

Vaccines and Global Health: The Week in Review 4 October 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.

Editor's Note:

The pace and complexity of the Ebola/EVD crisis continues. We will strive to present a coherent, high-level digest of the situation using official sources wherever possible, with a special focus on vaccines and other interventions now in development and various trials globally. Reading this issue you will encounter significant Ebola content throughout.

We note that UNMEER (UN Mission for Ebola Emergency Response) – the new UN coordinating mission established by and reporting to the UN Secretary General – began operations and launched its own website with daily "external situation reports" updates and other content as below.

We lead this edition with the full text of a report from a WHO consultation on the status of and milestones ahead for candidate Ebola/EVD vaccines.

EBOLA [to 4 October 2014]

WHO: Experimental Ebola vaccines 1 October 2014

WHO consultation on Ebola vaccines

[Full text with milestones summary at bottom]

From 29–30 September, WHO organized an expert consultation to assess the status of work to test and eventually license two candidate Ebola vaccines. More than 70 experts, including many from affected and neighbouring countries in West Africa, attended the event.

The expertise represented among participants ranged from the virology of emerging infections, to regulatory requirements that must be met, to medical ethics, public health, and infectious diseases. Heads of clinical research and other executives from the pharmaceutical industry also presented their views.

Some participants came with more than 3 decades of experience working in Africa on other infectious diseases.

Experts on the use of innovative, cutting-edge trial designs also shared their most recent work.

The overarching objective was to take stock of the many efforts currently under way to rapidly evaluate Ebola vaccines for safety and efficacy. The next step is to make these vaccines available as soon as possible – and in sufficient quantities – to protect critical frontline workers and to make a difference in the epidemic's future evolution.

All agreed on the ultimate goal: to have a fully tested and licensed product that can be scaled up for use in mass vaccination campaigns.

Two promising candidate vaccines

Given the public health need for safe and effective Ebola interventions, WHO regards the expedited evaluation of all Ebola vaccines with clinical grade material as a high priority. Two candidate vaccines have clinical-grade vials available for phase 1 pre-licensure clinical trials.

One (cAd3-ZEBOV) has been developed by GlaxoSmithKline in collaboration with the US National Institute of Allergy and Infectious Diseases. It uses a chimpanzee-derived adenovirus vector with an Ebola virus gene inserted.

The second (rVSV-ZEBOV) was developed by the Public Health Agency of Canada in Winnipeg. The license for commercialization of the Canadian vaccine is held by an American company, the NewLink Genetics company, located in Ames, Iowa. The vaccine uses an attenuated or weakened vesicular stomatitis virus, a pathogen found in livestock; one of its genes has been replaced by an Ebola virus gene.

Phase 1 clinical trials

WHO and other partners have helped facilitate expedited evaluation of these two vaccines in order to generate phase 1 safety and immunogenicity data for decision-making. A series of coordinated phase 1 trials is currently under way or will soon be initiated with international consortia at more than 10 sites in Africa, Europe and North America.

These studies aim to ensure good communication and harmonization of key design elements to allow for merging of data from different trials of the same candidate products.

The trials, which are being conducted in healthy human volunteers, are designed to test safety and immunogenicity and select the appropriate dose. Two phase 1 trials of the cAd3-ZEBOV started in September 2014 in USA and UK, and the first Phase 1 trial of VSV-ZEBOV is due to start early in October in USA.

The government of Canada has donated 800 vials of rVSV-ZEBOV to WHO. Once data on dosing from phase 1 trials become available, this donation could translate into about 1500 to 2000 doses of vaccine.

Both companies are working to augment their manufacturing capacity. The goal is a very significant increase in scale during the first half of 2015.

No delays

One shared mindset was readily apparent during the two-day discussions. Nothing must be allowed to slow down the goal of making vaccines accessible to people in affected West African countries. The phrase, "Nothing can be allowed to delay this work", was heard over and over again.

The ambition: to accomplish, within a matter of months, work that normally takes from two to four years, without compromising international standards for safety and efficacy.

In other words: to give the African people and their health authorities the best product that the world's scientists, working collectively, have to offer.

What the experts considered

Against this background, the meeting looked specifically at the objectives and key design elements for moving in an expedited manner to conduct additional clinical trials (phase 2 trial designs) that will generate additional safety data and evidence that the vaccine confers protection.

Parallel pathways for emergency use of experimental candidate vaccines with data collection, among frontline health care workers and other critical personnel, were also explored. Apart from the great sense of urgency, the overall spirit of the discussions was characterized by a strong sense of solidarity with the people of West Africa, their governments, and their medical, scientific, and public health communities.

Equally strong was the insistence on ensuring that evidence on safety, immunogenicity, and efficacy of the vaccines is collected properly.

Multiple challenges

Multiple potential challenges and uncertainties were put forward and assessed. Issues ranging from barriers to rapid implementation of R&D, to the design of trials and their use to guide eventual widespread vaccination, were discussed together with proposed ways to overcome them.

Some of the practical issues discussed included how to address communities' perceptions regarding vaccines in general, and vaccine studies more specifically, public expectations for vaccine availability for widespread use, and whether there is an adequate infrastructure in place to rapidly and safely evaluate and distribute vaccines.

One important technical challenge is the fact that the candidate vaccines must be stored at a temperature of -80°C.

Further issues that need to be urgently addressed include identifying staff who can conduct trials meeting international standards, logistical issues (such as cold chain needs for the vaccines), and the resources needed to start the studies quickly.

Some of the scientific challenges include how to conduct studies as safely and rapidly as possible to inform decisions about mass production of vaccines and their administration.

Key questions

Discussions focused on the main questions that studies should help address, which part of the research should be conducted in non-affected areas and which part in affected areas, and how such decisions could either help expedite or delay the availability of robust evidence.

One overarching conclusion was that the international community, joining the affected countries as a whole, has a responsibility and a role to play in accelerating the evaluation, licensing, and availability of the candidate vaccines – if proven safe and effective.

For all these reasons, the actions emerging from the consultation clearly identify a role for each of the main stakeholders.

Randomized controlled trials

Regarding the issue of how to accelerate the assessment and licensure of the vaccines, experts reiterated that, if feasible, randomized controlled trials are the design of choice because they provide the most robust data, in the shortest amount of time, to judge whether a vaccine is safe and induces protection.

Trials must be expedited, while preserving ethical and safety standards. Efficacy data of high quality must be gathered. Trials need to be carefully designed so that they concomitantly address the most important questions regarding safety, immunogenicity, and efficacy.

While individually randomized controlled trials provide the most robust data, alternative designs should be considered when these trials are not judged feasible. These include cluster-randomized and stepped-wedge designs. As long as the amount of vaccine remains limited, units – such as health or treatment facilities – can be randomized. Regardless of the design chosen, trials should move forward as quickly as possible.

Alternative study designs

Alternative study designs will not delay deployment of vaccine to those who need it. Instead, they will influence the choice of people who receive the vaccine. For some months to come, the critical limiting factor is extremely restricted vaccine supply, and not the need to conduct studies using alternative designs.

Descriptions of the so-called "randomized stepped wedge" design attracted lively interest and much discussion. In this design, a "wedge" (like a slice of a pie or a cake) of the study population is selected for step-wise inclusion in the trials.

As each "wedge" receives the vaccine, all lessons learned or needed to adjust the study design are then applied to the next group to be included in the study. The selection of study populations can be randomized by units, as described above; the entire study population eventually receives the vaccine if trials demonstrate sufficient efficacy.

Such a design makes it possible to roll out vaccinations and evaluate efficacy at the same time. It further has features that meet the explicit objective of fairness.

Other designs will be more relevant when large numbers of vaccine doses are available.

Involving countries

Decisions on study designs and target populations must be made with the active participation of experts from the three hardest-hit countries. Consultations with frontline health workers should be undertaken as a matter of urgency to identify the most feasible approaches to evaluate vaccine efficacy and identify factors influencing acceptability of randomized trials.

The experts discussed the importance of making sure that the trials are appropriately designed to inform the use of these vaccines in all populations, including children, pregnant women, and immunocompromised populations, including people who are HIV positive.

The group also discussed how best to use the doses of experimental vaccine donated by Canada and additional doses that may be available later this year and in 2015.

If vaccine doses are used in the short term, vaccines should be deployed to consenting frontline health workers.

The decision to initiate such deployment should be informed by data emerging from the phase 1 studies, and will occur with data collection on the deployment itself.

Equity is important and therefore vaccine should be made available in an equitable and consensual manner to the affected countries. Maximizing the information gained from the use of these vaccines during this phase is critical.

Information sharing

A cross-cutting issue is the need for data sharing – in real time – among the research, medical, and public health communities, coordinated by WHO. This was considered of paramount importance to inform decisions on future studies and scaling up the production of those experimental vaccines that look most promising.

Vaccine development normally takes a long time and is notoriously costly. Even under the best conditions and with the massive efforts of many partners, a significant number of doses will not be available until late in the first quarter of 2015.

One important factor for the completion of all the above steps is to secure the funding to ensure the production of the vaccine and to support priority studies. Major international funding partners should promptly pledge or commit the necessary funding so that this critical research is completed without further delay.

The African perspective

The presence of West African researchers, scientists, clinicians, and health officials vastly enriched the discussions, especially concerning the practical dimensions of trial design.

These experts further underscored the importance of communicating with communities and engaging their views, and called for qualitative studies to begin immediately. For example, some cultures are deeply distrustful of "Western" medicine and foreign medical staff in general, and of vaccines in particular.

Interventions from the three hardest-hit countries, Guinea, Liberia, and Sierra Leone, clearly stated that international assistance is both greatly needed and fully welcomed.

Families and entire villages have been shattered. Some communities are on the verge of hopelessness and helplessness. Many do not comprehend what hit them and why, especially as this is the first time that the Ebola virus and Ebola virus disease have been seen in West Africa. Governments are on board. Clinicians are on board. Researchers and their institutes are on board.

Statements made by West Africans reminded all participants of what life is really like in these countries. Children do not play in school yards, play pens, fenced back yards, or terraced gardens. They play in the bush.

These realities of daily African life need to be kept in mind when high-risk exposures are considered and defined.

Health workers

Participants were further reminded that the definition of "health care workers" in these African countries includes doctors, nurses, and laboratory technicians but also hospital cleaners, ambulance drivers, burial teams, mortuary attendants, and in some instances, traditional healers.

As hospitals in many areas are overflowing or closed, the number of treatment beds in all three countries is woefully inadequate, and people frequently do not trust the health care system, more and more patients are being cared for by their loved ones in homes or within the community.

These people are also at very high risk of infection and should be considered when priorities for support – in all its forms – are being set. The importance of community engagement cannot be overstated.

Operational changes made since the unprecedented resolutions on Ebola virus disease were adopted by an emergency session of the UN Security Council (on 18 September) and by a UN General Assembly high-level session on Ebola (on 25 September) involve a vast ground-swell scaling-up of international support to affected countries. This support includes a much larger number of medical staff working in countries, thanks to generous support from the governments of China, Cuba, and many others.

Lessons learned

Participants also drew heavily on lessons learned, in the African setting, during trials for candidate malaria, HIV/AIDS, cholera, epidemic meningitis, hepatitis B, and other vaccines.

As some experts noted, never again can the international community allow what boils down to "market failure" to create such catastrophic suffering for humanity in any country, in any region of the world.

The sense of urgency and need for speed, without compromising the integrity of studies or the quality of their data, are fully justified by the dire situation in affected countries and the risk that other countries may soon experience their first imported cases.

The Ebola outbreak currently ravaging parts of West Africa is the most severe acute public health emergency in modern times. Never before in recent history has a biosafety level 4 pathogen infected so many people so quickly, over such a wide geographical area, for so long.

Key expected milestones

- :: October 2014 Mechanisms for evaluating and sharing data in real time must be prepared and agreed upon and the remainder of the phase 1 trials must be started
- :: October–November 2014 Agreed common protocols (including for phase 2 studies) across different sites must be developed
- :: October–November 2014 Preparation of sites in affected countries for phase 2 b should start as soon as possible
- :: November-December 2014 Initial safety data from phase 1 trials will be available
- :: January 2015 GMP (Good Manufacturing Practices) grade vaccine doses will be available for phase 2 as soon as possible
- :: January—February 2015 Phase 2 studies to be approved and initiated in affected and non-affected countries (as appropriate)
- :: As soon as possible after data on efficacy become available Planning for large-scale vaccination, including systems for vaccine financing, allocation, and use.

UNMEER (UN Mission for Ebola Emergency Response)

http://www.un.org/ebolaresponse/index.shtml

:: <u>UN Ebola Crisis Centre</u>: <u>External Situation Report - 3 October 2014</u> HIGHLIGHTS

SRSG Banbury continues his visit in Liberia, including to a treatment facility in Lofa County

- Appointment of Victor Kisob to lead the Ebola Response Liaison office at UN Headquarters in New York
- Numerous new pledges made during the "Defeating Ebola in Sierra Leone" conference held in London yesterday attended by Special Envoy Nabarro; U.K. announces pilot scheme for community healthcare centres in Sierra Leone
- WFP and UNDP raise concerns about the impact of Ebola on West African economies, trade activities and food security

WHO Ebola virus disease - web site

- :: Situation report update 3 October 2014 pdf, 1.78 Mb
- :: Liberia: Ebola treatment centre sets a new pace 2 October 2014
- :: Liberia: Ebola clinic fills up within hours of opening 29 September 2014

:: International meetings attended by individuals from Ebola virus disease-affected countries

WHO Interim guidance

3 October 2014 :: 12 pages

WHO reference number: WHO/EVD/GUIDANCE/MG/14.1

Download the full version in English

Overview

The transmission of Ebola virus disease across country borders remains a risk, and should be taken into account when planning international meetings and large mass gatherings.

This interim guidance is aimed at assisting organizers of international meetings attended by individuals from EVD-affected countries and individuals with a travel history to EVD-affected countries within the previous 3 weeks.

The first part is intended for organizers of international meetings, to safely plan and conduct these events. The second part is addressed to public health authorities directly involved in supporting such international meetings.

OCHA

- :: Map: West Africa: Ebola Virus Disease (EVD) Outbreak (as of 30 Sep 2014)
- :: <u>Democratic Republic of the Congo</u>: <u>D.R. Congo</u>: <u>Humanitarian Fund releases USD 2.5 million to join the Government's efforts to fight Ebola in Equateur Province</u> 04 Oct 2014

 Source: UN Office for the Coordination of Humanitarian Affairs Country: Democratic Republic of the Congo (Kinshasa, 3 October 2014): The Humanitarian Coordinator in the Democratic Republic of Congo (DRC), Moustapha Soumaré, has allocated USD 2.56 million from the Common Humanitarian Fund (CHF) to fight the country's latest outbreak of Ebola in Equateur Province. As of 2 October, the highly contagious viral disease has killed 43 people out of 70 cases in the Boende district, over 1,000 km...
- :: <u>Liberia: CERF response to Ebola outbreak, as of 3 October 2014</u> 03 Oct 2014 Source: UN Office for the Coordination of Humanitarian Affairs Country: Guinea, Liberia, Nigeria, Sierra Leone CERF regional response overview (in US\$ million) CERF RESPONSE TIMELINE 15.2 US\$ million Allocations April—July • At the onset of the emergency, CERF provided three rapid response allocations, totaling \$2.3 million, for Guinea, Sierra Leone and

Liberia. The majority of funds supported emergency health activities, including training of medical personnel, disease detection and...

:: <u>Democratic Republic of the Congo: Update on the ebola virus disease in DRC, No.13, 29 September 2014–7pm [EN/FR]</u> 30 Sep 2014

Source: UN Office for the Coordination of Humanitarian Affairs Country: Democratic Republic of the Congo Coordination/ Keys developments

8 health personnel have died of Ebola Virus Disease (EVD) since the outbreak of the epidemic. On 28 September, the total number of cases (see table above for details) [had] ... an overall lethality rate of around 60%. The latest confirmed case was on 24 September...

UNICEF Watch [to 4 October 2014]

http://www.unicef.org/media/media_71724.html

:: Thousands of children orphaned by Ebola: UNICEF

DAKAR/GENEVA/NEW YORK, 30 September 2014 – At least 3,700 children in Guinea, Liberia and Sierra Leone have lost one or both parents to Ebola since the start of the outbreak in West Africa, according to preliminary UNICEF estimates, and many are being rejected by their surviving relatives for fear of infection.

UNDP

03 Oct 2014

Top United Nations Development officials to visit Ebola-affected countries

UNDP is carrying out a high-level mission to Guinea, Sierra Leone, Liberia and Senegal, aiming to boost efforts to contain Ebola outbreak while helping to preserve essential services and livelihoods.

UNFPA

03 October 2014 - Dispatch

Fear of health workers fuels Ebola crisis in Guinea

CONAKRY/NEW YORK – Panic over the Ebola outbreak in Guinea has inflamed distrust of health officials, impeding access to critical health services. UNFPA is reaching out to journalists and community leaders to dispel rumours about the disease and to encourage people to seek proper care – not only for suspected Ebola infections but also for other essential health needs.

UN Ebola Response MPTF [Multi-Partner Trust Fund]

http://mptf.undp.org/factsheet/fund/EBO00

- :: Terms of Reference
- :: Ebola MPTF Fact-Sheet
- :: Frequently Asked Questions

CDC/MMWR Watch [to 4 October 2014]

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

:: CDC Update on First Ebola Case Diagnosed in the United States, 10-03-2014 - Transcript

Friday, October 3, 2014

CDC hosted a telebriefing to update the investigation of the first Ebola case diagnosed in the United States.

MMWR, October 3, 2014 / Vol. 63 / No. 39

- :: <u>Typhoid Fever Surveillance and Vaccine Use South-East Asia and Western Pacific Regions, 2009–2013</u>
- :: Update: Influenza Activity United States and Worldwide, May 18-September 20, 2014
- :: Ebola Virus Disease Outbreak West Africa, September 2014
- :: Ebola Virus Disease Outbreak Nigeria, July-September 2014
- :: Importation and Containment of Ebola Virus Disease Senegal, August-September 2014

POLIO [to 4 October 2014]

GPEI Update: Polio this week - As of 24 September 2014

Global Polio Eradication Initiative Editor's Excerpt and text bolding

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

- :: All cases of wild poliovirus type 1 reported this week were from Pakistan. In 2014, Pakistan has accounted for 83% of cases reported globally. Khyber Pakhtunkhwa province and the Federally Administered Tribal Areas (FATA) constitute the most heavily infected area of the world, with 73% of cases worldwide occurring within these provinces.
- :: The risk of international spread of polio from Pakistan remains high. The bulk of cases in neighbouring Afghanistan are linked to cross-border transmission with Pakistan, and the outbreak affecting the Middle East originated in Pakistan.
- :: The Global Polio Eradication Initiative's Independent Monitoring Board (IMB) is meeting this week in London to review the progress of the past months. The IMB report will be published in 3 weeks.

Pakistan

- :: Eight new wild poliovirus type 1 (WPV1) cases were reported in the past week. Of these, 3 are from the Federally Administered Tribal Areas (FATA) (1 from North Waziristan Agency and 2 from Khyber Agency); 2 are from Khyber Pakhtunkhwa province (1 from Tank and 1 from Torghar district, which had been uninfected so far in 2014); 2 from Balochistan province (1 in Killa Abdulah and 1 in Quetta district); and 1 case in Sindh province in the previously uninfected Liaqat town of Karachi city. This brings the total number of WPV1 cases in 2014 to 174 compared to 36 in 2013 by this date. The most recent case had onset of paralysis on 14 September in Khyber Agency.
- :: Immunization activities are continuing with particular focus on known high-risk areas, in particular the newly opened areas of Khyber Pakhtunkhwa province. At exit and entry points, 182 permanent vaccination points are being used to reach internally displaced families as they leave their homes.

West Africa

:: Even as polio programme staff across West Africa support efforts to control the Ebola outbreak affecting the region, efforts are being made in those countries not affected by Ebola to vaccinate children against polio. National Immunization Days (NIDs) are planned in Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea Bissau, Mali, Mauritania, Niger, Senegal and Togo on 31 October to 2 November.

WHO & Regionals [to 4 October 2014]

:: MERS-CoV - WHO statement on the Seventh Meeting of the IHR Emergency Committee

1 October 2014

[Full text]

The seventh meeting of the Emergency Committee (EC) convened by the Director-General under the International Health Regulations (IHR 2005) regarding the Middle East respiratory syndrome coronavirus (MERS-CoV) was conducted with members and advisors of the Emergency Committee through electronic correspondence from 26 September 2014 through 30 September 2014.1

The WHO Secretariat provided an update on and assessment of epidemiological and scientific developments, including a description of recently reported cases and transmission patterns. Islamic Republic of Iran and Saudi Arabia provided an update on and assessment of MERS-CoV, including progress towards implementation of the Emergency Committee's temporary recommendations. 2

The Committee noted that: (i) there have been significant efforts made to strengthen infection prevention and control measures, with an epidemiological situation that has not changed since the 6th meeting of the IHR EC; (ii) the number of cases has fallen since the April upswing, and cases continues to appear sporadically with no evidence of sustained human-to-human transmission in communities; (iii) although transmission in health care settings is still occurring in small clusters, transmission seems generally contained; (iv) activities conducted to reduce the international spread of MERS-CoV seem to be effective; and (v) the current data suggest that MERS-CoV transmission could be seasonal, with an upsurge expected next spring.

The Committee reiterated that its previous advice remains relevant and that significant efforts should be made to:

- :: continue to strengthen infection prevention control (IPC) practices, build capacity of heathcare workers and provide protective equipment in vulnerable countries, especially African countries;
- :: improve awareness about MERS-CoV among pilgrims going for Hajj, and conduct surveillance for MERS-CoV among pilgrims during and after Hajj;
- :: harmonise laboratory testing algorithms;
- :: reinforce epidemiological surveillance in camels in the Middle East and in Africa, as well as surveillance in humans and address critical gaps in knowledge of human and animal transmission.

The Committee unanimously concluded that the conditions for a Public Health Emergency of International Concern (PHEIC) have not yet been met.

Based on the Committee's advice, and information currently available, the Director-General accepted the Committee's assessment. She thanked the Committee for its work.

The WHO Secretariat will continue to provide regular updates to the Committee Members and Advisors. The Emergency Committee will be reconvened in three months, or earlier if circumstances require.

- :: WHO SAGE Meeting: Geneva, 21-23 October 2014 Draft agenda (as of 29 September 2014)
- :: WHO Global Alert and Response (GAR) :: Disease Outbreak News (DONs) http://www.who.int/csr/don/en/
- Middle East respiratory syndrome coronavirus (MERS-CoV) Austria 2 October 2014
- Middle East respiratory syndrome coronavirus (MERS-CoV) Saudi Arabia 2 October 2014

- Ebola virus disease United States of America 1 October 2014
- :: <u>The Weekly Epidemiological Record (WER) 3 October 2014</u>, vol. 89, 40 (pp. 429–440) includes:
- Typhoid fever surveillance and vaccine use, South-East Asia and Western Pacific Regions, 2009–2013

http://www.who.int/entity/wer/2014/wer8940.pdf?ua=1

:: GIN September 2014 pdf, 1.64Mb

:: WHO Europe

- WHO delivers tetanus toxoid vaccine to Ukraine 03-10-2014

On 26 September 2014, WHO delivered a second tranche of medicine to Kyiv. The shipment included 300 000 doses of tetanus toxoid (TT) vaccine, which will cover Ukraine's needs until the end of 2015.

- <u>Statement regarding interim findings of WHO assessment of deaths of children in Idleb</u> governorate, Syrian Arab Republic 29-09-2014

A WHO assessment of the cause of the death of 15 children in rural Idleb, northern Syrian Arab Republic, has concluded that the most likely cause of the event was the incorrect use of a drug called Atracurium as a diluent for measles/rubella vaccine. There is no evidence that the measles/rubella vaccine itself or its correct diluent were the cause of this tragic event.

:: WHO PAHO

- Health officials from the Americas chart a path toward universal health coverage (10/02/2014)
- <u>Ministries of health of the Americas seek to strengthen coordination of humanitarian assistance in emergencies and disasters</u> (10/02/2014)
- <u>Health officials seek to reduce blindness and visual impairment in the Americas</u> (10/02/2014)
- Ministers of health of the Americas pledge action to improve mental health care (10/02/2014)
- Countries of the Americas seek to ensure safe and ample blood supplies through 100% voluntary donation (10/01/2014)
- Countries of the Americas agree to promote health in all public policies that have potential health impact (09/30/2014)

NIH Watch [to 4 October 2014]

:: NIH awards seven new vaccine adjuvant discovery contracts

The National Institute of Allergy and Infectious Diseases (NIAID awarded seven research contracts to discover and characterize new adjuvants, or substances formulated as part of vaccines to enhance their protective ability.

"The goal of this research is to identify novel adjuvant candidates that safely and selectively boost vaccine-induced immune responses," said NIAID Director Anthony S. Fauci, M.D. "Such adjuvants could be used to improve current vaccines, extend the vaccine supply or enhance vaccine efficacy in people with immature or weakened immune systems, such as infants and the elderly."

Total funding for these contracts, which are accelerating progress toward the goals described in NIAID's <u>Strategic Plan for Research on Vaccine Adjuvants</u>, could reach approximately \$70 million over five years.

The following institutions received the new contracts

- :: University of California, San Diego, La Jolla. Dennis Carson, M.D., principal investigator
- :: Boston Children's Hospital. Ofer Levy, M.D., Ph.D., principal investigator
- :: Vaxine PTY LTD, South Australia, Australia. Nikolai Petrovsky, Ph.D., principal investigator Corixa Corporation (now part of GlaxoSmithKline), Hamilton, Montana. Jay Evans, Ph.D., principal investigator
- :: Duke University, Durham, North Carolina. Herman Staats, Ph.D., principal investigator
- :: Oregon Health & Science University, Portland. Jay Nelson, Ph.D., principal investigator
- :: University of Kansas, Lawrence. Sunil David, M.D., Ph.D., principal investigator

IVI

:: IVI appoints Jerome H. Kim as Director General

Media Release

[Excerpt]

SEOUL, Republic Of Korea, Sept. 29, 2014 /PRNewswire/

The International Vaccine Institute (IVI)...announced the appointment of Jerome H. Kim, M.D., as the organization's Director General, effective early 2015.

"Jerome's scientific knowledge, technical expertise, and organizational and leadership skills make him an ideal fit for the position," said Prof. Adel A. Mahmoud, Chair of IVI's Board of Trustees. "With his distinguished track record in vaccine research & development and passionate commitment to vaccines, he will bring strong scientific leadership and management of a dynamic international organization."

"I am honored by the opportunity to join IVI, and I look forward to working with the IVI team, partners, and donors," said Dr. Kim, "IVI is a very unique organization. Its breadth in vaccinology spans research & development, epidemiology, technology transfer, policy and access. Together, we will improve the health and wellbeing of the world's poorest populations through fulfilling IVI's mission – to discover, develop, and deliver safe, effective and affordable vaccines for developing nations."...

Dr. Kim is a Professor of Medicine at the Uniformed Services University of the Health Sciences and is a Fellow of the American College of Physicians and the Infectious Diseases Society of America. He received his M.D. from the Yale University School of Medicine, and completed his training in Internal Medicine and fellowship in Infectious Diseases at Duke University Medical Center...

:: In Memoriam: Prof. Ragnar Norrby (1943 – 2014

IVI is greatly saddened by the recent passing of Prof. Ragnar Norrby. Prof. Norrby was a member of the IVI Board of Trustees (BOT), first as a representative of Sweden from 2005 to 2007, then as Board Chair and member-at –large from 2007 to 2012. Prof. Norrby was the Director General of the Swedish Institute for Infectious Disease Control in Stockholm, Sweden. His extensive expertise and experience in public health allowed him to make many contributions to IVI and its Board over the years. His presence will be missed.

IAVI

:: IAVI Welcomes Korean Women against AIDS to India

October 2, 2014

Group's Grant to IAVI Will Support AIDS Vaccine Research in Asia and Globally

The International AIDS Vaccine Initiative (IAVI) announced a \$50,000 grant from Korean Women against AIDS (KOWA), a newly formed advocacy organization comprised of leading members of the business and legislative communities of the Republic of Korea. KOWA awarded the grant shortly before embarking on a five-day visit in September, organized by IAVI and UNAIDS, to learn more about HIV/AIDS in India. "We are grateful for this commitment from such an illustrious group of leaders and innovators to help advance IAVI's mission to ensure development of an effective and accessible AIDS vaccine," said IAVI President & CEO Margie McGlynn...

GAVI Watch [to 4 October 2014]

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

:: <u>Norway to commit at least US\$ 215 million a year to Gavi between 2016 and 2020</u> Commitment will support immunisation programmes in developing countries to save lives and protect children's health.

Global Fund Watch [to 4 October 2014]

http://www.theglobalfund.org/en/mediacenter/announcements/

:: Luxembourg Raises Contribution to the Global Fund

29 September 2014

NEW YORK – Luxembourg is increasing its financial commitment to the Global Fund for 2014, thereby unlocking additional contributions from the United States and the United Kingdom. Prime Minister Xavier Bettel announced at the 2014 Global Citizen Festival in New York on Saturday that Luxembourg is making an additional pledge of €500,000 for 2014, in addition to its earlier pledge of €2.5 million. Both the United States and the United Kingdom have geared their own contributions to the Global Fund in a way that maximizes donations by other countries.

Industry Watch [to 4 October 2014]

Selected media releases and other selected content from industry. *No new digest content identified.*

FDA Watch [to 4 October 2014]

http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm *No new digest content identified.*

European Medicines Agency Watch [to 4 October 2014]

http://www.ema.europa.eu/ema/ No new digest content identified.

EVI Watch (European Vaccine Initiative) [to 4 October 2014]

http://www.euvaccine.eu/

No new digest content identified.

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

Vaccines and Global Health: The Week in Review has expanded its coverage of new reports, books, research and analysis published independent of the journal channel covered in Journal Watch below. Our interests span immunization and vaccines, as well as global public health, health governance, and associated themes. If you would like to suggest content to be included in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org

No new digest content.

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

No new relevant content identified.

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 4 October 2014
[No new, unique, relevant content]

The Atlantic

http://www.theatlantic.com/magazine/
Accessed 4 October 2014
[No new, unique, relevant content]

Bloomberg

http://www.bloomberg.com/
[No new, unique, relevant content]

BBC

http://www.bbc.co.uk/

Accessed 4 October 2014

4 October 2014 Last updated at 11:16 ET

Ebola outbreak: Eid celebrations subdued in West Africa

Celebrations in West Africa for the Muslim festival of Eid al-Adha have been badly affected by the Ebola outbreak.

Reports from Guinea say public places used for prayers are deserted while religious leaders in Sierra Leone told Muslims not to shake hands or embrace.

Meanwhile, a French nurse who got the virus in Liberia has recovered after having experimental treatment in Paris.

The outbreak is the world's deadliest and has killed more than 3,400 people.

The government in Guinea, where about 85% of the country's 11 million population are Muslim, warned people not to hold large gatherings in fields and squares often used for prayers.

Locals said Muslims were still slaughtering ceremonial sheep for Eid, but were doing so in smaller groups at their homes.

In Sierra Leone, which also has a large Muslim population, the United Council of Imams reminded people to follow the government's advice to avoid bodily contact...

Brookings

http://www.brookings.edu/ Accessed 4 October 2014 [No new, unique, relevant content]

Council on Foreign Relations

http://www.cfr.org/

Accessed 4 October 2014

Council of Councils Global Memos

Ebola and Cultures of Engagement: Chinese Versus Western Health Diplomacy

October 3, 2014

The Ebola outbreak in West Africa has killed more than 3,000 people, highlighting the ineffectiveness of existing health institutions in Africa. This brief considers Western and Chinese approaches to the Ebola outbreak as well as their long-term health diplomacy strategies, while considering how these contrasts reflect the differences in Western and Chinese diplomatic engagement on the continent more generally. Considering the merits and gaps of both horizontal and vertical healthcare approaches, Erica Penfold and Pieter Fourie argue that international health diplomacy should place greater emphasis on building horizontal, integrated healthcare systems to avoid similar pandemics.

Transcript

Media Conference Call: Laurie Garrett on Ebola

with Laurie Garrett, Thomas E. Novotny October 1, 2014

Laurie Garrett, CFR's senior fellow for global health, discusses the recent arrival of a traveler infected with Ebola in the United States, as well as the virus' rapid spread throughout West Africa.

Economist

http://www.economist.com/ Accessed 4 October 2014 [No new, unique, relevant content]

Financial Times

http://www.ft.com Accessed 4 October 2014 [No new, unique, relevant content]

Forbes

http://www.forbes.com/ Accessed 4 October 2014

Five Ethical Points Now That Ebola Has Entered The USA

Arthur Caplan, Contributor Sep 30, 2014

The first case of Ebola to occur on American soil has now occurred. The CDC announced a hospital in Dallas, Texas, has hospitalized a man who came there to visit his family. Sadly, this news is going to create a lot of panic. For example, the Internet will likely soon be [...]

Foreign Affairs

http://www.foreignaffairs.com/ Accessed 4 October 2014 [No new, unique, relevant content]

Foreign Policy

http://www.foreignpolicy.com/ Accessed 4 October 2014 [No new, unique, relevant content]

The Guardian

http://www.guardiannews.com/ Accessed 4 October 2014

The Observer view on the Ebola outbreak

Observer editorial

Saturday 4 October 2014 19.03 EDT

The world needs to face up to this global crisis

The world's most <u>deadly Ebola outbreak</u>, which has killed more than 3,000 people in west Africa and set belated alarm bells ringing throughout the international community, has its probable origin in a remote village in Guinea, close to the border with Liberia and Sierra Leone. On 26 December 2013, a two-year-old boy fell sick with a mysterious illness whose symptoms local people and medical workers had never seen before. Within two days, the boy was dead. As more people in the area succumbed and others began to flee, perplexed staff from the French-founded medical aid charity, Médecins Sans Frontières (MSF), developed a nightmarish suspicion.

"Samples [were sent] to the Institut Pasteur in Paris," a World Health Organisation (WHO) investigation reported. "The first news was shocking: the causative agent was indeed the Ebola virus." Who could ever have guessed that such a notorious disease, previously confined to Central Africa and Gabon, would crop up in another distant part of the continent? The news from subsequent virological analyses was even worse: this was Ebola Zaire, the most lethal in the family of five distinct Ebola species.

The finding was recorded on the WHO's website on 23 March. Since then, for a variety of causes, some wholly preventable, some less so, the often imagined but never seriously confronted prospect of a lethal, global pandemic with no readily available cure, spiralling out of control, has drawn ever closer. "Six months into the worst <u>Ebola</u> epidemic in history, the world is losing the battle to contain it," MSF's president, Joanne Liu, told the UN last month. "The WHO announcement on 8 August that the epidemic constituted a 'public health emergency of international concern' has not led to decisive action. States have essentially joined a global coalition of inaction," she said.

The reasons why this most devastating strain of Ebola suddenly sprang up in west Africa remain uncertain, but the under-resourced, often panicky and chronically unco-ordinated reaction to its arrival there has been only too painfully obvious. Last week's report that the Aids pandemic originated in Kinshasa, capital of the Democratic Republic of Congo, in the 1920s is instructive. In that case, researchers say, increased urban population density, disrupted societal norms leading to sexual promiscuity, and railway travel – the by-products of Belgian colonialism – encouraged the spread of HIV.

Similarly, in Guinea, Sierra Leone and Liberia, recent, prolonged periods of armed conflict and population upheavals, coupled with the unchecked exploitation of natural resources by international timber and mining companies, have altered regional ecology, rendering it more vulnerable physically as well as politically. Due to loss of habitat, fruit bats, widely believed to be the natural reservoir of the virus, moved closer to human settlements. People hunted and ate infected forest animals such as monkeys, squirrel and antelopes, the WHO report found. "Though no one knew it at the time, the Ebola virus had found a new home in a highly vulnerable population."

Whatever its causes, it is evident now that the rapid and accelerating spread of Ebola – the virus is infecting five additional people every hour in <u>Sierra Leone</u> and a similar number in Liberia – is the avoidable result of a lack of hospital beds, isolation wards and basic facilities. It is the result, also, of too few doctors and nurses, of underprotected health workers who are themselves falling ill in large numbers, of traditional healing and burial practices, of generally underfunded healthcare systems, of corrupt misappropriation of foreign aid earmarked for healthcare and, crucially, of the lack of a vaccine in the face of a mutating virus. Of the 20,000 new cases predicted by the end of November, 70% on current trends will result in death. By the end of January, the Centres for Disease Control in Atlanta warns, there could be 1.4m new cases.

West Africa's particular circumstances apart, the Ebola outbreak has now become a matter of truly international concern, not least because, as last week's unseemly panic in Texas has shown, the epidemic potentially threatens us all. After a slow start, the Obama administration showed a lead in sending 3,000 troops to Liberia to boost its health defences. But its efforts are proceeding <u>at a snail's pace</u>, reflecting a too familiar lack of preparedness.

The UK, despite parliamentary criticism last week, <u>has been at the forefront</u> of international efforts, concentrating £125m in assistance on Sierra Leone, building a new treatment centre outside Freetown and mobilising 400 NHS volunteers. David Cameron's commitment to maintaining Britain's overseas aid and development budget has never looked more sensible. France has been supplying direct assistance to Guinea. But in the face of a potential world-wide crisis, where is the rest of the world?

The European Commission makes all the right noises, but its financial contribution has been paltry. One of its <u>main concerns</u> appears to be how to airlift EU nationals in the affected countries. <u>Germany</u>, Europe's supposed powerhouse, has only belatedly joined the fight. Meanwhile, other big international players are conspicuous by their absence. What of China,

with its extensive commercial interests in west Africa? What of Russia, with its noisome pretensions to great power status? What of the other Brics countries, whose aspirations to a global role are so often heard? It is long past time they stepped up to mark and did their bit.

The scary truth of the Ebola pandemic is that, starting with the WHO last March, the world's leading governments and institutions were, for the most part, caught napping. They thought (as did much of the western media) that this outbreak was another grisly but isolated act in Africa's ongoing human tragedy. They thought it would not affect us. Now it is plain that it will, they badly need to get organised. They must act together, and quickly, not just to beat Ebola now, but in order to better deal with future pandemics when they come, as they surely will.

Peter Piot, the German scientist who discovered Ebola and a veteran of many battles against killer viruses, describes in an interview that we publish today how a "perfect storm" of mischance, miscalculation and mutation makes this epidemic unlike any that has gone before. We should all heed his words: "This isn't just an epidemic anymore. This is a humanitarian catastrophe. We don't just need care personnel, but also logistics experts, trucks, jeeps and foodstuffs. Such an epidemic can destabilise entire regions. I can only hope that we will be able to get it under control. I really never thought it could get this bad."

The Huffington Post

http://www.huffingtonpost.com/
Accessed 4 October 2014
[No new, unique, relevant content]

Le Monde

http://www.lemonde.fr/ Accessed 4 October 2014 [No new, unique, relevant content]

New Yorker

http://www.newyorker.com/
[No new, unique, relevant content]

New York Times

http://www.nytimes.com/ Accessed 4 October 2014 [No new, unique, relevant content]

Reuters

http://www.reuters.com/ Accessed 4 October 2014 [No new, unique, relevant content]

Wall Street Journal

http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 4 October 2014
[No new, unique, relevant content]

Washington Post

http://www.washingtonpost.com/

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