Center for Vaccine Ethics and Policy
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Vaccines and Global Health: The Week in Review
23 November 2013
Center for Vaccine Ethics & Policy (CVEP)

This weekly summary targets news, events, announcements, articles and research in the vaccine and global health 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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News release: WHO and the Philippine Government launch mass vaccination campaign

22 November 2013

Excerpt

MANILA, Philippines - WHO and the Philippine Department of Health have launched a vaccination campaign to prevent outbreaks of measles and polio among survivors of Typhoon Haiyan (Yolanda)…The campaign targets children in areas hardest hit by the disaster – starting with the evacuation centres in the city of Tacloban and at receiving centres in Cebu, where evacuated families are finding temporary shelter. Children under 5 years old are being vaccinated against polio and measles and given Vitamin A drops to boost their immune systems. ..WHO worked with the Department of Health to finalize plans and procure all necessary vaccines and supplies to carry out the campaign and set up immunization stations…WHO is working with partners to arrange for the delivery of vaccines using gas-powered and generator-powered fridges, freezers, vaccine-cases, cold boxes and ice packs for affected areas that have lost power. This "cold chain" is necessary to keep the vaccines from being spoiled. USAID has sent 6 solar-powered refrigerators to Tacloban.

http://www.who.int/mediacentre/news/releases/2013/philippines-vaccination-20131122/en/index.html

WHO - Humanitarian Health Action

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

WHO responding to health needs caused by typhoon Haiyan (Yolanda) 2013 – Health Cluster Bulletin – 20 November 2013

http://www.who.int/entity/hac/crises/phl/sitreps/philippines_health_cluster_bulletin_20november2013.pdf

The GAVI Alliance Board, meeting in Phnom Penh, Cambodia, took a number of decisions on additional vaccines for the Alliance's future portfolio, having received detailed analysis on five disease areas as part of the Vaccine Investment Strategy. The Board:
:: Decided new support would be made available for additional yellow fever campaigns in light of a resurgence of the disease in some parts of Africa.
:: Approved a contribution towards a global cholera vaccine stockpile for the period 2014-2018 to increase access to oral cholera vaccine in outbreak situations and endemic settings.
:: Agreed to continue to consider support for a malaria vaccine if and when one is licensed, prequalified by the WHO and recommended for use by the joint meeting of the WHO Strategic Advisory Group of Experts (SAGE) and the Malaria Programme Advisory Committee (expected in 2015), taking into account updated projections of impact, cost and country demand.
:: Concluded that further evidence is necessary on the impact and operational feasibility of supporting the important rabies vaccine as well as influenza vaccines for pregnant women. The Board agreed that GAVI will fund an observational study to address critical knowledge gaps around access to rabies vaccine and will monitor the evolving evidence base for maternal influenza vaccination in coming years.

Full media Release: Phnom Penh, 22 November 2013 – http://www.gavialliance.org/library/news/press-releases/2013/gavi-alliance-to-support-introduction-of-inactivated-polio-vaccine-in-worlds-73-poorest-countries/

The GAVI Alliance Board approved providing support for the introduction of inactivated poliovirus vaccine (IPV) as part of routine immunisation programmes in the world's 73 poorest countries. GAVI noted that in May 2013, the World Health Assembly endorsed the new Polio Eradication & Endgame Strategic Plan 2013-2018, "calling on countries to introduce at least one dose of IPV and begin the phased removal of oral polio vaccines. Removing oral polio vaccines will eliminate the risk of vaccine-associated polio outbreaks. Introducing IPV is a critical step to manage any risks associated with this phased removal. Adding IPV to routine immunisation programmes will improve immunity and help prevent new vaccine-associated outbreaks from emerging. At the same time, it will hasten eradication of wild polio serotypes in the remaining endemic countries of Afghanistan, Nigeria and Pakistan…."

The GAVI Board "endorsed opening a window of support for IPV for all GAVI-eligible countries and those graduating from GAVI support. Given the global health priority of polio eradication, the Board agreed to a number of policy exceptions for IPV, such as encouraging but not requiring countries to co-finance IPV introduction."

The Jeffrey Modell Foundation (JMF) announced "an unprecedented surveillance study…to shed light on important questions about vaccine-derived polioviruses throughout the globe…" This study will include 25 sites across a wide geographical range involving patient population for this surveillance, including JMF Centers in Argentina, Brazil, Colombia, Mexico, China, Hong Kong, India, Israel, Iran, Kuwait, Russia, Poland, Turkey and Tunisia. JMF "will work alongside the World Health Organization (WHO), The Centers for Disease Control and Prevention (CDC), Task Force for Global Health (TFGH), and the Bill &

Melinda Gates Foundation." The study will "…focus on patients with Primary Immunodeficiencies (PI) who have either received the Oral Polio Vaccine (OPV), a live-weakened form of the virus, or have been exposed to it. Due to little or no immune system, when a patient with PI receives OPV, he or she is unable to create an immune response and therefore, cannot clear the intestinal vaccine virus infection, which is typically excreted within six to eight weeks by individuals with healthy immune systems. After prolonged periods of time, the virus may no longer be the same as the original vaccine-virus as it can genetically alter. This is called Vaccine Derived Poliovirus (VDPV). Although rare, it is expected that patients with PI are at risk of developing Vaccine Associated Paralytic Poliomyelitis (VAPP) and VDPV excretion, which could lead to possible exposure to the community…Once wild poliovirus is eradicated globally, vaccine-viruses will be the only type of live poliovirus in the community and could potentially lead to an outbreak. In order to prevent this occurrence, the Polio Antivirals Initiative (PAI), an essential part of the TFGH's Polio Eradication effort, aims to create an efficient and inexpensive antiviral."

More information about PI: www.info4pi.org

Full media release: NEW YORK, Nov. 18, 2013 /PRNewswire/
http://www.prnewswire.com/news-releases/global-polio-study-begins-232335041.html

WHO: Global Alert and Response (GAR) – *Disease Outbreak News*
http://www.who.int/csr/don/2013_03_12/en/index.html
:: **Middle East respiratory syndrome coronavirus (MERS-CoV)** – update 18 November 2013
:: **Wild poliovirus in Cameroon** 21 November 2013
Excerpt

21 November 2013 - Wild poliovirus type 1 (WPV1) has been confirmed in Cameroon, the first wild poliovirus in the country since 2009. Wild poliovirus was isolated from two acute flaccid paralysis (AFP) cases from West Region. The patients developed paralysis on 1 October and 19 October 2013. Genetic sequencing indicates that these viruses are linked to wild poliovirus last detected in Chad in 2011.

An emergency outbreak response plan is being finalized, including at least three national immunization days (NIDs), the first of which was conducted on 25-27 October 2013. Subnational immunization days (SNIDs) will be implemented in December 2013, followed by two subsequent national immunization days in January and February 2014. Routine immunization rates are reported to be approximately 85.3 percent for oral polio vaccine (OPV3). A response in neighbouring countries is also being planned, notably in Chad and Central African Republic...

…This event confirms the risk of ongoing international spread of a pathogen (wild poliovirus) slated for eradication. Given the history of international spread of polio from northern Nigeria across West and Central Africa and subnational surveillance gaps, WHO assesses the risk of further international spread across the region as high…
http://www.who.int/csr/don/2013_11_21/en/index.html

Update: Polio this week - *As of 23 November 2013*
Global Polio Eradication Initiative
Full report: http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx
[Editor's extract and bolded text]

:: In the Middle East, a comprehensive outbreak response continues to be implemented across the region. Seven countries and territories are holding mass polio vaccination campaigns targeting 22 million children under the age of five years. In a joint resolution, all countries of the WHO Eastern Mediterranean Region have declared polio eradication to be an emergency, calling for support in negotiating and establishing access to those children who are currently unreached with polio vaccination. WHO and UNICEF are committed to working with all organizations and agencies providing humanitarian assistance to Syrians affected by the conflict. This includes vaccinating all Syrian children no matter where they are, whether in government or contested areas, or outside Syria.
:: In southern Afghanistan, the traditional endemic region in the country, no WPV cases have been reported for one year. All nine cases in the country this year are from Eastern Region, linked to cross-border transmission with Pakistan. For more, please click here.

Pakistan

:: Four new WPV1 cases were reported in the past week. Two of the cases are from Federally Administered Tribal Areas (FATA), one from Punjab and one from Sindh. The total number of WPV1 cases for Pakistan in 2013 is now 63. The most recent WPV1 case had onset of paralysis on 21 October (from Punjab).
:: The situation in North Waziristan is increasingly alarming. It is the area with the largest number of children being paralyzed by poliovirus in all of Asia. Immunization activities have been suspended by local leaders since June 2012. It is critical that children in these areas are vaccinated and protected from poliovirus. Immunizations in neighboring high-risk areas are being intensified, to further boost population immunity levels in those areas and prevent further spread of this outbreak.

Horn of Africa

:: Three new WPV1 cases were reported in the past week (from Somalia), bringing the total number of WPV1 cases in the Horn of Africa to 203 (183 from Somalia, 14 from Kenya and six from Ethiopia). The most recent WPV1 case in the region had onset of paralysis on 9 October (from Lower Shabelle, Somalia).
:: Outbreak response across the Horn of Africa is continuing. As a result of concerted outbreak response efforts, the impact of the response is beginning to be seen, as the number of newly-reported cases from Banadir, Somalia (the epicentre of the outbreak) has declined. All efforts continue to be made to reach all children everywhere.

Middle East

:: In Syria, no new WPV1 cases were reported in the past week. The total number of WPV1 cases remains 13. Wild poliovirus was last reported in Syria in 1999.
:: A comprehensive outbreak response continues to be implemented across the region. On 24 October, an already-planned large-scale supplementary immunization activity was launched in Syria to vaccinate 1.6 million children against polio, measles, mumps and rubella, in both government-controlled and contested areas.
:: Implementation of a supplementary immunization campaign in Deir Al Zour province commenced promptly when the first 'hot' acute flaccid paralysis (AFP) cases were reported .

Editor's Note: See *New England Journal of Medicine* below in *Journal Watch:*

Editorial

No Country Is Safe without Global Eradication of Poliomyelitis

Trevor Mundel, M.D., Ph.D., and Walter A. Orenstein, M.D.

Original Article

Identification and Control of a Poliomyelitis Outbreak in Xinjiang, China
Hui-Ming Luo, M.D et al

The **Weekly Epidemiological Record (WER) for 22 November 2013**, vol. 88, 47 (pp. 501–508) includes:
:: Progress towards poliomyelitis eradication in Pakistan, January 2012– September 2013
http://www.who.int/entity/wer/2013/wer8847.pdf

CDC/MMWR Watch [to 23 November 2013]
A serogroup B meningococcal vaccine is being considered for use at Princeton University. FDA is allowing the use of the vaccine at Princeton University under an Investigational New Drug application. Get the latest information and additional questions and answers about the outbreak from the University and the New Jersey Department of Health [9 pages]
MMWR November 22, 2013 / Vol. 62 / No. 46
:: Progress Toward Poliomyelitis Eradication — Afghanistan, January 2012–September 2013
:: Progress Toward Poliomyelitis Eradication — Pakistan, January 2012–September 2013

The U.S. Food and Drug Administration approved the first adjuvanted vaccine for the prevention of H5N1 influenza: Influenza A (H5N1) Virus Monovalent Vaccine, Adjuvanted is for use in people 18 years of age and older who are at increased risk of exposure to the H5N1 influenza virus. The H5N1 avian influenza vaccine "is not intended for commercial availability. The U.S. Department of Health and Human Services has purchased the vaccine from the manufacturer, ID Biomedical Corporation of Quebec, Quebec City, Canada (a subsidiary of GlaxoSmithKline Biologicals), for inclusion within the National Stockpile for distribution by public health officials if needed."
Full FDA NEWS RELEASE, Nov. 22, 2013:
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm376444.htm

Nigeria unveiled its National Routine Immunization Strategic Plan (NRISP) 2013-2015, "outlining a comprehensive strategy to increase access to live-saving vaccines through strengthened routine immunization (RI) systems." The plan was co-launched by the Nigerian Minister of Health, Prof. Onyebuchi Chukwu and Mr. Bill Gates in an event hosted by the National Primary Health Care Development Agency (NPHCDA) and attended by traditional and religious leaders, private sector representatives, and development partners, including Alhaji Aliko Dangote and the Sultan of Sokoto.
http://www.jhsph.edu/research/centers-and-institutes/ivac/about-us/news.html#Nigeria_NRISP_launch_2013
National Routine Immunization Strategic Plan (NRISP) 2013-2015
Executive Summary

This National Routine Immunization Strategic Plan (NRISP) lays out key goals and objectives for Nigeria's routine immunization (RI) system, and details the strategies that will allow the country to achieve its aims, while recognizing important challenges.

NRISP is not a standalone document, instead it was developed to fit within the National Strategic Health Development Plan 2010-2015 (NSHDP) and expand upon the comprehensive Multi-Year Plan 2011-2015 (cMYP). The NRISP will also operate within and alongside Nigeria's Saving One Million Lives Initiative (SOML) and other efforts to meet the MDGs. As highlighted in these initiatives, the NRISP is guided by a set of core principles, namely: accountability, efficiency, equity, ownership, integration, sustainability, and transparency.

Within the NRISP, the Strategic Framework enumerates strategies to improve the country's RI system. Three strategic focal areas have been identified to concentrate efforts to improve the system in practice; these strategies are already in place to varying extents and are recognizable by stakeholders at all levels in Nigeria. They are: Reaching Every Ward (REW), Accountability for RI Framework (AFRIN), and Health System Strengthening.

The Strategic Framework's strategies are categorized into RI system areas, and outputs, indicators, and responsible parties have been developed for each. A monitoring and evaluation (M&E) process describes a regular reporting structure inclusive of relevant stakeholders, and seeks to ensure that data are available in a timely manner and used in decision making. A system of rewards and sanctions are also suggested to improve accountability.

The NRISP aims to clarify the roles and responsibilities for different levels of government in the execution of the RI system. The National Primary Health Care Development Agency (NPHCDA)and partners are responsible for providing policy direction, mobilizing resources to fill gaps, building capacity, providing supportive supervision, and conducting M&E of the RI program. Implementation of this strategic plan and accountability framework will fall on the shoulders of states and local government areas (LGAs). The expectation is that State Primary Health Care Development Agencies (SPHCDAs) will guide LGAs, and LGAs will in turn support health facilities (HFs).

Consequent upon the above, the total budget to implement this plan for the period July 2013 to December 2015 estimated at USD 642,038,476 has been shared among the three tiers of governments. Therefore, 69% will be the responsibility of the federal, 15% that of the states, and 16% will be borne by the local governments. This averages USD 35.41 per child born in Nigeria over the next two and a half years.

Finally, the NRISP was developed through a consultative process that included stakeholders from all levels of government and various facets of society. Commitments were made on behalf of MoH, NPHCDA, states, and other important institutions to take up and implement these recommendations for the unanimously agreed upon purpose of this strategy: protecting the health of Nigeria's children through equitable provision of RI.

Media Release: New framework for neglected tropical diseases could unlock potential for world's poorest people

22 November 2013

Excerpt

A new concept and policy framework published in PLOS NTDs outlines concrete steps for the global development community as it works to synthesize health goals with economic, environmental and social priorities. The concept, "blue marble health," emphasizes the role of the Group of 20 (G20) nations in tackling neglected tropical diseases (NTDs) to expedite

poverty reduction efforts. Peter Hotez, MD PhD, president of the Sabin Vaccine Institute, director of the Sabin Vaccine Institute and Texas Children's Hospital Center for Vaccine Development and dean of the National School of Tropical Medicine at Baylor College of Medicine, said "Blue marble health connects countries worldwide by recognizing that extreme poverty is a fundamental underlying factor for neglected tropical diseases (NTDs), regardless of where they occur. G20 countries have an exceptional opportunity to embrace NTD control as a cross-cutting strategy and achieve long-lasting, inclusive prosperity within their societies and lower-income countries."…

…Existing medicines for the seven most common NTDs are safe, effective, and inexpensive. However, new tools and diagnostics will help us stay ahead of how current treatment needs evolve and enable us to address several NTDs for which there are no current options available. G20 countries have an important role to play in investing in R&D, including building up the local capacity of vaccine manufacturers in disease-endemic countries:

:: Vaccine Diplomacy: Promoting scientific collaboration between institutions from countries regardless of their ideological perspectives can foster essential dialogue on these life-threatening diseases and lead to new, effective interventions.

:: NTD Integration: Strong linkages exist between NTDs and nearly every major development priority. Efforts to control and eliminate should be incorporated into existing programs working to improve maternal and child health; water, sanitation and hygiene; hunger and nutrition; education; and combat HIV/AIDS, tuberculosis and malaria.

:: Health of Girls and Women: This population is especially disproportionately affected – indeed NTDs may be the most common afflictions of girls and women living in poverty.

:: NCDs: NTDs contribute to a hidden but substantial proportion of the world's non-communicable diseases.

:: Sustainable Development Goals (SDGs): Controlling NTDs will serve as a catalyst for the achievement of the Millennium Development Goals and a broad set of issues likely to be addressed in the new SDGs. It will be essential to incorporate NTDs into this framework…
http://www.sabin.org/updates/pressreleases/new-framework-neglected-tropical-diseases-could-unlock-potential-world%E2%80%99s

The Global Fund "welcomed an announcement by the Republic of Korea to double its contribution to the Global Fund over the next three years by drawing on the proceeds of a levy on airline tickets." The Korean Ministry of Health will contribute US$6 million to the Global Fund for 2014-16. An additional US $10 million, from a levy on all passengers leaving Korea on international flights, will be paid by the Korean Ministry of Foreign Affairs to the Global Fund in five annual installments of $2 million from 2013-17. The 1,000 won (US $0.95) levy, known as the Global Poverty Eradication Tax, was introduced in 2007, primarily to contribute financial resources to fight poverty and disease in impoverished countries. Korea has contributed US$19 million since it started lending financial support to the Global Fund in 2004, of which US$6 million was pledged for the 2011-13 period.
http://www.theglobalfund.org/en/mediacenter/newsreleases/2013-11-21_Republic_of_Korea_Boosts_Contribution_to_Global_Fund/

The International Vaccine Institute (IVI) announced that Professor Fred Binka, Dr. Joseph J. Kim, and Dr. George R. Siber will join the IVI Board of Trustees. The three new Board members, who hail from Ghana, the United States, and Canada, respectively, will serve a three-year term to oversee the governance and management of the institute. IVI Director General Dr. Christian Loucq commented, "The new members bring scientific, industrial, and global health expertise that will boost IVI's ability to make an impact in improving the health of the most impoverished. IVI has undergone several changes to strengthen its governance and management and to increase transparency. We look forward to capitalizing on the experience and knowledge they bring as we continue to evolve as an institute."

Full media release: SEOUL, South Korea, Nov. 18, 2013 /PRNewswire: http://www.prnewswire.com/news-releases/international-vaccine-institute-announces-appointments-of-new-members-to-its-board-of-trustees-232427031.html

Aeras announced that Lota S. Zoth, CPA was appointed Chair of its Board of Directors, noting that Ms. Zoth "assumes leadership of Aeras during its 10th year, at a time when the organization is focused on diversifying and advancing a pipeline of next-generation vaccine candidates." Ms. Zoth joined the board in 2011 and is a strategic finance and operations executive who served as Senior Vice President and Chief Financial Officer of MedImmune, Inc., now part of AstraZeneca. She replaces R. Gordon Douglas, Jr., outgoing Chair of the Board and Emeritus Professor of Medicine at Weill Cornell Medical College. Dr. Douglas served as Board Chair for the past 12 years and "guided the organization through its growth from a small nonprofit research group to an international nonprofit biotech with offices in South Africa and China; six TB vaccine candidates in its clinical portfolio; and global partnerships in Africa, Asia, Australia, Europe, and North America."

November 21, 2013, ROCKVILLE, MD - http://www.aeras.org/pressreleases/aeras-announces-new-board-leadership#.UpEwd-Ky-F8

The Gates Foundation announced a new round of winners as part of its Grand Challenges Explorations (GCE) initiative. GCE grants associated with vaccines included those in the category: *The 'One Health' Concept: Bringing Together Human and Animal Health for New Solutions* – "Over the last century, both human and veterinary medicine have made great advancements. In spite of the many overlaps between the two disciplines, they have become distinctly separate, limiting cross-disciplinary sharing of knowledge. These projects are exploring innovative ideas within the concept of 'One Health' to address human and livestock diseases, human nutrition, health service delivery, and measurement of impact. Projects include:

:: Milosz Faber of Thomas Jefferson University in the U.S. will develop a rabies vaccine that both protects dogs against rabies and reduces their population levels to control the incidence of human rabies. Human rabies causes 70,000 deaths annually and is mostly spread by dogs.

:: George Warimwe of the Jenner Institute at the University of Oxford in the United Kingdom will develop a vaccine to protect a variety of species, including humans, sheep, and cattle, against Rift Valley fever, which can cause serious illness…."

Full media release: http://www.gatesfoundation.org/Media-Center/Press-Releases/2013/11/Gates-Foundation-Awards-Grants-to-Test-Ideas-2

PATH said it will receive two US$1 million grants from the Bill & Melinda Gates Foundation's Grand Challenges Explorations initiative "to advance a new category of cold chain equipment and expand access to donated breast milk by simplifying human milk banking." The two-year, follow-on grants recognize successful projects with additional funding, allowing PATH and collaborators to build on work already under way. The first grant will support PATH work with equipment manufacturers to design novel approaches that catalyze the introduction of low-cost, durable, freeze-safe cold chain solutions into country immunization programs. PATH aims to advance "fail-safe" innovations in cold boxes and vaccine carriers that allow vaccines to remain cold for longer periods of time without damaging freeze-sensitive vaccines. PATH will work with manufacturing partners to overcome technical hurdles through design optimization, laboratory testing, and field evaluations in country immunization supply chains. In addition, PATH will engage with key stakeholders and country decision-makers to raise awareness of the need to prevent vaccine freezing and assess demand for cold chain equipment that meets this need.

Full media release: http://www.path.org/news/press-room/660/

DFID – GAVI - Summary Assessment 2013

Excerpt

Summary assessment: Continues to deliver results with activity across all reform priorities. Impact of increased focus on market shaping being felt. Key changes have begun to support health system strengthening.

Baseline

The GAVI Alliance is a public-private partnership committed to saving children's lives and protecting people's health by increasing access to immunisation in developing countries. The MAR highlighted several strengths:

:: GAVI has made a significant contribution to MDG 4 by increasing finance for vaccinations, including from innovative sources, and has improved coverage of new and underused vaccines.
:: It has a strong partnership with governments, civil society and the private sector.
:: It provides highly cost-effective health interventions with vaccines selected on strict criteria for health impact and cost effectiveness with appropriate administration costs.
:: It has effective financial oversight, with a proactive Audit and Finance Committee, an internal auditor and a robust Transparency and Accountability Policy.

The MAR also highlighted several weaknesses:

:: The need for more focus on market shaping to reduce prices and secure sustainable supply.
:: It has relatively poor performance of cash based programmes, particularly Health Systems Strengthening (HSS) support.
:: The need for a more systematic evidence based approach to working in fragile contexts.
:: There is lack of clarity in roles and responsibilities of key partners, such as WHO and UNICEF, and on the inclusion of civil society.

DFID's reform priorities for the MAR Update were:

:: Better approach to working in fragile settings through the development of a policy and systematic evidence of performance in fragile contexts - assessed under attention to cross-cutting issues (fragile states).

:: Greater focus on outcomes and performance, specifically in relation to the delivery of its cash based programmes (HSS) – assessed under strategic and performance management and financial resource management.
:: Stronger performance on influencing markets and more strategic approach to procurement for sustainable and affordable vaccine supply - assessed under cost and value consciousness.
:: Further alignment and clarity in roles and responsibilities of partners, including civil society – assessed under partnership behaviour.

Summary of Overall Progress

GAVI continues to be a high performing institution providing a very cost-effective health intervention. From the 2011 MAR high baseline, evidence collected for the 2013 MAR Update demonstrates GAVI's on-going commitment to improvement across the DFID reform priorities and in all at least some evidence of commitment being translated into implementation exists. However work streams are at different stages and for some, e.g. HSS support, it is too early to judge country level impact.

Full DFID Documentation - Multilateral Aid Review: Global Alliance for Vaccines and Immunisation (GAVI) at: https://www.gov.uk/government/publications/multilateral-aid-review-global-alliance-for-vaccines-and-immunisation-gavi

UN Watch [to 23 November 2013]
Selected meetings, press releases, and press conferences relevant to immunization, vaccines, infectious diseases, global health, etc. http://www.un.org/en/unpress/
No new relevant content

European Medicines Agency Watch [to 23 November 2013]
http://www.ema.europa.eu/ema/
No new relevant content

World Bank/IMF Watch [to 23 November 2013]
Selected media releases and other selected content relevant to immunization, vaccines, infectious diseases, global health, etc. http://www.worldbank.org/en/news/all
No new relevant content.

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

Vaccines and Global Health: 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

No new relevant content.

Journal Watch

Vaccines and Global Health: 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

The American Journal of Bioethics
Volume 13, Issue 12, 2013
http://www.tandfonline.com/toc/uajb20/current#.Uhk8Az_hflY
Special Issue Focus: *The SUPPORT Controversy and the Debate Over Research Within the Standard of Care*

American Journal of Infection Control
Vol 41 | No. 11 | November 2013 | Pages 949-114
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Public Health
Volume 103, Issue 12 (December 2013)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
November 2013; 89 (5)
http://www.ajtmh.org/content/current
[Reviewed earlier]

Annals of Internal Medicine
19 November 2013, Vol. 159. No. 10
http://annals.org/issue.aspx
[No relevant content]

BMC Public Health
(Accessed 23 November 2013)
http://www.biomedcentral.com/bmcpublichealth/content
Research article
Comparison of the Use of H1N1 and seasonal influenza vaccinations between veterans and non-veterans in the United States, 2010

Claudia Der-Martirosian, Kevin C Heslin, Michael N Mitchell, Karen Chu, Kim Tran and Aram Dobalian
BMC Public Health 2013, 13:1082 doi:10.1186/1471-2458-13-1082
Published: 20 November 2013
Abstract (provisional)
Background
Veterans of the U.S. armed forces tend to be older and have more chronic health problems than the general adult population, which may place them at greater risk of complications from influenza. Despite Centers for Disease Control and Prevention (CDC) recommendations, seasonal influenza vaccination rates for the general adult population remain well below the national goal of 80%. Achieving this goal would be facilitated by a clearer understanding of which factors influence vaccination.
Methods
Using the 2010 U.S. National Health Interview Survey (NHIS), this study estimates models of two types of vaccinations (H1N1 and seasonal flu), assesses if the correlates differ for these vaccinations, and analyses the distribution of the correlates by veteran status.
Results
Veterans, women, non-Hispanic whites, non-smokers, those at high risk, educated, with health insurance, and who use clinics as a usual source of care were more likely to receive both types of vaccinations. Those who were older, married, and with higher income were more likely to get vaccinated for seasonal flu, but not for H1N1. Age and number of children living in the household were found to have different effects for H1N1 compared to seasonal flu.
Conclusion
Veterans are more likely to get vaccinated for seasonal influenza and H1N1 compared to the general population. This might be due to Veterans having better access to care or Veterans participating in better health care practices. Future studies should examine potential differences in flu vaccination use among Veterans using Veterans Affairs (VA) health care system vs. non-VA users.

British Medical Bulletin
Volume 107 Issue 1 September 2013
http://bmb.oxfordjournals.org/content/current
[Reviewed earlier]

British Medical Journal
23 November 2013 (Vol 347, Issue 7934)
http://www.bmj.com/content/347/7934
[No relevant content]

Bulletin of the World Health Organization
Volume 91, Number 11, November 2013, 797-896
http://www.who.int/bulletin/volumes/91/11/en/index.html
Special theme: human resources for universal health coverage
[No specific relevant content]

Clinical Therapeutics
Vol 35 | No. 11 | November 2013 | Pages 1653-1864
http://www.clinicaltherapeutics.com/current
[No relevant content]

Cost Effectiveness and Resource Allocation
(Accessed 23 November 2013)
http://www.resource-allocation.com/
[No new relevant content]

Current Opinion in Infectious Diseases
December 2013 - Volume 26 - Issue 6 pp: v-v,493-588
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
Special Theme: ANTIMICROBIAL AGENTS
[No relevant content]

Developing World Bioethics
December 2013 Volume 13, Issue 3 Pages ii–ii, 105–170
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2013.13.issue-3/issuetoc
[Reviewed earlier]

Development in Practice
Volume 23, Issue 7, 2013
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier; No relevant content]

Emerging Infectious Diseases
Volume 19, Number 12—December 2013
http://www.cdc.gov/ncidod/EID/index.htm
Perspective
Review of Institute of Medicine and National Research Council Recommendations for One Health Initiative
Carol Rubin , Tanya Myers, William Stokes, Bernadette Dunham, Stic Harris, Beth Lautner, and Joseph Annelli
http://wwwnc.cdc.gov/eid/article/19/12/12-1659_article.htm
Abstract
Human health is inextricably linked to the health of animals and the viability of ecosystems; this is a concept commonly known as One Health. Over the last 2 decades, the Institute of Medicine (IOM) and the National Research Council (NRC) have published consensus reports and workshop summaries addressing a variety of threats to animal, human, and ecosystem health. We reviewed a selection of these publications and identified recommendations from NRC and IOM/NRC consensus reports and from opinions expressed in workshop summaries that are

relevant to implementation of the One Health paradigm shift. We grouped these recommendations and opinions into thematic categories to determine if sufficient attention has been given to various aspects of One Health. We conclude that although One Health themes have been included throughout numerous IOM and NRC publications, identified gaps remain that may warrant targeted studies related to the One Health approach.

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Volume 23 Issue 5 October 2013
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Volume 40, Issue 3, 2013
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Volume 15, Issue 1
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Theme: Realizing the Right to Health Through a Framework Convention on Global Health
[Reviewed earlier]

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Volume 8 / Issue 04 / October 2013
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Volume 28 Issue 7 October 2013
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[Accessed 23 November 2013]
Research Article
A mathematical model to predict the risk of hepatitis B infection through needle/syringe sharing in mass vaccination
Etsuji Okamoto
Infectious Diseases of Poverty 2013, 2:28 doi:10.1186/2049-9957-2-28
Published: 19 November 2013
http://www.idpjournal.com/content/2/1/28/abstract
Abstract (provisional)
Background
The Japanese Government settled a class litigation case with hepatitis B virus (HBV) carriers who claim to have been infected through needle/syringe sharing in mass vaccination with a blanket compensation agreement. However, it is difficult to estimate how many of the present HBV carriers were infected horizontally from mass vaccination and how many were infected vertically from mothers.

Methods
A mathematical model to predict the risk of infection through needle/syringe sharing in mass vaccination was proposed and a formula was developed. The formula was presented in a logarithmic graph enabling users to estimate how many people will be infected if a needle/syringe is shared by how many people for how many times under certain probability of infection. The formula was then applied to the historical data of mass tuberculin skin tests (TSTs) and BCG inoculation, from which a best estimate of how much needle/syringe sharing was practiced in different birth cohorts was determined.
Results
For the oldest cohort born between 1951 and 1955, the prevalence of HBV carriers---0.65% at birth through vertical transmission---more than doubled in 1995 (1.46%) through horizontal transmission. If the probability of infection through needle/syringe sharing is assumed to be 10% , it is theoretically likely that an average of five or more people shared a needle/syringe four times to achieve the prevalence of HBV carriers in 1995. However, for the youngest cohort born between 1981 and 1985, the effects of needle/syringe sharing were negligible because the later prevalence of HBV carriers was lower than the prevalence at birth.
Conclusions
More than half of the HBV carriers born in the early 1950s might have contracted the disease by mass vaccinations. Japan's experience needs to be shared with other countries as a caution in conducting mass vaccination programs under scarce needle/syringe supply.

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Volume 42 Issue 5 October 2013
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Vol 17 | No. 11 | November 2013
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November 20, 2013, Vol 310, No. 19
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Volume 38, Issue 6, December 2013

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Volume 27 issue 6 - Latest Issue
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Journal of Infectious Diseases
Volume 208 Issue 12 December 15, 2013
http://jid.oxfordjournals.org/content/current
Potential Impact of the US President's Emergency Plan for AIDS Relief on the Tuberculosis/HIV Coepidemic in Selected Sub-Saharan African Countries
Viviane D. Lima1,2, Reuben Granich3, Peter Phillips1,4, Brian Williams5 and Julio S. G. Montaner1,2
http://jid.oxfordjournals.org/content/208/12/2075.abstract
Abstract
Background. There are limited data measuring the impact of expanded human immunodeficiency virus (HIV) prevention activities on the tuberculosis epidemic at the country level. Here, we characterized the potential impact of the US President's Emergency Plan for AIDS Relief (PEPFAR) on the tuberculosis epidemic in sub-Saharan Africa.
Methods. We selected 12 focus countries (countries receiving the greatest US government investments) and 29 nonfocus countries (controls). We used tuberculosis incidence and mortality rates and relative risks to compare time periods before and after PEPFAR's inception, and a tuberculosis/HIV indicator to calculate the rate of change in tuberculosis incidence relative to the HIV prevalence.
Results. Comparing the periods before and after PEPFAR's implementation, both tuberculosis incidence and mortality rates have diminished significantly and to a higher degree in focus countries. The relative risk for developing tuberculosis, comparing those with and without HIV, was 22.5 for control and 20.0 for focus countries. In most focus countries, the tuberculosis epidemic is slowing down despite some regions still experiencing an increase in HIV prevalence.
Conclusions. This ecological study showed that PEPFAR had a more consistent and substantial effect on HIV and tuberculosis in focus countries, highlighting the likely link between high levels of HIV investment and broader effects on related diseases such as tuberculosis.

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Volume 2 Issue 3 September 2013
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The Lancet
Nov 23, 2013 Volume 382 Number 9906 p1679 – 1756 e25
http://www.thelancet.com/journals/lancet/issue/current
Series
Bangladesh: Innovation for Universal Health Coverage
The Bangladesh paradox: exceptional health achievement despite economic poverty
A Mushtaque R Chowdhury, Abbas Bhuiya, Mahbub Elahi Chowdhury, Sabrina Rasheed, Zakir Hussain, Lincoln C Chen
Preview |
Bangladesh, the eighth most populous country in the world with about 153 million people, has recently been applauded as an exceptional health performer. In the first paper in this Series, we

present evidence to show that Bangladesh has achieved substantial health advances, but the country's success cannot be captured simplistically because health in Bangladesh has the paradox of steep and sustained reductions in birth rate and mortality alongside continued burdens of morbidity. Exceptional performance might be attributed to a pluralistic health system that has many stakeholders pursuing women-centred, gender-equity-oriented, highly focused health programmes in family planning, immunisation, oral rehydration therapy, maternal and child health, tuberculosis, vitamin A supplementation, and other activities, through the work of widely deployed community health workers reaching all households.

Bangladesh: Innovation for Universal Health Coverage

Harnessing pluralism for better health in Bangladesh

Syed Masud Ahmed, Timothy G Evans, Hilary Standing, Simeen Mahmud

Preview |

How do we explain the paradox that Bangladesh has made remarkable progress in health and human development, yet its achievements have taken place within a health system that is frequently characterised as weak, in terms of inadequate physical and human infrastructure and logistics, and low performing? We argue that the development of a highly pluralistic health system environment, defined by the participation of a multiplicity of different stakeholders and agents and by ad hoc, diffused forms of management has contributed to these outcomes by creating conditions for rapid change.

The Lancet Global Health

Nov 2013 Volume 1 Number 5 e238 - 309

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

[Reviewed earlier; No relevant content]

The Lancet Infectious Diseases

Dec 2013 Volume 13 Number 12 p995 - 1098

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

A rare success for cholera vaccines

Saranya Sridhar a, Narendra Kumar Arora b

http://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2813%2970296-2/fulltext?_eventId=login

Cholera is a truly neglected infectious disease that is endemic in most parts of Africa and Asia. Despite an estimated annual burden of 2–4 million cases,1 it garners public attention only when outbreaks rampage through disaster-struck populations.2 Control of cholera depends on the long-term strategy of improving water quality and sanitation systems, but an effective vaccine conferring durable protection could offer an additional weapon in the depleted armoury of prevention strategies for this disease.

In 2001, WHO prequalified the licensed oral cholera vaccine Dukoral (SBL Vaccin AB, Sweden) for purchase by UN organisations.3 However, this vaccine is expensive, its efficacy lasts for only 2 years,4 and it is primarily used to protect travellers.3 In a technology transfer that should serve as a model for vaccine development, a modified version of the vaccine (Shanchol, Shantha Biotechnics, India) was manufactured and licensed in India in 2009. Shanchol was prequalified by the WHO in 2011. A field trial5 showed 67% cumulative efficacy in the first 2 years after vaccination. At that time, we sounded a note of cautious optimism and awaited the

results of longer follow-up since other promising cholera vaccines with similar efficacy had failed to deliver longlasting protection.6

In The Lancet Infectious Diseases, Sujit Bhattacharya and colleagues7 report on whether Shanchol was protective over 5 years in a follow-up of 66 900 participants in a cluster-randomised placebo-controlled trial in Kolkata, India. The whole-cell vaccine containing killed strains from the O1 and O139 serogroups was given in two doses 2 weeks apart to non-pregnant individuals older than 1 year. The vaccine showed 65% (95% CI lower boundary of 52%) cumulative efficacy in the 5 year period for prevention of cholera episodes severe enough for individuals to seek treatment. This cholera vaccine is the first in the long history of cholera vaccine development to show more than 50% efficacy lasting up to 5 years. However, in children aged 1–5 years, who are at greatest risk of disease, the vaccine conferred only 42% cumulative efficacy (95% CI lower boundary of 5%) and too few cases occurred during the fifth year of follow-up to judge whether protection in these children lasted into the fifth year after vaccination. This lower level of protection is compounded by the difficulty of delivering oral vaccination to young children in poor sanitary and hygiene conditions. Nonetheless, we believe this result of an unprecedented level of long-term efficacy will be a giant leap forward for global control of cholera.

Despite this advance, questions remain. How do we improve vaccine efficacy in young children? The cholera community might learn from influenza vaccination, in which live attenuated vaccines are most efficacious in children and killed vaccines most efficacious in adults. Perhaps more effort needs to be placed on development, improvement, and testing of new and old attenuated cholera vaccines.8 A booster dose 2–3 years after the first vaccination might be necessary. Would the vaccine work equally well in areas that are not cholera endemic? In endemic cholera areas, such as the Kolkata trial site,7 the vaccine might boost existing naturally acquired immunity. This boosting effect is given more credence by trial results showing an increased efficacy in the fourth and fifth year of the study, especially in adults, after a large cholera outbreak in the third year. Whether the vaccine will be equally efficacious in immunologically naive individuals, especially in the context of cholera outbreaks, is unknown. Individuals with HIV infection and those who are pregnant and elderly are the other high-risk populations in whom this vaccine needs to be assessed.

Vaccine efficacy was shown only against the O1 strain circulating in the study population. Efficacy against the O139 strains and newly emergent O1 strains expressing the classical toxins should be investigated.3 Resolution of whether the vaccine can reduce infection or transmission and not just protect against severe disease would help to further strengthen the case for vaccination.

We are only allowed the luxury of posing such questions because today's study offers the cholera community an effective vaccine conferring durable protection. Despite all these unresolved issues, the need for an affordable cholera vaccine for international use has now been partly fulfilled. The focus now shifts to global policy makers and individual governments as they determine how to translate these study results into effective public good. While we celebrate a rare success story, perhaps the first in the WHO supported Decade of Vaccines collaboration, we need to seize this opportunity to transform global cholera control before we are once again overwhelmed by the next, inevitable, outbreak.

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5 year efficacy of a bivalent killed whole-cell oral cholera vaccine in Kolkata, India: a cluster-randomised, double-blind, placebo-controlled trial

Sujit K Bhattacharya MD a b, Dipika Sur MD a, Dr Mohammad Ali PhD c, Suman Kanungo DIH a, Young Ae You MS c, Byomkesh Manna PhD a, Binod Sah MBBS c, Swapan K Niyogi MD a, Jin Kyung Park PhD c, Banwarilal Sarkar PhD a, Mahesh K Puri MSc c, Deok Ryun Kim MS c, Jacqueline L Deen MD d, Jan Holmgren PhD e, Rodney Carbis BSc c, Mandeep Singh Dhingra MD f, Allan Donner PhD g, G Balakrish Nair PhD a, Anna Lena Lopez MD c h, Thomas F Wierzba PhD c, John D Clemens MD c i j

http://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2813%2970273-1/abstract

Summary

Background

Efficacy and safety of a two-dose regimen of bivalent killed whole-cell oral cholera vaccine (Shantha Biotechnics, Hyderabad, India) to 3 years is established, but long-term efficacy is not. We aimed to assess protective efficacy up to 5 years in a slum area of Kolkata, India.

Methods

In our double-blind, cluster-randomised, placebo-controlled trial, we assessed incidence of cholera in non-pregnant individuals older than 1 year residing in 3,933 dwellings (clusters) in Kolkata, India. We randomly allocated participants, by dwelling, to receive two oral doses of modified killed bivalent whole-cell cholera vaccine or heat-killed Escherichia coli K12 placebo, 14 days apart. Randomisation was done by use of a computer-generated sequence in blocks of four. The primary endpoint was prevention of episodes of culture-confirmed Vibrio cholerae O1 diarrhoea severe enough for patients to seek treatment in a health-care facility. We identified culture-confirmed cholera cases among participants seeking treatment for diarrhoea at a study clinic or government hospital between 14 days and 1,825 days after receipt of the second dose. We assessed vaccine protection in a per-protocol population of participants who had completely ingested two doses of assigned study treatment.

Findings

69 of 31,932 recipients of vaccine and 219 of 34,968 recipients of placebo developed cholera during 5 year follow-up (incidence 2.2 per 1000 in the vaccine group and 6.3 per 1000 in the placebo group). Cumulative protective efficacy of the vaccine at 5 years was 65% (95% CI 52-74; p<0·0001), and point estimates by year of follow-up suggested no evidence of decline in protective efficacy.
Interpretation
Sustained protection for 5 years at the level we reported has not been noted previously with other oral cholera vaccines. Established long-term efficacy of this vaccine could assist policy makers formulate rational vaccination strategies to reduce overall cholera burden in endemic settings.
Funding
Bill & Melinda Gates Foundation and the governments of South Korea and Sweden.

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November 2013; 33 (8)
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New England Journal of Medicine
November 21, 2013 Vol. 369 No. 21
http://www.nejm.org/toc/nejm/medical-journal
Original Article
Identification and Control of a Poliomyelitis Outbreak in Xinjiang, China
Hui-Ming Luo, M.D., Yong Zhang, M.D., Ph.D., Xin-Qi Wang, M.D., Wen-Zhou Yu, M.D., Ph.D., M.P.H., Ning Wen, M.Sc., Dong-Mei Yan, M.Sc., Hua-Qing Wang, M.D., Ph.D., Fuerhati Wushouer, M.D., Hai-Bo Wang, M.D., Ph.D., Ai-Qiang Xu, M.D., Jing-Shan Zheng, M.D., De-Xin Li, M.D., Hui Cui, B.Sc., Jian-Ping Wang, M.Sc., Shuang-Li Zhu, B.Sc., Zi-Jian Feng, M.D., Fu-Qiang Cui, M.D., Ph.D., M.P.H., Jing Ning, B.Sc., Li-Xin Hao, M.D., Ph.D., Chun-Xiang Fan, M.Sc., Gui-Jun Ning, M.Sc., Hong-Jie Yu, M.D., Shi-Wen Wang, M.D., Ph.D., Da-Wei Liu, M.D., Dong-Yan Wang, B.Sc., Jian-Ping Fu, M.D., Ai-li Gou, B.Sc., Guo-Min Zhang, Ph.D., Guo-Hong Huang, B.Sc., Yuan-Sheng Chen, M.D., Ph.D., Sha-Sha Mi, M.D., Yan-Min Liu, M.D., Da-Peng Yin, Ph.D., Hui Zhu, B.Sc., Xin-Chun Fan, B.Sc., Xin-Lan Li, B.Sc., Yi-Xin Ji, M.Sc., Ke-Li Li, M.D., Hai-Shu Tang, M.Sc., Wen-Bo Xu, M.D., Yu Wang, M.D., Ph.D., M.P.H, and Wei-Zhong Yang, M.D.
N Engl J Med 2013; 369:1981-1990November 21, 2013DOI: 10.1056/NEJMoa1303368
Background
The last case of infection with wild-type poliovirus indigenous to China was reported in 1994, and China was certified as a poliomyelitis-free region in 2000. In 2011, an outbreak of infection with imported wild-type poliovirus occurred in the province of Xinjiang.
Full Text of Background...
Methods
We conducted an investigation to guide the response to the outbreak, performed sequence analysis of the poliovirus type 1 capsid protein VP1 to determine the source, and carried out serologic and coverage surveys to assess the risk of viral propagation. Surveillance for acute flaccid paralysis was intensified to enhance case ascertainment.
Full Text of Methods...
Results
Between July 3 and October 9, 2011, investigators identified 21 cases of infection with wild-type poliovirus and 23 clinically compatible cases in southern Xinjiang. Wild-type poliovirus type 1 was isolated from 14 of 673 contacts of patients with acute flaccid paralysis (2.1%) and from 13 of 491 healthy persons who were not in contact with affected persons (2.6%). Sequence analysis implicated an imported wild-type poliovirus that originated in Pakistan as the cause of the outbreak. A public health emergency was declared in Xinjiang after the outbreak was confirmed. Surveillance for acute flaccid paralysis was enhanced, with daily reporting from all public and private hospitals. Five rounds of vaccination with live, attenuated oral poliovirus vaccine (OPV) were conducted among children and adults, and 43 million doses of OPV were administered. Trivalent OPV was used in three rounds, and monovalent OPV type 1 was used in two rounds. The outbreak was stopped 1.5 months after laboratory confirmation of the index case.
Full Text of Results...
Conclusions

The 2011 outbreak in China showed that poliomyelitis-free countries remain at risk for outbreaks while the poliovirus circulates anywhere in the world. Global eradication of poliomyelitis will benefit all countries, even those that are currently free of poliomyelitis.

Editorial

No Country Is Safe without Global Eradication of Poliomyelitis

Trevor Mundel, M.D., Ph.D., and Walter A. Orenstein, M.D.

N Engl J Med 2013; 369:2045-2046November 21, 2013DOI: 10.1056/NEJMe131159
http://www.nejm.org/doi/full/10.1056/NEJMe1311591

In 1988, the World Health Assembly endorsed the goal of eradicating poliomyelitis worldwide. At the time, the estimated annual number of new cases of paralysis was 350,000, and poliomyelitis was considered to be endemic in 125 countries.1 In the 25 years since then, the incidence of poliomyelitis has been reduced by more than 99%, and only three countries — Pakistan, Nigeria, and Afghanistan — have never terminated indigenous transmission.1,2

Wild-type poliovirus type 2 has probably been eradicated; the last naturally occurring case was detected in 1999.2 Wild-type poliovirus type 3 appears to be close to eradication, with no new cases detected in 2013 (as of October 31, 2013).3-5 However, wild-type poliovirus type 1 remains in circulation.2,3 As illustrated by the 2011 poliomyelitis outbreak in China — a country that had not reported a case of paralysis caused by wild-type polioviruses since 1994 — as long as polioviruses circulate anywhere in the world, they can be exported to countries that are now poliomyelitis-free and can cause serious outbreaks.6

Public health authorities in China are to be commended for containing the outbreak so quickly. As described by Luo et al.6 in this issue of the *Journal,* a mass campaign to inoculate children with trivalent oral poliovirus vaccine was started within 3 weeks of outbreak confirmation, and the last case was detected approximately 1 month after the campaign was initiated. However, to make sure that polioviruses were truly eliminated, a total of five mass campaigns were conducted, in which 43.7 million doses of oral poliovirus vaccine were administered.6

The cost of containing the outbreak was considerable. Approximately $26 million (in U.S. dollars) was allocated for outbreak control. This cost does not include the less tangible cost of diverting hundreds of public health experts and local health workers from other important public health work. The apparently high immunity levels in this area of China probably made containment easier, since the population immunity was already close to herd-immunity thresholds.6

Should a similar outbreak occur in a poorer country with lower routine immunization coverage, or in a country that is not capable of responding as quickly, containment could prove far more difficult, as may be the case in the current importation of the poliovirus to the Horn of Africa and the Middle East, including Syria. Underscoring the highly infectious nature of poliomyelitis, importation of polioviruses from reservoir countries into areas that had been free of wild-type poliovirus has occurred in at least six countries so far this year, including Somalia (which had been free of the wild-type poliovirus since 2007), Kenya, Ethiopia, Syria, Cameroon, and Israel.3,7 The outbreak in the Horn of Africa was genetically traced to viruses from Nigeria, whereas the widespread circulation of wild-type poliovirus type 1 in Israel was linked to virus originating in Pakistan.7,8

To end poliomyelitis forever, the Global Polio Eradication Initiative (GPEI) has developed a comprehensive strategic plan to interrupt all transmission of wild-type poliovirus by the end of 2014 and to certify the world as poliomyelitis-free by 2018.2 Global eradication will require several key actions; these include administering oral poliovirus vaccine to interrupt the transmission of wild-type polioviruses, building and sustaining political commitment, improving

routine immunization delivery in remaining reservoir countries, delivering vaccines to children living in areas in conflict, and providing rigorous, ongoing oversight.

One essential part of the plan was to replace the current trivalent oral poliovirus vaccine with a bivalent vaccine containing only virus types 1 and 3. Oral poliovirus vaccine has been the major vaccine used in the eradication program because it is easy to administer, can passively immunize persons who do receive the vaccine directly, is relatively inexpensive, and induces greater intestinal immunity than that conferred by inactivated poliovirus vaccine. This superior intestinal immunity should be more effective in decreasing transmission, since in the developing world most poliovirus is thought to be spread by the fecal–oral route. However, on rare occasions, oral poliovirus vaccine has been known to cause paralysis, either as a result of vaccine-associated paralytic polio or by means of circulating vaccine-derived polioviruses that have acquired some properties of wild viruses.[3,9] Removing type 2 oral poliovirus vaccine should reduce vaccine-associated paralytic polio and cases of circulating vaccine-derived poliovirus infection by about 40% and more than 95%, respectively.[3,9]

A further benefit of the bivalent oral poliovirus vaccine (as compared with the trivalent vaccine) is that it would enhance immunogenicity against types 1 and 3 poliovirus.[10] To maintain population immunity to the type 2 virus and to reduce the risk of outbreaks of type 2 if it were reintroduced (e.g., through a break in laboratory containment), the administration of at least one dose of inactivated poliovirus is recommended in routine immunization.[11]

The estimated cost of the 2013–2018 GPEI strategic plan is approximately $5.5 billion.[2] This is clearly a substantial investment, but the failure to achieve global eradication would cost far more. Mathematical models suggest that abandoning the program before eradication is achieved would result in a massive resurgence of poliomyelitis, with approximately 200,000 cases of paralysis annually.[12] In addition to the huge financial burden this would impose — particularly in countries in the developing world — the human costs of a resurgence of poliomyelitis are incalculable.

The history of successful eradication efforts over more than two decades has proven that we can finish the job. The real lesson of the outbreak in China is that if we do not, any country is vulnerable to reimportation of poliomyelitis. Without question, the best defense against poliovirus is a good offense that eliminates the virus from the remaining reservoirs and truly eradicates the disease.

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December 2013 - Volume 32 - Issue 12 pp: 1303-1404,e426-e477
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November 2013, VOLUME 132 / ISSUE 5
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[Reviewed earlier]
Online
Case Report
Vaccine-Preventable Disease Among Homeschooled Children: Two Cases of Tetanus in Oklahoma
Matthew G. Johnson, MDa, Kristy K. Bradley, DVMb, Susan Mendus, MPHc, Laurence Burnsed, MPHd, Rachel Clinton, MSd, and Tejpratap Tiwari, MDe
Abstract
Homeschooled children represent an increasing proportion of school-aged children in the United States. Immunization rates among homeschooled children are largely unknown because they are usually not subject to state-based school-entry vaccination requirements. Geographic foci of underimmunized children can increase the risk for outbreaks of vaccine-preventable diseases. In 2012, 2 cases of tetanus were reported in Oklahoma; both cases involved homeschooled children without documentation of diphtheria-tetanus-acellular pertussis vaccination. We describe the characteristics of both patients and outline innovative outreach measures with the potential to increase vaccination access and coverage among homeschooled children.

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Volume 5, Issue 3 (September 2013), Pages 371-
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[No new relevant content]

Pharmacoeconomics
Volume 31, Issue 11, November 2013
http://link.springer.com/journal/40273/31/11/page/1
[No relevant content]

PLoS One
[Accessed 23 November 2013]
http://www.plosone.org/
[No new relevant content]

PLoS Medicine
(Accessed 23 November 2013)
http://www.plosmedicine.org/
Research Article
Characterization of Regional Influenza Seasonality Patterns in China and Implications for Vaccination Strategies: Spatio-Temporal Modeling of Surveillance Data
Hongjie Yu, Wladimir J. Alonso, Luzhao Feng, Yi Tan, Yuelong Shu, Weizhong Yang, Cécile Viboud
http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001552
Abstract
Background

The complexity of influenza seasonal patterns in the inter-tropical zone impedes the establishment of effective routine immunization programs. China is a climatologically and economically diverse country, which has yet to establish a national influenza vaccination program. Here we characterize the diversity of influenza seasonality in China and make recommendations to guide future vaccination programs.

Methods and Findings

We compiled weekly reports of laboratory-confirmed influenza A and B infections from sentinel hospitals in cities representing 30 Chinese provinces, 2005–2011, and data on population demographics, mobility patterns, socio-economic, and climate factors. We applied linear regression models with harmonic terms to estimate influenza seasonal characteristics, including the amplitude of annual and semi-annual periodicities, their ratio, and peak timing. Hierarchical Bayesian modeling and hierarchical clustering were used to identify predictors of influenza seasonal characteristics and define epidemiologically-relevant regions. The annual periodicity of influenza A epidemics increased with latitude (mean amplitude of annual cycle standardized by mean incidence, 140% [95% CI 128%-151%] in the north versus 37% [95% CI 27%-47%] in the south, $p<0.0001$). Epidemics peaked in January–February in Northern China (latitude ≥33°N) and April–June in southernmost regions (latitude <27°N). Provinces at intermediate latitudes experienced dominant semi-annual influenza A periodicity with peaks in January–February and June–August (periodicity ratio >0.6 in provinces located within 27.4°N-31.3°N, slope of latitudinal gradient with latitude -0.016 [95% CI -0.025 to -0.008], $p<0.001$). In contrast, influenza B activity predominated in colder months throughout most of China. Climate factors were the strongest predictors of influenza seasonality, including minimum temperature, hours of sunshine, and maximum rainfall. Our main study limitations include a short surveillance period and sparse influenza sampling in some of the southern provinces.

Conclusions

Regional-specific influenza vaccination strategies would be optimal in China; in particular, annual campaigns should be initiated 4–6 months apart in Northern and Southern China. Influenza surveillance should be strengthened in mid-latitude provinces, given the complexity of seasonal patterns in this region. More broadly, our findings are consistent with the role of climatic factors on influenza transmission dynamics.

Editors' Summary

Background

Every year, millions of people worldwide catch influenza, a viral disease of the airways. Most infected individuals recover quickly but seasonal influenza outbreaks (epidemics) kill about half a million people annually. These epidemics occur because antigenic drift—frequent small changes in the viral proteins to which the immune system responds—means that an immune response produced one year provides only partial protection against influenza the next year. Annual vaccination with a mixture of killed influenza viruses of the major circulating strains boosts this natural immunity and greatly reduces the risk of catching influenza. Consequently, many countries run seasonal influenza vaccination programs. Because the immune response induced by vaccination decays within 4–8 months of vaccination and because of antigenic drift, it is important that these programs are initiated only a few weeks before the onset of local influenza activity. Thus, vaccination starts in early autumn in temperate zones (regions of the world that have a mild climate, part way between a tropical and a polar climate), because seasonal influenza outbreaks occur in the winter months when low humidity and low temperatures favor the transmission of the influenza virus.

Why Was This Study Done?

Unlike temperate regions, seasonal influenza patterns are very diverse in tropical countries, which lie between latitudes 23.5°N and 23.5°S, and in the subtropical countries slightly north and south of these latitudes. In some of these countries, there is year-round influenza activity, in others influenza epidemics occur annually or semi-annually (twice yearly). This complexity, which is perhaps driven by rainfall fluctuations, complicates the establishment of effective routine immunization programs in tropical and subtropical countries. Take China as an example. Before a national influenza vaccination program can be established in this large, climatologically diverse country, public-health experts need a clear picture of influenza seasonality across the country. Here, the researchers use spatio-temporal modeling of influenza surveillance data to characterize the seasonality of influenza A and B (the two types of influenza that usually cause epidemics) in China, to assess the role of putative drivers of seasonality, and to identify broad epidemiological regions (areas with specific patterns of disease) that could be used as a basis to optimize the timing of future Chinese vaccination programs.

What Did the Researchers Do and Find?

The researchers collected together the weekly reports of laboratory-confirmed influenza prepared by the Chinese national sentinel hospital-based surveillance network between 2005 and 2011, data on population size and density, mobility patterns, and socio-economic factors, and daily meteorological data for the cities participating in the surveillance network. They then used various statistical modeling approaches to estimate influenza seasonal characteristics, to assess predictors of influenza seasonal characteristics, and to identify epidemiologically relevant regions. These analyses indicate that, over the study period, northern provinces (latitudes greater than 33°N) experienced winter epidemics of influenza A in January–February, southern provinces (latitudes less than 27°N) experienced peak viral activity in the spring (April–June), and provinces at intermediate latitudes experienced semi-annual epidemic cycles with infection peaks in January–February and June–August. By contrast, influenza B activity predominated in the colder months throughout China. The researchers also report that minimum temperatures, hours of sunshine, and maximum rainfall were the strongest predictors of influenza seasonality.

What Do These Findings Mean?

These findings show that influenza seasonality in China varies between regions and between influenza virus types and suggest that, as in other settings, some of these variations might be associated with specific climatic factors. The accuracy of these findings is limited by the short surveillance period, by sparse surveillance data from some southern and mid-latitude provinces, and by some aspects of the modeling approach used in the study. Further surveillance studies need to be undertaken to confirm influenza seasonality patterns in China. Overall, these findings suggest that, to optimize routine influenza vaccination in China, it will be necessary to stagger the timing of vaccination over three broad geographical regions. More generally, given that there is growing interest in rolling out national influenza immunization programs in low- and middle-income countries, these findings highlight the importance of ensuring that vaccination strategies are optimized by taking into account local disease patterns.

Perspective

Complex Disease Dynamics and the Design of Influenza Vaccination Programs

Steven Riley

http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001553

For influenza vaccine programs to be optimal from the point of view of the individual at risk of infection, two conditions must be met. First, the vaccine must contain antigens that are well-matched to currently circulating strains [1]. Second, the vaccine must be administered at the right time: early enough that there is sufficient time for antibodies to rise in response to the vaccination, but not so early that protection by the vaccine wanes prior to infectious challenge

[2]. The rate of waning of vaccine-induced protection against influenza is particularly high for older adults, one of the groups most at-risk of severe outcomes and often a top priority for national vaccination programs. Therefore, good knowledge of likely temporal trends in the risk of influenza infection is a necessary prerequisite for the design of optimal vaccination programs.

In this week's *PLOS Medicine*, Cécile Viboud and colleagues [3] present an extensive analysis of sentinel virological surveillance of influenzas A(H3N2) and B from China with the objective of finding epidemiological patterns that support the design of the country's first national influenza vaccination program. The authors use time series of viral isolation data from a network of sentinel hospitals, finding strong evidence for key epidemiological features of the incidence of influenza subtypes. Rather than relying on syndromic definitions or excess mortality, these biologically robust outcomes identify the patterns of circulating strains with high specificity. Despite variability in both the propensity of individuals to seek treatment and the likelihood of them being tested, virological surveillance data accurately describe the timing of peak incidence, the duration of elevated incidence (the influenza season), and periods when influenza is absent (provided testing levels are high year-round).

In many temperate populations such as the United States, knowledge of epidemiological patterns of influenza incidence has facilitated the robust design of vaccination programs [4]: incidence is strongly seasonal, with a very low risk of infection during the summer. The vast majority of infections are focused in a 6–8 week period in the winter months. Therefore, vaccination programs that are expected to last ~6 weeks are initiated ~12 weeks prior to the expected start of the season (the beginning of October in the Northern Hemisphere and the beginning of April in the Southern Hemisphere).

At lower latitudes, patterns are far less clear [5]. Equatorial populations such as Singapore report almost constant year-round incidence of influenza-like illness [6], while some subtropical locations, such as Hong Kong, exhibit weak biennial cycles, with their seasonality characterized primarily by a clear off-season [7]. A study of influenza patterns in Brazil, a country with a large population spanning a wide range of latitudes, revealed wave-like dynamics originating in the less populated equatorial region and travelling out towards larger temperate populations (based on excess pneumonia and influenza mortality) [8].

In their study, Viboud and colleagues were able to separate China into three epidemiological zones for influenza A(H3N2). In the temperate north, incidence peaked sharply during January and February, while in the tropical south, a longer epidemic with a lower peak was observed during April and May. The regions in the middle latitudinal zone exhibited biannual cycles with smaller incidence peaks temporally aligned with their northern and the southern neighbors. Intriguingly, there were clear differences in the spatial patterns of influenza B compared with those of influenza A. There was little evidence of biannual cycles for influenza B, with the timing of the single peak each year closely correlated with latitude: epidemics occurred first in the north and then progressed steadily to the south. Perhaps most striking, the authors also found that the proportion of samples positive for influenza B increased from less than 20% in the northernmost provinces to almost 50% in the southernmost provinces. These observations point to fundamentally different circulation patterns between influenzas A(H3N2) and B and should motivate systematic phylogeographical and serotype studies of influenza B at the national scale in China.

The observed differences in circulation patterns between influenzas A(H3N2) and B present challenges for the design of vaccination programs at middle and lower latitudes in China. As the authors observe, the timing of peaks in the southernmost provinces is only marginally ahead of Southern Hemisphere populations and suggests that those provinces may wish to follow the Southern Hemisphere timetable. However, such a decision might be slightly premature: genetic

data from even a small subset of the viral isolates used for this study could give a definitive picture of the ancestral relationship between viruses circulating in southern China relative to viruses in northern China and Southern Hemisphere populations.

A lasting legacy of the 2009 pandemic is increased interest in novel methods of manufacture for influenza vaccines [9]. Although the vast majority of vaccines delivered today arise from egg-based production systems (not substantially different from those used for the first vaccine trials approx 70 years ago), there are a number of alternative production processes under investigation that may reduce both costs and timelines [10],[11],[12]. When these technologies are fully developed, they could greatly facilitate the redesign of vaccination programs for both seasonal and pandemic influenza. As epidemiological and phylogenetic studies reveal more about the circulation of specific influenza virus subtypes in different regions of the world, it seems likely that the current system of selecting only two official vaccine strain sets per year will be refined. The results presented by Viboud and colleagues [3] suggest that rapidly expanding vaccination programs in populous mid-latitude provinces of China may provide an ideal setting in which to investigate the possible benefits of rapid vaccine production and locally-informed strain selection.

PLoS Neglected Tropical Diseases
November 2013
http://www.plosntds.org/article/browseIssue.action

Viewpoints

NTDs V.2.0: "Blue Marble Health"—Neglected Tropical Disease Control and Elimination in a Shifting Health Policy Landscape
Peter J. Hotez

Abstract
The concept of the neglected tropical diseases (NTDs) was established in the aftermath of the Millennium Development Goals. Here, we summarize the emergence of several new post-2010 global health documents and policies, and how they may alter the way we frame the world's major NTDs since they were first highlighted. These documents include a new Global Burden of Disease 2010 Study that identifies visceral leishmaniasis and food-borne trematode infections as priority diseases beyond the seven NTDs originally targeted by preventive chemotherapy, a London Declaration for access to essential medicines, and a 2013 World Health Assembly resolution on NTDs. Additional information highlights an emerging dengue fever pandemic. New United Nations resolutions on women and the non-communicable diseases (NCDs) have not yet embraced NTDs, which may actually be the most common afflictions of girls and women and represent a stealth cause of NCDs. NTDs also have important direct and collateral effects on HIV/AIDS and malaria, and there is now a robust evidence base and rationale for incorporating NTDs into the Global Fund to Fight AIDS, Tuberculosis, and Malaria. "Blue marble health" is an added concept that recognizes a paradoxical NTD disease burden among the poor living in G20 (Group of Twenty) and other wealthy countries, requiring these nations to take greater ownership for both disease control and research and development. As we advance past the year 2015, it will be essential to incorporate global NTD elimination into newly proposed Sustainable Development Goals.

Research Article

Cholera Vaccination Campaign Contributes to Improved Knowledge Regarding Cholera and Improved Practice Relevant to Waterborne Disease in Rural Haiti
Omowunmi Aibana, Molly Franke, Jessica Teng, Johanne Hilaire, Max Raymond, Louise C. Ivers

Background
Haiti's cholera epidemic has been devastating partly due to underlying weak infrastructure and limited clean water and sanitation. A comprehensive approach to cholera control is crucial, yet some have argued that oral cholera vaccination (OCV) might result in reduced hygiene practice among recipients. We evaluated the impact of an OCV campaign on knowledge and health practice in rural Haiti.
Methodology/Principal Findings
We administered baseline surveys on knowledge and practice relevant to cholera and waterborne disease to every 10th household during a census in rural Haiti in February 2012 (N=811). An OCV campaign occurred from May–June 2012 after which we administered identical surveys to 518 households randomly chosen from the same region in September 2012. We compared responses pre- and post-OCV campaign. Post-vaccination, there was improved knowledge with significant increase in percentage of respondents with ≥3 correct responses on cholera transmission mechanisms (odds ratio[OR] 1.91; 95% confidence interval[CI] 1.52-2.40), preventive methods (OR 1.83; 95% CI 1.46-2.30), and water treatment modalities (OR 2.75; 95% CI 2.16-3.50). Relative to pre-vaccination, participants were more likely post-OCV to report always treating water (OR 1.62; 95% CI 1.28-2.05). Respondents were also more likely to report hand washing with soap and water >4 times daily post-vaccine (OR 1.30; 95% CI 1.03-1.64). Knowledge of treating water as a cholera prevention measure was associated with practice of always treating water (OR 1.47; 95% CI 1.14-1.89). Post-vaccination, knowledge was associated with frequent hand washing (OR 2.47; 95% CI 1.35-4.51).
Conclusion
An OCV campaign in rural Haiti was associated with significant improvement in cholera knowledge and practices related to waterborne disease. OCV can be part of comprehensive cholera control and reinforce, not detract from, other control efforts in Haiti.

PNAS - Proceedings of the National Academy of Sciences of the United States of America
(Accessed 23 November 2013)
http://www.pnas.org/content/early/recent
[No new relevant content]

Pneumonia
Vol 2 (2013)
https://pneumonia.org.au/index.php/pneumonia/issue/current
[Reviewed earlier]

Public Health Ethics
Volume 6 Issue 3 November 2013
http://phe.oxfordjournals.org/content/current
Justice in Global Pandemic Influenza Preparedness: An Analysis Based on the Values of Contribution, Ownership and Reciprocity
Meena Krishnamurthy, Matthew Herder
http://phe.oxfordjournals.org/content/6/3/272.abstract
Abstract

In December 2006, Indonesia decided to stop sending influenza virus specimens to the World Health Organization's Global Influenza Surveillance Network (GISN). Indonesia justified its actions by claiming that they were in protest of the injustice of GISN. Its actions stimulated negotiations to improve the workings of GISN by developing and implementing a more just framework for 'sharing influenza viruses and other benefits'. These negotiations eventually led to the adoption of a new framework for virus and benefit sharing in May 2011, at the World Health Assembly meeting. In this article, we critically evaluate Indonesia's claims about the unjustness of GISN. We show that arguments based on the values of ownership, contribution and reciprocity work together to support Indonesia's claim that it was owed an equal share in the benefits of GISN and, in turn, that GISN was unjust because of its failure to ensure this. We also use these values to evaluate the newly agreed upon framework for virus and benefit sharing. We suggest the new framework fails to give proper consideration to the values of ownership, contribution and reciprocity and, as a result, that it is fundamentally unjust.

Qualitative Health Research
December 2013; 23 (12)
http://qhr.sagepub.com/content/current
[No relevant content]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
October 2013 Vol. 34, No. 4
http://www.paho.org/journal/index.php?option=com_content&view=article&id=133&Itemid=229&lang=en
[No relevant content]

Risk Analysis
November 2013 Volume 33, Issue 11 Pages 1939–2078
http://onlinelibrary.wiley.com/doi/10.1111/risa.2013.33.issue-11/issuetoc
[No relevant content]

Science
22 November 2013 vol 342, issue 6161, pages 901-1012
http://www.sciencemag.org/current.dtl
[No relevant content]

Science Translational Medicine
20 November 2013 vol 5, issue 212
http://stm.sciencemag.org/content/current
[No relevant content]

Social Science & Medicine

Volume 100, In Progress (January 2014)
http://www.sciencedirect.com/science/journal/02779536/100
[No new relevant content]

UN Chronicle
Vol. L No. 3 2013 September 2013
http://unchronicle.un.org/
Theme: Migration
This issue, which features contributions from twelve leading experts from within and outside of the United Nations system, looks at international migration and development. The articles examine, among other things, lowering the costs and amplifying the benefits of migration; the protection of migrants' rights and State sovereignty; labour migration and inclusive development; leveraging remittances for development; the reintegration of returning migrants; and strengthening migration cooperation.

Vaccine
Volume 31, Issue 50, Pages 5923-6040 (5 December 2013)
http://www.sciencedirect.com/science/journal/0264410X
[Reviewed earlier]

Vaccine: Development and Therapy
(Accessed 23 November 2013)
http://www.dovepress.com/vaccine-development-and-therapy-journal
[No new relevant content]

Vaccines — Open Access Journal
(Accessed 23 November 2013)
http://www.mdpi.com/journal/vaccines
Vaccines (ISSN 2076-393X), an international open access journal, is published by MDPI online quarterly.
[No new relevant content]

Value in Health
Vol 16 | No. 7 | November 2013
http://www.valueinhealthjournal.com/current
[No relevant content]

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

Evaluation of the immune response to human papillomavirus types 16, 18, 31, 45 and 58 in a group of Colombian women vaccinated with the quadrivalent vaccine
A Cómbita, D Duarte, J Rodríguez, M Molano… - Revista Colombiana de …, 2013
Objective To analyze whether the immune response to HPV-16,-18,-31,-45 and-58 capsids in women vaccinated with the quadrivalent vaccine induces cross-reactivity against other HPV virus-like particles (VLPs). Methods A total of 88 women aged between 18 and 27 ...

[PDF] **Humoral and cellular responses to a non-adjuvanted monovalent H1N1 pandemic influenza vaccine in hospital employees**
MT Herrera, Y Gonzalez, E Juárez… - BMC Infectious Diseases, 2013
Background The efficacy of the H1N1 influenza vaccine relies on the induction of both humoral and cellular responses. This study evaluated the humoral and cellular responses to a monovalent non-adjuvanted pandemic influenza A/H1N1 vaccine in occupationally ...

BASHH and the media [British Association for Sexual Health and HIV]
P Greenhouse, N Balmer, R Patel - Sexually Transmitted Infections, 2013
... This is probably best demonstrated by the media activity undertaken by BASHH around the human papillomavirus (HPV) vaccine, which is described in more detail below. Primarily, public education is a core function of the group. ...

Special Focus Newsletters
RotaFlash – Rotavirus Vaccine Update PATH 21 November 2013
Headline: Unanticipated benefits of rotavirus vaccination in the United States
http://vad.createsend4.com/t/ViewEmail/r/F18B988AE89914842540EF23F30FEDED/E38B11B8894CC5F5DBC23BD704D2542D

Media/Policy Watch
This section is intended to alert readers to substantive news, analysis and opinion from the general media on vaccines, immunization, global; public health and related themes. *Media Watch* is not intended to be exhaustive, but indicative of themes and issues CVEP is actively tracking. This section will grow from an initial base of newspapers, magazines and blog sources, and is segregated from *Journal Watch* above which scans the peer-reviewed journal ecology.

We acknowledge the Western/Northern bias in this initial selection of titles and invite suggestions for expanded coverage. We are conservative in our outlook in adding news sources which largely report on primary content we are already covering above. Many electronic media sources have tiered, fee-based subscription models for access. We will provide full-text where content is published without restriction, but most publications require registration and some subscription level.

Al Jazeera
http://www.aljazeera.com/Services/Search/?q=vaccine
Accessed 23 November 2013
[No new, unique, relevant content]

The Atlantic
http://www.theatlantic.com/magazine/

Accessed 23 November 2013
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 23 November 2013
[No new, unique, relevant content]

Brookings
http://www.brookings.edu/
Accessed 23 November 2013
[No new, unique, relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 23 November 2013
[No new, unique, relevant content]

Economist
http://www.economist.com/
Accessed 23 November 2013
[No new, unique, relevant content]

Financial Times
http://www.ft.com
Accessed 23 November 2013
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 23 November 2013
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 23 November 2013
[No new, unique, relevant content]

Foreign Policy
http://www.foreignpolicy.com/
Accessed 23 November 2013
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 23 November 2013
[No new, unique, relevant content]

The Huffington Post
http://www.huffingtonpost.com/
Accessed 23 November 2013
[No new, unique, relevant content]

Le Monde
http://www.lemonde.fr/
Accessed 23 November 2013
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 23 November 2013
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 23 November 2013
Editorial
Responding to a Meningitis Outbreak
By THE EDITORIAL BOARD
Published: November 22, 2013

A vaccine approved for use in Europe and Australia but not in the United States will be imported to help quell an outbreak of bacterial meningitis at Princeton University. This is a good example of how two federal agencies — the Centers for Disease Control and Prevention and the Food and Drug Administration — can collaborate to reach a common-sense solution to protect the public's health.

The university has been experiencing a small and slow-moving outbreak of a type of bacterial meningitis known as strain B. Four students and a visitor to the campus developed symptoms between March 22 and June 29; all have recovered. Two other students developed symptoms in October and early November. One has recovered; the other is recovering. On Friday, another student was diagnosed with meningitis, and tests are underway to determine whether it was caused by strain B.

Last year, some 160 cases of strain B were reported in the United States. The disease can cause headaches, high fevers and stiff necks, and it is fatal in 10 percent to 15 percent of the cases.

The vaccine currently used to prevent bacterial meningitis in this country protects against several other strains but not against strain B. The only vaccine proved to be effective against strain B is Bexsero, made by Novartis, which is based in Switzerland and which won regulatory approval for the vaccine in Europe in January and in Australia in August. The company has not pushed for approval here because it is concentrating on a vaccine against the other strains.

In this case, the C.D.C. requested permission to import the vaccine, and the F.D.A. approved it through a limited special process used occasionally to handle emergency situations, such as a shortage of critically needed cancer drugs last year. The vaccine will be available to all Princeton undergraduates starting next month, as well as to graduate students who live in dormitories and to people affiliated with the university who have specific medical conditions that put them at risk.

Although the imported vaccine has been approved only for use at Princeton, the C.D.C. should apply to have Bexsero available if a similar outbreak occurs somewhere else, and the F.D.A. should grant such approval.

Reuters
http://www.reuters.com/
Accessed 23 November 2013
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page
Accessed 23 November 2013
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 23 November 2013
[No new, unique, relevant content]

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Vaccines and Global Health: The Week in Review *is a service of the Center for Vaccines Ethics and Policy (CVEP) which is solely responsible for its content. Support for this service is provided by its governing institutions – Department of Medical Ethics, NYU Medical School; The Wistar Institute Vaccine Center and the Children's Hospital of Philadelphia Vaccine Education Center. Additional support is provided by the PATH Vaccine Development Program and the International Vaccine Institute (IVI), and by vaccine industry leaders including Janssen, Pfizer,* and Sanofi Pasteur U.S. *(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.*

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