**Vaccines and Global Health: The Week in Review**  
**13 December 2014**  
**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/](http://centerforvaccineethicsandpolicy.wordpress.com/). This blog allows full-text searching of over 6,500 entries.

Comments and suggestions should be directed to  
David R. Curry, MS  
Editor and  
Executive Director  
Center for Vaccine Ethics & Policy  
david.r.curry@centerforvaccineethicsandpolicy.org

**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.

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**POLIO** [to 13 December 2014]  
Public Health Emergency of International Concern (PHEIC)

**GPEI Update: Polio this week - As of 10 December 2014**  
Global Polio Eradication Initiative  
[Editor’s Excerpt and text bolding]

Full report: [http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx](http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx)

:: This week, donors, partners and stakeholders of the GPEI convened at the Global Polio Partners Group (PPG) meeting in Geneva to discuss the current status of the global effort and priorities for 2015 and beyond. Discussions also focused on polio legacy planning, strengthening routine immunization, the status of IPV introduction into OPV-using countries, and preparations for the trivalent to bivalent oral polio vaccine switch.
In the north of Madagascar, supplementary immunization activities are planned for 15 – 19 December in response to the outbreak of circulating vaccine-derived poliovirus type 1. National Immunization Days are planned for 19 – 23 January. The aim is to boost immunity across the country against all strains of poliovirus using trivalent oral polio vaccine.

For the first time ever, only 1 case of wild poliovirus has been reported in Africa in the last 4 months. The case had onset of paralysis on 11 August in Somalia.

Selected country report content:

**Afghanistan**

One new wild poliovirus type 1 (WPV1) case was reported in the past week in Afghanistan, in Spin Boldak, a district bordering Balochistan, Pakistan, in Kandahar province, which had not previously reported a case in 2014. The most recent case had onset of paralysis on 5 November in Kandahar district. The total number of WPV1 cases for 2014 in Afghanistan is now 24 compared to 11 at this time last year.

Given the growing wild poliovirus type 1 outbreak in neighbouring Pakistan, Afghanistan continues to conduct supplementary immunization activities (SIAs) to limit the spread of imported polioviruses and to tackle residual endemic transmission. In addition to SIAs using oral polio vaccine (OPV) two special activities were conducted in mid-November using Inactivated Polio Vaccine (IPV) in several high risk districts of the Southern and the Eastern Regions. Subnational Immunization Days (SNIDs) are planned in high risk areas of the south and east using monovalent oral polio vaccine (OPV) on 21 – 23 December, and 11 - 13 January using bivalent OPV.

**Nigeria**

Over 4 months has passed since the last case of WPV1 was reported in Nigeria.

One new type 2 circulating vaccine-derived poliovirus (cVDPV2) case was reported from Ajingi district of Kano state in the past week, with onset of paralysis on 2 November. The total number of cVDPV2 cases for 2014 in Nigeria is now 28.

**Pakistan**

Eight new wild poliovirus type 1 (WPV1) cases were reported in the past week. One is from Balochistan province in Killa Abdullah district (across the border from Spin Boldak, Afghanistan); 6 are from the Federally Administered Tribal Areas (FATA) (4 from Khyber Agency, 1 from South Waziristan and 1 from Frontier Region Bannu); and 1 from Nowshera district, in Khyber Pakhtunkhwa (KP) province. The total number of WPV1 cases in Pakistan in 2014 is now 276, compared to 74 at this time last year. The most recent WPV1 case had onset of paralysis on 22 November, from Frontier Region Bannu, FATA.

Immunization activities are continuing with particular focus on known high-risk areas, in previously inaccessible areas of FATA. At exit and entry points of conflict-affected areas 100 permanent vaccination points are being used to reach internally displaced families as they move in and out of the inaccessible area. Over 1 million doses of vaccine have been used in the past few months to vaccinate people passing through transit points and in host communities, including over 850,000 children under 10 years old.

**West Africa**

The Ebola crisis in western Africa is impacting on the implementation or polio eradication activities in Liberia, Guinea and Sierra Leone. Supplementary immunization activities in these countries have been postponed and the quality of acute flaccid paralysis surveillance has markedly decreased this year.

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.
Anti-Polio Worker Slain in Pakistan

By SALMAN MASOOD

DEC. 9, 2014

ISLAMABAD, Pakistan — A pair of unidentified gunmen killed a polio vaccinator in central Pakistan on Tuesday in yet another assault on workers who are part of a government effort to curb the disease.

Pakistan is struggling to contain the spread of polio as militant violence and a chaotic political environment hobble the campaign’s progress. At least 268 new cases of polio have been reported in the country this year.

Despite the government’s repeated vows to protect health workers, the attacks continue. Taliban militants have targeted workers across the country, accusing them of being spies for Western countries.

The latest shooting took place about 9 a.m. in Faisalabad, an industrial city in Punjab Province, on the second day of a three-day national vaccination campaign.

Two men on a motorbike opened fire on a health worker, Muhammad Sarfraz, in the Peoples Colony neighborhood, officials said. Mr. Sarfraz, 40, was a schoolteacher who had volunteered for the campaign.

"The attackers shot six bullets in his body and managed to escape," said Ali Waseem, a senior police official. A female worker with Mr. Sarfraz was unharmed.

Officials suspended the campaign in Faisalabad district.

Jundullah, a Taliban splinter group, claimed responsibility. Ahmed Marwat, a Jundullah spokesman, was quoted by local news media as saying that anti-polio workers would be targeted throughout Pakistan.

But police officials in Faisalabad speculated that the attack could have been a result of personal enmity. Mr. Sarfraz had been attacked twice this year, the officials said.

Waqar Gillani contributed reporting from Lahore, Pakistan.

EBOLA/EVD [to 13 December 2014]

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

Editor’s Note:
Our extensive coverage of Ebola/EVD activity continues – including detailed coverage of UNMEER and other INGO/agency activity now available at the end of this digest. Please also note that many of the organizations and journals we cover continue to publish important EVD content which is threaded throughout this edition.


Summary [Excerpt]
A total of 17 942 confirmed, probable, and suspected cases of Ebola virus disease (EVD) have been reported in five affected countries (Guinea, Liberia, Mali, Sierra Leone, and
the United States of America) and three previously affected countries (Nigeria, Senegal and Spain) up to the end of 7 December. There have been 6388 reported deaths. Reported case incidence is slightly increasing in Guinea (103 confirmed and probable cases reported in the week to 7 December), declining in Liberia (29 new confirmed cases in the 3 days to 3 December), and may still be increasing in Sierra Leone (397 new confirmed cases in the week to 7 December). The case fatality rate across the three most-affected countries in all reported cases with a recorded definitive outcome is 76%; in hospitalized patients the case fatality rate is 61%.

Response activities in the three intense-transmission countries continue to progress in line with the UNMEER aim to isolate and treat 100% of EVD cases and safely bury 100% of EVD-related deaths by 1 January. At a national level, there is now sufficient bed capacity in EVD treatment facilities to treat and isolate all reported EVD cases in each of the three intense-transmission countries, although the uneven distribution of beds and cases means there are serious shortfalls in some areas. Similarly, each country has sufficient and widespread capacity to bury all reported EVD-related deaths; however, because not all EVD-related deaths are reported, and many reported burials are of non-EVD-related deaths, it is possible that some areas still have insufficient burial capacity. Every district that has reported a case of EVD in the three intense-transmission countries has access to a laboratory within 24 hours from sample collection. All three countries report that more than 80% of registered contacts associated with known cases of EVD are being traced, although contact tracing is still a challenge in areas of intense transmission and in areas of community resistance. Rapidly increasing capacity for case finding and contact tracing in areas with low and moderate levels of transmission will be necessary to end local chains of transmission....

**Gavi commits to purchasing Ebola vaccine for affected countries**

Vaccine Alliance ready to begin procurement as soon as WHO recommends a vaccine for use

Geneva, 11 December 2014 - Plans to purchase millions of doses of an Ebola vaccine to support large-scale vaccination efforts were today agreed by the board of Gavi, the Vaccine Alliance. Today’s decision means that Gavi will be ready to act as soon as a safe, effective vaccine is recommended for use by the World Health Organization.

The Gavi Board endorsed plans that could see up to US$ 300 million committed to procure the vaccines, to be used to immunise at risk populations in affected countries. Up to an additional US$ 90 million could be used to support countries to introduce the vaccines and to rebuild devastated health systems and restore immunisation services for all vaccines in Ebola-affected countries.

**Join forces**

To meet the funding requirements of the approved Ebola initiative, Gavi will use a combination of existing and new sources of funds and join forces with initiatives that have already pledged funding to address the Ebola crisis.

Although there is currently no approved Ebola vaccine, two manufacturers have candidates undergoing human trials, with more manufacturers due to begin human trials with their candidate vaccines shortly. The Gavi Board’s decision to support the preparations for procuring Ebola vaccines while still awaiting a WHO recommendation was taken in light of the seriousness of the situation and the risks associated with delays in making a vaccine available.

**Critical importance**

“The Ebola outbreak reminds us of the critical importance of vaccines in fighting infectious diseases,” said Gavi CEO Dr Seth Berkley. “The Board’s decision underlines Gavi’s commitment
to support the people of the Ebola-affected countries by ensuring that they will have access to a WHO-recommended vaccine as soon as one is approved and available from manufacturers.”

Noting the seriousness of the epidemic and the devastating consequences for people and communities, the Gavi Board approved plans that could see:
:: Up to US$ 300 million spent procuring up to 12 million courses of WHO recommended Ebola vaccines
:: Up to US$ 45 million to help countries roll out the vaccine, including critical activities such as health worker training, social mobilisation, surveillance and, if required, improvements to cold storage facilities
:: Up to US$ 45 million to assist with the recovery of health systems and immunisation services for all vaccines in the countries affected by the outbreak

The Ebola outbreak, and its tragic effect on countries where we have been working for years, has tested Gavi’s ability to respond quickly to an urgent need and I am proud of the decision taken by the Board today.

Stockpiles
In addition to supporting the use of Ebola vaccines to control the current epidemic, Gavi funding could also be used to create stockpiles of first- and second-generation Ebola vaccines which countries can access rapidly in future outbreaks. Gavi already funds similar stockpiles for yellow fever, meningitis A and oral cholera vaccines.

“Gavi has a responsibility to those in need,” said Gavi Board Chair Dagfinn Høybråten. “The Ebola outbreak, and its tragic effect on countries where we have been working for years, has tested Gavi’s ability to respond quickly to an urgent need and I am proud of the decision taken by the Board today. We are making determined efforts to ensure that people living in Ebola-affected countries are protected as soon as possible and do not have to face another terrible outbreak in the future.”

Oversight
To maintain effective oversight of Gavi’s Ebola activities, the Board requested a schedule of regular updates through the Executive Committee and other governance mechanisms.

The Gavi Board’s decision was based on recommendations drawn up following three months of intensive collaboration between the Gavi Secretariat, Ebola-affected countries, the African Development Bank, WHO, UNICEF, the US Centers for Disease Control and Prevention, the World Bank, vaccine manufacturers, civil society organisations including Médecins Sans Frontières, and donors.

**WHO welcomes Gavi support for Ebola candidate vaccines**
11 December 2014, Geneva - The World Health Organization (WHO) welcomes the commitment by Gavi, the Vaccine Alliance to support the procurement of vaccines as soon as WHO recommends one for use.

"This is yet another example of the rapid mobilization from partners and stakeholders to respond to the Ebola outbreak with innovative products. If the vaccines currently being tested live up to their promise of safety and efficacy, this will be the fastest vaccine development and roll-out in history", said Dr Marie-Paule Kieny, WHO Assistant Director-General of Health Systems and Innovation.

WHO has been spearheading efforts to galvanize the research and development of vaccines that could be used to curb the outbreaks. Accelerated efforts are underway to evaluate a number of Ebola candidate vaccines with preliminary results anticipated in early 2015. Effective
strategies for vaccination may be to prioritize those greatest at risk of contracting Ebola; for example, frontline workers and close contacts of people proven to be infected with the virus.

The Gavi announcement follows the high level meeting convened by WHO, the African Development Bank, the West African Health Organization and the World Bank on Building Resilient Health Systems in Ebola-affected countries in Geneva with the aim of laying the foundation for stronger health systems in the medium- to long-term.

[U.S.] Secretary Burwell issues declaration under PREP Act to support development of Ebola vaccines

Important step in effort to develop Ebola vaccines to combat current, future outbreaks
December 9, 2014

Health and Human Services Secretary Sylvia M. Burwell today announced a declaration under the Public Readiness and Emergency Preparedness (PREP) Act to facilitate the development and availability of experimental Ebola vaccines. This declaration is intended to assist in the global community's effort to help combat the current epidemic in West Africa and help prevent future outbreaks there.

The declaration provides immunity under United States law against legal claims related to the manufacturing, testing, development, distribution, and administration of three vaccines for Ebola virus disease. It does not, generally, provide immunity for a claim brought in a court outside the United States.

For many years, the U.S. has encouraged vaccine development by managing liability and compensation, starting with the National Childhood Vaccine Injury Act of 1986. The PREP Act was designed to facilitate the development of medical countermeasures to respond to urgent public health needs, including the development of critical vaccines like those to prevent the spread of Ebola. This U.S. declaration under the PREP act is part of a global dialogue to address these issues in the U.S., and other countries where the vaccine is being developed, manufactured and potentially used.

“My strong hope in issuing this PREP Act declaration in the United States is that other nations will also enact appropriate liability protection and compensation legislation,” said Secretary Burwell. “As a global community, we must ensure that legitimate concerns about liability do not hold back the possibility of developing an Ebola vaccine, an essential strategy in our global response to the Ebola epidemic in West Africa.”

The PREP Act declaration is expected to strengthen the incentive to conduct research and spur development, manufacturing, and the potential use of the vaccines in large scale vaccination campaigns in West Africa. The PREP Act declaration provides legal protection under U.S. law for three vaccine candidates:
:: the GlaxoSmithKline’s Recombinant Replication Deficient Chimpanzee Adenovirus Type 3-Vectored Ebola Zaire Vaccine known as ChAd3-EBO-Z;
:: the BPSC1001 vaccine, known as rVSV-ZEBOV-GP, made by BioProtection Services Corporation, a subsidiary of Newlink Genetics; and
:: the Ad26.ZEBOV/MVA-BN-Filo vaccine manufactured by Janssen Corporation, subsidiary of Johnson & Johnson/Bavarian Nordic.

Similar PREP Act declarations have been issued, revised or renewed 14 times since the Act was signed in 2005. Past declarations have covered vaccines used in H5N1 pandemic influenza clinical trials in 2008, products related to the H1N1 influenza pandemic in 2009, and the development and manufacturing of antitoxins to treat botulism in 2008.
Vaccinations with VSV-ZEBOV have been suspended and will resume in early 2015

Press release by University Hospitals of Geneva (HUG)
Geneva, 11 December 2014

Since 10 November 2014, a total of 59 volunteers have been included in the clinical trial of the experimental VSV-ZEBOV Ebola vaccine at the University Hospitals of Geneva (HUG). All of these volunteers are in good health and are being monitored regularly by the team in charge of the study.

Initial results show that the vaccination is very well tolerated. In the hours and days following the injection, some volunteers had some fever or muscle pain; these reactions were expected and participants were informed about them during the medical consultation which took place before their inclusion in the study.

Close monitoring of the volunteers by the VSV-ZEBOV Geneva study team has allowed the identification of four cases of mild joint pain (in the hands and feet), 10 to 15 days after receiving the injection. These symptoms were not part of the expected side effects and were not included in the prior information given to volunteers, since this vaccine is being tested on humans for the first time.

As a precautionary measure, the study team has declared a pause in the injections. No injections will take place next week. This pause is beginning one week earlier than an already scheduled pause in the vaccination series. The available time will serve to gather more information and exchange it with the other teams that are testing the same experimental vaccine. Several investigations have been launched to ensure that the symptoms which have been identified are benign and transient. In the context of clinical trials the safety of volunteers is always a priority.

The onset of joint pain after infection or vaccination is very common. This happens, for instance, in one out of five vaccinations against rubella. This is a well-documented phenomenon which does not worry specialists. However, it deserves to be carefully studied in order to update the information which is provided to the volunteers. The temporary interruption of a clinical trial is a standard precautionary measure in such cases.

The VSV-ZEBOV Geneva study team is constantly exchanging information with teams conducting similar studies in the United States, Canada, Germany and Gabon. Up to now, these teams have not observed inflammatory symptoms among their volunteers. In Geneva, vaccinations will resume on 5 January 2015, with maximum 15 volunteers per week in order to ensure optimal monitoring conditions.


The Lancet Infectious Diseases

Online First
Correspondence

Dose regimen of favipiravir for Ebola virus disease
France Mentré, Anne-Marie Taburet, Jeremie Guedj, Xavier Anglaret, Sakoba Keïta, Xavier de Lamballerie, Denis Malvy
Published Online: 27 November 2014
Although several antivirals have shown efficacy against Ebola virus infection in vitro or in animal models, none of them have been yet assessed in human beings with Ebola virus disease. Potential drug candidates include favipiravir, a nucleotide analogue approved for novel or re-emerging influenza in Japan. This year, results of two independent studies in mice infected with Ebola virus showed that the initiation of 150 mg/kg favipiravir twice a day within 6 days of infection induced rapid virus clearance, reduced biochemical parameters of disease severity, and led to 100% survival. Moreover, favipiravir had a good safety profile in thousands of patients worldwide, is immediately available, and can be used orally, leading the French drug safety agency (ANSM) to approve the compassionate use of favipiravir in patients with Ebola virus disease. Here we explain the approach we used to propose a dose regimen in a forthcoming trial in Guinea that is assessing survival in adults with Ebola virus disease who receive favipiravir.

First we used the dose regimen used to successfully treat mice to estimate target plasma favipiravir concentrations for human patients. Using data provided by the manufacturer, we showed that, in mice, 150 mg/kg every 12 h led to mean daily minimal concentrations (Cmin, 12 h post-dosing) of 5 μg/mL, average concentrations (Cave, defined by the area under the concentration curve from 0 h to 24 h divided by 24 h) of 58 μg/mL, a half-life of 1·8 h, and maximal concentrations (Cmax) of 200 μg/mL. Since 10% of favipiravir is bound to plasma proteins in mice, unbound average (Cave_u) was therefore targeted to 52 μg/mL, and minimum concentrations (Cmin_u) to 4·5 μg/mL. Of note, 52 μg/mL is higher than the 99% inhibitory concentration with Zaire ebolavirus Mayinga 1976 strain (estimated to be 29 μg/mL).

Plasma protein binding in human beings was 54%; therefore, plasma Cmin and Cave were targeted to 10 μg/mL and 113 μg/mL, respectively.

Second, we used the pharmacokinetic model developed by the manufacturer in human beings with the parameter values estimated in US healthy volunteers to assess a dose regimen that could achieve these targeted concentrations. Simulations were done with various maintenance doses of 1000 mg, 1200 mg, and 1800 mg twice a day and led to median Cave at a steady state of 66·8 μg/mL (90% prediction interval 57·2–76·5), 83·3 μg/mL (72·2–95·3), and 134·4 μg/mL (115·9–152·0), respectively. Although the dose of 1200 mg twice a day gave a slightly lower Cave than targeted, it minimised the chance of relapse (Cmin of 57 μg/mL) and remained in the range of exposures previously assessed in human beings with good tolerance.

Since viral spread has to be blocked as soon and as strongly as possible after appearance of first symptoms, we assessed several loading dose strategies on day 1 to rapidly achieve high levels of exposure. In view of the short half-life of favipiravir, a dose of 2400 mg twice a day led to a low median Cmin of 4·3 μg/mL (90% prediction interval 0·6–15·6). Rather, concentrations achieved with a regimen of 2400 mg, 2400 mg, and 1200 mg every 8 h allowed us to achieve a Cmin at 8 h of 9·8 μg/mL (2·9–23·5) and a Cmin at 16 h of 45·2 μg/mL (12·9–85·1).

To summarise, we describe the method used to propose a relevant dose regimen of favipiravir to be assessed in patients with Ebola virus disease, in a context where trials are urgently needed. Our approach combined data on favipiravir efficacy against Ebola virus in vitro and in vivo with data provided by the manufacturer on favipiravir pharmacokinetics in uninfected mice and human beings. On the basis of these elements, we will assess favipiravir in adults with a loading dose of 2400 mg, 2400 mg, and 1200 mg every 8 h on day 1, and a maintenance dose of 1200 mg twice a day afterwards. Of note, this dose regimen is 50% greater than the one in the phase 3 trials of favipiravir for influenza in the USA (1800 mg twice a day on day 1, 800 mg twice a day on day 2–5). To reduce the chance of relapse in Ebola virus
disease, we decided to give the treatment for 10 days, which corresponds to the time needed for an effective antibody response.4

Although modelling is a valuable method to optimise the search of a dosing regimen, it is not a substitute for clinical data. Tolerance, virological, and pharmacokinetic data will be obtained during the trial to help to refine the dose regimen.

We declare no competing interests. We thank Toyama Chemical for sharing with us detailed data on favipiravir pharmacokinetics. We also thank Caroline Semaille and Nathalie Morgensztejn from the French National Agency for the Safety of Medicine and Health Products for helpful discussions, and the REACTing network of Aviesan for scientific support.

References

CDC/MMWR Watch [to 13 December 2014]
http://www.cdc.gov/media/index.html
:: Supporting West African Ebola Survivors - Press Release - Friday, December 12, 2014
The case fatality rate in West Africa’s ongoing Ebola epidemic – estimates range from 60 percent to 70 percent of those hospitalized – hides a hopeful statistic: the fact that many Ebola patients survive. There now are thousands of Ebola survivors.

In this epidemic as in past Ebola outbreaks, survivors often face stigma, income loss, and both grief and survivor guilt over the loss of family and friends. Many if not all of their possessions have been destroyed to prevent disease transmission. In some cases, families have been reluctant to accept orphaned children.

Two reports in the December 12 early release issue of CDC’s Morbidity and Mortality Weekly Report (MMWR) detail programs in Liberia and Sierra Leone to help Ebola survivors reintegrate with their communities and resume their lives. As survivors are thought to have some protective immunity to the strain of Ebola that sickened them, many survivors now work as caregivers for other Ebola patients.

“Nothing says more about the resilience of the human spirit than Ebola survivors who become role models for their communities,” said CDC Director Tom Frieden, M.D., M.P.H. “They show others that Ebola can be defeated and provide care, support, and inspiration for others stricken by this terrible disease.”

:: MMWR Early Release December 12, 2014 / Vol. 63 / Early Release
- Support Services for Survivors of Ebola Virus Disease — Sierra Leone, 2014
- Reintegration of Ebola Survivors into Their Communities — Firestone District, Liberia, 2014

:: MMWR Weekly, December 12, 2014 / Vol. 63 / No. 49
Estimated Influenza Illnesses and Hospitalizations Averted by Vaccination — United States, 2013–14 Influenza Season

Global Invasive Bacterial Vaccine-Preventable Diseases Surveillance — 2008–2014

Airport Exit and Entry Screening for Ebola — August–November 10, 2014

Ebola Virus Disease in Health Care Workers — Sierra Leone, 2014

Rapid Assessment of Ebola Infection Prevention and Control Needs — Six Districts, Sierra Leone, October 2014

Clinical Inquiries Regarding Ebola Virus Disease Received by CDC — United States, July 9–November 15, 2014

**MSF/Médecins Sans Frontières** [to 13 December 2014]

*Press release*

**Doctors Without Borders Distributes Antimalarial Drugs in Sierra Leone**

December 10, 2014

FREETOWN, SIERRA LEONE—As part of its ongoing emergency response to Ebola in West Africa, Doctors Without Borders/Médecins Sans Frontières (MSF) has begun its largest-ever distribution of antimalarials in Sierra Leone, alongside the Ministry of Health, the medical humanitarian organization announced Wednesday. Teams distributed 1.5 million antimalarial treatments to residents of Freetown and five districts in the surrounding Western area over four days, with the aim of protecting people from malaria during the disease’s peak season.

“In the context of Ebola, malaria is a major concern, because people who are sick with malaria have the same symptoms as people sick with Ebola,” said Patrick Robataille, MSF field coordinator in Freetown. “As a result, most people turn up at Ebola treatment centers thinking that they have Ebola, when actually they have malaria. It’s a huge load on the system, as well as being a huge stress on patients and their families.”

Sierra Leone has the fifth highest prevalence of malaria globally, and the disease is the biggest killer of children under five in the country. Malaria symptoms include high fever, dizziness, headaches, muscle aches and fatigue, many of which are similar to the symptoms of early-stage Ebola.

The antimalarial drug artesunate amodiaquine can be used both to prevent and to treat malaria. Its widescale use is recommended in the context of an Ebola outbreak by the World Health Organization (WHO).

At 1.5 million treatments, this is the largest-ever distribution of antimalarials in an Ebola outbreak, as well as the largest ever conducted in Sierra Leone.

“The size of this campaign is in proportion to the scale of the Ebola epidemic—it’s massive,” said Robataille....

**US$35 million grant from King Abdallah of Saudi Arabia to fight Ebola in West Africa**

*Press Release by Islamic Development Bank*

Thursday, 11 December 2014

The Custodian of the Two Holy Mosques, Saudi Arabia’s King Abdallah bin Abdulaziz al-Saud has extended a grant of US$35 million to help fight Ebola in West Africa.

In a statement to the media on this occasion, Dr. Ahmed Mohamed Ali, President of the Islamic Development Bank (IDB) said that the Ebola fighting programme, initiated by the Custodian of the Two Holy Mosques and implemented by IDB, comprises the following elements:
1- Providing schools with thermal sensors and medical examination equipment designed to diagnose the disease, thereby facilitating its treatment and preventing its spread. The equipment will allow governments to open schools for the current academic year. Pupils will be examined at entry to ensure they have not contracted the disease, thus reassuring parents about the safety of their children at school.

2- Providing thermal sensors and medical examination equipment at airports, railway stations and bus stations to diagnose the disease and ensure early treatment.

3- Establishing a specialized treatment centre in each of the three endemic countries, Sierra Leone, Guinea and Liberia, designed to serve suspected cases in schools, hospitals and public transport, and wherever contamination is likely to occur in crowded conditions. Suspected cases will be received in these centres for further medical tests before they are referred for specialized treatment if necessary.

4- Establishing a specialized treatment centre in Mali where Ebola appears to have broken out but is not widespread. The centre will help the country’s health authorities cope with potential epidemics in the future.

The IDB President emphasized that the kind donation made by the Custodian of the Two Holy Mosques will further boost the Islamic world efforts in supporting the international fight against Ebola. He added that the equipment financed by this donation will speed up the opening of schools in the countries concerned, reinforce the institutional and health infrastructure to fight the current epidemic and any potential epidemics in the future, Allah forbids, thus saving thousands of lives and ensuring the safety of those at risk of contamination...

New York Times
DEC. 11, 2014
The Opinion Pages
The Path to Zero Ebola Cases
By JIM YONG KIM
Op-Ed Contributor
MONROVIA, Liberia — In my career as a medical doctor and global health policy maker, I have been in the middle of monumental struggles, including fights to make treatment accessible in the developing world for those living with H.I.V./AIDS as well as multi-drug resistant tuberculosis. But the Ebola epidemic is the worst I’ve ever seen.

More than 11 months into the crisis, thousands of people are dead and more than 17,000 have been infected. The virus kills quickly, spreads fear even faster, alters human relationships, devastates economies and threatens to cruelly extinguish hope in three fragile countries that were on the rebound after years of misery. No other modern epidemic has been so destructive so fast.

Recently, the regional response to the Ebola epidemic has been extremely effective in slowing its spread. Presidents Alpha Condé of Guinea, Ellen Johnson Sirleaf of Liberia and Ernest Bai Koroma of Sierra Leone have shown strong resolve and determined political will in battling the virus. I recently spent two days in those countries and saw first-hand that the situation today is far better than it was a month ago because of national and international efforts.

But we are not yet on the path to end the epidemic. These three countries and the world must now shift the focus of their strategy with one goal in mind: zero Ebola cases. While each
country faces different challenges in reaching this destination, there are common principles that
can guide them. Here are five steps the world must take together.

First, we must find the resources required, no matter the cost, to get to zero cases as soon as
possible. Any delay will dramatically increase the price in terms of both lives and money. For
Senegal, the cost to treat one patient and track all of his contacts was more than $1 million. For
Nigeria, one infected person led to 19 other cases, and more than 19,000 contacts traced by
over 800 health care workers at a cost of more than $13 million. In Guinea, Liberia and Sierra
Leone, there are not one or 10 active transmission lines, but hundreds. Defeating Ebola now
will cost billions — but it will spare the rest of the world from the spread of the virus, save lives
in the countries, save money over the long term, and help the countries rebuild their
economies.

Second, it is time to multiply the number of trained people to hunt down the virus. Responders
must track each contact of an infected person. Done right, this strategy will eventually
extinguish all transmission lines, ending the epidemic. The focus of this vital activity must be on
the intensity, quality and reach of tracking activities deep into the community. The communities
need to be engaged, empowered and true partners in the drive to zero. It will also begin these
countries’ recovery process by providing work for potentially thousands of local people, and
teach skills that are much needed to build effective community health care systems.

Third, response coordination and support mechanisms must move down to the district level,
with teams capable of collecting and analyzing data to further drive the intervention, as well as
to scale up diagnostics and triage capabilities. We must especially focus on one particular piece
of data: The percentage of new cases not on previous contact lists. In other words, did trackers
previously identify the people who are newly infected as contacts of other cases, or do the new
cases represent unidentified transmission lines? This will tell us whether we’re winning or losing.
Right now, in all three countries, we have only partial data on this particular indicator.

Fourth, national response strategies must be nimble and adapt to local conditions, rather than
be bound by prior commitments. Liberia, for instance, has had the most recent success in the
fight against the virus and has seen a dramatic drop in reported cases. When I was in Liberia,
they counted 150 active cases — the lowest number in several months. Now there is an
opportunity to aggressively set in motion a contact tracing program to stop the lines of
transmission, one by one until it’s over.

Finally, we must empower the strong leaders in the region who head the response to extinguish
the virus wherever it exists. On the ground, there are talented national staff who have been
tested on the frontline. There are also international partners: the United States and the United
Kingdom, other countries, the United Nations, and international nongovernmental organizations,
which have deployed massive resources in support of national efforts. Together, they have
stood fast and slowed down this horrific epidemic. We must now give them the freedom and
resources to end it.

We have no choice but to beat Ebola. I return from West Africa admiring the leaders and the
international responders. But we must also acknowledge that we have underestimated Ebola in
the past and it’s possible we could do so again. We must not forget we have one goal only:
zero cases.
Jim Yong Kim, a physician, anthropologist and former president of Dartmouth College, is president of the World Bank Group.

**NIH Watch** [to 13 December 2014]
:: **UPDATE: Patient with exposure to Ebola arrives safely at NIH Clinical Center**
December 11, 2014

A patient with exposure to the Ebola virus while in Sierra Leone has arrived safely at the NIH Clinical Center for observation and to enroll in a clinical protocol. The patient was transferred from an overseas location via private charter medevac in isolation and admitted to the NIH Clinical Center at approximately 12:42 p.m. EST.

The patient is an American nurse who was volunteering services in an Ebola treatment unit in Sierra Leone. Out of an abundance of caution, the patient has been admitted to the NIH Clinical Center’s special clinical studies unit that is specifically designed to provide high-level isolation capabilities and is staffed by infectious diseases and critical care specialists. The unit staff is trained in strict infection control practices optimized to prevent spread of potentially transmissible agents such as Ebola.

No additional details about the patient are being shared at this time.

::: :

**WHO & Regionals** [to 13 December 2014]
:: The *Weekly Epidemiological Record (WER) 12 December 2014*, vol. 89, 50 (pp. 561–576) includes:
- Meeting of the Strategic Advisory Group of Experts on immunization, October 2014 – conclusions and recommendations

:: World Malaria Report 2014
Downloads: French summary Spanish summary

**Overview**
The World Malaria Report 2014 summarizes information received from malaria-endemic countries and other sources, and updates the analyses presented in the 2013 report. The World Malaria Report is WHO’s flagship malaria publication, released each year in December. It assesses global and regional malaria trends, highlights progress towards global targets, and describes opportunities and challenges in controlling and eliminating the disease. Most of the data presented in this report is for 2013.

:: New study highlights need to scale up violence prevention efforts globally
10 December 2014 -- The "*Global status report on violence prevention 2014*" reveals that 475 000 people were murdered in 2012, and homicide is the third leading cause of death globally for males aged 15–44 years, highlighting the urgent need for more decisive action to prevent violence.

**WHO Regional Offices**
WHO African Region AFRO
:: Democratic Republic of the Congo: The country that knows how to beat Ebola
In DRC there was long experience with Ebola – this was the seventh outbreak of the disease here. The country had the knowledge and the people needed to stop an outbreak – plus strong technical assistance and support from WHO.

:: Liberia: Sharing his experience fighting Ebola - 09 December 2014

WHO Region of the Americas PAHO
:: First-ever Universal Health Coverage Day urges “Health for all – everywhere” (12/12/2014)
:: Developing countries in Latin America and the Caribbean have world’s highest homicide rates (12/10/2014)
:: PAHO/WHO provides training in risk communication for possible Ebola introduction (12/09/2014)

WHO South-East Asia Region SEARO
:: WHO targets implementation of new guidelines for indoor air quality 11 December 2014
:: Address at the Ebola Preparedness Partners Meeting 5 December 2014, SEARO, New Delhi
Dr Poonam Khetrapal Singh, WHO Regional Director for South-East Asia

WHO European Region EURO
[website unreachable]

WHO Eastern Mediterranean Region EMRO
:: WHO delivers six tonnes of medicines to west Harasta in Syria 8 December 2014 - As part of an UN inter-agency convoy, WHO, in collaboration with the Syrian Arab Red Crescent (SARC), has delivered 6 tonnes of medicines and other items to west Harasta in Syria for a population of 2200 families. Since the beginning of the crisis, WHO has supported local health authorities, SARC and nongovernmental organization partners with the provision of medicines and medical equipment, including surgical supplies for over 12.5 million people across the country. It was the first time that medical support has reached west Harasta since October 2011.
:: Government of Saudi Arabia provides support for purpose-built mobile medical clinics in Erbil, Iraq 11 December 2014
:: Afghanistan’s midwifery report highlights need for still greater investment 10 December 2014
:: Vaccinators, health educators and volunteers in Aden: working enthusiastically with vulnerable groups 8 December 2014

UNICEF Watch [to 13 December 2014]
:: With 15 million children caught up in major conflicts, UNICEF declares 2014 a devastating year for children

NEW YORK/GENEVA, 8 December 2014 – The year 2014 has been one of horror, fear and despair for millions of children, as worsening conflicts across the world saw them exposed to extreme violence and its consequences, forcibly recruited and deliberately targeted by warring groups, UNICEF said today. Yet many crises no longer capture the world’s attention, warned the children’s agency.

GAVI Watch [to 13 December 2014]
Gavi commits to purchasing Ebola vaccine for affected countries [see Ebola coverage above]

Dr Flavia Bustreo appointed Vice Chair of Gavi Board

WHO Assistant Director-General will also chair the Board’s Governance Committee

Geneva, 11 December 2014 - Gavi, the Vaccine Alliance has today appointed World Health Organization Assistant Director-General for Family, Women’s and Children’s Health Dr Flavia Bustreo as the new Vice Chair of its Board.

Dr Bustreo has been a Gavi Board member since 2010 and will take up the position of Vice Chair on the January 1st 2015. As part of her responsibilities as Vice Chair of the Board, Dr Bustreo will also be the Chair of the Board’s Governance Committee and Vice Chair of the Executive Committee.

“I am very humbled by the Board’s decision, which is I believe is a reflection of the value of WHO’s critical role and contribution to the Alliance,” said Dr Bustreo. “I am also delighted that my appointment coincides with Human Rights Day and at a time when Gavi is embarking on its new strategy for 2016-2020, given that Gavi is such a critical instrument to saving and improving the lives of women and children and increasing equitable use of vaccines in lower income countries “

Dr Bustreo succeeds UNICEF Deputy Executive director Dr Geeta Rao Gupta who has served as Vice Chair since 2011.

“I am grateful to Geeta Rao Gupta for her strong support and counsel during a period of remarkable expansion of Gavi’s programmes,” said Gavi Board Chair Dagfinn Høybråten. “Geeta Rao Gupta was, along with Flavia Bustreo, a leading advocate in support of crucial board decisions including the approval of support for human papillomavirus vaccine and measles-rubella vaccine.”

“Flavia Bustreo’s appointment comes at an important moment for Gavi as we seek to secure funds for immunisation programmes between 2016 and 2020. We have a great deal of work to do if we are to reach every child with lifesaving vaccines and the knowledge and experience that Flavia will bring to her new role will help us address the challenges we face,” added Mr Høybråten.

Dr Bustreo has served as the WHO Assistant Director-General for Family, Women’s and Children’s Health since 2010. Her responsibilities include the oversight of WHO’s work on immunisation, reproductive, maternal, newborn, child and adolescent health, social and environmental determinants of health, gender, equity and human rights and ageing.

Sabin Vaccine Institute Watch [to 13 December 2014]
http://www.sabin.org/updates/pressreleases

Axel Hoos, MD, PhD, Appointed as Interim Chairman of the Sabin Board of Trustees

WASHINGTON, D.C. — December 10, 2014 — The Sabin Vaccine Institute (Sabin) today announced that its Board of Trustees unanimously appointed Axel Hoos, MD, PhD, to serve as the interim Chairman of the Board. Building upon the past successes of late Chairman Morton P. Hyman, Dr. Hoos will be instrumental to providing continuity to the institute and to Sabin’s efforts in launching new programs, clinical trials and advocacy campaigns around the world.

Global Fund Watch [to 13 December 2014]
Press releases
GENEVA – The Global Fund to Fight AIDS, Tuberculosis and Malaria is putting into place a new agreement for purchasing HIV medication that will save close to US$100 million over two years, money that can be reinvested in lifesaving drugs and programs all over the world.

By using a Pooled Procurement Mechanism, the agreement means lower prices, swifter delivery and more predictable and sustainable long-term supply – delivering on the goals of the Global Fund’s Market Shaping Strategy.

It also yields greater transparency, reducing risks and expenses for countries that implement programs treating people with HIV. The new approach will also deliver better HIV medication options for children.

The improvements were achieved by bundling the purchase of, high volume drugs with lower volume ones which are sometimes more difficult to obtain. Negotiators also focused on improved shelf life and active pharmaceutical ingredient security.

The Global Fund is entering agreements with eight suppliers, with three of them as long-term strategic partnerships...

GENEVA – UNAIDS and the Global Fund to Fight AIDS, Tuberculosis and Malaria signaled their strong partnership with a renewed cooperation agreement to help countries achieve Fast-Track targets to end the AIDS epidemic as a global health threat by 2030.

At the core of the agreement is an improved way of collaborating that strengthens coordination mechanisms, and information-sharing at all levels and mutual accountability.

The UNAIDS Fast-Track approach emphasizes the need to focus on the countries, cities and communities most affected by HIV and recommends that resources be concentrated on the areas with the greatest impact. The new agreement will focus on maximizing support to countries and optimizing investments and impact at country level...

FDA Watch  [to 13 December 2014]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
:: December 10, 2014 - FDA approves Gardasil 9 for prevention of certain cancers caused by five additional types of HPV

Industry Watch  [to 13 December 2014]
:: Sanofi Pasteur Announces FDA Approval of Fluzone® Intradermal Quadrivalent (Influenza Vaccine) for Adults
- The first and only four-strain influenza vaccine option administered intradermally -
- Helps protect adults 18 through 64 years of age against an additional influenza B strain

SWIFTWATER, Pa., Dec. 12, 2014 /PRNewswire/ -- Sanofi Pasteur, the vaccines division of Sanofi (EURONEXT: SAN and NYSE: SNY), today announced that the U.S. Food and Drug Administration (FDA) has approved the supplemental biologics license application (sBLA) for Fluzone Intradermal Quadrivalent vaccine. Fluzone Intradermal vaccine, which has been available in trivalent formulation for three years, is now available in a quadrivalent formulation to help protect against four strains of influenza virus. Fluzone Intradermal Quadrivalent vaccine is indicated for adults 18 through 64 years of age for active immunization for the prevention of influenza (“the flu”) caused by influenza A subtype viruses and type B viruses contained in the vaccine.
"Influenza B is a common cause of influenza-related morbidity and mortality across all age groups," said David P. Greenberg, M.D., Vice President, Scientific & Medical Affairs, and Chief Medical Officer, Sanofi Pasteur US. "Fluzone Intradermal Quadrivalent vaccine will offer another influenza vaccination option for health care providers and their adult patients with broad coverage against influenza viruses that may be predominant, coupled with the efficiency of using the intradermal microinjection system."

:: **FDA Approves Merck’s HPV Vaccine, GARDASIL®9, to Prevent Cancers and Other Diseases Caused by Nine HPV types -- Including Types that Cause About 90% of Cervical Cancer Cases**

GARDASIL 9 includes the greatest number of HPV types in any available HPV vaccine

December 11, 2014 05:30 PM Eastern Standard Time

KENILWORTH, N.J.--(BUSINESS WIRE)--Merck (NYSE:MRK), known as MSD outside the United States and Canada, announced today that the U.S. Food and Drug Administration (FDA) approved GARDASIL®9 (Human Papillomavirus 9-valent Vaccine, Recombinant), Merck’s 9-valent human papillomavirus (HPV) vaccine, for use in girls and young women 9 to 26 years of age for the prevention of cervical, vulvar, vaginal, and anal cancers caused by HPV types 16, 18, 31, 33, 45, 52 and 58, precancerous or dysplastic lesions caused by HPV types 6, 11, 16, 18, 31, 33, 45, 52, and 58, and genital warts caused by HPV types 6 and 11. GARDASIL 9 is also approved for use in boys 9 to 15 years of age for the prevention of anal cancer caused by HPV types 16, 18, 31, 33, 45, 52 and 58, precancerous or dysplastic lesions caused by HPV types 6, 11, 16, 18, 31, 33, 45, 52 and 58, and genital warts caused by HPV types 6 and 11. GARDASIL 9 is contraindicated in individuals with hypersensitivity, including severe allergic reactions to yeast, or after a previous dose of GARDASIL 9 or GARDASIL® [Human Papillomavirus Quadrivalent (Types 6, 11, 16, and 18) Vaccine, Recombinant].

“With GARDASIL 9, the medical and public health community now has the potential to help prevent 90 percent of cervical cancers caused by HPV,” said Dr. Julie Gerberding, president, Merck Vaccines. “This is an extraordinary opportunity to even further reduce the burden of HPV-related diseases and cancers in males and females.”

:: **Merck Announces Appointment of Dr. Julie Gerberding as Executive Vice President for Strategic Communications, Global Public Policy and Population Health**

December 10, 2014 09:30 AM Eastern Standard Time

KENILWORTH, N.J.--(BUSINESS WIRE)--Merck (NYSE:MRK), known as MSD outside the United States and Canada, today announced the appointment of Dr. Julie Gerberding, 59, as executive vice president for strategic communications, global public policy and population health, effective Dec. 15. In this newly created Executive Committee position, Gerberding, who most recently served as president of Merck Vaccines, will be responsible for Merck’s global public policy, corporate responsibility and communications functions, as well as the Merck Foundation and the Merck for Mothers program. Gerberding will also lead new partnership initiatives that accelerate Merck’s ability to contribute to improved population health, a measure of impact that is increasingly valued by governments and other global health organizations.

"Julie has been instrumental in making Merck’s vaccines more accessible and affordable, particularly in emerging markets and many of the world’s most resource-limited countries,” said Kenneth C. Frazier, chairman and chief executive officer, Merck. “Julie’s leadership of our vaccines business and her exceptional track record in both the public and private sectors make her ideally suited to lead these areas and to advance our engagement with organizations around the world that, like Merck, are working to advance population health.”
Gerberding joined Merck as president of Merck Vaccines in January 2010. Since then, Merck’s vaccines are reaching more people than ever, and Merck became the global leader in the vaccine market based on sales. In addition, the Sanofi Pasteur MSD joint venture in Europe, Merck’s European vaccine business for which Gerberding is the Board co-chair, has improved in both population reach and financial performance. She also helped lead the successful launch in India of the Merck Wellcome Trust non-profit joint venture for vaccine development, the MSD Wellcome Trust Hilleman Laboratories.

Prior to joining Merck, Gerberding served as director of the U.S. Centers for Disease Control and Prevention (CDC) from 2002-2009 and before that served as director of the Division of Healthcare Quality Promotion. Before joining the CDC, Gerberding was a tenured faculty member in Infectious Diseases at the University of California at San Francisco (UCSF). She continues as an Adjunct Associate Clinical Professor of Medicine at UCSF...

DCVMN / PhRMA / EFPIA / IFPMA / BIO Watch [to 13 December 2014]
:: DCVMN International develops multiple initiatives to accelerate access to affordable high quality-vaccines

Posted 09-December-2014

October 2014 — The Developing Countries Vaccine Manufacturers Network (DCVMN) International has announced at its annual gathering in Delhi, India, its intention to support access to affordable high-quality vaccines by enabling a larger number of vaccine manufacturers to achieve a more sustainable and secure supply of priority vaccines for international procurement, particularly for GAVI-eligible countries, with the common goal of protecting people against known and emerging infectious diseases globally.

DCVMN, through its members, has been working together with global health stakeholders since early this year, in identifying needs and challenges of the vaccine industry in developing countries. Four areas of action have been agreed to strengthen and foster sustainable vaccine supply:

(1) review of manufacturing facilities design,
(2) provide adequate training on evolving GMP requirements, quality management systems, and the WHO standards and prequalification,
(3) encourage dialogue on regulatory challenges,
(4) facilitate access to independent experts able to resolve vaccine industry specific issues.

The three years’ project costs of over 3.6 million dollars will be sourced to 60 percent by international global health organizations and the remaining jointly by DCVMN members and partners. The priority vaccines to be targeted encompass Pentavalent/Hexavalent, Pneumococcal Conjugate, Rotavirus, Typhoid Conjugate, Human Papillomavirus, Measles/Rubella and Inactivated Polio vaccines.

“Two out of three children in the world receive lifesaving vaccines from emerging manufacturers, and as the world's population is growing at the fastest rate in developing countries, it is important to ensure improved manufacturing in every facility we can reach” said Mr. Mahendra Suhardono, President of DCVMN.

All members involved in funding these initiatives share the vision of developing countries free of suffering and disabilities from major infectious diseases, and will work together to foster the development and supply of safe, effective and affordable vaccines for the future generations of world's developing nations.
**European Medicines Agency Watch** [to 13 December 2014]
*No new digest content identified.*

**BMGF - Gates Foundation Watch** [to 13 December 2014]
http://www.gatesfoundation.org/Media-Center/Press-Releases
*No new digest content identified.*

**IAVI Watch** [13 December 2014]
*No new digest content identified.*

**European Vaccine Initiative Watch** [to 13 December 2014]
http://www.euvaccine.eu/news-events
*No new digest content identified.*

**IVI Watch** [to 13 December 2014]
http://www.ivi.org/web/www/home
*No new digest content identified.*

**PATH Watch** [to 13 December 2014]
http://www.path.org/news/
*No new digest content identified.*

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**Reports/Research/Analysis/Commentary/Conferences/Meetings/Book Watch/Tenders**

*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

**Meeting: Ebola Vaccines and Antivirals: What Lies Ahead?**
Center for Strategic and International Studies
Tuesday December 16, 20143:00PM - 5:00 PM (EST)
2nd Floor Conference Room (Webcast accessible)
1616 Rhode Island Ave, NW
Washington, D.C.

There are rapidly accelerating efforts underway by industry, governments, NGOS, international organizations, and foundations to bring forward Ebola vaccines and antivirals. There have been promising early returns, amidst considerable unknowns and acute pressures to find safe, effective, and affordable new technological tools. Ambitious field trials are set to begin in the new year in West Africa. Hear what lies ahead from those on the front lines:
:: Dr. Anthony Fauci, Director of the National Institute of Allergy and Infectious Disease (NIAID)
:: Dr. Moncef Slaoui, Member of the GSK Board of Directors and the Corporate Executive Team
:: Dr. Johan Van Hoof, Global Therapeutic Area Head, Infectious Diseases and Vaccines, Janssen Research & Development, LLC
:: Mr. Rohit Malpan, Director of Policy and Analysis, Medecins Sans Frontieres Access Campaign
:: Dr. Julie Gerberding, President, Merck Vaccines  
:: Dr. J. Stephen Morrison, Senior Vice President and Director of the CSIS Global Health Policy Center will moderate.

**Journal Watch**  
*Vaccines and Global Health: The Week in Review* continues its weekly scanning of key peer-reviewed journals to identify and cite articles, commentary and editorials, books reviews and other content supporting our focus on vaccine ethics and policy. **Journal Watch is not intended to be exhaustive, but indicative of themes and issues the Center is actively tracking.** We selectively provide full text of some editorial and comment articles that are specifically relevant to our work. Successful access to some of the links provided may require subscription or other access arrangement unique to the publisher.  
*If you would like to suggest other journal titles to include in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org*

**The American Journal of Bioethics**  
*Volume 14, Issue 12, 2014*  
[http://www.tandfonline.com/toc/uajb20/current](http://www.tandfonline.com/toc/uajb20/current)  
[Reviewed earlier]

**American Journal of Infection Control**  
*Volume 42, Issue 12, p1255-13413 December 2014*  
[http://www.ajicjournal.org/current](http://www.ajicjournal.org/current)  
[Reviewed earlier]

**American Journal of Preventive Medicine**  
*Volume 47, Issue 6, p689-852, e11-e14 December 2014*  
[http://www.ajpmonline.org/current](http://www.ajpmonline.org/current)  
[Reviewed earlier]

**American Journal of Public Health**  
*Volume 104, Issue 12 (December 2014)*  
[Reviewed earlier]

**American Journal of Tropical Medicine and Hygiene**  
*December 2014; 91 (6)*  
[http://www.ajtmh.org/content/current](http://www.ajtmh.org/content/current)  
[Reviewed earlier]
Natural attack rate of influenza in unvaccinated children and adults: a meta-regression analysis
Kavisha Jayasundara1*, Charlene Soobiah2, Edward Thommes13, Andrea C Tricco24 and Ayman Chit15

Background
The natural (i.e. unvaccinated population) attack rate of an infectious disease is an important parameter required for understanding disease transmission. As such, it is an input parameter in infectious disease mathematical models. Influenza is an infectious disease that poses a major health concern worldwide and the natural attack rate of this disease is crucial in determining the effectiveness and cost-effectiveness of public health interventions and informing surveillance program design. We estimated age-stratified, strain-specific natural attack rates of laboratory-confirmed influenza in unvaccinated individuals.

Methods
Utilizing an existing systematic review, we calculated the attack rates in the trial placebo arms using a random effects model and a meta-regression analysis (GSK study identifier: 117102).

Results
This post-hoc analysis included 34 RCTs (Randomized Control Trials) contributing to 47 influenza seasons from 1970 to 2009. Meta-regression analyses showed that age and type of influenza were important covariates. The attack rates (95% CI (Confidence Interval)) in adults for all influenza, type A and type B were 3.50% (2.30%, 4.60%), 2.32% (1.47%, 3.17%) and 0.59% (0.28%, 0.91%) respectively. For children, they were 15.20% (11.40%, 18.90%), 12.27% (8.56%, 15.97%) and 5.50% (3.49%, 7.51%) respectively.

Conclusions
This analysis demonstrated that unvaccinated children have considerably higher exposure risk than adults and influenza A can cause more disease than influenza B. Moreover, a higher ratio of influenza B:A in children than adults was observed. This study provides a new, stratified and up-to-date natural attack rates that can be used in influenza infectious disease models and are consistent with previous published work in the field.
Study protocol

Multicenter case–control study protocol of pneumonia etiology in children: Global Approach to Biological Research, Infectious diseases and Epidemics in Low-income countries (GABRIEL network)


Author Affiliations

Published: 10 December 2014

Abstract (provisional)

Background

Data on the etiologies of pneumonia among children are inadequate, especially in developing countries. The principal objective is to undertake a multicenter incident case-control study of <5-year-old children hospitalized with pneumonia in developing and emerging countries, aiming to identify the causative agents involved in pneumonia while assessing individual and microbial factors associated with the risk of severe pneumonia.

Methods/design

A multicenter case-control study, based on the GABRIEL network, is ongoing. Ten study sites are located in 9 countries over 3 continents: Brazil, Cambodia, China, Haiti, India, Madagascar, Mali, Mongolia, and Paraguay. At least 1,000 incident cases and 1,000 controls will be enrolled and matched for age and date. Cases are hospitalized children <5-years with radiologically confirmed pneumonia, and the controls are children without any features suggestive of pneumonia. Respiratory specimens are collected from all enrolled subjects to identify 19 viruses and 5 bacteria. Whole blood from pneumonia cases is being tested for 3 major bacteria. S. pneumoniae-positive specimens are serotyped. Urine samples from cases only are tested for detection of antimicrobial activity. The association between procalcitonin, C-reactive protein and pathogens is being evaluated. A discovery platform will enable pathogen identification in undiagnosed samples.

Discussion

This multicenter study will provide descriptive results for better understanding of pathogens responsible for pneumonia among children in developing countries. The identification of determinants related to microorganisms associated with pneumonia and its severity should facilitate treatment and prevention.

BMC Medical Ethics

(Accessed 13 December 2014)
http://www.biomedcentral.com/bmcmedethics/content

Debate

Community engagement and the human infrastructure of global health research
Katherine F King, Pamela Kolopack, Maria W Merritt and James V Lavery
Published: 13 December 2014
Abstract (provisional)

Background
Biomedical research is increasingly globalized with ever more research conducted in low and middle-income countries. This trend raises a host of ethical concerns and critiques. While community engagement (CE) has been proposed as an ethically important practice for global biomedical research, there is no agreement about what these practices contribute to the ethics of research, or when they are needed.

Discussion
In this paper, we propose an ethical framework for CE. The framework is grounded in the insight that relationships between the researcher and the community extend beyond the normal bounds of the researcher-research participant encounter and are the foundation of meaningful engagement. These relationships create an essential "human infrastructure" - a web of relationships between researchers and the stakeholder community--i.e., the diverse stakeholders who have interests in the conduct and/or outcomes of the research. Through these relationships, researchers are able to address three core ethical responsibilities: (1) identifying and managing non-obvious risks and benefits; (2) expanding respect beyond the individual to the stakeholder community; and (3) building legitimacy for the research project.

Summary
By recognizing the social and political context of biomedical research, CE offers a promising solution to many seemingly intractable challenges in global health research; however there are increasing concerns about what makes engagement meaningful. We have responded to those concerns by presenting an ethical framework for CE. This framework reflects our belief that the value of CE is realized through relationships between researchers and stakeholders, thereby advancing three distinct ethical goals. Clarity about the aims of researcher-stakeholder relationships helps to make engagement programs more meaningful, and contributes to greater clarity about when CE should be recommended or required.

Research article

Shortcomings of protocols of drug trials in relation to sponsorship as identified by Research Ethics Committees: analysis of comments raised during ethical review

Marlies van Lent, Gerard A Rongen and Henk J Out

Published: 10 December 2014

Abstract (provisional)

Background
Submission of study protocols to research ethics committees (RECs) constitutes one of the earliest stages at which planned trials are documented in detail. Previous studies have investigated the amendments requested from researchers by RECs, but the type of issues raised during REC review have not been compared by sponsor type. The objective of this study was to identify recurring shortcomings in protocols of drug trials based on REC comments and to assess whether these were more common among industry-sponsored or non-industry trials.

Methods
Retrospective analysis of 226 protocols of drug trials approved in 2010-2011 by three RECs affiliated to academic medical centres in The Netherlands. For each protocol, information on sponsorship, number of participating centres, participating countries, study phase, registration status of the study drug, and type and number of subjects was retrieved. REC comments were extracted from decision letters sent to investigators after review and were classified using a predefined checklist that was based on legislation and guidelines on clinical drug research and previous literature.
Results
Most protocols received comments regarding participant information and consent forms (n = 182, 80.5%), methodology and statistical analyses (n = 160, 70.8%), and supporting documentation, including trial agreements and certificates of insurance (n = 154, 68.1%). Of the submitted protocols, 122 (54.0%) were non-industry and 104 (46.0%) were industry-sponsored trials. Non-industry trials more often received comments on subject selection (n = 44, 36.1%) than industry-sponsored trials (n = 18, 17.3%; RR, 1.58; 95% CI, 1.01 to 2.47), and on methodology and statistical analyses (n = 95, 77.9% versus n = 65, 62.5%, respectively; RR, 1.18; 95% CI, 1.01 to 1.37). Non-industry trials less often received comments on supporting documentation (n = 72, 59.0%) than industry-sponsored trials (n = 82, 78.8%; RR, 0.83; 95% CI, 0.72 to 0.95).

Conclusions
RECs identified important ethical and methodological shortcomings in protocols of both industry-sponsored and non-industry drug trials. Investigators, especially of non-industry trials, should better prepare their research protocols in order to facilitate the ethical review process.

BMC Public Health
(Accessed 13 December 2014)
http://www.biomedcentral.com/bmcpublichealth/content
[No new relevant content]

BMC Research Notes
(Accessed 13 December 2014)
http://www.biomedcentral.com/bmcresnotes/content
[No new relevant content]

British Medical Journal
13 December 2014(vol 349, issue 7987)
http://www.bmj.com/content/349/7987
Research
Innovative research methods for studying treatments for rare diseases: methodological review
Joshua J Gagne, assistant professor, Lauren Thompson, research assistant, Kelly O’Keefe, research manager, Aaron S Kesselheim, assistant professor
BMJ 2014; 349 doi: http://dx.doi.org/10.1136/bmj.g6802 (Published 24 November 2014) Cite this as: BMJ 2014;349:g6802
Abstract
Objective To examine methods for generating evidence on health outcomes in patients with rare diseases.
Design Methodological review of existing literature.
Setting PubMed, Embase, and Academic Search Premier searched for articles describing innovative approaches to randomized trial design and analysis methods and methods for conducting observational research in patients with rare diseases.
Main outcome measures We assessed information related to the proposed methods, the specific rare disease being studied, and outcomes from the application of the methods. We summarize
methods with respect to their advantages in studying health outcomes in rare diseases and provide examples of their application.

Results We identified 46 articles that proposed or described methods for studying patient health outcomes in rare diseases. Articles covered a wide range of rare diseases and most (72%) were published in 2008 or later. We identified 16 research strategies for studying rare disease. Innovative clinical trial methods minimize sample size requirements (n=4) and maximize the proportion of patients who receive active treatment (n=2), strategies crucial to studying small populations of patients with limited treatment choices. No studies describing unique methods for conducting observational studies in patients with rare diseases were identified.

Conclusions Though numerous studies apply unique clinical trial designs and considerations to assess patient health outcomes in rare diseases, less attention has been paid to innovative methods for studying rare diseases using observational data.

Clinical Review

Ebola virus disease
BMJ 2014; 349 doi: http://dx.doi.org/10.1136/bmj.g7348 (Published 10 December 2014) Cite this as: BMJ 2014;349:g7348

 Bulletin of the World Health Organization
Volume 92, Number 12, December 2014, 849-924
http://www.who.int/bulletin/volumes/92/12/en/
[Reviewed earlier]

Clinical Infectious Diseases (CID)
Volume 60 Issue 1 January 1, 2015
http://cid.oxfordjournals.org/content/current
[New issue; No relevant content]

Clinical Therapeutics
Volume 36, Issue 12, p1865-2140 December 2014
http://www.clinicaltherapeutics.com/current
[New issue; No relevant content]

Complexity
November/December 2014 Volume 20, Issue 2 Pages fmi–fmi, 1–81
[Reviewed earlier]

Conflict and Health
[Accessed 13 December 2014]
http://www.conflictandhealth.com/
[No new relevant content]
Cost Effectiveness and Resource Allocation
(Accessed 13 December 2014)
http://www.resource-allocation.com/
[No new relevant content]

Current Opinion in Infectious Diseases
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
[Reviewed earlier]

Development in Practice
Volume 24, Issue 8, 2014
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Emerging Infectious Diseases
Volume 20, Number 12—December 2014
http://wwwnc.cdc.gov/eid/
[New issue; No relevant content]

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

Epidemiology and Infection
Volume 142  - Issue 12  - December 2014
http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue
[Reviewed earlier]

The European Journal of Public Health
Volume 24, Issue 6, 01 December 2014
http://eurpub.oxfordjournals.org/content/24/6
[Reviewed earlier]
Management of pregnant women infected with Ebola virus in a treatment centre in Guinea, June 2014
by FM Baggi, A Taybi, A Kurth, M Van Herp, A Di Caro, R Wölfel, S Günther, T Decroo, H Declerck, S Jonckheere

It's not Ebola ... it's the systems
Victor K Barbiero
The 2014 Ebola outbreak in West Africa demonstrates key deficiencies in investment in health systems. Despite some modest investment in health systems, our field has instead largely chosen to pursue shorter-term, vertical efforts to more rapidly address key global health issues such as smallpox, polio, malaria, and HIV/AIDS. While those efforts have yielded substantial benefits, we have paid a price for the lack of investments in general systems strengthening. The Ebola deaths we have seen represent a small portion of deaths from many other causes resulting from weak systems. Major systems strengthening including crucial nonclinical elements will not happen overnight but should proceed in a prioritized, systematic way.

The future of routine immunization in the developing world: challenges and opportunities
Angela K Shen, Rebecca Fields, Mike McQuestion
Vaccine costs in the developing world have grown from < US$1/child in 2001 to about $21 for boys and $35 for girls in 2014, as more and costlier vaccines are being introduced into national immunization programs. To address these and other challenges, additional efforts are needed to strengthen 8 critical components of routine immunization: (1) policy, standards, and guidelines; (2) governance, organization, and management; (3) human resources; (4) vaccine, cold chain, and logistics management; (5) service delivery; (6) communication and community partnerships; (7) data generation and use; and (8) sustainable financing.

Strategies to reduce risks in ARV supply chains in the developing world
Chris Larson, Robert Burn, Anja Minnick-Sakal, Meaghan O'Keefe Douglas, Joel Kuritsky
Key strategies of the main ARV procurement program for PEPFAR to reduce supply chain risks include: (1) employing pooled procurement to reduce procurement and shipping costs and to accommodate changing country needs by making stock adjustments at the regional level, and (2) establishing regional distribution centers to facilitate faster turnaround of orders within defined catchment areas.
**VIEWPOINTS**

**A stewardship approach to shaping the future of public health supply chain systems**

Alan Bornbusch, Todd Dickens, Carolyn Hart, Chris Wright


http://dx.doi.org/10.9745/GHSP-D-14-00123

**Full Text**  **Full Text (PDF)**

- Guiding Principles: (1) Governments should see themselves as stewards of supply chains, providing vision, guidance, and oversight, not necessarily as operators of supply chains. (2) Governments should not be afraid to leverage the multiple supply chain actors and diverse options available; these can be woven into a coherent, integrated system, providing flexibility and reducing risk. (3) Governments will need new skills in leadership, regulation, market research, contract design, oversight of outsourced providers, financial analysis, and alliance-building.

**Global Health Governance**

[Accessed 13 December 2014]

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

**The integration of water, sanitation and hygiene services into the US President’s Emergency Plan for AIDS Relief: A qualitative study**

Lyana B. Mahmoudia, Jennifer L. Plattb & Jay P. Grahamac*

DOI:10.1080/17441692.2014.966736

pages 1-14

**Abstract**

Water, sanitation and hygiene (WASH) interventions have been associated with improving the health of people living with HIV/AIDS (PLHIV). WASH is increasingly integrated into the HIV sector and is now considered a key component of the transition from an emergency response to a better incorporated and coordinated AIDS response. However, limited research exists on integration efforts. This qualitative research study aims to address the limited body of research on WASH integration into HIV programmes through examining the US President's Emergency Plan for AIDS Relief (PEPFAR). PEPFAR is the US government's initiative to combat AIDS in the most afflicted countries. This study analyses the perceptions of people who have worked or are working on WASH integration into PEPFAR, highlighting their views on accomplishments, challenges and areas for improvement. It concludes with recommendations for moving forward.

**Globalization and Health**

[Accessed 13 December 2014]

http://www.globalizationandhealth.com/

**Research**
**Integration of community home based care programmes within national primary health care revitalisation strategies in Ethiopia, Malawi, South-Africa and Zambia: a comparative assessment**

Aantjes C, Quinlan T and Bunders J Globalization and Health 2014, 10:85 (11 December 2014)

**Commentary**

**Non-Communicable Diseases (NCDs) in developing countries: a symposium report**


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**Health Affairs**

December 2014; Volume 33, Issue 12

[http://content.healthaffairs.org/content/current](http://content.healthaffairs.org/content/current)

**Children's Health**

**How A New Funding Model Will Shift Allocations From The Global Fund To Fight AIDS, Tuberculosis, And Malaria**

Victoria Y. Fan1,*, Amanda Glassman2 and Rachel L. Silverman3

**Author Affiliations**

1Victoria Y. Fan ([vfan@post.harvard.edu](mailto:vfan@post.harvard.edu)) is an assistant professor in the Department of Public Health Sciences and Epidemiology at the University of Hawaii at Manoa, in Honolulu, and a research fellow at the Center for Global Development, in Washington, D.C.

2Amanda Glassman is director of global health policy and senior fellow at the Center for Global Development.

3Rachel L. Silverman is a policy analyst at the Center for Global Development.

**Corresponding author**

**Abstract**

Policy makers deciding how to fund global health programs in low- and middle-income countries face important but difficult questions about how to allocate resources across countries. In this article we present a typology of three allocation methodologies to align allocations with priorities. We then apply our typology to the Global Fund to Fight AIDS, Tuberculosis, and Malaria. We examined the Global Fund’s historical HIV allocations and its predicted allocations under a new funding model that creates an explicit allocation methodology. We found that under the new funding model, substantial shifts in the Global Fund’s portfolio are likely to result from concentrating resources in countries with more HIV cases and lower per capita incomes. For example, South Africa, which had 15.8 percent of global HIV cases in 2009, could see its Global Fund HIV funding more than triple, from historic levels that averaged 3.0 percent to 9.7 percent of total Global Fund allocations. The new funding model methodology is expected, but not guaranteed, to improve the efficiency of Global Fund allocations in comparison to historical practice. We conclude with recommendations for the Global Fund and other global health donors to further develop their allocation methodologies and processes to improve efficiency and transparency.

**International Survey Of Older Adults Finds Shortcomings In Access, Coordination, And Patient-Centered Care**

Robin Osborn1,*, Donald Moulds2, David Squires3, Michelle M. Doty4 and Chloe Anderson5

**Author Affiliations**

1Robin Osborn ([ro@cmwf.org](mailto:ro@cmwf.org)) is vice president and director of the International Health Policy and Practice Innovations program at the Commonwealth Fund, in New York City.

2Donald Moulds is executive vice president for programs at the Commonwealth Fund.
Abstract
Industrialized nations face the common challenge of caring for aging populations, with rising rates of chronic disease and disability. Our 2014 computer-assisted telephone survey of the health and care experiences among 15,617 adults age sixty-five or older in Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States has found that US older adults were sicker than their counterparts abroad. Out-of-pocket expenses posed greater problems in the United States than elsewhere. Accessing primary care and avoiding the emergency department tended to be more difficult in the United States, Canada, and Sweden than in other surveyed countries. One-fifth or more of older adults reported receiving uncoordinated care in all countries except France. US respondents were among the most likely to have discussed health-promoting behaviors with a clinician, to have a chronic care plan tailored to their daily life, and to have engaged in end-of-life care planning. Finally, in half of the countries, one-fifth or more of chronically ill adults were caregivers themselves.
**Human Vaccines & Immunotherapeutics** (formerly Human Vaccines)
September 2014 Volume 10, Issue 8
http://www.landesbioscience.com/journals/vaccines/toc/volume/10/issue/9/
[Reviewed earlier]

**Infectious Agents and Cancer**
[Accessed 13 December 2014]
http://www.infectagentscancer.com/content
[No new relevant content]

**Infectious Diseases of Poverty**
[Accessed 13 December 2014]
http://www.idpjournal.com/content
[No new relevant content]

**International Health**
Volume 6 Issue 4 December 2014
http://inthealth.oxfordjournals.org/content/6/3.toc
[Reviewed earlier]

**International Journal of Epidemiology**
Volume 43 Issue 5 October 2014
http://ije.oxfordjournals.org/content/current
[Reviewed earlier]

**International Journal of Infectious Diseases**
Volume 29, p1 December 2014
http://www.ijidonline.com/current
[Reviewed earlier]

**JAMA**
December 10, 2014, Vol 312, No. 22
http://jama.jamanetwork.com/issue.aspx
[New issue; No relevant content]

**JAMA Pediatrics**
December 2014, Vol 168, No. 12
http://archpedi.jamanetwork.com/issue.aspx
[Reviewed earlier]
Journal of Community Health
Volume 39, Issue 6, December 2014
http://link.springer.com/journal/10900/39/6/page/1
[Reviewed earlier]

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December 2014, Volume 68, Issue 12
http://jech.bmj.com/content/current
[Reviewed earlier]

Journal of Global Ethics
Volume 10, Issue 2, 2014
http://www.tandfonline.com/toc/rjge20/.U2V-Elf4L0l#.VAJEj2N4WF8
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_unserserved/toc/hpu.2
5.4.html
[Reviewed earlier]

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

Journal of Immigrant and Minority Health
Volume 16, Issue 6, December 2014
http://link.springer.com/journal/10903/16/6/page/1
Special Issue Focus: Mental Health and Wellness
[Reviewed earlier]

Journal of Immigrant & Refugee Studies
Volume 12, Issue 4, 2014
Special Issue: New Forms of Intolerance in European Political Life
[Reviewed earlier]

**Journal of Infectious Diseases**
Volume 210 Issue 12 December 15, 2014
http://jid.oxfordjournals.org/content/current
[Reviewed earlier]

**The Journal of Law, Medicine & Ethics**
Fall 2014 Volume 42, Issue 3 Pages 280–401
*Special Issue: SYMPOSIUM: Concussions and Sports*
[Reviewed earlier]

**Journal of Medical Ethics**
December 2014, Volume 40, Issue 12
http://jme.bmj.com/content/current
[Reviewed earlier]

**Journal of Medical Internet Research**
Vol 16, No 12 (2014): December
http://www.jmir.org/2014/12
[Reviewed earlier]

**Journal of Medical Microbiology**
December 2014; 63 (Pt 12)
http://jmm.sgmjournals.org/content/current
[Reviewed earlier]

**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**
Volume 165, Issue 6, p1073-1280 December 2014
http://www.jpeds.com/current
[Reviewed earlier]
Universal health coverage post-2015: putting people first

Dec 12, 2014 marks the world's first Universal Health Coverage (UHC) Day. Defined in the World Health Report 2010, UHC means that all people who need quality, essential health services (prevention, promotion, treatment, rehabilitation, and palliation) receive them without enduring financial hardship. UHC also means different things to different people. Vivian Lin, health systems director (WHO regional office for the Western Pacific), told The Lancet, “some define UHC as a journey or an aspiration but it is actually a strategy to get to equitable and sustainable outcomes”.

Meningococcal carriage: the dilemma of 4CMenB vaccine

The prevalence of acute bacterial meningitis and septicaemia due to Haemophilus influenzae b (Hib), Streptococcus pneumoniae, and Neisseria meningitidis has greatly decreased in Europe and North America since the successful introduction of capsular polysaccharide conjugate vaccines targeting Hib, serogroup C (and ACWY in the USA) meningococci, and S pneumoniae. Incidence of meningitis due to N meningitidis serogroup A has also decreased in sub-Saharan Africa since the introduction of the meningococcal serogroup A conjugate vaccine (MenAfriVac).

Ebola and human rights in west Africa

The prevalence of acute bacterial meningitis and septicaemia due to Haemophilus influenzae b (Hib), Streptococcus pneumoniae, and Neisseria meningitidis has greatly decreased in Europe and North America since the successful introduction of capsular polysaccharide conjugate vaccines targeting Hib, serogroup C (and ACWY in the USA) meningococci, and S pneumoniae. Incidence of meningitis due to N meningitidis serogroup A has also decreased in sub-Saharan Africa since the introduction of the meningococcal serogroup A conjugate vaccine (MenAfriVac).
Published Online: 19 September 2014
DOI: http://dx.doi.org/10.1016/S0140-6736(14)61412-4

Summary
The fear caused by the Ebola outbreak in west Africa, which is projected to infect some 20,000 people, is understandable. However, the disproportionate measures recently adopted in some of the affected countries are a cause for concern. Some 25 years ago, Jonathan Mann, then Director of WHO's Global Programme on AIDS, warned world leaders alarmed at the relentless spread of HIV:

Comment
Offline: Making it happen for women and girls
Richard Horton
DOI: http://dx.doi.org/10.1016/S0140-6736(14)62046-8

Summary
It was not a matter of forgetting. “There were forces within the UN that didn't want to include contraception.” Dr Babatunde Osotimehin is the Executive Director of the United Nations Population Fund (UNFPA) and doesn't mince his words. He was speaking last week at the launch of the Guttmacher Institute's signature report, Adding It Up. Sexual and reproductive health and rights were “deliberately” dropped by the UN back in 2000, he argued. Those forces are still active today. And they are “more nimble in pushing back”.

Articles
Effect of a quadrivalent meningococcal ACWY glycoconjugate or a serogroup B meningococcal vaccine on meningococcal carriage: an observer-blind, phase 3 randomised clinical trial
Prof Robert C Read, MD, David Baxter, PhD, David R Chadwick, PhD, Prof Saul N Faust, FRCPH, Prof Adam Finn, PhD, Prof Stephen B Gordon, MD, Prof Paul T Heath, FRCPCH, Prof David J M Lewis, MD, Prof Andrew J Pollard, PhD, David P J Turner, PhD, Rohit Bazaz, MD Amitava Ganguli, MRCP, Tom Havelock, MRCP, Prof Keith R Neal, MD, Ifeanyichukwu O Okike, MD, Begonia Morales-Aza, BSc, Kamlesh Patel, BSc, Matthew D Snape, MD, John Williams, MRCP, Stefanie Gilchrist, MSc, Steve J Gray, PhD, Prof Martin C J Maiden, PhD, Daniela Toneatto, MD, Huajun Wang, MSc, Maggie McCarthy, MPH, Peter M Dull, MD, Prof Ray Borrow, PhD
Published Online: 18 August 2014
DOI: http://dx.doi.org/10.1016/S0140-6736(14)60842-4

Summary
Background
Meningococcal conjugate vaccines protect individuals directly, but can also confer herd protection by interrupting carriage transmission. We assessed the effects of meningococcal quadrivalent glycoconjugate (MenACWY-CRM) or serogroup B (4CMenB) vaccination on meningococcal carriage rates in 18–24-year-olds.

Methods
In this phase 3, observer-blind, randomised controlled trial, university students aged 18–24 years from ten sites in England were randomly assigned (1:1:1, block size of three) to receive two doses 1 month apart of Japanese Encephalitis vaccine (controls), 4CMenB, or one dose of MenACWY-CRM then placebo. Participants were randomised with a validated computer-generated random allocation list. Participants and outcome-assessors were masked to the treatment group. Meningococci were isolated from oropharyngeal swabs collected before vaccination and at five scheduled intervals over 1 year. Primary outcomes were cross-sectional carriage 1 month after each vaccine course. Secondary outcomes included comparisons of carriage at any timepoint after primary analysis until study termination. Reactogenicity and
adverse events were monitored throughout the study. Analysis was done on the modified intention-to-treat population, which included all enrolled participants who received a study vaccination and provided at least one assessable swab after baseline. This trial is registered with ClinicalTrials.gov, registration number NCT01214850.

Findings
Between Sept 21 and Dec 21, 2010, 2954 participants were randomly assigned (987 assigned to control [984 analysed], 979 assigned to 4CMenB [974 analysed], 988 assigned to MenACWY-CRM [983 analysed]); 33% of the 4CMenB group, 34% of the MenACWY-CRM group, and 31% of the control group were positive for meningococcal carriage at study entry. By 1 month, there was no significant difference in carriage between controls and 4CMenB (odds ratio 1·2, 95% CI 0·8–1·7) or MenACWY-CRM (0·9, [0·6–1·3]) groups. From 3 months after dose two, 4CMenB vaccination resulted in significantly lower carriage of any meningococcal strain (18·2% [95% CI 3·4–30·8] carriage reduction), capsular groups BCWY (26·6% [10·5–39·9] carriage reduction), capsular groups CWY (29·6% [8·1–46·0] carriage reduction), and serogroups CWY (28·5% [2·8–47·5] carriage reduction) compared with control vaccination. Significantly lower carriage rates were also noted in the MenACWY-CRM group compared with controls: 39·0% (95% CI 17·3–55·0) carriage reduction for serogroup Y and 36·2% (15·6–51·7) carriage reduction for serogroup CWY. Study vaccines were generally well tolerated, with increased rates of transient local injection pain and myalgia in the 4CMenB group. No safety concerns were identified.

Interpretation
Although we detected no significant difference between groups at 1 month after vaccine course, MenACWY-CRM and 4CMenB vaccines reduced meningococcal carriage rates during 12 months after vaccination and therefore might affect transmission when widely implemented.

Funding
Novartis Vaccines.

The Lancet Global Health
Dec 2014 Volume 2 Number 12 e672 – 736
http://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

The Lancet Infectious Diseases
Dec 2014 Volume 14 Number 12 p1163 – 1292
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Maternal and Child Health Journal
Volume 18, Issue 10, December 2014
http://link.springer.com/journal/10995/18/10/page/1
Special Issue: Island Maternal and Child Health
[Reviewed earlier]

Medical Decision Making (MDM)
November 2014; 34 (8)
The Milbank Quarterly  
*A Multidisciplinary Journal of Population Health and Health Policy*  
September 2014 Volume 92, Issue 3 Pages 407–631  
[Reviewed earlier]

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Volume 516 Number 7530 pp143-282 11 December 2014  
[http://www.nature.com/nature/current_issue.html](http://www.nature.com/nature/current_issue.html)  
[New issue; No relevant content]

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December 2014, Volume 20 No 12 pp1355-1492  
[http://www.nature.com/nm/journal/v20/n12/index.html](http://www.nature.com/nm/journal/v20/n12/index.html)  
[Reviewed earlier]

Nature Reviews Immunology  
December 2014 Vol 14 No 12  
[http://www.nature.com/nri/journal/v14/n12/index.html](http://www.nature.com/nri/journal/v14/n12/index.html)  
[Reviewed earlier]

New England Journal of Medicine  
December 11, 2014 Vol. 371 No. 24  
*Perspective*  
**Ebola Vaccine — An Urgent International Priority**  
Rupa Kanapathipillai, M.D., Ana Maria Henao Restrepo, M.D., Patricia Fast, M.D., Ph.D., David Wood, Ph.D., Christopher Dye, D.Phil., Marie-Paule Kieny, Ph.D., and Vasee Moorthy, B.M., B.Ch., Ph.D.  
DOI: 10.1056/NEJMp1412166  
This article was published on October 7, 2014, at NEJM.org.

The Pediatric Infectious Disease Journal  
[http://journals.lww.com/pidj/pages/currenttoc.aspx](http://journals.lww.com/pidj/pages/currenttoc.aspx)  
[Reviewed earlier]
Assessment of the Risk of Ebola Importation to Australia

December 10, 2014 · Research

Objectives:
To assess the risk of Ebola importation to Australia during the first six months of 2015, based upon the current outbreak in West Africa.

Methodology:
We assessed the risk under two distinct scenarios: (i) assuming that significant numbers of cases of Ebola remain confined to Guinea, Liberia and Sierra Leone, and using historic passenger arrival data into Australia; and, (ii) assuming potential secondary spread based upon international flight data. A model appropriate to each scenario is developed, and parameterised using passenger arrival card or international flight data, and World Health Organisation case data from West Africa. These models were constructed based on WHO Ebola outbreak data as at 17 October 2014 and 3 December 2014. An assessment of the risk under each scenario is reported. On 27 October 2014 the Australian Government announced a policy change, that visas from affected countries would be refused/cancelled, and the predicted effect of this policy change is reported.

Results:
The current probability of at least one case entering Australia by 1 July 2015, having travelled directly from West Africa with historic passenger arrival rates into Australia, is 0.34. Under the new Australian Government policy of restricting visas from affected countries (as of 27 October 2014), the probability of at least one case entering Australia by 1 July 2015 is reduced to 0.16. The probability of at least one case entering Australia by 1 July 2015 via an outbreak from a secondary source country is approximately 0.12.

Conclusions:
Our models suggest that if the transmission of Ebola remains unchanged, it is possible that a case will enter Australia within the first six months of 2015, either directly from West Africa (even when current visa restrictions are considered), or via secondary outbreaks elsewhere.
Government and medical authorities should be prepared to respond to this eventuality. Control measures within West Africa over recent months have contributed to a reduction in projected risk of a case entering Australia. A significant further reduction of the rate at which Ebola is proliferating in West Africa, and control of the disease if and when it proliferates elsewhere, will continue to result in substantially lower risk of the disease entering Australia.

**PLoS Medicine**
(Accessed 13 December 2014)
http://www.plosmedicine.org/
Open Access
Policy Forum
*From Joint Thinking to Joint Action: A Call to Action on Improving Water, Sanitation, and Hygiene for Maternal and Newborn Health*
Yael Velleman mail, Elizabeth Mason, Wendy Graham, Lenka Benova, Mickey Chopra, Oona M. R. Campbell, Bruce Gordon, Sanjay Wijesekera, Sennen Hounton, Joanna Esteves Mills, Val Curtis, Kaosar Afsana, Sophie Boisson, [ ... ], Oliver Cumming , [ view all ]
Published: December 12, 2014
DOI: 10.1371/journal.pmed.1001771

**Summary Points**
:: There is sufficient evidence that water, sanitation, and hygiene (WASH) may impact maternal and newborn health (MNH) to warrant greater attention from all stakeholders involved in improving MNH and achieving universal WASH access.
:: Enabling stronger integration between the WASH and health sectors has the potential to accelerate progress on MNH; this should be accompanied by improving monitoring of WASH in health care facilities providing MNH services as part of routine national-level monitoring, and at the global level through international instruments.
:: Global and national efforts to reduce maternal and newborn mortality and morbidity should adequately reflect WASH as a pre-requisite for ensuring the quality, effectiveness, and use of health care services.
:: The Post-2015 development framework is an opportunity for a stronger, more inter-sectoral response to the MNH challenge, and the goals and targets aimed at maximizing healthy lives and increasing access to quality health care should adequately embed WASH targets and success indicators.
:: Further implementation research is needed to identify effective interventions to improve WASH at home and in health care facilities, and to impact on MNH in different health system contexts.

**PLoS Neglected Tropical Diseases**
http://www.plosntds.org/
(Accessed 13 December 2014)
*Global Programme to Eliminate Lymphatic Filariasis: The Processes Underlying Programme Success*
Kazuyo Ichimori, Jonathan D. King, Dirk Engels, Aya Yajima, Alexei Mikhailov, Patrick Lammie, Eric A. Ottesen
Policy Platform | published 11 Dec 2014 | PLOS Neglected Tropical Diseases
10.1371/journal.pntd.0003328
**Research Article**

**The Link between Inequality and Population Health in Low and Middle Income Countries: Policy Myth or Social Reality?**

Ioana van Deurzen mail, Wim van Oorschot, Erik van Ingen  
Published: December 11, 2014  
DOI: 10.1371/journal.pone.0115109

**Abstract**

An influential policy idea states that reducing inequality is beneficial for improving health in the low and middle income countries (LMICs). Our study provides an empirical test of this idea: we utilized data collected by the Demographic and Health Surveys between 2000 and 2011 in as much as 52 LMICs, and we examined the relationship between household wealth inequality and two health outcomes: anemia status (of the children and their mothers) and the women' experience of child mortality. Based on multi-level analyses, we found that higher levels of household wealth inequality related to worse health, but this effect was strongly reduced when we took into account the level of individuals' wealth. However, even after accounting for the differences between individuals in terms of household wealth and other characteristics, in those LMICs with higher household wealth inequality more women experienced child mortality and more children were tested with anemia. This effect was partially mediated by the country's level and coverage of the health services and infrastructure. Furthermore, we found higher inequality to be related to a larger health gap between the poor and the rich in only one of the three examined samples. We conclude that an effective way to improve the health in the LMICs is to increase the wealth among the poor, which in turn also would lead to lower overall inequality and potential investments in public health infrastructure and services.

**An Outbreak of Type Π Vaccine-Derived Poliovirus in Sichuan Province, China: Emergence and Circulation in an Under-Immunized Population**

Hai-Bo Wang, Gang Fang, Wen-Zhou Yu, Fei Du, Chun-Xiang Fan, Qing-Lian Liu, Li-Xin Hao, Yu Liu, Jing-Shan Zheng, Zhi-Ying Qin, Wei Xia, Shi-Yue Zhang, Zun-Dong Yin, Qiong Jing, Yan-Xia Zhang, Rong-Na Huang, Ru-Wei Yang, Wen-Bin Tong, Qi Qi, Xu-Jing Guan, Yu-Lin Jing, Qian-Li Ma, Jin Wang, Xiao-Zhen Ma, Na Chen, Hong-Ru Zheng, Yin-Qiao Li, Chao Ma, Qi-Ru Su, Kathleen H. Reilly, Hui-Ming Luo, Xian-Ping Wu, Ning Wen, Wei-Zhong Yang  
Research Article | published 11 Dec 2014 | PLOS ONE 10.1371/journal.pone.0113880

**The Possible Impact of Vaccination for Seasonal Influenza on Emergence of Pandemic Influenza via Reassortment**

Xu-Sheng Zhang, Richard Pebody, Daniela De Angelis, Peter J. White, Andre Charlett, John W. McCauley  
Research Article | published 10 Dec 2014 | PLOS ONE 10.1371/journal.pone.0114637

**The Relationship between Influenza Vaccination Habits and Location of Vaccination**

Lori Uscher-Pines, Andrew Mulcahy, Jurgen Maurer, Katherine Harris  
Research Article | published 09 Dec 2014 | PLOS ONE 10.1371/journal.pone.0114863

**School-Located Influenza Vaccination Reduces Community Risk for Influenza and Influenza-Like Illness Emergency Care Visits**

Cuc H. Tran, Jonathan D. Sugimoto, Juliet R. C. Pulliam, Kathleen A. Ryan, Paul D. Myers, Joan B. Castleman, Randell Doty, Jackie Johnson, Jim Stringfellow, Nadia Kovacevich, Joe Brew, Lai Ling Cheung, Brad Caron, Gloria Lipori, Christopher A. Harle, Charles Alexander, Yang Yang, Ira M. Longini, M. Elizabeth Halloran, J. Glenn Morris, Parker A. Small
Research Article | published 09 Dec 2014 | PLOS ONE 10.1371/journal.pone.0114479
Socio-Psychological Factors Driving Adult Vaccination: A Qualitative Study
Ana Wheelock, Anam Parand, Bruno Rigole, Angus Thomson, Marisa Miraldo, Charles Vincent, Nick Sevdalis
Research Article | published 09 Dec 2014 | PLOS ONE 10.1371/journal.pone.0113503

PLoS Pathogens
http://journals.plos.org/plospathogens/
(Accessed 13 December 2014)
[No new relevant content]

PNAS - Proceedings of the National Academy of Sciences of the United States of America
(Accessed 13 December 2014)
http://www.pnas.org/content/early/
[No new relevant content]

Pneumonia
Vol 5 (2014)
Special Issue "Pneumonia Diagnosis"
[Reviewed earlier]

Public Health Ethics
Volume 7 Issue 3 November 2014
http://phe.oxfordjournals.org/content/current
Special Symposium on Dual Loyalties: Health Providers Working for the State
[Reviewed earlier]

Qualitative Health Research
December 2014; 24 (12)
http://qhr.sagepub.com/content/current
Special Issue: Concepts in Promoting Health
[Reviewed earlier]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
September 2014 Vol. 36, No. 3
[Reviewed earlier]
One of the main problems encountered thus far in the quest for an effective HIV-1 vaccine has been that injected immunogens—virus-derived proteins against which an immune response is sought—generally only elicit antibodies with a narrow breadth of HIV-1 neutralization (1). During chronic infection, however, ∼10 to 30% of individuals naturally develop highly efficient antibodies that can neutralize multiple HIV-1 viral strains. These broadly neutralizing antibodies (bNAbs) have provided a template for the design of immunogens aimed at eliciting similar antibodies upon vaccination. On page 1380 of this issue, McGuire et al. (2) show that immunogens derived from the viral envelope glycoprotein of HIV-1 preferentially activate B cells that produce only narrow neutralizing antibodies (nNAbs). This supersedes the activation of B cells that produce the desired bNAbs, when both are present in the same pool of cells and are exposed to the same immunogen, possibly explaining the inability of previous vaccine candidates to achieve protective immune responses. By modifying the immunogen, McGuire et al. show that this preferential activation can be reversed in favor of the desired B cells, offering exciting new promise for vaccine design.
Participation in medical research as a resource-seeking strategy in socio-economically vulnerable communities: call for research and action

Raffaella M. Ravinetto1,2,*, Muhammed O. Afolabi3,4, Joseph Okebe3,4, Jennifer Ilo Van uil5,6, Pascal Lutumba7,8, Hypolite Muhindo Mavoko8, Alain Nahum9, Halidou Tinto10, Adamu Addissie11, Umberto D'Alessandro3,4,12 and Koen Peeters Grietens12,13,14

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Abstract
The freedom to consent to participate in medical research is a complex subject, particularly in socio-economically vulnerable communities, where numerous factors may limit the efficacy of the informed consent process. Informal consultation among members of the Switching the Poles Clinical Research Network coming from various sub-Saharan African countries, that is Burkina Faso, The Gambia, Rwanda, Ethiopia, the Democratic Republic of Congo (DRC) and Benin, seems to support the hypothesis that in socio-economical vulnerable communities with inadequate access to health care, the decision to participate in research is often taken irrespectively of the contents of the informed consent interview, and it is largely driven by the opportunity to access free or better quality care and other indirect benefits. Populations' vulnerability due to poverty and/or social exclusion should obviously not lead to exclusion from medical research, which is most often crucially needed to address their health problems. Nonetheless, to reduce the possibility of exploitation, there is the need to further investigate the complex links between socio-economical vulnerability, access to health care and individual freedom to decide on participation in medical research. This needs bringing together clinical researchers, social scientists and bioethicists in transdisciplinary collaborative research efforts that require the collective input from researchers, research sponsors and funders.
**Toward a Functional Definition of a “Rare Disease” for Regulatory Authorities and Funding Agencies**

Joe T.R. Clarke, MD, PhD, Doug Coyle, PhD, Gerald Evans, MD, Janet Martin, PharmD, Eric Winquist, MD, MSc  
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DOI: [http://dx.doi.org/10.1016/j.jval.2014.08.2672](http://dx.doi.org/10.1016/j.jval.2014.08.2672)

**Abstract**

**Background**  
The designation of a disease as “rare” is associated with some substantial benefits for companies involved in new drug development, including expedited review by regulatory authorities and relaxed criteria for reimbursement. How “rare disease” is defined therefore has major financial implications, both for pharmaceutical companies and for insurers or public drug reimbursement programs. All existing definitions are based, somewhat arbitrarily, on disease incidence or prevalence.

**Objectives**  
What is proposed here is a functional definition of rare based on an assessment of the feasibility of measuring the efficacy of a new treatment in conventional randomized controlled trials, to inform regulatory authorities and funding agencies charged with assessing new therapies being considered for public funding.

**Methods**  
It involves a five-step process, involving significant negotiations between patient advocacy groups, pharmaceutical companies, physicians, and public drug reimbursement programs, designed to establish the feasibility of carrying out a randomized controlled trial with sufficient statistical power to show a clinically significant treatment effect.

**Results and Conclusions**  
The steps are as follows: 1) identification of a specific disease, including appropriate genetic definition; 2) identification of clinically relevant outcomes to evaluate efficacy; 3) establishment of the inherent variability of measurements of clinically relevant outcomes; 4) calculation of the sample size required to assess the efficacy of a new treatment with acceptable statistical power; and 5) estimation of the difficulty of recruiting an adequate sample size given the estimated prevalence or incidence of the disorder in the population and the inclusion criteria to be used.
Historically, vaccines have been designed to mimic the immunity induced by natural exposure to the target pathogen, but this approach has not been effective for any parasitic pathogens of humans or complex pathogens that cause chronic disease in humans, such as Plasmodium. Despite intense efforts by many laboratories around the world on different aspects of Plasmodium spp. molecular and cell biology, epidemiology and immunology, progress towards the goal of an effective malaria vaccine has been disappointing. The premise of rational vaccine design is to induce the desired immune response against the key pathogen antigens or epitopes targeted by protective immune responses. We advocate that development of an optimally efficacious malaria vaccine will need to improve on nature, and that this can be accomplished by rational vaccine design facilitated by mining genomic, proteomic and transcriptomic datasets in the context of relevant biological function. In our opinion, modern genome-based rational vaccine design offers enormous potential above and beyond that of whole-organism vaccines approaches established over 200 years ago where immunity is likely suboptimal due to the many genetic and immunological host-parasite adaptations evolved to allow the Plasmodium parasite to coexist in the human host, and which are associated with logistic and regulatory hurdles for production and delivery.

**Journal of Racial and Ethnic Health Disparities**
December 2014
http://link.springer.com/journal/40615

**Racial/Ethnic Disparities in HPV Vaccine Uptake Among a Sample of College Women**
Chukwuemeka Okafor, Xingdi Hu, Robert L Cook

**Abstract**

Objective
The aim of this study is to determine the association between racial/ethnic status and uptake and completion of the HPV vaccine series in college women.

Methods
Participants were recruited from a large university in North Central Florida. Young women between 18 and 26 years of age who were currently enrolled in a college course comprised the study sample. Participants completed an anonymous online survey that assessed sociodemographic characteristics, sexual behaviors, gynecological healthcare utilization, and perception of risk to HPV-associated diseases. Multivariable analysis was conducted to determine the relationship between racial/ethnic status and HPV vaccination status.

Results
Of the 835 with complete data (51.0 % white, 16.5 % black, 13.8 % Hispanic, 8.3 % Asian, and 9.9 % other), 53 % had initiated (receipt of at least one dose) the three-dose HPV vaccine series. Of those who initiated, 70 % indicated that they had completed all three doses. In adjusted analysis, blacks were significantly less likely to report initiation [adjusted prevalence ratio (aPR) = 0.78; 95 % confidence interval (CI), 0.63, 0.97] and completion (aPR = 0.64; 95 % CI: 0.48, 0.84) of the three dose HPV vaccine as compared to whites. Although
completion rates were lower in all other racial/ethnic groups as compared to whites, these rates did not reach statistical significance.

Conclusions
These findings are consistent with research from other types of settings and demonstrate lower initiation and completion rates of HPV vaccine among black women attending college as compared to their white counterparts. Additional research is needed to understand why black college women have low initiation and completion rates.

Special Focus Newsletters
MVI Update - PATH Malaria Vaccine Initiative
December 2014
:: Greetings from the director
:: Japan’s GHIT Fund announces award to MVI
:: Biting back? Immunize mosquitoes
:: RTS,S submitted to European regulatory authority
:: Direct Membrane-Feeding Assay Workshop
:: Interview with Rick King, MVI R&D Director

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

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

Al Jazeera
http://www.aljazeera.com/Services/Search/?q=vaccine
Accessed 13 December 2014
[No new, unique, relevant content]

AP (Associated Press)
http://hosted.ap.org/dynamic/fronts/HOME?SITE=AP
Accessed 13 December 2014
California battles whooping cough epidemic
SAN DIEGO (AP) — California officials are battling the worst whooping cough epidemic to hit the state in seven decades as a recent rebound in...
By: JULIE WATSON — Dec. 12, 2014 12:12 AM EST

The Atlantic
http://www.theatlantic.com/magazine/
Sierra Leone bans Christmas and New Year gatherings over Ebola risk
Freetown residents will be barred from joining their extended families in rural areas, in move to be enforced by the army

Sarah Boseley in Freetown
Saturday 13 December 2014 07.26 EST

Christmas and New Year gatherings have been banned by the government throughout Sierra Leone for fear the Ebola virus will be spread to rural villages as people go home to celebrate.

The edict, which will be enforced by the army, means those who live in the capital, Freetown, will be barred from travelling to join their extended families. The city’s residents account for a third of the country’s population. A “lock-down” is reported to also be happening in nearby Port Loko, which is the other big urban area with soaring cases.

Palo Conteh, the minister of defence who heads the government’s Ebola response unit, said on Friday there would be “no Christmas and New Year celebrations this year. We will ensure that everybody remains at home to reflect on Ebola.

“Military personnel will be on the streets at Christmas and the New Year to stop any street celebrations.”

More than a quarter of the population of Sierra Leone is Christian, although Islam is the dominant religion. Christmas decorations are for sale at the roadside markets and there are Christmas trees in many public buildings.

But there have been serious concerns that the number of Ebola cases could soar over the festive period. Public gatherings are already banned to avoid contagion.

Schools are closed across the three west African countries where the epidemic is raging – Sierra Leone, Liberia and Guinea – disrupting the education of five million children. Bars and clubs are closed. Football games are among the sports caught up in the ban. Churches have been allowed to hold services, but must separate the members of the congregation.

Travel is already greatly restricted in Sierra Leone by night-time curfews enforced by army checkpoints. Many villages and even whole districts where Ebola cases have occurred are quarantined for 21 days – by which time anybody infected would show symptoms. Some villages have been quarantined for months as one case occurs a couple of weeks after another...

The Huffington Post
http://www.huffingtonpost.com/
Accessed 13 December 2014
[No new, unique, relevant content]

Le Monde
Accessed 13 December 2014
http://www.lemonde.fr/
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 13 December 2014
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 13 December 2014
Health Commissioner: Flu prevalent in New York
12 December 2014 - ALBANY, N.Y. — New York's acting health commissioner has declared influenza "prevalent" in the state, and says health care workers who aren't vaccinated must wear masks around patients.

HPV Vaccine Does Not Increase Risky Sexual Behavior: Study
12/09/14
A new study says there is no reason to worry that an HPV vaccine will lead to risky sexual behavior.

UNMEER External Situation Reports
UNMEER External Situation Reports are issued daily (excepting Saturday) with content organized under these headings:
- Highlights
- 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.
Key Political and Economic Developments

1. UN Secretary-General Ban Ki-moon yesterday announced the appointment of Ismail Ould Cheikh Ahmed of Mauritania as his new Special Representative and Head of UNMEER. Mr. Ould Cheikh Ahmed will succeed Anthony Banbury, who will return to New York in early January 2015. The Secretary-General expressed his gratitude to Mr. Banbury for his vision and leadership of UNMEER, and for his commitment to fighting this unprecedented EVD outbreak. Bringing more than 28 years of development and humanitarian assistance experience with the United Nations in Africa, the Middle East and Eastern Europe, Mr. Ould Cheikh Ahmed is currently Deputy Special Representative of the Secretary-General and Deputy Head of the United Nations Support Mission in Libya (UNSMIL), United Nations Resident Coordinator, Humanitarian Coordinator and United Nations Development Programme (UNDP) Resident Representative. He served as Resident Coordinator, Humanitarian Coordinator and UNDP Resident Representative in Syria (2008-2012) and Yemen (2012-2014).

2. The Red Cross warned on Thursday of a possible rise in the rate of EVD infections in West Africa as people travel across the region during the festive holidays. Urging people to take extra care to limit the spread of the virus, International Federation of the Red Cross and Red Crescent Societies (IFRC) Secretary General Elhadj As Sy said increasing rates were not inevitable but were a real risk. "Now is the time to be even more vigilant," he told an audience at the Royal Institute of International Affairs in London. "We all welcome the plateauing and the signs of declines we are seeing in some places, but that should not be a reason for complacency."

Response Efforts and Health

5. The Liberian Ministry of Health and Social Welfare (MOHSW) and UNDP visited eleven out of the fifteen counties to verify, and in some cases create, lists of Ebola response workers that are still to be paid. The MOHSW committed to paying eight of the counties this week for three months back-dated pay, though payments are yet to be verified with the Ministry of Finance. Challenges to making payments continue to emerge, including that in several counties individuals refuse to open bank accounts because they have never had bank accounts before and are not comfortable opening one for the first time.

Resource Mobilisation

11. Saudi Arabia’s King Abdullah has granted US$ 35 million to fight EVD, the Islamic Development Bank said Thursday. The grant will provide schools and airports in West Africa with heat sensors and medical equipment to help prevent and treat the illness, Ahmed Mohamed Ali, president of the Jeddah-based IDB, said in a statement. The funds will also help to establish specialized treatment centers in the most affected countries -- Sierra Leone, Guinea and Liberia.

12. The OCHA Ebola Virus Outbreak Overview of Needs and Requirements, now totaling US$ 1.5 billion, has been funded for $ 1.05 billion, which is around 70 percent of the total ask.

13. The Ebola Response Multi-Partner Trust Fund currently has US$ 108.2 million in commitments. In total $ 131 million has been pledged.

Outreach and Education

15. According to WHO, on 9 December there were a total of 21 sub-prefectures across Guinea where EVD response efforts are facing community resistance. These sub-prefectures are located in the three main areas affected by the epidemic: the Forest Region; central-northern Guinea and Conakry and adjacent prefectures. Resistance is often due to insufficient sensitization, lack of trust stemming from the non-delivery on promises by EVD responders (such as ambulance transportation or kit distribution) and the fact that many patients admitted to the ETCs are not surviving. The National Ebola Response Cell (NERC), with UNMEER support, is taking action to resolve bottlenecks in the delivery of hygiene and supply kits and the
establishment of Community Watch Committees which are critical to stop transmission and lift resistance.

11 December 2014 | Key Political and Economic Developments

2. US magazine TIME has declared the Ebola fighters their “Person of the Year 2014”. In explaining its choice, the magazine noted: “The rest of the world can sleep at night because a group of men and women are willing to stand and fight. For tireless acts of courage and mercy, for buying the world time to boost its defenses, for risking, for persisting, for sacrificing and saving, the Ebola fighters are TIME’s 2014 Person of the Year.” The magazine also notes the importance of learning from this outbreak, to strengthen healthcare and response services and be better prepared in future.

Response Efforts and Health

4. Sierra Leonean authorities have imposed a two-week lockdown in Kono district, where a major EVD flare-up has gone largely unreported until now. Although rapid reaction has helped contain the virus to about half of the 15 chiefdoms in Kono, WHO teams that arrived in the area 10 days ago were taken aback at the situation they encountered. In the space of 11 days, two WHO teams buried 87 victims, including a nurse and an ambulance driver enlisted to help dispose of corpses piling up in the local hospital. 25 people had died in a hastily cordoned off section of the hospital in the five days before the team arrived. “We are only seeing the ears of the hippo,” said Dr. Amara Jambai, Sierra Leone's Director of Disease Prevention and Control, expressing concern that the official figures underrepresent the size of the outbreak in Kono district.

5. UNDP has completed 2 prison isolation units for incoming prisoners in Freetown, Sierra Leone. The two facilities will serve as observation centers for new inmates (male and female separately) in Freetown’s correctional centers, to help prevent an outbreak among the prison population. The units will open officially on Friday 12 December. Further, UNDP is scaling up a nationwide prison sensitization and equipment campaign to improve conditions and strengthen protection against the spread of EVD inside detention facilities.

10 December 2014 | Key Political and Economic Developments

1. The government of Liberia, with the support of UNMEER and regional participation from Sierra Leone, Guinea, Mali and Nigeria, organized a technical meeting on cross-border coordination on the prevention and control of EVD. In her opening statement, President Johnson Sirleaf emphasized the need to pool shared regional resources to counter EVD across the whole region. She also mentioned the cross-country coordination of specialized national institutions and the need for ease of access to resources available in border areas, as well as managing the porous borders. UNMEER SRSG Banbury stated the clear commitment of the UN to support the regional counter-EVD initiatives. A Strategic Framework for Cross-Border Collaboration on EVD Prevention and Control was elaborated at the meeting.

2. More foreign health workers are needed to help tackle the epidemic, which is spreading quickly in western Sierra Leone and deep in the forested interior of Guinea, Special Envoy Nabarro said in Geneva on Tuesday, adding that the outbreak is still flaming strongly in western Sierra Leone and some parts of the interior of Guinea. “We don't yet have the full number of functioning treatment centers and places where people who are ill can be kept away from others,” he said. Dr. Nabarro expressed confidence that there will be an improvement in Freetown in the next few weeks. The rise in the spread of EVD in western Sierra Leone reflects
the fact that tribal-led communities have yet to fully accept the outbreak and take action to avoid infection, he said.

3. EVD is still "running ahead" of efforts to contain it, WHO Director General Margaret Chan said, warning against complacency. The risk to the world "is always there" while the outbreak continues, Dr. Chan said. "It's not as bad as it was in September. But going forward we are now hunting the virus, chasing after the virus. Hopefully we can bring the number of cases down to zero." She said a key part of bringing the outbreak under control was ensuring communities understood EVD, as teams going into some areas were still facing resistance. Community participation is a critical success factor for EVD control, Dr. Chan said. "In all the outbreaks that WHO were able to manage successfully, that was a success element and this is not happening in this current situation."

Response Efforts and Health

6. Several doctors in Sierra Leone were on strike for a second day on Tuesday to demand better care for medical workers who catch EVD, after a spate of recent deaths. The doctors want assurances that they will have access to life saving equipment, like dialysis machines, if they become infected.

Outreach and Education

15. Yesterday, on Anti-Corruption Day, UNDP in collaboration with Liberia's Anti-Corruption Commission and the Carter Center set up public conversations on community radio stations in Bong, Lofa, Rural Montserrado and Nimba counties regarding how EVD response funds are used locally. County task forces collected and shared data for the wider public on who the donors are, how much they are funding, what activities and equipment they are contributing to, and which groups are being targeted. Community members made suggestions on existing gaps and possible priorities. To encourage people to listen to the shows in remote areas, 1,200 solar radios manufactured by South Africa based NGO Lifeline Energy were distributed across the four counties. UNDP plans to scale up the initiative and distribute another 3,000 radios targeting patients in ETUs, survivors and others.

9 December 2014 | Response Efforts and Health

4. Yesterday UNMEER received 20,000 sets of Personal Protective Equipment (PPE) from the Japan Disaster Relief Team. This is the first batch of 700,000 sets of PPEs committed by the government of Japan to UNMEER to help provide critical protection to healthcare workers in Guinea, Liberia, Sierra Leone and Mali. At the official handover ceremony in Accra, SRSG Banbury thanked the government of Japan and stressed the need for continued contributions from partners around the world to keep up the fight against EVD.

6. Community resistance increased in the past week in certain areas of Guinea, even leading to violent actions by local communities against EVD responders -- including a UNICEF contractor. At the same time, resistance has been overcome in other areas.

Essential Services

17. Two EVD-waste management machines have arrived in Freetown, Sierra Leone. The machines will be installed in two EVD treatment facilities: in a military hospital in Freetown and the Hastings Treatment Centre in Waterloo. Two medical waste advisors and two machinists will ensure the machines are installed properly, work effectively, and that staff are trained on how to use them safely. The sterilizing machines, known as autoclaves, decontaminate and compress used medical equipment and waste through several cycles of high-pressure steam and vacuuming, allowing for their safe disposal. The machines are the first of their kind in any
8 December 2014 | Key Political and Economic Developments

1. Liberia's Supreme Court on Sunday lifted a government order suspending campaigning in and around the capital for next week's senate election, imposed on the grounds that campaigning risks spreading EVD. President Ellen Johnson Sirleaf's government imposed the executive order last week, banning the holding of political rallies in Montserrado County, which includes the capital. It was contested by her son, Robert Sirleaf, who is running as an independent candidate for the senate. He had appealed for a temporary lifting of the ban, arguing that to stop campaigning in just one part of the country is discriminatory. The court will hear a petition on Monday by some political parties, civil society groups and others to postpone national senate polls until EVD is defeated.

2. The National Coordinator of Guinea's National Ebola Response Cell (NERC) informed UNMEER that, on instructions from President Condé, a number of cabinet ministers left for the field to meet with local authorities and the population in sub-prefectures featuring community resistance. The ministers were instructed to sensitize and inform the population about the government’s response strategy, reinforce the authority of the prefectural EVD response coordinators, and ensure the swifter deployment of comités de veille (community watch committees), which President Condé has criticized as progressing too slowly. President Condé has also instructed the NERC and its pillar heads to start undertaking field missions from 8 December to show the government's resolve to intensify response efforts.

Human Rights

3. WHO informed that EVD contact tracing efforts had to be suspended in the village of Sanassia in Sanguiana sub-prefecture (Kouroussa prefecture, Guinea) as well as in the sub-prefecture of Watanga (Macenta prefecture) due to local community resistance, including alleged death threats against EVD response workers.

5. Around 20 United Nations peacekeepers placed under quarantine in Mali after they were potentially exposed to EVD more than three weeks ago have been released. The soldiers were being treated at a clinic in the capital Bamako for injuries sustained while serving in MINUSMA, when a nurse working at the facility died of EVD. The MINUSMA solders were then placed under quarantine, but have not presented symptoms of illness and have therefore been released. Mali has registered eight cases of EVD so far: 7 confirmed and 1 probable. 6 patients have died.

7. An UNMIL peacekeeper who contracted EVD has arrived in the Netherlands for treatment on Saturday. The Nigerian man was admitted to the University Medical Center in Utrecht. The Netherlands follows Germany, France and Switzerland in taking on EVD patients at the request of the World Health Organization.

Essential Services

19. UNICEF released essential drugs and supplies to three ngo partners to cover 40% of health facilities, as part of the restoration of essential health services effort in Liberia.
Support for this service is provided by its governing institutions – Department of Medical Ethics, NYU Medical School; The Wistar Institute Vaccine Center and the Children’s Hospital of Philadelphia Vaccine Education Center. Additional support is provided by the PATH Vaccine Development Program; the International Vaccine Institute (IVI); the Bill & Melinda Gates Foundation; industry resource members Janssen, Pfizer, and Sanofi Pasteur U.S. (list in formation), and the Developing Countries Vaccine Manufacturers Network (DCVMN).

Support is also provided by a growing list of individuals who use this membership service to support their roles in public health, clinical practice, government, NGOs and other international institutions, academia and research organizations, and industry.

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