

Vaccines and Global Health: The Week in Review 24 January 2015
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 and Global Health: 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 6,500 entries.

Comments and suggestions should be directed to
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Request an email version: Vaccines and Global Health: The Week in Review is published as a single email summary, scheduled for release each Saturday evening before midnight (EDT in the U.S.). If you would like to receive the email version, please send your request to david.r.curry@centerforvaccineethicsandpolicy.org.

EBOLA/EVD [to 24 January 2015]

Public Health Emergency of International Concern (PHEIC); "Threat to international peace and security" (UN Security Council)

136th WHO Executive Board starts with special session on Ebola – Live Webcast

23 January 2015 -- The 136th session of the WHO Executive Board will run from Monday, 26 January 2015. On Sunday, 25 January, the Board will hold a special session on the Ebola emergency. The special session will review the current state of WHO's Ebola response and make recommendations for future large-scale and sustained outbreaks and emergencies. It will also discuss preparedness in non-affected countries and regions.

Live webcast: Sunday 25 January 2015 from 10:00 to 13:00 and 15:00 to 18:00 CET

- Special session – English http://www.who.int/mediacentre/executive-board-live/en/

- Special session Arabic
- Special session Chinese
- Special session French
- Special session Russian
- Special session Spanish

World Health Organization update on Ebola outbreak in West Africa

23 Jan 2015

Speaker: Dr Bruce Aylward, WHO Assistant Director-General in charge of the Ebola operational response

Video: http://webtv.un.org/watch/world-health-organization-press-conference-geneva-15-

january-2015/4006783074001

Major milestone for GSK/NIH candidate Ebola vaccine as first doses shipped to Liberia for use in phase III clinical trial

23 January 2015, Issued: London, UK

Healthcare workers among those to be vaccinated in large-scale trial involving up to 30,000 people due to start in the coming weeks

GSK has announced that the first batch of its candidate Ebola vaccine is being shipped to west Africa and is expected to arrive in Liberia later today Friday 23 January. The shipment, containing an initial 300 vials of the candidate vaccine, is the first to arrive in one of the main Ebola affected countries and will be used to start the first large-scale efficacy trial of experimental Ebola vaccines in the coming weeks.

The candidate vaccine is currently being tested in five small phase I clinical trials in the UK, USA, Switzerland and Mali, involving around 200 healthy volunteers in total. Initial data from these trials show that the candidate vaccine has an acceptable safety profile, including in a west African population, and across the different doses evaluated. Based on the safety and immunological data available from these trials, GSK has selected the most appropriate dosage level to advance to the next phases of clinical testing. Results from the first of the phase I studies were published in November 2014 and results from the remaining phase I studies will be published in the coming months.

The selected dose will now be tested in a large phase III clinical trial led by the US National Institutes of Health (NIH) which is expected to involve up to 30,000 people, one third of whom will receive GSK's candidate Ebola vaccine. It will compare the candidate vaccine to a control vaccine to assess whether the immune response seen in phase I trials actually translates into meaningful protection against Ebola. This trial will begin in Liberia in the coming weeks, subject to regulatory approval, with further shipments of vaccines to follow.

Dr Moncef Slaoui, Chairman of Global Vaccines at GSK, said: "Shipping the vaccine today is a major achievement and shows that we remain on track with the accelerated development of our candidate Ebola vaccine. The initial phase I data we have seen are encouraging and give us confidence to progress to the next phases of clinical testing which will involve the vaccination of thousands of volunteers, including frontline healthcare workers. If the candidate vaccine is able to protect these people, as we hope it will, it could significantly contribute to efforts to bring this epidemic under control and prevent future outbreaks.

"It is important to remember that this vaccine is still in development and any potential future use in mass vaccination campaigns will depend on whether WHO, regulators and other

stakeholders are satisfied that the vaccine candidate provides protection against Ebola without causing significant side effects and how quickly large quantities of vaccine can be made."

GSK is working closely with the World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) in the USA to assist with the design and to potentially support trials in other affected countries – Sierra Leone and Guinea – in the coming months. In parallel, GSK plans to begin large phase II safety trials in non-affected west African countries.

The candidate Ebola vaccine shipped today was co-developed by the NIH's National Institute of Allergy and Infectious Diseases (NIAID) and Okairos, a biotechnology company acquired by GSK in 2013. It uses a type of chimpanzee cold virus, known as chimpanzee adenovirus type 3 (ChAd3), as a carrier to deliver benign genetic material from the Zaire strain of the Ebola virus, which is responsible for the current Ebola outbreak in west Africa. GSK has been working with the NIH to accelerate development in response to the current Ebola epidemic.

Davos: UN launches \$1 billion appeal for global Ebola response

21 January 2015

The United Nations today appealed for \$1 billion needed for the first six months of 2015 to sustain the momentum to stamp out Ebola in West Africa, where 'the epidemic has started to turn' in all three of the worst-hit countries – Guinea, Liberia and Sierra Leone.

"We're beginning to see an overall decline in number of new cases each week," Dr. David Nabarro, the UN Special Envoy on Ebola, told a <u>news conference</u> [video] in Davos, Switzerland, at the 2015 World Economic Forum, where global leaders from across business, Government, international organizations, academia and civil society are gathered for strategic dialogues on events and trends shaping the world.

Valerie Amos, UN Emergency Relief Coordinator, also welcomed the "early signs of reduction of Ebola in all three countries" but noted the need to remain vigilant.

And as the Secretary-General of the United Nations [Ban Ki-moon] said yesterday, complacency would be our worst enemy," Ms. Amos, who is also the UN Under-Secretary-General for Humanitarian Affairs told reporters.

The <u>appeal</u> was launched by Ms. Amos and Dr. Nabarro, who are in Davos where there are some 20 scheduled events at the World Economic Forum devoted to the global fight against the Ebola epidemic...

Press Conference Needs and Requirements for a Global Ebola Response

Valerie Amos, UN Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, and David Nabarro, the UN Secretary-General's Special Envoy on Ebola, present the latest Overview of the UN system and partners' Requirements for the Ebola Response. This is an appeal for funds to support the efforts of the national governments of Guinea, Liberia and Sierra Leone as they identify and treat people affected by Ebola, ensure a rapid end to the outbreak, re-establish essential social services and improve people's food and nutrition security. The appeal includes funds needed for enabling nearby countries to reduce their people's risk of Ebola infection.

Download audio: http://webcasts.weforum.org/widget/1/davos2015?p=1&pi=1&a=66503

WHO: Ebola response roadmap - Situation report 21 January 2015

[Excerpt] SUMMARY

- :: Case incidence continues to fall in Guinea, Liberia, and Sierra Leone, with a halving time of 1.4 weeks in Guinea, 2.0 weeks Liberia, and 2.7 weeks in Sierra Leone. A combined total of 145 confirmed cases were reported from the 3 countries in the week to 18 January: 20 in Guinea, 8 in Liberia, and 117 in Sierra Leone.
- :: Mali has been declared free of Ebola virus disease (EVD) after completing 42 days since the last case tested negative for EVD.
- :: Surveillance and information sharing will be increased in the border districts of Guinea-Bissau, Côte d'Ivoire, Mali and Senegal adjacent to the 3 intense-transmission countries.
- :: Each of the intense-transmission countries has sufficient capacity to isolate and treat patients, with more than 2 treatment beds per reported confirmed, probable and suspected case. The planned numbers of beds in each country has now been reduced in accordance with falling case incidence.
- :: Similarly, each country has sufficient capacity to bury all people known to have died from EVD.
- :: Guinea, Liberia and Sierra Leone report that between 89% and 99% of registered contacts are monitored each day, though the number of contacts traced per EVD case remains lower than expected in many districts. In the week to 11 January, 53% of new confirmed cases in Guinea arose from known contacts; in the period between 1 January and 15 January, 53% of new confirmed cases in Liberia arose from known contacts. Equivalent data are not yet available for Sierra Leone.
- :: There are currently 27 laboratories providing case-confirmation services in the 3 intense-transmission countries. Five more laboratories are planned in order to meet demand. The mean time between sample collection to sample testing in the 21 days to 18 January was 1.37 days in Guinea, 2.03 days in Liberia, and 2.32 days in Sierra Leone, although several districts in Guinea have yet to report data.
- :: Case fatality among hospitalized patients (calculated from all hospitalized patients with a reported definitive outcome) is between 57% and 59% in the 3 intense-transmission countries, with no detectable improvement since the onset of the epidemic.
- :: A total of 828 health worker infections have been reported in the 3 intense-transmission countries; there have been 499 reported deaths. The incidence of health worker infections has fallen in Liberia and Sierra Leone, but rose in Guinea throughout December.
- :: As an indication of community engagement, 71% of districts in Guinea and 100% of districts in Sierra Leone have a list of key religious leaders who promote safe and dignified burials. No data are available for Liberia. Incidents of community resistance to safe burials and contact tracing continue to be reported in all 3 countries, although they are most common in Guinea.

COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION

:: There have been in excess of 21,000 reported confirmed, probable, and suspected cases (Annex 1) of EVD in Guinea, Liberia and Sierra Leone (table 1), with more than 8600 deaths (outcomes for many cases are unknown). A total of 20 new confirmed cases were reported in Guinea, 8 in Liberia, and 117 in Sierra Leone in the 7 days to 18 January. :: A stratified analysis of cumulative confirmed and probable cases indicates that the number of cases in males and females is similar (table 2). Compared with children (people aged 14 years and under), people aged 15 to 44 are approximately three times more likely to be affected. :: People aged 45 and over are almost four times more likely to be affected than are children. :: A total of 828 health worker infections have been reported in the 3 intense-transmission countries; there have been 499 reported deaths (table 3)...

Statement on the 4th meeting of the IHR Emergency Committee regarding the 2014 Ebola outbreak in West Africa

WHO statement

21 January 2015

The fourth meeting of the Emergency Committee convened by the WHO Director-General under the International Health Regulations (IHR) 2005 regarding the Ebola virus disease (EVD, or "Ebola") outbreak in West Africa was conducted with members and advisors of the Emergency Committee on Tuesday, 20 January 2015.

This meeting was convened to review, in accordance with IHR provisions, whether the event continued to constitute a Public Health Emergency of International Concern and, if so, whether this warranted an extension or revision of the three - month date of the expiration of the temporary recommendations, which were first issued on 8 August 2014 and extended on 22 September 2014 and 23 October 2014.

Developments since the Committee's last meeting were reviewed, including the most recent epidemiological situation. The Committee noted that the number of Ebola cases is decreasing in all three of the most affected countries.

Since the previous meeting, three countries have declared the end of Ebola transmission: Spain, the United States of America, and Mali. One case was imported into the United Kingdom of Great Britain and Northern Ireland (UK), in a health care worker who returned from Sierra Leone and was asymptomatic on exit screening and during travel; she became ill after arrival in the UK.

The Committee expressed concern that additional measures affecting travel, transport and trade that go beyond the temporary recommendations have been put in place in more than 40 countries.

Current response and preparedness activities were reviewed, as well as recent scaling up of the response. Priorities and strategies for moving towards zero cases were presented.

Guinea, Liberia, Sierra Leone, Mali and UK provided an update on and assessment of the Ebola situation in their countries, including progress towards implementation of the temporary recommendations.

Even though a few cases have occurred outside the three most affected countries, the measures recommended appear to have been helpful in limiting further international spread, including the exportation of disease from the three most affected countries.

It was the unanimous view of the Committee that the event continues to constitute a Public Health Emergency of International Concern. The Committee reviewed the temporary recommendations previously issued and stated that all previous temporary recommendations should remain in effect.

The committee provided the following additional advice to the Director-General for her consideration in addressing the Ebola outbreak in accordance with the IHR.

Recommendations for the most affected countries (Guinea, Liberia, Sierra Leone)

The Committee strongly reiterated the previous temporary recommendation on exit screening and highlighted the value of exit screening in these three countries. Exit screening remains critical for minimizing the risk of exportation of Ebola cases. The three most affected countries should maintain robust exit screening until Ebola transmission is confirmed to have stopped in these countries. The Committee again urged affected countries to provide WHO regularly with

the number of people screened at international airports and the outcomes of exit screening. The international community should support a sustainable approach to this exit screening.

Recommendations for countries sharing borders with Guinea, Liberia and Sierra Leone
These countries should be conducting active surveillance, including in border areas, and
engaging in cross-border cooperation, information and asset sharing, and continued vigilance
for new cases. National governments should empower local communities that have land
crossings at shared national borders to be part of these activities.

Recommendations for all countries

The Committee reaffirmed the need to avoid unnecessary interference with international travel and trade, as specified in Article 2 of the IHR 2005. The Committee noted that more than 40 countries have implemented additional measures, such as quarantine of returning travellers and refusal of entry. Such measures are impeding the recruitment and return of international responders. They also have harmful effects on local populations by increasing stigma and isolation, and by disrupting livelihoods and economies.

The Committee concluded that the primary emphasis must continue to be on 'getting to zero' Ebola cases, by stopping the transmission of Ebola within the three most affected countries. This action is the most important step for preventing international spread. Complacency is the biggest risk to not getting to zero cases. Continued vigilance is essential.

The Director-General thanked the Committee members and advisors for their advice and requested their reassessment of this situation within three months or earlier should circumstances require.

<u>Briefing on the Ebola virus outbreak - General Assembly, Informal meeting of the plenary, 69th session</u>

20 Jan 2015

Informal meeting of the plenary, to hear a briefing by Mr. Ismail Ould Cheikh Ahmed, Special Representative and Head of the United Nations Mission for Ebola Emergency Response (UNMEER), concerning the public health crisis emanating from the Ebola virus outbreak.

A letter from the Secretary-General addressed to the President of the General Assembly, containing a report on progress made in the Ebola response, was issued in document A/69/720.

A letter from the President of the General Assembly, dated 15 January 2015, was sent to all permanent representatives and permanent observers.

Video: http://webtv.un.org/watch/briefing-on-the-ebola-virus-outbreak-general-assembly-informal-meeting-of-the-plenary-69th-session/4000843020001

Text: <u>Statement by Ismail Ould Cheikh Ahmed, Special Representative and Head of UNMEER, to the UN General Assembly</u>

<u>Letter dated 12 January 2015 from the Secretary-General addressed to the President of the</u> General Assembly

A/69/720 :: 21 pages, General Assembly, Sixty-ninth session; Agenda item 124; Global health and foreign policy

:: Protecting fans from Ebola at the Africa Cup of Nations

23 January 2015 -- Thanks to preparedness activities by Equatorial Guinea's Ministry of Health, FIFA and WHO, the one million people gathered in Equatorial Guinea for the 2015 Africa Cup of Nations are able to focus more on footie than on fears of Ebola. So what does it take to ensure that capacities are in place to prevent, identify and respond to potential Ebola virus transmission at such a large mass gathering?

Read the story from Equatorial Guinea

UNICEF [to 24 January 2015]

http://www.unicef.org/media/media 71508.html

Media Releases [selected]

As schools reopen in Guinea, UNICEF helps efforts to reduce Ebola transmission risk DAKAR/NEW YORK/GENEVA, 20 January 2015 – As schools reopen in Guinea, UNICEF and partners are helping reduce as much as possible the risk of Ebola transmission, training teachers to implement safety measures such as daily temperature screening, and supplying thermometers and handwashing kits for schools.

World Bank [to 24 January 2015]

http://www.worldbank.org/en/news/all

<u>Ebola: Most African Countries Avoid Major Economic Loss but Impact on Guinea, Liberia, Sierra Leone Remains Crippling</u>

Africa-wide impact in 2015The Bank Group expects sub-Saharan Africa to grow at 4.6 percent in 2015, down from a 5.0 percent forecast in June 2014. Projections have been lowered because of global events, including the West African Ebola epidemic as well as the net effect of winners and losers from a steep fall in the global prices of oil and other commodities. Key risks to this projected growth include a renewed spread of Ebola, violent insurgencies, further reductions in commodity prices, and volatile global financial conditions. Much of the economic impact of Ebola beyond the epicenter of directly affected West African countries is based on fear, as was the case during the SARS outbreak in East Asia a decade ago...

January 20, 2015

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POLIO [to 24 January 2015]

Public Health Emergency of International Concern (PHEIC)

GPEI Update: Polio this week - As of 21 January 2014

Global Polio Eradication Initiative

[Editor's Excerpt and text bolding]

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

:: Ministers of Health from around the world will convene next week at WHO's Executive Board meeting, to set global public health policies. Among other topics, representatives are expected to review the current polio epidemiology and global preparedness plans for the phased removal of oral polio vaccines. A report has been prepared, to facilitate discussions, available here and below.

- :: In Nigeria, the Expert Review Committee on Polio Eradication and Routine Immunization (ERC) is meeting this week to discuss aggressive strategies to urgently eradicate both wild- and vaccine-derived polioviruses in the country as rapidly as possible.
- :: The first wild poliovirus type 1 (WPV1) case of 2015 is reported this week, from Pakistan. The case had onset of paralysis on 3 January, from Khyber Pakhtunkhwa. See 'Pakistan' section for more.
- :: Bill and Melinda Gates, co-chairs of the Bill & Melinda Gates Foundation, this week published their <u>annual letter</u>, outlining how they believe the world will look like in 15 years. In the letter, they highlight the urgent need to eradicate polio. "Destroying a disease utterly is a very difficult thing to do so difficult in fact, that it's happened only once in history, when smallpox was eradicated in 1980. But if we keep working hard... we can get polio out of Africa this year and out of every country in the world in the next several years."

Selected country report content:

Pakistan

- :: Seven new wild poliovirus type 1 (WPV1) cases were reported in the past week, including the first case with onset of paralysis in 2015. The total number of WPV1 cases in 2014 is 303, and one for 2015 (onset of paralysis on 3 January, from Khyber Pakhtunkhwa KP).
- :: Pakistan accounts for more than 85% of all WPV1 cases worldwide in 2014.
- :: To urgently address the intense transmission affecting the country, the government has put in place emergency measures to take advantage of the upcoming 'low season' for poliovirus transmission (in the early part of 2015). A 'low season plan' has been established, based on lessons learned on accessing populations in insecure areas, engaging communities and fixing remaining operational challenges. Implementation is overseen by Emergency Operations Centres at federal and provincial levels to ensure accountability for the quality of polio eradication operations. More

West Africa

- :: Even as polio programme staff across West Africa support efforts to control the Ebola outbreak affecting the region, efforts are being made in those countries not affected by Ebola to vaccinate children against polio to create a buffer zone surrounding the Ebola-affected countries. The Ebola crisis in western Africa continues to have an impact on the implementation of polio eradication activities in Liberia, Guinea and Sierra Leone. Supplementary immunization activities (SIAs) in these countries have been postponed and the quality of acute flaccid paralysis surveillance has markedly decreased throughout 2014.
- :: NIDs are planned using bivalent oral polio vaccine (OPV) in Niger and Benin on 27 February to 2 March, and Subnational Immunization Days (SNIDs) tentatively in Mali in February with dates to be confirmed. From 27 to 31 March, NIDs will take place in Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger and Senegal using trivalent OPV. NIDs are also scheduled on those dates for the three Ebola-affected countries Guinea, Liberia and Sierra Leone.

Poliomyelitis: Report by the secretariat

WHO 136th Executive Board (January 2015) EB136/21 - 16 January 2015 - Provisional agenda item 8.2 [pdf] عربي | 中文 | English | Français | Русский | Español

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WHO & Regionals [to 24 January 2015]

:: 136th WHO Executive Board session

26 January-3 February 2015 -

- Main Documents: http://apps.who.int/gb/e/e eb136.html

:: Noncommunicable diseases take 16 million lives prematurely annually

19 January 2015 -- Urgent government action is needed to meet global targets to reduce the burden of noncommunicable diseases (NCDs), and prevent the annual toll of 16 million people dying prematurely – before the age of 70 – from heart and lung diseases, stroke, cancer and diabetes, according to a new WHO report. The report states that most premature NCD deaths are preventable.

- Read the news release on the new NCDs status report
- Read the NCDs status report

:: Global Alert and Response (GAR): Disease Outbreak News (DONs)

- Middle East respiratory syndrome coronavirus (MERS-CoV) Oman 23 January 2015
- Middle East respiratory syndrome coronavirus (MERS-CoV) Saudi Arabia 20 January 2015
- Human infection with avian influenza A(H7N9) virus China 19 January 2015

:: The <u>Weekly Epidemiological Record (WER) for 23 January 2015</u>, vol. 90,4 (pp. 17–24) includes –

Global Advisory Committee on Vaccine Safety, 3-4 December 2014

:: <u>Call for proposal for consultant pdf, 117kb</u> Expanded programme on Immunization (EPI) 23 January 2015

Terms of Reference for a consultant

Deadline for application: 29th January 2014

WHO Regional Offices

WHO African Region AFRO

Press Releases

- :: <u>More than 2.5 million people reached in emergency response campaign with anti-malarial medicines in Sierra Leone 22 January 2015</u>
- :: Meningitis A vaccine now recommended in routine immunization schedules

Brazzaville, 20 January 2015 – The World Health Organization (WHO) now recommends the conjugate meningitis A vaccine MenAfriVac® to be introduced in routine immunization schedules in sub-Saharan Africa. This recommendation ensures that infants are protected against meningitis and population-wide immunity is maintained. The use of the MenAfriVac® vaccine to prevent meningitis A epidemics is one of the greatest vaccination success stories in public health history and highlights what partners can accomplish when unified by a compelling cause. In 2014, the MenAfriVac® campaigns reached more than 63 million people with remarkable success.

WHO Region of the Americas PAHO

No new digest content identified.

WHO South-East Asia Region SEARO

:: <u>India</u>: <u>first to adapt the Global Monitoring Framework on noncommunicable diseases (NCDs)</u>
January 2015

Every year, roughly 5.8 million Indians die from heart and lung diseases, stroke, cancer and diabetes. In other words, 1 in 4 Indians risks dying from an NCD before they reach the age of 70. Full story - India: first to adapt the Global Monitoring Framework on NCDs

WHO European Region EURO

:: Ukraine health system buckling under weight of humanitarian crisis 19-01-2015

WHO Eastern Mediterranean Region EMRO

:: WHO provides support for hearing impaired children in Iraq

22 January 2015 – WHO and the Ministry of Health of the Kurdistan region have provided cochlear implants to 20 internally displaced and refugee children in Iraq as part of a larger WHO disability prevention and reduction project targeting internally displaced persons, refugees and affected host communities in Dohuk. WHO is also providing support to strengthen health services. To continue to improve its humanitarian response in Iraq, WHO requires more financial resources. Of the US\$ 187 million needed, the Organization has so far raised only US\$ 55 million (29%).

WHO Western Pacific Region

No new digest content identified.

CDC/MMWR Watch [to 24 January 2015]

http://www.cdc.gov/media/index.html

- :: MMWR Weekly, January 23, 2015 / Vol. 64 / No. 2
- *Notes from the Field:* Investigation of Contacts of a Health Care Worker Who Worked While Ill with Pertussis Maryland, August—September 2014

California measles outbreak expands to 78 cases; more likely

By Rosanna Xia and Rong-Gong Lin II

Los Angeles Times, January 23,2 015

The measles outbreak centered in California continues to expand, with officials now confirming 78 cases of the illness in seven states and Mexico.

The California Department of Public Health said there are now 68 cases in the state – 48 that have been directly linked to being at Disneyland or Disney California Adventure last month. Some people also visited one or both of the parks while infectious in January.

The measles outbreak has also spread beyond those who visited Disneyland in December and January and is infecting people in the broader community...

...The California patients range in age from 7 months to 70 years. The vaccination status is known for 39 of the patients. Of those, 32 were unvaccinated, one had received partial vaccination and seven were fully vaccinated.

Of the cases in California, about one in four have had to be hospitalized, officials said. Disneyland officials confirmed to The Times that five Disneyland employees have been diagnosed with measles. All Disneyland employees who could have been in contact with those

five have been asked to provide vaccination records or do a blood test that shows they have built immunity to the disease.

Any employees who had not been vaccinated or could not confirm their immunity status have been asked to go on paid leave until their status could be confirmed, company officials said.

Healthcare officials said it is safe to go Disneyland and other venues with large crowds if you are immunized for measles...

GAVI Watch [to 24 January 2015]

http://www.gavialliance.org/library/news/press-releases/

:: <u>Half a billion children vaccinated and seven million lives saved thanks to Gavi partners</u> Global health milestone announced days ahead of major replenishment meeting

Davos, 22 January 2015 – New figures released today by Gavi, the Vaccine Alliance show that half a billion children have been reached with lifesaving vaccines in the 15 years since the organisation was founded.

The figures also reveal that the number of deaths averted through Gavi-supported immunisation programmes now tops seven million.

Gavi CEO Dr Seth Berkley announced the figures during a press conference at the World Economic Forum in Davos – the place where Gavi was born in 2000 – just days ahead of a major event to be hosted in Berlin which is looking to raise billions of dollars to ensure Gavi Is fully funded between 2016 and 2020.

"Quite simply, no other intervention touches so many lives," said Dr Berkley. "More and more children are being reached with new and effective vaccines and we are seeing children growing up who simply would not be alive and healthy today if they had not been protected through immunisation. We are proud of this milestone but we want to go further and immunise a further 300 million children against life-threatening diseases between 2016 and 2020. We believe we can defeat vaccine-preventable illness, further preventing child death and helping communities lift themselves out of poverty...

:: <u>New private sector partners bring technical expertise and innovative finance to help save children's lives</u>

Gavi to leverage corporate patent royalties and local knowledge to improve vaccine delivery and injection safety in poor countries

Davos, 21 January 2015 – A collaboration of private sector organisations with global supply chain and injection safety expertise has partnered with Gavi, the Vaccine Alliance to support children's health in 73 of the poorest countries. Strong vaccine supply chains, which ensure vaccines get from production lines to children who need them, and injection safety are important factors in increasing vaccination coverage, maintaining vaccine confidence and improving child health in poor countries.

The three-year partnership between Gavi and the <u>International Federation of Pharmaceutical Wholesalers</u> (IFPW), a global association of pharmaceutical wholesalers focused on the storage and delivery of medicines, will bolster regional supply chain training centres in Benin and Rwanda, serving multiple countries in Africa.

Vaccines are temperature sensitive, and the infrastructure in poor countries often is lacking. Partnerships, such as this one with IFPW ... are bringing new thinking and resources to help the Vaccine Alliance reach every child.

IFPW, whose members include <u>Walgreens Boots Alliance</u> and McKesson-Celesio, will provide a package of support, including US\$ 1.5 million in cash and member expertise to ensure that

aspiring students in Gavi-supported countries receive the training needed to become the next generation of supply chain managers.

"IFPW and its partners are, by nature, experts in managing healthcare supply chains and cold chains such as those required for proper vaccine handling," explained Ornella Barra, Executive Vice President of Walgreens Boots Alliance and Chief Executive of Global Wholesale and International Retail. "We look forward to sharing our industry's knowledge, expertise and resources with Gavi and its partners to strengthen developing countries' medical supply chains and to improve the availability of and access to vaccines for the children who need them."... :: IFFIm's debut Sukuk awarded 'Social Impact Deal of the Year 2014'

13 January 2015 Islamic Finance News also awards IFFIm honourable mention in category of 'Sukuk Deal of the Year'.

Global Statement on Gavi Replenishment: Potential funding shortfall if donors don't step up

Results | 20 January 2015

A number of NGOs and CSOs issued a joint statement in support of the Gavi replenishment goals. The statement signed by: ACTION Global Health Advocacy Partnership, Save the Children, ONE, Global Poverty Project, BRAC, WorldVision and the Gavi Civil Society Steering Committee, RESULTS Australia, RESULTS Canada, Global Health Advocates (France), CORE Group Partners Project (India), Health Education and Literacy Programme, Pakistan Civil Society Coalition Network for Health and Immunization, Asociación Mexicana de Vacunología, IMA World Health and American Cancer Society, Alternative Santé Cameroon, CCAM Cameroon, PROVARESSC Cameroun.

European Medicines Agency Watch [to 24 January 2015]

21/01/2015

:: New international standard to improve safety of medicines

New EMA guide will help industry and regulatory authorities to implement changes

The European Medicines Agency (EMA) has published a guide to support the implementation of a new international standard for the safety monitoring of medicines in the European Union (EU). The so-called ISO ICSR standard improves the reporting of suspected side effects of medicines in Individual Case Safety Reports (ICSRs). The use of the new international standard will take effect on 1 July 2016.

ISO ICSR aims to establish the same format for the reports on individual cases of suspected side effects in patients due to a medicine across the world. It also is expected to include better information on medicines that might be associated with an adverse drug reaction and on the therapeutic uses of those medicines. In addition, the standard also strengthens personal data protection in the records of ICSRs collected by pharmaceutical companies and regulatory authorities.

FDA Watch [to 24 January 2015]

http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm :: FDA approves a second vaccine to prevent serogroup B meningococcal disease January 23, 2015

The U.S. Food and Drug Administration today approved Bexsero, a vaccine to prevent invasive meningococcal disease caused by Neisseria meningitidis serogroup B in individuals 10 through 25 years of age.

Bexsero is the second vaccine approved by the FDA in the past three months to prevent this disease. The agency approved the first meningococcal serogroup B vaccine in October 2014. Before these approvals, existing approved meningococcal vaccines in the U.S. covered only four of the five main serogroups of N. meningitidis bacteria that cause meningococcal disease: A, C, Y and W...

... "With today's approval of Bexsero, the U.S. now has two vaccines for the prevention of serogroup B meningococcal disease," said Karen Midthun, M.D., director of the FDA's Center for Biologics Evaluation and Research. "The approval of these vaccines represents a major public health accomplishment toward preventing this life-threatening disease."...

Industry Watch [to 24 January 2015]

:: <u>Novartis Bexsero vaccine approved by FDA for the prevention of meningitis B, the leading</u> cause of bacterial meningitis in the US

Jan 23, 2015, 18:35 ET

Novartis announced today that the US Food and Drug Administration (FDA) has granted accelerated approval of Bexsero® (Meningococcal Group B Vaccine [recombinant, adsorbed]) for active immunization to prevent invasive meningococcal disease caused by serogroup B (also known as meningitis...

:: <u>Major milestone for GSK/NIH candidate Ebola vaccine as first doses shipped to Liberia for use</u> in phase III clinical trial

23 January 2015, Issued: London, UK

Healthcare workers among those to be vaccinated in large-scale trial involving up to 30,000 people due to start in the coming weeks [see full press release above in Ebola/EVD section]: Prevenar 13 Receives CHMP Positive Opinion For Prevention Of Vaccine-Type Pneumococcal Pneumonia in Adults

January 22, 2015 11:21 AM Eastern Standard Time

NEW YORK--(<u>BUSINESS WIRE</u>)--Pfizer Inc. (NYSE:PFE) announced today that the European Medicines Agency's Committee for Medicinal Products for Human Use (CHMP) has adopted a positive opinion recommending that the indication for Prevenar 13* (pneumococcal polysaccharide conjugate vaccine [13-valent, adsorbed]) be expanded to include the prevention of pneumonia caused by the 13 pneumococcal serotypes in the vaccine in adults 18 years and older. Prevenar 13 is currently approved in Europe for the prevention of invasive pneumococcal disease (IPD) in the same population. The CHMP's positive opinion will now be reviewed by the European Commission (EC). The decision on whether to approve Prevenar 13 for this indication will be made by the EC and will be applicable to all European Union member states plus Iceland, Lichtenstein and Norway...

:: <u>Specialty Vaccine Company PaxVax Appoints Nima Farzan as President</u> January 21, 2015

REDWOOD CITY, Calif.--(<u>BUSINESS WIRE</u>)--PaxVax, Inc., a specialty vaccine company focused on travel and biodefense, today announced the appointment of Nima Farzan as President and Chief Operating Officer (COO). Mr. Farzan, who has served as PaxVax COO for the past three years, will be responsible for the company's global operations including the finance, production and commercial functions. The company also announced today that Mr.

Farzan has joined the PaxVax Board of Directors. Kenneth Kelley will continue to serve as the company's Chief Executive Officer and as a Director....

BMGF - Gates Foundation Watch [to 24 January 2015]

http://www.gatesfoundation.org/Media-Center/Press-Releases

:: Bill and Melinda Gates Release 2015 Annual Letter: "Our Big Bet for the Future"

SEATTLE (January 21, 2015)— Today, Bill and Melinda Gates share their 2015 Annual Letter.

"Our Big Bet for the Future" addresses the breakthroughs they see coming over the next fifteen years that will improve the lives of people in poor countries faster than at any other time in history.

Annual Letter segment – <u>One: Health Child deaths will go down, and more diseases will be wiped out</u>

European Vaccine Initiative Watch [to 24 January 2015]

http://www.euvaccine.eu/news-events
No new digest content identified.

Sabin Vaccine Institute Watch [to 24 January 2015]

http://www.sabin.org/updates/pressreleases No new digest content identified.

IAVI Watch [24 January 2015]

http://www.iavi.org/press-releases/2015 No new digest content identified.

IVI Watch [to 24 January 2015]

http://www.ivi.org/web/www/home No new digest content identified.

PATH Watch [to 24 January 2015]

http://www.path.org/news/

No new digest content identified.

Global Fund Watch [to 24 January 2015]

http://www.theglobalfund.org/en/mediacenter/ No new digest content identified

NIH Watch [to 24 January 2015]

http://www.nih.gov/news/index.html

No new digest content identified.

DCVMN / PhRMA / EFPIA / IFPMA / BIO Watch [to 24 January 2015]

No new digest content identified.

<u>Reports/Research/Analysis/Commentary/Conferences/Meetings/Book</u> <u>Watch/Tenders</u>

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

MSF- The Right Shot: Bringing Down Barriers to Affordable and Adapted Vaccines

2nd Edition - January 2015 :: 124 pages

http://www.doctorswithoutborders.org/sites/usa/files/attachments/the_right_shot_2nd_edition.pdf

website: www.msfaccess.org/our-work/vaccines

[Full text from <u>Overview</u>]

Whether vaccinating refugee children in South Sudan, or pregnant women in Afghanistan, MSF has committed itself to prioritizing vaccination as a core health service in its operations. In 2013 alone, our programs delivered more than 6.7 million doses of vaccines and immunological products, and we see the need to ramp up our activities even further.

However, the organization increasingly faces challenges at the field and global levels in expanding capacity to address immunization needs. The barriers encountered by MSF, including the rising cost of new vaccines and the lack of vaccine products suited for low-resource settings, are also obstacles for affected countries. As MSF uses newer vaccines more frequently in crisis settings, in line with the recently developed World Health Organization (WHO) guidelines on vaccinating in humanitarian emergencies, the challenges we face in purchasing vaccines at an affordable price have become acute. In addition, countries that are unable to afford these high prices are increasingly voicing their frustration at the inability to protect their children against life-threatening—but preventable—diseases.

This second edition of The Right Shot outlines how the prices of 16 fundamentally important vaccines have evolved since their development, in some cases as far back as 2000.

The report analyzes how prices are affected by the fact that a few multinational companies dominate the market, a lack of competition, various procurement strategies and purchasing conditions, and the business practices of the pharmaceutical industry. The publication consolidates and analyzes vaccine price data points from countries, UNICEF, Pan American Health Organization (PAHO), MSF, and pharmaceutical companies. By examining the differences in pricing strategies used by companies based in emerging economies (developing country manufacturers) and multinational companies (industrialized country manufacturers), the publication explains how multinational pharmaceutical companies use their first-to-market advantage to reap blockbuster revenues, and are increasingly moving beyond high-income countries in seeking other profitable markets.

It also demonstrates how entry of additional manufacturers with WHO-prequalified vaccines, in particular developing country manufacturers, stimulates competition and drives down prices.

An overarching challenge that MSF faces in analyzing the vaccine market is the lack of data on prices and the notoriously opaque nature of the market; this lack of transparency also inhibits efforts to improve affordability. Price secrecy is ubiquitous in the vaccines market, putting countries and other purchasers at a distinct disadvantage when negotiating with companies.

While Gavi, the Vaccine Alliance, has helped to lower prices of new and underused vaccines for its eligible countries—originally the poorest 73 countries of the world—the cost to fully immunize a child has nevertheless skyrocketed. Even at the lowest global prices, the introduction of the newest vaccines against pneumococcal and diarrheal diseases (pneumococcal conjugate and rotavirus vaccines, respectively), and against cervical cancer (human papillomavirus vaccine) has increased the cost of the full vaccines package 68-fold from 2001 to 2014, calling into question the sustainability of immunization programs after countries lose donor support. Of particularly serious concern is the impact of this drastic increase on most middle-income countries (MICs), which are benefitting neither from lower prices negotiated by organizations such as Gavi, nor from international donor support. Many children living in MICs are not benefitting from new, life-saving vaccines as a result of irrational and unaffordable pricing policies; some of these countries even have lower immunization coverage rates than Gavi-eligible countries.

Finally, while recent years have seen the introduction of several new vaccines that offer significant potential to reduce childhood deaths, there has been little investment in adapting—or optimizing—vaccine products to resource-limited contexts. Most vaccines still need to be refrigerated in a rigid "cold chain" until the moment they are administered, which is an immense challenge for places without electricity. Multiple doses are needed to fully protect children, and bulky products complicate transport to remote areas. These are some of the obstacles that annually prevent almost 22 million children under one year of age from receiving the basic package of lifesaving vaccines. Whether in a small village in rural Congo or a refugee camp in Iraq, vaccine delivery can be extremely difficult and costly to execute. A growing body of evidence, including MSF research, shows that some vaccines can remain effective outside of a strictly regulated temperature range, and rapid steps to re-label vaccines for their true heat stability are needed, along with further investments in better adapted products.

Vaccine commodities themselves account for almost half of the 57 billion US dollars (US\$) needed to finance the Decade of Vaccines—the global framework for expanding access to immunization from 2011 to 2020. In the meantime, many countries, especially middle-income countries, are unable to afford the newest vaccines for their populations, nor can organizations such as MSF provide these vaccines to crisis-affected children, because of the very high price tag. Better solutions that can make new quality-assured vaccines more affordable and adapted to the environments where children are most vulnerable are urgently needed. Efforts to accelerate real competition in the vaccines market will deliver the most sustainable price reductions; in the interim, procurement strategies that benefit as many countries as possible should be pursued. Collective action is needed to improve price transparency and ensure affordable prices for quality assured vaccines in all countries, so that governments can make the benefits of immunization accessible to their populations. Shedding more light on the vaccine industry will benefit children everywhere.

MSF bends donation policy for pneumonia vaccine

By Jenny Lei Ravelo 22 January 2015 DEVEX - Global health [Excerpt]

After years of refusing vaccine handouts from big pharmaceutical companies, international medical humanitarian group Médecins Sans Frontières is bending its policy to accept donations of the pneumococcal conjugate vaccine....

...MSF, which also does routine immunization campaigns in its emergency work, has been negotiating with big pharma companies for years to expand access to these lower-cost vaccines to all countries as well as relief organizations like them, which are also subject to vaccine market rates, under its Access Campaign. But after years of failed negotiations, the organization has decided to accept donations for a "limited supply" of PCV, the vaccine to fight pneumonia.

MSF argues "the serious delays in providing lifesaving vaccines for children living in crisis have forced MSF to make this pragmatic, though unsustainable, decision."

François Servranckx, the group's communications lead for Access Campaign, said the agreement is limited to only three years, and that despite the decision, they will continue to argue their cause to pharmaceutical companies and donor countries supporting Gavi.

"We are not asking for charity from big pharmaceutical companies, but for fair prices enabling every country in the world to buy vaccines for its own population," he told Devex.

He also doesn't think this would dilute the organization's advocacy, "in the sense that we have already said that a donation is not a solution."

MSF is one of the few organizations with strict policies on donations. It does not accept bilateral donor funding in conflict situations, and also does not accept donations from companies benefiting from the production or sale of tobacco, alcohol, arms and pharmaceuticals, and from extractive industries like minerals, oil and gas...

Meeting Twenty: The Presidential Commission for the Study of Bioethical Issues

Focus on the current Ebola virus disease (EVD) epidemic

February 5-6, 2015, Washington, D.C.

Federal Register Notice

<u>Agenda</u>

Watch the live webcast Feb. 5-6

Location: The Hamilton Crowne Plaza Hotel, 1001 14th St. NW, Washington, DC 20005
The Commission is considering three areas of ethical concern raised by public health
emergency response with a focus on the current Ebola virus disease (EVD) epidemic. The first
area concerns U.S. public policies that restrict association or movement (such as quarantine),
which have recently been proposed and/or employed for health care workers and military
personnel returning from countries affected by EVD in western Africa.

The second area concerns the ethics of placebo-controlled trials in the context of public health emergencies, and the EVD epidemic specifically, where the drug undergoing testing might be effective against the disease causing the emergency.

The third area of concern is the ethical considerations relevant to collecting and storing biospecimens during a public health emergency, such as the EVD epidemic, and sharing these specimens and associated data internationally for future research...

The Bioethics Commission Requests Comment on Ethical Considerations in the EVD Response

- ...The Commission is particularly interested in receiving public commentary regarding the following issues in the context of public health emergency response generally and the EVD epidemic specifically:
- :: Ethical and scientific standards for public health emergency response;
- :: Ethical and scientific standards that guide the use of quarantine or other movement restrictions during public health emergencies;
- :: The impact of quarantine or other movement restrictions on the availability or willingness of health workers to volunteer to contain the epidemic in disease-affected areas;

- :: The impact of quarantine or other movement restrictions on public fear and anxiety about potential threats to public health;
- :: How U.S. public policy and public health response to the current EVD epidemic might or should affect public attitudes to, and further U.S. policy and public health response to, other current and future public health issues and emergencies;
- :: Ethical and scientific standards for placebo-controlled trials during public health emergencies;
- :: Ethical and scientific standards for collection, storage, and international sharing of biospecimens and associated data during public health emergencies.

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

<u>Volume 15</u>, Issue 1, 2015 <u>http://www.tandfonline.com/toc/uajb20/current</u> [Reviewed earlier]

American Journal of Infection Control

January 2015 Volume 43, Issue 1, p1-98 http://www.ajicjournal.org/current [Reviewed earlier]

American Journal of Preventive Medicine

January 2015 Volume 48, Issue 1, p1-120 http://www.ajpmonline.org/current [Reviewed earlier]

American Journal of Public Health

Volume 105, Issue 1 (January 2015) http://ajph.aphapublications.org/toc/ajph/current [Reviewed earlier]

American Journal of Tropical Medicine and Hygiene

January 2015; 92 (1) http://www.ajtmh.org/content/current [Reviewed earlier]

Annals of Internal Medicine

20 January 2015, Vol. 162. No. 2

http://annals.org/issue.aspx

Ideas and Opinions | 20 January 2015

<u>Drug and Vaccine Access in the Ebola Epidemic: Advising Caution in Compassionate</u> Use

Andrew Hantel, MD; and Christopher Olusola Olopade, MD, MPH

Article and Author Information

Ann Intern Med. 2015;162(2):141-142. doi:10.7326/M14-2002

This article was published online first at www.annals.org on 14 October 2014.

BMC Health Services Research

http://www.biomedcentral.com/bmchealthservres/content

(Accessed 24 January 2015)

Research article

<u>Cost to households in treating maternal complications in northern Ghana: a cross sectional study</u>

Maxwell Ayindenaba Dalaba<u>12</u>*, Patricia Akweongo<u>3</u>, Raymond Akawire Aborigo<u>24</u>, Happiness Pius Saronga<u>15</u>, John Williams<u>2</u>, Gifty Apiung Aninanya<u>2</u>, Rainer Sauerborn<u>1</u> and Svetla Loukanova<u>1</u>

Author Affiliations

BMC Health Services Research 2015, 15:34 doi:10.1186/s12913-014-0659-1

Published: 22 January 2015

Abstract (provisional)

Background

The cost of treating maternal complications has serious economic consequences to households and can hinder the utilization of maternal health care services at the health facilities. This study estimated the cost of maternal complications to women and their households in the Kassena-Nankana district of northern Ghana.

Methods

We carried out a cross-sectional study between February and April 2014 in the Kassena-Nankana district. Out of a total of 296 women who were referred to the hospital for maternal complications from the health centre level, sixty of them were involved in the study. Socio-demographic data of respondents as well as direct and indirect costs involved in the management of the complications at the hospital were collected from the patient's perspective. Analysis was performed using STATA 11.ResultsOut of the 60 respondents, 60% (36) of them suffered complications due to prolonged labour, 17% (10) due to severe abdominal pain, 10%(6) due to anaemia/malaria and 7%(4) due to pre-eclampsia. Most of the women who had complications were primiparous and were between 21?25 years old. Transportation cost accounted for the largest cost, representing 32% of total cost of treatment. The median direct medical cost was US\$8.68 per treatment, representing 44% of the total cost of treatment. Indirect costs accounted for the largest proportion of total cost (79%). Overall, the median

expenditure by households on both direct and indirect costs per complication was US\$32.03. Disaggregating costs by type of complication, costs ranged from a median of US\$58.33 for preeclampsia to US\$6.84 for haemorrrhage. The median number of days spent in the hospital was 2?days - five days for pre-eclampsia. About 33%(6) of households spent more than 5% of annual household expenditure and therefore faced catastrophic payments.

Although maternal health services are free in Ghana, women still incur substantial costs when complications occur and face the risk of incurring catastrophic health expenditure. *Research article*

<u>Mobile phone text messaging interventions for HIV and other chronic diseases: an overview of systematic reviews and framework for evidence transfer</u>

Lawrence Mbuagbaw<u>123</u>*, Sara Mursleen<u>1</u>, Lyubov Lytvyn<u>1</u>, Marek Smieja<u>14</u>, Lisa Dolovich<u>5</u> and Lehana Thabane12678

Author Affiliations

BMC Health Services Research 2015, 15:33 doi:10.1186/s12913-014-0654-6

Published: 22 January 2015

Abstract (provisional)

Background

Strong international commitment and the widespread use of antiretroviral therapy have led to higher longevity for people living with human immune deficiency virus (HIV). Text messaging interventions have been shown to improve health outcomes in people living with HIV. The objectives of this overview were to: map the state of the evidence of text messaging interventions, identify knowledge gaps, and develop a framework for the transfer of evidence to other chronic diseases.

Methods

We conducted a systematic review of systematic reviews on text messaging interventions to improve health or health related outcomes. We conducted a comprehensive search of PubMed, EMBASE (Exerpta Medica Database), CINAHL (Cumulative Index to Nursing and Allied Health Literature), PsycINFO, Web of Science (WoS) and the Cochrane Library on the 17th April 2014. Screening, data extraction and assessment of methodological quality were done in duplicate. Our findings were used to develop a conceptual framework for transfer. Results

Our search identified 135 potential systematic reviews of which nine were included, reporting on 37 source studies, conducted in 19 different countries. Seven of nine (77.7%) of these reviews were high quality. There was some evidence for text messaging as a tool to improve adherence to antiretroviral therapy. Text messages also improved attendance at appointments and behaviour change outcomes. The findings were inconclusive for self-management of illness, treatment of tuberculosis and communicating results of medical investigations. The geographical distribution of text messaging research was limited to specific regions of the world. Prominent knowledge gaps included the absence of data on long term outcomes, patient satisfaction, and economic evaluations. The included reviews also identified methodological limitations in many of the primary studies.

Conclusions

Global evidence supports the use of text messaging as a tool to improve adherence to medication and attendance at scheduled appointments. Given the similarities between HIV and other chronic diseases (long-term medications, life-long care, strong link to behaviour and the need for home-based support) evidence from HIV may be transferred to these diseases using our proposed framework by integration of HIV and chronic disease services or direct transfer.

Research article

How rural and urban parents describe convenience in the context of school-based influenza vaccination: a qualitative study

Candace Lind1*, Margaret L Russell2, Ramona Collins1, Judy MacDonald3, Christine J Frank1 and Amy E Davis4
Author Affiliations

BMC Health Services Research 2015, 15:24 doi:10.1186/s12913-014-0663-5

Published: 22 January 2015

Abstract (provisional)

Background

Seasonal influenza vaccine uptake among school-age children has been low, particularly among rural children, even in jurisdictions in Canada where this immunization is publicly funded. Providing this vaccination at school may be convenient for parents and might contribute to increased vaccine uptake, particularly among rural children. We explore the construct of convenience as an advantage of school based influenza vaccination. We also explore for rural urban differences in this construct.

Methods

Participants were parents of school-aged children from Alberta, Canada. We qualitatively analyzed focus group data from rural parents using a thematic template that emerged from prior work with urban parents. Both groups of parents had participated in focus groups to explore their perspectives on the acceptability of adding an annual influenza immunization to the immunization program that is currently delivered in Alberta schools. Data from within the theme of `convenience? from both rural and urban parents were then further explored for subthemes within convenience.

Results

Data were obtained from nine rural and nine urban focus groups. The template of themes that had arisen from prior analysis of the urban data applied to the rural data. Convenience was a third level theme under Advantages. Five fourth level themes emerged from within convenience. Four of the five sub-themes were common to both rural and urban participants: reduction of parental burden to schedule, reduction in parental lost time, decrease in parental stress and increase in physical access points for influenza immunization. The fifth subtheme, increases temporal access to influenza immunization, emerged uniquely from the rural data. Conclusions

Both rural and urban parents perceived that convenience would be an advantage of adding an annual influenza immunization to the vaccinations currently given to Alberta children at school. Improving temporal access to such immunization may be a more relevant aspect of convenience to rural than to urban parents.

BMC Infectious Diseases

http://www.biomedcentral.com/bmcinfectdis/content

(Accessed 24 January 2015)

Research article

Measles vaccine coverage estimates in an outbreak three years after the nation-wide campaign in China: implications for measles elimination, 2013

Chao Ma<u>1</u>⁺, Fangjun Li<u>2</u>⁺, Xiang Zheng<u>3</u>, Hong Zhang<u>2</u>, Mengjuan Duan<u>1</u>, Yanhua Yang<u>2</u>, Lixin Hao<u>1</u>, Qiru Su<u>1</u>, Lance Rodewald<u>4</u>, Bosong Guo<u>5</u>, Shanliang Xiao<u>6</u>, Huaqing Wang<u>1</u>, Li Li<u>1</u>, Junhua Li<u>2</u>, Huiming Luo<u>1</u>* and Lidong Gao<u>2</u>*

Author Affiliations

BMC Infectious Diseases 2015, 15:23 doi:10.1186/s12879-015-0752-z

Published: 22 January 2015

Abstract (provisional)

Background

China is approaching measles elimination, but indigenous measles still circulates. County L in China has reported measles-containing vaccine (MCV) coverage rates >95% since 2000. Despite high reported coverage, a large measles outbreak occurred among young children in L County. We measured MCV coverage using 5 different methods during an investigation on this outbreak and compared our estimates with reported rates.

Methods

Reported coverage rates are determined by aggregating clinic-based data across the county: doses administered in each clinic divided by the number of children registered in each clinic. Our methods estimated coverage for the 2010?2012 birth cohort, and were (1) administrative method: doses administered in clinics divided by the birth cohort recorded in the Statistical Year Book, (2) house-to-house convenience-sample survey of children living near cases, (3) vaccination clinic records review, (4) determination of a convenience sample of measles outbreak cases? vaccination statuses and using the field vaccine efficacy outbreak equation to estimate population coverage, and (5) a seroprevalence survey using a convenience sample of residual blood samples from hospitals.

Results

The measles outbreak totaled 215 cases, representing an incidence of 195.8 per million population. Our estimated MCV coverage rates were: (1) administrative method: 84.1%-87.0% for MCV1 and 80.3%-90.0% for MCV2, (2) in-house survey: 83.3% of 9?17 month children received MCV1, and 74.5% of 24?47 month children received MCV2, (3) clinic record review: 85.5% of 9?17 month children received MCV1, and 73.2% of 24?59 month children received MCV2, (4) field VE method: 83.6% of 9?47 month children received one or more MCV doses, and (5) serology: seropositive rates were <80% in the 12?17 and 18?23 month age cohorts. Conclusions

Compared with reported coverage >95%, our 5 coverage assessments all showed substantially lower coverage. China should evaluate guidelines for reporting vaccination coverage and identify feasible improvements to the assessment methods.

BMC Medical Ethics

(Accessed 24 January 2015)
http://www.biomedcentral.com/bmcmedethics/content
[No new relevant content]

BMC Public Health

(Accessed 24 January 2015)
http://www.biomedcentral.com/bmcpublichealth/content
[No new relevant content]

BMC Research Notes

(Accessed 24 January 2015)

http://www.biomedcentral.com/bmcresnotes/content [No new relevant content]

British Medical Journal

24 January 2015(vol 350, issue 7992) http://www.bmj.com/content/350/7992 [No new relevant content]

Bulletin of the World Health Organization

Volume 93, Number 1, January 2015, 1-64 http://www.who.int/bulletin/volumes/93/1/en/ [Reviewed earlier]

Clinical Infectious Diseases (CID)

Volume 60 Issue 3 February 1, 2015 http://cid.oxfordjournals.org/content/current [Reviewed earlier]

Clinical Therapeutics

January 2015 Volume 37, Issue 1, p1-242 http://www.clinicaltherapeutics.com/current [Reviewed earlier]

Complexity

January/February 2015 Volume 20, Issue 3 Pages fmi–fmi, 1–92 http://onlinelibrary.wiley.com/doi/10.1002/cplx.v20.3/issuetoc [Reviewed earlier]

Conflict and Health

[Accessed 24 January 2015]
http://www.conflictandhealth.com/
[No new relevant content]

Contemporary Clinical Trials

Volume 41, <u>In Progress</u> (March 2015) [Reviewed earlier]

Cost Effectiveness and Resource Allocation

(Accessed 24 January 2015)
http://www.resource-allocation.com/
[No new relevant content]

Current Opinion in Infectious Diseases

February 2015 - Volume 28 - Issue 1 pp: v-vi,1-116 http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx [Reviewed earlier]

Developing World Bioethics

December 2014 Volume 14, Issue 3 Pages ii–iii, 111–167 http://onlinelibrary.wiley.com/doi/10.1111/dewb.2014.14.issue-3/issuetoc [Reviewed earlier]

Development in Practice

<u>Volume 25</u>, Issue 1, 2015 <u>http://www.tandfonline.com/toc/cdip20/current</u> [Reviewed earlier]

Emerging Infectious Diseases

Volume 21, Number 2—February 2015 http://wwwnc.cdc.gov/eid/ Perspective

Evaluation of Border Entry Screening for Infectious Diseases in Humans

Linda A. Selvey⊠, Catarina Antão, and Robert Hall

Author affiliations: Curtin University, Perth, Western Australia, Australia (L.A. Selvey, C. Antão); Monash University, Melbourne, Victoria, Australia (R. Hall)

Abstract

In response to the severe acute respiratory syndrome (SARS) pandemic of 2003 and the influenza pandemic of 2009, many countries instituted border measures as a means of stopping or slowing the spread of disease. The measures, usually consisting of a combination of border entry/exit screening, quarantine, isolation, and communications, were resource intensive, and modeling and observational studies indicate that border screening is not effective at detecting infectious persons. Moreover, border screening has high opportunity costs, financially and in terms of the use of scarce public health staff resources during a time of high need. We discuss the border-screening experiences with SARS and influenza and propose an approach to decision-making for future pandemics. We conclude that outbreak-associated communications for travelers at border entry points, together with effective communication with clinicians and more effective disease control measures in the community, may be a more effective approach to the international control of communicable diseases.

Epidemics

Volume 9, <u>In Progress</u> (December 2014) <u>http://www.sciencedirect.com/science/journal/17554365</u> [Reviewed earlier]

Epidemiology and Infection

Volume 143 - Issue 02 - January 2015

http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue

[Reviewed earlier]

The European Journal of Public Health

Volume 25, Issue 1, 01 February 2015

http://eurpub.oxfordjournals.org/content/24/6

Migration and health

Suicide among immigrants in Europe—a systematic literature review

Jacob Spallek, Anna Reeske, Marie Norredam, Signe Smith Nielsen, Jessica Lehnhardt, Oliver Razum

Eur J Public Health (2015) 25 (1): 63-71

<u>DOI:</u> http://dx.doi.org/10.1093/eurpub/cku121 First published online: 5 August 2014 (9 pages)

Abstract

How do immigrants use primary health care services? A register-based study in Norway

Esperanza Diaz, Amaia Calderón-Larrañaga, Alexandra Prado-Torres, Beatriz Poblador-Plou, Luis-Andrés Gimeno-Feliu

Eur J Public Health (2015) 25 (1): 72-78

<u>DOI:</u> http://dx.doi.org/10.1093/eurpub/cku123 First published online: 1 August 2014 (7 pages)

Abstract

<u>Caesarean section by immigrants' length of residence in Norway: a population-based study</u>

Ingvil K. Sørbye, Anne K. Daltveit, Johanne Sundby, Camilla Stoltenberg, Siri Vangen

Eur J Public Health (2015) 25 (1): 78-84

<u>DOI: http://dx.doi.org/10.1093/eurpub/cku135</u> First published online: 5 September 2014 (7 pages)

Abstract

Remigration of migrants with severe disease: myth or reality?—a register-based cohort study

Marie Norredam, Oluf Hoejbjerg Hansen, Jørgen Holm Petersen, Anton E Kunst, Maria Kristiansen, Allan Krasnik, Charles Agvemang

Eur J Public Health (2015) 25 (1): 84-89

<u>DOI: http://dx.doi.org/10.1093/eurpub/cku138</u> First published online: 8 September 2014 (6 pages)

Abstract

<u>Sexual and gender-based violence in the European asylum and reception sector: a perpetuum mobile?</u>

Ines Keygnaert, Sonia F. Dias, Olivier Degomme, Walter Devillé, Patricia Kennedy, András Kováts, Sara De Meyer, Nicole Vettenburg, Kristien Roelens, Marleen Temmerman

Eur J Public Health (2015) 25 (1): 90-96

DOI: http://dx.doi.org/10.1093/eurpub/cku066 First published online: 29 May 2014 (7 pages)

Abstract

Eurosurveillance

Volume 20, Issue 3, 22 January 2015

http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678 Rapid communications

An outbreak of measles associated with an international dog show in Slovenia, November 2014

by M Grgič-Vitek, T Frelih, V Ucakar, M Fafangel, O Jordan Markocic, K Prosenc, A Kraigher Serogroup C invasive meningococcal disease among men who have sex with men and in gay-oriented social venues in the Paris region: July 2013 to December 2014 by L Aubert, MK Taha, N Boo, Y Le Strat, AE Deghmane, A Sanna, AS Barret, D Lévy-Bruhl, S Vandentorren, I Parent du Châtelet

<u>Lactating mothers infected with Ebola virus: EBOV RT-PCR of blood only may be</u> insufficient

by M Moreau, C Spencer, JG Gozalbes, R Colebunders, A Lefevre, S Gryseels, B Borremans, S Gunther, D Becker, JA Bore, FR Koundouno, A Di Caro, R Wölfel, T Decroo, M Van Herp, L Peetermans, AM Camara

Global Health: Science and Practice (GHSP)

December 2014 | Volume 2 | Issue 4 http://www.ghspjournal.org/content/current [Reviewed earlier]

Global Health Governance

[Accessed 24 January 2015] http://blogs.shu.edu/ghg/category/complete-issues/summer-2013/ [No new relevant content]

Global Public Health

Volume 10, Issue 1, 2015 http://www.tandfonline.com/toc/rgph20/10/1#.VI0Y33tW_4U [Reviewed earlier]

Globalization and Health

[Accessed 24 January 2015] http://www.globalizationandhealth.com/ [No new relevant content]

Health Affairs

January 2015; Volume 34, Issue 1 http://content.healthaffairs.org/content/current

Variety Issue [Reviewed earlier]

Health and Human Rights

Volume 16, Issue 2 December 2014 http://www.hhrjournal.org/volume-16-issue-2/ Papers in Press: Special Issue on Health Rights Litigation
[Reviewed earlier]

Health Economics, Policy and Law

Volume 10 - Special Issue 01 January 2015 http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue SPECIAL ISSUE: Global Financial Crisis, Health and Health Care [Reviewed earlier]

Health Policy and Planning

Volume 30 Issue 1 February 2015 http://heapol.oxfordjournals.org/content/current [Reviewed earlier]

Health Research Policy and Systems

http://www.health-policy-systems.com/content [Accessed 24 January 2015] Commentary

Global trends in health research and development expenditures - the challenge of making reliable estimates for international comparison

Alison J Young, Robert F Terry, John-Arne Røttingen and Roderik F Viergever Health Research Policy and Systems 2015, 13:7 doi:10.1186/1478-4505-13-7 Published: 24 January 2015

Abstract (provisional)

Better estimates of changes in the level and structure of national, regional, and global expenditures on health research and development (R&D) are needed as an important source of information for advancing countries' health research policies. However, such estimates are difficult to compile and comparison between countries needs careful calibration. We outline the steps that need to be taken to make reliable estimates of trends in countries' expenditures on health R&D, describe that an ideal approach would involve the use of international sets of deflators and exchange rates that are specific to health R&D activities, and explain which methods should be used given the current absence of such health R&D-specific deflators and exchange rates. Finally, we describe what should be the way forward in improving our ability to make reliable estimates of trends in countries' health R&D expenditures.

Human Vaccines & Immunotherapeutics (formerly Human Vaccines) Volume 10, Issue 9, 2014

http://www.landesbioscience.com/journals/vaccines/toc/volume/10/issue/9/ Special Issue on Vaccine Acceptance; Key focus on HPV vaccine uptake and maternal immunization [Reviewed earlier]

Infectious Agents and Cancer

[Accessed 24 January 2015]
http://www.infectagentscancer.com/content
[No new relevant content]

Infectious Diseases of Poverty

[Accessed 24 January 2015] http://www.idpjournal.com/content [No new relevant content]

International Health

Volume 7 Issue 1 January 2015 http://inthealth.oxfordjournals.org/content/7/1.toc [Reviewed earlier]

International Journal of Epidemiology

Volume 43 Issue 6 December 2014 http://ije.oxfordjournals.org/content/current [Reviewed earlier]

International Journal of Infectious Diseases

January 2015 Volume 30, p1 http://www.ijidonline.com/current [Reviewed earlier]

JAMA

January 20, 2015, Vol 313, No. 3 http://jama.jamanetwork.com/issue.aspx Viewpoint | January 20, 2015

Legislative Prescriptions for Controlling Nonmedical Vaccine Exemptions

Y. Tony Yang, ScD, LLM, MPH1; Ross D. Silverman, JD, MPH2 [+] Author Affiliations

JAMA. 2015;313(3):247-248. doi:10.1001/jama.2014.16286.

This Viewpoint discusses types of exemptions from required vaccines and recent legislation to control numbers of nonmedical vaccine exemptions.

During 2014, numerous communities across the United States have been affected by significant, largely avoidable outbreaks of vaccine-preventable illnesses (VPIs), such as measles,

mumps, and pertussis. 1 These outbreaks have been associated with increasing numbers of families actively declining immunizations against VPIs for their children. 2...

JAMA Pediatrics

January 2015, Vol 169, No. 1 http://archpedi.jamanetwork.com/issue.aspx [Reviewed earlier]

Journal of Community Health

Volume 40, Issue 1, February 2015 http://link.springer.com/journal/10900/40/1/page/1 Original Paper

<u>An Outbreak of Pertussis in Rural Texas: An Example of the Resurgence of the</u> Disease in the United States

Anthony O. Eshofonie, Huai Lin, Randy P. Valcin, LaTasha R. Martin, Paul E. Grunenwald Abstract

During 2012, an increase in the number of pertussis cases or outbreaks was reported among most states within the United States. The majority of these cases included previously vaccinated children between the ages of 7–10 years. This underscores the growing concern regarding current immunization practices and vaccine efficacy, especially as it pertains to pertussis prevention within this age group. In the fall of 2012, an outbreak of pertussis occurred within a school district in a rural Texas county that was reflective of this national pattern. Our objective is to describe this outbreak, highlight the similarities with the national trend, and identify strategies for better disease prevention. The cases in this outbreak were interviewed and laboratory testing done. Information regarding exposure and immunization history among cases was obtained. Immunization audits of the affected institutions were also conducted. We performed a descriptive analysis of the collected data using EPI-INFO software v.3.5.3. A total of 34 cases were identified in this outbreak, of which 23 were PCR confirmed and 11 were epidemiologically linked. Ages ranged from 5 months to 12 years, and 62 % were among children aged 7–10 years. All cases were up-to-date on their pertussis vaccinations. Immunization coverage rate was over 90 % within each of the affected institutions. The characteristics of this outbreak bear striking similarities to the current national trend in terms of age groups and immunization status of the affected cases. Increased focus on this vulnerable target group, including heightened scrutiny of vaccine efficacy and delivery, is indicated.

Journal of Epidemiology & Community Health

January 2015, Volume 69, Issue 1 http://jech.bmj.com/content/current [Reviewed earlier]

Journal of Global Ethics

<u>Volume 10</u>, Issue 3, 2014 <u>http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0I#.VAJEj2N4WF8</u> *Tenth Anniversary Forum: The Future of Global Ethics* [Reviewed earlier]

Journal of Global Infectious Diseases (JGID)

October-December 2014 Volume 6 | Issue 4 Page Nos. 139-198 http://www.jgid.org/currentissue.asp?sabs=n [Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)

Volume 25, Number 4, November 2014

http://muse.jhu.edu/journals/journal of health care for the poor and underserved/toc/hpu.2 5.4.html

[Reviewed earlier]

Journal of Health Organization and Management

<u>Issue 6 – December 2014</u> <u>http://link.springer.com/journal/10903/16/6/page/1</u> <u>Special Focus: Mental Health and Wellness</u> [Reviewed earlier]

Journal of Immigrant and Minority Health

Volume 17, Issue 1, February 2015

http://link.springer.com/journal/10903/17/1/page/1

<u>Frequency of Infectious Diseases in Immigrants in a Western European Country: A Population-Based Study</u>

Rosa Maria Limina, Guglielmino Baitelli, Claudio Marcantoni, Loredana Covolo, Andrea Festa, Fabrizio Speziani, Francesco Vassallo, Carmelo Scarcella, Francesco Donato

The aim of this population-based study was to assess the incidence rates of infectious diseases in native- (Italian) and foreign-born (immigrants) populations in a North Italy area, in 2006–2010. Crude, age-specific incidence rates (IRs) and age-standardised rate ratios (SRRs) between foreign- and native-born subjects and their 95 % confidence intervals (95 % CI) were estimated. A total of 32,554 cases of infectious diseases were found (9.9 % in foreign-born subjects). The highest SRRs between foreign- and nativeborn subjects were found for tuberculosis (SRR = 27.1; 95 % CI 21.3–34.3), malaria (SRR = 21.1; 14.6–30.4), scabies (SRR = 8.5; 7.6–9.4), $\frac{\text{AIDS}}{\text{AIDS}}$ (SRR = 2.5; 1.8–3.4) and viral hepatitis B (SRR = 3.3; 2.1–5.2). The highest IR was found for $\frac{\text{AIDS}}{\text{AIDS}}$ in people from the Americas (IR = 4.57; 95 % CI 2.2–8.4), for malaria and tuberculosis in people from Africa (IR = 13.89; 11.6–16.5 and IR = 11.87; 9.8–14.3 respectively). Therefore immigrants are at a higher risk of acquiring some common infectious diseases compared to the native population in Western European countries.

Among Bacille Calmette-Guerin (BCG) Vaccinated Persons

<u>Joan M. Mangan, Sebastian Galindo-Gonzalez, Tracy A. Irani</u> *Abstract*

Misperceptions surrounding the <u>Bacille Calmette-Guerin (BCG)</u> vaccine can lead some vaccinated individuals to resist being tested and treated for tuberculosis (TB). Educational

messages to best explain the risk of TB to BCG-vaccinated, Hispanic persons were systematically developed and tested. First, TB program staff provided messages they considered effective. These were analyzed and validated by TB experts, and then presented in group interviews initially to foreign-born Hispanic persons with a TB diagnosis, and then persons without a prior TB diagnosis. Based on interviewees' feedback, preferred statements were used to develop one long and three short comprehensive messages. One-on-one interviews were conducted with Hispanic persons to assess the saliency of the comprehensive educational messages. Participants preferred messages that were gain or positively-framed and explained that BCG does not confer lifelong protection against TB. Participants confirmed the messages would likely have a positive impact on patient decisions to undergo TB testing and treatment.

<u>Understanding HPV Vaccination Among Latino Adolescent Girls in Three U.S. Regions</u>

Beth A. Glenn, Jennifer Tsui, Gloria D. Coronado, Maria E. Fernandez, Lara S. Savas, Victoria M. Taylor, Roshan Bastani

Abstract

A multi-site study was conducted to assess HPV vaccine initiation and correlates of initiation among Latina adolescents. The study was a collaboration of the CDC/NCI-funded <u>Cancer Prevention</u> and Control Research Network. Data were collected in 2009 from caregivers of Latina adolescents recruited from Los Angeles Country (n = 274), Washington State (Yakima Valley region; n = 90), and Texas (Houston, n = 38; Lower Rio Grande Valley, n = 42). A set of 24 survey items assessed use of the HPV vaccine and awareness, attitudes and barriers to vaccination. Moderate levels of vaccine awareness among caregivers and low uptake of the vaccine (26–37 %) among girls were observed. Attitudinal barriers such as concerns about negative effects of the vaccine on daughter's sexual behavior, fertility, and future health were infrequently endorsed. Efforts to understand regional similarities and differences may help inform interventions

Journal of Immigrant & Refugee Studies

Volume 12, Issue 4, 2014

http://www.tandfonline.com/toc/wimm20/current#.VFWeF8I4WF9
Special Issue: New Forms of Intolerance in European Political Life
[Reviewed earlier]

Journal of Infectious Diseases

Volume 211 Issue 3 February 1, 2015 http://jid.oxfordjournals.org/content/current [Reviewed earlier]

The Journal of Law, Medicine & Ethics

Winter 2014 Volume 42, Issue 4 Pages 408–602 http://onlinelibrary.wiley.com/doi/10.1111/jlme.2014.42.issue-4/issuetoc Special Issue: SYMPOSIUM: The Buying and Selling of Health Care [Reviewed earlier]

Journal of Medical Ethics

January 2015, Volume 41, Issue 1 http://jme.bmj.com/content/current JME40: Good medical ethics [Reviewed earlier]

Journal of Medical Internet Research

Vol 17, No 1 (2015): January http://www.jmir.org/2015/1 [Reviewed earlier]

Journal of Medical Microbiology

January 2015; 64 (Pt 1)
http://jmm.sgmjournals.org/content/current
[No relevant content]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 3 Issue 4 December 2014 http://jpids.oxfordjournals.org/content/current [Reviewed earlier]

Journal of Pediatrics

February 2015 Volume 166, Issue 2, p215-506

http://www.jpeds.com/current

<u>Frequent Vaccination Missed Opportunities at Primary Care Encounters Contribute</u> to Underimmunization

<u>Linda Y. Fu</u>, MD, MS, <u>Kathleen Zook</u>, RN, MPH, <u>Janet Gingold</u>, MD, MPH, <u>Catherine W. Gillespie</u>, PH, PhD, <u>Christine Briccetti</u>, MD, MPH, <u>Denice Cora-Bramble</u>, MD, MBA, <u>Jill G. Joseph</u>, MD, PhD, Rachel Y. Moon, MD

Received: June 17, 2014; Received in revised form: September 10, 2014; Accepted: October

24, 2014; Published Online: November 21, 2014 DOI: http://dx.doi.org/10.1016/j.jpeds.2014.10.066

Abstract
Objective

To examine missed opportunities to administer an eligible vaccination (MOs) and their contribution to underimmunization in contemporary pediatric practices. Study design

This study was a retrospective analysis from 42 diverse pediatric practices located throughout the US. Medical records of 50 randomly selected children 3-18 months of age per practice were reviewed in Spring 2013. Immunization status for age and MOs were assessed as of each encounter and as of March 1, 2013.

Results

Of 2076 eligible patients, 72.7% (95% CI 67.6-77.9) were up-to-date with receipt of standard vaccines. Most children (82.4%; 95% CI 78.3-85.9) had at least 1 MO, and 37.8% (95% CI 30.0-46.2) had at least one MO to administer an overdue vaccination. After adjustment, risk of underimmunization was 3.5 times greater for patients who had ever experienced an MO for an overdue vaccination compared with those who had not (adjusted relative risk = 3.5; 95% CI 2.8-4.3). If all age-appropriate vaccinations had been administered at the last recorded encounter, 45.5% (95% CI 36.8-54.5) of the underimmunized patients would have been up to date at the time of assessment.

Conclusion

MOs were common and contributed substantially to underimmunization in this contemporary sample of diverse primary care practice settings.

Journal of Public Health Policy

Volume 36, Issue 1 (February 2015) http://www.palgrave-journals.com/jphp/journal/v36/n1/index.html [Reviewed earlier]

Journal of the Royal Society - Interface

06 February 2015; volume 12, issue 103 http://rsif.royalsocietypublishing.org/content/current [Reviewed earlier]

Journal of Virology

February 2015, volume 89, issue 3 http://jvi.asm.org/content/current [New issue; No relevant content]

The Lancet

Jan 24, 2015 Volume 385 Number 9965 p303-392 http://www.thelancet.com/journals/lancet/issue/current Editorial

What are affordable vaccines?

The Lancet

Summary

Affordability of vaccines prevents many people from accessing the benefits of immunisation, says a new <u>report</u> from Médecins Sans Frontières (MSF) released on Jan 20. Although the world's poorest countries are supported by GAVI, the report describes how a large group of middle-income countries, aid agencies, and GAVI-graduating countries are struggling to afford key vaccinations. For example, in 2014, 78% of low-income countries, but only 56% of middle-income countries, have introduced or intend to introduce pneumococcal conjugate vaccines. *Review*

<u>Indicators linking health and sustainability in the post-2015 development agenda</u>

Dr <u>Carlos Dora</u>, PhD, Prof <u>Andy Haines</u>, F Med Sci, <u>John Balbus</u>, MD, <u>Elaine Fletcher</u>, BA, <u>Heather Adair-Rohani</u>, MPH, <u>Graham Alabaster</u>, PhD, <u>Rifat Hossain</u>, MA, <u>Mercedes de Onis</u>, MD, <u>Francesco Branca</u>, PhD, <u>Maria Neira</u>, MD *Summary*

The UN-led discussion about the post-2015 sustainable development agenda provides an opportunity to develop indicators and targets that show the importance of health as a precondition for and an outcome of policies to promote sustainable development. Health as a precondition for development has received considerable attention in terms of achievement of health-related Millennium Development Goals (MDGs), addressing growing challenges of non-communicable diseases, and ensuring universal health coverage. Much less attention has been devoted to health as an outcome of sustainable development and to indicators that show both changes in exposure to health-related risks and progress towards environmental sustainability.

We present a rationale and methods for the selection of health-related indicators to measure progress of post-2015 development goals in non-health sectors. The proposed indicators show the ancillary benefits to health and health equity (co-benefits) of sustainable development policies, particularly those to reduce greenhouse gas emissions and increase resilience to environmental change. We use illustrative examples from four thematic areas: cities, food and agriculture, energy, and water and sanitation. Embedding of a range of health-related indicators in the post-2015 goals can help to raise awareness of the probable health gains from sustainable development policies, thus making them more attractive to decision makers and more likely to be implemented than before.

The Lancet Global Health

Jan 2015 Volume 3 Number 1 e1-e61 http://www.thelancet.com/journals/langlo/issue/current [Reviewed earlier]

The Lancet Infectious Diseases

Jan 2015 Volume 15 Number 1 p1-130 http://www.thelancet.com/journals/laninf/issue/current [Reviewed earlier]

Maternal and Child Health Journal

Volume 19, Issue 1, January 2015 http://link.springer.com/journal/10995/19/1/page/1 [Reviewed earlier]

Medical Decision Making (MDM)

January 2015; 35 (1) http://mdm.sagepub.com/content/current [Reviewed earlier]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy

December 2014 Volume 92, Issue 4 Pages 633–840 http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue [Reviewed earlier]

Nature

Volume 517 Number 7535 pp411-522 22 January 2015 http://www.nature.com/nature/current_issue.html Nature / Article

A new antibiotic kills pathogens without detectable resistance

Losee L. Ling, Tanja Schneider, Aaron J. Peoples, Amy L. Spoering, Ina Engels, Brian P. Conlon, Anna Mueller, Till F. Schäberle, Dallas E. Hughes, Slava Epstein, Michael Jones, Linos Lazarides, Victoria A. Steadman, Douglas R. Cohen, Cintia R. Felix, K. Ashley Fetterman, William P. Millett, Anthony G. Nitti, Ashley M. Zullo, Chao Chen & Kim Lewis
Affiliations

Nature 517, 455-459 (22 January 2015)

doi:10.1038/nature14098

Abstract

Antibiotic resistance is spreading faster than the introduction of new compounds into clinical practice, causing a public health crisis. Most antibiotics were produced by screening soil microorganisms, but this limited resource of cultivable bacteria was overmined by the 1960s. Synthetic approaches to produce antibiotics have been unable to replace this platform. Uncultured bacteria make up approximately 99% of all species in external environments, and are an untapped source of new antibiotics. We developed several methods to grow uncultured organisms by cultivation in situ or by using specific growth factors. Here we report a new antibiotic that we term teixobactin, discovered in a screen of uncultured bacteria. Teixobactin inhibits cell wall synthesis by binding to a highly conserved motif of lipid II (precursor of peptidoglycan) and lipid III (precursor of cell wall teichoic acid). We did not obtain any mutants of Staphylococcus aureus or Mycobacterium tuberculosis resistant to teixobactin. The properties of this compound suggest a path towards developing antibiotics that are likely to avoid development of resistance.

Nature Medicine

January 2015, Volume 21 No 1 pp1-98 http://www.nature.com/nm/journal/v21/n1/index.html [New issue; No relevant content]

Nature Reviews Immunology

January 2015 Vol 15 No 1 http://www.nature.com/nri/journal/v15/n1/index.html [New issue; No relevant content]

New England Journal of Medicine

January 22, 2015 Vol. 372 No. 4 http://www.nejm.org/toc/nejm/medical-journal

Perspective

Foreseeable Risks? Informed Consent for Studies within the Standard of Care

Chana A. Sacks, M.D., and Celestine E. Warren, A.B.

N Engl J Med 2015; 372:306-307 January 22, 2015 DOI: 10.1056/NEJMp1415113

The Office for Human Research Protections has drafted guidelines on disclosing reasonably foreseeable risks in trials involving interventions that are within the standard of care. But what risks, aside from those already seen in clinical care, are reasonably foreseeable?

Pediatrics

January 2015, VOLUME 135 / ISSUE 1

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

[Reviewed earlier]

Published online January 19, 2015

Article

Geographic Clusters in Underimmunization and Vaccine Refusal

<u>Tracy A. Lieu</u>, MD, MPHa, <u>G. Thomas Ray</u>, MBAa, <u>Nicola P. Klein</u>, MD, PhDa,b, <u>Cindy Chung</u>, MDc, and <u>Martin Kulldorff</u>, PhDd

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dDepartment of Population Medicine, Harvard Pilgrim Health Care and Harvard Medical School, Boston, Massachusetts

(doi: 10.1542/peds.2014-2715)

Abstract

BACKGROUND AND OBJECTIVE: Parental refusal and delay of childhood vaccines has increased in recent years and is believed to cluster in some communities. Such clusters could pose public health risks and barriers to achieving immunization quality benchmarks. Our aims were to (1) describe geographic clusters of underimmunization and vaccine refusal, (2) compare clusters of underimmunization with different vaccines, and (3) evaluate whether vaccine refusal clusters may pose barriers to achieving high immunization rates.

METHODS: We analyzed electronic health records among children born between 2000 and 2011 with membership in Kaiser Permanente Northern California. The study population included 154 424 children in 13 counties with continuous membership from birth to 36 months of age. We used spatial scan statistics to identify clusters of underimmunization (having missed 1 or more vaccines by 36 months of age) and vaccine refusal (based on International Classification of Diseases, Ninth Revision, Clinical Modification codes).

RESULTS: We identified 5 statistically significant clusters of underimmunization among children who turned 36 months old during 2010–2012. The underimmunization rate within clusters ranged from 18% to 23%, and the rate outside them was 11%. Children in the most statistically significant cluster had 1.58 (P < .001) times the rate of underimmunization as others. Underimmunization with measles, mumps, rubella vaccine and varicella vaccines clustered in similar geographic areas. Vaccine refusal also clustered, with rates of 5.5% to 13.5% within clusters, compared with 2.6% outside them.

CONCLUSIONS: Underimmunization and vaccine refusal cluster geographically. Spatial scan statistics may be a useful tool to identify locations with challenges to achieving high immunization rates, which deserve focused intervention.

Pharmaceutics

<u>Volume 6</u>, Issue 4 (December 2014), Pages 543http://www.mdpi.com/1999-4923/6/4 [Reviewed earlier]

Pharmacoeconomics

Volume 33, Issue 1, January 2015 http://link.springer.com/journal/40273/33/1/page/1 [Reviewed earlier]

PLoS Currents: Outbreaks

http://currents.plos.org/outbreaks/ (Accessed 24 January 2015)

The Western Africa Ebola Virus Disease Epidemic Exhibits Both Global Exponential and Local Polynomial Growth Rates

January 21, 2015 · Research

Abstract

Background:

While many infectious disease epidemics are initially characterized by an exponential growth in time, we show that district-level Ebola virus disease (EVD) outbreaks in West Africa follow slower polynomial-based growth kinetics over several generations of the disease.

Methods:

We analyzed epidemic growth patterns at three different spatial scales (regional, national, and subnational) of the Ebola virus disease epidemic in Guinea, Sierra Leone and Liberia by compiling publicly available weekly time series of reported EVD case numbers from the patient database available from the World Health Organization website for the period 05-Jan to 17-Dec 2014.

Results:

We found significant differences in the growth patterns of EVD cases at the scale of the country, district, and other subnational administrative divisions. The national cumulative curves of EVD cases in Guinea, Sierra Leone, and Liberia show periods of approximate exponential growth. In contrast, local epidemics are asynchronous and exhibit slow growth patterns during 3 or more EVD generations, which can be better approximated by a polynomial than an exponential function.

Conclusions:

The slower than expected growth pattern of local EVD outbreaks could result from a variety of factors, including behavior changes, success of control interventions, or intrinsic features of the disease such as a high level of clustering. Quantifying the contribution of each of these factors could help refine estimates of final epidemic size and the relative impact of different mitigation efforts in current and future EVD outbreaks.

PLoS Medicine

(Accessed 24 January 2015)
http://www.plosmedicine.org/
[No new relevant content]

PLoS Neglected Tropical Diseases

http://www.plosntds.org/ (Accessed 24 January 2015) [No new relevant content]

PLoS One

[Accessed 24 January 2015] http://www.plosone.org/
[No new relevant content]

PLoS Pathogens

http://journals.plos.org/plospathogens/ (Accessed 24 January 2015) [No new relevant content]

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

(Accessed 24 January 2015)
http://www.pnas.org/content/early/
[No new relevant content]

Pneumonia

Vol 5 (2014)
https://pneumonia.org.au/index.php/pneumonia/issue/current
<a href="mailto:Special Issue "Pneumonia Diagnosis"
[Reviewed earlier]

Public Health Ethics

Volume 7 Issue 3 November 2014
http://phe.oxfordjournals.org/content/current
http://phe.oxfordjournals.org/content/current
http://phe.oxfordjournals.org/content/current
http://phe.oxfordjournals.org/content/current
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<a href="Special Symposium on Dual Loyalities: Health Providers Working for the Symposium on Dual Loyalities: Health Providers Working for the Symposium on Dual Loyalities: Health Providers Working for the Symposium on Dual Loyalities: Health Providers Working for the Symposium on Dual Loyalities: Health Providers Working for the Symposium on Dual Loyalities: Health Providers Working for the Symposium on Dual Loyalities: Health Providers Working for the Symposium on Dual Loyalities: Health Providers Working for the Symposium on Dual Loyalities: Health Providers Working for the Symposium on Dual Loyalities: Health Providers Working for the Symposium on Dual Loyalities:

Qualitative Health Research

February 2015; 25 (2)

http://qhr.sagepub.com/content/current Special Issue: Responses to Treatment

[Reviewed earlier]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)

September 2014 Vol. 36, No. 3

http://www.paho.org/journal/index.php?option=com_content&view=article&id=151&Itemid=26 6&lang=en

[Reviewed earlier]

Risk Analysis

December 2014 Volume 34, Issue 12 Pages 2063–2188 http://onlinelibrary.wiley.com/doi/10.1111/risa.2014.34.issue-12/issuetoc [Reviewed earlier]

Science

23 January 2015 vol 347, issue 6220, pages 349-452 http://www.sciencemag.org/current.dtl
[New issue; No relevant content]

Social Science & Medicine

Volume 126, <u>In Progress</u> (February 2015) <u>http://www.sciencedirect.com/science/journal/02779536/126</u> [Reviewed earlier]

Tropical Medicine and Health

Vol. 42(2014) No. 4 https://www.jstage.jst.go.jp/browse/tmh/42/4/_contents [Reviewed earlier]

Tropical Medicine & International Health

January 2015 Volume 20, Issue 1 Pages 1–119 http://onlinelibrary.wiley.com/doi/10.1111/tmi.2014.20.issue-1/issuetoc [Reviewed earlier]

Vaccine

Volume 33, Issue 6, Pages 749-832 (4 February 2015)
http://www.sciencedirect.com/science/journal/0264410X/33/6
Use of placebos in Phase 1 preventive HIV vaccine clinical trials
Pages 749-752

Yunda Huang, Shelly T. Karuna, Holly Janes, Nicole Frahm, Martha Nason, Paul T. Edlefsen, James G. Kublin, Lawrence Corey, M. Juliana McElrath, Peter B. Gilbert Abstract

Phase 1 preventive HIV vaccine trials are often designed as randomized, double-blind studies with the inclusion of placebo recipients. Careful consideration is needed to determine when the inclusion of placebo recipients is highly advantageous and when it is optional for achieving the study objectives of assessing vaccine safety, tolerability and immunogenicity. The inclusion of placebo recipients is generally important to form a reference group that ensures fair evaluation and interpretation of subjective study endpoints, or endpoints whose levels may change due to exposures besides vaccination. In some settings, however, placebo recipients are less important because other data sources and tools are available to achieve the study objectives.

Highlights

- :: Study objectives and the research context drive the design of Phase 1 preventive HIV vaccine trials.
- :: The inclusion of placebo recipients enables blinding and fair assessment of study endpoints.
- :: The inclusion of placebo recipients provides valuable in-study reference data.
- :: Placebo recipients are less important for vaccines with extensive safety data.
- :: Placebo recipients are less important when baseline data are proper as reference information.

How and why researchers use the number needed to vaccinate to inform decision making—A systematic review

Review Article

Pages 753-758

Ahmed Hashim, Vica Dang, Shelly Bolotin, Natasha S. Crowcroft

Abstract

Background

The number needed to vaccinate (NNV) is a measure that has been widely used in the scientific literature to draw conclusions about the usefulness and cost-effectiveness of various immunization programmes. The main objective of this review is to examine how and why the NNV has been used and reported in the published literature.

Methods

Electronic databases were searched and records were screened against the eligibility criteria by two independent authors. We included papers that reported and interpreted NNV.

Results

We identified 27 studies, the designs including observational studies, economic analyses, systematic reviews, and commentaries. The NNV has been used in the literature to describe three main themes: potential benefits of vaccination programmes, cost-effectiveness, and economic analyses, and modelling studies to compare different vaccination strategies. Conclusions

NNV has been used in a wide variety of ways in the literature, yet there are no defined thresholds for what is a favourable NNV. Furthermore, the generalizability of the NNV is usually limited. Further work is required to determine the most appropriate use of this measure.

Interventions to increase influenza vaccination rates in children with high-risk conditions—A systematic review

Review Article Pages 759-770 N.W. Aigbogun, J.I. Hawker, A. Stewart *Highlights*

- :: Influenza is a common cause of morbidity and mortality, and children with high-risk conditions (HRCs) are more likely to be hospitalized with influenza than previously healthy children.
- :: Despite recommendations by the World Health Organization (WHO), annual influenza vaccination rates in children with HRCs have remained low, especially when compared to rates in other risk groups such as the elderly and pregnant women.
- :: This systematic review identifies, describes and compares studies of interventions to improve influenza vaccination rates in children with HRCs we found good evidence that reminder letters are effective, but weak evidence of effectiveness of other strategies or combination of strategies.
- :: There is a need for further research of these interventions, possibly outside the United States, as almost all of the studies included in this review originated from there.

Asking about human papillomavirus vaccination and the usefulness of registry validation: A study of young women recruited using Facebook

Original Research Article

Pages 826-831

Bharathy Gunasekaran, Yasmin Jayasinghe, Julia M.L. Brotherton, Yeshe Fenner, Elya E. Moore, John D. Wark, Ashley Fletcher, Sepehr N. Tabrizi, Suzanne M. Garland Abstract

Background

Australia was the first country to implement a government-funded National Human Papillomavirus (HPV) Vaccination Programme. We assessed HPV vaccine uptake comparing self-reported and Register validated estimates, and the knowledge and attitudes of young women with regards to HPV vaccination post-implementation of the programme.

Females, aged 16–25 years living in Victoria, Australia, were recruited using targeted advertising on Facebook from May to September 2010, to complete a web-based questionnaire. Results

Geographic distribution, Indigenous and socio-economic status of the 278 participants were representative of the target population. Overall, 210/278 (76%) had heard of HPV vaccines, with 162/278 (58%) reporting receipt of at least one dose of vaccine, and 54 (19%) unsure. Verification of HPV vaccination status of 142 consenting participants (51%) showed 71% had received at least one dose. Main reasons for vaccination were for protection against HPV infection and cervical cancer (96%) and because it was free (87%), whereas unvaccinated women were uncertain of their eligibility (50%), concerned about adverse reactions (32%), or perceived that vaccination was not needed if they were monogamous (32%). Conclusion

The potential utility of a vaccination register in the context of a national programme is apparent from the large proportion of young women who were unsure of their vaccine status. HPV vaccine knowledge among participants was relatively high suggesting the national programme has successfully communicated to the majority of eligible women, the purpose and limitations of the vaccine. Vigilance is needed to ensure that young women follow through with Pap testing in vaccine eligible cohorts. The ongoing vaccination programme for pre-adolescent girls and boys should communicate to parents that those with one sexual partner can still acquire HPV and that the safety of the vaccine is now well demonstrated.

Vaccine

Volume 33, Issue 5, Pages 585-748 (29 January 2015)

http://www.sciencedirect.com/science/journal/0264410X/33/5

Age at HPV vaccine initiation and completion among US adolescent girls: Trend from 2008 to 2012

Pages 585-587

Mahbubur Rahman, Christine J. McGrath, Jacqueline M. Hirth, Abbey B. Berenson *Highlights*

- :: We analyzed National Immunization Survey of Teens 2008–2012 data to examine what proportion of adolescent girls receives HPV vaccine at <13 years of age.
- :: The weighted proportion of girls who initiated the vaccine at <13 years of age increased from 14.1% in 2008 to 55.9% in 2012.
- :: Additional efforts are needed to increase HPV vaccine uptake among adolescent girls as only half of them receive this vaccine at ACIP recommended age.

<u>Supporting countries in establishing and strengthening NITAGs: Lessons learned from 5 years of the SIVAC initiative</u>

Review Article

Pages 588-595

Alex Adjagba, Kamel Senouci, Robin Biellik, Nyambat Batmunkh, Pape Coumba Faye, Antoine Durupt, Bradford D. Gessner, Alfred da Silva

Abstract

To empower governments to formulate rational policies without pressure from any group, and to increase the use of evidence-based decision-making to adapt global recommendations on immunization to their local context, the WHO has recommended on multiple occasions that countries should establish National Immunization Technical Advisory Groups (NITAGs). The World Health Assembly (WHA) reinforced those recommendations in 2012 when Member States endorsed the Decade of Vaccines Global Vaccine Action Plan (GVAP). NITAGs are multidisciplinary groups of national experts responsible for providing independent, evidenceinformed advice to health authorities on all policy-related issues for all vaccines across all populations. In 2012, according to the WHO-UNICEF Joint Reporting Form, among 57 countries eligible for immunization program financial support from the GAVI Alliance, only 9 reported having a functional NITAG. Since 2008, the Supporting Independent Immunization and Vaccine Advisory Committees (SIVAC) Initiative (at the Agence de Médecine Préventive or AMP) in close collaboration with the WHO and other partners has been working to accelerate and systematize the establishment of NITAGs in low- and middle-income countries. In addition to providing direct support to countries to establish advisory groups, the initiative also supports existing NITAGs to strengthen their capacity in the use of evidence-based processes for decision-making aligned with international standards. After 5 years of implementation and based on lessons learned, we recommend that future efforts should target both expanding new NITAGs and strengthening existing NITAGs in individual countries, along three strategic lines: (i) reinforce NITAG institutional integration to promote sustainability and credibility, (ii) build technical capacity within NITAG secretariats and evaluate NITAG performance, and (iii) increase networking and regional collaborations. These should be done through the development and dissemination of tools and guidelines, and information through a variety of adapted mechanisms.

The role of parental attitudes and provider discussions in uptake of adolescent vaccines

Original Research Article

Pages 642-647

Vaughn I. Rickert, Susan J. Rehm, Matthew C. Aalsma, Gregory D. Zimet

Abstract

The purpose of this study was to examine the relationship between parental vaccine attitudes, the number of specific vaccines discussed with a provider, and immunization outcomes including discussing immunization with their teen, knowledge of adolescent vaccine schedule, and their son or daughter being up-to-date on recommended vaccines using a nationally weight sample. Parents completed an internet-based survey between December 2012 and January 2013 and we computed a vaccine attitude scale (higher scores indicating stronger and more positive attitudes toward vaccination of teen) for each parent and categorized them into one of three groups: low (n = 76), medium (n = 207) or high (n = 215). We also constructed a vaccine discussion scale representing the number of vaccines discussed with their adolescent's physician. Parents who were identified as having high vaccine attitudes were significantly more likely to report their physician talked with them about a particular vaccine. Using logistic regression and controlling for respondent's gender and age, income, and teen's gender, we found medium as compared to low-attitude parents had a 6.21 (95%CI = 3.08, 12.51) greater odds of reporting that their teen had all recommended vaccines. Similarly, high as compared to low-attitude parents reported a 23.02 (95% CI = 11.27, 46.99) greater odds of having a teen who was up-to-date on recommended vaccines. We detected that for each additional vaccine discussed, there was a 1.24 (95%CI = 1.11, 1.39) increase in odds of the teen having all recommended vaccines. Parental immunization attitudes and provider discussion about vaccines are key ingredients to improving immunization rates among adolescents. While some parents may be reluctant to immunize their son or daughter with a recommended vaccine, vaccinespecific discussions between physicians and parents represent an important first step to continued discussions with providers regarding vaccination. Moreover, vaccine discussions must occur within the context of ongoing conversations about health and disease prevention.

Using a school-based approach to deliver immunization—Global update

Original Research Article

Pages 719-725

Jos Vandelaer, Marianne Olaniran

Highlights

- :: In 2012, school-based immunization was used in 95 out of 174 countries.
- :: Tetanus and diphtheria toxoids are the most frequently administered antigens.
- :: All school grades are targeted, but most countries give doses in first and sixth grade.
- :: The approach can be a platform to reach school-aged children with immunization and other interventions but special approaches are needed to reach out-of-school and absent children.

Expected cost effectiveness of high-dose trivalent influenza vaccine in US seniors
Pages 734-741

Ayman Chit, Julie Roiz, Benjamin Briquet, David P. Greenberg Abstract

Objectives

Seniors are particularly vulnerable to complications resulting from influenza infection. Numerous influenza vaccines are available to immunize US seniors, and practitioners must decide which product to use. Options include trivalent and quadrivalent standard-dose inactivated influenza vaccines (IIV3 and IIV4 respectively), as well as a high-dose IIV3 (HD). Our research examines the public health impact, budget impact, and cost-utility of HD versus IIV3 and IIV4 for immunization of US seniors 65 years of age and older.

Methods

Our model was based on US influenza-related health outcome data. Health care costs and vaccine prices were obtained from the Centers for Medicare and Medicaid Services. Efficacies of

IIV3 and IIV4 were estimated from various meta-analyses of IIV3 efficacy. The results of a head-to-head randomized controlled trial of HD vs. IIV3 were used to estimate relative efficacy of HD. Conservatively, herd protection was not considered.

Results

Compared to IIV3, HD would avert 195,958 cases of influenza, 22,567 influenza-related hospitalizations, and 5423 influenza-related deaths among US seniors. HD generates 29,023 more Quality Adjusted Life Years (QALYs) and a net societal budget impact of \$154 million. The Incremental Cost Effectiveness Ratio (ICER) for this comparison is \$5299/QALY. 71% of the probabilistic sensitivity analysis (PSA) simulations were <\$100,000/QALY.

Compared to IIV4, HD would avert 169,257 cases of influenza, 21,222 hospitalizations and 5212 deaths. HD generates 27,718 more QALYs and a net societal budget impact of -\$17 million and as such dominates IIV4. For this comparison, 81% of PSA simulations were <\$100,000/QALY. Conclusions

HD is expected to achieve significant reductions in influenza-related morbidity and mortality. Further, HD is a cost effective alternative to both IIV3 and IIV4 in seniors. Our conclusions were robust in the face of sensitivity analyses.

Vaccine: Development and Therapy

(Accessed 24 January 2015)
http://www.dovepress.com/vaccine-development-and-therapy-journal
[No new relevant content]

Vaccines — Open Access Journal

(Accessed 24 January 2015)
http://www.mdpi.com/journal/vaccines
[No new relevant content]

Value in Health

January 2015 Volume 18, Issue 1, p1-136 http://www.valueinhealthjournal.com/current [Reviewed earlier]

* * *

<u>From Google Scholar & other sources: Selected Journal Articles, Newsletters, Dissertations, Theses, Commentary</u>

Influenza and Other Respiratory Viruses

January 2015 Volume 9, Issue 1 Pages i–i, 1–57 http://onlinelibrary.wiley.com/doi/10.1111/irv.2014.9.issue-1/issuetoc Short Article

<u>Introducing seasonal influenza vaccine in low-income countries: an adverse events following immunization survey in the Lao People's Democratic Republic</u>

Manilay Phengxay1,*, Sara A. Mirza2, Rita Reyburn1, Anonh Xeuatvongsa3, Christian Winter1, Hannah Lewis1, Sonja J. Olsen2, Reiko Tsuyuoka1, Viengphone Khanthamaly4, Francisco S. Palomeque2, Joseph S. Bresee2, Ann C. Moen2, Andrew L. Corwin4 and for the Lao PDR Field Epidemiology Training Cohort Team†

Article first published online: 17 JAN 2015

DOI: 10.1111/irv.12299

Abstract
Objective

In 2012, Lao PDR introduced seasonal influenza vaccine in pregnant women, persons aged ≥50 years, persons with chronic diseases, and healthcare personnel. We assessed adverse events following immunization (AEFI).

Methods

We used a multistage randomized cluster sample design to interview vaccine recipients. Findings

Between April and May 2012, 355 902 were vaccinated. Of 2089 persons interviewed, 261 (12·5%) reported one or more AEFI. The most commonly reported AEFIs were local reactions. No hospitalizations or deaths were reported; 16% sought medical care. Acceptance and awareness of vaccination were high.

Conclusions

Following the introduction of seasonal influenza vaccine in Lao PDR, self-reported adverse events were mild.

American Journal of Men's Health (AJMH)

January 2015; 9 (1)

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

Published online before print January 15, 2015, doi: 10.1177/1557988314567324

Has Their Son Been Vaccinated? Beliefs About Other Parents Matter for Human Papillomavirus Vaccine

<u>Christine L. Schuler</u>, MD, MPH1, <u>Tamera Coyne-Beasley</u>, MD, MPH2 1Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA 2University of North Carolina, Chapel Hill, NC, USA Abstract

The goal of this study was to determine if parents' beliefs about social norms of human papillomavirus (HPV) vaccination for sons were associated with knowledge of HPV, intention to vaccinate sons, or beliefs about side effects. A cross-sectional, survey-based study of parents with sons was performed in 2010. Fisher's exact tests were used to examine associations between demographics and responses about social norms. Multivariate logistic regression models examined beliefs about social norms of male HPV vaccination and primary outcomes.

Few parents agreed that others were vaccinating sons (n = 31/267, 12%), including 1% responding strongly agree and 11% responding agree. Most parents, 52%, disagreed that others were vaccinating (40% disagree, 11% strongly disagree), and 37% chose prefer not to answer regarding others' vaccination practices. Hispanic parents and those with a high school education or less were significantly more likely to choose prefer not to answer than their respective counterparts regarding vaccination norms. In multivariate models, parents agreeing others were vaccinating sons had greater odds of having high knowledge of HPV (adjusted odds ratio [aOR] high vs low knowledge 3.15, 95% confidence interval [CI] 1.13, 8.77) and increased intention to vaccinate sons (n = 243, aOR = 4.41, 95% CI = 1.51, 12.89).

Beliefs about side effects were not significantly associated with beliefs about social norms. Parents' beliefs about others' vaccination practices are important with regard to knowledge of HPV and intention to vaccinate sons. Studying how various public messages about HPV vaccine may influence normative beliefs could be relevant to improving vaccination coverage.

Journal of Paediatrics and Child Health

January 2015 Volume 51, Issue 1 Pages 1–128

http://onlinelibrary.wiley.com/doi/10.1111/jpc.2015.51.issue-1/issuetoc

Article first published online: 14 JAN 2015

Review Article

Conquering rotavirus: From discovery to global vaccine implementation

Julie E Bines1,2,3,* and Carl D Kirkwood1,2

DOI: 10.1111/jpc.12815

Abstract

Rotavirus, the commonest cause of severe dehydrating gastroenteritis world-wide, was discovered less than 50 years ago. It causes about 450 000 deaths per year in children <5 years of age and hospitalises millions more. Rotavirus vaccines have been shown to have a major impact on hospital admissions due to rotavirus gastroenteritis and all-cause gastroenteritis and reduce mortality in developing countries. In Australia, there has been a 71% decrease in rotavirus hospitalisations in children 0–5 years of age. From the discovery of rotavirus as the major causative agent for severe gastroenteritis, through vaccine development and vaccine post-marketing surveillance activities, Australian scientists and clinicians have played a significant role in the global effort to reduce the burden of rotavirus infection.

Nature Genetics

January 2015, Volume 47 No 1 pp1-97

http://www.nature.com/ng/journal/v47/n1/index.html

Published online 19 January 2015

<u>Evolutionary history and global spread of the Mycobacterium tuberculosis Beijing lineage</u>

Matthias Merker, Camille Blin, Stefano Mona, Nicolas Duforet-Frebourg, Sophie Lecher, Eve Willery, Michael Blum, Sabine Rüsch-Gerdes, Igor Mokrousov, Eman Aleksic, Caroline Allix-Béguec, Annick Antierens, Ewa Augustynowicz-Kopeć, Marie Ballif, Francesca Barletta, Hans Peter Beck, Clifton E Barry III, Maryline Bonnet, Emanuele Borroni, Isolina Campos-Herrero, Daniela Cirillo, Helen Cox, Suzanne Crowe, Valeriu Crudu, Roland Diel et al. Affiliations

doi:10.1038/ng.3195

Abstract

Mycobacterium tuberculosis strains of the Beijing lineage are globally distributed and are associated with the massive spread of multidrug-resistant (MDR) tuberculosis in Eurasia. Here we reconstructed the biogeographical structure and evolutionary history of this lineage by genetic analysis of 4,987 isolates from 99 countries and whole-genome sequencing of 110 representative isolates. We show that this lineage initially originated in the Far East, from where it radiated worldwide in several waves. We detected successive increases in population size for this pathogen over the last 200 years, practically coinciding with the Industrial Revolution, the First World War and HIV epidemics. Two MDR clones of this lineage started to spread

throughout central Asia and Russia concomitantly with the collapse of the public health system in the former Soviet Union. Mutations identified in genes putatively under positive selection and associated with virulence might have favored the expansion of the most successful branches of the lineage.

* * * *

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/ Accessed 24 January 2015 [No new, unique, relevant content]

The Atlantic

http://www.theatlantic.com/magazine/
Accessed 24 January 2015
The Financial Consequences of a Bad Flu Shot
Bourree Lam Jan 21 2015, 7:30 AM ET

While the CDC doesn't have an official estimate for the economic costs of ineffective seasonal vaccines, various studies have suggested that resistant viral strains can weigh on the economy.

BBC

http://www.bbc.co.uk/ Accessed 24 January 2015 [No new, unique, relevant content]

Brookings

http://www.brookings.edu/ Accessed 24 January 2015 [No new, unique, relevant content]

Council on Foreign Relations

http://www.cfr.org/ Accessed 24 January 2015 [No new, unique, relevant content]

The Economist

http://www.economist.com/ Accessed 24 January 2015 [No new, unique, relevant content]

Forbes

http://www.forbes.com/
Accessed 24 January 2015
Gates Foundation CEO: "History Is Going To Judge Us"
1/16/2015

Sue Desmond-Hellmann, the CEO of The Bill & Melinda Gates Foundation, came to San Francisco this week to meet with some of the life science and healthcare executives in town for the annual JP Morgan Healthcare Conference, which draws thousands of people from around the country and the world. Desmond-Hellmann and I got a chance to talk during her visit about what's new and what's in store at the foundation funded by the world's two richest men — $\underline{\text{Bill}}$ Gates and Warren Buffett.

Desmond-Hellmann became the CEO of what is arguably the world's largest private foundation (it has a \$42.3 billion trust endowment) last May, after serving as chancellor of the University of California, San Francisco and working as the head of development at Genentech, where she led the development of cancer drugs Herceptin and Avastin.

Now, she's on the other side of the table, trying to coax pharmaceutical company executives to produce vaccines for people in poor countries. "Capitalism and private companies are good at solving problems," but not necessarily the problems of poor people, said Desmond-Hellmann. "What the foundation has started to do, which is exciting, [is looking at how] can we help create the market conditions that allow private companies to care about and start to work with us to solve the problems." These are problems including malaria, HIV and neglected infectious diseases, including Ebola...

Foreign Affairs

http://www.foreignaffairs.com/ Accessed 24 January 2015 [No new, unique, relevant content]

Fortune

http://fortune.com/ Accessed 24 January 2015

One shot to cure them all: The quest for the universal flu shot

by Erika Fry

January 21, 2015, 8:30 AM EST

The latest flu vaccine is no match for the year's most common strains—but there's a better way to fight the virus.

The Guardian

http://www.guardiannews.com/ Accessed 24 January 2015 [No new, unique, relevant content]

The Huffington Post

http://www.huffingtonpost.com/ Accessed 24 January 2015

A Birthday Gift to Last a Lifetime: Seth Berkley

22 January 2015

For most people a birthday is a cause for celebration, and today, 15 years after Gavi was first born -- right here at the World Economic Forum in Davos -- is certainly no exception. But for millions of children living in the poorest parts of the world a birthday means so much more, and is a truly life-changing milestone. That's because growing up for example in sub-Saharan Africa, you are 15 times less likely to live long enough to see your fifth birthday, compared to children in wealthier parts of the world...

Le Monde

Accessed 24 January 2015
http://www.lemonde.fr/
[No new, unique, relevant content]

Mail & Guardian

http://mg.co.za/ Accessed 24 January 2015 [No new, unique, relevant content]

New Yorker

http://www.newyorker.com/ Accessed 24 January 2015 [No new, unique, relevant content]

New York Times

http://www.nytimes.com/ Accessed 24 January 2015

<u>Liberia Ebola Vaccine Trial 'Challenging' as Cases Tumble</u>

January 24, 2015

West Africa, aims to enroll at-risk people such as healthcare staff, family members and burial workers. It will test a GSK vaccine, a rival one from Merck and NewLink, and a placebo. "It may, at this point, be hard to find 27,000...

Doctors Group Urges Measles Shots as Disneyland Outbreak Spreads

spread to more than 80 people in seven states and Mexico. The American Academy of Pediatrics said all children should get the vaccine for measles, mumps and rubella between 12 and 15 months of age and again between 4 and 6 years January 24, 2015

Reuters

http://www.reuters.com/ Accessed 24 January 2015 [No new, unique, relevant content]

Wall Street Journal

http://online.wsj.com/home-page? wsjregion=na,us& homepage=/home/us Accessed 24 January 2015

Study of Ebola Drug ZMapp Set for West Africa

24 January 20215

A clinical trial of the experimental Ebola drug ZMapp may be ready to get under way in infected patients in West Africa in February, the latest effort to combat the current epidemic and any future outbreaks.

Washington Post

http://www.washingtonpost.com/ Accessed 24 January 2015 Africa

<u>U.S.-built Ebola treatment centers in Liberia are nearly empty as outbreak fades</u> Kevin Sieff January 18

...It now appears that the alarming epidemiological predictions that in large part prompted the U.S. aid effort here were far too bleak. Although future flare-ups of the disease are possible, the near-empty Ebola centers tell the story of an aggressive American military and civilian response that occurred too late to help the bulk of the more than 8,300 Liberians who became infected. Last week, even as international aid organizations built yet more Ebola centers, there was an average of less than one new case reported in Liberia per day.

"If they had been built when we needed them, it wouldn't have been too much," said Moses Massaquoi, the Liberian government's chairman for Ebola case management. "But they were too late."...

* * * *

Ebola/EVD: Additional Coverage [to 24 January 2015]

UNMEER [UN Mission for Ebola Emergency Response] @UNMEER #EbolaResponse

Editor's Note: UNMEER's <u>website</u> is aggregating and presenting content from various sources including its own External Situation Reports, press releases, statements and other formats. We present a composite below from the week ending 24 January 2015. We also note that 1) a regular information category in these reports – human rights – has apparently eliminated as it no longer appears in any of the continuing updates, and 2) the content level of these reports continues, in our view, to trend less informative and less coherent. We will review continuing coverage of this material over the next few weeks.

UNMEER External Situation Reports

UNMEER External Situation Reports are issued daily (excepting Saturday) with content organized under these headings:

- Hiahliahts
- Key Political and Economic Developments
- Human Rights

- Response Efforts and Health
- Logistics
- Outreach and Education
- Resource Mobilisation
- Essential Services
- Upcoming Events

The "Week in Review" will present highly-selected elements of interest from these reports. The full daily report is available as a pdf using the link provided by the report date.

:: 23 Jan 2015 UNMEER External Situation Report

Key Political and Economic Developments

1. In Davos, Switzerland, a panel discussion on 'Confronting the Challenge of Catastrophic Outbreaks: What critical lessons can be learned from the 2014 Ebola outbreak to prepare us for the future?' was held on 22 January. Moderating the talks, Peter Piot, the Director of the London School of Hygiene & Tropical Medicine, characterized the EVD outbreak in West Africa as a black swan event. The panel which included President Alpha Condé of Guinea and WHO Director-General Margaret Chan underscored the need to guard against complacency and donor fatigue, until we get to zero transmission as well as build resilient public health care systems and infrastructure to better cope with future outbreaks and endemic diseases. *Outreach and Education*

10. Community resistance towards safe burials and general suspicion of burial teams continues in many parts of the Liberia. UNMEER and partners are engaging more with local communities to enhance awareness in the Phase II national response efforts. In this regard, UNMEER along with county authorities plan to follow up on some recent burials that took place in Flowin, Garbusi and Boapea towns in Nimba County.

Resource Mobilisation

- 7. The OCHA Ebola Virus Outbreak Overview of Needs and Requirements, now totaling USD 1.5 billion, has been funded for USD 1.18 billion, which is around 79% of the total ask.
- 8. The Ebola Response Multi-Partner Trust Fund currently has USD 135.8 million in commitments. In total USD 140 million has been pledged.

Essential Services

- 14. WFP, in coordination with the Government of Liberia, UNMEER and UNICEF, will be supporting re-opening of schools starting in February: WFP will facilitate the transport of WASH supplies to ensure that schools, as they open, have all supplies necessary to prevent the transmission of EVD.
- 15. In Sierra Leone, two successive emergency campaigns to distribute anti-malarial drugs successfully reached more than 2.5 million people in door-to-door distribution in 8 districts (Bombali, Kambia, Koinadugu, Moyamba, Port Loko and Tonkolili and Western Area Urban and Rural). The campaign was implemented by the National Malaria Control Programme of the Ministry of Health and Sanitation with technical support and guidance by WHO in collaboration with MSF, UNICEF and other Roll Back Malaria partners. This effort will significantly reduce the number of people with fever that might be mistaken for EVD.

:: 22 Jan 2015 UNMEER External Situation Report

Key Political and Economic Developments

1. In a World Bank Report prepared for the 2015 World Economic Forum in Davos, the Bank acknowledged progress made in slowing the EVD transmission rate, but cautioned that recent efforts have likely reduced the impact of Ebola on the African economy perhaps from USD 30

billion to USD 6 billion. The report noted that most of these losses are forecasted to hit the affected countries.

2. In Davos, Switzerland, Special Envoy David Nabarro provided an updated Overview of Needs and Requirements in the global efforts to stop Ebola. The financial needs for the first six month of 2015 amount to 1.5 billion USD. Almost 500 million USD is already available and the appeal is now for the gap of 1 billion USD.

Response Efforts and Health

7. In Sierra Leone, 19,673 Ebola Response Workers (ERWs) were paid through mobile money between 7 and 19 January. Of these, 96% have cash-out their pay. *Essential Services*

18. Following the reopening of schools in Guinea, attendance remain low in the first week. UNICEF and partners continue to monitor schools to ensure measures put in place for the safe return to school are being adhered to around the country. UNICEF and Enfance du Globe provided psychosocial support to 150 children affected by Ebola in Belya.

:: 21 Jan 2015 UNMEER External Situation Report

Key Political and Economic Developments

- 1. The UN General Assembly held an informal meeting on Ebola, yesterday and received briefings from the Secretary-General, SRSG Ould Cheikh Ahmed, SE David Nabarro and representatives of the affected countries among others. Participants assessed that the global response to address Ebola has significantly slowed transmission, highlighted that there is no room for complacency and reiterated the goal to reach zero transmission. *Loaistics*
- 7. WFP is enhancing operational capacity to undertake medical evacuation of humanitarian staff with EVD by deploying a WFP-charted Bell 412 helicopter to Freetown, Sierra Leone on 22 January. Plans are for the aircraft to be based in Freetown initially, and then to operate out of a field location, such as Bo or Port Loko, as required. This is the second dedicated Medevac helicopter that WFP has deployed to the region; the other is stationed in Conakry, serving Guinea.

Essential Services

18. Following the reopening of schools in Guinea, attendance remain low in the first week. UNICEF and partners continue to monitor schools to ensure measures put in place for the safe return to school are being adhered to around the country. UNICEF and Enfance du Globe provided psychosocial support to 150 children affected by Ebola in Belya.

:: 20 Jan 2015 UNMEER External Situation Report

Kev Political and Economic Developments

1. In a press interview on his way to the World Economic Forum in Davos, Switzerland, President Alpha Condé of Guinea called on the IMF to cancel the debt of his country as well as of Liberia and Sierra Leone. He further indicated that the cancellation should be for bilateral and multilateral debt.

Outreach and Education

13. Similarly, UNICEF helped the Ministry of Youth broadcast Ebola sensitization messages to youth during the Africa Nations Cup. Messaging will continue 30 days after the end of the African Cup. UNICEF provided flat screen TVs, generators, retro-projectors, and screens to broadcast the Cup in 200 locations throughout the country.

Essential Services

- 16. Schools reopened across Guinea yesterday. In preparation, 80,657 teachers were trained on safe school opening protocol (100% teachers from preschool to higher education) with the assistance of UNICEF. UNICEF and partners also helped ensuring that thermoflash and hand washing stations were provided on locations. Early reporting suggests attendance is low, with for instance 63 students present at the Lycée 2 Octobre in Conakry out of 1,300 students. Current estimates are that students will receive 160 of the usual 180 days of instruction and local media are encouraging attendance to make best use of the reduced time.

 18. In Liberia, schools began registering students on 12 January for the launch of the new academic year, and the Ministry of Education finalized a condensed 2015 academic calendar, including a minimum of 187 instructional days from 2 February to 2 November.
- :: 19 Jan 2015 UNMEER External Situation Report

Key Political and Economic Developments

- 1. On 18 January, the Government of Mali, WHO and UNMEER declared Mali Ebola-free, after 42 days without any new EVD cases. They insisted on the need to remain vigilant as long as the outbreak is not contained in the three most affected countries.
- 4. The Red Cross indicated that security challenges in several areas in Guinea have prevented safe and dignified burials. The National Response Coordinator will work with both the gendarmerie and the Red Cross to look at the feasibility of escorts for safe burial teams.

 9. In preparation for the potential reopening of the Liberia and Sierra Leone border, IOM Regional Office Dakar has signed a Memorandum of Understanding with the Mano River Union. IOM is urgently initiating a comprehensive border assessment in coordination with CDC. Loaistics
- 11. The WFP-led Emergency Telecoms (ET) Cluster is providing internet connectivity in 43 locations across the three Ebola-affected countries, ensuring reliable internet access for 741 humanitarian personnel. Last week in Guinea, the ET Cluster installed internet in the Ebola Treatment Unit (ETU) in Beyla to facilitate the critical efforts of health workers. It also installed radio equipment in the city of Kissidougou to enable humanitarian staff to communicate with one another and a radio base station for UNHAS/UNMEER in Conakry, in order to provide reliable communications between air and ground staff. *Essential Services*

19. Schools and universities in Guinea are scheduled to reopen today.

* * * *

Vaccines and Global Health: The Week in Review is a service of the Center for Vaccines Ethics and Policy (<u>CVEP</u>) which is solely responsible for its content, and is an open access publication, subject to the terms of the Creative Commons Attribution License (<u>http://creativecommons.org/licenses/by-nc/3.0/</u>). Copyright is retained by CVEP.

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<u>Ethics, NYU Medical School; The Wistar Institute Vaccine Center</u> and the <u>Children's Hospital of Philadelphia Vaccine Education Center</u>. Additional support is provided by the <u>PATH Vaccine Development Program</u>; the <u>International Vaccine Institute</u> (IVI); the <u>Bill & Melinda Gates Foundation</u>; industry resource members Janssen, Pfizer, and Sanofi Pasteur U.S. (list in formation), and the Developing Countries Vaccine Manufacturers Network (DCVMN).

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