

Vaccines: The Week in Review
13 December 2010
Center for Vaccine Ethics & Policy

<http://centerforvaccineethicsandpolicy.wordpress.com/>

A program of

- Center for Bioethics, University of Pennsylvania
<http://www.bioethics.upenn.edu/>
- The Wistar Institute Vaccine Center
<http://www.wistar.org/vaccinecenter/default.html>
- Children's Hospital of Philadelphia, Vaccine Education Center
<http://www.chop.edu/consumer/jsp/microsite/microsite.jsp>

This weekly summary targets news and events in the global vaccines field gathered from key governmental, NGO and company announcements, key journals and events. This summary provides support for ongoing initiatives of the Center for Vaccine Ethics & Policy, and is not intended to be exhaustive in its coverage.

Vaccines: The Week in Review is now also posted in a blog format at <http://centerforvaccineethicsandpolicy.wordpress.com/>. Each item is treated as an individual post on the blog, allowing for more effective retrospective searching. Given email system conventions and formats, you may find this alternative more effective. This blog also allows for RSS feeds, etc.

Comments and suggestions should be directed to

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The WHO posted: **HEALTH CLUSTER BULLETIN: CHOLERA OUTBREAK IN HAITI –SATURDAY, DECEMBER 11, 2010 – #9**

"The violence and instability in Haiti due to results of the November 28th election has had a detrimental effect on the fight against the cholera epidemic. The epidemiological data reported indicates that the disease has reached all 10 department of the island nation, and will continue to spread...

EPIDEMIOLOGY

"On December 10th, MSPP reported that the cumulative number of hospital visits and deaths due to cholera, as of December 6th, was 97,595 and 2,193 respectively, giving an overall Case Fatality Rate of 2.2%. Of this total, 46,749 of patients have been hospitalized due to cholera. The in-hospital case fatality rate for the whole country is 3.2%...."

More at: http://new.paho.org/disasters/index.php?option=com_docman&task=doc_download&gid=1608

The Global Fund to Fight AIDS, Tuberculosis and Malaria made two related announcements. The first involves suspension of funding of two malaria grants in Mali with immediate effect and termination of a third grant for tuberculosis (TB) after it found evidence of misappropriation and unjustified

expenditure. Management of the two suspended grants will be transferred to a new Principal Recipient. The Global Fund noted that the government of Mali "has condemned the embezzlement of funds and is working with the Global Fund to solve problems and ensure that grant activities can resume as soon as possible." In addition to the Mali grant suspension, the Global Fund said it is placing grants in five countries on an "Additional Safeguards Policy" list. Grants in countries on this list are subject to closer scrutiny of their grant activities by The Global Fund and have certain restrictions on cash movements. The five countries are Cote d'Ivoire, Djibouti, Mali, Mauritania and Papua New Guinea.

The Global Fund also said it is "putting in place a number of actions to prevent and detect possible misuse of money for training in grants across all the 144 countries that receive funding, as well as drug theft in grants in specific countries. Michel Kazatchkine, the Global Fund's Executive Director, commented, "The Global Fund tolerates no fraud, and we take public action to stop it, recover lost money and establish new and trustworthy channels for resources so they can reach those in need. Suspensions are the Global Fund's way of making this clear to all concerned. They are a structured way to work with a country so that together we can put problems behind us and focus on saving lives..."

http://www.theglobalfund.org/en/pressreleases/?pr=pr_101207

Separately, **The Global Fund said it will "invite major international funders of drug supplies to developing countries, technical and law enforcement agencies and implementers of health programs to intensify joint efforts to prevent theft of medical drugs."** A preliminary meeting will be held in January to draw up a joint action plan. The Global Fund noted that "in past years, reports and allegations of large-scale theft of new, effective malaria drugs have received particular attention. The medicines, known as Artemisinin-based Combination Therapies (ACTs), are given out for free or very cheaply in public health centers and hospitals in a large number of countries but are sold over the counter in pharmacies and street stalls for US\$8 or more per treatment. Typically, more than half of malaria drugs in African countries are not given out by doctors or nurses but are sold over the counter. "Theft of medicines is a problem that affects all institutions investing in health services, and we must clamp down on it," said Michel Kazatchkine, the Global Fund's Executive Director. "However, no single institution can act on its own. We can only solve this challenge if we all work together."

http://www.theglobalfund.org/en/pressreleases/?pr=pr_101210

The WHO posted: Avian influenza – situation in Indonesia - update 5

9 December 2010 - The Ministry of Health of Indonesia has announced a new case of human infection of H5N1 avian influenza. A 21-year-old female from Bandung City, West Java, Province developed symptoms on 14 November, was hospitalized on 22 November and is currently in hospital. Initial investigations indicate the case resided in an area close to a business where chickens were kept and the area was found to be lacking cleanliness with chicken droppings present. Additional investigations on the possible source of infections are being undertaken. Laboratory tests have confirmed infection with the H5N1 avian influenza virus. Of the 171 cases confirmed to date in Indonesia, 141 have been fatal.

http://www.who.int/csr/don/2010_12_09/en/index.html

The U.S. Food and Drug Administration (FDA) issued final guidance for people who wish to comment during the agency's advisory committee meetings. The FDA "encourages participation from all stakeholders in its decision-making process. Every advisory committee meeting includes an open public hearing session, during which interested people may present relevant information or their oral and/or written views. The guidance finalizes information contained in the 2005 draft guidance titled The Open Public Hearing – FDA Advisory Committee Meetings – Draft Guidance."

<http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm236245.htm>

The Weekly Epidemiological Record (WER) for 10 December 2010, vol. 85, 50 (pp 497–508) includes: Progress towards eradicating poliomyelitis in India, January 2009 – October 2010; Performance of acute flaccid paralysis (AFP) surveillance and incidence of poliomyelitis, 2010.

<http://www.who.int/entity/wer/2010/wer8550.pdf>

The MMWR for December 10, 2010 / Vol. 59 / No. 48 includes:

- [Nonpolio Enterovirus and Human Parechovirus Surveillance --- United States, 2006--2008](#)

- [Progress Toward Poliomyelitis Eradication --- India, January 2009--October 2010](#)

- [Update: Outbreak of Cholera --- Haiti, 2010](#)

<http://www.cdc.gov/mmwr/PDF/wk/mm5948.pdf>

Journal Watch

[Editor's Note]

Vaccines: The Week in Review continues its weekly scanning of key 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. Our initial scan list includes the journals below. If you would like to suggest other titles, please write to David Curry at david.r.curry@centerforvaccineethicsandpolicy.org

Clinical Infectious Diseases

15 December 2010 Volume 51, Number 12

<http://www.journals.uchicago.edu/toc/cid/current>

[Reviewed earlier]

Emerging Infectious Diseases

Volume 16, Number 12–December 2010

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

[Reviewed earlier]

Human Vaccines

Volume 6, Issue 12 December 2010

<http://www.landesbioscience.com/journals/vaccines/toc/volume/6/issue/12/>

[Reviewed earlier]

JAMA

December 8, 2010, Vol 304, No. 22, pp 2441-2548

<http://jama.ama-assn.org/current.dtl>

Lab, Field, & Clinic

Scientists Turn to Immune “Fingerprints” to Understand Vaccines, Infections

Bridget M. Kuehn

Extract

Despite the success of vaccines in preventing millions of deaths and serious illnesses each year, many mysteries remain about how they interact with the immune system to produce immunity. Similarly, an understanding of how the immune system responds to infection is limited.

As a result, important questions persist. For example, why are older adults less likely to develop protective immunity after vaccination? Why are some individuals susceptible to a particular infectious disease and others are less susceptible?

A new initiative hopes to catalogue the “fingerprints” of human immune responses (such as the production of antibodies) to vaccines or infectious agents.

To help answer such questions, the National Institute of Allergy and Infectious Diseases (NIAID) has launched its human immune phenotyping initiative, a \$100-million effort that will be carried out at 6 institutions across the country. The participating centers will document and compare changes that occur in the immune system of ...

Journal of Infectious Diseases

15 December 2010 Volume 202, Number 12

<http://www.journals.uchicago.edu/toc/jid/current>

[Reviewed earlier]

The Lancet

Dec 11, 2010 Volume 376 Number 9757 Pages 1959 - 2040

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

Comment

Cholera's western front

Jason B Harris, Regina C LaRocque, Richelle C Charles, Ramendra N Mazumder, Azharul I Khan, Pradip K Bardhan

Preview

The cholera epidemics of the 19th century forged the way for the revolution in sanitation and the provision of safe sources of public water, which are the hallmark of developed countries. Nevertheless, more than 1 billion people, including much of the Haitian population, have little access to safe sources of water, and hence remain vulnerable to cholera epidemics.

The Lancet Infectious Disease

Dec 2010 Volume 10 Number 12 Pages 813 - 892

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

[Reviewed earlier]

Nature

Volume 468 Number 7325 pp731-862 9 December 2010

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

[No relevant content]

Nature Medicine

December 2010, Volume 16 No 12

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

Commentary

Induction of unnatural immunity: prospects for a broadly protective universal influenza vaccine

Gary J Nabel & Anthony S Fauci

Preview

The immune system normally responds to influenza virus by making neutralizing antibodies to regions of the viral spike, the hemagglutinin, that vary year to year. This natural response protects against circulating subtypes but necessitates production of new vaccines annually. Newer vaccine approaches have succeeded in eliciting broadly neutralizing antibodies to highly conserved yet vulnerable regions of the hemagglutinin and suggest potential pathways for the development of universal influenza vaccines.

New England Journal of Medicine

December 9, 2010 Vol. 363 No. 24

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

Perspective

[A National Cholera Vaccine Stockpile — A New Humanitarian and Diplomatic Resource](#)

M.K. Waldor, P.J. Hotez, J.D. Clemens

Free full-text: <http://www.nejm.org/doi/pdf/10.1056/NEJMoa1001593>

The Pediatric Infectious Disease Journal

December 2010 - Volume 29 - Issue 12 pp: A9-A10,1067-1157,e80-e99

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

[Reviewed earlier]

Pediatrics

December 2010 / VOLUME 126 / ISSUE 6

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

[Reviewed earlier]

PLoS Medicine

(Accessed 12 December 2010)

http://medicine.plosjournals.org/perlserv/?request=browse&issn=1549-1676&method=pubdate&search_fulltext=1&order=online_date&row_start=1&limit=10&document_count=1533&ct=1&SESSID=aac96924d41874935d8e1c2a2501181c#results

Participatory Epidemiology: Use of Mobile Phones for Community-Based Health Reporting

Clark C. Freifeld, Rumi Chunara, Sumiko R. Mearu, Emily H. Chan, Taha Kass-Hout, Anahi Ayala Iacucci, John S. Brownstein

Science

10 December 2010 vol 330, issue 6010, pages 1441-1572

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

News of the Week

Infectious Diseases

Australia to Test 'Mosquito Vaccine' Against Human Disease

Martin Enserink

Science 10 December 2010: 1460-1461.[DOI:10.1126/science.330.6010.1460]

In January, entomologists will start deploying a strange bacterium called *Wolbachia pipientis* in an attempt to halt disease transmission by mosquitoes.

Science Translational Medicine

8 December 2010 vol 2, issue 61

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

Editorial

Vaccine Policy: Summun Bonum

Caroline Ash

Scientists and policy-makers must help to achieve a public consensus about the value of vaccination to individuals and society.

Meeting Reports: Vaccines

A Crisis of Public Confidence in Vaccines

Steven Black and Rino Rappuoli

Abstract

A meeting was held in Siena, Italy, in July 2010 to review the evidence for a decrease in public confidence in vaccines, to discuss possible reasons for this phenomenon, and to develop possible strategies to improve public confidence in vaccines. Prevention of morbidity and mortality by vaccination is one of the major public health accomplishments of the last century. Nevertheless, despite the improved safety and effectiveness of vaccines, public confidence in vaccination is decreasing. Improved methods of vaccine safety assessment have not improved public confidence. In addition, dissemination of false information on the Internet has undermined public confidence globally. Reductions in vaccine uptake or use of available vaccines can and have resulted in increased morbidity and mortality due to infectious diseases. The lack of public confidence in vaccines risks undermining the political will necessary to rapidly respond to a more severe influenza pandemic in the future. To improve the current situation, we must define both the risks and the benefits of individual vaccines so that the public can understand the rationale for vaccine recommendations. Key to regaining public trust in vaccines is a credible, consistent, and unified message developed from the private and public sectors that directly addresses public concerns. Unless an active effort is made to improve public confidence and trust in vaccination, there is a risk that gains made in combating the morbidity and mortality of infectious diseases through the use of vaccines will be lost. Loss of political will resulting from this loss of public confidence may also result in inappropriate decisions regarding the development and use of pandemic influenza vaccines for use in future pandemics, thus compromising public health.

Vaccine

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

Volume 29, Issue 2 (16 December 2010)

[Reviewed earlier]