Center for Vaccine Ethics and Policy
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**Vaccines and Global Health: The Week in Review**
**1 November 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/. This blog allows full-text searching of over 6,500 entries.*

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

**POLIO** [to 1 November 2014]
*Public Health Emergency of International Concern (PHEIC)*

**GPEI Update: Polio this week - *As of 22 October 2014***
Global Polio Eradication Initiative
*Editor's Excerpt and text bolding*
*Full report: http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx*
:: World Polio Week, which ran 23 to 29 October, provided an opportunity to recognize the progress made towards the global eradication of polio in 2014. This year is the first year with South East Asia certified as polio-free.
:: Jonas Salk, who developed the first polio vaccine in the 1950s, celebrated his 100th birthday on 28 October. Read more about the legacy of the polio vaccine here.

:: The Federation of Islamic Medical Associations launched a call to action [see below] this week to Muslim physicians across the world to join the urgent effort to protect all children from vaccine preventable diseases.
:: The Independent Monitoring Board has published its 10th report, following its meeting in early October. The report is available here. [see below]
::  At last week's meeting of the Strategic Advisory Group of Experts on Immunization (SAGE), the group reviewed the readiness criteria for type 2 OPV withdrawal globally, and concluded that preparations for such a withdrawal in early 2016 are on track. They recommended that Member States accelerate preparations and facilitate international coordination. More. [see below]

***Pakistan***

:: Ten new wild poliovirus type 1 (WPV1) cases were reported in the past week in Pakistan. Of these, 4 are from the Federally Administered Tribal Areas (FATA) (1 from North Waziristan, 1 from Frontier Region Bannu and 2 from Khyber Agency); 1 from Zhob district in Balochistan province, previously uninfected in 2014; 1 from Peshawar district of Khyber Pakhtunkhwa (KP) province; and 4 from Sindh province (1 from Khigadap, 2 from Khikorangi and 1 from Dadu, the latter 2 districts were previously uninfected in 2014). The most recent case had onset of paralysis on 1 October. This brings the total number of WPV1 cases in 2014 to 220 compared to 53 in 2013 by this date.
:: One new type 2 circulating vaccine-derived poliovirus (cVDPV2) case was reported in the past week. This case had onset of paralysis in Khyber Agency, FATA, on 16th September. The case brings the 2014 cVDPV2 country total to 20 .
:: Immunization activities are continuing with particular focus on known high-risk areas, in particular the newly opened areas of FATA. At exit and entry points of areas that are inaccessible during polio campaigns, 163 permanent vaccination points are being used to reach internally displaced families as they move in and out of the inaccessible area.

**Independent Monitoring Board of the Global Polio Eradication Initiative - 10th Report – October 2014**

36 pages :: pdf - http://www.polioeradication.org/Portals/0/Document/Aboutus/Governance/IMB/11IMBMeeting/11IMB_Report_EN.pdf

*The Independent Monitoring Board provides an independent assessment of the progress being made by the Global Polio Eradication Initiative in the detection and interruption of polio transmission globally. This tenth report follows our eleventh meeting, held in London from 30 September to 2 October 2014*

**Conclusions and Recommendations,** pp 35-36

*[Full text; Editor's text bolding]*

***The programme will certainly not achieve its end-2014 target of stopping global polio transmission. This is not the first time that a major target has been missed, and this failure will not be welcome news.***

The IMB is adamant that the programme should not be stung by this failure into looking to the comfort zone of a single short-term priority – reaching for a polio-free Africa. Global polio incidence cannot be allowed to move further out of control because Pakistan and the many countries with low levels of immunity are put on the programme's back burner. Three priorities must be pursued with equal tenacity. The great prize of clearing polio out of Africa in the next six months is achievable but still is enormously challenging. The work to achieve this must go hand in hand with securing a sharp downturn in cases of polio in Pakistan over the same time

period, as well as a surge in levels of immunity everywhere that the polio virus could seek a fresh mandate to kill and to paralyse.

**Pakistan's polio programme is a disaster**. It continues to flounder hopelessly, as its virus flourishes. Home to 80% of the world's polio cases in 2014, and with a programme that is incomparably weak, Pakistan is the major stumbling block to global polio eradication. To claim that this low-transmission season will be its last has no basis in reality. The country, supported by its neighbours, needs to change its polio eradication programme drastically, urgently, and transformatively.

The government of Pakistan has a decision to make. A determined effort now – led by the National Disaster Management Authority – could stop polio in Pakistan, and so in the region. If the programme simply continues as it is, Pakistan is very likely to be the polio virus' last home on earth, with the entire global community spending huge sums of money simply to keep Pakistan polio virus out of their countries.

**Strong progress in Nigeria creates, for the first time, the possibility of a polio-free Africa.** There is a mood of excitement within the programme that this is already a 'done deal'. This concerns the IMB. Nothing could be further from the truth. The achievement of this goal, both in Nigeria and in wider Africa, is beset with complexity and risk. Nigeria must not celebrate victory before it is earned. It cannot claim that polio transmission is interrupted until vaccine-derived polio and wild polio virus are both gone from the whole country. The road to polio-free certification will be a rocky one. As India has found, keeping polio out requires a programme hitting sustained levels of excellence. This is what the Nigeria programme must strive for if the gains of the last year are not to be lost.

A polio-free Africa requires the programme to fire on all cylinders simultaneously. It requires every part of Africa – some with recent polio cases, some with low levels of immunity, some affected or threatened by Ebola – to be made and kept polio-free.

**In Africa, our greatest concern lies with Cameroon, Equatorial Guinea, and the wider Central Africa sub-region.** Neither government is giving polio the priority response that it deserves. Polio is just waiting to spill across the border into Central African Republic and Gabon, if it has not done so already. The WHO African Regional Office failed to mount a strong sub-regional outbreak response, and is now (understandably) impeded in doing so by its need to focus on Ebola.

**Though it is about to miss another deadline, the global programme has made some progress.** The job of eradicating polio must be seen through. The progress has particularly come from innovation. It is vital that the programme recognizes and embraces this fact. Too many times, the programme has achieved progress through innovation, only to then seemingly forget its importance and believe that it now has all of the answers. It does not. Open minds are needed to persuade those of a hardened vertical programme pedigree that routine immunisation must be allowed to sweep in and shape the polio programme in the time ahead.

Windows of opportunity often become apparent only in retrospect. One closed when Pakistani vaccinators started to be attacked in December 2012, for example. The programme had got close to stopping polio transmission, but missed the chance to do so in time. Similarly, all are now wishing that Central Africa had properly dealt with polio before Ebola emerged and complicated matters substantially. Both examples illustrate that the programme must act when it has an opportunity to do so. The polio programme operates in a complex, ever-changing world. The virus' distribution changes, as do the political and security situations where it lives. Nobody knows what is round the corner.

**Both Africa and Pakistan now have a window of opportunity.** In Pakistan, there is no longer a group of children in North Waziristan that the government cannot access. In Africa, there has never been less polio virus. In neither place is the situation easy, but it is probably as good as it is going to get, and may well get worse not better. It is absolutely vital that both opportunities are seized.

**This is the moment for transformative action, not iterative year-by-year improvement**. The World Health Assembly has declared polio eradication a programmatic emergency for global public health. WHO has declared polio's spread a Public Health Emergency of International Concern. At the end of 2014, the programme will miss yet another target. It has to be the last time and the IMB's recommendations reflect this vital moment in history.

**The IMB recommends:**

:: That the Prime Minister and Cabinet of Pakistan order the National Disaster Management Authority to take on the task of stopping polio in Pakistan, with immediate effect.

:: That the plan for Pakistan's Emergency Operations Center be strengthened, to provide intelligence and coordination functions in support of the National Disaster Management Authority's work. If there is delay in adopting the National Disaster Management Authority recommendation, the EOC should be strengthened to have the capacity and power that they need to run a programme truly set on eradication.

:: A special meeting of the Independent Monitoring Board in early 2015 with those who will lead the eradication of polio from Pakistan, at federal level, in each province and in FATA. It is to be hoped that the government of the United Arab Emirates might play an important part in such a meeting.

:: That the World Health Organization headquarters take over the management of the Central Africa outbreak from the World Health Organization African Regional Office, freeing the latter to focus on the Ebola crisis and simultaneously enabling a decisive Central Africa polio outbreak response.

:: That the International Health Regulations Expert Committee make a recommendation that all countries receiving travellers from polio-infected countries should ensure that they have a valid vaccination certificate, as a condition of entry. That this should be implemented urgently.

:: That the programme better integrate its work to strengthen routine immunisation with work to stop polio transmission. That Gavi is invited to become the sixth core partner, and its Chief Executive to join the Polio Oversight Board.

**WHO: Summary of the SAGE October 2014 meeting**

*[Full text]*

**SAGE reviewed the readiness criteria for type 2 oral poliovirus vaccine (OPV) withdrawal globally** which include:

1. at least one dose of inactivated poliovirus vaccine in OPV-using countries;
2. bivalent oral polio vaccine (bOPV) licensed for routine immunization;
3. type 2 poliovirus surveillance and response protocols and monovalent OPV stockpile;
4. appropriate containment and handling of residual type 2 materials; and
5. verification of global eradication of wild poliovirus type 2.

SAGE confirmed that preparations for OPV2 withdrawal in early 2016 are on track and recommended that WHO Member States be formally apprised of this through WHO's governing bodies to accelerate preparations and facilitate international coordination.

SAGE endorsed the protocols for the management and use of the global type 2 monovalent OPV (mOPV2) stockpile and for type 2 poliovirus response in the post-OPV2 era, the plan for expansion of environmental surveillance, and the revised strategy for containment of

polioviruses ( i.e. the third edition of the WHO global action plan to minimize facility-associated risk in post-eradication/post-OPV era or GAP III). SAGE recognized and appreciated that countries with more than 95% of the global birth cohort, including almost all countries at highest risk for persistent type 2 circulating vaccine derived poliovirus (cVDPV2) emergence and circulation, either already use IPV or have formally expressed a commitment or intent to introduce IPV by end 2015. SAGE further urged:

a. accelerated licensure of bOPV for routine use and consideration of new regulatory approaches;
b. utilization of only global mOPV2 stockpiles to manage post-cessation type 2 poliovirus; and
c. completion of poliovirus containment phase 1 activities by end-2015.

SAGE re-iterated its concern about the persistent cVDPV2 circulation in Nigeria and Pakistan, and reinforced its previous recommendation (April 2014) that elimination of persistent cVDPV2 by mid-2015 at latest should have similar priority to elimination of wild polioviruses. SAGE concurred that Nigeria should schedule sufficient trivalent OPV (tOPV) campaigns across the northern states to interrupt the cVDPV2 by March 2015. Similarly, Pakistan should exploit the improved access in the northwest of the country to ensure sufficient tOPV is used in all areas, and especially for children from the conflict-affected areas, to interrupt the persistent cVDPV in that country as soon as possible.

SAGE endorsed the proposed risk-based approach for boosting immunity to type 2 poliovirus prior to OPV2 withdrawal by ensuring sufficient tOPV campaigns are planned and conducted to raise population immunity above the estimated threshold for transmission in areas at highest risk of cVDPV2 emergence. SAGE emphasized that planning for this risk-based approach should be done on a sub-national basis.

**SAGE discussed the second annual report on the implementation of the Decade of Vaccine Global Vaccine Action Plan (GVAP).** As in 2013, the GVAP secretariat prepared a detailed technical report on progress against each of the GVAP indicators. This year, the report was supplemented with additional inputs from the civil society organizations and also included progress on research and development indicators (which is reported every other year). SAGE noted the success in introducing new vaccines, and achievements in numerous countries in several areas such as the establishment and strengthening of National Immunization Technical Advisory Groups.

However, five out of the six GVAP goals still require substantial progress to bring them back on track. SAGE identified five areas for priority action:

:: Three years after its start date, implementation of the GVAP is sporadic and slow.
:: Poor data quality and use is impeding program management and improvement.
:: The affordability and supply of vaccines need to be urgently examined. Each may be causing a significant problems for a large number of countries, and the current lack of accurate information hinders understanding and corrective action.
:: Basic failures of integration mean that healthcare workers repeatedly miss easy opportunities to offer vaccinations when people are at the clinic with other health problems.
:: Vaccine delivery is impeded by disruptive situations, including war and major disease outbreaks (such as Ebola, currently). Such situations will always exist. Vaccination must continue to be delivered despite such situations.

SAGE issued various recommendations which are detailed in its GVAP assessment report 2014.1 One key recommendation is for the Regional Technical Advisory Groups and partners to support countries to rapidly finalize their national vaccine action plans based on both the Global

and Regional Vaccine Action Plans and establish advisory bodies to guide and monitor implementation.

**SAGE was requested to consider the preferred schedules for meningococcal A conjugate vaccine** for infants and young children living in the African meningitis belt countries, to achieve sustainable disease control following the initial mass vaccination campaigns targeting those 1-29 years of age. SAGE reiterated the importance of efforts to complete mass vaccination campaigns in all African countries in the meningitis belt. SAGE recommended that countries completing vaccination campaigns introduce the vaccine into the routine childhood immunization programme within 1 to 5 years following campaign completion, along with a one-time catch-up campaign for young children born since the initial mass vaccination and who will be outside the target age for routine immunization. SAGE concluded that a one-dose schedule at 9 months of age or older is recommended. Although administration at 9 months of age is preferred for programmatic reasons to be co-administered alongside the routine vaccination schedule, the single dose could be scheduled at somewhat older ages (e.g. 12-18 months) based on local programmatic and epidemiologic considerations.

**SAGE was provided with an update on the Ebola outbreak and response.** A SAGE Working Group on Ebola Vaccines and Vaccination will be rapidly established.

**SAGE also discussed the use of Japanese encephalitis vaccines, the use of the hepatitis E vaccine and the issue of vaccination hesitancy.**

The full meeting report will be published in the WHO Weekly Epidemiological Record on 12 December 2014. The meeting documents — including presentations and background readings — can be found at the following link:
http://www.who.int/immunization/sage/meetings/2014/october/en/index.html

## WORLD POLIO DAY 24 OCTOBER 2014 - FIMA

**The Federation of Islamic Medical Associations (FIMA) invites all Muslim physicians to join together to end polio and improve child health and welfare.**

We have a historic opportunity to end a disease that has plagued children for much too long. Today, cases of polio are down more than 99% worldwide since 1988, and this year alone has seen significant progress against the disease. Nigeria and Afghanistan, two of the three countries that have never stopped transmission of polio, have reported only six and twelve cases respectively as of October 2014. Iraq and Syria have successfully curbed polio outbreaks even in the midst of conflict.

But pockets of polio still remain, primarily in Muslim majority countries. As of October 2014, Pakistan accounts for more than 80% of cases globally and remains the largest exporter of the disease. Leaders in the Muslim world have already played a vital role in advancing eradication efforts and supporting childhood immunization.

For example, the International Islamic Fiqh (Jurisprudence) Academy in Jeddah and other prominent Islamic leaders around the world have issued nearly thirty fatwas (religious edicts) promoting the safety of polio vaccines. The Islamic Advisory Group (IAG), under the leadership of the Grand Imam of the Holy Mosque of Mecca, issued a declaration to support vaccination. Additionally, a range of Muslim donors have contributed to the polio eradication effort, including the United Arab Emirates, the Kingdom of Saudi Arabia, the Islamic Development Bank and several Muslim philanthropists. But more must be done to defeat this disease.

As believers in the Islamic faith, it is our sacred duty to take care of our children, promote and protect their health and welfare. As physicians, it is our responsibility to provide lifesaving care, educate families on the importance and safety of vaccines and advocate for the right of our communities to have access to quality healthcare.

This is why we, Muslim physicians, are uniting behind a new Call to Action on Polio Eradication and Children's Health to declare our commitment to end polio and urge our leaders to ensure vaccination of all children. Several leading physicians have joined the call to action, including Dr. Yagob Al-Mazrou, Secretary General, Health Services Council, Kingdom of Saudi Arabia; Dr. Tariq Cheema, Founder and CEO, World Congress of Muslim Philanthropists, US; Dr. Sania Nishtar, Founder and President, Heartfile, Pakistan; Dr. Gamal Serour, Director, International Islamic Center for Population Studies and Research, Al Azhar University (IICPSR), Egypt.

A complete list of vaccination advocates to date can be found here.

We call on our fellow physicians across the Muslim world to join us in this urgent effort to end polio and protect children against all vaccine preventable diseases. Over the next few months, we will continue to welcome signatories with the goal of bringing thousands of physicians together in solidarity for children's health.

Join the call to action here.

**EBOLA/EVD** [to 1 November 2014]
*Public Health Emergency of International Concern (PHEIC); "Threat to international peace and security" (Security Council)*

**WHO: Ebola Virus Disease (EVD)**
**Situation report - 31 October 2014** 'WHO Roadmap'
*HIGHLIGHTS*
:: There have been 13,567 reported Ebola cases in eight affected countries since the outbreak began, with 4,951 reported deaths.
:: Intense transmission continues in Guinea, Liberia and Sierra Leone.
:: All 83 contacts of the health-care worker infected in Spain have completed the 21-day follow-up period.

**Virtual press briefings: Ebola outbreak**
*Video, audio and transcripts from the briefings*
:: 29 October 2014 virtual press briefing on Ebola outbreak Speakers: Dr Bruce Aylward, WHO Assistant Director-General, Polio and Emergencies.
- Audio of the press briefing
  mp3, 62 Mb, [01:07:00]
- Transcript of the press briefing
  pdf, 380kb

**WHO welcomes Swissmedic approval of Ebola vaccine trial at Lausanne University Hospital**
Statement
28 October 2014
*[Full text]*

The World Health Organization (WHO) welcomes the approval by Swissmedic, the Swiss regulatory authority for therapeutic products, for a trial with an experimental Ebola vaccine at the Lausanne University Hospital (CHUV). This marks the latest step towards bringing safe and effective Ebola vaccines for testing and implementation as quickly as possible.

Approval means that the vaccine can be used on approximately 120 individuals in Lausanne. The trial, which is receiving support from WHO, is the latest in a series of trials that are ongoing in Mali, the United Kingdom, and the United States.

*About the vaccine*

The vaccine is based on a genetically modified chimpanzee adenovirus ("ChAd-Ebola"; Chimpanzee-Adenovirus chAD3-ZEBOV). The trial will test the safety of the vaccine and its capacity to induce an immune response. Results from the CHUV trial will – together with the results of other centres involved – provide the basis for planning subsequent trials involving several thousand participants, and for choosing vaccine dose-level for efficacy trials.

Developed by the US National Institute of Allergy and Infectious Diseases (NIAID) and pharmaceutical company GlaxoSmithKline, the vaccine consists of a virus that is rendered harmless and used as genetic carrier for one Ebola protein. The application, submitted at the end of September 2014, was handled as a priority, given the dimensions of the Ebola epidemic in West Africa.

*Vaccine trials*

The trial is one of two in Switzerland coordinated by WHO. A second vaccine, rVSV-ZEBOV, is to be tested at the Geneva University Hospitals, concurrent to the Lausanne trial.

"These are dosing and safety trials being held in advance of to Phase II and III trials currently scheduled for late 2014-early 2015," says Marie-Paule Kieny, Assistant Director-General for Health Systems and Innovation at WHO. "If shown to be safe and effective, either of the vaccines could be scaled up for production during the first quarter of next year, with millions of doses produced for wide distribution in high-risk countries."

Trials in Lausanne will begin this week, with first results expected in December 2014.

## WHO updates personal protective equipment guidelines for Ebola response

31 October 2014

*[Excerpt from news release]*

As part of WHO's commitment to safety and protection of healthcare workers and patients from transmission of Ebola virus disease, WHO has conducted a formal review of personal protective equipment (PPE) guidelines for healthcare workers and is updating its guidelines in context of the current outbreak.

*About the PPE guidelines*

These updated guidelines aim to clarify and standardize safe and effective PPE options to protect health care workers and patients, as well as provide information for procurement of PPE stock in the current Ebola outbreak. The guidelines are based on a review of evidence of PPE use during care of suspected and confirmed Ebola virus disease patients.

The Guidelines Development Group convened by WHO included participation of a wide range of experts from developed and developing countries, and international organizations including the United States Centers for Disease Control and Prevention, Médecins Sans Frontières, the Infection Control Africa Network and others.

"These guidelines hold an important role in clarifying effective personal protective equipment options that protect the safety of healthcare workers and patients from Ebola virus disease transmission," says Edward Kelley, WHO Director for Service Delivery and Safety. "Paramount to the guidelines' effectiveness is the inclusion of mandatory training on the putting on, taking off and decontaminating of PPE, followed by mentoring for all users before engaging in any clinical care."…

- Personal protective equipment in the context of filovirus disease outbreak response
  Rapid advice guideline
  October 2014
- Personal protective equipment in the context of filovirus disease outbreak response
  Technical specifications
  October 2014

*WHO: Ebola situation assessments*
:: Ebola virus disease – Mali 31 October 2014

*WHO IN ACTION*
Sierra Leone: Helping the Ebola survivors turn the page
27 October 2014
Sierra Leone: The Kenema tent helps to prevent Ebola spread
27 October 2014

**WHO: Call for nominations for SAGE Working Group on Ebola Vaccines**
29 October 2014

WHO is calling for nominations for membership in a Working Group of the Strategic Advisory Group of Experts (SAGE) on Ebola Vaccines and Vaccination. Proposals for nominations should be sent by email to sageexecsec@who.int with Curriculum Vitae, indication of expertise and completed Declaration of Interests using the form below. Only complete nominations (self or from third party) received by Wednesday, 5 November 2014, will be considered. The final selection of members of the Working Group will be done by a duly appointed selection panel. Following review of all nominations by the selection panel, successful nominees will be notified via e-mail.

- Terms of reference
  pdf, 74kb
- Declaration of interests form
  pdf, 692kb

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

UNMEER's website is aggregating and presenting content from various sources including its own External Situation Reports, press releases, statements and what it titles "developments." We present a composite below from the week ending 1 November 2014.

*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*
- *Medical*
- *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.

31 October 2014 |

*Key Political and Economic Developments*

1. World Bank Group President Jim Yong Kim announced in Ghana, Accra, an additional $100 million funding in its Ebola crisis response to speed up deployment of foreign health workers to the three worst-affected countries in West Africa. The announcement increases the World Bank Group's funding for the Ebola fight over the last three months in Guinea, Liberia and Sierra Leone to more than $500 million. This additional financing will help set up a coordination hub in close cooperation with the three countries, the WHO, UNMEER, and other agencies to recruit, train and deploy qualified foreign health workers.

5. A UNDP socio-economic impact study on Guinea has shown that economic growth in the country slowed from 4.5 percent to 2.4 percent.

*Human Rights*

6. The WHO reports that survivors of EVD have not found life easy on the other side. Some in the community brand them as "witches" for surviving and a phenomenon called "post-Ebola syndrome" has been noted in survivors, including a range of symptoms such as visual problems, body aches, headaches and extreme fatigue. The latter is making it difficult to take up their former lives, especially if it involved manual work as farmers, laborers and household managers.

*Medical*

7. Médecins Sans Frontières (MSF) urged caution over claims of a slowdown in EVD transmission in Liberia, saying the apparent drop could be due to poor management of the sick. The number of admissions in MSF's 250-bed Monrovia Ebola centre dropped to around 80 yet mandatory cremation of dead bodies and a poor ambulance and referral system could also be the reason for this.

30 October 2014 |

*Logistics*

9. WFP plans to provide voice services and internet connectivity to approximately 20 ETUs per coun-try. In addition, Common Security Telecommunications services will be provided for the humanitarian community in 15 locations across Guinea, Liberia and Sierra Leone. ET Cluster also plans to deliver 500 mobile phones to support patients isolated from their families in ETUs.

*Essential Services*

15. New (partial) data on severe acute malnutrition admissions in Liberia for the month of September revealed that a total of 325 severely malnourished children under the age of five from seven counties were admitted to UNICEF-supported integrated management of acute malnutrition treatment sites.

*Attachment and Resources*

OCHA EVD fact sheets and 3Ws for Guinea, Liberia and Sierra Leone (recently updated): http://reliefweb.int/maps

29 October 2014 |

*Human Rights*

4. Stigmatisation and discrimination of EVD affected people persists. Burial teams in some parts of Liberia face discrimination as community members want landlords to evict them. There are

also concerns that these workers cannot go about their daily activities easily which increases food insecurity threatens livelihoods.

*Medical*

5. The WHO reports that 82 people who had contact with a toddler who died of EVD in Mali are being monitored but no new cases of the disease have yet been reported.

7. Switzerland has approved the testing of an experimental EVD vaccine from GlaxoSmithKline on healthy volunteers, some of whom will be travelling to West Africa as medical staff. The trial will be conducted among 120 volunteer participants at the Lausanne University Hospital, with support from the World Health Organization. The volunteers, who include many medical students, will be monitored for six months to determine both the safety and efficacy of the vaccine. There is a small control group of volunteers among them who will be given a placebo. Volunteers going into the field will not receive the placebo, for ethical reasons.

9. The WHO has reported that many people in the most affected countries have been unable or too frightened to seek medical care. A shortage of labs capable of handling potentially infected blood samples has also made it difficult to track the outbreak.

*Essential Services*

16. UNICEF is re-activating essential immunization efforts to curb vaccine-preventable diseases and is in the process of procuring supplies to ensure infection prevention and control in addition to funding training, outreach and field monitoring.

28 October 2014 |

*Highlights*

:: The UN Secretary-General expressed his concern at the imposition of restrictions applying to healthcare workers who have travelled to the most affected countries.

:: UNMEER ECM's for Guinea and Sierra Leone met with the US Ambassador to the United Nations to discuss the Ebola virus disease (EVD) outbreak response and underscored the criticality of concerted action to bring the crisis under control.

:: UNMEER, in cooperation with the Logistics Cluster, air-lifted 1,050 kg of personal protective equipment (PPE) and body bags from Monrovia to Mali in response to the first confirmed case of EVD in that country.

:: UNMEER has commenced the first regular Conakry-Freetown-Monrovia-Accra flight.

*Key Political and Economic Developments*

1. The UN Secretary-General expressed his concern at the recent restrictions put in place in several countries and localities applying to people who have travelled to the most affected countries. These restrictions have put particular pressure on health care workers and those who are on the frontline of the EVD response. The Secretary-General stressed that returning health workers are exceptional people who are giving of themselves for humanity. They should not be subjected to restrictions that are not based on science. Those who develop infections should be supported, not stigmatized. The Secretary-General reiterated that the best way for any country to protect itself from EVD is to stop the outbreak at its source in West Africa. This requires considerable international health care worker support and in return for this support, we have an obligation to look after them.

*Essential Services*

18. The results of the WFP mobile vulnerability analysis mapping assessment show that in the most affected areas of Guinea, EVD appears to have compounded an already precarious situation of chronic food insecurity. With harvests well underway, Guinea is entering the time of year when rural households should be consuming more. The country is also approaching the

market period for cash crops, which, during normal times, leads to increased incomes in rural areas.
19. International Rescue Committee's president David Miliband says that people in the Ebola affected countries are scared to go to health centers because they think they might catch EVD. He said that the health systems in Liberia and neighboring Sierra Leone in particular have been almost shut down by EVD.
20. Efforts to contain malaria may be jeopardised by the strain on health services caused by the EVD crisis. Dr Fatoumata Nafo-Traoré, who heads the Roll Back Malaria Partnership, noted that in 2012.

27 October 2014 |
*Key Political and Economic Developments*
1. The UN Secretary-General hosted a global Town Hall to brief UN staff members on measures being taken to protect them from EVD. He stressed that the UN has an obligation to the affected countries to end the epidemic and, at the same time, an obligation to protect its personnel. He said that with EVD prominent in the media, it is important that our messages are based on facts and evidence, and that we must convey a sense of urgency without inciting panic. Strict protocols are in place in the affected countries to protect UN personnel and prevent further transmission, while UN clinics in the three affected countries are being upgraded.
*Human Rights*
4. LGBT campaigners in Liberia have reported that homosexual people in the capital Monrovia have been harassed, and physically attacked by others blaming them for the EVD outbreak after some religious leaders in Liberia said EVD was a punishment from God for homosexuality.
*Medical*
8. The Democratic Republic of Congo could be declared Ebola-free in late November, as its two-month EVD outbreak appears to have come to an end. The WHO reported that all contacts have been traced and monitored, and the last one has now tested negative for EVD. There had been 67 cases and 49 deaths.
9. WHO has set out plans for speeding up development and deployment of experimental EVD vaccines, saying up to 1 million doses could be ready for use in West Africa by the middle of 2015.
11. Mauretania has now closed its border with Mali in response to concerns over the spread of EVD.
*Essential Services*
18. WFP reported that should the EVD epidemic last another 4-5 months, when farmers begin to prepare their land, planting for the 2015 harvest could be affected.

26 October 2014 | *Weekly Situational Analysis*
2. The health consequences of EVD are severe. Yet the longer the outbreak continues, the greater also will be the economic, social and political cost. Concerns grow as to political and social stability, food security and economic livelihoods across all three of the most affected countries - Guinea, Liberia and Sierra Leone. Isolated riots and demonstrations have occurred, restrictions of movement have increased tensions, farm production is anaemic, and reduced trade and economic activity is leading to job losses, including in the international mining sector and service industries.
3. In response to the worsening situation, countries within the region or linked by major air routes, continue to tighten restrictions on travel to and from the affected countries. This is despite clear statements from the WHO, World Bank and others, that such strategies will not

contain the spread of EVD, will hinder the humanitarian response to the crisis, and worsen the economic strain on these now increasingly isolated economies.

7. The WHO has now released estimates of the volunteers and health infrastructure required to meet the goal of 70-70-60. It is acknowledged these needs may shift, and require adjustment overtime, as the crisis evolves. Yet projections are a useful way to characterise the potential scale of the EVD response. Up to 4388 beds may be required in 50 Ebola treatment units (ETUs) across Guinea, Liberia and Sierra Leone. There are currently 1126 (25 per cent) beds already in place. An estimated 28 laboratories (12 are operational) are also required for case confirmation supported by up to 20,000 contact tracing workers. A further 230 teams to ensure safe burials may be required.

8. Perhaps the key gap remains the availability of foreign medical teams to manage and staff ETUs. There are currently firm commitments from teams for only 30 of the 50 ETUs required. Safety is the primary obstacle to filling this gap - EVD has so far claimed the lives of 244 health workers. Steps are urgently being taken to try and make operating in EVD affected countries safer for health workers (and other international volunteers). The European Union has announced a medevac operation for international health workers to be put into action on a case-by-case basis. Appropriate in-country treatment facilities for medical staff are also in development, and well advanced in both Liberia (US military) and Sierra Leone (UK military).

*UNMEER site: Statements*

:: Statement attributable to the Spokesman for the Secretary-General on restrictions applied to travellers from Ebola-affected countries (27 October 2014)

*UNMEER site: Press Releases*

:: World Bank Group Pledges Additional $100 million to Speed New Health Workers to Ebola-stricken Countries (30 October 2014)
:: WFP Engineering and Logistics (29 October 2014)
:: Higher Levels of Food-Related Coping Strategies in Guinea (29 October 2014)
:: UN Secretary-General's remarks to the press with the African Union Commission Chairperson and President of the World Bank (28 October 2014)
:: UN Secretary-General's remarks to the press (27 October 2014)
:: UNMEER presents robust plan to aid swift recovery in Ebola-affected countries (26 October 2014)
[The "operational framework" was described in general terms. No document link was provided in the announcement.]
:: UN Aircraft Flies Medical Supplies For The World Health Organization To Mali (25 October 2014)

*UNMEER site: Developments*

:: Mali confirms its first case of Ebola
24 October 2014 - Mali's Ministry of Health has confirmed the country's first case of Ebola virus disease. The Ministry received positive laboratory results, from PCR testing, on Thursday and

*UNMEER site: News*

Nabarro urges vigilance as Ebola outbreak shows signs of easing in Liberia
31 October 2014 - New York Encouraging signs that the Ebola epidemic in Liberia is easing must not lead to an easing of the international effort to fight the disease, the Secretary-General's Special Envoy on Ebola told reporters Friday.

World Bank Group adds $100 million to fill a 'critical gap' in the anti-Ebola effort
30 October 2014 - The World Bank Group announced on Thursday that it will allocate an additional $100 million to the international response to the Ebola outbreak in West Africa, bringing its total in pledges over the past three months to more than $500 million.

Sierra Leone: for Ebola survivors the pain goes on
29 October 2014 - As the Ebola outbreak grows and spreads, a small but significant group of people is also growing: the Ebola survivors. Emerging shell-shocked from what one described as a "glimpse of hell", the survivors have not found life easy on the other side of the Ebola ward.

In the battle against Ebola, resources are mounting
28 October 2014 - As resources mount, progress is being made against the Ebola outbreak in West Africa, but the effort requires more work and even more resources, the UN's man in charge of coordinating the effort to halt the disease said Tuesday.

Ebola fighter: 'We are on the right track'
27 October 2014 - Monrovia, Liberia The man overseeing international efforts to combat the Ebola outbreak in West Africa said Friday that more resources are needed, but he was confident that the virus would be defeated.

**UNICEF** [to 1 November 2014]
http://www.unicef.org/media/media_71724.html
#EbolaResponse: Emergency health equipment flown to Guinea under UNICEF-EU partnership
BRUSSELS/ZARAGOZA, Guinea Conakry, 29 October 2014 – A cargo plane transporting 14 ambulance cars took off today from Zaragoza airport in Spain to Guinea Conakry, part of UNICEF's efforts to send in life-saving health equipment to the Ebola-affected country. This is the third cargo airlift funded by a €1 million contribution from the European Commission's Humanitarian Aid budget.

**CDC/MMWR Watch** [to 1 November 2014]
http://www.cdc.gov/media/index.html
*Ebola Outbreak - 2014*
:: Monitoring Symptoms and Controlling Movement to Stop Spread of Ebola - Media Statement - Monday, October 27, 2014
:: CDC Issues Revised Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure - Media Statement - Monday, October 27, 2014
:: Update: CDC Ebola Response and Interim Guidance - Transcript - Audio Recording - Monday, October 27, 2014

MMWR October 31, 2014 / Vol. 63 / No. 43
:: Progress Toward Poliomyelitis Eradication — Afghanistan and Pakistan, January 2013–August 2014
:: Update: Ebola Virus Disease Outbreak — West Africa, October 2014
:: Announcement: Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure

**FDA Watch** [to 1 November 2014]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
:: **FDA as part of a coordinated global response on Ebola**
Margaret A. Hamburg, M.D., is Commissioner of the Food and Drug Administration
Posted on October 28, 2014 by FDA Voice
*[Full text]*

The tragic Ebola epidemic is an extraordinary global public health crisis, and FDA is taking extraordinary steps to be proactive and flexible in our response – whether it's providing advice on medical product development, authorizing the emergency use of new diagnostic tools, quickly enabling access to investigational therapies, or working on the front lines in West Africa.

FDA has an Ebola Task Force with wide representation from across FDA to coordinate our many activities. We are actively working with federal colleagues, the medical and scientific community, industry, and international organizations and regulators to help expedite the development and availability of medical products – such as treatments, vaccines, diagnostic tests, and personal protective equipment – with the potential to help bring the epidemic under control as quickly as possible.

These efforts include providing scientific and regulatory advice to commercial developers and U.S. government agencies that support medical product development, including the National Institutes of Health (NIH), the Office of the Assistant Secretary for Preparedness and Response (ASPR), the Centers for Disease Control and Prevention (CDC), and the Department of Defense (DoD). The advice that FDA is providing is helping to accelerate product development programs.

Our medical product reviewers have been working tirelessly with sponsors to clarify regulatory requirements, provide input on manufacturing and pre-clinical and clinical trial designs, and expedite the regulatory review of data as it is received. FDA has been in contact with dozens of drug, vaccine, device, and diagnostic test developers, and we remain in contact with more than 20 sponsors that have possible products in pipeline.

We also have been collaborating with the World Health Organization and other international regulatory counterparts—including the European Medicines Agency, Health Canada, and others—to exchange information about investigational products for Ebola in support of international response efforts.

Investigational vaccines and treatments for Ebola are in the earliest stages of development and for most, there are only small amounts of some experimental products that have been manufactured for testing. For those in limited supply, there are efforts underway to increase their production so their safety and efficacy can be properly assessed in clinical trials.

As FDA continues to work to expedite medical product development, we strongly support the establishment of clinical trials, which is the most efficient way to show whether these new products actually work. In the meantime, we also will continue to enable access to investigational products when they are available and requested by clinicians, using expanded access mechanisms, also known as "compassionate use," which allow access to such products outside of clinical trials when we assess that the expected benefits outweigh the potential risks for the patient.

In addition, under the FDA's Emergency Use Authorization (EUA) authority, we can allow the use of an unapproved medical product—or an unapproved use of an approved medical product—for a larger population during emergencies, when, among other reasons, based on scientific evidence available, there is no adequate, approved, and available alternative. To date,

FDA has authorized the use of five diagnostic tests during this Ebola epidemic: one was developed by DoD, two were developed by CDC, and this week FDA issued EUAs for two new, quicker Ebola tests made by BioFire Defense.

To further augment diagnostic capacity, we have contacted several commercial developers that we know are capable of developing rapid diagnostic tests and have encouraged them to work with us to quickly develop and make available such tests. Several entities have expressed interest and have initiated discussions with FDA.

We also are monitoring for fraudulent products and false product claims related to the Ebola virus and taking appropriate action to protect consumers. To date, we have issued warning letters to three companies marketing products that claim to prevent, treat or cure infection by the Ebola virus, among other conditions. Additionally, we are carefully monitoring the personal protective equipment (PPE) supply chain to help ensure this essential equipment continues to be available to protect health care workers.

And at least 12 FDA employees are being deployed to West Africa as part of the Public Health Service's team to help with medical care. We are proud that they are answering the call. As you can see, FDA has been fully engaged in response activities and is using its authorities to the fullest extent possible to continue its mission to protect and promote the public health, both domestically and abroad. Our staff is fully committed to responding in the most proactive, thoughtful, and flexible manner to the Ebola epidemic in West Africa.

I could not be more proud of the dedication and leadership that the FDA staff involved in this response has shown. I therefore want to take this opportunity to thank more than 250 staff, including those soon to be on the ground in West Africa, who have already contributed countless hours to this important effort, and who will continue to do so in the coming days and weeks as we address this very serious situation. I am hopeful that our work and the coordinated global response will soon lead to the end of this epidemic and help reduce the risk of additional cases in the U.S. and elsewhere.

:: FDA News Release - First vaccine approved by FDA to prevent serogroup B Meningococcal disease October 29, 2014

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**WHO & Regionals** [to 1 November 2014]

1. :: Global Alert and Response (GAR) - Disease outbreak news
2. Middle East respiratory syndrome coronavirus (MERS-CoV) – Qatar 31 October 2014
3. Human infection with avian influenza A(H7N9) virus – China 29 October 2014

**European Medicines Agency Watch** [to 1 November 2014]

http://www.ema.europa.eu/ema/

:: Revised framework for development of influenza vaccines

*EMA releases third and final module for public consultation*

30/10/2014 The European Medicines Agency (EMA) has released the third module of a new overarching guideline on influenza vaccines for a three-month public consultation. With this publication, the EMA is now close to finalising the establishment of a revised regulatory framework which aims to facilitate the prompt assessment of new influenza vaccines.

:: EMA advises on development plan for GSK Ebola vaccine 29/10/2014

*Developers encouraged to request accelerated procedure for scientific advice*

The European Medicines Agency (EMA) has given scientific advice to GSK on its development plan for an Ebola vaccine. This is the first time in the current Ebola outbreak that EMA has given 'rapid scientific advice' using an accelerated procedure. EMA established this procedure to contribute to the global response against Ebola and to help companies speed up the development of Ebola vaccines and treatments.

Through rapid scientific advice, developers can receive EMA's expert opinion and advice for example on clinical trial design, manufacturing-related questions as well as safety monitoring of medicines.

EMA encourages companies to request rapid scientific advice for their development plans. This will help them to generate the robust data and information needed to assess that treatments and vaccines against Ebola actually work, are acceptably safe and of high quality…

**GAVI Watch** [to 1 November 2014]
http://www.gavialliance.org/library/news/press-releases/
:: Pentavalent vaccine introductions represent historic milestone for immunisation in India
01 November 2014

Rollouts in Madhya Pradesh and Rajasthan start two-phase process which will add 5-in-1 vaccine to routine immunisation programmes in every Indian state.

**PATH Watch** [to 1 November 2014]
http://www.path.org/news/
:: Positive clinical results indicate vaccine candidate is highly efficacious against bacterial diarrhea
Press release | October 27, 2014
Vaccine/adjuvant combination against a leading cause of bacterial diarrhea shows great promise for saving children's lives

**IVI Watch** [to 1 November 2014]
http://www.ivi.org/web/www/home
:: Transitions in D&D Management [Undated]

Dr. Thomas F. Wierzba, Deputy Director General of Development & Delivery (D&D), will be leaving IVI in December 2014. He will be moving on to PATH's Enteric Vaccine Initiative (EVI). Dr. Wierzba has been with IVI for four years and oversees a large team that manages IVI's clinical and field research. He has been instrumental in many of our major cholera, typhoid and hepatitis E studies that include the five-year phase 3 trial of the oral cholera vaccine (OCV) (published in The Lancet Infectious Diseases) and the single-dose OCV trial in Bangladesh, which is currently ongoing…

IVI is pleased to announce that his successor will be Dr. Laura Digilio who will join IVI as Interim Director of Development & Delivery, effective January 1, 2015. Dr. Digilio brings a wealth of experience and knowledge in various vaccines and clinical development. Her most recent position was Senior Director, Clinical Development and HIV and Polio Vaccine Programs Clinical Leader at Crucell (now Janssen Vaccines) in Leiden, The Netherlands...
Dr. Digilio will visit IVI between now and the end of the year to work with Dr. Wierzba and the D&D team on the transition.

## Aeras Launches New Campaign to Protect Healthcare Workers from TB

October 31, 2014 – Aeras said it launched TB Unmasked, "a new campaign to raise awareness about the risks healthcare workers face on the front lines of the global tuberculosis (TB) epidemic." The campaign features a five-part film that profiles the personal and moving experiences of healthcare workers around the world as they risk their lives caring for others. Healthcare workers in countries with a high-burden of TB face an increased risk of developing this deadly disease, from two to 12 times higher than the general population, according to years of scientific research, including new data presented at the Union World Conference.

The campaign website, TBunmasked.org, will feature the film, resources for healthcare workers about best practices for protection, and a platform for sharing individual experiences working amidst the global TB crisis.

Thomas G. Evans, M.D., Aeras President and CEO, said, "The ebola epidemic has focused public attention on the risks that healthcare workers face every day. The TB epidemic threatens healthcare workers with one of the most deadly infectious diseases in the world, responsible for approximately 4,100 deaths every day. Healthcare workers can protect themselves by following best practices for infection control procedures and personal protection, but a vaccine is urgently needed to protect healthcare workers and patients from this epidemic."

**Global Fund Watch** [to 1 November 2014]
http://www.theglobalfund.org/en/mediacenter/announcements/
Johannes Hunger Appointed as Head of Strategic Information
31 October 2014

The Global Fund to Fight AIDS, Tuberculosis and Malaria announced the appointment of Johannes Hunger, an expert on strategic and policy planning in global health, as Head of Strategic Information.

Mr. Hunger now leads the Global Fund team that coordinates reporting and analysis of results, and provides strategic direction on impact modelling and assessment, cost-effectiveness, and demand forecast. In his new position, starting 27 October, Mr. Hunger also oversees monitoring of the Global Fund's key performance indicators related to impact…

**Industry Watch** [to 1 November 2014]
Selected media releases and other selected content from industry.
:: Novartis announces divestiture of influenza vaccines business to CSL for USD 275 million
*CSL to acquire Novartis influenza vaccines business, including development pipeline, for USD 275 million*

Basel, Switzerland, October 26, 2014 - Novartis today announced it has entered into a definitive agreement to divest its influenza vaccines business to CSL Limited (CSL) for an agreed price of USD 275 million. This transaction requires regulatory approvals and is expected to close in the second half of 2015.

CSL has more than 40 years of experience in the influenza vaccines business and operates in 27 countries with more than 13,000 employees worldwide. In addition to vaccines, CSL has established businesses in plasma-driven therapies, pharmaceuticals, antivenoms and immunohemotology. The Novartis influenza vaccines unit will be combined with CSL's subsidiary, bioCSL.

"In CSL, we have found not only an owner for the influenza business that shares our

commitment to protecting public health, but also a strong growth platform for the business and our associates," said Joseph Jimenez, CEO of Novartis.

The Novartis influenza vaccines business has a strong track record of delivering almost 1 billion doses of seasonal and pandemic influenza vaccines globally over the last 30 years. The company was the first and only manufacturer with the flexibility of two production technologies - egg-based vaccines for seasonal, pandemic and pre-pandemic, and cell-culture-based vaccines for antibiotic-free production with the potential for rapid scale-up to protect against pandemic threats. The business also benefits from access to a proprietary adjuvant platform and leadership in pandemic preparedness.

Novartis remains fully committed to the influenza business during the transition period to closing, including honoring agreements with customers, research and development for influenza vaccines and product launches…

:: Pfizer Receives FDA Accelerated Approval for TRUMENBA® (Meningococcal Group B Vaccine) for the Prevention of Invasive Meningococcal B Disease in Adolescents and Young Adults
October 29, 2014

Pfizer Inc. (NYSE:PFE) announced today that the U.S. Food and Drug Administration (FDA) has granted accelerated approval of TRUMENBA® (meningococcal group B vaccine) for active immunization to prevent invasive disease caused by Neisseria meningitidis serogroup B in individuals 10 through 25 years of age. Approval of TRUMENBA is based on demonstration of immune response, as measured by serum bactericidal activity against four serogroup B strains representative of prevalent strains in the United States. The effectiveness of TRUMENBA against diverse serogroup B strains has not been confirmed. As part of the accelerated approval process, Pfizer will complete its ongoing studies to confirm the effectiveness of TRUMENBA against diverse serogroup B strains.

TRUMENBA was reviewed and approved under the FDA's Breakthrough Therapy designation and Priority Review programs…

:: Profectus BioSciences Receives $9.5 Million Department of Defense Funding to Manufacture Trivalent VesiculoVax™-Vectored Vaccine to Protect Against all Ebola and Marburg Viruses - *Funding to support GMP manufacture of VesiculoVax™-vectored vaccines for Zaire-Ebola virus, Sudan-Ebola virus, and Angola-Marburg virus that will be blended into a single formulation; rapid follow-up Phase 1 clinical trial planned -*

BALTIMORE, Md., Oct. 31, 2014 /PRNewswire/ -- Profectus BioSciences, Inc., a clinical-stage vaccine company developing novel vaccines for the treatment and prevention of infectious diseases, announced today that the Department of Defense (DoD) through the Medical Countermeasure Systems-Joint Vaccine Acquisition Program (MCS-JVAP), a subordinate command of the Joint Program Executive Office for Chemical and Biological Defense, Edgewood, MD, has contracted the manufacture and IND-enabling preclinical testing of the Profectus trivalent Ebola/Marburg vaccine. In addition, the USACC has contracted for clinical evaluation of the VesiculoVax™ Zaire-Ebola virus vaccine to meet the current outbreak in West Africa…

**EVI Watch** (European Vaccine Initiative) [to 1 November 2014]
http://www.euvaccine.eu/
*No new digest content identified.*

**NIH Watch** [to 1 November 2014]
http://www.nih.gov/news/index.html
*No new digest content identified.*

**BMGF - Gates Foundation Watch** [to 1 November 2014]
http://www.gatesfoundation.org/Media-Center/Press-Releases
*No new digest content identified.*

## ***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

### American Society of Tropical Medicine and Hygiene (ASTMH)

**ASTMH 63rd Annual Meeting**
2-6 November 2014
New Orleans, LA
:: Schedule-at-a-Glance
:: **UPDATED: To Stop Ebola Outbreak, Virus Must Be Contained in West Africa**

*The Society issued the following statement ahead of ASTMH's Annual Meeting in New Orleans:*

Deerfield, Ill. (October 30, 2014) – The Ebola virus has killed and affected thousands of people in West Africa, fueled anxiety worldwide, and has led to fear and irrational assessments in the face of a threatening and incurable virus. These reactions are understandable given that the virus has such a high fatality rate, no vaccine and no proven cure.

The efforts of brave healthcare professionals and humanitarians from the United States and around the world should be lauded. These heroes are serving the global good by working in West Africa to end this outbreak and prevent additional death and suffering. The Society firmly believes that policies that hinder the work of healthcare workers are ineffective and counterproductive.

The American Society of Tropical Medicine and Hygiene (ASTMH) is proud to be the professional home for scientists, clinicians and program professionals who lead the fight against infectious disease – in the lab and on the ground. Amidst this rapidly evolving global public health situation, ASTMH will host its 63rd Annual Meeting in New Orleans November 2-6. The world's leading scientists on tropical medicine and global health will gather to share the latest findings on malaria, dengue, cholera, as well as Ebola and many other diseases that impact our world.

The nature of our community's work coupled with the timing of the meeting has raised concern among health and government officials in our host city of New Orleans and the state of Louisiana. **The Society has been contacted by the Louisiana Department of Health and Hospitals (DHH) and the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) regarding their plans to implement a travel advisory that affects our upcoming conference.**

Each state within the U.S. has legal rights and responsibilities to set its own public health policy to meet perceived local public health needs and concerns. **While the state of Louisiana's policies are outside of the scientific understanding of Ebola**

**transmission—and acknowledged by the state health officials' own admission—we recognize that the state has determined its policy in this matter. ASTMH does not agree with the policy as outlined by the Louisiana DHH.**

The ASTMH Annual Meeting serves a much larger good, bringing scientists and dedicated professionals together from around the world to further the scientific discourse and ultimately improve the health of those suffering from disease.

**We deeply regret that some of our attendees are affected by Louisiana's travel advisory. ASTMH will fully refund the registration fee for anyone who cannot attend as a result of this policy.**

The Society's meeting provides us with an opportunity to engage Louisiana, other U.S. states and the global community on some of the health issues we care most about – the tremendous toll of the current outbreak in West Africa, best strategies to safeguard global public health now and in the future and to raise public awareness of tropical infectious diseases.

ASTMH firmly believes the single best way to safeguard Americans and the world is to end the epidemic in West Africa with the help of our best-trained, brave men and women.

## IMMUNIZATION SUPPLY CHAIN AND LOGISTICS - a neglected but essential system for national immunization programmes

*A Call to Action for national programmes and the global community by the who immunization practices advisory committee*

WHO Immunization Practices Advisory Committee (IPAC) MARCH 2014 :: 24 pages

ENGLISH: http://apps.who.int/immunization/call-to-action_ipac-iscl.pdf

FRANCAIS: http://www.who.int/iris/bitstream/10665/137320/1/WHO_IVB_14.05_fre.pdf

*[Excerpts from introduction to report]*

We the Immunization Practices Advisory Committee (IPAC) members, call on national immunization programmes and the global community to review and renew investment in their Immunization Supply Chain and Logistics (ISCL) systems; otherwise, the benefits of immunization programmes will be jeopardized by obstacles limiting access to, and use of, effective vaccines.

*Call-to-Action*

The Immunization Supply Chain and Logistics (ISCL) systems, which were designed in the 1980s, have supported the achievement of acceptable vaccination coverage, using coping mechanisms to overcome enduring challenges in vaccine storage, distribution and management. The dedication, intelligence and creativity of health workers acting within outdated ISCL systems have substituted for much-needed assets and capital. Despite many efforts, national immunization programmes, already struggling to meet the demands of routine immunization and supplemental campaigns, may not be in the best position to respond to the introduction of all the new vaccines.

A widening variety of new vaccines and immunization schedules, a diversity of service delivery strategies, an expanding target population, increased cold-chain infrastructure requirements and insufficient funding, are just a few of the new realities that will further stress ISCL systems, which were initially designed to manage fewer, less expensive and less bulky vaccines and related supplies. Existing systems cannot keep pace with the changing landscape of national immunization programmes, resulting in stock-outs, potential administration of ineffective vaccines, avoidable wastage and inadequate cold-chain capacity, all of which have considerable coverage, performance and cost implications. These inefficiencies not only hinder the ability to provide much-needed immunizations, they also yield a lower return in health

outcomes for those investing in the research, production, procurement and delivery of vaccines, threatening the dependability of future funding sources.

The growth in complexity of immunization programmes is occurring at the same time as the development and application of innovative supply chain strategies and technology, especially in the private sector. In the public sector, national immunization programmes, and the global community that supports them, have an opportunity to improve their performance and a mandate to provide the right vaccines in the right quantities, in the right condition, at the right time, in the right place and at the right supply chain cost.

## ***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 11, 2014
http://www.tandfonline.com/toc/uajb20/current
[Reviewed earlier]

**American Journal of Infection Control**
Volume 42, Issue 10 , Supplement, S189-S296 October 2014
http://www.ajicjournal.org/issue/S0196-6553%2814%29X0013-1
[Reviewed earlier]

**American Journal of Preventive Medicine**
Volume 47, Issue 4, p375-530, e7-e10 October 2014
http://www.ajpmonline.org/current
[Reviewed earlier]

**American Journal of Public Health**
Volume 104, Issue 11 (November 2014)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

**American Journal of Tropical Medicine and Hygiene**

October 2014; 91 (4)
http://www.ajtmh.org/content/current
[Reviewed earlier]

**Annals of Internal Medicine**
21 October 2014, Vol. 161. No. 8
http://annals.org/issue.aspx
[Reviewed earlier]

**BMC Health Services Research**
(Accessed 1 November 2014)
http://www.biomedcentral.com/bmchealthservres/content
***Research article***
**Can a community health worker and a trained traditional birth attendant work as a team to deliver child health interventions in rural Zambia?**
Kojo Yeboah-Antwi, Davidson H Hamer, Katherine Semrau, Karen Z Waltensperger, Gail Snetro-Plewman, Chilobe Kambikambi, Amon Sakala, Stephen Filumba, Bias Sichamba, David R Marsh
BMC Health Services Research 2014, 14:516 (27 October 2014)
*Abstract*
Background
Teaming is an accepted approach in health care settings but rarely practiced at the community level in developing countries. Save the Children trained and deployed teams of volunteer community health workers (CHWs) and trained traditional birth attendants (TBAs) to provide essential newborn and curative care for children aged 0–59 months in rural Zambia. This paper assessed whether CHWs and trained TBAs can work as teams to deliver interventions and ensure a continuum of care for all children under-five, including newborns.
Methods
We trained CHW-TBA teams in teaming concepts and assessed their level of teaming prospectively every six months for two years. The overall score was a function of both teamwork and taskwork. We also assessed personal, community and service factors likely to influence the level of teaming.
Results
We created forty-seven teams of predominantly younger, male CHWs and older, female trained TBAs. After two years of deployment, twenty-one teams scored "high", twelve scored "low," and fourteen were inactive. Teamwork was high for mutual trust, team cohesion, comprehension of team goals and objectives, and communication, but not for decision making/planning. Taskwork was high for joint behavior change communication and outreach services with local health workers, but not for intra-team referral. Teams with members residing within one hour's walking distance were more likely to score high.
Conclusion
It is feasible for a CHW and a trained TBA to work as a team. This may be an approach to provide a continuum of care for children under-five including newborns.

**BMC Infectious Diseases**
(Accessed 1 November 2014)

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

**BMC Medical Ethics**
(Accessed 1 November 2014)
http://www.biomedcentral.com/bmcmedethics/content

**BMC Public Health**
(Accessed 1 November 2014)
http://www.biomedcentral.com/bmcpublichealth/content
***Research article***
**Immunization knowledge and practice among Malaysian parents: a questionnaire development and pilot-testing**
Ammar Ihsan Awadh, Mohamed Azmi Hassali, Omer Qutaiba Al-lela, Siti Halimah Bux, Ramadan M Elkalmi, Hazrina Hadi BMC Public Health 2014, 14:1107 (27 October 2014)
*Abstract (*provisional)
Background
Parents are the main decision makers for their children vaccinations. This fact makes parents? immunization knowledge and practices as predictor factors for immunization uptake and timeliness. The aim of this pilot study was to develop a reliable and valid instrument in Malaysian language to measure immunization knowledge and practice (KP) of Malaysian parents.
Methods
A cross-sectional prospective pilot survey was conducted among 88 Malaysian parents who attended public health facilities that provide vaccinations. Translated immunization KP questionnaires (Bahasa Melayu version) were used. Descriptive statistics were applied, face and content validity were assessed, and internal consistency, test-retest reliability, and construct validity were determined.
Conclusions
The pilot study concluded that the Bahasa Melayu version of the immunization KP questionnaire has good reliability and validity for measuring the knowledge and practices of Malaysian parents and therefore this version can be used in future research.

**BMC Research Notes**
(Accessed 1 November 2014)
http://www.biomedcentral.com/bmcresnotes/content
[No new relevant content]

**British Medical Journal**
01 November 2014(vol 349, issue 7981)
http://www.bmj.com/content/349/7981
[New issue; No relevant content]

**Bulletin of the World Health Organization**
Volume 92, Number 11, November 2014, 773-848
http://www.who.int/bulletin/volumes/92/11/en/

## Achieving compliance with the International Health Regulations by overseas territories of the United Kingdom of Great Britain and Northern Ireland

Esther L Hamblion, Mark Salter, Jane Jones & on behalf of the UK Overseas Territories and Crown Dependencies IHR Project Group
doi: 10.2471/BLT.14.137828
*Abstract* [HTML] Article [HTML] Article pdf, 1.39Mb

The 2005 International Health Regulations (IHR) came into force for all Member States of the World Health Organization (WHO) in June 2007 and the deadline for achieving compliance was June 2012. The purpose of the IHR is to prevent, protect against, control – and provide a public health response to – international spread of disease. The territory of the United Kingdom of Great Britain and Northern Ireland and that of several other Member States, such as China, Denmark, France, the Netherlands and the United States of America, include overseas territories, which cover a total population of approximately 15 million people. Member States have a responsibility to ensure that all parts of their territory comply with the IHR. Since WHO has not provided specific guidance on compliance in the special circumstances of the overseas territories of Member States, compliance by these territories is an issue for self-assessment by Member States themselves. To date, no reports have been published on the assessment of IHR compliance in countries with overseas territories. We describe a gap analysis done in the United Kingdom to assess IHR compliance of its overseas territories. The findings and conclusions are broadly applicable to other countries with overseas territories which may have yet to assess their compliance with the IHR. Such assessments are needed to ensure compliance across all parts of a Member States' territory and to increase global health security.

***LESSONS FROM THE FIELD***

## Establishing an early warning alert and response network following the Solomon Islands tsunami in 2013

Augustine Bilve, Francisco Nogareda, Cynthia Joshua, Lester Ross, Christopher Betcha, Kara Durski, Juliet Fleischl & Eric Nilles
doi: 10.2471/BLT.13.133512
*Abstract [*HTML] Article [HTML] Articlepdf, 1.0

Problem
On 6 February 2013, an 8.0 magnitude earthquake generated a tsunami that struck the Santa Cruz Islands, Solomon Islands, killing 10 people and displacing over 4700.
Approach
A post-disaster assessment of the risk of epidemic disease transmission recommended the implementation of an early warning alert and response network (EWARN) to rapidly detect, assess and respond to potential outbreaks in the aftermath of the tsunami.
Local setting
Almost 40% of the Santa Cruz Islands' population were displaced by the disaster, and living in cramped temporary camps with poor or absent sanitation facilities and insufficient access to clean water. There was no early warning disease surveillance system.
Relevant changes
By 25 February, an EWARN was operational in five health facilities that served 90% of the displaced population. Eight priority diseases or syndromes were reported weekly; unexpected health events were reported immediately. Between 25 February and 19 May, 1177 target diseases or syndrome cases were reported. Seven alerts were investigated. No sustained

transmission or epidemics were identified. Reporting compliance was 85%. The EWARN was then transitioned to the routine four-syndrome early warning disease surveillance system.
Lesson learnt
It was necessary to conduct a detailed assessment to evaluate the risk and potential impact of serious infectious disease outbreaks, to assess whether and how enhanced early warning disease surveillance should be implemented. Local capacities and available resources should be considered in planning EWARN implementation. An EWARN can be an opportunity to establish or strengthen early warning disease surveillance capabilities.

**Clinical Infectious Diseases** (CID)
Volume 59 Issue 9 November 1, 2014
http://cid.oxfordjournals.org/content/current
[Reviewed earlier]

**Clinical Therapeutics**
Volume 36, Issue 10, p1295-1482 October 2014
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

**Cost Effectiveness and Resource Allocation**
(Accessed 1 November 2014)
http://www.resource-allocation.com/
[No new relevant content]

**Current Opinion in Infectious Diseases**
December 2014 - Volume 27 - Issue 6 pp: v-v,471-572
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[New issue; No relevant content]

**Developing World Bioethics**
December 2014 Volume 14, Issue 3 Pages ii–iii, 111–167
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2014.14.issue-3/issuetoc
**Developing Ethical Awareness in Global Health: Four Cases for Medical Educators (pages 111–116)**
Mary White and Jessica Evert
Article first published online: 1 OCT 2012 | DOI: 10.1111/dewb.12000
Abstract
**Why Restrictions on the Immigration of Health Workers Are Unjust (pages 117–126)**
Javier Hidalgo
Article first published online: 22 NOV 2012 | DOI: 10.1111/dewb.12006
Abstract

**Alternatives of Informed Consent for Storage and Use of Human Biological Material for Research Purposes: Brazilian Regulation (pages 127–131)**
Gabriela Marodin, Paulo Henrique Condeixa de França, Jennifer Braathen Salgueiro, Marcia Luz da Motta, Gyséllе Saddi Tannous and Anibal Gil Lopes
Article first published online: 21 DEC 2012 | DOI: 10.1111/dewb.12012
Abstract

**Disease Control Priorities for Neglected Tropical Diseases: Lessons from Priority Ranking Based on the Quality of Evidence, Cost Effectiveness, Severity of Disease, Catastrophic Health Expenditures, and Loss of Productivity (pages 132–141)**
Elisabeth Marie Strømme, Kristine Bærøe and Ole Frithjof Norheim
Article first published online: 31 MAY 2013 | DOI: 10.1111/dewb.12016
Abstract

**Collaborative International Research: Ethical and Regulatory Issues Pertaining to Human Biological Materials at a South African Institutional Research Ethics Committee (pages 150–157)**
Aslam Sathar, Amaboo Dhai and Stephan van der Linde
Article first published online: 31 MAY 2013 | DOI: 10.1111/dewb.12018
Abstract

**Promoting Research Integrity in Africa: An African Voice of Concern on Research Misconduct and the Way Forward (pages 158–166)**
Francis Kombe, Eucharia Nkechinyere Anunobi, Nyanyukweni Pandeni Tshifugula, Douglas Wassenaar, Dimpho Njadingwe, Salim Mwalukore, Jonathan Chinyama, Bodo Randrianasolo, Perpetua Akindeh, Priscilla S. Dlamini, Felasoa Noroseheno Ramiandrisoa and Naina Ranaivo
Article first published online: 17 APR 2013 | DOI: 10.1111/dewb.12024
Abstract

**Development in Practice**
Volume 24, Issue 7, 2014
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

**Emerging Infectious Diseases**
Volume 20, Number 11—November 2014
http://wwwnc.cdc.gov/eid/
[Reviewed earlier]

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

**Epidemiology and Infection**
Volume 142 - Issue 10 - October 2014
http://journals.cambridge.org/action/displayIssue?jid=HYG&tab=currentissue

[Reviewed earlier]

**The European Journal of Public Health**
Volume 24, Issue suppl 2, 01 October 2014
http://eurpub.oxfordjournals.org/content/24/suppl_2
Supplement: 7th European Public Health Conference
*Introduction to Glasgow 2014*

We are delighted to introduce this supplement to the European Journal of Public Health which contains the abstracts of papers to be presented at the 7th European Public Health Conference. It includes abstracts for the main part of the conference: plenary sessions; oral sessions (including workshops); pitch sessions; and poster walks.

For Glasgow 2014, we have received a new record in abstracts and workshops: 1025 single abstracts and 75 workshops from 68 countries worldwide. This new record posed an extra challenge to the International Scientific Committee, responsible for the reviewing of the abstracts. The International Scientific Committee of the Glasgow 2014 conference consisted of 59 experts from 20 countries and was chaired by Martin McKee from the UK. We are extremely grateful to them for the hard work this involved. The members of the International Scientific …

**Eurosurveillance**
Volume 19, Issue 43, 30 October 2014
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
[New issue; No relevant content]

**Global Health: Science and Practice (GHSP)**
August 2014 | Volume 2 | Issue 3
http://www.ghspjournal.org/content/current
[Reviewed earlier]

**Global Health Governance**
[Accessed 1 November 2014]
http://blogs.shu.edu/ghg/category/complete-issues/summer-2013/
[No new relevant content]

**Global Public Health**
Volume 9, Supplement 1, 2014
http://www.tandfonline.com/toc/rgph20/.Uq0DgeKy-F9#.U4onnCjDU1w
*This Special Supplement is dedicated to all the Afghan and international health workers who sacrificed their lives during the rebuilding of the Afghan health system.*
[Reviewed earlier]

**Globalization and Health**
[Accessed 1 November 2014]

http://www.globalizationandhealth.com/

***Debate***

**Towards a comprehensive global approach to prevention and control of NCDs**

Martin McKee1*, Andy Haines2, Shah Ebrahim3, Peter Lamptey3, Mauricio L Barreto4, Don Matheson5, Helen L Walls367, Sunia Foliaki5, J Jaime Miranda8, Oyun Chimeddamba9, Luis Garcia-Marcos10, Paolo Vineis11 and Neil Pearce36

*Abstract*

Background

The "25×25" strategy to tackle the global challenge of non-communicable diseases takes a traditional approach, concentrating on a few diseases and their immediate risk factors.

Discussion

We propose elements of a comprehensive strategy to address NCDs that takes account of the evolving social, economic, environmental and health care contexts, while developing mechanisms to respond effectively to local patterns of disease. Principles that underpin the comprehensive strategy include: (a) a balance between measures that address health at the individual and population level; (b) the need to identify evidence-based feasible and effective approaches tailored to low and middle income countries rather than exporting questionable strategies developed in high income countries; (c) developing primary health care as a universal framework to support prevention and treatment; (d) ensuring the ability to respond in real time to the complex adaptive behaviours of the global food, tobacco, alcohol and transport industries; (e) integrating evidence-based, cost-effective, and affordable approaches within the post-2015 sustainable development agenda; (f) determination of a set of priorities based on the NCD burden within each country, taking account of what it can afford, including the level of available development assistance; and (g) change from a universal "one-size fits all" approach of relatively simple prevention oriented approaches to more comprehensive multi-sectoral and development-oriented approaches which address both health systems and the determinants of NCD risk factors.

Summary

The 25×25 is approach is absolutely necessary but insufficient to tackle the NCD disease burden of mortality and morbidity. A more comprehensive approach is recommended.

**Health Affairs**

October 2014; Volume 33, Issue 10

http://content.healthaffairs.org/content/current

*Theme: Specialty Pharmaceutical Spending & Policy*

[No relevant content]

**Health and Human Rights**

Volume 16, Issue 2 December 2014

http://www.hhrjournal.org/

*Papers in Press: Special Issue on Health Rights Litigation*

[Reviewed earlier]

**Health Economics, Policy and Law**

Volume 9 - Issue 04 - October 2014
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
[Reviewed earlier]

**Health Policy and Planning**
Volume 29 Issue 7 October 2014
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

**Health Research Policy and Systems**
http://www.health-policy-systems.com/content
[Accessed 1 November 2014]
***Research***
**How can we establish more successful knowledge networks in developing countries? Lessons learnt from knowledge networks in Iran**
Bahareh Yazdizadeh, Reza Majdzadeh, Ali Alemi and Sima Amrolalaei
Author Affiliations
Health Research Policy and Systems 2014, 12:63 doi:10.1186/1478-4505-12-63
Published: 29 October 2014
*Abstract* (provisional)
Background
Formal knowledge networks are considered among the solutions for strengthening knowledge translation and one of the elements of innovative systems in developing and developed countries. In the year 2000, knowledge networks were established in Iran's health system to organize, lead, empower, and coordinate efforts made by health-related research centers in the country. Since the assessment of a knowledge network is one of the main requirements for its success, the current study was designed in two qualitative and quantitative sections to identify the strengths and weaknesses of the established knowledge networks and to assess their efficiency.
Methods
In the qualitative section, semi-structured, in-depth interviews were held with network directors and secretaries. The interviews were analyzed through the framework approach. To analyze effectiveness, social network analysis approach was used. That is, by considering the networks' research council members as 'nodes', and the numbers of their joint articles - before and after the network establishments - as 'relations or ties', indices of density, clique, and centrality were calculated for each network. In the qualitative section, non-transparency of management, lack of goals, administrative problems were among the most prevalent issues observed.
Results
Currently, the most important challenges are the policies related to them and their management. In the quantitative section, we observed that density and clique indices had risen for some networks; however, the centrality index for the same networks was not as high. Consequently the attribution of density and clique indices to these networks was not possible.
Conclusion
Therefore, consolidating and revising policies relevant to the networks and preparing a guide for establishing managing networks could prove helpful. To develop knowledge and technology

in a country, networks need to solve the problems they face in management and governance. That is, the first step towards the realization of true knowledge networks in health system.

**Human Vaccines & Immunotherapeutics** (formerly Human Vaccines)
September 2014 Volume 10, Issue 9
http://www.landesbioscience.com/journals/vaccines/toc/volume/10/issue/9/

**Do current cost-effectiveness analyses reflect the full value of childhood vaccination in Europe?**

*A rotavirus case study*

Bernd Brüggenjürgena, Mathie Lorrotb, Fiona R Sheppardc & Vanessa Rémyd*

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*Abstract*

Economic evaluation of vaccination programs can be challenging and does not always fully capture the benefits provided. Reasons for this include the difficulties incurred in accurately capturing the health and economic impact of infectious diseases and how different diseases may interact with each other. Rotavirus infection, for example, peaks at a similar time than other infectious diseases, such as RSV and influenza, which can cause hospital overcrowding and disruption, and may pose a risk to more vulnerable children due to limited availability of isolation facilities. Another challenge, specific to evaluating childhood vaccination, is that QoL cannot be accurately measured in children due to a lack of validated instruments. Childhood diseases also incur a care giver burden, due to the need for parents to take time off work, and this is important to consider. Finally, for diseases such as RVGE, cost-effectiveness analyses in which longer time horizons are considered may not reflect the short-term benefits of vaccination. Further quantification of the economic impact of childhood diseases is thus required to fully highlight the true benefits of childhood vaccination that may be realized. Herein we explore the limitations of existing economic evaluations for childhood vaccination, and how economic analyses could be better adapted in future.

**Cost-effectiveness of hepatitis A vaccination in Indonesia**

Auliya A Suwantikaab*, Philippe Beutelsc & Maarten J Postmaa

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*Abstract*

Objective

This study aims to assess the cost-effectiveness of hepatitis A immunization in Indonesia, including an explicit comparison between one-dose and two-dose vaccines.

Methods

An age-structured cohort model based on a decision tree was developed for the 2012 Indonesia birth cohort. Using the model, we made a comparison on the use of two-dose and one-dose vaccines. The model involved a 70-year time horizon with 1-month cycles for children less than

2 years old and annually thereafter. Monte Carlo simulations were used to examine the economic acceptability and affordability of the hepatitis A vaccination.
Results
Vaccination would save US$ 3 795 148 and US$ 2 892 920 from the societal perspective, for the two-dose and one-dose vaccine schedules, respectively, in the context of hepatitis A treatment. It also would save 8917 and 6614 discounted quality-adjusted-life-years (QALYs), respectively. With the vaccine price of US$ 3.21 per dose, the implementation of single dose vaccine would yield an incremental cost-effectiveness ratio (ICER) of US$ 4933 per QALY gained versus no vaccination, whereas the two-dose versus one-dose schedule would cost US$ 14 568 per QALY gained. Considering the 2012 gross-domestic-product (GDP) per capita in Indonesia of US$ 3557, the results indicate that hepatitis A vaccination would be a cost-effective intervention, both for the two-dose and one-dose vaccine schedules in isolation, but two-dose vaccination would no longer be cost-effective if one-dose vaccination is a feasible option. Vaccination would be 100% affordable at budgets of US$ 71 408 000 and US$ 37 690 000 for the implementation of the two-dose and one-dose vaccine schedules, respectively.
Conclusions
The implementation of hepatitis A vaccination in Indonesia would be a cost-effective health intervention under the market vaccine price. Given the budget limitations, the use of a one-dose-vaccine schedule would be more realistic to be applied than a two-dose schedule. The vaccine price, mortality rate and discount rate were the most influential parameters impacting the ICERs.

## Knowledge of and attitudes to influenza in unvaccinated primary care physicians and nurses

*A cross-sectional study*

Angela Domínguezab*, Pere Godoybc, Jesús Castillabd, José María Mayorale, Núria Soldevilab, Núria Tornerabc, Diana Toledobf, Jenaro Astrayg, Sonia Tamamesh, Susana García-Gutiérrezi, Fernando González-Candelasj, Vicente Martínk, José Díazl, the CIBERESP Working Group & for the Survey on Influenza Vaccination in Primary Health Care Workers

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*Abstract*
Primary healthcare workers, especially nurses, are exposed to the vast majority of patients with influenza and play an important role in vaccinating patients. Healthcare workers' misconceptions about influenza and influenza vaccination have been reported as possible factors associated with lack of vaccination. The objective of this study was to compare the characteristics of unvaccinated physicians and unvaccinated nurses in the 2011–2012 influenza season. We performed an anonymous web survey of Spanish primary healthcare workers in 2012. Information was collected on vaccination and knowledge of and attitudes to the influenza vaccine. Multivariate analysis was performed using unconditional logistic regression. We included 461 unvaccinated physicians and 402 unvaccinated nurses. Compared with unvaccinated nurses, unvaccinated physicians had more frequently received seasonal influenza vaccination in the preceding seasons (aOR 1.58; 95% CI 1.11–2.25), and more frequently believed that vaccination of high risk individuals is effective in reducing complications (aOR 2.53; 95% CI 1.30–4.95) and that influenza can be a serious illness (aOR 1.65; 95% CI 1.17–

2.32). In contrast, unvaccinated physicians were less concerned about infecting patients (aOR 0.62; 95% CI 0.40–0.96). Unvaccinated nurses had more misconceptions than physicians about influenza and the influenza vaccine and more doubts about the severity of annual influenza epidemics in patients with high risk conditions and the prevention of complications by means of the influenza vaccination. For unvaccinated physicians, strategies to improve vaccination coverage should stress the importance of physicians as a possible source of infection of their patients. The effectiveness of influenza vaccination of high risk persons should be emphasized in nurses.

**Inequalities in vaccination coverage for young females whose parents are informal caregivers**

Tabatha N Offutt-Powella*, Rohit P Ojhab, Tara M Brinkmanb, Joseph E Totac, Bradford E Jacksond, Karan P Singhd & Jennifer S Smithe

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*Abstract*

The effects of caregiver strain and stress on preventive health service utilization among adult family members are well-established, but the effects of informal caregiving on children of caregivers are unknown. We aimed to assess whether inequalities in vaccination coverage (specifically human papillomavirus [HPV] and influenza) exist for females aged 9 to 17 years whose parents are informal caregivers (i.e., care providers for family members or others who are not functionally independent) compared with females whose parents are not informal caregivers. Data from the 2009 Behavioral Risk Factor Surveillance System were analyzed using Poisson regression with robust variance to estimate overall and subgroup-specific HPV and influenza vaccination prevalence ratios (PRs) and corresponding 95% confidence limits (CL) comparing females whose parents were informal caregivers with females whose parents were not informal caregivers. Our unweighted study populations comprised 1645 and 1279 females aged 9 to 17 years for the HPV and influenza vaccination analyses, respectively. Overall, both HPV and influenza vaccination coverage were lower among females whose parents were informal caregivers (HPV: PR = 0.72, 95% CL: 0.53, 0.97; Influenza: PR = 0.89, 95% CL: 0.66, 1.2). Our results suggest consistently lower HPV and influenza vaccination coverage for young females whose parents are informal caregivers. Our study provides new evidence about the potential implications of caregiving on the utilization of preventive health services among children of caregivers.

**Parents' attitude toward multiple vaccinations at a single visit with alternative delivery methods**

Patricia Kaaijk*a, Deborah E Kleijnea, Mirjam J Knola, Irene A Harmsena, Olga JAE Ophorsta & Nynke Y Rotsa

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Abstract

Last decades, the number of routine childhood vaccinations has increased considerably, which consequently has led to multiple vaccine injections per consultation. Implementation of additional vaccines will probably lead to more than 2 vaccine injections per consult, which might be a barrier for parents to vaccinate their child. A decrease in vaccination coverage, however, increases the risk of disease outbreaks. Less stressful alternative methods for vaccine delivery might lead to an increased acceptance of multiple childhood vaccinations by parents. The present questionnaire study was set up to explore the maximum number of vaccine injections per visit that is acceptable for parents, as well as to gauge parents' attitude toward alternative needle-free methods for vaccine delivery. For this purpose, the parents' opinion toward a jet injector, a patch, a microneedle system, and nasal spray device as methods for vaccine delivery was assessed. The majority of the 1154 participating parents indicated that 3 vaccine injections per visit was perceived as too much. Most participants had a positive attitude with respect to the jet injector and the patch as alternative vaccine delivery method, whereas the microneedle device and an intranasal spray device were not perceived as better than the conventional syringe by the parents. Parents indicated that both the jet injector and the patch might increase their acceptance of giving their children more than 2 vaccinations at the same time. This should encourage vaccine developers and manufacturers to put efforts in developing these delivery methods for their vaccines.

**Infectious Agents and Cancer**
[Accessed 1 November 2014]
http://www.infectagentscancer.com/content
[No new relevant content]

**Infectious Diseases of Poverty**
[Accessed 1 November 2014]
http://www.idpjournal.com/content
***Editorial***
**Acquired immunity and asymptomatic reservoir impact on frontline and airport ebola outbreak syndromic surveillance and response**
Ernest Tambo and Zhou Xiao-Nong
Author Affiliations
Infectious Diseases of Poverty 2014, 3:41 doi:10.1186/2049-9957-3-41
Published: 29 October 2014
*Abstract* (provisional)
The number of surveillance networks for infectious disease diagnosis and response has been growing. In 2000, the World Health Organization (WHO) established the Global Outbreak Alert and Response Network, which has been endorsed by each of the 46 WHO African members since then. Yet, taming the dynamics and plague of the vicious Ebola virus disease (EVD) in African countries has been patchy and erratic due to inadequate surveillance and contact tracing, community defiance and resistance, a lack of detection and response systems, meager/weak knowledge and information on the disease, inadequacies in protective materials protocols, contact tracing nightmare and differing priorities at various levels of the public health system. Despite the widespread acceptance of syndromic surveillance (SS) systems, their ability to provide early warning alerts and notifications of outbreaks is still unverified. Information is often too limited for any outbreak, or emerging or otherwise unexpected disease, to be recognized at either the community or the national level. Indeed, little is known about the role

and the interactions between the Ebola infection and exposure to other syndemics and the development of acquired immunity, asymptomatic reservoir, and Ebola seroconversion. Can lessons be learnt from smallpox, polio, and influenza immunity, and can immunization against these serve as a guide? In most endemic countries, community health centers and disease control and prevention at airports solely relies on passive routine immunization control and reactive syndromic response. The frontline and airport Ebola SS systems in West Africa have shown deficiencies in terms of responding with an alarming number of case fatalities, and suggest that more detailed insights into Ebola, and proactive actions, are needed. The quest for effective early indicators (EEE) in shifting the public and global health paradigm requires the development and implementation of a comprehensive and effective community or regional integrated pandemic preparedness and surveillance response systems tailored to local contexts. These systems must have mechanisms for early identification, rapid contact tracing and tracking, confirmation, and communication with the local population and the global community, and must endeavor to respond in a timely manner.

**International Health**
Volume 6 Issue 3 September 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**
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http://www.ijidonline.com/current
[Reviewed earlier]

**JAMA**
October 22/29, 2014, Vol 312, No. 16
http://jama.jamanetwork.com/issue.aspx
[Reviewed earlier]

**JAMA Pediatrics**
October 2014, Vol 168, No. 10
http://archpedi.jamanetwork.com/issue.aspx
[No relevant content]

**Journal of Community Health**
Volume 39, Issue 5, October 2014

http://link.springer.com/journal/10900/39/5/page/1
[Reviewed earlier]

**Journal of Epidemiology & Community Health**
December 2014, Volume 68, Issue 12
http://jech.bmj.com/content/current

## Microcredit participation and child health: results from a cross-sectional study in Peru

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*Abstract*
Background
Childhood malnutrition is a major consequence of poverty worldwide. Microcredit programmes—which offer small loans, financial literacy and social support to low-income individuals—are increasingly promoted as a way to improve the health of clients and their families. This study evaluates the hypothesis that longer participation in a microcredit programme is associated with improvements in the health of children of microcredit clients.
Methods
Cross-sectional data were collected in February 2007 from 511 clients of a microcredit organisation in Peru and 596 of their children under 5 years of age. The primary predictor variable was length of participation in the microcredit programme. Outcome variables included height, weight, anaemia, household food security and parent-reported indicators of child health. Multivariate linear and logistic regressions assessed the association between the number of loan cycles and child health outcomes. Pathways through which microcredit may have influenced health outcomes were also explored via mediation analyses.
Results
Longer participation in microcredit was associated with greater household food security and reduced likelihood of childhood anaemia. No significant associations were observed between microcredit participation and incidence of childhood illnesses or anthropometric indicators. Increased consumption of red meat may mediate the association between the number of loan cycles and food security, but not the association with anaemia.
Conclusions
The effects of microcredit on the health of clients' children are understudied. Exploratory findings from this analysis suggest that microcredit may positively influence child health, and that diet may play a causal role.

**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)**
July-September 2014 Volume 6 | Issue 3 Page Nos. 93-137
http://www.jgid.org/currentissue.asp?sabs=n
[Reviewed earlier]

**Journal of Health Care for the Poor and Underserved (JHCPU)**
Volume 25, Number 3, August 2014
http://muse.jhu.edu/journals/journal_of_health_care_for_the_poor_and_underserved/toc/hpu.25.3.html
[Reviewed earlier]

**Journal of Health Organization and Management**
Issue 6 – December 2014
http://link.springer.com/journal/10903/16/6/page/1
**Special Focus: Mental Health and Wellness**

**Journal of Immigrant and Minority Health**
Volume 16, Issue 5, October 2014
http://link.springer.com/journal/10903/16/5/page/1
[New issue; No relevant content]

**Journal of Immigrant & Refugee Studies**
Volume 12, Issue 4, 2014
http://www.tandfonline.com/toc/wimm20/current#.VFWeF8l4WF9
*Special Issue: New Forms of Intolerance in European Political Life*

**Journal of Infectious Diseases**
Volume 210 Issue 10 November 15, 2014
http://jid.oxfordjournals.org/content/current
[New issue; No relevant content]

**The Journal of Law, Medicine & Ethics**
Fall 2014 Volume 42, Issue 3 Pages 280–401
http://onlinelibrary.wiley.com/doi/10.1111/jlme.2014.42.issue-3/issuetoc
*Special Issue: SYMPOSIUM: Concussions and Sports*
[Reviewed earlier]

**Journal of Medical Ethics**
November 2014, Volume 40, Issue 11
http://jme.bmj.com/content/current
[New issue; No relevant content]

**Journal of Medical Internet Research**
Vol 16, No 10 (2014): October
http://www.jmir.org/2014/10
[Reviewed earlier]

**Journal of Medical Microbiology**
November 2014; 63 (Pt 11)
http://jmm.sgmjournals.org/content/current
[New issue; No relevant content]

**Journal of the Pediatric Infectious Diseases Society (JPIDS)**
Volume 3 Issue 3 September 2014
http://jpids.oxfordjournals.org/content/current
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**Journal of Pediatrics**
Vol 165 | No. 4 | October 2014 | Pages 647-878
http://www.jpeds.com/current
[Reviewed earlier]

**Journal of Public Health Policy**
Volume 35, Issue 3 (August 2014)
http://www.palgrave-journals.com/jphp/journal/v35/n3/index.html
[Reviewed earlier]

**Journal of the Royal Society – Interface**
December 6, 2014; 11 (101)
http://rsif.royalsocietypublishing.org/content/current
[No new relevant content]

**Journal of Virology**
November 2014, volume 88, issue 21
http://jvi.asm.org/content/current
[Reviewed earlier]

**The Lancet**
Nov 01, 2014 Volume 384 Number 9954 p1549 – 1640
http://www.thelancet.com/journals/lancet/issue/current

***Editorial***

**WHO AFRO: in need of new leadership**
The Lancet
*Preview* |
The past 6 months have shone an unprecedented spotlight on health in Africa. Although now is not the time for a detailed review of the failures that led to the current Ebola outbreak in west Africa, enough is known to say that WHO's Regional Office for Africa (WHO AFRO) failed catastrophically in its mandate to monitor emerging health threats on the continent and to signal those threats to the wider international community. It is already known that some WHO country offices in west Africa simply did not recognise the importance of Ebola or act quickly enough to scale up the agency's global response.

**Violence against children in Cambodia: breaking the silence**
The Lancet
*Preview* |
"When we arrive at school and it is early and we are alone, it is quiet and we are afraid…", admits a 13-year-old Cambodian girl. School should be a familiar and welcoming place; however, findings from the first-of-its-kind Cambodia's Violence Against Children Survey, coordinated by UNICEF Cambodia, reveal that many children are subjected to violence at the hands of people they know and should trust in places that should feel safe.

***The Lancet Commissions***

**Culture and health**
A David Napier, Clyde Ancarno, Beverley Butler, Joseph Calabrese, Angel Chater, Helen Chatterjee, François Guesnet, Robert Horne, Stephen Jacyna, Sushrut Jadhav, Alison Macdonald, Ulrike Neuendorf, Aaron Parkhurst, Rodney Reynolds, Graham Scambler, Sonu Shamdasani, Sonia Zafer Smith, Jakob Stougaard-Nielsen, Linda Thomson, Nick Tyler, Anna-Maria Volkmann, Trinley Walker, Jessica Watson, Amanda C de C Williams, Chris Willott, James Wilson, Katherine Woolf
*Preview* |
Planned and unplanned migrations, diverse social practices, and emerging disease vectors transform how health and wellbeing are understood and negotiated. Simultaneously, familiar illnesses—both communicable and non-communicable—continue to affect individual health and household, community, and state economies. Together, these forces shape medical knowledge and how it is understood, how it comes to be valued, and when and how it is adopted and applied.

**The Lancet Global Health**
Nov 2014 Volume 2 Number 11 e616 – 671
http://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

**The Lancet Infectious Diseases**

Nov 2014 Volume 14 Number 11 p1023 - 1162
http://www.thelancet.com/journals/laninf/issue/current

***Comment***

**Ebola in west Africa: from disease outbreak to humanitarian crisis**

Peter Piot, Jean-Jacques Muyembe, W John Edmunds

*Preview* /

The epidemic of Ebola haemorrhagic fever in west Africa is the 25th known outbreak since 1976,1 but is fundamentally different from all previous cases. Besides the fact that it is the first Ebola outbreak in west Africa, it is the largest and longest Ebola epidemic, and the first to involve three entire countries and capital cities, with around 5000 cases and 2500 deaths so far.2 How could it get to this point? The answer is the synergy of several factors that created a perfect storm:3 a context of decades of civil war leading to a low level of trust in authorities, even when these are working hard to reconstruct the country; dysfunctional health services with a major scarcity of health workers, especially in Liberia and Sierra Leone (another consequence of armed conflict); strong traditional beliefs in disease causation and even denial of the virus' existence; high-risk traditional funeral practices that amplify transmission, in addition to more recent healing practices in some churches where the bodies of patients with Ebola are touched; a slow and inadequate national and international response (although this is now changing); and high population mobility across borders—something that has not happened around previous outbreaks in central Africa.

**Treating MERS-CoV during an outbreak**

Christopher M Coleman, Matthew B Frieman

Preview | Full Text | PDF

**Sustaining rotavirus vaccination in Africa: measuring vaccine effectiveness**

George E Armah, Fred N Binka

Preview | Full Text | PDF

**Maternal and Child Health Journal**

Volume 18, Issue 9, November 2014

http://link.springer.com/journal/10995/18/9/page/1

[New issue; No relevant content]

**Medical Decision Making (MDM)**

November 2014; 34 (8)

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

[New issue; No relevant content]

**The Milbank Quarterly**

*A Multidisciplinary Journal of Population Health and Health Policy*

September 2014 Volume 92, Issue 3 Pages 407–631

http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue

[Reviewed earlier]

**Nature**

Volume 514 Number 7524 pp535-658 30 October 2014
http://www.nature.com/nature/current_issue.html

***Nature / Editorial***

# Call to action - Time to ramp up science's contribution to controlling the Ebola outbreak.

29 October 2014

Science has so far taken a back seat as the Ebola outbreak has continued to spread. Research has deferred to the need to gear up the public-health response. But there is a growing sense that, unless science can somehow now change the game, the outbreak will be difficult to bring under control.

The Ebola virus has killed more than 4,800 people in six countries, and has affected people in another two, the latest being Mali. There are still not enough medical staff and treatment beds to handle the current caseload. The World Health Organization (WHO) projects that as many as 10,000 new cases could be arising per week by December if the outbreak is not turned around. Enter science. Speeding the development of treatments and vaccines is one area in which the international community is trying to move forward. On 22 October, the US Biomedical Advanced Research and Development Authority and the US Army awarded US$17.1 million to Profectus BioSciences, a company based in Baltimore, Maryland, that is developing vaccines against Ebola based on vesicular stomatitis virus. It is the third candidate Ebola vaccine to have moved towards or into clinical trials this year. On 24 October, the WHO outlined plans to test the first two — one licensed to NewLink Genetics of Ames, Iowa, the other being developed by GlaxoSmithKline, headquartered in London. These two vaccines have already entered human safety trials and the WHO says that they could be tested in health-care workers and others in West Africa as early as December.

In the meantime, aid agencies such as Médecins Sans Frontières (also known as Doctors Without Borders) and researchers funded by the European Union will test candidate Ebola treatments, including experimental drugs, medicines already approved for other uses that could be made available 'off label', and purified plasma or blood from Ebola survivors.

Beyond treatments and vaccines, scientists have more fundamental questions, about both the Ebola virus behind the current outbreak and other viruses in the family to which it belongs, the filoviruses. This group includes Marburg virus, also capable of causing a lethal haemorrhagic fever, which killed a Ugandan health-care worker on 28 September. A third filovirus outbreak occurred this year in the Democratic Republic of the Congo, where an Ebola outbreak unrelated to that in West Africa has killed 49 people.

The emergence of three filovirus outbreaks this year and the increasing frequency and reach of such outbreaks — which have occurred every year except 2 in the past 21 years — should serve as the clearest warning possible: we urgently need to understand more about the pathology, distribution, epidemiology and clinical aspects of these viruses. A World View on page 537 argues that such science should help to steer the response; a News Feature on page 554 lays out the five most pressing questions about the filoviruses, and says why answering them might help to prevent a future outbreak or even help to bring this one under control.

For instance, new filoviruses have been discovered within the past five years, such as the Lloviu virus discovered in 2011 in bats in Spain. And scientists have learnt that these viruses have a much more widespread distribution than was suspected. The Reston virus, for example, an ebolavirus that does not seem to harm humans, has turned up in recent years in pigs in both the Philippines and China. Scientists suspect that there are more of these viruses to be found,

in more places, and urgently want to understand why some are lethal to humans and others are not — and whether that could change.

It is also not known which animals harbour Ebola virus in the wild, or how the first person infected in the West African outbreak last December contracted the disease. Understanding this is crucial if people are to avoid a possible reservoir in the future.

It has been difficult to answer these questions for many reasons, such as the (fortunate) relative rarity and unpredictability of human filovirus outbreaks. And laboratory studies require highly contained, specialized biosafety-level-4 (BSL-4) labs — of which there are too few around the world.

Thanks to a biodefence building boom over the past decade, there are now 13 such labs planned or operating in the United States. Canada, France, Australia, Germany, the United Kingdom, South Africa, Gabon and Russia are among the select nations that also have such facilities. But there are major research-funding nations, such as Japan, that do not have BSL-4 labs, or do not allow them to perform the highest-containment research because of worries that pathogens could escape and spark lethal local epidemics.

The current Ebola outbreak proves the fallacy of that decision. The world would not be in the position it is today, with the possibility of deploying an Ebola vaccine during the current outbreak, without the existence of both high-containment facilities and money for research on diseases that are, thankfully, rare in developing countries. More of both, in more places, can only hasten our understanding of Ebola and other diseases. Because one thing is clear: whether it is Ebola virus, another filovirus or something completely different, there will be a next time.

***Nature | Column: World View***

**Developed nations must not fear sending Ebola help**

The anxiety and stigma associated with Ebola are hampering Australia's willingness and ability to help with the control efforts in Africa, argues Tim Inglis.

**Nature Medicine**

October 2014, Volume 20 No 10 pp1079-1217

http://www.nature.com/nm/journal/v20/n9/index.html

[Reviewed earlier]

**Nature Reviews Immunology**

October 2014 Vol 14 No 10

http://www.nature.com/nri/journal/v14/n10/index.html

[Reviewed earlier]

**New England Journal of Medicine**

October 30, 2014 Vol. 371 No. 18

http://www.nejm.org/toc/nejm/medical-journal

***Perspective***

**Mounting a Good Offense against Measles**

Walter Orenstein, M.D., and Katherine Seib, M.S.P.H.

N Engl J Med 2014; 371:1661-1663October 30, 2014DOI: 10.1056/NEJMp1408696

[Excerpt]

…Measles meets the biologic criteria for eradication. Humans are necessary to maintain the virus in nature, since there is no nonhuman reservoir. There is an effective intervention measure — measles vaccines. Diagnostic tests can confirm whether someone has measles. And proof of principle has been demonstrated by prolonged elimination of indigenous circulation of the virus in the Western Hemisphere.

It may be premature to embark on another global eradication effort until polio eradication is achieved; however, much more can be done to reduce measles transmission in its current reservoirs. We can increase support for improving global routine-immunization programs so that they include two doses of measles vaccine in their schedules and for ensuring that there is adequate vaccine and infrastructure to conduct special mass-vaccination campaigns against measles. Support is also needed for strengthening the global laboratory network to permit detection and analysis of which measles strains are persisting and which have been eliminated.5

We must also overcome vaccine hesitancy. Despite the overwhelming evidence that vaccines — including the measles, mumps, and rubella vaccine — are safe, too many people still believe that greater risk is posed by vaccinating than by not vaccinating. Research is needed on how best to address public concerns about vaccine safety. The lack of apparent measles disease in the United States — which is attributable to the enormous success of the U.S. immunization program — gives a false sense that there is little or no threat. Efforts are also needed to educate the public that measles is a serious disease, which no one need suffer from, and that vaccines are highly effective in preventing it.

In the end, we can best protect our population against measles by ensuring that people eligible for vaccination are vaccinated and by supporting global efforts to go on the offensive against this major cause of the global disease burden.

***Perspective***

**Ebola Then and Now**

Joel G. Breman, M.D., D.T.P.H., and Karl M. Johnson, M.D.

N Engl J Med 2014; 371:1663-1666October 30, 2014DOI: 10.1056/NEJMp1410540

[Excerpt]

In October 1976, the government of Zaire (now the Democratic Republic of Congo [DRC]) asked what was then the U.S. Center for Disease Control, where we worked, to join an international group of scientists in elucidating and controlling an outbreak of an unusually lethal hemorrhagic fever. Just before we arrived in Zaire, our laboratory had used virologic and immunologic tests to identify the cause as a new filovirus, and we brought electron micrographs of the agent.1 In Zaire, we became, respectively, the chief of surveillance, epidemiology, and control and the scientific director of the International Commission for the Investigation and Control of Ebola Hemorrhagic Fever in Zaire.

The 2013–2014 outbreak of Ebola virus disease (EVD) has much in common with the 1976 outbreak. Both were caused by Zaire ebolavirus 2 and began in rural forest communities, where wild game is hunted for food (though no animal has been implicated as the trigger of these outbreaks). Severely ill patients came to provincial hospitals with systemic illness resembling malaria, typhoid, Lassa fever, yellow fever, or influenza. Unsuspecting hospital staff had contact with patients' blood and body fluids, which amplified the outbreaks. Cases were exported to cities, and chains of transmission were established…

**The Pediatric Infectious Disease Journal**
October 2014 - Volume 33 - Issue 10 pp: 997-1101,e247-e272

http://journals.lww.com/pidj/pages/currenttoc.aspx
[Reviewed earlier]

**Pediatrics**
October 2014, VOLUME 134 / ISSUE 4
http://pediatrics.aappublications.org/current.shtml
***[Reviewed earlier]***
October 1; 134 (Supplement_2: Bioethical Issues in Pediatrics: A Series of Supplements to Pediatrics: Supplement III: The Child's Best Interest and the Interests of Others) : 134S2-a - S129

**Pharmaceutics**
Volume 6, Issue 3 (September 2014), Pages 354-
http://www.mdpi.com/1999-4923/6/2
[Reviewed earlier]

**Pharmacoeconomics**
Volume 32, Issue 11, November 2014
http://link.springer.com/journal/40273/32/11/page/1
[New issue; No relevant content]

**PLoS One**
[Accessed 1 November 2014]
http://www.plosone.org/
[No new relevant content]

**PLoS Medicine**
(Accessed 1 November 2014)
http://www.plosmedicine.org/
[No new relevant content]

**PLoS Neglected Tropical Diseases**
(Accessed 1 November 2014)
http://www.plosntds.org/
[No new relevant content]

**PNAS - Proceedings of the National Academy of Sciences of the United States of America**
(Accessed 1 November 2014)
http://www.pnas.org/content/early/
[No new relevant content]

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

**Public Health Ethics**
Volume 7 Issue 2 July 2014
http://phe.oxfordjournals.org/content/current
[Reviewed earlier]

**Qualitative Health Research**
October 2014; 24 (10)
http://qhr.sagepub.com/content/current
***Special Issue: Values, Perceptions, & Health***
[Reviewed earlier]

**Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)**
August 2014 Vol. 36, No. 2
http://www.paho.org/journal/index.php?option=com_content&view=article&id=150&Itemid=262&lang=en
[New issue; No relevant content]

**Risk Analysis**
September 2014 Volume 34, Issue 9 Pages 1581–1774
http://onlinelibrary.wiley.com/doi/10.1111/risa.2014.34.issue-9/issuetoc
[New issue; No relevant content]

**Science**
31 October 2014 vol 346, issue 6209, pages 513-668
http://www.sciencemag.org/current.dtl
***In Depth***
***Infectious Diseases***
**The Ebola vaccine underdog**
Jon Cohen
In the race to develop an Ebola vaccine, a small cancer therapy company, NewLink Genetics, has been in the shadows of GlaxoSmithKline (GSK), a big pharma company with lots of experience and far deeper resources. But at a high-level meeting held by the World Health Organization on 23 October, it became clear that NewLink, which is based in Ames, Iowa, by next spring may have more vaccine on hand than GSK, which is based in the United Kingdom.

NewLink's projections come with a major caveat: It all depends on dose. Specifically, the NewLink vaccine is made from an Ebola gene stitched into a livestock pathogen, vesicular stomatitis virus (VSV). It's currently unknown whether the vaccine needs 1 million VSV particles per dose or 100 million. Early human studies now under way should answer this question. Charles Link Jr., the CEO of NewLink, has avoided media attention until now, but he spoke with Science at length about the prospects and the caveats.

**Social Science & Medicine**
Volume 120, In Progress (November 2014)
http://www.sciencedirect.com/science/journal/02779536/118
[Reviewed earlier]

**Tropical Medicine and Health**
Vol. 42(2014) No. 4
https://www.jstage.jst.go.jp/browse/tmh/42/4/_contents
[No new relevant content]

**Vaccine**
Volume 32, Issue 48, Pages 6325-6590 (12 November 2014)
http://www.sciencedirect.com/science/journal/0264410X/32/48
**Better vaccines for healthier life. Part I. Conference report of the DCVMN International 14th Annual General Meeting Hanoi, Vietnam**
Pages 6325-6329
Sonia Pagliusi, Rahman Rustan, Weidan Huang, Thuvan Nguyen, DCVMN Executive Committee
*Abstract*
The Developing Countries Vaccine Manufacturers' Network (DCVMN) brought together nearly 220 senior representatives of governmental and non-governmental global health organizations, as well as corporate executives of emerging vaccine manufacturers, from 26 countries for a two-day tailored lectures, Q&A sessions, CEOs panel discussion and networking opportunities, followed by a vaccine-technology symposium and visit to manufacturing facilities in Hanoi, Vietnam. Participants included representatives of 38 vaccine manufacturers, as well as international partners and collaborating research institutions, with 39% female participants. The Vice-Minister of Health to Vietnam commended the speakers and participants to this Annual General Meeting, devoted to achieve our common goal of protecting people against infectious diseases with better vaccines, for a healthier life. He reminded the audience that the first vaccine produced in Vietnam was oral polio vaccine (OPV) in the early 1960s and contributed to polio eradication in Vietnam, in 2000. Through its manufacturing resources, Vietnam eliminated neonatal tetanus in 2005, and has controlled measles and hepatitis B spread. The Ministry of Health hopes that by sharing experiences, delegates at this conference will foster international cooperation and partnerships among organizations. CEOs elaborated on challenges and opportunities for emerging countries.
**Better vaccines for healthier life. Part II. Conference report of the DCVMN International 14th Annual General Meeting Hanoi, Vietnam**
Pages 6330-6335

Sonia Pagliusi, Patrick Tippoo, Venkatraman Sivaramakrishnan, Thuvan Nguyen, DCVMN Executive Committee

Abstract

*Highlights*

:: New vaccines are required to meet the public health challenges of future generation.
:: Innovation shall be accompanied by command of manufacturing scale-up and quality.
:: Regulatory alliances and harmonization will foster access to vaccines.

**Report of the 7th African Rotavirus Symposium, Cape Town, South Africa, 8th November 2012**

Pages 6336-6341

L.M. Seheri, J.M. Mwenda, N. Page

*Abstract*

The 7th African Rotavirus Symposium was held in Cape Town, South Africa, on the 8th November 2012 as a Satellite Symposium at the First International African Vaccinology Conference. Over 150 delegates participated in this symposium including scientists, clinicians, health officials, policymakers and vaccine manufacturers from across Africa. Key topics discussed included rotavirus surveillance, rotavirus vaccine introduction, post rotavirus vaccine impact analysis and intussusception data and surveillance in Africa. The symposium provided early rotavirus vaccine adopter countries in Africa (South Africa, Ghana and Botswana) an opportunity to share up-to-date information on vaccine introduction, and allowed colleagues to share experiences in establishing routine rotavirus surveillance (Tanzania, Niger and Rwanda). Overall, the symposium highlighted the high burden of rotavirus in Africa, and the need to continue to strengthen efforts in preventing rotavirus diarrhoea in Africa.

**Seasonal influenza vaccine dose distribution in 157 countries (2004–2011)**

Review Article

Pages 6369-6376

Abraham Palache, Valerie Oriol-Mathieu, Atika Abelin, Tamara Music, on behalf of the Influenza Vaccine Supply task force (IFPMA IVS)

Abstract

Highlights

:: Survey methodology assesses global influenza vaccine dose distribution which can provide a reasonable proxy of vaccine utilization.
:: Global distribution increased approximately 86.9% between 2004 and 2011, but only approximately 12.1% between 2008 and 2011.
:: Based on dose distribution, it appears that seasonal influenza VCR in many countries remains well below the World Health Assembly (WHA) VCR targets and below the recommendations of the Council of the European Union in EURO.
:: Inter- and intra-regional disparities in dose distribution trends call into question the impact of current vaccine recommendations at achieving coverage targets.
:: Additional policy measures, such as reimbursement, health care provider knowledge, attitudes, practices, and communications, are required for VCR targets to be met and for more populations to benefit from available safe and effective influenza vaccines.

**The impact of introducing new vaccines on the health system: Case studies from six low- and middle-income countries**

Original Research Article

Pages 6505-6512

Helen E.D. Burchett, Sandra Mounier-Jack, Sergio Torres-Rueda, Ulla K. Griffiths, Pierre Ongolo-Zogo, Stephen Rulisa, Jean-Marie Edengue, Enrique Chavez, Yayehirad Kitaw, Mitike Molla, Mamadou Konate, Lawrence Gelmon, Washington Onyango-Ouma, Mylene Lagarde, Anne Mills

Abstract

Highlights

:: The new vaccines seemed to integrate well into existing health systems.
:: The introductions had no impact on many elements of the EPI and health system.
:: The new vaccine introductions had no effect on the coverage of other vaccines.
:: Most effects were found in vaccination programmes, not broader health systems.
:: Effects were primarily reported to be temporary, at the time of introduction only.

*Abstract*

Objective

We aimed to explore the impacts of new vaccine introductions on immunization programmes and health systems in low- and middle-income countries.

Methods

We conducted case studies of seven vaccine introductions in six countries (Cameroon, PCV; Ethiopia, PCV; Guatemala, rotavirus; Kenya, PCV; Mali, Meningitis A; Mali, PCV; Rwanda, HPV). Interviews were conducted with 261 national, regional and district key informants and questionnaires were completed with staff from 196 health facilities. Routine data from districts and health facilities were gathered on vaccination and antenatal service use. Data collection and analysis were structured around the World Health Organisation health system building blocks.

Findings

The new vaccines were viewed positively and seemed to integrate well into existing health systems. The introductions were found to have had no impact on many elements within the building blocks framework. Despite many key informants and facility respondents perceiving that the new vaccine introductions had increased coverage of other vaccines, the routine data showed no change. Positive effects perceived included enhanced credibility of the immunisation programme and strengthened health workers' skills through training. Negative effects reported included an increase in workload and stock outs of the new vaccine, which created a perception in the community that all vaccines were out of stock in a facility. Most effects were found within the vaccination programmes; very few were reported on the broader health systems. Effects were primarily reported to be temporary, around the time of introduction only.

Conclusion

Although the new vaccine introductions were viewed as intrinsically positive, on the whole there was no evidence that they had any major impact, positive or negative, on the broader health systems.

**Vaccine: Development and Therapy**

(Accessed 1 November 2014)

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

[No new relevant content]

**Vaccines — Open Access Journal**

(Accessed 1 November 2014)

http://www.mdpi.com/journal/vaccines

***Editorial:***

**DNA Vaccines: Recent Developments and the Future**
by Britta Wahren and Margaret A. Liu
Vaccines 2014, 2(4), 785-796; doi:10.3390/vaccines2040785 - published 27 October 2014
Abstract: This special issue is focused on DNA vaccines, marking the two decades since the first demonstration of pre-clinical protection was published in Science (Ulmer et al.; Heterologous protection against influenza by injection of DNA encoding a viral protein. 1993). This introductory article provides an overview of the field and highlights the observations of the articles in this special issue while placing them in the context of other recent publications.

**Value in Health**
Volume 17, Issue 7 November 2014
http://www.valueinhealthjournal.com/current
**Information Used in the Decision-Making Process Regarding Influenza Vaccination Policy: Perceptions of Stakeholders in France and the Netherlands**
M.L. Silva, L. Perrier, J. Paget, A. Mosnier, V. Buthion, J.M. Cohen, H.M. Späth
DOI: http://dx.doi.org/10.1016/j.jval.2014.08.603
*Abstract*
To minimize the medical and societal impact of influenza, most WHO countries recommend seasonal vaccination in targeted populations; however, little is known about the decision-making procedures at a country-level. In Europe, the Netherlands has the highest rate of influenza vaccination and France is not far behind. Our purpose was to analyze differences and similarities in the information used in the decision-making process between these two countries, according to the stakeholders involved.

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

**Open Forum Infectious Diseases**
Volume 1 Issue 3 Fall 2014
http://ofid.oxfordjournals.org/content/current
**Hepatitis E Vaccine to Prevent Morbidity and Mortality During Epidemics**
Kenrad E. Nelson1, James W.K. Shih2, Jun Zhang2, QingJian Zhao2, Ningshao Xia2, John Ticehurst1 and Alain Labrique1
*Author Affiliations*
1Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland 21205, USA
2National Institute of Diagnostics and Vaccine Development, School of Public Health, Xiamen University, Xiamen, Fujian 361005, PR China
*Abstract*
Recurrent large water-borne epidemics of Hepatitis E occur regularly after monsoon rains contaminate water supplies in Asia or during humanitarian crises in Africa. These epidemics commonly affect thousands of persons with high mortality in pregnant women who become infected. Although a subunit HEV vaccine has been developed by Chinese investigators and found to be highly effective and safe in a large clinical trial, this vaccine is only available in

China. Until it is pre-qualified by WHO, the vaccine may not be available for use outside China in low income countries who lack national vaccine regulatory agencies. In this manuscript we explore possible strategies for providing access to this potentially important vaccine for international use in responding to epidemics of HEV in low resource countries.

**Tropical Medicine & International Health**
November 2014 Volume 19, Issue 11 Pages 1293–1390
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2014.19.issue-11/issuetoc

***Systematic review***

**Non-clinical interventions for acute respiratory infections and diarrheal diseases among young children in developing countries**

Miguel Niño Zarazúa1,* and Maureen Seguin2

DOI: 10.1111/tmi.12423
*Accepted Article (Accepted, unedited articles published online and citable. The final edited and typeset version of record will appear in future.)*

*Abstract*
Objective
To assess the effectiveness of non-clinical interventions against acute respiratory infections and diarrheal diseases among young children in developing countries.
Methods
Experimental and observational impact studies of non-clinical interventions aimed at reducing the incidence of mortality and/or morbidity among children due to acute respiratory infections and/or diarrhoeal diseases were reviewed, following the Cochrane Handbook for Systematic Reviews of Interventions and the PRISMA guidelines.
Results
Enhancing resources and/or infrastructure, and promoting behavioural changes, are effective policy strategies to reduce child morbidity and mortality due to diarrhoeal disease and acute respiratory infections in developing countries. Interventions targeting diarrhoeal incidence generally demonstrated a reduction, ranging from 18.3% to 61%. The wide range of impact size reflects the diverse design features of policies and the heterogeneity of socio-economic environments in which these policies were implemented. Sanitation promotion at household level seems to have a greater protective effect for small children.
Conclusion
Public investment in sanitation and hygiene, water supply and quality, and the provision of medical equipment that detect symptoms of childhood diseases, in combination of training and education for medical workers, are effective policy strategies to reduce diarrhoeal diseases and acute respiratory infections. More research is needed in the countries that are most affected by childhood diseases. There is a need for disaggregation of analysis by age-cohorts, as impact effectiveness of policies depends on children's age.

***Special Focus Newsletters***

RotaFlash [PATH] October 29, 2014
Global total of national rotavirus vaccine introductions reaches 70 with Norway
New rotavirus vaccines advance in their development as rollouts continue to rise

## ***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 1 November 2014*
UN Ebola effort faces 'information challenge'
28 Oct 2014 08:46:42 GMT
Top Ebola official says trouble figuring out new infection cases in West Africa makes controlling outbreak difficult.

**The Atlantic**
http://www.theatlantic.com/magazine/
*Accessed 1 November 2014*
The Anti-Vaccine Movement Is Forgetting the Polio Epidemic
On the 100th anniversary of Jonas Salk's birth, his son Peter talks about the backlash against vaccines and other human factors that make it difficult to eradicate deadly viruses.
Jennie Rothenberg Gritz Oct 28 2014, 7:30 AM ET

**BBC**
http://www.bbc.co.uk/
*Accessed 1 November 2014*
Ebola crisis: Canada visa ban hits West Africa states
Canada is to suspend visa applications from residents and passport-holders from West African countries in the grip of the Ebola outbreak.
The decision follows a similar decision by Australia, which drew criticism from the World Health Organization (WHO).
The ban would apply to countries with "widespread and persistent-intense transmission", Canada said…

**Brookings**
http://www.brookings.edu/
*Accessed 1 November 2014*
[No new, unique, relevant content]

**Center for Global Development**
http://international.cgdev.org/

*Accessed 1 November 2014*
How Much Is Actually Being Spent on Ebola?
10/27/14
Amanda Glassman and Sneha Raghavan
How much is actually being spent on Ebola by donor governments, organizations, and private individuals? The short answer is that we don't really know.
We do know that the US government, the World Bank, and others are committing large amounts of money to Liberia, Guinea, and Sierra Leone through various channels such as the World Health Organization, UNICEF, the CDC, and bilateral aid to affected country governments. We also have UN OCHA's Financial Tracking service, which is publishing regular updates with donors' Ebola contributions.
However, compared to the pledges made in press releases, UN OCHA's numbers come up short for several donors, as of October 24, 2014. The figure below illustrates this discrepancy, with the differences amounting to as much as $391 million in the case of the US government. The World Bank has committed up to $400 million, but UN OCHA's database only accounts for around $197 million of this, even accounting for uncommitted pledges…

**Council on Foreign Relations**
http://www.cfr.org/
*Accessed 1 November 2014*
[No new, unique, relevant content]

**The Economist**
http://www.economist.com/
*Accessed 1 November 2014*
*Vaccine-makers and Ebola*
*Giving it a shot*
Drugmakers bet that vaccines will help in the fight against Ebola
Nov 1st 2014 | From the print edition
IN MAY 2013 GlaxoSmithKline (GSK), a British pharmaceuticals firm, bought a small Swiss vaccine-maker for $325m. It acquired Okairos because it had the technology to create vaccines that stimulate stronger than normal immune responses. In a press release Okairos said the deal included a "small number of early-stage assets".
That passing remark turned out to be a big deal. What GSK had paid for included a preclinical Ebola vaccine candidate, and in March this year it contacted the World Health Organisation (WHO) to let it know what it had. The WHO told GSK at first that its focus was on implementing disease-control protocols, and it was not until August that the company was asked to accelerate work on its vaccine.
The pharmaceutical industry has long neglected vaccines, not least because they are mostly needed by countries too poor to pay much for them. However, as concern about the current Ebola outbreak has grown, work on several candidates has been stepped up. This has involved unprecedented collaboration between companies, regulators, governments and bodies such as the WHO. Two candidates, GSK's and one from NewLink Genetics, an American firm, will be ready for testing in West Africa by the end of the year. Health-care workers will be the guinea-pigs, so if the vaccines work this would have the fortunate side-effect of protecting a vital group of people.
Johnson & Johnson (J&J), another American firm, is a slightly later entrant and its double-jab vaccine will begin human trials in January. Nevertheless it has just made a commitment of

$200m to accelerate and expand production of one of its jabs, and has spent more than $187m on a licensing deal with a Danish vaccine maker, Bavarian Nordic, to acquire the second. This deal includes upfront payments, equity investments, payouts at each important stage of progress and a supply contract. GSK says it can make 230,000 doses by April and 1m a month by the end of 2015. All this suggests it sees strong demand throughout next year.

Staff at GSK and J&J say they are working around the clock to accelerate production and that efforts are being driven by humanitarian need rather than any assumption that they will be profitable, or even work at all. Other vaccines are now being pushed forward but are not as far ahead as these three. Profectus BioSciences recently got two government contracts worth $17m to speed up work on its vaccine.

A lot of collaboration is likely in production, distribution and purchasing. Rival firms' jabs may be combined into a single treatment. Pfizer, another American firm, is offering to share its specialised production capacity. GAVI, an international agency that procures vaccines for poor countries, is working on a plan to make big advance orders of Ebola jabs, but it will need more money if its work on other diseases next year is not to suffer.

Besides the short-term help with the outbreak that it is providing, Britain has made a commitment to Sierra Leone, a former colony, to help finance the development of any vaccines it needs over the medium term. Other countries are being urged to follow its example. Governments have already provided around $500m since 2008 towards research costs for Ebola drugs and vaccines for poor countries.

In late October drug regulators, industry executives and other officials and experts gathered in Geneva to discuss what were the obstacles to delivering Ebola vaccines, and how to remove them. Regulators in America and Europe are trying to rush out guidelines on the data they would require to grant approval for vaccines to be put into widespread use. Since vaccines are given to healthy people, they must be put through stringent safety tests. Unapproved Ebola drugs, however, have been given to some patients. Pharmaceutical firms say if regulators could harmonise their approvals processes, that could speed up the delivery of new vaccines.

There are also plans for a liability fund overseen by the World Bank. This would recompense those who suffer adverse reactions after being inoculated. Vaccine-makers usually buy insurance for such eventualities, but given the shortened testing schedule for the proposed Ebola jabs, insurers may be reluctant to provide it.

If mass vaccination across West Africa proved necessary, there might be a need for tens of millions of doses. That may sound like an exciting business opportunity for the pharmaceutical firms. But even if the urgency of the situation prompts regulators to waive some of their strict requirements on testing, and even with a liability fund in place, the vaccine-makers will be putting their reputations on the line. If their jabs are rushed into production, at great cost to donors, but prove ineffective or, worse, have serious side-effects, the companies that made them are bound to suffer recriminations.

**Financial Times**
http://www.ft.com
*Accessed 1 November 2014*
Jim Yong Kim finds mission in Ebola crisis
29 October 2014

**Forbes**
http://www.forbes.com/
*Accessed 1 November 2014*

# Ebola Vaccine And Treatment Makers Need Liability Protection

Glenn G. Lammi , Contributor

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U.S. politicians and regulators, many of whom ordinarily trend toward hyper-caution on new drug reviews and approvals, are rushing forward with policies aimed at speeding up development of Ebola vaccines and treatments. These measures include coordinated research among public health officials and drug makers, Food and Drug Administration (FDA) pledges of regulatory assistance, and congressional interest in legislation to qualify Ebola-targeted products for an FDA priority-review program. Such cooperation is encouraging, but government also needs to take action on another R&D disincentive which, if left unaddressed, could completely undermine current efforts on Ebola and frustrate future cooperative management of unforeseen pandemics. Ebola vaccine and treatment manufacturers need to have protection from tort liability exposure.

Any medical procedure, pharmaceutical product, or vaccine may have adverse health risks in some instances. Drug manufacturers must consider those risks when deciding whether to invest millions of dollars for product R&D, and the Food and Drug Administration (FDA) must weigh those risks against the benefits when approving a treatment. Such risks, along with the high regulatory barriers and low economic incentives attendant to investing in rare diseases, likely have been factors that explain the dearth of Ebola vaccines and treatments.

The United States government has the motivation and the means to minimize or eliminate such liability risks. Federal health agencies are already directly involved in vaccine development, and they will no doubt also be the major purchasers of the resulting drugs. Those federal entities could include a provision in the R&D agreements or purchasing contracts that would substitute the government as a defendant in any resulting lawsuits against private businesses, or indemnify companies from tort liability. The former option is certainly superior to indemnification, which could require the vaccine and treatment producers to litigate cases and then seek reimbursement for the losses or settlements. The companies would also have to negotiate with the government over whether the indemnification would cover litigation costs, such as attorneys' fees.

The federal government indemnified manufacturers in contracts for a smallpox vaccine after the September 11, 2001 terrorist attacks. The companies argued that the proposed indemnification was insufficient, and in April 2003, Congress added expanded liability protections to the Homeland Security Act of 2002. For the one-year period of the national smallpox vaccination program (2003-2004), individuals allegedly harmed by a government-purchased smallpox vaccine could only sue the federal government under the Federal Tort Claims Act. Congress could consider the passage of a similar law for Ebola vaccines.

Congress could also legislatively alter the normal rules of liability in a manner beneficial to Ebola vaccine or treatment manufacturers. For instance, in the 2002 Homeland Security Act, Congress included the SAFETY Act. That law required persons allegedly harmed by "qualified anti-terrorism technology" (which could conceivably include vaccines) to file suit in federal court, and it prohibited them from pursuing exemplary damages. The law also limited the manufacturer's damages to the amount of SAFETY Act-mandated liability insurance. Congress could also consider creating a specific liability compensation program for alleged victims of Ebola vaccines and/or treatments, or bring the nascent vaccines under the rubric of an existing no-fault regime for vaccines, namely the National Vaccine Injury Compensation Program.

One final option, which may be the most feasible and immediately beneficial, would be to apply the Public Readiness and Emergency Preparedness Act of 2005 (PREP Act) to Ebola vaccines and treatments. As explained in a 2006 Washington Legal Foundation Legal Opinion

Letter, the act empowers the Secretary of Health and Human Services (HHS) to declare targeted liability protection for any vaccine or countermeasure in the event of a credible threat to public health or a public health emergency. Any person or entity can seek such a declaration, or the Secretary can make one sua sponte. The PREP Act applies only to tort liability claims, and the Secretary can limit the duration of the immunity and can apply other narrowing factors, such as geographical area and distribution method. Allegedly injured parties can only sue in federal court if the FDA or the Justice Department investigates and finds willful misconduct by the drug manufacturer. The act preempts all state laws that might limit distribution of the declared countermeasure, and it creates compensation funds for injured parties.

The HHS Secretary has previously declared PREP Act protection for six classes of drugs, most recently for the manufacture, distribution, and dispensing of avian influenza virus vaccine. The passage of new laws, the expansion of current ones, or the use of the PREP Act to address liability arising from the testing, manufacture, and dispensing of Ebola vaccines and countermeasures should be high on Ebola "czar" Ronald Klain's to-do list. America is fortunate that the feared deployment of smallpox as a bioterror weapon hasn't materialized, and that the avian flu virus did not proliferate. But government policies to mitigate liability exposure and create programs that cut out avaricious plaintiffs' lawyers from the injury compensation process successfully helped us to prepare. Similar measures are needed now as the deadly threat of Ebola stares us in the face, measures that may speed development of products that can stem the disease's spread overseas as well.

**Foreign Affairs**
http://www.foreignaffairs.com/
*Accessed 1 November 2014*

**Foreign Policy**
http://www.foreignpolicy.com/
*Accessed 1 November 2014*
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**The Guardian**
http://www.guardiannews.com/
*Accessed 1 November 2014*
[No new, unique, relevant content]

**The Huffington Post**
http://www.huffingtonpost.com/
*Accessed 1 November 2014*

**Le Monde**
*Accessed 1 November 2014*
http://www.lemonde.fr/
[No new, unique, relevant content]

**New Yorker**
http://www.newyorker.com/
*Accessed 1 November 2014*
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**New York Times**
http://www.nytimes.com/
*Accessed 1 November 2014*
In Liberia, a Good or Very Bad Sign: Empty Hospital Beds
28 October 2014
For days this month, the ambulances from this Ebola treatment unit went out in search of patients, only to return with just one or two suspected cases. And many times, those people ended up testing negative for the disease. "Where are the patients?" an aid worker wondered aloud as colleagues puzzled over the empty beds at the International Medical Corps treatment unit here in Bong County, Liberia, which opened in mid-September. Around the country, treatment centers, laboratory workers who test for Ebola, and international and national health officials trying to track the epidemic have noticed an unexpected pattern: There are far fewer people being treated for Ebola than anticipated. As of Sunday, fewer than half of the 649 treatment beds across the country were occupied, a surprising change in a nation where patients had long been turned away from Ebola units for lack of space…
The Flu, TB and Now Ebola: A Rare Legal Remedy Returns
26 October 2014
It was nearly 100 years ago that an influenza pandemic led to sweeping quarantines in American cities, and it was more than two decades ago that patients in New York were forced into isolation after an outbreak of tuberculosis. In modern America, public health actions of such gravity are remarkably rare. So the decisions by New York and New Jersey on Friday to quarantine some travelers returning from the Ebola zone in West Africa have taken public officials into unfamiliar legal and medical territory...The quarantine by New Jersey of medical workers returning from Ebola-afflicted areas of West Africa is virtually without precedent in the modern history of the nation, public health and legal experts said on Sunday…

**Wall Street Journal**
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
*Accessed 1 November 2014*
The High Cost of Quarantine - Expenses Range From Police Protection to Takeout Meals
For more than a week, a family of six from West Africa has been serving a mandatory quarantine in West Haven, Conn., one of the first orders enacted on travelers arriving in the U.S. from the Ebola-stricken region.
An unmarked police car and an officer remain outside the family's house 24 hours a day and a member of the city's health department comes by regularly to check for fever or other symptoms of Ebola. Other family members, who live in the house and can come and go, bring food and supplies to their homebound kin, said Edward O'Brien, West Haven's mayor.
The work of enforcing this quarantine, which fell to Mr. O'Brien and his town, hasn't been cost-free. Depending on how much overtime local police accrue, he estimates the tab at about $1,000 a day or more….

**Washington Post**
http://www.washingtonpost.com/
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*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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