



**Vaccines and Global Health: The Week in Review**  
**12 May 2018**  
**Center for Vaccine Ethics & Policy (CVEP)**

*This weekly digest 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 <https://centerforvaccineethicsandpolicy.net>. This blog allows full-text searching of over 8,000 entries.*

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## **Milestones :: Perspectives**

### **World Health Assembly**

21–26 May 2018

Geneva

Main Documents: [http://apps.who.int/gb/e/e\\_wha71.html](http://apps.who.int/gb/e/e_wha71.html)

[A71/1](#) - Provisional agenda

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### **EBOLA/EVD** [to 12 May 2018]

<http://www.who.int/ebola/en/>

### **WHO and partners working with national health authorities to contain new Ebola outbreak in the Democratic Republic of the Congo**

11 May 2018 News Release Geneva/Brazzaville/Kinshasa

The World Health Organization (WHO) and a broad range of partners are in the Democratic Republic of the Congo (DRC) working with the Government to contain an outbreak of Ebola virus disease (EVD) in Bikoro health zone, Equateur Province. The outbreak was declared three days ago. WHO Director-General Dr Tedros Adhanom Ghebreyesus will travel to the DRC over the week-end to take stock of the situation and direct the continuing response in support of the national health authorities.

As of 11 May, 34 Ebola cases have been reported in the area in the past five weeks, including 2 confirmed, 18 probable (deceased) and 14 suspected cases. Five samples were collected from 5 patients and two have been confirmed by the laboratory. Bikoro health zone is 250 km from Mbandaka, capital of Equateur Province in an area of the country that is very hard to reach.

"WHO staff were in the team that first identified the outbreak. I myself am on my way to the DRC to assess the needs first-hand," said Dr Tedros. "I'm in contact with the Minister of Health and have assured him that we're ready to do all that's needed to stop the spread of Ebola quickly. We are working with our partners to send more staff, equipment and supplies to the area."

A multidisciplinary team including WHO experts, along with staff from the Provincial Division of Health and Médecins Sans Frontières (MSF), arrived in Bikoro on 10 May. This first group of responders is now gathering more data to understand the extent and drivers of the epidemic. The team will also set up an active case search and contact tracing, establish Ebola treatment units to care for patients, set up mobile labs, and engage the community on safe practices. WHO will also work with national authorities in planning further public health measures such as vaccination campaigns.

"WHO is supporting the Government of the Democratic Republic of the Congo in coordinating this response; this is the country's ninth Ebola outbreak and there is considerable expertise in-country," said Dr Matshidiso Moeti, WHO Regional Director for Africa. "However, any country facing such a threat may require international assistance. WHO and its partners including MSF, World Food Programme (WFP), UNICEF, International Federation of Red Cross and Red

Crescent Societies (IFRC) and the Congolese Red Cross, UNOCHA and MONUSCO , US Centers for Disease Control and Prevention (US-CDC), the International Organization for Migration (IOM), are all stepping up their support.”

The response plan to the outbreak includes surveillance, case investigation, and contact tracing; community engagement and social mobilization; case management and infection prevention and control; safe and dignified burials; research response including the use of ring vaccination and antivirals; and coordination and operations support.

“It is too early to judge the extent of this outbreak,” said Dr Peter Salama, WHO Deputy Director-General for Emergency Preparedness and Response. “However, early signs including the infection of 3 health workers, the geographical extent of the outbreak, the proximity to transport routes and population centres, and the number of suspected cases indicate that stopping this outbreak will be a serious challenge. This will be tough and it will be costly. We need to be prepared for all scenarios.”

In its latest Disease Outbreak News, WHO lists the risks to surrounding countries as moderate. WHO has however, already alerted those countries and is working with them on border surveillance and preparedness for potential outbreaks. WHO does not at this time advise any restrictions on travel and trade to the Democratic Republic of the Congo.

**MSF/Médecins Sans Frontières** [to 12 May 2018]

<http://www.doctorswithoutborders.org/news-stories/press/press-releases>

*Press release*

### **DRC: Emergency Team Supports Rapid Response to Ebola Cases**

May 09, 2018

An emergency team with the international medical humanitarian organization Doctors Without Borders/Médecins Sans Frontières (MSF) is working with the Ministry of Health in the Democratic Republic of Congo (DRC) and other international organizations to assess and support a rapid response to an Ebola outbreak in the country, confirmed by national health authorities on May 8. The MSF team is based in the Bikoro health zone of Equateur province and in Kinshasa. It will support the deployment of a rapid and tailored response to better detect suspected cases and contain the epidemic.

DRC occasionally experiences Ebola outbreaks; In the last few years, MSF has responded on a number of occasions, including to outbreaks in Likati (2017, three confirmed Ebola cases); Boende (2014, 24 confirmed Ebola cases); Isiro (2012); and Mweka (2007, 18 confirmed Ebola cases).

“MSF has worked alongside the Congolese authorities in the past to care for patients suffering from Ebola and bring outbreaks under control. At the moment, there is an experienced MSF team in Bikoro, made up of medics, water and sanitation experts, health promoters, logisticians, and an epidemiologist. The team is working with the national authorities and other international organizations to assess the situation and to ensure that the outbreak is contained.”

—Julien Raickman, MSF head of mission in DRC

**2018 Ebola outbreak situation reports:**

**Ebola Outbreak in DRC: 11 May 2018**

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## Yemen

### Fighting the world's largest cholera outbreak: oral cholera vaccination campaign begins in Yemen

Aden, 10 May 2018 – The first-ever oral cholera vaccination campaign in Yemen was launched on 6 May and concludes on 15 May, just before the start of Ramadan. The campaign aims to prevent the resurgence of the world's largest cholera outbreak. The volatile mix of conflict, a deteriorating economic situation, and little or no access to clean drinking-water and sanitation have resulted in more than one million suspected cholera cases since the outbreak began in April 2017.

#### *A race against time*

This campaign is part of a broader cholera integrated response plan, implemented by national health authorities, WHO and UNICEF. Outbreak response activities include surveillance and case detection, community engagement and awareness, enhancing laboratory testing capacity, improving water and sanitation, and training and deploying rapid response teams to affected areas.

This epidemic has affected the entire country, and the implementation of this oral cholera vaccination campaign, as part of the entire response to cholera, marks a milestone in the combined efforts of WHO and UNICEF, in partnership with the World Bank and Gavi, the Vaccine Alliance, through the generous support of our donors.

"The ongoing conflict, lack of access to safe drinking-water, weak sewage systems due to lack of fuel for pumps and the collapsing health system is the perfect mix for a new explosion of cholera during Yemen's rainy season, which is already in its beginning stages," said Dr Nevio Zagaria, WHO Representative in Yemen.

#### *"Hot" districts prioritized to prevent spread*

On 24 April, UNICEF delivered the first batch of 455 000 doses of oral cholera vaccine from the Gavi-funded global stockpile, targeting people over the age of 1 year, including pregnant women. The Global Task Force for Cholera Control approved the request of more than 4.6 million doses of the vaccine from the global stockpile to target cholera hotspots across the country.

"This vaccination campaign comes at such a critical time. Children in Yemen were the worst hit by last year's outbreak and remain the most vulnerable due to widespread malnutrition and deteriorating sanitation and hygiene," said Meritxell Relaño, UNICEF Representative in Yemen. Recent reports revealed that in the first 3 days of the campaign, more than 124 000 doses of oral cholera vaccine were administered. This represents 35% of the estimated target population in the 4 districts where the campaign began. A fifth district, will be included in the coming days, bringing the total target population to 470 905 individuals. The campaign currently involves 11 fixed teams and 328 mobile teams.

## **Cholera Vaccination Campaign Starts in Yemen After Year Delay-WHO**

By Reuters May 7, 2018

GENEVA — The first vaccine campaign against cholera in Yemen has started, 18 months after war and a sanitation crisis triggered an epidemic, but the World Health Organization said it did not yet have permission nationwide to do the vaccinations.

Some senior Houthi officials, whose forces control the capital Sanaa, have objected to vaccinations and this has already delayed the programme by nearly a year, aid workers say. There have been more than one million suspected cases of cholera in Yemen, and 2,275 recorded deaths since Nov 2016, the WHO says.

The oral vaccination campaign, which began in four districts in Aden on Sunday targeting 350,000 people, coincides with the rainy season, which health workers fear could spread the disease further.

"We have plans in place for extending that to all of the at-risk zones and we are still negotiating with health authorities in the north of the country, in Sanaa, in order to plan those campaigns," Michael Ryan, WHO Assistant Director-General, told a news briefing on Monday.

"As of yet we don't have established dates for those campaigns, but we are ready to move... just as soon as we get those necessary approvals," he added...

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## **Concern over reported number of measles cases in Yemen**

The Lancet | 12 May 2018

Over 3000 suspected measles cases have been reported in 2018 across Yemen, where conflict has plunged the country into the world's largest humanitarian crisis. Xun Yuan reports.

As of April 20, over 3000 suspected measles cases have been reported across the country, more than 60 of which were fatal, according to data from UNICEF and WHO. According to UNICEF, the highest numbers of cases have been seen in Aden (786 patients), Al Bayda (324 patients), and Sana'a (245 patients). UNICEF Yemen told The Lancet that the exact number has not yet been confirmed due in part to the poor laboratory examination capacity in Yemen at the time.

Despite the uncertainty, the sheer number of suspected cases still raises alarm. From 2013 to 2017, the number of suspected cases has ranged from about 2000 to 4000 per year, according to UNICEF.

"Every 2 or 3 years, there is a spike in measles cases because the number of unvaccinated children accumulates", WHO told The Lancet. "The last big outbreak of measles was in 2012, at which time the conflict had not yet begun." According to WHO, the combination of the expected upsurge in cases since the last outbreak and the deterioration of the security situation—whereby reporting of new cases and access to communities is becoming problematic—makes this uptick of reported cases particularly worrisome.

Fouzia Shafique, chief of health and Nutrition of UNICEF Yemen, told The Lancet that reported coverage of the measles vaccine, MCV1, has generally been maintained on a national scale despite the challenges that the Expanded Program on Immunization faces in Yemen. Based on data shared by WHO and UNICEF with The Lancet, the last national campaign was initiated in November, 2014, and reached all 333 districts, covering 93% of the targeted individuals. In the

following years, mop-up campaigns, door-to-door immunisations in specific areas where the virus is known or suspected to still be circulating, were done on a yearly basis, with coverage ranging from 41% to 92%.

A nationwide measles vaccination campaign is scheduled to occur at the end of this year, and is expected to target over 13 million children under the age of 15 years, said Shafique.

Some governorates and districts are nevertheless seeing declines in coverage, according to Shafique.

"Due to deterioration of security situation and considerable stress on the health system, with salaries unpaid in most of the country for over 18 months, and operational cost not paid for much longer, the access to quality services became affected", she told The Lancet.

A risk assessment done by WHO with UNICEF and the local health authorities this year found that "more than 100 districts were identified as very-high-risk for measles and rubella", said the Emergency Communications lead of WHO Yemen.

"There is certainly an upsurge of measles cases, at least in Aden. We have admitted 11 measles patients in the last 3 days. But, sadly, we do not have enough resources to vaccinate other children at risk", a doctor based in Aden, who chose to remain anonymous because of safety concerns, told The Lancet. Doctors in the area have been known to be targeted by violent attacks, this doctor reported.

Local residents at Jayshan District in Abyan Governorate also expressed frustration with the near-complete collapse of the information system in Yemen, because of which they did not receive updates about vaccination programmes.

When asked about the past vaccination campaigns, Sadiq Basha, a Jayshan District local resident whose son was diagnosed with measles, seemed surprised and told The Lancet in Arabic, "I have never heard of such things. If I did, why would I let my kid go unvaccinated?" Apart from the accessibility issue, a doctor based in Aden also raised concern about the inability to maintain the cold chain, which he said was due to lack of fuel to support the generators.

Although the Saudi-led coalition's blockade on the Al Hudaydah port was officially lifted, sources told The Lancet that the decreased capacity of the port and the delayed clearances for imports continued to pose challenges to the import of fuel. The UN Verification and Inspection Mechanism has reported that the total fuel imports for April were 27% of the monthly national requirements.

UNICEF, however, believes that the break of the cold chain is rare. "UNICEF provides fuel to the national and all governorate-level cold rooms", Shafique told The Lancet. "We have also helped installed solar panels in over 300 sites so as to not be dependent on electricity and fuel." Some local residents have said that concerns about the stability of the vaccines have deterred them from bringing their children to get vaccinated.

"We heard the vaccines distributed by local clinics are no longer effective", Nawal Hanna, another local resident at Jayshan District, told The Lancet, "we don't know if there are any harms coming from getting those vaccines, but we'd rather not take that risk."

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### **At The Age Of 81, Pioneering Virologist Dr. Robert Gallo To Lead Largest Study Ever On Impact Of HIV Programs**

*Gallo's Institute of Human Virology (IHV) to lead \$100 Million Project Which Will Enable Researchers to Better Understand HIV in Nigeria*

BALTIMORE, May 9, 2018 /PRNewswire/ -- The Institute of Human Virology (IHV) at the University of Maryland School of Medicine, led by Dr. Robert Gallo, who co-discovered HIV as the cause of AIDS, will lead a \$100 million project to measure the reach and impact of HIV programs in Nigeria – the largest population-based HIV survey ever conducted in a single country.

The work is funded by the U.S. Centers for Disease Control and Prevention (CDC) through the President's Emergency Plan for AIDS Relief (PEPFAR), in collaboration with the Government of Nigeria and the Global Fund to Fight AIDS, Tuberculosis and Malaria.

"With this new grant, IHV has been awarded close to \$1 billion total in PEPFAR funds, a milestone that coincides with PEPFAR's 15-year anniversary," said Robert C. Gallo, MD, the Homer & Martha Gudelsy Distinguished Professor in Medicine who, just turned 81 and is still active in leading all aspects of the Institute's work. "We commend President George W. Bush, who signed PEPFAR into law, on this historical global health initiative."...

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## **Emergencies**

### **POLIO**

#### ***Public Health Emergency of International Concern (PHEIC)***

#### **Polio this week as of 8 May 2018** [GPEI]

:: Sweden is the first country to formally engage in the global poliovirus containment process.

:: Professor David Heymann, of the London School of Hygiene and Tropical Medicine, discusses what lessons smallpox eradication teaches us, and why it is critical to complete the job of polio eradication.

*Summary of newly-reported viruses this week:*

**Nigeria:** Two circulating vaccine-derived poliovirus type 2 (cVDPV2) positive environmental samples have been confirmed in Jigawa province.

**Somalia:** One circulating vaccine-derived poliovirus type 2 (cVDPV2) positive environmental sample has been confirmed in Banadir province. Two circulating vaccine-derived poliovirus type 3 (cVDPV3) positive environmental samples have been confirmed, also in Banadir province.

### **Statement of the Seventeenth IHR Emergency Committee Regarding the International Spread of Poliovirus**

10 May 2018 *Statement Geneva*

*[Excerpts; Editor's bolded text]*

**Conclusion**

**The Committee unanimously agreed that the risk of international spread of poliovirus remains a Public Health Emergency of International Concern (PHEIC), and recommended the extension of Temporary Recommendations for a further three months.**

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The seventeenth meeting of the Emergency Committee under the International Health Regulations (2005) (IHR) regarding the international spread of poliovirus was convened by the Director General on 30 April 2018 at WHO headquarters with members, advisers and invited member states attending via teleconference...

*Wild polio*

Overall the Committee was encouraged by continued progress in WPV1 eradication, with the number of cases globally remaining low in 2018. In addition, there has now been no international spread of WPV1 since October 2017.

The Committee commended the continued high level commitment seen in both Afghanistan and Pakistan, and the high degree of cooperation and coordination, particularly targeting the high risk mobile populations that frequently cross the international border. The joint planning to cease transmission in the two recognized zones of transmission (the northern corridor which extends from Nangarhar to Islamabad and Rawalpindi, and the southern corridor from Kandahar to Quetta Block) is a key to success in achieving WPV eradication in Pakistan and Afghanistan, the region, and globally.

The Committee commended the achievements in Pakistan that have resulted in a sustained reduction in the number of cases, with only one case so far in 2018, and a fall in the proportion of environmental samples that have tested positive for WPV1. No orphan virus (viruses that are not closely related to any other virus based on genetic analysis) has been detected so far in 2018, giving some confidence that surveillance is working well. Notable achievements include better quality supplementary immunization activities (SIA) and improved communication to reduce missed children. However, environmental surveillance continues to detect WPV1 transmission in many high risk areas of the country such as Karachi, Peshawar and the Quetta Block. The robust response to environmental detections of WPV was welcomed.

The Committee was concerned by the stagnation in progress in Afghanistan and the ongoing risks to eradication posed by the number of inaccessible and missed children, particularly in the southern and eastern regions, resulting in fourteen cases in 2017, and already seven cases in 2018. The continued inaccessibility in Kandahar, Paktika, and parts of Nangarhar and Kunar, and issues with vaccine acceptance in some high risk areas particularly in Kandahar, the Bermel district of Paktika, and Kunar are the biggest challenges. Of greatest concern are the children chronically unreachable by the polio program, these numbering around 13,000 children in Shahwalikot and 40,000 children living in areas controlled by militant anti- government elements in the eastern region.

The Committee commended the innovations that continue to be made in Nigeria to reach children in Borno, where the number of inaccessible children has fallen from 160,000 in late



2017 to around 104,000 currently. While certain cross border activities are being undertaken, such as international synchronization of vaccination campaigns, these efforts appeared to be insufficient to ensure that any poliovirus still circulating undetected is not exported to neighboring Lake Chad basin countries. The Committee also noted that routine immunization coverage is low, particularly in high risk areas of northern Nigeria. The country however has declared routine immunization a national public health emergency and is actively planning for Gavi transition with strengthening of its routine immunization program in mind. Although it is over 19 months since the last detection of WPV1 in Nigeria, the outbreak response assessment by global polio experts concluded ongoing undetected transmission could not be ruled out.

There is ongoing concern about the districts of the neighboring countries of the Lake Chad basin region that have been affected by the Boko Haram insurgency, with the consequent lack of services and presence of IDPs and refugees. The risk of international spread from Nigeria to the Lake Chad basin countries or further afield in sub-Saharan Africa remains substantial. The Committee was encouraged that the Lake Chad basin countries, Cameroon, Chad, the Central African Republic (CAR), Niger and Nigeria continued to be committed to sub-regional coordination of immunization and surveillance activities. However, there are widespread persistent gaps in population immunity across these countries, and the ongoing population movement in the sub-region and insecurity are major challenges. The committee urged that work to characterize and vaccinate transient and permanent populations on the Lake Chad islands continue urgently.

#### *Vaccine derived poliovirus*

The committee noted that in DR Congo, the vaccine-derived polio outbreak has now been declared a public health emergency, with resources being made available for an emergency operation centre, appointment of a national outbreak coordinator, and other resources. However, there has been further transmission into new areas not covered by previous mOPV2 campaigns, with the report of a case in Haut Katanga province, and another eight cases reported in previously affected provinces. Further rounds with mOPV2 are being planned. Risks are compounded by poor surveillance in many areas, and widespread gaps in population immunity. It was noted that upcoming elections with the possibility of civil unrest posed an additional risk to the ability of the country to halt the outbreak. The movement of refugees and IDPs increases the risk of further spread, and the IPV shortage in neighboring countries is another risk, with the under 2 age group vulnerable to type 2 infection. In DR Congo, insecurity and geographical remoteness of the affected area pose significant challenges to controlling the outbreak.

The committee noted that in Syria, there has been no new case for more than six months, giving hope that transmission may have stopped. However, while AFP surveillance indicators are good, and environmental surveillance is now in operation, low level transmission cannot yet be ruled out.

The new outbreak of cVDPV2 with international spread affecting Somalia and Kenya is a major concern, together with the recent detection of cVDPV3 by environmental sampling in Mogadishu. While the robust response to date was commendable, the lack of clarity about where the virus emerged and circulated for a prolonged period prior to detection means that it remains unsure whether the population currently being targeted is sufficient. The persistently inaccessible districts in the South and Central zones of Somalia makes an effective response

extremely difficult, with more than 300,000 children aged under 5 years believed to be living in these districts. Nomadic and refugee movement make other areas in the sub-region (e.g. Somali region of Ethiopia, north east Kenya, and Yemen) potentially at risk of international spread.

The new outbreak of cVDPV2 recently detected in Jigawa, Nigeria, again underlines the vulnerability of northern Nigeria to poliovirus transmission.

### ***Conclusion***

**The Committee unanimously agreed that the risk of international spread of poliovirus remains a Public Health Emergency of International Concern (PHEIC), and recommended the extension of Temporary Recommendations for a further three months.**

The Committee considered the following factors in reaching this conclusion:

:: Although the risk of international spread of WPV may be diminishing as transmission falls, the impact of any delay in eradicating WPV caused by international spread, should it occur now, would be even more grave in terms of delaying certification and the need to maintain human and financial resources for a longer period to achieve eradication. The risk of global complacency developing increases as the numbers of WPV cases remains low and eradication becomes a tangible reality, and removing the PHEIC now could contribute to greater complacency, particularly at an inopportune time given the upcoming Hajj with its heightened population movement.

:: Many countries remain vulnerable to WPV importation, as evidenced by gaps in population immunity in several key high risk areas, and also the current number of cVDPV outbreaks, both type 2 and 3, which only emerge and circulate due to lack of polio population immunity.

:: Inaccessibility to vaccination programs remains another major risk, particularly in several countries currently infected with WPV or cVDPV, i.e. Afghanistan, Nigeria and Somalia, which all have sizable populations that have been unreached with polio vaccine for prolonged periods.

**:: The risk is amplified by population movement, whether for family, social, economic or cultural reasons, or in the context of populations displaced by insecurity and returning refugees.** There is a need for international coordination to address these risks, particularly between Afghanistan and Pakistan, Nigeria and its Lake Chad neighbors, and countries in and bordering the Horn of Africa and DR Congo.

:: The inaccessible population in Borno state in Nigeria remains substantial despite the commendable efforts to reach all settlements. These populations have not received polio vaccine since WPV1 was detected in 2016, so ongoing transmission in these unreached pockets cannot be ruled out. The risk of transmission in the Lake Chad sub-region appears considerable, with significant gaps in population immunity in these vulnerable countries, compounded by international population movement.

:: The new international outbreak of cVDPV2 affecting Somalia and Kenya, with a highly diverged cVDPV2 that appears to have circulated undetected for up to four years highlights that there are still high-risk populations in South and Central zones of Somalia where population immunity and surveillance are compromised by inaccessibility.

:: The ongoing spread of cVDPV2 in DR Congo demonstrates significant gaps in population immunity at a critical time in the polio endgame; the lack of IPV vaccination in several countries neighboring DR Congo heightens the risk of international spread, as population immunity is rapidly waning.

:: The increasing number of countries in which immunization systems have been weakened or disrupted by conflict and complex emergencies poses another risk. Populations in these fragile states are vulnerable to outbreaks of polio. Outbreaks in fragile states are exceedingly difficult to control and threaten the completion of global polio eradication during its end stage.

:: A regional approach and strong crossborder cooperation is required to respond to these risks, as much international spread of polio occurs over land borders...

#### *Additional considerations*

The Committee noted that in all the infected and vulnerable countries, routine immunization was generally quite poor, if not nationally, then in sub-national pockets. The Committee also noted that surveillance in these areas may also be sub-optimal, particularly where access is compromised by conflict. The Committee strongly encourages all these countries to make further efforts to improve routine immunization and strengthen surveillance in such areas, and requested international partners to support these countries in rapidly improving routine immunization coverage to underpin eradication.

The Committee also urged that Nigeria and the Lake Chad countries increase cross border efforts and joint planning and response. Intensified effort is needed to identify and reach vulnerable populations in the sub-region, particularly in the Lake Chad islands. Nigeria should ensure continuing political commitment and take measures to counter fatigue in the fight against polio. Similarly, the DR Congo government needs to pay more attention to prevention of international spread of cVDPV2 from DR Congo, noting that neighboring countries are affected by the global shortage of IPV.

**Based on the current situation regarding WPV1 and cVDPV, and the reports provided by Afghanistan, DR Congo, Kenya, Pakistan, and Somalia, the Director-General accepted the Committee's assessment and on 7 May 2018 determined that the situation relating to poliovirus continues to constitute a PHEIC, with respect to WPV1 and cVDPV.** The Director-General endorsed the Committee's recommendations for countries meeting the definition for 'States infected with WPV1, cVDPV1 or cVDPV3 with potential risk for international spread', 'States infected with cVDPV2 with potential risk for international spread' and for 'States no longer infected by WPV1 or cVDPV, but which remain vulnerable to re-infection by WPV or cVDPV' and extended the Temporary Recommendations under the IHR to reduce the risk of the international spread of poliovirus, effective 7 May 2018.

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#### **WHO Grade 3 Emergencies** [to 12 May 2018]

##### **Yemen**

:: Fighting the world's largest cholera outbreak: oral cholera vaccination campaign begins in Yemen Aden, 10 May 2018

*[See Milestones above for more detail]*

Iraq - *No new announcements identified*

Nigeria - *No new announcements identified*

South Sudan - *Webpage not responding at inquiry*

The Syrian Arab Republic - *No new announcements identified*

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## **WHO Grade 2 Emergencies** [to 12 May 2018]

*[Several emergency pages were not available at inquiry]*

### **Myanmar**

:: One million Rohingya refugees, host communities being vaccinated against cholera  
SEAR/PR/1689

Cox's Bazar, 6 May 2018: A massive cholera vaccination campaign began today to protect nearly one million Rohingyas and their host communities living in and around the refugee camps in Bangladesh, to prevent any potential outbreak during the ongoing monsoon season. This is a second cholera vaccination campaign being held for the Rohingyas and their host communities. Earlier 900,000 doses of oral cholera vaccine were administered to the vulnerable population in two phases in October – November last year.

"Considering the water and sanitation conditions in the overcrowded camps and the increased risk of disease outbreaks in the monsoon season, the health sector is taking all possible measures to prevent cholera and other water and vector borne diseases," says Dr. Bardan Jung Rana, WHO Representative to Bangladesh...

Cameroon - *No new announcements identified*

Central African Republic - *No new announcements identified.*

Democratic Republic of the Congo - *No new announcements identified*

Ethiopia - *No new announcements identified.*

Libya - *No new announcements identified.*

Niger - *No new announcements identified.*

Ukraine - *No new announcements identified.*

## **Looming monsoons and little funding threaten health gains in Cox's Bazar**

8 May 2018 News Release Geneva

With monsoon hitting Bangladesh, WHO warns that life-saving health services for 1.3 million people—Rohingya refugees and host communities— living in Cox's Bazar are under serious threat, unless urgent funding is secured.

Scaling up health operations since September 2017, WHO and health partners have supported the Government of Bangladesh in saving thousands of lives of refugees who crossed over from Myanmar in large numbers in a very short span of time. Given the high risk of outbreaks among the refugees in overcrowded, unsanitary camps, WHO prioritized disease control from the outset.

WHO rapidly set up a vital disease early warning system, and together with government and partners administered over 3 million doses of life- saving vaccines against deadly diseases such as cholera, measles, rubella, diphtheria, tetanus and polio. When an outbreak of diphtheria was detected, WHO responded rapidly, bringing in international experts, emergency medical teams and medicines and medical supplies.

**To protect communities from a potential cholera outbreak during monsoon season, WHO and partners began a massive oral cholera vaccination campaign on 6 May. Nearly one million Rohingyas and their host community will be targeted. This is the third oral cholera vaccination campaign that builds on two rounds of vaccination last year that reached around 900,000 people...**

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### **UN OCHA – L3 Emergencies**

*The UN and its humanitarian partners are currently responding to three 'L3' emergencies. This is the global humanitarian system's classification for the response to the most severe, large-scale humanitarian crises.*

#### **Syrian Arab Republic**

:: Turkey | Syria: Situation in North-western Syria - Situation Report No.4 (as of 8 May 2018)

#### **Yemen**

:: Yemen Humanitarian Update Covering 1 – 7 May 2018 | Issue 14

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### **UN OCHA – Corporate Emergencies**

*When the USG/ERC declares a Corporate Emergency Response, all OCHA offices, branches and sections provide their full support to response activities both at HQ and in the field.*

#### **Somalia**

:: OCHA Somalia Flash Update #4 - Humanitarian impact of heavy rains | 8 May 2018

#### **Ethiopia**

:: Ethiopia – Floods Flash Update #2, 10 May 2018

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#### ***Editor's Note:***

*We will cluster these recent emergencies as below and continue to monitor the WHO webpages for updates and key developments.*

#### **EBOLA/EVD** [to 12 May 2018]

<http://www.who.int/ebola/en/>

*[See Milestones above for detail]*

#### **MERS-CoV** [to 12 May 2018]

<http://who.int/emergencies/mers-cov/en/>

*[Webpage not responding at inquiry]*

#### **Yellow Fever** [to 12 May 2018]

<http://www.who.int/csr/disease/yellowfev/en/>

*- No new announcements identified.*

#### **Zika virus** [to 12 May 2018]

<http://www.who.int/csr/disease/zika/en/>

*- No new announcements identified.*

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## **WHO & Regional Offices** [to 12 May 2018]

*See Milestones above for coverage of Ebola and Yemen.*

### **Weekly Epidemiological Record, 11 May 2018, vol. 93, 19 (pp. 241–248)**

Progress towards polio eradication, worldwide, January 2016–March 2018

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## **WHO Regional Offices**

*Selected Press Releases, Announcements*

### **WHO African Region AFRO**

*Selected Featured News*

:: WHO supports South Sudan in vaccination campaign against cholera before transmission season 11 May 2018

:: Nigeria's Lassa fever outbreak contained, but continued vigilance needed 10 May 2018

:: 600 000 people to benefit from oral cholera vaccines in Bauchi, Nigeria 10 May 2018

:: New Ebola outbreak declared in Democratic Republic of the Congo 09 May 2018

:: Largest cholera vaccine drive in history to target spike in outbreaks 08 May 2018

:: WHO supports six African countries conduct first joint health emergency operations exercise 08 May 2018

### **WHO Region of the Americas PAHO**

:: Mosquito Awareness Week: Calling all citizens to the frontlines of mosquito control (05/10/2018)

:: PAHO calls on the role of nurses in primary health care to be expanded (05/10/2018)

:: Protecting achievements; expanding diagnosis and treatment; and preventing mother to child transmission – All vital elements of the fight against Chagas (05/07/2018)

### **WHO South-East Asia Region SEARO**

:: One million Rohingya refugees, host communities being vaccinated against cholera SEAR/PR/1689 Cox's Bazar, 6 May 2018:

### **WHO European Region EURO**

:: World Health Day 2018 in the WHO European Region – making health about the people, for the people 09-05-2018

:: Small team of cancer nurses has a big impact on Scotland's Western Isles 08-05-2018

:: Fostering healthier and more sustainable diets – learning from the Mediterranean and New Nordic experience 07-05-2018

### **WHO Eastern Mediterranean Region EMRO**

:: Last nationwide vaccination campaign in Afghanistan starts before the high transmission season for poliovirus 6 May 2018

### **WHO Western Pacific Region**

:: Doing it for themselves: Peer-led HIV testing in Viet Nam improves access to care

7 May 2018

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**CDC/ACIP** [to 12 May 2018]

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

<https://www.cdc.gov/vaccines/acip/index.html>

Thursday, May 10, 2018

**Three CDC scientists named as 2018 Service to America Medal Finalists**

**MMWR News Synopsis for May 10, 2018**

Progress Toward Polio Eradication – Worldwide, January 2016-March 2018

In 2016-2017 there was progress toward global eradication of wild poliovirus (WPV). To date in 2018 (as of April 24) there have been more reported WPV than in the same time period in 2017. Identifying and vaccinating every last child remains challenging, but is necessary to end WPV transmission in Afghanistan, Nigeria, and Pakistan and to prevent outbreaks of circulating vaccine-derived polioviruses (cVDPV). Progress continued toward global eradication of wild poliovirus (WPV) in 2016-2017. WPV transmission continues in three countries — Afghanistan, Nigeria, and Pakistan. Reported WPV cases worldwide decreased from 37 in 2016 to 22 in 2017; to date in 2018 (as of April 24), eight WPV cases have been reported, compared to five during the same time period in 2017. Areas with low vaccination coverage, frequently due to inaccessibility and conflict, are at risk for not only WPV but also circulating vaccine-derived polioviruses (cVDPV). Stopping WPV transmission and prevention of cVDPV outbreaks will require reaching all unvaccinated children in hard-to-reach areas globally. As long as polio exists anywhere, it remains a threat everywhere. All countries must maintain high population immunity and strong poliovirus surveillance.

**Register for upcoming June ACIP meeting**

June 20-21, 2018

Deadline for registration:

Non-US Citizens: May 16, 2018

US Citizens: June 11, 2018

Registration is NOT required to watch the live meeting webcast or to listen via telephone.

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**Africa CDC** [to 12 May 2018]

<https://au.int/en/africacdc>

*No new digest content identified.*

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**China CDC**

<http://www.chinacdc.cn/en/ne/>

*No new digest content identified.*

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**ECDC - European Centre for Disease Prevention and Control** [to 12 May 2018]

<https://ecdc.europa.eu/en/home>

7 May 2018

**First detected cases of extensively drug-resistant gonorrhoea**

Within a matter of weeks, three cases of gonorrhoea that are resistant to the recommended first line antibiotic treatment have been detected in Europe and Australia. These are the first global reports of *Neisseria gonorrhoeae* with high-level resistance to azithromycin and ceftriaxone resistance that also show resistance to several other vital antibiotics. At a time with limited alternatives to the current dual therapy, lack of a vaccine and insufficient surveillance capacity in some regions, these cases highlight the growing threat of drug-resistance – which could lead to untreatable gonorrhoea.

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**Announcements**

**AERAS** [to 12 May 2018]

<http://www.aeras.org/pressreleases>

*No new digest content identified.*

**BMGF - Gates Foundation** [to 12 May 2018]

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

*No new digest content identified.*

**Bill & Melinda Gates Medical Research Institute** [to 12 May 2018]

<https://www.linkedin.com/company/bill-melinda-gates-medical-research-institute/>

*The Bill & Melinda Gates Medical Research Institute is a non-profit research organization dedicated to combating diseases that impact the world's poorest. We strive to combat inequities in health by accelerating progress in translational science to ensure life-saving products are available and accessible to everyone. We consider ourselves pioneers dedicated to uncovering radical solutions that will close the gap between cutting-edge scientific innovation and its application to challenges in global health.*

*Webpage not responding at inquiry.*

**CEPI – Coalition for Epidemic Preparedness Innovations** [to 12 May 2018]

<http://cepi.net/>

*No new digest content identified.*

**EDCTP** [to 12 May 2018]

<http://www.edctp.org/>

*The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against*



*HIV/AIDS, tuberculosis and malaria as well as other poverty-related and neglected infectious diseases in sub-Saharan Africa, with a focus on phase II and III clinical trials*  
*No new digest content identified.*

**Emory Vaccine Center** [to 12 May 2018]

<http://www.vaccines.emory.edu/>

*No new digest content identified.*

**European Medicines Agency** [to 12 May 2018]

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

*No new digest content identified.*

**European Vaccine Initiative** [to 12 May 2018]

<http://www.euvaccine.eu/news-events>

*No new digest content identified.*

**FDA** [to 12 May 2018]

<http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm>

May 11, 2018, 16:10 ET

**[Statement from FDA Commissioner Scott Gottlieb, M.D., on the Trump Administration's plan to lower drug prices](#)**

**Fondation Merieux** [to 12 May 2018]

<http://www.fondation-merieux.org/>

*No new digest content identified.*

**Gavi** [to 12 May 2018]

<http://www.gavi.org/library/news/press-releases/>

09 May 2018

**[IFPW and Gavi expand leadership training for a stronger supply chain](#)**

The partnership draws on private sector support to implement an innovative training and mentorship programme for supply chain managers in Gavi-supported countries.

07 May 2018

**[New management training for immunisation leaders kicks-off in Kigali](#)**

24 managers from five Gavi-supported countries will attend the first round of the nine-month programme.

07 May 2018

**[Largest cholera vaccine drive in history to target spike in outbreaks](#)**

Two million people in five African countries to be protected against cholera.

07 May 2018

**GHIT Fund** [to 12 May 2018]

<https://www.ghitfund.org/>

*GHIT was set up in 2012 with the aim of developing new tools to tackle infectious diseases that devastate the world's poorest people. Other funders include six Japanese pharmaceutical •  
No new digest content identified.*

**Global Fund** [to 12 May 2018]

<http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=>

*News*

**[Global Fund Board Strengthens Sustainability and Domestic Financing](#)**

10 May 2018

SKOPJE – The Board of the Global Fund to Fight AIDS, Tuberculosis and Malaria, at its 39th Board meeting, highlighted the importance of strengthening sustainability and supporting successful transition to domestic financing to build long-term solutions and achieve greater health security.

The Global Fund is committed to being a good partner in working toward sustainability, acting as a catalyst to additional investment, filling short-term gaps, and addressing bottlenecks to successful transition to more domestic funding. While shifting financing often includes challenges, including how to effectively fund civil society, transition increases country ownership and is necessary to end epidemics.

Prime Minister Zoran Zaev spoke to the Board about the importance of allocating sufficient resources and engaging civil society in developing long-term sustainability of health programs. He expressed strong confidence that a collective approach can lead to success...

**Hilleman Laboratories** [to 12 May 2018]

<http://www.hillemanlabs.org/>

*No new digest content identified.*

**Human Vaccines Project** [to 12 May 2018]

<http://www.humanvaccinesproject.org/media/press-releases/>

*No new digest content identified.*

**IAVI** [to 12 May 2018]

<https://www.iavi.org/>

*No new digest content identified*

**IFFIm**

<http://www.iffim.org/library/news/press-releases/>

*No new digest content identified.*

**IVAC** [to 12 May 2018]

<https://www.jhsph.edu/research/centers-and-institutes/ivac/index.html>

*Undated*

**Now Available: HERMES (Highly Extensible Resource for Modeling Event-Driven Supply Chains)**

*Systems modeling* is a tool for policymakers and program managers to capture all the direct and indirect effects of changes to a system, identify sustainable solutions to the root causes of issues and save time, effort, and resources in costly trial and error. Without systems modeling, evaluating systems, identifying gaps, and implementing solutions can be insufficient, unsustainable, and costly.

*Vaccine supply chains* are complex systems, comprising all the equipment, personnel, policies and processes needed to deliver a vaccine from its point of origin to the population. Understanding how the various components of a vaccine supply chain interact with each other is critical to evaluating supply chain function, identifying the root causes of issues, and formulating sustainable solutions...

*About HERMES*

Funded by the Bill & Melinda Gates Foundation, HERMES is a software program that allows users to generate a detailed computer simulation model of a supply chain. Researchers from the Global Obesity Prevention Center (GOPC) and International Vaccine Access Center (IVAC) at Johns Hopkins University, as well as the Pittsburgh Supercomputing Center (PSC) at Carnegie Mellon University, are releasing the new HERMES software to help decision makers around the world improve the delivery of vaccines. The model can serve as a "virtual laboratory" for users to evaluate a supply chain and test the effects of implementing different potential policies, interventions, practices, and technology changes...

**IVI** [to 12 May 2018]

<http://www.ivv.int/>

**IVI acquires \$6.46 million grant to measure single dose impact of HPV vaccine**

The International Vaccine Institute (IVI) has acquired a 6.46 million-dollar grant from the Bill & Melinda Gates Foundation to conduct a Human papillomavirus (HPV) vaccine single-dose impact study in Thailand. The study will be conducted in partnership with the Thailand Ministry of Public Health and proposes to measure the effectiveness of a single-dose of HPV vaccine administered to young women in Thailand, while also generating data of single dose effectiveness to inform global public health policy. IVI will receive a total of \$6,465,516 from the foundation for this study through October 2023.

HPV is the most common viral infection of the reproductive tract. Some HPV strains are harmless but others cause cervical cancer, with HPV infection responsible for nearly all cases of cervical cancer. According to the World Health Organization, globally, cervical cancer is the fourth most common cancer in women with an estimated 530,000 new cases in 2012 alone, and accounts for 7.5 percent of all female cancer deaths. It is estimated that more than 270,000 die from cervical cancer yearly, with over 85 percent of these deaths occurring in less developed regions.

There are currently two internationally licensed HPV vaccines: Gardasil and Cervarix. Both vaccines are shown to be safe and very effective in preventing infection with HPV 16 and 18, which are known to cause at least 70 percent of all cervical cancers. By mid-2016, 65 countries had introduced HPV vaccines, including a growing number of middle- and low-income countries. Both vaccines are administered in a two- or three-dose regimen, which can be costly.

"Data of single dose effectiveness can be highly useful in informing the most cost-effective approach to HPV vaccination and global public health policy," said Dr. Julia Lynch, Deputy Director General for Development and Delivery at IVI, who will lead the study. "If one dose is confirmed to offer sufficient protection, it could significantly reduce vaccine and administration costs while increasing uptake to save more lives."

**JEE Alliance** [to 12 May 2018]

<https://www.jeealliance.org/>

11.5.2018 *Events*

**"Investing for a Rainy Day: How to Finance Outbreak Preparedness?"**

Geneva

**MSF/Médecins Sans Frontières** [to 12 May 2018]

<http://www.doctorswithoutborders.org/news-stories/press/press-releases>

*Press release*

**MSF Responds to President Trump's Speech on Drug Pricing**

May 11, 2018

The international medical humanitarian organization Doctors Without Borders/Médecins Sans Frontières (MSF) made the following statement today in response to President Trump's speech on drug pricing.

*Press release*

**DRC: Emergency Team Supports Rapid Response to Ebola Cases**

May 09, 2018

*[See Milestones above for more detail]*

*Press release*

**Yemen: Scores of civilians treated after airstrikes target Sana'a city center**

May 08, 2018

A series of airstrikes by the Saudi and Emirati-led coalition aimed at the Presidential office in the heart of Sana'a, Yemen, killed at least six people and injured 72 others on Monday morning, according to staff at two hospitals supported by Doctors Without Borders/Médecins Sans Frontières (MSF) who received the dead and wounded. The airstrikes took place in a bustling area near a hotel, bank, pharmacies, and shops.

**NIH** [to 12 May 2018]

<http://www.nih.gov/news-events/news-releases>

May 8, 2018

**Despite mutations in Makona Ebola virus, disease consistent in mice, monkeys**

— Scientists previously speculated that genetic diversity of the Makona strain would result in more severe disease.

**PATH** [to 12 May 2018]

<http://www.path.org/news/index.php>

*Press release* | May 07, 2018

**New management training for immunisation leaders kicks-off in Kigali**

*24 managers from five Gavi-supported countries will attend the first round of the nine-month programme*

KIGALI, May 7 2018—Yale's Global Health Leadership Initiative (GHLI), the Rwanda-based University of Global Health Equity (UGHE), PATH, and Gavi, the Vaccine Alliance have joined forces to strengthen national leadership and management of immunisation programmes in Gavi-supported countries. The Expanded Program on Immunisation Leadership and Management Programme (EPI LAMP) is an innovative management training course for immunisation leaders in developing countries. The programme will improve the managerial capacity of governments to support Gavi's mission to ensure every child is protected with lifesaving vaccines...

**Sabin Vaccine Institute** [to 12 May 2018]

<http://www.sabin.org/updates/pressreleases>

May 7, 2018

**Georgian Leaders Gather to Discuss Immunization Regulations**

TBILISI, GEORGIA — Today, the Sabin Vaccine Institute and the Ministry of Labour, Health and Social Affairs of Georgia, together with the Parliament of Georgia, assembled senior officials and stakeholders to evaluate and prioritize policies to improve routine immunization coverage in Georgia.

**UNAIDS** [to 12 May 2018]

<http://www.unaids.org/en>

11 May 2018 *Feature story*

**UNAIDS Executive Director puts the spotlight on the HIV response in Lesotho, South Africa and Zambia during five-day visit**

UNAIDS Executive Director, Michel Sidibé, completed a five-day visit to three countries in southern Africa. The mission included high-level political discussions, the launch of the Lesotho HIV Health and Situation Room and frank and an open dialogue with women activists about how to address sexual harassment and abuse.

07 May 2018 *Feature story*

**Measuring progress against the 10 commitments through Global AIDS Monitoring**

At the United Nations High-Level Meeting on Ending AIDS in 2016, countries pledged to achieve a set of 10 Fast-Track commitments by 2020—an acceleration agenda that aims to end the AIDS epidemic by 2030 as part of the Sustainable Development Goals. To help ensure that the deadlines are met, the United Nations General Assembly requested an annual report on progress achieved in meeting those [10 commitments](#).

UNAIDS supports countries to collect information on their national HIV responses through the Global AIDS Monitoring (GAM) framework—an annual collection of 72 indicators on the

response to HIV in a country. These data form part of the data set used to report back to the General Assembly.

07 May 2018 *Feature story*

### **Heads of H6 agencies embrace new results framework**

...To accelerate change, the executive heads of the H6 partnership met on the sidelines of the United Nations System Chief Executives Board in London, United Kingdom, on 2 May and agreed a new results framework, H6 Results 2020. H6 Results 2020 aims to shape the H6 partnership into a trusted, valued source for technical support, strategic policy advice and best practices for the health and well-being of women, children and adolescents.

Developed under the chairpersonship of UNAIDS Executive Director Michel Sidibé, H6 Results 2020 is closely aligned with the Every Woman Every Child Every Adolescent Global Strategy and the 2020 Every Woman Every Child Partners' Framework. H6 Results 2020 sets ambitious goals while committing to deliver on a number of concrete results for 2020.

"I am excited about our revitalized H6 partnership. As the technical arm of the Every Woman Every Child movement, we plan to further streamline and simplify the health architecture, coordinating with key partners to leverage political capital, technical expertise and advocacy for results for women, children and adolescents everywhere," said Mr Sidibé...

**UNICEF** [to 12 May 2018]

<https://www.unicef.org/media/>

*Selected Press Releases/Reports*

### **770,000 children under five suffering from acute malnutrition in Kasai region of Democratic Republic of the Congo**

NEW YORK/DAKAR/GENEVA/JOHANNESBURG/KINSHASA, 11 May 2018 – At least 770,000 children in the Kasai region in the Democratic Republic of Congo are suffering from acute malnutrition, including 400,000 children who are severely malnourished and at risk of death – UNICEF said in a report released today. The children's agency went on to warn that unless urgent action was taken to strengthen the humanitarian response, the number of child deaths could skyrocket.

### **UNICEF welcomes Education Under Attack report**

NEW YORK, 10 May 2018 – Speaking today at the launch of Education under Attack 2018, a new report by the Global Coalition to Protect Education from Attack (GCPEA), Shahida Afzar, UNICEF Deputy Executive Director, said: "Today's report is helping us shine a light on an issue that is too often overlooked. Children are under attack around the globe.

### **On Mother's Day, UNICEF calls for the narrowing of "breastfeeding gaps" between rich and poor worldwide**

NEW YORK, 10 May 2018 – The number of babies missing out on breastfeeding remains high, particularly among the world's richest countries, UNICEF said in a new analysis released today. Worldwide, approximately 7.6 million babies each year are not breastfed.

### **Immunization Financing in MENA Middle-Income Countries**

May 2018

PDF: [https://www.unicef.org/mena/sites/unicef.org.mena/files/2018-04/immunization%20financing%20Web\\_0.pdf](https://www.unicef.org/mena/sites/unicef.org.mena/files/2018-04/immunization%20financing%20Web_0.pdf)

### *Highlights*

Most MENA countries have high immunization coverage rates. But immunization coverage has dropped considerably in some (including Iraq, the Syrian Arab Republic and Yemen), due to the conflicts, instability and the prevailing geopolitical situation in the region. Approximately 1.3 million surviving infants in MENA missed their third dose of DTP vaccine in 2016. In many of the region's countries, problems of equity persist, particularly concerning displaced populations, nomads, ethnic groups and marginalized urban populations.

#### Key Points:

- :: The Ministry of Health budget remains the mainstay of immunization financing in most of the countries.

- :: New vaccine introductions pose challenges for the region.

- :: The Sudan will be the first of the Gavi countries in MENA to move into the 'accelerated transition process'

- :: Local and external factors have made procuring and purchasing vaccines and related products a considerable challenge for most MENA countries.

### **Vaccine Confidence Project** [to 12 May 2018]

<http://www.vaccineconfidence.org/>

*No new digest content identified.*

### **Vaccine Education Center – Children's Hospital of Philadelphia** [to 12 May 2018]

<http://www.chop.edu/centers-programs/vaccine-education-center>

*No new digest content identified.*

### **Wellcome Trust** [to 12 May 2018]

<https://wellcome.ac.uk/news>

*News Published: 10 May 2018*

#### **Wellcome pledges £2m after new Ebola outbreak confirmed**

*Wellcome is making an initial fund of up to £2 million available to support a rapid response to the new Ebola outbreak in the Democratic Republic of Congo (DRC).*

The pledge comes after the DRC government announced the latest outbreak this week, following tests that confirmed two cases of Ebola in the Bikoro area, near the north-west border. It's the ninth Ebola outbreak in DRC.

The funding will be available to the government of the DRC and the World Health Organization (WHO) for the critical research needed to support the operational response now underway in the country.

Wellcome's £2m emergency funding will also be supported by £1m funding from the UK Department for International Development (DFID) through the Joint Initiative on Epidemic Preparedness.

Jeremy Farrar, Director of Wellcome, said: "It's vital the global response to this outbreak is swift. We know from previous outbreaks that the DRC are ready to act, but they need global support to ensure this outbreak is contained effectively. We must ensure the very best protection for the communities at risk and for the health workers working to protect lives – now and for future outbreaks...

## **Distinguished scientists elected as Fellows and Foreign Members of the Royal Society**

09 May 2018 - Fifty eminent scientists have been elected as Fellows of the Royal Society and ten as new Foreign Members for their exceptional contributions to science...

*[10 Wellcome researchers have today been elected Fellows of [@royalsociety](#). They are named in a list that celebrates over 50 eminent scientists and researchers for their exceptional contributions to science.]*

**The Wistar Institute** [to 12 May 2018]

<https://www.wistar.org/news/press-releases>

*No new digest content identified.*

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**BIO** [to 12 May 2018]

<https://www.bio.org/insights/press-release>

May 11 2018

### **BIO Statement on Trump Administration's Plan to Lower Drug Costs**

"We have concerns that some of the ideas proposed today could, if adopted, hurt patient access to the medicines they need ..."

**DCVMN – Developing Country Vaccine Manufacturers Network** [to 12 May 2018]

<http://www.dcvmn.org/>

19 April 2018

### **Biovac awarded manufacturing licence**

Cape Town, 18 April 2018 - The Biovac Institute (Biovac) has been awarded a manufacturing licence by a South African regulator, taking it one step closer to realising the government's ambition of producing its own vaccines.

Biovac is a public-private partnership that was formed in 2003 to try and revitalise the state's human vaccine manufacturing capacity, after the demise of the state vaccine institute...

**IFPMA** [to 12 May 2018]

<http://www.ifpma.org/resources/news-releases/>

*No new digest content identified.*

**PhRMA** [to 12 May 2018]

<http://www.phrma.org/press-room>

May 11, 2018

### **PhRMA Statement on President Trump's Drug Pricing Blueprint**

PhRMA president and CEO Stephen J. Uhl issued a statement on President Donald Trump's drug pricing blueprint.

"These far-reaching proposals could fundamentally change how patients access medicines and realign incentives across the entire prescription drug supply chain. While some of these proposals could help make medicines more affordable for patients, others would disrupt coverage and limit patients' access to innovative treatments..."

**Industry Watch** [to 12 May 2018]



:: **Proposed Acquisition of Shire plc by Takeda** May 8, 2018 Osaka, Japan

*Transaction Highlights*

- :: Brings together complementary positions in gastroenterology (GI) and neuroscience; provides leading positions in rare diseases and plasma-derived therapies to complement strength in oncology and focused efforts in vaccines
- :: Creates a global, values-based, R&D-driven biopharmaceutical leader headquartered in Japan, with an attractive geographic footprint and provides the scale to drive future development
- :: Creates a highly complementary, robust, modality-diverse pipeline and a strengthened R&D engine focused on breakthrough innovation
- :: Enhances Takeda's cash flow profile, with management confident of delivering substantial annual cost synergies and generating attractive returns for shareholders
- :: Takeda's transformation positions the combined group to successfully integrate Shire and maximize value from the combination

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

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

*No new digest content identified.*

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***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](mailto:david.r.curry@centerforvaccineethicsandpolicy.org)

**American Journal of Infection Control**

May 2018 Volume 46, Issue 5, p479-600

<http://www.ajicjournal.org/current>

[Reviewed earlier]

### **American Journal of Preventive Medicine**

May 2018 Volume 54, Issue 5, p611-726, e83-e98

<http://www.ajpmonline.org/current>

[Reviewed earlier]

### **American Journal of Public Health**

May 2018 108(5)

<http://ajph.aphapublications.org/toc/ajph/current>

[Reviewed earlier]

### **American Journal of Tropical Medicine and Hygiene**

Volume 98, Issue 5, 2018

<http://www.ajtmh.org/content/journals/14761645/98/5>

*Editorials*

#### **[Real-Time Modeling Should Be Routinely Integrated into Outbreak Response](#)**

Authors: [Daniel G. Bausch](#) and [John Edmunds](#)

<https://doi.org/10.4269/ajtmh.18-0150>

*Articles*

#### **[Barriers and Opportunities to Advancing Women in Leadership Roles in Vector Control: Perspectives from a Stakeholder Survey](#)**

Authors: [Mary H. Hayden](#), [Erika Barrett](#), [Guyah Bernard](#), [Eunice N. Toko](#), [Maurice Agawo](#), [Amanda M. Okello](#), [Jayleen K. L. Gunn](#) and [Kacey C. Ernst](#)

<https://doi.org/10.4269/ajtmh.17-0693>

### **Annals of Internal Medicine**

1 May 2018 Vol: 168, Issue 9

<http://annals.org/aim/issue>

*Original Research*

#### **[Evaluating Vaccination Strategies for Zika Virus in the Americas](#)**

David P. Durham, PhD; Meagan C. Fitzpatrick, PhD; Martial L. Ndeffo-Mbah, PhD; Alyssa S. Parpia, MPH; Nelson L. Michael, MD, PhD; Alison P. Galvani, PhD

*Conclusion:*

A Zika vaccine of moderate to high efficacy may virtually eliminate prenatal infections through a combination of direct protection and transmission reduction. Efficiency of age-specific targeting of Zika vaccination depends on the timing of future outbreaks.

*Position Papers*

#### **[Ethical Obligations Regarding Short-Term Global Health Clinical Experiences: An American College of Physicians Position Paper](#)**

Matthew DeCamp, MD, PhD; Lisa Soleymani Lehmann, MD, PhD; Pooja Jaeel, MD; Carrie Horwitch, MD, MPH; for the ACP Ethics, Professionalism and Human Rights Committee \*

*Abstract*

This American College of Physicians position paper aims to inform ethical decision making surrounding participation in short-term global health clinical care experiences. Although the

positions are primarily intended for practicing physicians, they may apply to other health care professionals and should inform how institutions, organizations, and others structure short-term global health experiences. The primary goal of short-term global health clinical care experiences is to improve the health and well-being of the individuals and communities where they occur. In addition, potential benefits for participants in global health include increased awareness of global health issues, new medical knowledge, enhanced physical diagnosis skills when practicing in low-technology settings, improved language skills, enhanced cultural sensitivity, a greater capacity for clinical problem solving, and an improved sense of self-satisfaction or professional satisfaction. However, these activities involve several ethical challenges. Addressing these challenges is critical to protecting patient welfare in all geographic locales, promoting fair and equitable care globally, and maintaining trust in the profession. This paper describes 5 core positions that focus on ethics and the clinical care context and provides case scenarios to illustrate them.

### **BMC Cost Effectiveness and Resource Allocation**

<http://resource-allocation.biomedcentral.com/>

(Accessed 12 May 2018)

[No new digest content identified]

### **BMJ Global Health**

May 2018 - Volume 3 - 3

<http://gh.bmj.com/content/3/3>

[Reviewed earlier]

### **BMC Health Services Research**

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

(Accessed 12 May 2018)

[No new digest content identified]

### **BMC Infectious Diseases**

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

(Accessed 12 May 2018)

[No new digest content identified]

### **BMC Medical Ethics**

<http://www.biomedcentral.com/bmcmedethics/content>

(Accessed 12 May 2018)

[No new digest content identified]

### **BMC Medicine**

<http://www.biomedcentral.com/bmcmed/content>

(Accessed 12 May 2018)

[No new digest content identified]

### **BMC Pregnancy and Childbirth**

<http://www.biomedcentral.com/bmcpregnancychildbirth/content>

(Accessed 12 May 2018)

[No new digest content identified]

### **BMC Public Health**

<http://bmcpublichealth.biomedcentral.com/articles>

(Accessed 12 May 2018)

[No new digest content identified]

### **BMC Research Notes**

<http://www.biomedcentral.com/bmcresearchnotes/content>

(Accessed 12 May 2018)

[No new digest content identified]

### **BMJ Open**

May 2018 - Volume 8 - 5

<http://bmjopen.bmj.com/content/current>

[New issue; No digest content identified]

### **Bulletin of the World Health Organization**

Volume 96, Number 5, May 2018, 297-368

<http://www.who.int/bulletin/volumes/96/5/en/>

[Reviewed earlier]

### **Child Care, Health and Development**

Volume 44, Issue 3 Pages: 343-506 May 2018

<https://onlinelibrary.wiley.com/toc/13652214/current>

[Reviewed earlier]

### **Clinical and Experimental Vaccine Research**

Volume 7(1); January 2018

<http://ecevr.org/>

[Reviewed earlier]

### **Clinical Therapeutics**

May 2018 Volume 40, Issue 5, p669-812

<http://www.clinicaltherapeutics.com/current>

[New issue; No digest content identified]

### **Conflict and Health**

<http://www.conflictandhealth.com/>

[Accessed 12 May 2018]

[No new digest content identified]

### **Contemporary Clinical Trials**

Volume 68 Pages 1-146 (May 2018)

<https://www.sciencedirect.com/journal/contemporary-clinical-trials/vol/68/suppl/C>

[Reviewed earlier]

### **Current Opinion in Infectious Diseases**

June 2018 - Volume 31 - Issue 3

<http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx>

[Reviewed earlier]

### **Developing World Bioethics**

March 2018 Volume 18, Issue 1 Pages 1–64

<http://onlinelibrary.wiley.com/doi/10.1111/dewb.2018.18.issue-1/issuetoc>

***Special Issue: Rebuilding Patient-Physician Trust in China, Developing a Trust-Oriented Bioethics***

[Reviewed earlier]

### **Development in Practice**

Volume 28, Issue 4, 2018

<http://www.tandfonline.com/toc/cdip20/current>

[Reviewed earlier]

### **Disaster Medicine and Public Health Preparedness**

Volume 12 - Issue 2 - April 2018

<https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/latest-issue>

[New issue; No digest content identified]

### **Disasters**

April 2018 Volume 42, Issue 2 Pages 205–404

<http://onlinelibrary.wiley.com/doi/10.1111/disa.2018.42.issue-2/issuetoc>

[Reviewed earlier]

**EMBO Reports**

01 April 2018; volume 19, issue 4

<http://embor.embopress.org/content/19/4?current-issue=y>

[Reviewed earlier]

**Emerging Infectious Diseases**

Volume 24, Number 5—May 2018

<http://wwwnc.cdc.gov/eid/>

[Reviewed earlier]

**Epidemics**

Volume 22, Pages 1-78 (March 2018)

<https://www.sciencedirect.com/journal/epidemics/vol/22/suppl/C>

***Special Issue: The RAPIDD Ebola Forecasting Challenge***

[Reviewed earlier]

**Epidemiology and Infection**

Volume 146 - Issue 5 - April 2018

<https://www.cambridge.org/core/journals/epidemiology-and-infection/latest-issue>

[Reviewed earlier]

**The European Journal of Public Health**

Volume 28, Issue 1, 1 February 2018

<https://academic.oup.com/eurpub/issue/28/1>

[Reviewed earlier]

**Global Health Action**

Volume 11, 2018 – Issue 1

<https://www.tandfonline.com/toc/zgha20/11/1?nav=tocList>

[Reviewed earlier]

**Global Health: Science and Practice (GHSP)**

Vol. 6, No. 1 March 21, 2018

<http://www.ghspjournal.org/content/current>

[Reviewed earlier]

**Global Public Health**

Volume 13, 2017 Issue 6

<http://www.tandfonline.com/toc/rqph20/current>

[Reviewed earlier]

**Globalization and Health**

<http://www.globalizationandhealth.com/>

[Accessed 12 May 2018]

[No new digest content identified]

**Health Affairs**

May 2018 Vol. 37, No. 5

<https://www.healthaffairs.org/toc/hlthaff/current>

***Precision Medicine***

[New issue; No digest content identified]

**Health and Human Rights**

Volume 19, Issue 2, December 2017

<http://www.hhrjournal.org/>

***Special Section on Romani People and the Right to Health***

[Reviewed earlier]

**Health Economics, Policy and Law**

Volume 13 - Issue 2 - April 2018

<https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue>

[Reviewed earlier]

**Health Policy and Planning**

Volume 33, Issue 4, 1 May 2018

<http://heapol.oxfordjournals.org/content/current>

[Reviewed earlier]

**Health Research Policy and Systems**

<http://www.health-policy-systems.com/content>

[Accessed 12 May 2018]

[No new digest content identified]

**Humanitarian Exchange Magazine**

Number 71 March 2018

<https://odihpn.org/magazine/humanitarian-response-urban-areas/>

**Humanitarian response in urban areas**

Humanitarian crises are increasingly affecting urban areas either directly, through civil conflict, hazards such as flooding or earthquakes, urban violence or outbreaks of disease, or indirectly, through hosting people fleeing these threats. The humanitarian sector has been slow to understand how the challenges and opportunities of working in urban spaces necessitate changes in how they operate. For agencies used to working in rural contexts, the dynamism of

the city, with its reliance on markets, complex systems and intricate logistics, can be a daunting challenge. Huge, diverse and mobile populations complicate needs assessments, and close coordination with other, often unfamiliar, actors is necessary.

[Reviewed earlier]

**Human Vaccines & Immunotherapeutics** (formerly Human Vaccines)

Volume 14, Issue 4 2018

<http://www.tandfonline.com/toc/khvi20/current>

[Reviewed earlier]

**Infectious Agents and Cancer**

<http://www.infectagentscancer.com/content>

[Accessed 12 May 2018]

[No new digest content identified]

**Infectious Diseases of Poverty**

<http://www.idpjournal.com/content>

[Accessed 12 May 2018]

[No new digest content identified]

**International Health**

Volume 10, Issue 3, 1 May 2018

<http://inthehealth.oxfordjournals.org/content/current>

[New issue; No digest content identified]

**International Journal of Community Medicine and Public Health**

Vol 5, No 5 (2018) May 2018

<http://www.ijcmph.com/index.php/ijcmph/issue/view/38>

[Reviewed earlier]

**International Journal of Epidemiology**

Volume 47, Issue 2, 1 April 2018, Pages 359

<https://academic.oup.com/ije/issue/47/2>

[Reviewed earlier]

**International Journal of Human Rights in Healthcare**

Volume 11 Issue 2 2018

<https://www.emeraldinsight.com/toc/ijhrh/11/2>

[New issue; No digest content identified]



## **International Journal of Infectious Diseases**

April 2018 Volume 69, In Progress Open Access

[http://www.ijidonline.com/issue/S1201-9712\(18\)X0003-4](http://www.ijidonline.com/issue/S1201-9712(18)X0003-4)

[Reviewed earlier]

## **JAMA**

May 8, 2018, Vol 319, No. 18, Pages 1841-1946

<http://jama.jamanetwork.com/issue.aspx>

[New issue; No digest content identified]

## **JAMA Pediatrics**

May 2018, Vol 172, No. 5, Pages 401-504

<http://archpedi.jamanetwork.com/issue.aspx>

*Original Investigation*

### **Vaccination Patterns in Children After Autism Spectrum Disorder Diagnosis and in Their Younger Siblings**

Ousseny Zerbo, PhD; Sharareh Modaressi, MPH; Kristin Goddard, MPH; et al.

JAMA Pediatr. 2018;172(5):469-475. doi:10.1001/jamapediatrics.2018.0082

This matched cohort study investigates if children after receiving an autism spectrum disorder diagnosis obtain their remaining scheduled vaccines and compares their vaccination patterns with those of younger siblings of children without autism spectrum disorder.

### **Effect of a Health Care Professional Communication Training Intervention on Adolescent Human Papillomavirus VaccinationA Cluster Randomized Clinical Trial**

Amanda F. Dempsey, MD, PhD, MPH; Jennifer Pyznawoski, MSPH; Steven Lockhart, MPH; et al.

JAMA Pediatr. 2018;172(5):e180016. doi:10.1001/jamapediatrics.2018.0016

This cluster randomized clinical trial evaluates the effect of a 5-component health care professional human papillomavirus vaccine communication intervention on adolescent human papillomavirus vaccination.

*Special Communication*

### **Key Implications of Data Sharing in Pediatric Genomics**

Vasiliki Rahimzadeh, MSc; Christoph Schickhardt, JD, PhD; Bartha M. Knoppers, PhD; et al.

JAMA Pediatr. 2018;172(5):476-481. doi:10.1001/jamapediatrics.2017.5500

This special communication discusses the current ethical, legal, and social implications of sharing genomic and associated clinical data involving children.

*Abstract*

Accurate clinical interpretation of children's whole-genome and whole-exome sequences relies on comparing the patient's linked genomic and phenotypic data with variant reference databases of both healthy and affected patients. The robustness of such comparisons, in turn, is made possible by sharing pediatric genomic and associated clinical data. Despite this, sparse ethical-legal policy attention has been paid to making such sharing routine in practice. The interdisciplinary Paediatric Task Team of the Global Alliance for Genomics and Health considered in detail the current ethical, legal, and social implications of sharing genomic and associated clinical data involving children. An initial set of points to consider was presented at a meeting of the Paediatric Task Team at the 4th Plenary of the Global Alliance for Genomics and

Health. The Key Implications for Data Sharing (KIDS) framework for pediatric genomics was developed based on feedback from this group and was supplemented by findings from a critical appraisal of the data-sharing literature. The final points to consider that comprise the KIDS framework are categorized into the following 4 primary themes: children's involvement, parental consent, balancing benefits and risks, and data protection and release requirements.

**JBIR Database of Systematic Review and Implementation Reports**

April 2018 - Volume 16 - Issue 4

<http://journals.lww.com/jbisrir/Pages/currenttoc.aspx>

[Reviewed earlier]

**Journal of Adolescent Health**

May 2018 Volume 62, Issue 5, p505-632

[https://www.jahonline.org/issue/S1054-139X\(17\)X0020-7](https://www.jahonline.org/issue/S1054-139X(17)X0020-7)

[Reviewed earlier]

**Journal of Community Health**

Volume 43, Issue 3, June 2018

<https://link.springer.com/journal/10900/43/3/page/1>

[Reviewed earlier]

**Journal of Empirical Research on Human Research Ethics**

Volume 13, Issue 2, April 2018

<http://journals.sagepub.com/toc/jre/current>

***Ethical Issues in Biobanking and use of Biospecimens***

[Reviewed earlier]

**Journal of Epidemiology & Community Health**

May 2018 - Volume 72 - 5

<http://jech.bmj.com/content/current>

[New issue; No digest content identified]

**Journal of Evidence-Based Medicine**

February 2018 Volume 11, Issue 1 Pages 1–67

<http://onlinelibrary.wiley.com/doi/10.1111/jebm.2018.11.issue-1/issuetoc>

[Reviewed earlier]

**Journal of Global Ethics**

Volume 13, Issue 3, 2017

<http://www.tandfonline.com/toc/rjge20/current>

[Reviewed earlier]

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

Volume 29, Number 1, February 2018

<https://muse.jhu.edu/issue/38046>

[Reviewed earlier]

**Journal of Humanitarian Logistics and Supply Chain Management**

Volume 8 Issue 1 2018

<https://www.emeraldinsight.com/toc/jhlscm/8/1>

[Reviewed earlier]

**Journal of Immigrant and Minority Health**

Volume 20, Issue 3, June 2018

<https://link.springer.com/journal/10903/20/3/page/1>

[Reviewed earlier]

**Journal of Immigrant & Refugee Studies**

Volume 16, 2018\_ Issue 3

<http://www.tandfonline.com/toc/wimm20/current>

[Reviewed earlier]

**Journal of Infectious Diseases**

Volume 217, Issue 11, 12 May 2018

<https://academic.oup.com/jid/issue/217/1>

[Reviewed earlier]

**Journal of Medical Ethics**

May 2018 - Volume 44 - 5

<http://jme.bmj.com/content/current>

[Reviewed earlier]

**Journal of Medical Internet Research**

Vol 20, No 5 (2018): May

<http://www.jmir.org/2018/5>

[New issue; No digest content identified]

**Journal of Medical Microbiology**

Volume 67, Issue 4, April 2018

<http://jmm.microbiologyresearch.org/content/journal/jmm/67/4>

[Reviewed earlier]

**Journal of Patient-Centered Research and Reviews**

Volume 5, Issue 2 (2018)

<https://digitalrepository.aurorahealthcare.org/jpcrr/>

[New issue; No digest content identified]

**Journal of the Pediatric Infectious Diseases Society (JPIDS)**

Volume 7, Issue 1 March 2018

<https://academic.oup.com/jpids/issue>

[Reviewed earlier]

**Journal of Pediatrics**

May 2018 Volume 196, p1-334

<http://www.jpeds.com/current>

[Reviewed earlier]

**Journal of Pharmaceutical Policy and Practice**

<https://joppp.biomedcentral.com/>

[Accessed 12 May 2018]

[No new digest content identified]

**Journal of Public Health Management & Practice**

May/June 2018 - Volume 24 - Issue 3

<https://journals.lww.com/jphmp/pages/currenttoc.aspx>

[Reviewed earlier]

**Journal of Public Health Policy**

Volume 39, Issue 1, February 2018

<https://link.springer.com/journal/41271/39/1/page/1>

[Reviewed earlier]

**Journal of the Royal Society – Interface**

May 2018; volume 15, issue 142

<http://rsif.royalsocietypublishing.org/content/current>

[Reviewed earlier]

**Journal of Travel Medicine**

Volume 25, Issue suppl\_1, 1 May 2018

[https://academic.oup.com/jtm/issue/25/suppl\\_1](https://academic.oup.com/jtm/issue/25/suppl_1)

## ***Asian travel: from the rare to the difficult***

[Reviewed earlier]

## **Journal of Virology**

May 2018, volume 92, issue 10

<http://jvi.asm.org/content/current>

[Reviewed earlier]

## **The Lancet**

May 12, 2018 Volume 391 Number 10133 p1865-1964

<http://www.thelancet.com/journals/lancet/issue/current>

*Comment*

### **Emergency deployment of oral cholera vaccine for the Rohingya in Bangladesh**

Firdausi Qadri, Abul Kalam Azad, Meerjady Sabrina Flora, Ashraful Islam Khan, Md Taufiqul

...This OCV campaign was undertaken in challenging conditions and provides a model for pre-emptive delivery of OCV from the stockpile to prevent major cholera epidemics in complex humanitarian emergencies at high risk for cholera. It shows the importance of cooperation and collaboration of governments, the ICG OCV stockpile group, and international partners for OCV implementation in humanitarian crises. The conditions in which the Rohingya live remain precarious. Although the OCV campaign has so far appeared to prevent a cholera outbreak or epidemic, there has been a continued influx of unvaccinated Rohingya after the campaign who, together with people who were missed in the campaign or received only a single dose, constitute a potentially at-risk population as the major cholera season approaches. Provision of adequate clean water and sanitation remains a challenge and there are fears that cyclones and landslides will further aggravate the situation. Accordingly, an additional tranche of OCV doses from the stockpile was approved on April 12, 2018, and vaccination of the new arrivals and of the host population living in close proximity and those aged 5 years and older at the time of the earlier campaign, who received only a single dose, began on May 6, 2018.

icddr,b and the IEDCR were involved in leading the surveillance described in this Comment and all the authors were involved in supporting the OCV campaigns...

### **Mapping the burden of cholera in sub-Saharan Africa and implications for control: an analysis of data across geographical scales**

Justin Lessler, Sean M Moore, Francisco J Luquero, Heather S McKay, Rebecca Grais, Myriam Henkens, Martin Mengel, Jessica Dunoyer, Maurice M'bangombe, Elizabeth C Lee, Mamoudou Harouna Djingarey, Bertrand Sudre, Didier Bompangue, Robert S M Fraser, Abdinasir Abubakar, William Perea, Dominique Legros, Andrew S Azman

*Series*

### **Pathology and laboratory medicine in low-income and middle-income countries**

Access to pathology and laboratory medicine services: a crucial gap

Michael L Wilson, Kenneth A Fleming, Modupe A Kuti, Lai Meng Looi, Nestor Lago, Kun Ru

### **Pathology and laboratory medicine in low-income and middle-income countries Improving pathology and laboratory medicine in low-income and middle-income countries: roadmap to solutions**

Shahin Sayed, William Cherniak, Mark Lawler, Soo Yong Tan, Wafaa El Sadr, Nicholas Wolf, Shannon Silkensen, Nathan Brand, Lai Meng Looi, Sanjay A Pai, Michael L Wilson, Danny Milner, John Flanigan, Kenneth A Fleming

**Pathology and laboratory medicine in low-income and middle-income countries  
Delivering modern, high-quality, affordable pathology and laboratory medicine to  
low-income and middle-income countries: a call to action**

Susan Horton, Richard Sullivan, John Flanigan, Kenneth A Fleming, Modupe A Kutu, Lai Meng Looi, Sanjay A Pai, Mark Lawler

**Lancet Global Health**

May 2018 Volume 6 Number 5 e469-e592

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

[Reviewed earlier]

**Lancet Infectious Diseases**

May 2018 Volume 18 Number 5 p475-582 e147-e182

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

[Reviewed earlier]

**Lancet Respiratory Medicine**

May 2018 Volume 6 Number 5 p315-402 e16-e18

<http://www.thelancet.com/journals/lanres/issue/current>

[Reviewed earlier]

**Maternal and Child Health Journal**

Volume 22, Issue 5, May 2018

<https://link.springer.com/journal/10995/22/5/page/1>

[Reviewed earlier]

**Medical Decision Making (MDM)**

Volume 38, Issue 4, May 2018

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

[Reviewed earlier]

**The Milbank Quarterly**

*A Multidisciplinary Journal of Population Health and Health Policy*

Volume 96, Issue 1 Pages: 1-212 March 2018

<https://onlinelibrary.wiley.com/toc/14680009/96/1>

[Reviewed earlier]

## **Nature**

Volume 557 Issue 7704, 10 May 2018

[http://www.nature.com/nature/current\\_issue.html](http://www.nature.com/nature/current_issue.html)

*Comment* | 09 May 2018

### **When will clinical trials finally reflect diversity?**

An analysis of drug studies shows that most participants are white, even though trials are being done in more countries, reveal Todd C. Knepper and Howard L. McLeod.

Todd C. Knepper & Howard L. McLeod

## **Nature Medicine**

Volume 24 Issue 5, May 2018

<https://www.nature.com/nm/volumes/24/issues/5>

[New issue; No digest content identified]

## **Nature Reviews Immunology**

Volume 18 Issue 5, May 2018

<https://www.nature.com/nri/journal/v18/n4/index.html>

*Review Article* | 30 January 2018

### **Passive immunotherapy of viral infections: 'super-antibodies' enter the fray**

So-called super-antibodies are highly potent, broadly reactive antiviral antibodies that offer promise for the treatment of various chronic and emerging viruses. This Review describes how recent technological advances led to their isolation from rare, infected individuals and their development for the prevention and treatment of various viral infections.

Laura M. Walker & Dennis R. Burton

## **New England Journal of Medicine**

May 10, 2018 Vol. 378 No. 19

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

[New issue; No digest content identified]

## **Pediatrics**

May 2018, VOLUME 141 / ISSUE 5

<http://pediatrics.aappublications.org/content/141/5?current-issue=y>

[Reviewed earlier]

## **Pharmaceutics**

Volume 10, Issue 1 (March 2018)

<http://www.mdpi.com/1999-4923/10/1>

[Reviewed earlier]

## **PharmacoEconomics**

Volume 36, Issue 5, May 2018

<https://link.springer.com/journal/40273/36/5/page/1>  
[Reviewed earlier]

### **PLOS Currents: Disasters**

<http://currents.plos.org/disasters/>

[Accessed 12 May 2018]

[No new digest content identified]

### **PLoS Currents: Outbreaks**

<http://currents.plos.org/outbreaks/>

[Accessed 12 May 2018]

#### **[Zika virus outbreak in Suriname, a report based on laboratory surveillance data](#)**

May 10, 2018 · *Research Article*

**Introduction :** Since the identification of ZIKV in Brazil in May 2015, the virus has spread extensively throughout the Americas. Cases of ZIKV infection have been reported in Suriname since October 2, 2015. **Methods :** A laboratory-based surveillance system was quickly implemented according to previous experience with the emergence of chikungunya. General practitioners and public health centers located in different districts of Suriname were asked to send blood samples from suspicious cases to Academic Hospital for molecular diagnosis of Zika virus infection. We investigated Zika-related laboratory data collected during surveillance and response activities to provide the first outbreak report in Suriname in terms of time, location and person. **Results :** A total of 791 molecularly confirmed cases were reported during a 48-week interval from October 2015 to August 2016. The majority of ZIKV-positive cases involved women between 20 and 39 years of age, reflecting concern about Zika infection during pregnancy. The outbreak peaked in mid-January and gradually spread from the district of Paramaribo to western coastal areas. **Discussion :** This report provides a simple and comprehensive description of the outbreak in Suriname and demonstrates the utility of laboratory data to highlight the spatiotemporal dynamics of the outbreak in that country.

### **PLoS Medicine**

<http://www.plosmedicine.org/>

(Accessed 12 May 2018)

*Editorial*

#### **[The next forum for unraveling FDA off-label marketing rules: State and federal legislatures](#)**

Michael S. Sinha, Aaron S. Kesselheim

Editorial | published 08 May 2018 PLOS Medicine

<https://doi.org/10.1371/journal.pmed.1002564>

...Buoyed by a narrow victory in one appeals court, advocates have turned to state and federal legislatures to unravel current FDA rules relating to off-label promotion. But these rules are essential for the ability of the FDA to fulfill its public health mission by defining what uses of drugs have benefits that outweigh their risks versus those that lack sufficient evidence to warrant such use. These distinctions are crucial for individual physicians—who do not have the time or expertise to perform the same critical data evaluation conducted by the scores of highly



trained scientists at the FDA—and for patients, who could be exposed to more non–evidence-based and potentially dangerous off-label uses of high-cost drugs.

### **PLoS Neglected Tropical Diseases**

<http://www.plosntds.org/>

[Accessed 12 May 2018]

[No new digest content identified]

### **PLoS One**

<http://www.plosone.org/>

[Accessed 12 May 2018]

*Research Article*

#### **[Controlling epidemics with transmissible vaccines](#)**

Scott L. Nuismer, Ryan May, Andrew Basinski, Christopher H. Remien

| published 10 May 2018 PLOS ONE

<https://doi.org/10.1371/journal.pone.0196978>

*Abstract*

As the density of human and domestic animal populations increases, the threat of localized epidemics and global pandemics grows. Although effective vaccines have been developed for a number of threatening pathogens, manufacturing and disseminating vaccines in the face of a rapidly spreading epidemic or pandemic remains a formidable challenge. One potentially powerful solution to this problem is the use of transmissible vaccines. Transmissible vaccines are capable of spreading from one individual to another and are currently being developed for a range of infectious diseases. Here we develop and analyze mathematical models that allow us to quantify the benefits of vaccine transmission in the face of an imminent or ongoing epidemic. Our results demonstrate that even a small amount of vaccine transmission can greatly increase the rate at which a naïve host population can be protected against an anticipated epidemic and substantially reduce the size of unanticipated epidemics if vaccination is initiated shortly after pathogen detection. In addition, our results identify key biological properties and implementation practices that maximize the impact of vaccine transmission on infectious disease.

### **PLoS Pathogens**

<http://journals.plos.org/plospathogens/>

[Accessed 12 May 2018]

[No new digest content identified]

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

<http://www.pnas.org/content/early/>

[Accessed 12 May 2018]

[No new digest content identified]

## **Prehospital & Disaster Medicine**

Volume 33 - Issue 2 - April 2018

<https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue>

[Reviewed earlier]

## **Preventive Medicine**

Volume 110 Pages 1-116 (May 2018)

<https://www.sciencedirect.com/journal/preventive-medicine/vol/109/suppl/C>

[Reviewed earlier]

## **Proceedings of the Royal Society B**

16 May 2018; volume 285, issue 1878

<http://rspb.royalsocietypublishing.org/content/285/1878?current-issue=y>

*Editorial*

### **Introduction of the Evidence synthesis: article type**

Gary Carvalho

Published 9 May 2018. DOI: 10.1098/rspb.2018.0858

#### *1. Introduction*

With over two million scientific publications appearing each year worldwide, there is an escalating need to access evidence and opinion to inform policy. In response, articles encompassing a breadth of policy and practice, from clinical medicine through to conservation science increasingly adopt an Evidence Synthesis framework. These articles access, appraise and synthesize scientific information and makes them readily available to non-specialists. They are rigorous, objective and transparent and driven by stakeholder needs, enabling the reader to make informed decisions. In an exciting new development, Proceedings of the Royal Society B will be extending its publication portfolio by launching a new article type entitled Evidence synthesis in June 2018, as part of a joint programme by the Academy of Medical Sciences and the Royal Society <https://royalsociety.org/topics-policy/projects/evidence-synthesis/>. Articles can range from brief review-style papers, through to meta-analysis and full systematic reviews of contentious issues. This editorial will serve to explain the appetite for such articles and the benefits for us in publishing them, as well as explain to authors the journal requirements for these pieces...

## **Public Health**

May 2018 Volume 158, p1-202

<http://www.publichealthjrnal.com/current>

### ***Special issue on Migration: A global public health issue***

Edited by Sian M Griffiths, Roger YN Chung

[Reviewed earlier]

## **Public Health Ethics**

Volume 11, Issue 1, 1 April 2018

<http://phe.oxfordjournals.org/content/current>

[Reviewed earlier]

**Public Health Reports**

Volume 133, Issue 3, May/June 2018

<http://phr.sagepub.com/content/current>

[New issue; No digest content identified]

**Qualitative Health Research**

Volume 28, Issue 6, May 2018

<http://qhr.sagepub.com/content/current>

***Special Issue: Mental Health***

[Reviewed earlier]

**Research Ethics**

Volume 13, Issue 3-4, July-October 2017

<http://journals.sagepub.com/toc/reab/current>

[Reviewed earlier]

**Reproductive Health**

<http://www.reproductive-health-journal.com/content>

[Accessed 12 May 2018]

[No new digest content identified]

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

[http://www.paho.org/journal/index.php?option=com\\_content&view=featured&Itemid=101](http://www.paho.org/journal/index.php?option=com_content&view=featured&Itemid=101)

[Reviewed earlier]

**Risk Analysis**

Volume 38, Issue 5 Pages: 869-1103 May 2018

<https://onlinelibrary.wiley.com/toc/15396924/current>

[Reviewed earlier]

**Risk Management and Healthcare Policy**

Volume 10, 2017

<https://www.dovepress.com/risk-management-and-healthcare-policy-archive56>

[Reviewed earlier]

**Science**

11 May 2018 Vol 360, Issue 6389

<http://www.sciencemag.org/current.dtl>

[New issue; No digest content identified]

### **Science Translational Medicine**

02 May 2018 Vol 10, Issue 439

<http://stm.sciencemag.org/>

[New issue; No digest content identified]

### **Social Science & Medicine**

Volume 204 Pages 1-124 (May 2018)

<https://www.sciencedirect.com/journal/social-science-and-medicine/vol/204/suppl/C>

[Reviewed earlier]

### **Systematic Reviews**

<https://systematicreviewsjournal.biomedcentral.com/articles>

[Accessed 12 May 2018]

[Reviewed earlier]

### **Travel Medicine and Infectious Diseases**

March-April, 2018 Volume 22

<http://www.travelmedicinejournal.com/>

[Reviewed earlier]

### **Tropical Medicine & International Health**

Volume 23, Issue 5 Pages: i-iv, 447-579 May 2018

<https://onlinelibrary.wiley.com/toc/13653156/current>

[Reviewed earlier]

### **Vaccine**

Volume 36, Issue 22, Pages 3061-3190 (24 May 2018)

<https://www.sciencedirect.com/journal/vaccine/vol/36/issue/22>

#### ***Vaccine Technology VI***

Edited by Laura A. Palomares, Tarit K. Mukhopadhyay, Yvonne Genzel, Linda L.H. Lua, Manon M.J. Cox

#### **[Vaccine Technology VI: Innovative and integrated approaches in vaccine development](#)**

Pages 3061-3063

Laura A. Palomares, Tarit K. Mukhopadhyay, Yvonne Genzel, Linda H.L. Lua, Manon M.J. Cox

### **Vaccine: Development and Therapy**

<https://www.dovepress.com/vaccine-development-and-therapy-archive111>

(Accessed 12 May 2018)

[No new digest content identified]

## **Vaccines — Open Access Journal**

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

(Accessed 12 May 2018)

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## **Value in Health**

May 2018 Volume 21, Issue 5, p491-630

<http://www.valueinhealthjournal.com/current>

### ***THEMED SECTION: Rare Diseases***

*Editorial*

### **[Rare Diseases: Addressing the Challenges in Diagnosis, Drug Approval, and Patient Access](#)**

Kati Copley-Merriman

p491–492

Published online: April 10, 2018

Rare diseases represent a wide range of disorders and constellations of clinical signs and symptoms. Many rare diseases cause chronic or progressive physical deterioration, disability, or premature death and start in childhood, creating a huge burden on parents and caregivers. Most rare diseases are thought to be genetic and there may be as many as 7000 rare diseases [1]. Although there is no universally accepted terminology or definition as to what constitutes a rare disease, it is typically characterized by its low frequency of occurrence. A global review of rare disease terminology found that 58% of definitions included a prevalence threshold with an average global threshold of 40 cases per 100,000 people [2]. Although the frequency of a single rare disease is low, because of the large number of rare diseases, the total number of people with a rare disease is large.

Rare diseases became known as orphan diseases because drug companies were not interested in adopting them to develop treatments. The Orphan Drug Act of 1983 passed by the US Congress created incentives to encourage companies to develop new drugs for rare diseases. There is similar legislation in the European Union. Drugs are granted an orphan designation if they are for the treatment of rare diseases that are life-threatening or seriously debilitating. The definition of “rare disease” varies from jurisdiction to jurisdiction, being a disease or condition affecting fewer than 200,000 patients in the United States (6.4 per 10,000 inhabitants), or a disease with a prevalence of 5 per 10,000 inhabitants or lower in the European Union [3]. In the decade leading up to the passage of the Orphan Drug Act, only 10 industry-supported products for rare diseases were brought to market. Since 1983, more than 600 orphan drug indications were approved from more than 450 distinct drug products, representing a huge increase in rare disease research and clinical development of new technologies [4].

Nevertheless, the development of new rare disease therapies has encountered significant obstacles with respect to understanding the incidence and prevalence (epidemiology), patient-reported burden of disease, economic cost of the disease and treatment, health technology assessment, and patient access. In June 2013, two working groups were established by the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) under the

ISPOR Rare Disease Special Interest Group. An article by the first working group provided rare disease terms and definitions [2]. The second working group (Challenges in Assessment and Appraisal of Diagnostics and Treatments Working Group) undertook a broad identification of challenges confronting those engaged in rare disease-focused research and development, as well as technology assessment.

Subsequently, Value in Health issued a special Call for Papers to attract submissions for a themed section dedicated to rare diseases. The resulting nine selected articles are published in this issue.

1. The first article, written by a group of authors from the ISPOR Rare Disease Special Interest Group, develops a multistakeholder catalogue of the principal difficulties faced in real-life rare disease research [5].

2. The article by Auvin et al. [6] provides a method to estimate the prevalence of rare diseases on the basis of reported incidence, to capture the time it takes for the diagnosis of newly discovered rare diseases to become part of mainstream diagnostic practice.

3. Building on a previously published report in Value in Health titled "Patient-Reported Outcome and Observer-Reported Outcomes Assessment in Rare Disease Clinical Trials: An ISPOR Clinical Outcome Assessment Emerging Good Practices Task Force Report" [7], the article by Phillips [8] in this issue describes rare disease clinical outcome assessments specific to pediatric patients and developmental changes while maturing.

4. The article by Knight et al. [9] describes economic modeling considerations for rare diseases and strategies that manufacturers have used to overcome challenges in submissions to the highly specialized technologies of the National Institute for Health and Care Excellence in England and in ultra-orphan appraisals to the Scottish Medicines Consortium.

5. Schlander et al. [10] conducted a systematic review of the literature-reported expenditures for drugs for rare and ultra-rare diseases in Europe to explore the budget impact of rare diseases.

6. The article by Magalhaes [11] reports a structured deliberation to elicit and describe the values of the general public in Alberta, Canada, regarding whether the severity of a rare condition can achieve priority in funding over common conditions, and what aspects of a condition drive this judgment.

7. The article by Hughes et al. [12] reports a person trade-off and discrete choice experiment among 3950 adults representative of the UK general population to estimate societal preferences for funding of non-cost-effective orphan drug treatments (i.e., Does the UK general public consider rarity in itself as being sufficient to justify special consideration for additional National Health Service funding?).

8. The article by Ollendorf et al. [13] explores the general ethical dilemmas that rare diseases present, the rare disease landscape in health technology assessment and US payer systems, the role of contextual factors in rare diseases (beyond cost effectiveness), and possible ways forward.

9. The final article by Kos et al. [14] investigates patient access to medicines for rare diseases from the Orphanet list in various European countries in the past decade using IMS Health sales data.

Although the international community has taken steps to address the rare disease challenges outlined in these articles, it has done so with a high degree of variation. The ISPOR Rare Disease Special Interest Group plans to continue its multistakeholder efforts toward providing recommendations to address rare disease challenges regarding evidence generation and health technology assessment. This collection of articles should help those attempting to address these challenges

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

**Journal of Community Health**

First Online: 05 May 2018

**Assessing and Improving Zoster Vaccine Uptake in a Homeless Population**

L Kaplan-Weisman, E Waltermaurer, C Crump

*Abstract*

The herpes zoster (shingles) vaccine is recommended for all adults aged  $\geq 60$  years without contraindications to prevent shingles and post-herpetic neuralgia. There are no published studies on zoster vaccination rates, barriers, or workflows in adults who have experienced homelessness. Due to barriers specific to this vaccine, including difficulty determining insurance coverage, high upfront costs, need for storage in a freezer, and under-prescription by physicians, uptake is lower compared to other recommended vaccines for older adults. To address these barriers, we developed a new approach of partnering our on-site primary care clinic in a transitional homeless shelter with a local pharmacy and offering vaccination on Shingles Immunization Days with a goal of matching or exceeding the national zoster immunization rate of 30.6%. Over a 3-year period, the live attenuated zoster vaccine was offered to 86% of eligible patients resulting in an immunization rate of 38.1%. This is higher than the estimated national rate but significantly lower than rates of tetanus (80.6%), pneumococcal (76.3%), and influenza (69.6%) vaccination in the same population, highlighting the unique obstacles to zoster immunization. Major reasons that patients were not immunized included lack of insurance coverage and patient refusal of all vaccines. Our findings demonstrate that homeless adults are interested in zoster vaccination and a model of on-site primary care in a shelter partnering with a pharmacy can successfully improve vaccine uptake in this population. Coverage of the new inactivated zoster vaccine under Medicare Part B could increase the national zoster immunization rate.

**System Dynamics Review**

Volume 33, Issue 2 Pages: 87-180 April/June 2017

<https://onlinelibrary.wiley.com/toc/10991727/current>

*Early View – Main Article*

## **Using integrated modeling to support the global eradication of vaccine-preventable diseases**

RJ Duintjer Tebbens, KM Thompson - 2018

### *Abstract*

The long-term management of global disease eradication initiatives involves numerous inherently dynamic processes, health and economic trade-offs, significant uncertainty and variability, rare events with big consequences, complex and interrelated decisions, and a requirement for cooperation among a large number of stakeholders. Over the course of more than 16 years of collaborative modeling efforts to support the Global Polio Eradication Initiative, we developed increasingly complex integrated system dynamics models that combined numerous analytical approaches, including differential equation-based modeling, risk and decision analysis, discrete-event and individual-based simulation, probabilistic uncertainty and sensitivity analysis, health economics and optimization. We discuss the central role of systems thinking and system dynamics in the overall effort and the value of integrating different modeling approaches to appropriately address the trade-offs involved in some of the policy questions. We discuss practical challenges of integrating different analytical tools and we provide our perspective on the future of integrated modeling.

## **Influenza and other respiratory viruses**

Volume 12, Issue 3 Pages: 305-420 May 2018

<https://onlinelibrary.wiley.com/toc/17502659/current>

*Accepted Manuscript*

## **65 Years of influenza surveillance by a WHO-coordinated global network**

T Ziegler, A Mamahit, NJ Cox -

### *ABSTRACT*

The 1918 devastating influenza pandemic left a lasting impact on influenza experts and the public, and the importance of global influenza surveillance was soon recognized. The WHO Global Influenza Surveillance Network (GISN) was founded in 1952 and renamed to Global Influenza Surveillance and Response System in 2011 upon the adoption by the World Health Assembly, of the Pandemic Influenza Preparedness Framework for the Sharing of Influenza Viruses and Access to Vaccines and Other Benefits ("PIP Framework"). The importance of influenza surveillance had been recognized and promoted by experts prior to the years leading up to the establishment of WHO. In the 65 years of its existence, the Network has grown to comprise 143 National Influenza Centers recognized by WHO, 6 WHO Collaborating Centers, 4 Essential Regulatory Laboratories, and 13 H5 Reference Laboratories. The Network has proven its excellence throughout these 65 years, providing detailed information on circulating seasonal influenza viruses, as well as immediate response to the influenza pandemics in 1957, 1968, and 2009, and to threats caused by animal influenza viruses and by zoonotic transmission of coronaviruses. For its central role in global public health, the Network has been highly recognized by its many partners and by international bodies. Several generations of world renown influenza scientists have brought the Network to where it is now and they will take it forward to the future, as influenza will remain a pre-eminent threat to humans and to animals.

## **Journal of Clinical Epidemiology**

March 2018 Volume 95, p1-142

[https://www.jclinepi.com/issue/S0895-4356\(17\)X0016-4](https://www.jclinepi.com/issue/S0895-4356(17)X0016-4)



## ***Controversy and Debate on Dengue Vaccine Series***

### **Controversy and debate on dengue vaccine series—paper 1: review of a licensed dengue vaccine: inappropriate subgroup analyses and selective reporting may cause harm in mass vaccination programs**

Antonio L. Dans, Leonila F. Dans, Mary Ann D. Lansang, Maria Asuncion A. Silvestre, Gordon H. Guyatt

Published online: November 24, 2017

#### ***Highlights***

:: The possibility that dengue vaccines can cause severe dengue has led to serious concern regarding the safety of mass vaccination programs.

:: This paper points out problems in the analyses of a published meta-analysis addressing this safety issue for a new vaccine against dengue fever—Dengvaxia.

:: Although the authors of the meta-analysis show a sevenfold rise in hospitalization for dengue fever in children <5 years old, they fail to point out two signals of harm for another outcome—hospitalization for severe dengue fever in children younger than 9 years, the relative risk was 8.5 (95% confidence interval [CI]: 0.5, 146.8), and in the overall study group, the relative risk was 5.5 (95% CI: 0.9, 33).

:: The selective reporting and inappropriate subgroup claims mask the potential harm of dengue mass vaccination programs.

:: Countries planning public use of the vaccine must conduct diligent postmarketing surveillance, secure informed consent from parents of potential recipients, and closely monitor the results of ongoing long-term follow-up of clinical trial participants.

#### ***Abstract***

Severe life-threatening dengue fever usually occurs when a child is infected by dengue virus a second time. This is caused by a phenomenon called antibody-dependent enhancement (ADE). Since dengue vaccines can mimic a first infection in seronegative children (those with no previous infection), a natural infection later in life could lead to severe disease. The possibility that dengue vaccines can cause severe dengue through ADE has led to serious concern regarding the safety of mass vaccination programs. A published meta-analysis addressed this safety issue for a new vaccine against dengue fever—Dengvaxia. The trials in this meta-analysis have been used to campaign for mass vaccination programs in developing countries. We discuss the results of this paper and point out problems in the analyses. Reporting the findings in an Asian trial (CYD14), the authors show a sevenfold rise in one outcome—hospitalization for dengue fever in children <5 years old. However, they fail to point out two signals of harm for another outcome—hospitalization for severe dengue fever (as confirmed by an independent data monitoring committee): 1. In children younger than 9 years, the relative risk was 8.5 (95% confidence interval [CI]: 0.5, 146.8), and 2. In the overall study group, the relative risk was 5.5 (95% CI: 0.9, 33).

The authors conduct a subgroup analysis to support claims that the vaccine is probably safe among children aged 9 years or more. This subgroup analysis has limited credibility because: (1) it was a post hoc analysis; (2) it was one of a large number of subgroup analyses; (3) the test of interaction was not reported, but was insignificant ( $P=0.14$ ); and (4) there is no biological basis for a threshold age of 9 years. The more likely explanation for the higher risk in younger children is ADE, that is, more frequent seronegativity, rather than age itself. The selective reporting and inappropriate subgroup claims mask the potential harm of dengue mass vaccination programs. Countries planning public use of the vaccine must conduct diligent

postmarketing surveillance, secure informed consent from parents of potential recipients, and closely monitor the results of ongoing long-term follow-up of clinical trial participants.

**Controversy and debate on dengue vaccine series—paper 2: response to review of a licensed dengue vaccine: inappropriate subgroup analyses and selective reporting may cause harm in mass vaccination programs**

Sri Rezeki S. Hadinegoro, Jose Luis Arredondo-García, Maria Rosario Capeding, Sophie Pallardy, Fernando Noriega, Alain Bouckennooghe  
Published online: January 3, 2018

**Controversy and debate on dengue vaccine series—paper 3: final response to review of a licensed dengue vaccine: inappropriate subgroup analyses and selective reporting may cause harm in mass vaccination programs**

Antonio L. Dans, Leonila F. Dans, Mary Ann D. Lansang, Maria Asuncion A. Silvestre, Gordon H. Guyatt  
Published online: January 3, 2018

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**Media/Policy Watch**

This watch section is intended to alert readers to substantive news, analysis and opinion from the general media and selected think tanks and similar organizations 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.

**The Atlantic**

<http://www.theatlantic.com/magazine/>

*Accessed 12 May 2018*

**The New Ebola Outbreak Could Take 'Three Months' to Control**

Ed Yong May 11, 2018

The DRC ministry of health is also considering whether to deploy an experimental Ebola vaccine that has proven its effectiveness in clinical .

**BBC**

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

*Accessed 12 May 2018*

[No new, unique, relevant content]

**The Economist**

<http://www.economist.com/>

*Accessed 12 May 2018*

[No new, unique, relevant content]

**Financial Times**

<http://www.ft.com/home/uk>

*Accessed 12 May 2018*

[No new, unique, relevant content]

**Forbes**

<http://www.forbes.com/>

*Accessed 12 May 2018*

[No new, unique, relevant content]

**Foreign Affairs**

<http://www.foreignaffairs.com/>

*Accessed 12 May 2018*

[No new, unique, relevant content]

**Foreign Policy**

<http://foreignpolicy.com/>

*Accessed 12 May 2018*

[No new, unique, relevant content]

**The Guardian**

<http://www.guardiannews.com/>

*Accessed 12 May 2018*

[No new, unique, relevant content]

**Huffington Post**

<https://www.huffingtonpost.co.uk/>

*Accessed 12 May 2018*

**[Why The World Needs Pop-up Vaccine Factories](#)**

10 May 2018

Dr Harris Makatsoris, Professor of Manufacturing Operations in the Sustainable Manufacturing Systems Centre at Cranfield University

... The existing model for manufacturing vaccines is geared towards the economies of scale demanded by commerce: huge factories producing a product for a global market. Cranfield is working closely with Imperial on the engineering and manufacturing aspects of the Hub to find workable models of production: novel kinds of processing equipment, strategies for supply chains, storage and distribution linked to the pop-up operations. Once data has been analysed and models tested as digital versions, there are expected to be trials of working operations in the partner countries in 2019.

Ultimately, the work of the Hub is about independence - enabling more countries, and particularly those in the developing world, to access a cost-effective way of meeting their needs for vaccines as they arise rather than being dependent on systems of global business. At the heart of the threat from pandemics is the issue of globalisation, of a world that has been

shrinking, where there are very few locations or communities that aren't inter-linked in some way with every other. Inter-dependencies continue to grow and become more complex, meaning, in many cases including health, we can't afford to think solely in terms of national interests.

### **New Yorker**

<http://www.newyorker.com/>

*Accessed 12 May 2018*

[No new, unique, relevant content]

### **New York Times**

<http://www.nytimes.com/>

*Accessed 12 May 2018*

*Health*

**[Ebola Erupts Again in Africa, Only Now There's a Vaccine](#)**

12 May 2018

### **[Security Tight as Pakistan Starts 5-Day Anti-Polio Drive](#)**

7 May 2018

A Pakistani health official says a five-day anti-polio drive has been launched in the country to vaccinate millions of children under five years of age against the crippling disease. Aimal Khan, a spokesman with the anti-polio drive, says the campaign was launched on Monday amid tight security. He says a total of 23.8 million children are to be vaccinated in the campaign, which involves a total of 161,000 health workers in 109 districts...

### **Wall Street Journal**

<http://online.wsj.com/home-page?wsjregion=na,us&homepage=/home/us>

*Accessed 12 May 2018*

[No new, unique, relevant content]

### **Washington Post**

<http://www.washingtonpost.com/>

*Accessed 12 May 2018*

[No new, unique, relevant content]

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### **[Think Tanks et al](#)**

### **Brookings**

<http://www.brookings.edu/>

*Accessed 12 May 2018*

[No new relevant content]

### **Center for Global Development**

<http://www.cgdev.org/page/press-center>

*Accessed 12 May 2018*

[No new relevant content]

## CSIS

<https://www.csis.org/>

Accessed 12 May 2018

[No new relevant content]

## Council on Foreign Relations

<http://www.cfr.org/>

Accessed 12 May 2018

[No new relevant content]

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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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