

Vaccines: The Week in Review

25 August 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 http://centerforvaccineethicsandpolicy.wordpress.com/. This blog allows full-text searching of over 3,500 entries.

Comments and suggestions should be directed to
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Editor's Note:

Vaccines: The Week in Review resumes publication with this issue covering the period from 25 August 2012 forward.

Policy Shifts on Emergency Use of Cholera Vaccines

Science 17 August 2012 vol 337, issue 6096, pages 769-876

http://www.sciencemag.org/content/337/6096.toc

News & Analysis
Public Health

Martin Enserink

Summary

Many experts have argued that in outbreak situations—especially in the poor, messy places where cholera often strikes—existing vaccines are too expensive, not effective enough, and too impractical to roll out; they might even make matters worse, some fear, because they distract health workers from treating patients or improving water and sanitation, the cornerstones of cholera control. But now, the tide appears to have turned. This week, a technical working group at the World Health Organization is set to publish a report advocating for the creation of a global stockpile of cholera vaccines that would be rushed to countries when an outbreak begins.

Meeting Report: WHO Technical Working Group on creation of an oral cholera vaccine stockpile

Geneva, 26–27 April 2012

Authors: WHO

Publication details: 15 pages; WHO reference number: WHO/HSE/PED/2012

Overview

The 64th World Health Assembly (2011) called for an integrated, comprehensive strategy of cholera prevention and control. The WHA Resolution 64.15 included consideration of the use of oral cholera vaccines (OCV) "where appropriate, in conjunction with other recommended prevention and control methods and not as a substitute for such methods".

This consideration was taken forward at a September 2011 consultation, which noted that an OCV stockpile for outbreak control could be initiated in the near future. This is the report of a Technical Working Group which was convened, in April 2012, to develop an OCV stockpile implementation framework. Participants advised on: the criteria for choice of stockpiled vaccine and its deployment; the appropriate size of an OCV stockpile; the managing partnership and evaluation processes required; the decision-making procedure and operational issues; and the financing mechanism. http://www.who.int/iris/bitstream/10665/75240/1/WHO HSE PED 2012 2 eng.pdf

PAHO reported on a meeting of its Technical Advisory Group on Vaccine-Preventable Diseases (TAG) focused on cholera. The meeting was held in Washington, D.C. on 16 August 2012. The group reported that elimination of cholera transmission on the Island of Hispaniola can be achieved by increasing and sustaining access to clean drinking water and adequate sanitation, and that "reaching the longterm goal will be greatly aided with complementary short-term actions such as the expanded use of oral cholera vaccine." PAHO said the meeting of the Technical Advisory Group is "framed in the set of actions that governments of Haiti and Dominican Republic, PAHO/WHO, and other agencies and partners have been carrying out in the wake of the cholera outbreak in October 2010." One example of this coordinated action is the launching last June of the Regional Coalition on Water and Sanitation for the Elimination of Cholera on the Island of Hispaniola, which helps governments to harmonize and streamline international assistance and investments in water and sanitation infrastructure on the island. Dr. Jon Andrus, Deputy Director of PAHO, opened the meeting by tasking TAG with the provision of technical recommendations on cholera vaccination grounded in the best available science. "If the evidence indicates, especially with the recent experience of demonstration projects conducted in the field in Haiti, we should not fail to miss short-term opportunities to save more lives more quickly. However, such action must be balanced within the long-term vision of safe water and sanitation that will ultimately stop cholera transmission on the island."

After the presentation of scientific evidence and the results of two demonstration projects, the Technical Advisory Group, chaired by Dr. Ciro de Quadros, recommended introduction of the oral cholera vaccine. This recommendation was supported by data presented by Partners in Health and GHESKIO, two nongovernmental health organizations with a long history of work in Haiti. Acting on PAHO's suggestion, both had recently conducted projects which achieved high vaccination coverage of up to 90% for two doses of the oral cholera vaccine.

Given that current global supplies of the vaccine are limited, TAG experts also recommended prioritizing vaccination in densely populated urban areas with limited access to sanitation and drinking water, and in rural areas where access to health

services is most challenging. As manufacturers ramp up production in the near future, the experts unanimously recommended moving toward universal vaccination. However, they noted that doing so will require urgent attention to mobilizing and sustaining the flow of financial resources, strengthening operational capacity, and insuring that vaccination efforts are well-integrated into the long-term vision of safe water and sanitation to stop cholera's transmission. The Technical Advisory Group also highlighted the importance of finding solutions to the global scarcity of the cholera vaccine, as well as the need to strengthen epidemiological surveillance processes, which are critical in securing cholera prevention and control. TAG members additionally stressed the need to conduct research to close current knowledge gaps on the vaccine.

Members of PAHO's Technical Advisory Group for Vaccine-Preventable Disease include Dr. Ciro de Quadros (Chairperson and Executive Vice- President of the Sabin Vaccine Institute), Dr. Peter Figueroa (Rapporteur and Acting Chief Medical Officer at the Ministry of Health of Jamaica), Dr. Roger Glass (Fogarty International Center, U.S. National Institutes of Health), Dr. Anne Schuchat (National Center for immunization and Respiratory Diseases, U.S. Centers for Disease Control and Prevention), Dr. Jeannette Vega (Center for Epidemiology and Health Policy, Chile), Dr. Akira Homma (Policy and Strategy Council, Bio-Manguinhos Institute, Fiocruz, Brazil), Dr. Arlene King (Ministry of Health and Long-term Care, Canada), Dr. Ramiro Guerrero-Carvajal (PROESA, Colombia), Dr. José Ignacio Santos (Department of Experimental Medicine, National Autonomous University of Mexico) and Cuahtémoc Ruiz (PAHO).

The **U.S. Global Health Initiative (GHI) published interim reports on its** "aspirational goals in eight broad health areas." The reports focus on progress against GHI targets through links provided on the program graphic here: http://www.ghi.gov/about/goals/index.htm

The Global Fund said it signed two grant agreements with Nigeria worth a total of US\$225 million to support programs that will prevent and treat malaria. The grant agreements "expand a partnership with the Global Fund that has yielded remarkable progress in recent years, such as undertaking the largest distribution of bed nets done anywhere – more than 45 million to date." Included is an additional US\$50 million for bed nets, "approved in an unusual move by the Global Fund Board that was linked to additional commitments by the Government of Nigeria." During a transformation of the Global Fund's grant management structure this year, Nigeria was identified as one of 20 'high impact' countries now under a special designation. http://www.theglobalfund.org/en/mediacenter/newsreleases/2012-08-24 Nigeria and the Global Fund Sign Grant Agreements worth USD 225 Million to Fight Malaria/

NIAID said it awarded 14 grants totaling US\$7.8 million in first-year funding for "basic research to identify new approaches for designing a safe and effective HIV vaccine." The grants were awarded under the Innovation for HIV Vaccine Discovery (IHVD) initiative, which is expected to receive up to \$34.8 million over the next four years. NIAID Director Anthony S. Fauci, M.D. commented, "Recent

discoveries about the basic biology of HIV and how the virus adapts to its host have provided useful information and new opportunities to guide vaccine development. These grants are designed to build on that information and stimulate discovery of new ways to design a robust vaccine that prevents acquisition and establishment of latent infection." The 14 IHVD grant recipient organizations include:

- Altravax Inc. (Sunnyvale, Calif.)
- Catholic University of America (Washington, D.C.)
- Dartmouth College (Hanover, N.H.)
- Duke University (Durham, N.C.)
- Harvard Medical School (Boston)
- Massachusetts General Hospital (Boston)
- NYU Langone Medical Center (New York City)
- University of California (Irvine)
- University of Maryland (Baltimore)
- University of Medicine and Dentistry of New Jersey (Newark)
- University of Minnesota (Minneapolis)
- University of North Carolina (Chapel Hill)
- University of Rochester (Rochester, N.Y.)
- University of Texas at El Paso

http://www.nih.gov/news/health/aug2012/niaid-21.htm

Post: A Global Partnership for Vaccine Design

USID - IMPACT blog

Posted by Guest blogger Margaret McGlynn, IAVI President and CEO on Monday, August 13th 2012

When you're dealing with a global public health crisis, having an international presence isn't just advisable – it is imperative. This applies as much to the development of new tools to prevent disease as it does to treatment. An AIDS vaccine candidate, for example, must be tested in the people who will eventually use it and against the strains of HIV it is devised to protect them from.

That's why the International AIDS Vaccine Initiative (IAVI), in partnership with USAID, has worked diligently over the past several years to establish itself as a truly global non-profit partner. Using donor funds, IAVI has created an enviable network of research centers in sub-Saharan Africa dedicated to assessing novel AIDS vaccine candidates in clinical trials and conducting supporting epidemiological studies on HIV. These partnerships have made meaningful contributions to the research capacity of many developing countries—a capability that is now helping local researchers tackle other diseases.

IAVI and its partners are now applying that same model to support the design of a new generation of AIDS vaccine candidates. Today, IAVI and the <u>Translational Health Sciences and Technology Institute (THSTI)</u>, an autonomous institute of the Indian government's Department of Biotechnology (DBT), launched an <u>HIV Vaccine Design Programme</u> near New Delhi. The Programme is dedicated to the large-scale generation and preclinical evaluation of immunogens, the active ingredients of vaccines. It will focus on devising immunogens capable of eliciting antibodies that can prevent infection by a broad range of the circulating genetic variants of HIV.

That challenge, known to researchers as the neutralizing antibody problem, has long stymied progress toward an AIDS vaccine. But recent discoveries of antibodies capable of blocking a number of HIV variants have provided researchers with clues to the design of potentially powerful new vaccine candidates. The HIV Vaccine Design Programme will use these insights to develop new methods to generate large numbers of potential HIV immunogens and rapidly assess their potential for use in candidate vaccines. Much of the work will take place in a laboratory housed within THSTI that is being built and staffed with support from IAVI, DBT and THSTI.

The Programme's location is no accident. Over the past decade, IAVI has enjoyed a productive partnership for the clinical evaluation of candidate AIDS vaccines with key medical research institutions of the Indian government. Indian scientists have also actively participated in an international consortium of HIV laboratories supported by IAVI to advance HIV vaccine research. The government of India, meanwhile, is in the early phase of its "Decade of Innovation", a policy that seeks to harness a growing roster of home-grown biotechs, the nation's deep pool of scientific talent and global research partnerships to boost innovation in a variety of high-tech fields.

The HIV Vaccine Design Programme provides an opportunity to engage an emerging economy in the global quest to develop a vaccine against HIV. For India, it creates an opportunity to address a crisis of significant relevance to Indians. As importantly, it seeds the kinds of collaborations that often foster scientific and technical innovation and generate ideas that might be applied to address other diseases that have long hampered development.

http://blog.usaid.gov/2012/08/a-global-partnership-for-vaccine-design/

PATH's Malaria Vaccine Initiative (MVI) announced a new collaboration with the International AIDS Vaccine Initiative (IAVI) and Imperial College London "to measure the capacity of different vaccine candidates in human clinical testing to elicit an immune response aimed at protecting against deadly malaria parasites." David C. Kaslow, M.D., director of MVI, said, "Until now, malaria vaccine scientists have struggled to directly compare the cellular immune response elicited in humans by one vaccine to that of another, and this has hampered the ability to prioritize a portfolio of vaccine candidates. We are fortunate to have in IAVI and Imperial College London partners with a track record of developing validated human immunological assays. Through this new collaboration, we look forward to being able to make better informed decisions about if and how various malaria vaccines elicit immune responses at the cellular level in humans." MVI said the tests will help "prioritize investments and allow scientists to refine vaccine strategies by showing whether a particular formulation, delivery approach, or vaccine adjuvant elicits a superior cell-mediated immune response." More at: http://www.malariavaccine.org/pr2012Aug20-referencelab.php

Separately, MVI said it recently named "some of the world's most eminent malaria scientists and vaccinologists to its Vaccine Science Portfolio Advisory Council (VSPAC) — "a group of external experts tasked with providing strategic input and advice on the MVI's scientific portfolio and overall research and development (R&D) program." The new members of the VSPAC are: Dr. Norman Baylor, President and CEO of Biologics Consulting Group, Inc. and former Director of the Office of Vaccines Research and Review (OVRR) in the FDA's Center for Biologics Evaluation and Research; Dr. Kamini Mendis, an independent consultant on malaria and tropical medicine,

formerly the Coordinator of Malaria Treatment and Malaria Elimination at WHO; Dr. Rafick-Pierre Sékaly, Co-Director and Chief Scientific Officer of VGTI Florida; and Dr. Fidel Zavala, Professor at the Department of Molecular Microbiology and Immunology at the Bloomberg School of Public Health, Johns Hopkins University. Dr. David C. Kaslow, director of MVI and former chair of the VSPAC, said, "We're fortunate to have some of the world's most distinguished scientists advising us on MVI's malaria vaccine research and development strategy. The expertise of the VSPAC members is a critical resource to realizing our near-term strategic goal of supporting development of a first-generation malaria vaccine that could protect millions against disease and death, as well as our long-term goals of developing more highly effective second-generation vaccines, including vaccines to support future elimination and eradication efforts." http://www.path.org/news/pr120814-mvi-vspac.php

The FDA (U.S.) said it approved the 2012-2013 influenza (flu) vaccine formulation for all six manufacturers licensed to produce and distribute the vaccines in the United States. Based on that information and the recommendations of the FDA's Vaccines and Related Biological Products Advisory Committee, the strains selected for inclusion in the 2012-2013 flu vaccines are:

- A/California/7/2009 (H1N1)-like virus
- A/Victoria/361/2011 (H3N2)-like virus
- B/Wisconsin/1/2010-like virus.

The FDA noted that while the H1N1 virus is the same as what was included in the 2011-2012 influenza vaccines, this year's influenza H3N2 and B viruses differ from those in the 2011-2012 influenza vaccines.

http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm315365.htm

The **MMWR Weekly for August 24, 2012** / Vol. 61 / No. 33 includes:

<u>Vaccination Coverage Among Children in Kindergarten — United States, 2011–12 School</u> Year

The Weekly Epidemiological Record (WER):

- <u>24 August 2012, vol. 87, 34 (pp. 317–328)</u> includes: Global leprosy situation, 2012 http://www.who.int/entity/wer/2012/wer8734.pdf
- <u>17 August 2012</u>, <u>vol. 87</u>, <u>33 (pp. 305–316)</u> includes: Meeting of the International Task Force for Disease Eradication, April 2012; Progress towards eliminating onchocerciasis in the WHO Region of the Americas in 2011: interruption of transmission in Guatemala and Mexico; Monthly report on dracunculiasis cases, January–May 2012 http://www.who.int/entity/wer/2012/wer8733.pdf

WHO Fact Sheet: Pneumonia

Fact sheet N°331 August 2012 Key Facts

= Pneumonia is the leading cause of death in children worldwide.

- Pneumonia kills an estimated 1.4 million children under the age of five years every year more than AIDS, malaria and tuberculosis combined.
- Pneumonia can be caused by viruses, bacteria or fungi.
- Pneumonia can be prevented by immunization, adequate nutrition and by addressing environmental factors.
- Pneumonia can be treated with antibiotics, but around 30% of children with pneumonia receive the antibiotics they need.

Full Fact Sheet: http://www.who.int/mediacentre/factsheets/fs331/en/index.html

UNICEF said it launched the *Innovate for Children* website to "draw attention to health and education challenges faced by children in developing countries

– and the potential for innovative product design and inventive use of technology to find solutions." The website "welcomes comments and ideas, and invites online submissions on projects designed to accelerate reduction of child mortality. UNICEF's methodology in innovation work "emphasizes the importance of understanding the needs of users and the geographic, social and economic barriers that limit access to life-saving supplies and services."

Website: http://www.unicef.org/media/media 65582.html

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:

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Proceedings: Progress Toward Rubella Elimination and CRS Prevention in Europe

This meeting was held 8-10 February, 2012 in Rome, Italy. Over 150 people from 47 countries came together to review the latest developments in the fight against rubella and CRS in Europe. A special session on measles was also convened to review the numerous overlaps in these two areas. Proceedings are now available for download. Progress Toward Rubella Elimination and CRS Prevention in Europe finalweb.pdf(3.26mb pdf)

Workshop Summary: Accelerating the Development of New Drugs and Diagnostics: Maximizing the Impact of the Cures Acceleration Network August 22, 2012

Summary

Advances in technologies and knowledge are creating new avenues for research and opportunities for the discovery and clinical development of innovative therapies and diagnostics. However, despite these opportunities, only a small fraction of investigational products are successfully developed into cures and therapies that can be accessed by

patients. One response to the ever-widening gap between the number and promise of basic scientific discoveries and the translation of those discoveries into therapies is a renewed emphasis on collaborative approaches among federal agencies, academia, and industry, all directed at the advancement of the drug development enterprise. The newly developed Cures Acceleration Network (CAN) -- a part of the National Center for Advancing Translational Sciences (NCATS) within the National Institutes of Health (NIH) -- has the potential to catalyze widespread changes in NCATS, NIH, and the drug development ecosystem in general.

On June 4–5, 2012, the IOM Forum on Drug Discovery, Development, and Translation held, at the request of NCATS, a workshop -- bringing together members of federal government agencies, the private sector, academia, and advocacy groups -- to explore options and opportunities in the implementation of CAN. This document summarizes the workshop.

http://iom.edu/Reports/2012/Accelerating-the-Development-of-New-Drugs-and-Diagnostics.aspx?utm_medium=etmail&utm_source=Institute%20of%20Medicine&utm_campaign=08.22.12+Report+-

+Cures+Acceleration+Network&utm_content=New%20Reports&utm_term=Academic

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

Annals of Internal Medicine

21 August 2012, Vol. 157. No. 4 http://www.annals.org/content/current [No relevant content]

British Medical Bulletin

Volume 102 Issue 1 June 2012 http://bmb.oxfordjournals.org/content/current [Reviewed earlier; No relevant content]

British Medical Journal

25 August 2012 (Vol 345, Issue 7871) http://www.bmj.com/content/345/7871 [No relevant content] 18 August 2012 (Vol 345, Issue 7870) http://www.bmj.com/content/345/7870 [No relevant content]

Bulletin of the World Health Organization

Volume 90, Number 8, August 2012, 557-632 http://www.who.int/bulletin/volumes/90/8/en/index.html [Reviewed earlier]

Cost Effectiveness and Resource Allocation

(Accessed 25 August 2012)
http://www.resource-allocation.com/
[No new relevant content]

Emerging Infectious Diseases

Volume 18, Number 9—September 2012 http://www.cdc.gov/ncidod/EID/index.htm

Perspective

Hepatitis E, a Vaccine-Preventable Cause of Maternal Deaths

A. B. Labrique et al.

Abstract

Hepatitis E virus (HEV) is a major cause of illness and of death in the developing world and disproportionate cause of deaths among pregnant women. Although HEV vaccine trials, including trials conducted in populations in southern Asia, have shown candidate vaccines to be effective and well-tolerated, these vaccines have not yet been produced or made available to susceptible populations. Surveillance data collected during 2001–2007 from >110,000 pregnancies in a population of \approx 650,000 women in rural Bangladesh suggest that acute hepatitis, most of it likely hepatitis E, is responsible for \approx 9.8% of pregnancy-associated deaths. If these numbers are representative of southern Asia, as many as 10,500 maternal deaths each year in this region alone may be attributable to hepatitis E and could be prevented by using existing vaccines.

Eurosurveillance

Volume 17, Issue 34, 23 August 2012 http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678 [No new relevant content]

Volume 17, Issue 33, 16 August 2012 http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678 [No new relevant content]

Global Health Governance

Volume V, Issue 2: Spring 2012

[Reviewed earlier]

Globalization and Health

[Accessed 25 August 2012] http://www.globalizationandhealth.com/
[No new relevant content]

Health Affairs

August 2012; Volume 31, Issue 8
http://content.healthaffairs.org/content/current
Theme: Challenges Facing The Safety Net
[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 5 August 2012 http://heapol.oxfordjournals.org/content/current [Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines) Volume 8, Issue 8 August 2012

http://www.landesbioscience.com/journals/vaccines/toc/volume/8/issue/8/ [Reviewed earlier]

International Journal of Infectious Diseases

Volume 16, Issue 8, Pages e573-e644 (August 2012) http://www.ijidonline.com/ [Reviewed earlier]

JAMA

August 22, 2012, Vol 308, No. 8

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

[No relevant content]

August 15, 2012, Vol 308, No. 7

http://jama.jamanetwork.com/issue.aspx?journalid=67&issueid=24772&direction=P

Viewpoint

The State of the World's Refugees: Adapting Health Responses to Urban Environments

António Guterres, MEng; Paul Spiegel, MD, MPH Extract [Free full text]

The forced displacement of populations, across borders and within their own countries, is one of the most visible and enduring manifestations of persecution and conflict. At the end of 2011, more than 42 million people had been forcibly displaced from their homes by conflict, including 15 million refugees and 26 million internally displaced people (IDPs). 1 In 2011, more than 4.3 million people were newly uprooted, with some 800 000 fleeing to neighboring countries in humanitarian crises stretching from Côte d'Ivoire, Libya, Syria, the border between Sudan and South Sudan, to the Horn of Africa 1 and more recently due to conflict in Mali. 2

These new emergencies unfolded alongside unresolved crises that have resulted in millions of people living in situations of protracted displacement, often for decades. Millions of refugees and IDPs from countries such as Somalia, Afghanistan, Eritrea, Colombia, the Democratic Republic of Congo, and Iraq remain unable to return to their homes after extended periods in exile. The vast majority of refugees—approximately 80%—are hosted in the developing world, primarily in neighboring countries...

Viewpoint

A Framework for Catastrophic Disaster Response

Dan Hanfling, MD; Bruce M. Altevogt, PhD; Lawrence O. Gostin, JD Extract

The Japanese tsunami, Haitian earthquake, and Gulf Coast hurricane offered stark reminders of how vulnerable organized societies are to catastrophic events. They also show how public health emergencies—whether naturally occurring (eg, a pandemic outbreak of novel influenza) or deliberate (eg, a terrorist attack using an improvised nuclear device)—will stress the health system beyond its current capacity. This will require a health and medical response that is fundamentally different from the status quo.

Journal of Health Organization and Management

Volume 26 issue 6 - Published: 2012

http://www.emeraldinsight.com/journals.htm?issn=1477-7266&show=latest [No relevant content]

Journal of Infectious Diseases

Volume 206 Issue 5 September 1, 2012 http://www.journals.uchicago.edu/toc/jid/current [Reviewed earlier]

Journal of Global Infectious Diseases (JGID)

April-June 2012 Volume 4 | Issue 2 Page Nos. 99-138 http://www.jgid.org/currentissue.asp?sabs=n [Reviewed earlier; No relevant content]

Journal of Medical Microbiology

September 2012; 61 (Pt 9) http://jmm.sgmjournals.org/content/current [No relevant content]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

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

The Lancet

http://www.thelancet.com/journals/lancet/issue/current Aug 25, 2012 Volume 380 Number 9843 p703 - 778 [No relevant content]

Aug 18, 2012 Volume 380 Number 9842 p621 - 702 [No relevant content]

The Lancet Infectious Disease

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

Editorial

Realising the dream of an AIDS-free generation

The Lancet Infectious Diseases

Preview

Françoise Barré-Sinoussi has been associated with the fight against HIV/AIDS since the start of the epidemic: in 1983 she and colleagues published research that identified a retrovirus in a patient at risk of AIDS, work that would 25 years later win her the Nobel Prize for Medicine. During this year's International AIDS Conference in Washington, DC, July 22–27, she assumed the presidency of the International AIDS Society—given her pivotal contributions during the start of the scientific exploration of HIV/AIDS, she is a fitting person to take the helm of this organisation at a time when optimism is high that the epidemic can be brought to an end.

Comment

Global mortality of 2009 pandemic influenza A H1N1

Cécile Viboud, Lone Simonsen *Preview* More than 3 years after the emergence of the 2009 pandemic influenza A H1N1 virus, the associated global mortality remains unclear. Of 18 500 laboratory-confirmed pandemic-associated deaths identified during April, 2009, to April, 2010, worldwide, less than 12% were reported from Africa and southeast Asia, although these regions are home to more than 38% of the world's population. Laboratory-confirmed deaths are gross underestimates of influenza-related mortality because of the lack of routine laboratory tests and difficulties in identification of influenza-related deaths triggered by bacterial superinfections or exacerbation of chronic illnesses.

Comment

Effectiveness of H1N1 vaccination in Scotland, UK

John S Oxford

Preview

The inherent scientific strength of the UK National Health Service (NHS) is exemplified in The Lancet Infectious Diseases by the report by Colin Simpson and colleagues.1 Few countries have nationally linked primary care, hospital records, death certificates, and virological swab data. The numbers in the study are large, with nearly 24 million persondays of observation during the two waves of the H1N1 2009 influenza pandemic in the early summer and the autumn, with the numbers vaccinated and outcomes ranging from hospital admission to death.

Correspondence

Quantifying the efficacy of influenza vaccines

Ruurd Torensma

Preview

The gloomy message reported by Michael Osterholm and colleagues1 urges for improved monitoring of the efficacy of seasonal influenza vaccines. Their finding that influenza vaccines provide only moderate protection, which is greatly reduced or absent in some seasons, against virologically confirmed influenza, seems odd but could be predicted from rather old results that classify immunity against influenza as the so-called original antigenic sin.2,3 The sin is that antibodies induced after vaccination or natural infection are only directed at the first viral strain encountered either by infection or vaccination.

Correspondence

Quantifying the efficacy of influenza vaccines

Arthur L Caplan

Preview

In their meta-analysis, Michael Osterholm and colleagues1 concluded that available evidence shows incomplete efficacy of influenza vaccination. Media coverage and potential consequences of this report are concerning. Critics of vaccination are likely to seize upon such claims to undermine public health efforts to vaccinate against influenza.

Quantifying the efficacy of influenza vaccines

Alberto L García-Basteiro, Anna Llupià, Guillermo Mena, José M Bayas, Antoni Trilla *Preview*

Michael Osterholm and colleagues1 presented the results of a thorough meta-analysis assessing the efficacy and effectiveness of trivalent inactivated vaccine (TIV) and live attenuated influenza vaccines, including only those trials that ascertained influenza virus infection through RT-PCR or culture. The estimated pooled efficacy of TIV was 59% (95% CI 51–67) in adults aged 18–65 years. Results of six of 17 analyses suggested that seasonal vaccination was effective against medically attended influenza.

Quantifying the efficacy of influenza vaccines

Jiehui Kevin Yin, Gulam Khandaker, Harunor Rashid, Dominic E Dwyer, Robert Booy *Preview*

The meta-analysis by Michael Osterholm and colleagues1 sheds fresh light on influenza vaccine efficacy and effectiveness. Their review focused on specific endpoint data of RT-PCR or culture-confirmed influenza (serological diagnoses were excluded) to "assess the highest quality evidence" about the efficacy and effectiveness of influenza vaccine; only "moderate protection" was reported. The median vaccine effectiveness of monovalent pandemic H1N1 (pH1N1) was shown to be 69% (range 60–93) on the basis of five case-control studies (references 48–52 in Osterholm and colleagues1), all of which were published before Feb 15, 2011.

Quantifying the efficacy of influenza vaccines

Alessandra Soriano, Raffaele Manna

Preview

In their meta-analysis of the efficacy and effectiveness of influenza vaccines licensed in the USA, Michael Osterholm and colleagues1 stated that "evidence for protection in adults aged 65 years or older is lacking", although chronic disorders such as cardiac and pulmonary diseases could require influenza vaccination. The cost-effectiveness of influenza vaccination policy requires consideration of adverse effects such as autoimmune disorders, which are rarely reported. Possible reasons for disregarding these events include the subacute presentation in some cases and the variable latency period (from days to years), which makes ascertainment of the causality link difficult.

Quantifying the efficacy of influenza vaccines: Authors' replyMichael T Osterholm, Nicholas S Kelley, Alfred Sommer, Edward A Belongia *Preview*

We appreciate the thoughtful comments in response to our meta-analysis of the efficacy and effectiveness of influenza vaccines.1 Ruurd Torensma suggests that vaccine efficacy can be easily monitored with recombinant DNA technology and microchips to measure neutralising antibodies against several vaccine strains. This is a welcome advance for measurement of strain specific and cross-reactive antibody production, but this technique does not measure vaccine efficacy or reduce the need for field studies with influenza confirmed by use of RT-PCR as the endpoint.

Research

Estimated global mortality associated with the first 12 months of 2009 pandemic influenza A H1N1 virus circulation: a modelling study

Fatimah S Dawood, A Danielle Iuliano, Carrie Reed, Martin I Meltzer, David K Shay, Po-Yung Cheng, Don Bandaranayake, Robert F Breiman, W Abdullah Brooks, Philippe Buchy, Daniel R Feikin, Karen B Fowler, Aubree Gordon, Nguyen Tran Hien, Peter Horby, Q Sue Huang, Mark A Katz, Anand Krishnan, Renu Lal, Joel M Montgomery, Kåre Mølbak, Richard Pebody, Anne M Presanis, Hugo Razuri, Anneke Steens, Yeny O Tinoco, Jacco Wallinga, Hongjie Yu, Sirenda Vong, Joseph Bresee, Marc-Alain Widdowson *Summary*

Background

18 500 laboratory-confirmed deaths caused by the 2009 pandemic influenza A H1N1 were reported worldwide for the period April, 2009, to August, 2010. This number is likely to be only a fraction of the true number of the deaths associated with 2009 pandemic influenza A H1N1. We aimed to estimate the global number of deaths during the first 12 months of virus circulation in each country.

Methods

We calculated crude respiratory mortality rates associated with the 2009 pandemic influenza A H1N1 strain by age (0—17 years, 18—64 years, and >64 years) using the cumulative (12 months) virus-associated symptomatic attack rates from 12 countries and symptomatic case fatality ratios (sCFR) from five high-income countries. To adjust crude mortality rates for differences between countries in risk of death from influenza, we developed a respiratory mortality multiplier equal to the ratio of the median lower respiratory tract infection mortality rate in each WHO region mortality stratum to the median in countries with very low mortality. We calculated cardiovascular disease mortality rates associated with 2009 pandemic influenza A H1N1 infection with the ratio of excess deaths from cardiovascular and respiratory diseases during the pandemic in five countries and multiplied these values by the crude respiratory disease mortality rate associated with the virus. Respiratory and cardiovascular mortality rates associated with 2009 pandemic influenza A H1N1 were multiplied by age to calculate the number of associated deaths.

Findings

We estimate that globally there were 201 200 respiratory deaths (range 105 700—395 600) with an additional 83 300 cardiovascular deaths (46 000—179 900) associated with 2009 pandemic influenza A H1N1. 80% of the respiratory and cardiovascular deaths were in people younger than 65 years and 51% occurred in southeast Asia and Africa. Interpretation

Our estimate of respiratory and cardiovascular mortality associated with the 2009 pandemic influenza A H1N1 was 15 times higher than reported laboratory-confirmed deaths. Although no estimates of sCFRs were available from Africa and southeast Asia, a disproportionate number of estimated pandemic deaths might have occurred in these regions. Therefore, efforts to prevent influenza need to effectively target these regions in future pandemics.

Funding

None.

Effectiveness of H1N1 vaccine for the prevention of pandemic influenza in Scotland, UK: a retrospective observational cohort study

Colin R Simpson, Lewis D Ritchie, Chris Robertson, Aziz Sheikh, Jim McMenamin *Summary*

Background

Methods

A targeted vaccination programme for pandemic H1N1 2009 influenza was introduced in Scotland, UK, in October, 2009. We sought to assess the effectiveness of this vaccine in a sample of the Scottish population during the 2009—10 pandemic.

We assessed the effectiveness of the Scottish pandemic H1N1 2009 influenza vaccination with a retrospective cohort design. We linked data of patient-level primary care, hospital records, death certification, and virological swabs to construct our cohort. We estimated vaccine effectiveness in a nationally representative sample of the Scottish population by establishing the risk of hospital admission and death (adjusted for potential confounders) resulting from influenza-related morbidity in vaccinated and unvaccinated patients and laboratory-confirmed cases of influenza H1N1 2009 in a subset of patients.

Findings

Pandemic H1N1 2009 influenza vaccination began in week 43 of 2009 (Oct 21, 2009) and was given to 38 296 (15·5%, 95% CI 15·4—15·6) of 247 178 people by the end of the study period (Jan 31, 2010). 208 882 (85%) people were unvaccinated. There were 5207 emergency hospital admissions and 579 deaths in the unvaccinated population and 924 hospital admissions and 71 deaths in the vaccinated population during 23 893 359 person-days of observation. The effectiveness of H1N1 vaccination for prevention of emergency hospital admissions from influenza-related disorders was 19·5% (95% CI 0·8 —34·7). The vaccine's effectiveness in preventing laboratory-confirmed influenza was 77·0% (95% CI 2·0—95·0).

Interpretation

Pandemic H1N1 2009 influenza vaccination was associated with protection against pandemic influenza and a reduction in hospital admissions from influenza-related disorders in Scotland during the 2009—10 pandemic.

Funding

National Institute for Health Research Health Technology Assessment Programme (UK).

Medical Decision Making (MDM)

July-August 2012; 32 (4)

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

Theme: Patients' Choices: Perceived Risk, Health State Values, and Decisions

Original Articles/Presenting Probabilities to Patients

[Reviewed earlier]

The Milbank Quarterly

June 2012 Volume 90, Issue 2 Pages 215–416 http://onlinelibrary.wiley.com/doi/10.1111/milq.2012.90.issue-2/issuetoc [Reviewed earlier]

Nature

Volume 488 Number 7412 pp429-550 23 August 2012 http://www.nature.com/nature/current_issue.html [No relevant content]

Volume 488 Number 7411 pp253-424 16 August 2012 http://www.nature.com/nature/journal/v488/n7411/index.html [No relevant content]

Nature Immunology

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

Nature Medicine

August 2012, Volume 18 No 8 pp1155-1302 http://www.nature.com/nm/journal/v18/n8/index.html [Reviewed earlier]

Nature Reviews Immunology

September 2012 Vol 12 No 9

http://www.nature.com/nri/journal/v12/n8/index.html

The impact of differential antiviral immunity in children and adults

Andrew J. Prendergast, Paul Klenerman & Philip J. R. Goulder p636 | doi:10.1038/nri3277

Abstract

The course of immune maturation has evolved to favour survival at each stage of development in early life. Fetal and neonatal immune adaptations facilitate intrauterine survival and provide early postnatal protection against extracellular pathogens, but they leave infants susceptible to intracellular pathogens such as viruses that are acquired perinatally. This Review focuses on three such pathogens — HIV, hepatitis B virus and cytomegalovirus — and relates the differential impact of these infections in infants and adults to the antiviral immunity that is generated at different ages. A better understanding of age-specific antiviral immunity may inform the development of integrated prevention, treatment and vaccine strategies to minimize the global disease burden resulting from these infections.

New England Journal of Medicine

August 23, 2012 Vol. 367 No. 8 http://content.nejm.org/current.shtml [No relevant content]

August 16, 2012 Vol. 367 No. 7 http://www.nejm.org/toc/nejm/lastweek [No relevant content]

OMICS: A Journal of Integrative Biology

July – August 2012, 16(7-8) 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

Eradication of Invasive Pneumococcal Disease due to the Seven-valent Pneumococcal Conjugate Vaccine Serotypes in Calgary, Alberta

Leal, Jenine; Vanderkooi, Otto G.; Church, Deirdre L.; MacDonald, Judy; Tyrrell, Gregory J.; Kellner, James D.

Pediatric Infectious Disease Journal. 31(9):e169-e175, September 2012.

doi: 10.1097/INF.0b013e3182624a40

Abstract:

Background: The seven-valent pneumococcal conjugate vaccine (PCV7) was licensed in Canada in 2001. Routine infant vaccination programs in Alberta began in 2002. Several years after PCV7 introduction, the routine use of PCV7 in infants and high-risk children has led to near elimination of invasive pneumococcal disease (IPD) caused by vaccine serotypes.

Methods: Prospective, population-based surveillance of all IPD cases was conducted from January 1998 to December 2010. Demographic, clinical and microbiologic data were collected.

Results: There were 1462 IPD cases over 13 years. Comparing PCV7 serotype IPD incidence in the prevaccine period (1998–2001) to the late postvaccine period (2007–2010), there were declines in children 0–5 months (100%), 6–23 months (98%), 2–4 years (97%), 5–15 years (100%) as well as in adults 16–64 years (73%), 65–84 years (90%) and \geq 85 years of age (100%). From 2008 to 2010, there were no cases of PCV7 serotype IPD in children under 2 years of age. There have been increases in non-PCV7 serotype IPD; notably, serotypes 5 and 19A have increased significantly in adults and 19A in children.

Conclusions: PCV7 serotype IPD has been eliminated in vaccine-eligible young children and nearly eliminated in all other age groups. Serotype 19A increased significantly at all ages before the introduction of an expanded valency pneumococcal conjugate vaccine.

Pediatrics

August 2012, VOLUME 130 / ISSUE 2 http://pediatrics.aappublications.org/current.shtml [Reviewed earlier]

Pharmacoeconomics

September 1, 2012 - Volume 30 - Issue 9 pp: 749-858 http://adisonline.com/pharmacoeconomics/pages/currenttoc.aspx [Reviewed earlier]

PLoS One

[Accessed 25 August 2012]

http://www.plosone.org/article/browse.action;jsessionid=577FD8B9E1F322DAA533C413 369CD6F3.ambra01?field=date

The Effectiveness of U.S. Public Health Surveillance Systems for Situational Awareness during the 2009 H1N1 Pandemic: A Retrospective Analysis Michael A. Stoto

PLoS ONE: Research Article, published 22 Aug 2012 10.1371/journal.pone.0040984 Abstract

Background

The 2009 H1N1 outbreak provides an opportunity to learn about the strengths and weaknesses of current U.S. public health surveillance systems and to identify implications for measuring public health emergency preparedness.

Methodology/Principal Findings

We adopted a "triangulation" approach in which multiple contemporary data sources, each with different expected biases, are compared to identify time patterns that are likely to reflect biases versus those that are more likely to be indicative of actual infection rates. This approach is grounded in the understanding that surveillance data are the result of a series of decisions made by patients, health care providers, and public health professionals about seeking and providing health care and about reporting cases to health authorities. Although limited by the lack of a gold standard, this analysis suggests that children and young adults are over-represented in many pH1N1 surveillance systems, especially in the spring wave. In addition, the nearly two-month delay between the Northeast and the South in the Fall peak in some surveillance data seems to at least partially reflect regional differences in concerns about pH1N1rather than real differences in pH1N1 infection rates.

Conclusions/Significance

Although the extent of the biases suggested by this analysis cannot be known precisely, the analysis identifies underlying problems with surveillance systems – in particular their dependence on patient and provider behavior, which is influenced by a changing information environment – that could limit situational awareness in future public health emergencies. To improve situational awareness in future health emergencies, population-based surveillance systems such as telephone surveys of representative population samples and seroprevalence surveys in well-defined population cohorts are needed.

PLoS Medicine

(Accessed 25 August 2012)

http://www.plosmedicine.org/article/browse.action?field=date

Why We Need Urban Health Equity Indicators: Integrating Science, Policy, and Community

Jason Corburn, Alison K. Cohen Policy Forum, published 14 Aug 2012 doi:10.1371/journal.pmed.1001285 Summary Points

- As the urban population of the planet increases and puts new stressors on infrastructure and institutions and exacerbates economic and social inequalities, public health and other disciplines must find new ways to address urban health equity.
- Urban indicator processes focused on health equity can promote new modes of healthy urban governance, where the formal functions of government combine with science and social movements to define a healthy community and direct policy action.
- An inter-related set of urban health equity indicators that capture the social determinants of health, including community assets, and track policy decisions, can help inform efforts to promote greater urban health equity.
- Adaptive management, a strategy used globally by scientists, policy makers, and civil society groups to manage complex ecological resources, is a potential model for developing and implementing urban health equity indicators.
- Urban health equity indicators are lacking and needed within cities of both the global north and south, but universal sets of indicators may be less useful than context-specific measures accountable to local needs.

PLoS Neglected Tropical Diseases

July 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 25 August 2012)
http://www.pnas.org/content/early/recent
[No new relevant data]

Public Health Ethics

Volume 5 Issue 1 April 2012 http://phe.oxfordjournals.org/content/current [Reviewed earlier]

Science

24 August 2012 vol 337, issue 6097, pages 877-1008 http://www.sciencemag.org/current.dtl
[No relevant content]

17 August 2012 vol 337, issue 6096, pages 769-876 http://www.sciencemag.org/content/337/6096.toc

News & Analysis
Public Health
Policy Shifts on Emergency Use of Cholera Vaccines

Martin Enserink

Summary

Many experts have argued that in outbreak situations—especially in the poor, messy places where cholera often strikes—existing vaccines are too expensive, not effective enough, and too impractical to roll out; they might even make matters worse, some fear, because they distract health workers from treating patients or improving water and sanitation, the cornerstones of cholera control. But now, the tide appears to have turned. This week, a technical working group at the World Health Organization is set to publish a report advocating for the creation of a global stockpile of cholera vaccines that would be rushed to countries when an outbreak begins.

Science Translational Medicine

22 August 2012 vol 4, issue 148 http://stm.sciencemag.org/content/current **Review**

IMMUNOENGINEERING

Engineering Approaches to Immunotherapy

Melody A. Swartz, Sachiko Hirosue, and Jeffrey A. Hubbell

22 August 2012: 148rv9

Abstract

As the science of immunology grows increasingly mechanistic, motivation for developing quantitative, design-based engineering approaches has also evolved, both for therapeutic interventions and for elucidating immunological pathways in human disease. This has seeded the nascent field of "immunoengineering," which seeks to apply engineering analyses and design approaches to problems in translational immunology. For example, cell engineers are creating ways to tailor and use immune cells as living therapeutics; protein engineers are devising new methods of rapid antibody discovery; biomaterials scientists are guiding vaccine delivery and immune-cell activation with novel constructs; and systems immunologists are deciphering the evolution and maintenance of T and B cell receptor repertoires, which could help guide vaccine design. The field is multidisciplinary and collaborative, with engineers and immunologists working together to better understand and treat disease. We discuss the scientific progress in this young, yet rapidly evolving research area, which has yielded numerous start-up companies that are betting on impact in clinical and commercial translation in the near future.

Health Care

Measuring the Benefits of HPV Vaccination

Ruanne V. Barnabas

22 August 2012: 148ec149

[No abstract] Costs of HPV disease in the United States could be offset by vaccination.

15 August 2012 vol 4, issue 147

http://stm.sciencemag.org/content/4/147.toc

Vaccine

http://www.sciencedirect.com/science/journal/

Elsevier system unavailable until 26 August 2012

Vaccine: Development and Therapy

(Accessed 25 August 2012)

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

Reasons for not having received influenza vaccination and its predictors in Canadians

Original Research

Authors: Chen Y, Wu J, Yi QL, Laroche J, Wong T

Published Date August 2012 Volume 2012:2 Pages 23 - 33

DOI: http://dx.doi.org/10.2147/VDT.S32618

Yue Chen,1 Jun Wu,2 Qi-long Yi,1 Julie Laroche,3 Thomas Wong2

1Department of Epidemiology and Community Medicine, Faculty of Medicine, University of Ottawa, 2Professional Guidelines and Public Health Practice Division, Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, 3Immunization Assessment and Information, Centre for Immunization and Respiratory Infectious Diseases, Public Health Agency of Canada, Ottawa, Ontario, Canada Background: Influenza vaccination is the most effective way to prevent influenza.

However, only about one-third of Canadians receive an annual seasonal influenza vaccination.

Methods: The reasons for not having received influenza vaccination were examined among 131,061 Canadians \geq 12 years of age who participated in a national survey in 2007–2008. Among them, 127,297 subjects responded to the questions concerning their flu shot history and were grouped into three categories: never (n = 51,767), 1+ year ago (n = 29,310), last year (n = 46,220). Subjects who reported not having had a flu shot during the past year were asked the reasons for not having it. The log binomial regression model was used to estimate prevalence ratios (PRs) and 95% confidence intervals (95% CIs) for the associations of various reasons for not having received influenza vaccination and their predictors.

Results: When weighted to the Canadian population, 44.0% had never previously received influenza vaccine and 24.5% had received the vaccine > 12 months ago. The most common reasons for not having received influenza vaccination in the past 12 months were "Respondent did not think it necessary" (71.3%) and "Have not gotten around to it" (17.6%). Log binomial regression analysis shows that females were less likely to report these two reasons compared to males with PRs of 0.98 (0.97, 0.99) and 0.84 (0.81, 0.87), respectively. Younger participants were more likely to report, "Have not gotten around to it." For those who had an influenza vaccination previously, the primary reason for not having an influenza vaccination in the last year was "Have not gotten around to it."

Conclusions: More than two-thirds of Canadians 12+ years of age did not receive an influenza vaccination in the past year, and "Respondent did not think it necessary" and "Have not gotten around to it" were the main reasons.

Value in Health

Vol 15 | No. 5 | July-August 2012 | Pages 593-790 http://www.valueinhealthjournal.com/current [Reviewed earlier]

From Google Scholar: Dissertations, Theses, Selected Journal Articles

Thesis: Evaluation of the impact of access to free influenza vaccine on immunization rates for children with cystic fibrosis

By Jones, Katie, M.P.H., THE UNIVERSITY OF TEXAS SCHOOL OF PUBLIC HEALTH, 2012, 47 pages; 1511823

Abstract:

Children with cystic fibrosis are at increased risk of seasonal influenza associated complications, which makes them a judicious target of interventions designed to increase influenza vaccination rates. The Baylor College of Medicine/Texas Children's Hospital Pediatric Cystic Fibrosis (BCM/TCH CF) Care Center implemented an enhanced multi-component initiative designed to increase influenza vaccination rates in its patient population during the 2011-2012 influenza season. We evaluated the impact of specific components of this intervention on vaccination rates among the clinic's patient population via a historical medical chart review and examined the relationship between vaccination status and the number of pulmonary exacerbations requiring hospital

admission during the influenza season. The multi-component intervention was comprised of providing influenza free of charge in the CF Care Center, reminders via phone call and letters, and drive through influenza vaccine clinics on nights and weekends. The intervention to increase influenza vaccination rates led to overall improved vaccination rates among the patients at the BCM/TCH CF Care Center, increasing from 90% adherence observed during the 2010-2011 season to 94% adherence during the 2011-2012 season. The availability of free influenza vaccine in the CF Care Center, combined with reminders about being vaccinated early in the season proved to be the most effective practices for improving the vaccination rate in the CF Care Center.

http://gradworks.umi.com/15/11/1511823.html

<u>CURRENT OPINION - Advances in hepatitis immunization (A, B, E): public</u> <u>health policy and novel vaccine delivery</u>

G Hendrickx, A Vorsters, P Van Damme - Curr Opin Infect Dis, 2012 Summary

Follow-up of vaccinated individuals confirms the long-term protection offered by the hepatitis A as well as hepatitis B vaccines. Data confirm the safety and immunogenicity profile of both vaccines, also when used in patient groups. The first data on the hepatitis E...

<u>CURRENT OPINION - Meningococcal disease in travelers: update on vaccine options</u>

JP Cramer, A Wilder-Smith - Curr Opin Infect Dis, 2012 Summary

The vaccine of choice for travelers at risk of invasive meningococcal disease is a tetravalent conjugate meningococcal vaccine. Data on the need for re-vaccination schedules are still lacking, and so are data on immunogenicity in very young children and ...

Analysis of indexes used to evaluate immunization coverage rate of first dose of measles containing vaccine.

Beijing Da Xue Xue Bao. 2012 Aug 18;44(4):617-21.

http://www.ncbi.nlm.nih.gov/pubmed/22898859

[Article in Chinese]

Rui LP, Zhang L, Tang N, Wang T.

Source

Department of Epidemiology and Biostatistics, Peking University School of Public Health, Beijing 100191, China.

Abstract

OBJECTIVE:

To obtain an objective index of evaluating the immunization coverage rate of first dose of measles containing vaccine (MCV1)by comparison of the indexes in Guizhou Province. METHODS:

Multistage random sampling method was applied to draw subjects from healthy children who had no measles history and aged from 8 months to 6 years of age. The investigated immunization coverage rate (IIR) and the estimated immunization coverage

rate (EIR) were evaluated according to the positive rate of measles antibody as a gold standard, and the data of incidence cases as a reference.

RESULTS:

The IIR was 86.0% for the group aged from 8 months to 1 year, 90.1% for the group aged from 2 to 3 years and 90.2% for the group aged from 4 to 6 years. The adjusted estimated immunization coverage rate (AIIR) was 89.8%, 94.8% and 95.3%, respectively. Given the vaccine efficacy (VE) was 82.9%, the EIR1 was 59.8%, 71.6% and 77.9%, respectively and the AEIR1 was 68.2%, 79.7% and 86.8%, respectively; given the VE was 95%, the EIR1 was 84.3%, 90.1% and 92.7%, respectively, and the AEIR1 was 88.6%, 93.4% and 96.0%, respectively. The EIR2 was 97.9%, 94.5% and 91.4%, respectively. The relative difference was from 0 to 2.4% when compared with the estimated positive rate of AIIR and AEIR1 given the VE was 95% with the actual positive rate of measles antibody, the difference had no statistical significance(P>0.05). The relative error was low for the estimate positive rates of AIIR and EIR2 and AEIR1 (given the VE was 95%) for the children that had not suffered from measles, the relative error varied from 7.0% to 15.8%.

CONCLUSION:

The investigated immunization coverage rate after adjustment and the AEIR1 (VE 95%) were in line with the actual positive rate of measles antibody, which suggests that we should set an integral evaluation system for the immunization coverage rate based on AIIR and AEIR1.

PMID: 22898859 [PubMed - in process] Free full text

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 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 fee-based 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 25 August 2012 [No new unique, relevant content]

Financial Times

http://www.ft.com Accessed 25 August 2012 [No new unique, relevant content]

Foreign Affairs

http://www.foreignaffairs.com/ September/October 2012 Volume 91, Number 5 Accessed 25 August 2012 [No new unique, relevant content]

Foreign Policy

http://www.foreignpolicy.com/ Accessed 25 August 2012] [No new unique, relevant content]

The Guardian

http://www.guardiannews.com/ Accessed 25 August 2012 [No new unique, relevant content]

The Huffington Post

http://www.huffingtonpost.com/ Accessed 25 August 2012 [No new unique, relevant content]

New Yorker

http://www.newyorker.com/ Accessed 25 August 2012 [No new unique, relevant content]

New York Times

http://www.nytimes.com/ Accessed 25 August 2012 August 24, 2012, 7:03 am

Comment

Polio, Another Scourge of War (Pakistan)

By HUMA YUSUF

http://latitude.blogs.nytimes.com/2012/08/24/taliban-stymie-efforts-to-eradicate-polio-in-pakistan/

Opinion

Tropical Diseases: The New Plague of Poverty

By PETER J. HOTEZ

Published: August 18, 2012

Extract Houston

In the United States, <u>2.8 million children are living in households with incomes of less than \$2 per person per day</u>, a benchmark more often applied to developing countries. An additional 20 million Americans live in extreme poverty. In the Gulf Coast states of Louisiana, Mississippi and Alabama, poverty rates are near 20 percent. In some of the poorer counties of Texas, where I live, rates often approach 30 percent. In these places,

the Gini coefficient, a measure of inequality, ranks as high as in some sub-Saharan African countries.

Poverty takes many tolls, but in the United States, one of the most tragic has been its tight link with a group of infections known as the neglected tropical diseases, which we ordinarily think of as confined to developing countries...

http://www.nytimes.com/2012/08/19/opinion/sunday/tropical-diseases-the-new-plague-of-poverty.html?_r=2

Cholera Epidemic Envelops Coastal Slums in West Africa

By ADAM NOSSITER

Published: August 22, 2012

DAKAR, Senegal — A fierce cholera epidemic is spreading through the coastal slums of West Africa, killing hundreds and sickening many more in one of the worst regional outbreaks in years, health experts said...

http://www.nytimes.com/2012/08/23/world/africa/cholera-epidemic-envelops-coastal-slums-in-west-africa.html

Wall Street Journal

http://online.wsj.com/home-page HEALTH INDUSTRY August 23, 2012, 12:03 a.m. ET Wal-Mart's New Health Push

Retailer to Offer More Vaccinations in Stores as It Seeks Growth in More Areas

Washington Post

http://www.washingtonpost.com/ Accessed 25 August 2012 [No new unique, relevant content]

<u>Twitter Watch</u> [will resume next week...]

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.

* * * *

Vaccines: The Week in Review is a service of the Center for Vaccines Ethics and Policy (<u>CVEP</u>) which is solely responsible for its content. Support for this service is provided by its governing institutions — <u>Department of Medical Ethics, NYU Medical School; The Wistar Institute Vaccine Center</u> and the <u>Children's Hospital of Philadelphia Vaccine Education Center</u>. Additional support is provided by <u>PATH Vaccine Development Program</u> and the <u>International Vaccine Institute</u> (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 (<u>DCVMN</u>). 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.

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