglected diseases that disproportionately affect people in low- and middle-income countries. Representing a 40 percent increase over 2011, the 132 R&D projects in the 2012 update focus on the following diseases prioritized by the World Health Organization's Special Programme for Research and Training in Tropical Diseases (TDR): tuberculosis, malaria, human African trypanosomiasis (sleeping sickness), leishmaniasis, dengue, onchocerciasis (River blindness), American trypanosomiasis (Chagas disease), schistosomiasis, leprosy and lymphatic filariasis.

The only major sector increasing R&D funding for neglected diseases in 2011, the research-based pharmaceutical industry has a long-standing and continuing commitment to fighting these conditions. Industry's holistic approach includes R&D projects, capacity-strengthening efforts, and medicine donations.

"We take a comprehensive approach to tackling neglected diseases," says Eduardo Pisani, IFPMA Director General, "Donations of 14 billion treatments this decade address patients' near-term needs while these 132 R&D programs will bring innovative vaccines and treatments to meet future needs and hopefully stop these dreaded diseases."

http://www.ifpma.org/fileadmin/content/News/2013/IFPMA_News_Release_RD_Status_Report_16Jan2013.pdf

Report:

http://www.ifpma.org/fileadmin/content/Publication/2013/IFPMA_R_D_Status_Report_Neglected_Conditions.pdf

Meeting: Understanding the value of vaccines

GAVI

Annecy, France

Week of 14 January 2013

GAVI said it convened a group of 25 health economists and other experts from around the world experts "to better understand the full value of vaccines," and to agree on a programme of future research to answer some of the key questions raised. The GAVI announcement noted that "...as well as preventing death and illness, we know that vaccines make a broader contribution to human and economic development. Some of the ways in which this happens are already well understood: children who are healthy do not require medical treatment or care that costs money; their families are then able to spend or save this money in other ways...Other known and potential impacts require further research. For example: what is the link between vaccines, health and educational achievement? How can we measure the connection between childhood health and future economic prospects?"

<http://www.gavialliance.org/library/news/gavi-features/2013/understanding-the-value-of-vaccines/>

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

American Journal of Public Health

Volume 103, Issue 2 (February 2013)

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

[Reviewed earlier]

Annals of Internal Medicine

15 January 2013, Vol. 158. No. 2

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

[No relevant content]

BMC Public Health

(Accessed 19 January 2013)

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

[No new relevant content]

British Medical Bulletin

Volume 104 Issue 1 December 2012

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

[Reviewed earlier; No relevant content]

British Medical Journal

19 January 2013 (Vol 346, Issue 7891)

<http://www.bmj.com/content/346/7891>

Editorial

What must be done about the killings of Pakistani healthcare workers?

Zulfiqar A Bhutta,

Founding Chair, Division of Women and Child Health, Aga Khan University, Karachi, Pakistan
BMJ 2013; 346 doi: <http://dx.doi.org/10.1136/bmj.f280> (Published 16 January 2013)

Extract

It's time to stop trying to accommodate those who spread fear and terror

In December 2012 nine volunteer polio workers, six of whom were young women, were murdered in Pakistan.¹ A day later five female education workers were murdered on their way to work in Swabi (Khyber Pakhtunkhwa). The coordinated attacks sent a chilling message to civic society that female workers and volunteers, hitherto protected by a strict Pashtun moral code, were now terrorist targets. These murders begin to fade into a background of incessant conflict and insurgency around the border areas of Khyber Pakhtunkhwa, the federally administered tribal areas, and Baluchistan. The city of Karachi is caught in a spiral of targeted killings and kidnappings for ransom.² In Baluchistan, the law of the government has all but collapsed and the Hazara minorities have been forced to demand army rule in the main city, Quetta, to protect themselves from the threat of ethnic cleansing at the hands of a well connected and funded underground network of terrorist organisations.³ The nation is inured to reports of violent deaths on a daily basis, however, and the recent targeted killings of health workers are already off...

Bulletin of the World Health Organization

Volume 91, Number 1, January 2013, 1-80

<http://www.who.int/bulletin/volumes/91/1/en/index.html>

[Reviewed earlier]

Cost Effectiveness and Resource Allocation

(Accessed 19 January 2013)

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

[No new relevant content]

Emerging Infectious Diseases

Volume 19, Number 1—January 2013

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

[Reviewed earlier]

Eurosurveillance

Volume 18, Issue 3, 17 January 2013

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

[No relevant content]

Global Health Governance

[Volume VI, Issue 1: Fall 2012](#)

– December 31, 2012

[Reviewed earlier]

Globalization and Health

[Accessed 19 January 2013]

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

[No new relevant content]

Health Affairs

January 2013; Volume 32, Issue 1

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

Theme: Transforming The Delivery Of Health Care

[No specific relevant content on vaccines/immunization]

Health and Human Rights

Vol 14, No 2 (2012)

<http://hhrjournal.org/index.php/hhr>

[Reviewed earlier]

Health Economics, Policy and Law

Volume 7 / Issue 04 / October 2012, pp 383 - 384

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

Special Issue: End of Life Care and Evaluation

[Reviewed earlier; No specific relevant content on vaccines/immunization]

Health Policy and Planning

Volume 28 Issue 1 January 2013
<http://heapol.oxfordjournals.org/content/current>
[Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 9, Issue 1 January 2013
<http://www.landesbioscience.com/journals/vaccines/toc/volume/9/issue/1/>
[Reviewed earlier]

Infectious Diseases of Poverty
2012, 1
<http://www.idjournal.com/content>
[Accessed 19 January 2013]
[No new relevant content]

International Journal of Infectious Diseases
January 2013, Vol. 17, No. 1
<http://www.ijidonline.com/>
[No relevant content]

JAMA
January 16, 2013, Vol 309, No. 3
<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 207 Issue 3 February 1, 2013
<http://www.journals.uchicago.edu/toc/jid/current>
[Reviewed earlier; No relevant content]

Journal of Global Infectious Diseases (JGID)
October-December 2012
Volume 4 | Issue 4
Page Nos. 187-224
<http://www.jgid.org/currentissue.asp?sabs=n>
[Reviewed earlier; No relevant content]

Journal of Medical Ethics

February 2013, Volume 39, Issue 2
<http://jme.bmj.com/content/current>
[No relevant content]

Journal of Medical Microbiology

February 2013; 62 (Pt 2)
<http://jmm.sgmjournals.org/content/current>
[No relevant content]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 1 Issue 4 December 2012
<http://jpids.oxfordjournals.org/content/current>
[Reviewed earlier]

The Lancet

Jan 19, 2013 Volume 381 Number 9862 p177 – 266 e1
<http://www.thelancet.com/journals/lancet/issue/current>

Comment

More evidence for use of pneumococcal conjugate vaccines

Cynthia G Whitney
Preview

Pneumococcal conjugate vaccines (PCVs) are among the leading interventions for reducing deaths and improving the health of children around the world. These vaccines are now routinely used in about 88 countries, with the number of countries increasing quickly.¹ PCVs are used on various schedules, designed to complement existing schedules for other vaccines that are already part of national immunisation programmes. Until now, however, clinical trial evidence to support some of the different ways PCVs can be used was missing.

Articles

Effectiveness of the ten-valent pneumococcal Haemophilus influenzae protein D conjugate vaccine (PHiD-CV10) against invasive pneumococcal disease: a cluster randomised trial

Arto A Palmu, Jukka Jokinen, Dorota Borys, Heta Nieminen, Esa Ruokokoski, Lotta Siira, Taneli Puumalainen, Patricia Lommel, Marjan Hezareh, Marta Moreira, Lode Schuerman, Terhi M Kilpi
[Preview](#) | [Summary](#)

The Lancet Infectious Disease

Jan 2013 Volume 13 Number 1 p1 - 96
<http://www.thelancet.com/journals/laninf/issue/current>
[Reviewed earlier]

Medical Decision Making (MDM)

January 2013; 33 (1)

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

Special Issue: Decision Aids and Risk Perception

[Reviewed earlier]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy

December 2012 Volume 90, Issue 4 Pages 631–807

<http://onlinelibrary.wiley.com/doi/10.1111/milq.2012.90.issue-4/issuetoc>

[Reviewed earlier]

Nature

Volume 493 Number 7432 pp271-446 17 January 2013

http://www.nature.com/nature/current_issue.html

[No relevant content]

Nature Immunology

January 2013, Volume 14 No 1 pp1-99

<http://www.nature.com/ni/journal/v14/n1/index.html>

[Reviewed earlier; No relevant content]

Nature Medicine

January 2013, Volume 19 No 1 pp1-112

<http://www.nature.com/nm/journal/v19/n1/index.html>

[Reviewed earlier]

Nature Reviews Immunology

January 2013 Vol 13 No 1

<http://www.nature.com/nri/journal/v13/n1/index.html>

[Reviewed earlier; No relevant content]

New England Journal of Medicine

January 17, 2013 Vol. 368 No. 3

<http://content.nejm.org/current.shtml>

[No relevant content]

Online First - Original Article

Risk of Fetal Death after Pandemic Influenza Virus Infection or Vaccination

Siri E. Håberg, M.D., Ph.D., Lill Trogstad, M.D., Ph.D., Nina Gunnes, Ph.D., Allen J. Wilcox, M.D., Ph.D., Håkon K. Gjessing, Ph.D., Sven Ove Samuelsen, Ph.D., Anders Skrondal, Ph.D., Inger Cappelen, Ph.D., Anders Engeland, Ph.D., Preben Aavitsland, M.D., Steinar Madsen, M.D., Ingebjørg Buajordet, Ph.D., Kari Furu, Ph.D., Per Nafstad, M.D., Ph.D., Stein Emil Vollset, M.D.,

Dr.P.H., Berit Feiring, M.Sc.Pharm., Hanne Nøkleby, M.D., Per Magnus, M.D., Ph.D., and Camilla Stoltenberg, M.D., Ph.D.

January 16, 2013 DOI: 10.1056/NEJMoa1207210

<http://www.nejm.org/doi/full/10.1056/NEJMoa1207210>

Abstract

Background

During the 2009 influenza A (H1N1) pandemic, pregnant women were at risk for severe influenza illness. This concern was complicated by questions about vaccine safety in pregnant women that were raised by anecdotal reports of fetal deaths after vaccination.

[Full Text of Background...](#)

Methods

We explored the safety of influenza vaccination of pregnant women by linking Norwegian national registries and medical consultation data to determine influenza diagnosis, vaccination status, birth outcomes, and background information for pregnant women before, during, and after the pandemic. We used Cox regression models to estimate hazard ratios for fetal death, with the gestational day as the time metric and vaccination and pandemic exposure as time-dependent exposure variables.

[Full Text of Methods...](#)

Results

There were 117,347 eligible pregnancies in Norway from 2009 through 2010. Fetal mortality was 4.9 deaths per 1000 births. During the pandemic, 54% of pregnant women in their second or third trimester were vaccinated. Vaccination during pregnancy substantially reduced the risk of an influenza diagnosis (adjusted hazard ratio, 0.30; 95% confidence interval [CI], 0.25 to 0.34). Among pregnant women with a clinical diagnosis of influenza, the risk of fetal death was increased (adjusted hazard ratio, 1.91; 95% CI, 1.07 to 3.41). The risk of fetal death was reduced with vaccination during pregnancy, although this reduction was not significant (adjusted hazard ratio, 0.88; 95% CI, 0.66 to 1.17).

[Full Text of Results...](#)

Conclusions

Pandemic influenza virus infection in pregnancy was associated with an increased risk of fetal death. Vaccination during pregnancy reduced the risk of an influenza diagnosis. Vaccination itself was not associated with increased fetal mortality and may have reduced the risk of influenza-related fetal death during the pandemic. (Funded by the Norwegian Institute of Public Health.)

[Full Text of Discussion...](#)

OMICS: A Journal of Integrative Biology

January 2013, 17(1):

<http://online.liebertpub.com/toc/omi/17/1>

[Reviewed earlier; No relevant content]

The Pediatric Infectious Disease Journal

January 2013 - Volume 32 - Issue 1 pp: A13-A14,1-98,e1-e44

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

[Reviewed earlier]

Pediatrics

January 2013, VOLUME 131 / ISSUE 1

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

[Reviewed earlier]

Pharmacoeconomics

December 1, 2012 - Volume 30 - Issue 12 pp: 1097-1214

<http://adisonline.com/pharmacoeconomics/pages/currenttoc.aspx>

[Reviewed earlier; No relevant content]

PLoS One

[Accessed 19 January 2013]

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

[No new relevant content]

PLoS Medicine

(Accessed 19 January 2013)

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

[No new relevant content]

PLoS Neglected Tropical Diseases

December 2012

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

[Reviewed earlier]

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

(Accessed 19 January 2013)

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

[No new relevant content]

Public Health Ethics

Volume 5 Issue 3 November 2012

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

[Reviewed earlier]

Qualitative Health Research

February 2013; 23 (2)

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

Special Issue: The Experiences of Others

[No relevant content]

Trends in Molecular Medicine

Volume 19, Issue 1, Pages 1-70 (January 2013)

<http://www.sciencedirect.com/science/journal/14714914>

[reviewed earlier; No relevant content]

Science

18 January 2013 vol 339, issue 6117, pages 245-364

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

News & Analysis

Disease Eradication

Killings Force Rethinking of Pakistan's Anti-Polio Drive

Leslie Roberts

Pakistan is one of just three countries where the poliovirus remains entrenched, and global cases are at an all-time low. Over the years, polio workers have been killed in conflict zones, but never in such numbers or in such deliberate attacks as in Pakistan. Health workers are asking, can the government safeguard its legions of vaccinators and still reach enough kids to keep the poliovirus in check? And if not and the virus regains steam, how big of a setback will that be to the global initiative, which, 13 years after it was due to be finished, is finally close to success?

<http://www.sciencemag.org/content/339/6117/259.summary>

Science Translational Medicine

16 January 2013 vol 5, issue 168

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

HPV

Cancer Vaccines: Targeting an Infectious Cause

Ruanne V. Barnabas

16 January 2013: 168ec11

[Full Text](#)

Estimating the percentage of cancers caused by infectious agents could bolster development of vaccines.

Vaccine

Volume 31, Issue 4, Pages 567-724 (11 January 2013)

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

[Reviewed earlier]

Vaccine: Development and Therapy

(Accessed 19 January 2013)

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

[No new relevant content]

Value in Health

Vol 15 | No. 8 | December 2012 | Pages 991-1192

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

[Reviewed earlier]

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

Journal of Communication

Early View - ORIGINAL ARTICLE

"1-2-3 Pap" Intervention Improves HPV Vaccine Series Completion Among Appalachian Women

Robin C. Vanderpool^{1,*}, Elisia Cohen², Richard A. Crosby¹, Maudella G. Jones³, Wallace Bates³, Baretta R. Casey¹, Tom Collins³

Article first published online: 10 JAN 2013

DOI: 10.1111/jcom.12001

<http://onlinelibrary.wiley.com/doi/10.1111/jcom.12001/abstract?deniedAccessCustomisedMessage=&userIsAuthenticated=false>

Abstract

Completion of the Human Papillomavirus (HPV) vaccine series is a national priority. This study not only identified correlates of intent to complete the vaccine series and actual series completion, but also tested the efficacy of a DVD intervention to promote series completion. Women's beliefs that all 3 doses reduced cancer risk predicted intent and completion. Intention predicted completion, as did the belief that having a friend accompany the woman would promote completion. Beyond these effects, women assigned to the intervention were 2.44 times more likely than women in the usual care group to complete the series. Thus, in controlled analyses, a theory-grounded DVD intervention successfully promoted HPV series completion in a community setting. This method of intervention has high translational potential.

Cancer Causes & Control

2013 Jan 5. [Epub ahead of print]

Prevalence of HPV types in cervical specimens from an integrated healthcare delivery system: baseline assessment to measure HPV vaccine impact.

[Dunne EF](#), [Klein NP](#), [Naleway AL](#), [Baxter R](#), [Weinmann S](#), [Riedlinger K](#), [Fetterman B](#), [Steinau M](#), [Scarborough MZ](#), [Gee J](#), [Markowitz LE](#), [Unger ER](#).

<http://www.ncbi.nlm.nih.gov/pubmed/23292130>

Abstract

PURPOSE:

Two human papillomavirus (HPV) vaccines are available to prevent cervical cancer. One early measure of HPV vaccine impact would be a reduction in vaccine-related HPV types (HPV 6, 11, 16, or 18, or HPV 16, 18) in cervical samples from young women. We aimed to assess feasibility of specimen collection and baseline HPV prevalence in an integrated healthcare delivery system.

METHODS:

Residual cervical specimens collected during routine cervical cancer screening (2006-2008) were retained consecutively from eligible females aged 11-29 years, stratified by age group. Specimens were evaluated for 37 HPV genotypes using the Roche Linear Array assay.

RESULTS:

Of 10,124 specimens submitted, 10,103 (99 %) were adequate for HPV testing. Prevalence of HPV 6, 11, 16, or 18 genotype was 11.4 % overall and was the highest in the youngest age group (18.1 % in the 11-19-year-olds, 12.5 % in the 20-24-year-olds, and 7.0 % in the 25-29-year-olds).

CONCLUSIONS:

HPV types 6, 11, 16, or 18 prevalence could be measured over time to assess early HPV vaccine impact using residual specimens from an integrated healthcare delivery system, particularly if sampling focused on young women.

Media Watch

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 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 of 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.

BBC

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

Accessed 19 January 2013

[No new, unique, relevant content]

Economist

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

Accessed 19 January 2013

[No new, unique, relevant content]

Financial Times

<http://www.ft.com>

Accessed 19 January 2013

[No new, unique, relevant content]

Forbes

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

Accessed 19 January 2013

[No new, unique, relevant content]

Foreign Affairs

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

January/February 2013 Volume 92, Number 1

Accessed 19 January 2013

[No new unique, relevant content]

Foreign Policy

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

Accessed 19 January 2013

[No new unique, relevant content]

The Guardian

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

Accessed 19 January 2013

[No new unique, relevant content]

The Huffington Post

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

Accessed 19 January 2013

[No new unique, relevant content]

New Yorker

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

Accessed 19 January 2013

[No new, unique, relevant content]

NPR/National Public Radio [U.S.]

Public Health

Accessed 19 January 2013

[No new, unique, relevant content]

New York Times

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

Accessed 19 January 2013.

Op-Ed Contributor

Stick With the Science

By SETH BERKLEY

Published: January 17, 2013

GOVERNMENT representatives are meeting in Geneva this week to decide whether to introduce a global ban on mercury that could include thiomersal, a mercury-based preservative that has been used in some vaccine manufacturing since the 1930s to prevent bacterial or fungal contamination of multidose vials of vaccine.

Hosted by the United Nations Environment Program, the [intergovernmental negotiating committee](#) is charged with drafting a global treaty to rid the world of the threats posed by mercury.

Despite the ominous connotations of mercury, the decision should in theory be a no-brainer: [The scientific and medical consensus](#) is that thiomersal poses no human health risk, and that

rather than saving lives, a ban would put millions of the world's poorest children at risk of deadly diseases by disrupting vaccination programs.

But with vaccines, logic and evidence don't always prevail. In the late 1990s we were at a similar juncture when, as part of a broader remit to find ways to reduce the human health hazards posed by mercury and under pressure from anti-vaccine lobbyists, the U.S. Food and Drug Administration turned its attention to the safety of thiomersal (known in the U.S. as thimerosal).

Despite a lack of evidence that it was harmful — and in the absence of any evidence to show that it wasn't — the F.D.A. decided to take a precautionary approach and urged manufacturers to reduce or eliminate thiomersal from almost all vaccines in the United States.

Since then, scientists have published unequivocal evidence of its safety, including a 2006 study which showed that thiomersal is broken down by the body into ethylmercury. Unlike methylmercury, say from contaminated fish, which can make its way through the food chain and accumulate in the body, ethylmercury is naturally flushed out of the body within a couple of weeks. Despite such clinical and laboratory evidence, the damage to thiomersal's reputation had already been done, and anti-vaccine campaigners are still trying to fan the flames.

Anti-vaccination groups have long campaigned against the use of thiomersal, claiming that this organic mercury derivative was responsible for increases in developmental disorders such as autism. What's more, they argue that with a precautionary reduction already in place in the United States, denying children in developing countries access to the same thiomersal-free vaccines would be a global injustice.

Nothing could be further from the truth. Quite apart from the mountain of scientific evidence refuting any link between thiomersal and autism, with some studies involving hundreds of thousands of children [\[pdf\]](#), banning thiomersal or phasing out this agent would have a devastating impact on global health and lead to millions of children being denied access to life-saving vaccines.

To some extent, thiomersal is still used in vaccines in the United States and Europe, for example in some flu shots, but if there were a ban we could easily switch to single-dose vials. In developing countries this is not so simple. Not only are single-dose vials less cost effective and less practical for mass vaccinations, they also take up more space in refrigerators, which are already at peak storage capacity. In the absence of any alternative preservative, far fewer vaccines would reach children in developing countries.

This would be a tragedy. In 2010 alone it is estimated that more than [1.4 million child deaths](#) were prevented through the use of thiomersal-containing vaccines. Little wonder that organizations such as the World Health Organization, Doctors Without Borders, the American Academy of Pediatrics, the U.S. Institute of Medicine and the GAVI Alliance [oppose a ban](#).

Indeed thiomersal is not the main target of the anti-mercury treaty, but rather an unfortunate bycatch. Even so, in many ways the situation mirrors the debate that took place more than a decade ago. This time it is the U.N.E.P. that is undertaking the laudable task of reducing the human health impact of mercury. The problem is that under pressure from anti-vaccine groups, hard scientific evidence is sometimes disregarded.

A recent example of this took place in December in a French case involving a claim by a former state employee that the aluminum content of vaccines given to him at work made him chronically ill. Although the court was not convinced of a probable link between the man's illness and vaccinations, and in the absence of any scientific evidence of a link or any other explanation, it ruled in favor of the employee.

That is not to say that taking precautions isn't intrinsically sensible; it's just that sometimes dodging the issue in this way is not the best precaution, and instead of solving problems it sometimes creates them.

One of the core principles of medicine is "primum non nocere": first, do no harm. But given the sheer numbers of lives at stake there is a strong argument that the burden of proof be shifted to the detractors.

Where a vaccine already has an established and strong safety record and is saving lives, the onus should be on producing evidence of a genuine risk before there is any change in policy related to its availability.

With millions of vulnerable lives at stake, the treaty negotiators need to engage and recognize that a ban on thiomersal would be bad policy based on bad science.

Seth Berkley is a medical epidemiologist and chief executive of the GAVI Alliance, a public-private global health partnership to increase access to immunization in poor countries.

Reuters

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

Accessed 19 January 2013

[No new, unique, relevant content]

Wall Street Journal

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

Accessed 19 January 2013

[No new, unique, relevant content]

Washington Post

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

Accessed 19 January 2013

[No new, unique, relevant content]

Twitter Watch (19 January 2013 – 19:43)

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.

[World Bank Data @worldbankdata](#)

We've just updated the World Development Indicators - get the most current and accurate global development [#opendata](#) - <http://cot.ag/X8snXG>

Retweeted by [World Bank](#)

12:28 PM - 18 Jan 13

[CDC Flu @CDCFlu](#)

Today, CDC announced 48 states have reported widespread flu activity.

<http://1.usa.gov/gUUICT> . Get a flu vax to protect yourself from flu.

Retweeted by [CDCgov](#)

9:28 AM - 18 Jan 13

[IHME at UW @IHME_UW](#)

RT [@fogarty_nih](#): Recorded webcast of Dr Chris Murray of IHME [@UW](#) speaking yesterday at [#NIH](#) on [#GBD2010](#) is now live > [http://videocast.nih.gov/Summary.asp?File=17753 ...](http://videocast.nih.gov/Summary.asp?File=17753...)
9:32 AM - 18 Jan 13

[GAVI Alliance @GAVIAlliance](#)

Next week, GAVI CEO [@GAVISeth](#) & GAVI Board Chair [@Hoybraten](#) will attend [#WEF](#) Annual Meeting in [#Davos](#)! Follow them! <http://ht.ly/gVb8f>
2:49 AM - 18 Jan 13

[WHO @WHO](#)

An estimated 20 million children worldwide did not receive the first dose of [#measles](#) vaccine in 2011
12:08 PM - 17 Jan 13

[WHO @WHO](#)

In 2011, large [#measles](#) outbreaks were reported, among others, in DRC, Ethiopia, India, Nigeria, Pakistan, France, Italy, Spain
11:32 AM - 17 Jan 13

* * * *

Vaccines: The Week in Review is a service of the Center for Vaccines Ethics and Policy (C^{VEP}) 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.

* * * *