Vaccines and Global Health: The Week in Review
15 April 2017
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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***Request an email version:** Vaccines and Global Health: The Week in Review is published as a single email summary, scheduled for release each Saturday evening before midnight (EST/U.S.). If you would like to receive the email version, please send your request to david.r.curry@centerforvaccineethicsandpolicy.org.*

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Milestones :: Perspectives

Nationwide immunization campaign protects 5 million children against polio in war-torn Yemen

Joint WHO, UNICEF, World Bank news release

SANA'A, 8 April 2017— In an effort to keep Yemen polio-free, nearly 5 million children under the age of five have been vaccinated in a nationwide campaign covering all governorates in the country. The campaign was supported by a partnership between the World Bank, UNICEF and WHO launched in February 2017.

Despite intensifying violence in Sa'ada governorate, more than 369,000 children between the ages of 6 months and 15 years were immunized against measles – a highly contagious and potentially fatal disease - and over 155,000 children under the age of 5 were vaccinated against polio.

Thousands of dedicated health workers, health educators, religious leaders and local council officials played a key role in mobilizing their communities to maximize the immunization campaign's reach. Thanks to their support, high-risk groups, such as internally displaced persons and refugees, have also been vaccinated.

"WHO, UNICEF and the World Bank, are working closely with health authorities to keep Yemen polio-free and curb the spread of measles," said Dr Nevio Zagaria, WHO Representative in Yemen. "This partnership provides continuous support to national health authorities to increase vaccination coverage for vulnerable children across Yemen."

The two year-long conflict in Yemen has all but destroyed the country's health system, including the national immunization programme to protect all children from preventable diseases. WHO and UNICEF have provided sustained support for the programme, along with other essential health services for children, including:
:: Delivering fuel, generators and solar-powered refrigerators to keep vaccines at a constant cool temperature,
:: Support for transferring vaccines from national and governorate cold rooms to local health facilities and vaccination teams.

"Every minute, the situation of Yemen's children gets worse. It is unacceptable that children in Yemen are dying of preventable diseases. This is why, together with partners, we are sparing no effort to save more lives," said Ms. Meritxell Relaño, UNICEF Representative in Yemen.

"The World Bank is committed to investing in children's health, which is a vital investment in the country's future, through working with our UN partners in Yemen and strengthening the local health institutions" said Ms. Sandra Bloemenkamp, World Bank Country Manager for Yemen…

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Ten years in public health 2007-2017

By Dr Margaret Chan, Director-General, WHO
13 April 2017 - Today we begin the launch of "*Ten years in public health 2007-2017*" – a report that chronicles the evolution of global public health over the decade that I have served as Director-General at WHO.

This series of chapters, which will be published over the next 6 weeks, evaluates successes, setbacks, and enduring challenges during my administration. They show what needs to be done when progress stalls or new threats emerge. The chapters show how WHO technical leadership can get multiple partners working together in tandem under coherent strategies. The importance of country leadership and community engagement is stressed repeatedly throughout the chapters.

Together we have made tremendous progress. Health and life expectancy have improved nearly everywhere. Millions of lives have been saved. The number of people dying from malaria and HIV has been cut in half. WHO efforts to stop TB saved 49 million lives since the start of this century. In 2015, the number of child deaths dropped below 6 million for the first time, a 50% decrease in annual deaths since 1990. Every day 19000 fewer children die. We are able to count these numbers because of the culture of measurement and accountability instilled in WHO.

The challenges facing health in the 21st century are unprecedented in their complexity and universal in their impact. Under the pressures of demographic ageing, rapid urbanization, and the globalized marketing of unhealthy products, chronic noncommunicable diseases have overtaken infectious diseases as the leading killers worldwide. Increased political attention to combat heart attacks and stroke, cancer, diabetes, and chronic respiratory diseases is welcome as a powerful way to improve longevity and healthy life expectancy. However, no country in the world has managed to turn its obesity epidemic around in all age groups. I personally welcome is the political attention being given to women, their health needs, and their contributions to society. Investment in women and girls has a ripple effect. All of society wins in the end.

Lessons learned from the 2014 Ebola outbreak in West Africa catalysed the establishment of WHO's new Health Emergencies Programme, enabling a faster, more effective response to outbreaks and emergencies. The R&D Blueprint, developed following the Ebola response, cuts the time needed to develop and manufacture new vaccines and other products from years to months, accelerating the development of countermeasures for diseases such as Zika virus. For example, in December 2016, WHO was able to announce that the Ebola vaccine conferred nearly 100% protection in clinical trials conducted in Guinea.

The chapters reveal another shared priority for WHO: fairness in access to care as an ethical imperative. No one should be denied access to life-saving or health-promoting interventions for unfair reasons, including those with economic or social causes. That principle is profoundly demonstrated in WHO's work on universal health coverage, which in the past decade has expanded from a focus on primary health care to the inclusion of UHC as a core element of the 2030 Agenda for Sustainable Development. Health has a central place in the global goals. Importantly, countries have committed to this powerful social equalizer. Universal health coverage reflects the spirit of the SDGs and is the ultimate expression of fairness, ensuring no one is left behind.

These chapters tell a powerful story of global challenges and how they have been overcome. In a world facing considerable uncertainty, international health development is a unifying – and uplifting – force for the good of humanity. I have been proud to witness this impressive spirit of collaboration and global solidarity.

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Featured Journal Content

PNAS - Proceedings of the National Academy of Sciences of the United States of America
http://www.pnas.org/content/early/
[Accessed 15 April 2017]
Editorial - Biological Sciences - Medical Sciences:
Simply put: Vaccination saves lives
Walter A. Orenstein and Rafi Ahmed
PNAS 2017 ; published ahead of print April 10, 2017, doi:10.1073/pnas.1704507114
Extract

Few measures in public health can compare with the impact of vaccines. Vaccinations have reduced disease, disability, and death from a variety of infectious diseases. For example, in the United States, children are recommended to be vaccinated against 16 diseases (1). Table 1 highlights the impact in the United States of immunization against nine vaccine-preventable diseases, including smallpox and a complication of one of those diseases, congenital rubella syndrome, showing representative annual numbers of cases in the 20th century compared with 2016 reported cases (2, 3). All of the diseases have been reduced by more than 90% and many have either been eliminated or reductions of 99% or more have been achieved. A recent analysis of vaccines to protect against 13 diseases estimated that for a single birth cohort nearly 20 million cases of diseases were prevented, including over 40,000 deaths (4). In addition to saving the lives of our children, vaccination has resulted in net economic benefits to society amounting to almost $69 billion in the United States alone. A recent economic analysis of 10 vaccines for 94 low- and middle-income countries estimated that an investment of $34 billion for the immunization programs resulted in savings of $586 billion in reducing costs of illness and $1.53 trillion when broader economic benefits were included (5). The only human disease ever eradicated, smallpox, was eradicated using a vaccine, and a second, polio, is near eradication, also using vaccines (6, 7)…

Vaccines not only provide individual protection for those persons who are vaccinated, they can also provide community protection by reducing the spread of disease within a population (Fig. 1). Person-to-person infection is spread when a transmitting case comes in contact with a susceptible person. If the transmitting case only comes in contact with immune individuals, then the infection does not spread beyond the index case and is rapidly controlled within the population. Interestingly, this chain of human-to-human transmission can be interrupted, even if there is not 100% immunity, because transmitting cases do not have infinite contacts; this is referred to as "herd immunity" or "community protection," and is an important benefit of vaccination.

Mathematical modelers can estimate on average how many persons the typical transmitting case is capable of infecting if all of the contacts were susceptible (i.e., a population of 100% susceptibility). This number is known as R0, or the basic reproductive number. The immunity threshold needed within the population for terminating transmission can be calculated in percent as (R0 − 1)/R0 × 100 and is a guide to setting immunity levels and vaccination coverage targets for various diseases (8). For example, measles is one of the most contagious of vaccine-preventable diseases, with an estimated immunity threshold of 92–94%. In contrast, the protection threshold for rubella is estimated at 83–85%. Thus, eliminating rubella transmission is easier than measles, and when there are gaps in immunization coverage leading to accumulation of susceptibles, measles is often the first vaccine-preventable disease identified. Because of community protection induced by vaccines, persons who cannot be vaccinated (e.g., have contraindications or are younger than the age for whom vaccines are recommended), as well as persons who fail to make an adequate immune response to the vaccine (although most vaccines are highly effective, they are not 100% effective), can be protected indirectly because they are not exposed (Fig. 1). Thus, for most vaccines, achieving high levels of coverage is important not only for individual protection but in preventing disease in vulnerable populations that cannot be directly protected by vaccination. This provides the rationale for interventions to achieve high population immunity, such as removing barriers that may prevent access to vaccines (e.g., providing recommended vaccines without cost), as well as mandates for immunization requirements for attending school (9). There are many reasons why vaccinations may not be received as recommended. One extreme is outright opposition to vaccines. Probably even more common may be that making the effort to receive vaccines (e.g., making the healthcare visits at the appropriate time so vaccines can be administered) may be a low priority compared with other issues, so in the absence of having a mandate for vaccination, other things take priority. Thus, appropriate mandates could help in making vaccination a priority for all (10).

It's often said that vaccines save lives, but this is not strictly true; it is vaccination that saves lives. A vaccine that remains in the vial is 0% effective even if it is the best vaccine in the world. Thus, it is imperative that we all work together to assure that a high level of coverage is obtained among populations for whom vaccines are recommended. In some sense, vaccines have become victims of their own success. Diseases that once induced fear and sparked desire for vaccines are now rare, and there is a false and dangerous sense of complacency among the public.

In addition, in recent years, growing numbers of persons have become hesitant about vaccines, fearing side effects and not appreciative of the enormous health and economic benefits that vaccines provide. A CDC report on 159 measles cases reported between January 4 and April 2, 2015, showed that 68 United States residents with measles were unvaccinated, and of these 29 (43%) cited philosophical or religious objections to vaccination (11). A 2014 national web-based poll of parents in the United States estimated that 90.8% (89.3–92.1%) reported accepting or planning to accept all recommended noninfluenza childhood vaccines, 5.6% (4.6–6.9%) reported intentionally delaying one or more, and 3.6% (2.8–4.5%) reported refusing one or more vaccines (12). A national survey of pediatricians in the United States reported that the proportion of pediatricians reporting parental vaccine refusals increased from 74.5% in 2006 to 87.0% in 2013 (13). A 67-country survey on the state of vaccine confidence reported an average of 5.8% of respondents globally were skeptical about the importance of vaccines, with that proportion rising to more than 15% in some countries (14). One of the major concerns in

recent years has been the allegations that vaccines can cause autism. There are three major theories advanced on the role of vaccines in causing autism: (i) measles, mumps, rubella vaccine (MMR); (ii) thimerosal, an ethyl mercury containing preservative in many vaccines in the United States in the past, now mostly out of vaccines recommended for children; and (iii) too many vaccines (15). There have been multiple well-conducted studies and independent reviews of those studies by the Institute of Medicine (now the National Academy of Medicine) that do not support a role for vaccines in causing autism (16). Independent evaluation of the safety of the immunization schedule has found it to be extremely safe (17). However, translating the science into information capable of influencing vaccine skeptics has been difficult.

The National Vaccine Advisory Committee (NVAC) in the United States issued a report in 2015, with 23 recommendations to assure high levels of vaccine confidence (18). The recommendations have five focus areas: (i) measuring and tracking vaccine confidence, (ii) communication and community strategies to increase vaccine confidence, (iii) healthcare provider strategies to increase vaccine confidence, (iv) policy strategies to increase vaccine confidence, and (v) continued support and monitoring of the state of vaccine confidence. Critical to assuring confidence is evidence-based research to evaluate which interventions are most effective. The NVAC recommended that a repository of evidence-based best practices for informing, educating, and communicating with parents and others in ways that foster or increase vaccine confidence be created. And while we have focused on children, vaccine preventable diseases exact a substantial health burden in adults and immunization coverage rates for most recommended vaccines are substantially lower for adults than those achieved for recommended vaccines in children. Thus, there is need not only in enhancing immunization rates in children but also in adults.

In summary, vaccines are some of the most effective and also cost-effective prevention tools we have. But vaccines that are not administered to persons for whom they are recommended are not useful. It is incumbent upon all of us who work in the healthcare setting, as well as community leaders, to stress to our friends and colleagues the importance of vaccination both for the individual vaccinated as well as for the communities in which the individuals live. Also critically important, there remains an urgent need for greater emphasis on research to develop vaccines for global diseases for which vaccines either do not exist or need improvement.
[References and Acknowledgment at title link above]

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New England Journal of Medicine
April 13, 2017 Vol. 376 No. 15
http://www.nejm.org/toc/nejm/medical-journal
Perspective
Yellow Fever — Once Again on the Radar Screen in the Americas
Catharine I. Paules, M.D., and Anthony S. Fauci, M.D.
Four arthropod-borne viruses (arboviruses) have recently emerged or reemerged in the Americas, spreading rapidly through populations that had not previously been exposed to them and causing substantial morbidity and mortality.1 The first was dengue, which reemerged to cause widespread disease predominantly in South America and the Caribbean in the 1990s. This epidemic was followed by West Nile virus in 1999, which has since become endemic in the

continental United States, and chikungunya in 2013, which continues to cause disease, predominantly in the Caribbean and South America. Most recently, Zika virus emerged in Brazil in 2015 and spread through infected travelers to more than 60 countries and territories in the Americas, including the United States.

Over the past several weeks, a fifth arbovirus, yellow fever virus, has broken out in Brazil, with the majority of the infections occurring in rural areas of the country. These are referred to as sylvatic, or jungle, cases, since the typical transmission cycle occurs between forest mosquitoes and forest-dwelling nonhuman primates, with humans serving only as incidental hosts. In this ongoing outbreak, health authorities have reported 234 confirmed infections and 80 confirmed deaths as of February 2017.[2] Confirmed infections have occurred in the Brazilian states of Minas Gerais, Espírito Santo, and São Paulo (see map - Confirmed Cases of Yellow Fever in the Current Outbreak.), and hundreds of additional cases remain under investigation. The high number of cases is out of proportion to the number reported in a typical year in these areas.

Although there is currently no evidence that human-to-human transmission through Aedes aegypti mosquitoes (urban transmission) has occurred, the outbreak is affecting areas in close proximity to major urban centers where yellow fever vaccine is not routinely administered. This proximity raises concern that, for the first time in decades, urban transmission of yellow fever will occur in Brazil.

As we have seen with dengue, chikungunya, and Zika, A. aegypti–mediated arbovirus epidemics can move rapidly through populations with little preexisting immunity and spread more broadly owing to human travel. Although it is highly unlikely that we will see yellow fever outbreaks in the continental United States, where mosquito density is low and risk of exposure is limited, it is possible that travel-related cases of yellow fever could occur, with brief periods of local transmission in warmer regions such as the Gulf Coast states, where A. aegypti mosquitoes are prevalent.

It is also conceivable that yellow fever outbreaks may occur in the U.S. territories, just as the recent Zika epidemic reached Puerto Rico, causing a significant outbreak there and leading to thousands of travel-related cases and more than 250 locally transmitted cases in the continental United States. In an era of frequent international travel, any marked increase in domestic cases in Brazil raises the possibility of travel-related cases and local transmission in regions where yellow fever is not endemic. In light of the serious nature of this historically devastating disease, public health awareness and preparedness are critical, even for individual cases.

Yellow fever most likely originated in Africa and was imported into the Americas in the 1600s.[3] It claimed hundreds of thousands of lives in the 18th and 19th centuries. The Philadelphia yellow fever epidemic of 1793, for example, killed approximately 10% of the city's population and prompted the federal government to flee the city. In 1881, Cuban epidemiologist Carlos Finlay proposed that yellow fever was a mosquito-borne infection. The U.S. Army physician Walter Reed and a Yellow Fever Commission verified that fact in 1900. Subsequently, mosquito-control efforts and better sanitation practices virtually eliminated yellow fever from the United States and other nonendemic areas of the Americas, although sporadic outbreaks of varying magnitude continued to occur in tropical regions where the disease was endemic.[4]

In 1937, virologist Max Theiler developed a live attenuated yellow fever vaccine that is still in use today and that provides lifetime immunity in up to 99% of vaccinees, according to the World Health Organization (WHO). Extensive vaccination campaigns combined with effective vector-control strategies have significantly reduced the number of yellow fever cases worldwide. However, localized outbreaks continue to occur in parts of Africa and Central and South America, resulting in an estimated 84,000 to 170,000 severe cases and 29,000 to 60,000 related deaths per year, according to the WHO.

Beginning in December 2015, a large urban outbreak of yellow fever occurred in Angola and subsequently spread to the Democratic Republic of Congo, causing 961 confirmed cases and 137 deaths. In addition, cases related to travel from those countries were noted in nonendemic areas such as China, raising concern about international spread of disease. During the outbreak, the world's emergency vaccine stockpile reserved for epidemic response was exhausted, prompting health authorities to immunize inhabitants of some areas using one fifth of the standard dose in order to extend the vaccine supply.5 Since vaccination is the mainstay of epidemic response, the limited number of stockpiled vaccine doses and the long time needed to produce additional vaccine made this outbreak difficult to control. To prevent a similar occurrence in Brazil or in future yellow fever outbreaks, early identification of cases and rapid implementation of public health management and prevention strategies, such as mosquito control and appropriate vaccination, are critical.

Early recognition may be difficult in countries such as the United States, where most physicians have never seen a case of yellow fever and know little about the clinical manifestations. Typically, yellow fever is suspected on the basis of clinical presentation and confirmed later, since definitive diagnosis requires testing available only in specialized laboratories. The clinical illness manifests in three stages: infection, remission, and intoxication.3 During the infection stage, patients present after a 3-to-6-day incubation period with a nonspecific febrile illness that is difficult to distinguish from other flulike diseases. High fevers associated with bradycardia, leukopenia, and transaminase elevations may provide a clue to the diagnosis, and patients will be viremic during this period.

This initial stage is followed by a period of remission, when clinical improvement occurs and most patients fully recover. However, 15 to 20% of patients have progression to the intoxication stage, in which symptoms recur after 24 to 48 hours.3 This stage is characterized by high fevers, hemorrhagic manifestations, severe hepatic dysfunction and jaundice (hence the name "yellow fever"), renal failure, cardiovascular abnormalities, central nervous system dysfunction, and shock. Antibodies may be detected during this stage; however, viremia has usually resolved. Case-fatality rates range from 20 to 60% in patients in whom severe disease develops, and treatment is supportive, since no antiviral therapies are currently available.3,4

Yellow fever is the most severe arbovirus ever to circulate in the Americas, and although vaccination campaigns and vector-control efforts have eliminated it from many areas, sylvatic transmission cycles continue to occur in endemic tropical regions. The most recent outbreak in Brazil highlights this phenomenon. If the current outbreak leads to urban spread through A. aegypti mosquitoes, clinicians should adopt a high index of suspicion for yellow fever, particularly in travelers returning from affected regions. As with all potentially reemerging infectious diseases, public health awareness and preparedness are essential to prevent a resurgence of this historical threat.

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Emergencies

Public Health Emergencies of International Concern (PHEIC) [to 15 April 2017]

POLIO
Public Health Emergency of International Concern (PHEIC)
Polio this week as of 12 April 2017
:: The Polio Research Committee (PRC) is meeting this week in Geneva, to continue to provide guidance to the eradication effort's research agenda. Research underpins polio eradication, evaluating new strategies, products and solutions to long-standing operational, epidemiological and virological challenges.
:: Summary of newly-reported viruses this week: two new wild poliovirus type 1 positive environmental samples from Pakistan.

Country Updates [Selected Excerpts]
New cases or environmental samples reported across the monitored country/region settings: Afghanistan, Pakistan, Nigeria, Lake Chad Basin. Guinea and West Africa, and Lao People's Democratic Republic have been removed from the monitored geographies list.
Afghanistan
:: On 4-5 April, the Technical Advisory Group (TAG) on Polio Eradication in Afghanistan convened in Kabul. This independent technical body of experts reviewed latest epidemiology by region, remaining gaps and strategies for the rest of the year.
::Pockets of remaining unreached children in particular in Bermel, Helmand and Kandahar needs to be addressed, as such pockets continue to present a risk to the national effort.
Pakistan
:: Two new WPV1 positive environmental samples were reported in the past week, from Islamabad and Gadap (greater Karachi), Sindh, collected on 11 and 9 March, respectively.

[See joint WHO, UNICEF, World Bank news release on polio immunization in Yemen in Milestones above]

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WHO Grade 3 Emergencies [to 15 April 2017]
Yemen - *No new announcements identified*
Nationwide immunization campaign protects 5 million children against polio in war-torn Yemen
8 April 2017
[See Milestones above for more detail]

Iraq - *No new announcements identified*
Nigeria - *No new announcements identified*
South Sudan - *No new announcements identified*
The Syrian Arab Republic - *No new announcements identified*

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WHO Grade 2 Emergencies [to 15 April 2017]
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.*
Myanmar - *No new announcements identified.*
Niger - *No new announcements identified.*
Ukraine - *No new announcements identified.*

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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.

Iraq
:: Iraq: Mosul Humanitarian Response Situation Report No. 28 (2 - 9 April 2017) [EN/KU/AR]
Highlights [Excerpts]
…Humanitarian needs in western Mosul remain high, with shortages of food and water being reported. Although some areas of western Mosul are accessible to humanitarian partners, regular water supply has been very severely impact by the conflict resulting in serious shortages of water supplies of acceptable quality.
…Since the start of the operation in western Mosul on 19 February, an estimated 275,000 displaced people have passed through the Hammam al Alil screening site as of 9 April, according to the Government of Iraq.
…The cumulative number of IDPs since the beginning of the Mosul Operation on 17 October 2016 has reached beyond 436,000 people as of 9 April, according to the government. The government reports that 91,000 individuals have returned to eastern Mosul, and around 345,000 people are currently displaced as of 9 April…

:: UN Damage Assessment Shows Extensive Destruction in Western Mosul [EN/AR/KU]
(Baghdad, 13 April 2017): The most recent assessment from UN-Habitat, the United Nations Human Settlements Programme, confirms that extensive damage has occurred in western Mosul…
"The level of damage in western Mosul is already far greater than in the east, even before the battle to retake the Old City begins," said Lise Grande, Humanitarian Coordinator for Iraq. "Nearly 300,000 civilians have fled western Mosul. Hundreds of thousands more may in the days and weeks ahead."
"Homes are being destroyed. Schools and health centres are damaged and crucial public infrastructure including electricity and water stations are in ruins," said Ms. Grande. "Under international humanitarian law, parties to the conflict are obliged to do everything possible to protect civilians and limit damage to civilian infrastructure. Nothing is more important."…

Syria

:: 14 Apr 2017 Syria - IDP Situation Monitoring Initiative (ISMI) Weekly Update, Major Reported IDP Movements (03/04/17 - 09/04/17)
:: Northwest Syria – Flash Update (As of 11 April 2017)

Yemen
:: 14 Apr 2017 - Yemen Humanitarian Bulletin Issue 22 | 14 April 2017
:: 13 Apr 2017 - Situational briefing to the General Assembly on the Secretary-General's Call to Action on famine response and prevention
:: 11 Apr 2017 - Statement by the Humanitarian Coordinator in Yemen, Jamie McGoldrick,on the need to improve humanitarian access to Taizz City [EN/AR]

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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.

Zika virus [to 15 April 2017]
http://www.who.int/emergencies/zika-virus/en/
[No new digest content identified]

MERS-CoV [to 15 April 2017]
http://www.who.int/emergencies/mers-cov/en/
[No new digest content identified]

Yellow Fever [to 15 April 2017]
http://www.who.int/emergencies/yellow-fever/en/
[No new digest content identified]

EBOLA/EVD [to 15 April 2017]
http://www.who.int/ebola/en/
[No new digest content identified]

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WHO & Regional Offices [to 15 April 2017]

World Immunization Week, 24-30 April
Immunization saves millions of lives and is widely recognized as one of the world's most successful and cost-effective health interventions.

Radical increase needed in funding for water and sanitation
13 April 2017 – Countries are not increasing spending fast enough to meet the water and sanitation targets under the Sustainable Development Goals, says a new report published by WHO on behalf of UN-Water. According to the report, countries have increased their budgets

for water, sanitation and hygiene over the last 3 years, yet 80% of countries report that this financing is still insufficient to meet nationally-defined targets

Highlights

WHO and partners provide vaccines to control meningitis C in Nigeria
April 2017 -- A vaccination campaign is underway in Nigeria to contain an outbreak of meningitis C, a strain of meningitis which first emerged in the country in 2013.

WHO boosts emergency lifesaving care for civilians severely injured in west Mosul
April 2017 – Since the start of the campaign in Mosul late last year, over 6000 patients have been referred to hospitals in Mosul and neighbouring governorates. To further boost all levels of trauma care, the EU has committed an additional €10 million to WHO.

Reference Guide: Developing health financing strategy
April 2017 – A new guide published by WHO examines policy development for health financing, expanding on areas including revenue raising, pooling revenues, purchasing services, benefit design, and rationing mechanisms. Health financing is key to improving health system performance and progressing towards universal health coverage (UHC).

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Weekly Epidemiological Record, 14 April 2017, vol. 92, 15 (pp. 181–192)
:: Immunization and Vaccine-related Implementation Research Advisory Committee (IVIR-AC): summary of conclusions and recommendations, 1–2 February 2017 meeting
:: Zika virus: an epidemiological update

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WHO Regional Offices
Selected Press Releases, Announcements
WHO African Region AFRO
:: African Vaccination Week 24-30 April 2017
:: Elephantiasis is no longer a public health problem in Togo: WHO commends Togo for Historic Achievement
Brazzaville, 14 April 2017 - After over a decade of persistent efforts, Togo has eliminated lymphatic filariasis—also known as elephantiasis—as a public health problem. The announcement follows a formal validation by the World Health Organization (WHO) which congratulated the Togolese government for this historic achievement.

WHO Region of the Americas PAHO
:: PAHO opens contest on best experiences in health promotion in cities, schools and universities in the Americas (04/11/2017)

WHO South-East Asia Region SEARO
:: Scaling up health sector response to viral hepatitis
WHO today launched the Regional Action Plan for Viral Hepatitis which provides an actionable framework of evidence-based, priority interventions to support national responses for

prevention, control and management of viral hepatitis. The goal of the action plan is to eliminate viral hepatitis as a major public health threat in the Region by 2030.
The action plan was launched at a three-day meeting of programme managers from all member countries, partners and donors, to accelerate efforts to end viral hepatitis.

WHO European Region EURO
No new digest content identified.

WHO Eastern Mediterranean Region EMRO
:: WHO increases support for cancer patients, the forgotten casualties of the Syrian war
13 April 2017
:: WHO welcomes support from Government of Brazil to Syria health response 13 April, 2017
:: WHO's Regional Director launches National Immunization Week in Lebanon 10 April 2017

WHO Western Pacific Region
No new digest content identified.

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CDC/ACIP [to 15 April 2017]
http://www.cdc.gov/media/index.html

No new digest content identified

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Announcements

Human Vaccines Project [to 15 April 2017]
http://www.humanvaccinesproject.org/media/press-releases/
Apr 11, 2017, 09:00 ET
The Human Vaccines Project, Vanderbilt And Illumina Join Forces To Decode The Human Immunome
NEW YORK, April 11, 2017 /PRNewswire-USNewswire/ -- The Human Vaccines Project and Vanderbilt University Medical Center today announced that they joined forces with Illumina, Inc., to decipher the human immunome, the genetic underpinnings of the immune system. Illumina will provide the genetic sequencing technologies and expertise required to process the massive amounts of data required to decode the human immunome.

The Human Vaccines Project is a public-private partnership of academic research centers, industry, non-profits and government agencies that aims to decode the human immune system to accelerate development of next-generation vaccines and immunotherapies. A core initiative of the Project is the Human Immunome Program, an internationally led effort by Vanderbilt University Medical Center to determine key principles of how the human immune system prevents and controls disease by illuminating the complete set of genes and molecular structures known as the human immunome.

"By decoding the human immune system, we have the potential to uncover novel diagnostic biomarkers for a wide range of diseases," said James Crowe Jr., M.D., director of the Vanderbilt Vaccine Center and lead investigator of the Human Immunome Program. "This will enable the development of highly targeted vaccines and immunotherapies against infectious and non-communicable diseases like AIDS, Alzheimer's, multiple sclerosis and cancer."

Due to its scale and complexity, the human immunome is estimated to be billions of times larger than the human genome. With recent technological advances from biomedical and computational sciences, it is now possible to undertake such a mammoth genetic sequencing and data analysis program.

"We are very pleased to collaborate with the Human Vaccines Project, Vanderbilt and its partners, by bringing Illumina's state of the art genetic sequencing and bioinformatics technologies to help solve this major challenge," said Gary Schroth, Ph.D., distinguished scientist and vice president for product development at Illumina. "Successfully defining the human immunome will provide the foundational knowledge to usher in a new era of vaccine, diagnostic and therapeutic development."…

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PATH [to 15 April 2017]
http://www.path.org/news/index.php
Announcement | April 12, 2017
Vietnam launches National Immunization Information System
The government-led scale-up of PATH's ImmReg and VaxTrak systems aims to track the immunization of every individual in Vietnam, from birth until the end of their life
On March 24, Vietnam's Deputy Prime Minister, Vu Duc Dam, officially launched the National Immunization Information System (NIIS) in Hanoi. This system evolved from ImmReg, a digital immunization registry, and VaxTrak, a vaccine tracking tool, both developed and tested by PATH beginning in 2012.

ImmReg allows health workers to use computers, smartphones, and tablets to enter and search for immunization records, and send short message service (SMS) reminders to those due for vaccination. It has shown to increase the on-time vaccination rates for essential vaccines for children, as well as reduce the time and costs associated with local routine immunization programs. VaxTrak tracks vaccine supply chain, thus decreasing the likelihood of stock-outs and reducing waste. Since 2016, PATH has supported the Ministry of Health (MOH) and Viettel, the largest telecom company in Vietnam, to integrate ImmReg and VaxTrak into a national system. They aim to track immunization records of the entire Vietnamese population, from birth to death, and make the vaccine supply chain more efficient.

The NIIS is an ambitious system that positions Vietnam as a global leader in digital health. Health centers throughout the world, in both developed and developing countries, have relied on paper-based records to record patient and vaccine information by hand. Paper-based records make it challenging to track which children are due for vaccination and can be prone to error. Inaccurate data leads to poor management of vaccine stocks, resulting in vaccines delivery

delays. A paper-based system also makes it more difficult for health workers to develop reports for health officials to use in developing immunization plans and strategies.

Through initiatives such as ImmReg, VaxTrak, and the Better Immunization Data Initiative, PATH is helping countries adopt digital solutions that allow health workers to better record and access data, ultimately leading to better health service delivery…

Press release | April 12, 2017
Viet Nam's first human milk bank to serve as model for learning and replication across the country
Human milk banks fill a vital nutritional gap for at-risk newborns without access to their own mother's milk, but few exist across Southeast Asia. Viet Nam's first human milk bank demonstrates the feasibility of establishing a facility of international standards in the region, and will serve as a model across the country and Southeast Asia.

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IAVI – International AIDS Vaccine Initiative [to 15 April 2017]
https://www.iavi.org/
April 13, 2017
IAVI Mourns the Passing of Major Force in HIV Science Dr. Mark Wainberg
The world lost a leader in the fight against AIDS this week with the passing of Dr. Mark Wainberg. The pioneering Canadian researcher is widely recognized for his involvement in the 1989 identification of antiviral drug Lamivudine, which is now one of the most extensively used drugs in treating HIV and its co-infections.

"Dr. Wainberg's passing is a tremendous loss for the scientific community," said IAVI President and CEO Mark Feinberg. "His extraordinary contributions to the field of HIV research and development continue to be an inspiration to me and to all who knew him. Discoveries stemming from his investigations and collaborations have significantly advanced treatment, prevention and cure research."

Among these contributions was the identification of several mutations in the HIV genome that are responsible for drug resistance. In recent years, he also turned his attention to researching a potential HIV cure based on the possibility that HIV may be unable to form resistance to compounds called integrase inhibitors that block viral replication…

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UNAIDS [to 15 April 2017]
http://www.unaids.org/
Selected Press Releases & Updates
Press statement
UNAIDS saddened by the death of HIV researcher Mark Wainberg
GENEVA, 13 April 2017—UNAIDS is deeply saddened by the tragic death of pioneering HIV researcher Mark Wainberg. An internationally renowned scientist, Dr Wainberg was a leading HIV researcher from the start of the AIDS epidemic.

"Mark Wainberg was a giant in HIV science. His work contributed to saving millions of lives," said Michel Sidibé, Executive Director of UNAIDS.

Dr Wainberg and colleagues identified one of the main antiretroviral medicines used to treat HIV infection, lamivudine. He contributed to the understanding of HIV drug resistance and more recently was working towards a cure for HIV. Dr Wainberg was the head of AIDS research at the Lady Davis Institute for Medical Research at the Jewish General Hospital and Director of the McGill University AIDS Centre, Canada, at the time of his death…

Update

UNAIDS Scientific and Technical Advisory Committee calls for HIV testing revolution

13 April 2017

The participants of a meeting of the UNAIDS Scientific and Technical Advisory Committee (STAC) have called on UNAIDS to lead global efforts to galvanize an HIV testing revolution. The target is to achieve 90% of people living with HIV knowing their HIV status by 2020. In 2015, only 60% of people living with HIV knew their HIV status.

In a mid-term review of progress towards the 90–90–90 targets, held on 9 and 10 April in Geneva, Switzerland, the participants heard that late HIV diagnosis represents the single greatest barrier to increasing rates of HIV viral suppression globally. New testing technologies have emerged, but programmes must reach the people who need HIV testing services.

Key barriers to HIV testing uptake include lack of individual awareness of risk, stigma, legal and structural barriers, associated costs such as travel to facilities and the perception that there is little benefit from diagnosing HIV infection if no symptoms are present. The participants heard that many people avoid seeking HIV testing services at health facilities, since both travel and waiting times can often be long. Barriers to testing are often experienced by young people, men and members of key populations.

The participants agreed that political and financial support for HIV testing must be significantly increased and that the central focus of HIV testing services should be moved from the health facility to the community. Community workers have a critical role in scaling up these community-centred strategies. The STAC recommended that UNAIDS develop a road map for the HIV testing revolution, for review and comment by the STAC at its next meeting in July…

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European Medicines Agency [to 15 April 2017]

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

12/04/2017

Update of EMA recommendations for 2017/2018 seasonal flu vaccine composition

Update completes previous recommendations issued in March 2017

10/04/2017

Reporting irregularities that may affect medicines

EMA Board adopts new policy on handling information on alleged improprieties from external sources

The European Medicines Agency's (EMA) Management Board has adopted a new policy on how EMA handles allegations of improprieties received from external parties. These improprieties may include allegations of departures from standards of good practices that could have an impact on the evaluation and supervision of medicines.

The goal is to create an environment where individuals from outside the Agency feel confident to raise their concerns on improprieties in their area of work. The policy helps EMA assess these reports and co-ordinate any further investigation in a structured way, while protecting the confidentiality of the reporter.

Since 2013, EMA has received a total of 43 reports that relate, for example, to the manufacturing of medicines or the conduct of clinical trials. Although no formal policy has existed until now, all reports were dealt with in line with the principles included in the new policy.

A dedicated email inbox, reporting@ema.europa.eu, has been created. Individuals external to EMA can raise their concerns by sending a message or providing information to this address. They can also send a letter to the Agency. Their identity will be kept confidential…

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NIH [to 15 April 2017]
http://www.nih.gov/news-events/news-releases
April 12, 2017
NIH study of Ebola patient traces disease progression and recovery
The patient was at the NIH Clinical Center for 26 days.
Excerpt

Analysis of daily gene activation in a patient with severe Ebola virus disease cared for at the National Institutes of Health in 2015 found changes in antiviral and immune response genes that pinpointed key transition points in the response to infection. The changes included a marked decline in antiviral responses that correlated with clearance of virus from white blood cells. The analysis also showed that the preponderance of host responses shifted rapidly from activation of genes involved in cell damage and inflammation toward those linked to promotion of cellular and organ repair. This pivot came before the first signs of clinical improvement in the patient, who was admitted to the NIH Clinical Center on day 7 of illness and remained at the hospital for 26 days. Researchers from the NIH's National Institute of Allergy and Infectious Diseases (NIAID) led the study…

… Although this study represents only a single case, it provides unprecedented detail on the host response to Ebola virus disease and may inform the development of therapeutics designed to boost or accelerate host factors that most effectively counter the virus and promote healing. It may also lead to better prognostic criteria to enable clinicians to tailor the treatment of patients with Ebola virus disease in ways that can best promote recovery…

NIH scientists advance understanding of herpesvirus infection
April 12, 2017

Protein complexes identified that control infection and reactivation.

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FDA [to 15 April 2017]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm

What's New for Biologics
Complete List of Currently Approved NDA and ANDA Application Submissions (PDF - 17KB)
Posted: 4/10/2017; Updated as of 4/5/2017

Complete List of Currently Approved Premarket Approvals (PMAs) (PDF - 16KB)
Posted: 4/10/2017; Updated as of 4/6/2017

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Wellcome Trust [to 15 April 2017]
https://wellcome.ac.uk/news
News / Published: 12 April 2017
One of our researchers wins global health award
Professor César Victora, a Wellcome Investigator, has been awarded the prestigious John Dirks Canada Gairdner Global Health Award 2017 for his work on maternal and child health in low- and middle-income countries.

The award recognises Professor Victora's (opens in a new tab) contributions to child health and nutrition, health programme monitoring and evaluation, and health equity.

His key achievement has been his work on cohort studies. He helped set up the 1982 Pelotas Birth Cohort, in Brazil, one of the world's longest running birth cohort studies. It is still monitoring around 6,000 individuals, and has been followed by further cohort studies set up in 1993 and 2004.

Professor Victora's research helped to demonstrate the impact of the first 1,000 days of life on influencing lifelong outcomes, in particular the importance of breastfeeding for preventing infant mortality…

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GHIT Fund [to 15 April 2017]
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 companies, the Japanese Government and the Bill & Melinda Gates Foundation.
2017.04.10
GHIT Fund 5th Anniversary Website Launched

In celebration of our 5th anniversary we have launched a special site featuring substantive interviews with key global health leaders and GHIT partners. Interviews examine GHIT and Japan's impact on global health R&D to date, and the potential for further impact in the years to come. The site also offers background on the history of our institution and staff, as well as our plans for our next 5 years. We invite you to visit the site and take a journey with us through our past and future.
:: GHIT 5th Anniversary Website http://5th.ghitfund.org/top/en

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AERAS [to 15 April 2017]

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

BIO [to 15 April 2017]
https://www.bio.org/insights
No new digest content identified.

BMGF - Gates Foundation [to 15 April 2017]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified.

CEPI – Coalition for Epidemic Preparedness Innovations [to 15 April 2017]
http://cepi.net/
No new digest content identified.

DCVMN [to 15 April 2017]
http://www.dcvmn.org/
No new digest content identified

EDCTP [to 15 April 2017]
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.

European Vaccine Initiative [to 15 April 2017]
http://www.euvaccine.eu/news-events
No new digest content identified.

Fondation Merieux [to 15 April 2017]
http://www.fondation-merieux.org/news
Mission: Contribute to global health by strengthening local capacities of developing countries to reduce the impact of infectious diseases on vulnerable populations.
No new digest content identified.

Gavi [to 15 April 2017]
http://www.gavi.org/library/news/press-releases/
No new digest content identified.

Global Fund [to 15 April 2017]
http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=
No new digest content identified.

Hilleman Laboratories [to 15 April 2017]
http://www.hillemanlabs.org/
No new digest content identified.

IFPMA [to 15 April 2017]
http://www.ifpma.org/resources/news-releases/
No new digest content identified.

IVI [to 15 April 2017]
http://www.ivi.int/
No new digest content identified.

PhRMA [to 15 April 2017]
http://www.phrma.org/press-room
No new digest content identified.

Sabin Vaccine Institute [to 15 April 2017]
http://www.sabin.org/updates/pressreleases
No new digest content identified.

* * * *

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

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

Integrating Clinical Research into Epidemic Response: The Ebola Experience

National Academy of Sciences - Committee on Clinical Trials During the 2014-15 Ebola Outbreak
Released April 12, 2017 :: 287 pages
PDF: https://download.nap.edu/cart/download.cgi?record_id=24739
Overview
The 2014 Ebola epidemic in western Africa was the longest and deadliest Ebola outbreak in history, resulting in 28,616 cases and 11,310 deaths. In the midst of the rapidly spreading, highly dangerous contagious disease—with no Ebola-specific vaccines or therapeutics available to help curb the epidemic—the international community implemented clinical trials on investigational agents, not yet studied in humans for safety or efficacy. Within that context, the Office of the Assistant Secretary for Preparedness and Response, the National Institute of Allergy and Infectious Disease, and the U.S. Food and Drug Administration, supported the National Academies of Sciences, Engineering, and Medicine to convene a committee to analyze the clinical trials that were conducted during the epidemic and consider the many scientific, ethical and practical issues related to the conduct of research in similar contexts. The resulting report, Integrating Clinical Research into Epidemic Response: The Ebola Experience, assesses the value of the trials and makes recommendations about how the conduct of trials could be improved in the context of a future international emerging or re-emerging infectious disease event.

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Fostering Integrity in Research

National Academies of Sciences, Engineering, and Medicine; Policy and Global Affairs; Committee on Science, Engineering, and Public Policy
2017 :: 284 pages
ISBN 978-0-309-39125-2 | DOI: 10.17226/21896
PDF:
https://www.nap.edu/login.php?record_id=21896&page=https%3A%2F%2Fwww.nap.edu%2Fdownload%2F21896

Description

The integrity of knowledge that emerges from research is based on individual and collective adherence to core values of objectivity, honesty, openness, fairness, accountability, and stewardship. Integrity in science means that the organizations in which research is conducted encourage those involved to exemplify these values in every step of the research process. Understanding the dynamics that support – or distort – practices that uphold the integrity of research by all participants ensures that the research enterprise advances knowledge.

The 1992 report Responsible Science: Ensuring the Integrity of the Research Process evaluated issues related to scientific responsibility and the conduct of research. It provided a valuable service in describing and analyzing a very complicated set of issues, and has served as a crucial basis for thinking about research integrity for more than two decades. However, as experience has accumulated with various forms of research misconduct, detrimental research practices, and other forms of misconduct, as subsequent empirical research has revealed more about the nature of scientific misconduct, and because technological and social changes have altered the environment in which science is conducted, it is clear that the framework established more than two decades ago needs to be updated.

Responsible Science served as a valuable benchmark to set the context for this most recent analysis and to help guide the committee's thought process. Fostering Integrity in Research identifies best practices in research and recommends practical options for discouraging and addressing research misconduct and detrimental research practices.

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News Release

Kaiser Permanente Study Tests New Way to Reduce 'Vaccine Hesitancy'

Parent volunteers who value immunization show promise as advocates to help protect communities against contagious diseases

SEATTLE, April 11, 2017 /PRNewswire/ -- Results are promising for a new approach to reducing "vaccine hesitancy," which happens when parents' concerns about vaccine safety lead them to delay or skip their children's immunizations, according to a Kaiser Permanente study published today in Health Promotion Practice: The Immunity Community: A Community Engagement Strategy for Reducing Vaccine Hesitancy.

The approach, called the Immunity Community, mobilizes parents who value vaccination to be advocates and to have positive conversations with other parents at their kids' childcare centers, preschools and schools — in person and through social media.

Parents took a survey before and after the three-year intervention in two communities in Washington state. The surveys showed significant improvements in vaccine-related attitudes:
:: Parents concerned about others not vaccinating their children rose from 81 percent to 89 percent.
:: Those who called themselves "vaccine hesitant" fell from 23 percent to 14 percent.
Fewer parents thought children receive vaccines at too young an age.
:: More parents were confident that vaccinating their children is a good decision.
:: More parents knew the vaccination rates at their children's childcare or school.

"Our evaluation found that the Immunity Community program was successful at empowering parents to communicate positive messages about vaccines in a way that was not confrontational," said study principal investigator Clarissa Hsu, PhD, of Kaiser Permanente Washington Health Research Institute's Center for Community Health and Evaluation.

"Strong negative rhetoric about vaccines can circulate widely on social media. And some parents feel hesitant about early childhood vaccines and may delay or refuse some or all vaccines, which may put others in their community at risk," Hsu said. "This project was designed to counterbalance prevalent anti-vaccine messages that do not reflect the fact that most (at least four in five) people vaccinate their kids and are supportive of vaccines."…

Health Promotion Practice
First published date: April-11-2017
10.1177/1524839917697303

The Immunity Community: A Community Engagement Strategy for Reducing Vaccine Hesitancy

Jennie Schoeppe, MPH, MSPT, Allen Cheadle, PhD, Mackenzie Melton, MPH, Todd Faubion, PhD, Creagh Miller, MPH, Juno Matthys, BS, Clarissa Hsu, PhD

Abstract
Parental concerns about vaccine safety have grown in the United States and abroad, resulting in delayed or skipped immunizations (often called "vaccine hesitancy"). To address vaccine hesitancy in Washington State, a public–private partnership of health organizations implemented and evaluated a 3-year community intervention, called the "Immunity Community." The intervention mobilized parents who value immunization and provided them with tools to engage in positive dialogue about immunizations in their communities. The evaluation used qualitative and quantitative methods, including focus groups, interviews, and pre and post online surveys of parents, to assess perceptions about and reactions to the intervention, assess facilitators and barriers to success, and track outcomes including parental knowledge and attitudes. The program successfully engaged parent volunteers to be immunization advocates. Surveys of parents in the intervention communities showed statistically significant improvements in vaccine-related attitudes: The percentage concerned about other parents not vaccinating their children increased from 81.2% to 88.6%, and the percentage reporting themselves as "vaccine-hesitant" decreased from 22.6% to 14.0%. There were not statistically significant changes in parental behaviors. This study demonstrates the promise of using parent advocates as part of a community-based approach to reduce vaccine hesitancy.

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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

American Journal of Infection Control
April 01, 2017 Volume 45, Issue 4, p341-46
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
April 2017 Volume 52, Issue 4, p417-556, e95-e122
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
Volume 107, Issue 4 (April 2017)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
Volume 96, Issue 4, 2017
http://www.ajtmh.org/content/current
[Reviewed earlier]

Annals of Internal Medicine
4 April 2017 Vol: 166, Issue 7
http://annals.org/issue.aspx
[Reviewed earlier]

BMC Cost Effectiveness and Resource Allocation
http://resource-allocation.biomedcentral.com/
(Accessed 15 April 2017)
[No new digest content identified]

BMJ Global Health
January 2017; volume 2, issue 1
http://gh.bmj.com/content/2/1?current-issue=y
[Reviewed earlier]

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 15 April 2017)
Research article
Health workers perceptions and attitude about Ghana's preparedness towards preventing, containing, and managing Ebola Virus Disease
Philip Baba Adongo, Philip Teg-Nefaah Tabong, Emmanuel Asampong, Joana Ansong, Magda Robalo and Richard M. Adanu
BMC Health Services Research 2017 17:266
Published on: 12 April 2017
Abstract
Background
Ebola virus is highly infectious and the disease can be very fatal. The World Health Organization has declared the 2014–2015 Ebola Virus Disease outbreak a Public Health Emergency of International Concern. In response to this, preparations were made in various health facilities and entry points across Ghana. This study explored health workers perceptions, and attitude about Ghana's preparedness towards preventing and containing Ebola Virus Disease.
Methods
We conducted a qualitative study in five (5) of the ten (10) regions in Ghana. Five focus group discussions (N = 44) were conducted among nurses; one in each region. In addition, ten (10) health workers (2 in each region) who are members of regional Ebola Virus Disease task force were recruited and interviewed. In the Greater Accra, Volta and Western regions that have ports, six (6) port health officials: two in each of these regions were also interviewed. The interviews were recorded digitally and transcribed verbatim. Thematic content analysis was used to analyze the transcripts with the aid of NVivo 10 software.
Results
The results of this study showed that Ghanaian health workers perceived the screening at various ports as important and ongoing but felt that the screenings at in-land ports were being undermined by the use of unapproved routes. Training of health workers was also being carried out in all the regions, however, there was a general perception among 33 out of 44 nurses that majority of health workers have not received training on Ebola Virus Disease prevention and management. Logistical challenges were also reported as some health facilities did not have adequate Personal Protective Equipment. In facilities where equipment was available, they were stored in places which are not easily accessible to health workers at all times of the day. Human resource preparation was also perceived to be a challenge as health workers (38/44 of nurses) generally expressed fear and unwillingness to work in Ebola treatment centres in the event of an outbreak in Ghana.
Conclusions
Our study concludes that preparatory work for Ebola Virus Disease prevention and containment in Ghana is perceived as inadequate by health workers. Ghana needs to strengthen preparation in the area of training of health workers, provision and accessibility of Personal Protective

Equipment and incentives for health workers to better position her to contain and manage any Ebola Virus Disease outbreak.

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 15 April 2017)
Research article
Long-term impact of self-financed rotavirus vaccines on rotavirus-associated hospitalizations and costs in the Valencia Region, Spain
Rotavirus vaccines are available in Spain from 2007. They are recommended by the Spanish Pediatric Association, but not funded by the National Health System (NHS) and its coverage rate reached 40-50%...Despite the low-medium vaccine coverage, the introduction of rotavirus vaccines had a specific coverage-related response impact in the hospitalizations for RVAGE and AGE in children <5 years and their use substantially reduced hospital related costs. The model used reassures that the estimated impact is due to the vaccination and not to other external factors.
Alejandro Orrico-Sanchez, Mónica López-Lacort, Silvia Pérez-Vilar and Javier Díez-Domingo
BMC Infectious Diseases 2017 17:267
Published on: 11 April 2017

Research article
Is the impact of childhood influenza vaccination less than expected: a transmission modelling study
To reduce the burden of severe influenza, most industrialized countries target specific risk-groups with influenza vaccines, e.g. the elderly or individuals with comorbidities. Since children are the main spre...
Felix Weidemann, Cornelius Remschmidt, Silke Buda, Udo Buchholz, Bernhard Ultsch and Ole Wichmann
BMC Infectious Diseases 2017 17:258
Published on: 11 April 2017

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 15 April 2017)
[No new digest content identified]

BMC Medicine
http://www.biomedcentral.com/bmcmed/content
(Accessed 15 April 2017)
[No new digest content identified]

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 15 April 2017)

[No new digest content identified]

BMC Public Health
http://bmcpublichealth.biomedcentral.com/articles
(Accessed 15 April 2017)
[No new digest content identified]

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 15 April 2017)
[No new digest content identified]

BMJ Open
April 2017 - Volume 7 - 4
http://bmjopen.bmj.com/content/current
Smoking and tobacco
[No new digest content identified]

Bulletin of the World Health Organization
Volume 95, Number 4, April 2017, 241-312
http://www.who.int/bulletin/volumes/95/4/en/
[Reviewed earlier]

Child Care, Health and Development
March 2017 Volume 43, Issue 2 Pages 161–321
http://onlinelibrary.wiley.com/doi/10.1111/cch.v43.2/issuetoc
[Reviewed earlier]

Clinical and Experimental Vaccine Research
2017 Jan;6(1):31-37. English.
http://ecevr.org/
[Reviewed earlier]

Clinical Therapeutics
March 2017 Volume 39, Issue 3, p451-664
http://www.clinicaltherapeutics.com/issue/S0149-2918(17)X0003-9
[Reviewed earlier]

Complexity
November/December 2016 Volume 21, Issue S2 Pages 1–642

http://onlinelibrary.wiley.com/doi/10.1002/cplx.v21.S2/issuetoc
[Reviewed earlier]

Conflict and Health
http://www.conflictandhealth.com/
[Accessed 15 April 2017]
[No new content]

Contemporary Clinical Trials
Volume 55, Pages 1-62 (April 2017)
http://www.sciencedirect.com/science/journal/15517144/55
[New issue; No relevant content identified]

Current Opinion in Infectious Diseases
April 2017 - Volume 30 - Issue 2
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

Developing World Bioethics
April 2017 Volume 17, Issue 1 Pages 1–60
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2017.17.issue-1/issuetoc
[Reviewed earlier]

Development in Practice
Volume 27, Issue 2
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Disasters
April 2017 Volume 41, Issue 2 Pages 209–426
http://onlinelibrary.wiley.com/doi/10.1111/disa.2017.41.issue-2/issuetoc
[Reviewed earlier]

EMBO Reports
Volume 18, Issue 3, 2017
http://embor.embopress.org/front.current-issue
[Reviewed earlier]

Emerging Infectious Diseases
Volume 23, Number 4—April 2017

http://wwwnc.cdc.gov/eid/
[Reviewed earlier]

Epidemics
Volume 18, Pages 1-112 (March 2017)
http://www.sciencedirect.com/science/journal/17554365
Multi-model comparisons for neglected tropical diseases - validation and projection
Edited by Déirdre Hollingsworth and Graham Medley
[Reviewed earlier]

Epidemiology and Infection
Volume 145 - Issue 5 - April 2017
https://www.cambridge.org/core/journals/epidemiology-and-infection/latest-issue
[Reviewed earlier]

The European Journal of Public Health
Volume 27, Issue 2, 15 April 2017
https://academic.oup.com/eurpub/issue/27/2
[Reviewed earlier]

Global Health Action
Volume 10, 2017 - Issue 1
http://www.tandfonline.com/toc/zgha20/10/1?nav=tocList
[Reviewed earlier]

Global Health: Science and Practice (GHSP)
March 24, 2017, 5 (1)
http://www.ghspjournal.org/content/current
[Reviewed earlier]

Global Public Health
Volume 12, 2017 Issue 5
http://www.tandfonline.com/toc/rgph20/current
[Reviewed earlier]

Globalization and Health
http://www.globalizationandhealth.com/
[Accessed 15 April 2017]
Debate
A systematic tale of two differing reviews: evaluating the evidence on public and private sector quality of primary care in low and middle income countries

Jorge Coarasa, Jishnu Das, Elizabeth Gummerson and Asaf Bitton
Published on: 12 April 2017
Abstract
Systematic reviews are powerful tools for summarizing vast amounts of data in controversial areas; but their utility is limited by methodological choices and assumptions. Two systematic reviews of literature on the quality of private sector primary care in low and middle income countries (LMIC), published in the same journal within a year, reached conflicting conclusions. The difference in findings reflects different review methodologies, but more importantly, a weak underlying body of literature. A detailed examination of the literature cited in both reviews shows that only one of the underlying studies met the gold standard for methodological robustness. Given the current policy momentum on universal health coverage and primary health care reform across the globe, there is an urgent need for high quality empirical evidence on the quality of private versus public sector primary health care in LMIC.

Health Affairs
April 2017; Volume 36, Issue 4
http://content.healthaffairs.org/content/current
Issue Focus: Maternity Coverage, Children, Disability & More
[Reviewed earlier]

Health and Human Rights
Volume 18, Issue 2, December 2016
http://www.hhrjournal.org/
Special Section: Universal Health Coverage and Human Rights
[Reviewed earlier]

Health Economics, Policy and Law
Volume 12 - Issue 2 - April 2017
https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue
Special Issue: Towards a Global Framework for Health Financing
[Reviewed earlier]

Health Policy and Planning
Volume 32 Issue 3 April 2017
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Health Research Policy and Systems
http://www.health-policy-systems.com/content
[Accessed 15 April 2017]
[No new digest content identified]

Humanitarian Exchange Magazine
Number 68 January 2017
http://odihpn.org/magazine/the-crisis-in-south-sudan/
The crisis in South Sudan
[Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 13, Issue 3, 2017
http://www.tandfonline.com/toc/khvi20/current
[Reviewed earlier]

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 15 April 2017]
[No new content]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 15 April 2017]
[No new digest content identified]

International Health
Volume 9, Issue 2 March 2017
http://inthealth.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Community Medicine and Public Health
Vol 4, No 4 (2017) April 2017
http://www.ijcmph.com/index.php/ijcmph/issue/view/22
Original Research Articles
Status of oral polio vaccination program for international travellers and its determinants: an experience from a designated centre of West Bengal
Manisha Sarkar, Urmila Dasgupta, Saikat Bhattacharya, Krishna Das Bhattacharyya, Salil Kumar Bhattacharya
Abstract
Background: In order to maintain the polio free status of India, it is vital to monitor the ongoing oral polio vaccination for international travellers. The aim of the study was to determine the status of oral polio vaccination program for international travellers from India to polio infected countries and to find out the determinants of deviation from proposed guidelines.
Methods: A descriptive cross-sectional study was conducted among 101 International travellers from November 2014 to April 2015 at a designated Polio vaccination centre for international travellers in Kolkata. A pre-designed pre-tested schedule was used to collect oral polio vaccination related details. The travellers who gave consent were eligible for the study. Data

was expressed in terms of mean, median, standard deviation etc. Association between variables was tested by Chi square test.
Results: 32.7% of the travellers had inadequate gap between OPV & travel. Knowledge of gap between OPV and travel was perceived more from health centres and travel agencies than mass media. Inadequate gap was more among lower age group, males, those with information source as mass media, official purpose of visit, those with incorrect knowledge regarding the gap requirement and those who maintained at least four weeks gap between OPV and yellow fever vaccine.
Conclusions: Wrong information from the source is responsible for wrong knowledge among the travellers which leads to inadequate gap between OPV and travel. It is crucial to increase awareness among the vaccinators and international travellers in order to contribute towards global polio eradication

International Journal of Epidemiology
Volume 45 Issue 6 December 2016
http://ije.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Infectious Diseases
March 2017 Volume 56, p1-286
http://www.ijidonline.com/issue/S1201-9712(17)X0003-9
Special Issue: Commemorating World Tuberculosis Day 2017
[40+ articles covering a range of TB thematic areas]
[Reviewed earlier]

JAMA
April 11, 2017, Vol 317, No. 14, Pages 1391-1490
http://jama.jamanetwork.com/issue.aspx
Viewpoint
Achieving Universal Coverage Without Turning to a Single PayerLessons From 3 Other Countries
Regina E. Herzlinger, DBA; Barak D. Richman, JD, PhD; Richard J. Boxer, MD
JAMA. 2017;317(14):1409-1410. doi:10.1001/jama.2017.1475
This Viewpoint references national health insurance mandates in Switzerland, Singapore, and Germany as examples of how to achieve universal health care coverage with private-sector insurance systems.

JAMA Pediatrics
April 1, 2017, Vol 171, No. 4, Pages 313-404
http://archpedi.jamanetwork.com/issue.aspx
[Reviewed earlier]

JBI Database of Systematic Review and Implementation Reports

March 2017 - Volume 15 - Issue 3
http://journals.lww.com/jbisrir/Pages/currenttoc.aspx
[Reviewed earlier]

Journal of Community Health
Volume 42, Issue 2, April 2017
http://link.springer.com/journal/10900/42/2/page/1
[Reviewed earlier]

Journal of Epidemiology & Community Health
April 2017 - Volume 71 - 4
http://jech.bmj.com/content/current
[Reviewed earlier]

Journal of Global Ethics
Volume 12, Issue 3, 2016
http://www.tandfonline.com/toc/rjge20/current
Theme Issue: Refugee Crisis: The Borders of Human Mobility
[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)
January – March 2017 Vol 9 Issue 1 Pages 1-37
http://www.jgid.org/currentissue.asp?sabs=n
[Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 28, Number 1, February 2017
https://muse.jhu.edu/issue/35850
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 19, Issue 2, April 2017
http://link.springer.com/journal/10903/19/2/page/1
[Reviewed earlier]

Journal of Immigrant & Refugee Studies
Volume 15, Issue 1, 2017
http://www.tandfonline.com/toc/wimm20/current
[Reviewed earlier]

Journal of Infectious Diseases
Volume 215, Issue 5 1 March 2017
http://jid.oxfordjournals.org/content/current
[Reviewed earlier]

Journal of Medical Ethics
April 2017 - Volume 43 - 4
http://jme.bmj.com/content/current
[Reviewed earlier]
Online First - Research ethics
Paper
Vaccine testing for emerging infections: the case for individual randomisation
Nir Eyal1,
Marc Lipsitch2
http://dx.doi.org/10.1136/medethics-2015-103220
Abstract
During the 2014–2015 Ebola outbreak in Guinea, Liberia and Sierra Leone, many opposed the use of individually randomised controlled trials to test candidate Ebola vaccines. For a raging fatal disease, they explained, it is unethical to relegate some study participants to control arms. In Zika and future emerging infections, similar opposition may hinder urgent vaccine research, so it is best to address these questions now. This article lays out the ethical case for individually randomised control in testing vaccines against many emerging infections, including lethal infections in low-income countries, even when at no point in the trial do the controls receive the countermeasures being tested. When individual randomisation is feasible—and it often will be—it tends to save more lives than alternative designs would. And for emerging infections, individual randomisation also tends as such to improve care, access to the experimental vaccine and prospects for all participants relative to their opportunities absent the trial, and no less than alternative designs would. That obtains even under placebo control and without equipoise—requiring which would undermine individual randomisation and the alternative designs that opponents proffered. Our arguments expound four often-neglected factors: benefits to non-participants, benefits to participants once a trial is over including post-trial access to the study intervention, participants' prospects before randomisation to arms and the near-inevitable disparity between arms in any randomised controlled trial.

Journal of Medical Internet Research
Vol 19, No 4 (2017): April
http://www.jmir.org/2017/4
[Reviewed earlier]

Journal of Medical Microbiology
Volume 66, Issue 3, March 2017
http://jmm.microbiologyresearch.org/
[Reviewed earlier]

Journal of Patient-Centered Research and Reviews
Volume 4, Issue 1 (2017)
http://digitalrepository.aurorahealthcare.org/jpcrr/
[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 6 Issue 1, March 2017
http://jpids.oxfordjournals.org/content/current
[Reviewed earlier]

Journal of Pediatrics
April 2017 Volume 183, p1-206
http://www.jpeds.com/current
[Reviewed earlier]

Journal of Public Health Policy
Volume 38, Issue 1, February 2017
http://link.springer.com/journal/41271/38/1/page/1
[Reviewed earlier]

Journal of the Royal Society – Interface
01 April 2017; volume 14, issue 129
http://rsif.royalsocietypublishing.org/content/current
Life Sciences–Mathematics interface
[Reviewed earlier]

Journal of Travel Medicine
Volume 24, Issue 2, March/April 2017
https://academic.oup.com/jtm/issue/24/2
[Reviewed earlier]

Journal of Virology
March 2017, volume 91, issue 6
http://jvi.asm.org/content/current
[Reviewed earlier]

The Lancet
Apr 15, 2017 Volume 389 Number 10078 p1491-1580
http://www.thelancet.com/journals/lancet/issue/current
Editorial
Defunding the UNFPA: sign of the times

The Lancet
Published: 15 April 2017
It was expected but still devastating. The US State Department on April 3 announced a defunding of the UN organisation for family planning and reproductive health, the UNFPA. The USA claimed the agency "supports, or participates in the management of, a programme of coercive abortion or involuntary sterilisation in China", invoking the Kemp-Kasten Amendment prohibiting US funding of organisations involved in such activities. The UNFPA strenuously denies this allegation.

The removal of support, a loss of US$75 million for UNFPA, is a blow to an agency that ensures access to contraception and maternal and child health services, and fights against gender violence, child marriage, and female genital mutilation in more than 150 countries worldwide. In 2015, the USA was among the largest donors to UNFPA, which is currently facing a $140 million shortfall. Previous Republican presidencies withheld funding from UNFPA for similar antiabortion reasons. But the current US Administration's invocation of Kemp-Kasten and its broadening of the related Global Gag rule appear to be a more direct attack on women's lives and rights.

Extra chilling is that the White House rationalised UNFPA's defunding despite their own memo stating no evidence of direct UN engagement in forced abortions or sterilisation in China. This clear play of politics over evidence shows them comfortable aligning health policy with an ideological agenda, but also shamelessly nonchalant with a lack of facts. This apparent disregard for truth in policy making is a worrying sign of things to come for other UN agencies and indeed women's health.

In fact, the dismay over the UNFPA defunding masks the depressing reality of the low-level and priority of health funding for women. With the USA's annual foreign assistance budget of about $40 billion, its $75 million for UNFPA is a tiny drop in the bucket. Republican representative John Shimkus absurdly asked during a recent US health-care debate why men should have to pay for prenatal care. To follow the US lead would send a message that the world does not care for women. Other countries should stridently reject this misogyny and harken support for UNFPA to continue its essential work.

Lancet Global Health
Apr 2017 Volume 5 Number 4 e370-e466
http://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

Lancet Infectious Diseases
Apr 2017 Volume 17 Number 4 p349-460 e107-e127
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Lancet Public Health
Apr 2017 Volume 2 Number 4 e157-e201
http://thelancet.com/journals/lanpub/issue/current

[Reviewed earlier]

Lancet Respiratory Medicine
Apr 2017 Volume 5 Number 4 p235-360
http://www.thelancet.com/journals/lanres/issue/current
[Reviewed earlier]

Maternal and Child Health Journal
Volume 21, Issue 4, April 2017
http://link.springer.com/journal/10995/21/4/page/1
[Reviewed earlier]

Medical Decision Making (MDM)
Volume 37, Issue 3, April 2017
http://mdm.sagepub.com/content/current
[Reviewed earlier]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
March 2017 Volume 95, Issue 1 Pages 1–209
http://onlinelibrary.wiley.com/doi/10.1111/milq.2017.95.issue-1/issuetoc
[Reviewed earlier]

Nature
Volume 544 Number 7649 pp137-264 13 April 2017
http://www.nature.com/nature/current_issue.html
[New issue; No digest content identified]

Nature Medicine
April 2017, Volume 23 No 4 pp397-526
http://www.nature.com/nm/journal/v23/n4/index.html
[New issue; No digest content identified]

Nature Reviews Immunology
April 2017 Vol 17 No 4
http://www.nature.com/nri/journal/v17/n4/index.html
[New issue; No digest content identified]

New England Journal of Medicine
April 13, 2017 Vol. 376 No. 15

http://www.nejm.org/toc/nejm/medical-journal
Perspective
Yellow Fever — Once Again on the Radar Screen in the Americas
Catharine I. Paules, M.D., and Anthony S. Fauci, M.D.
[See Featured Journal Content above for full text]

Perspective
The Perils of Trumping Science in Global Health — The Mexico City Policy and Beyond
Nathan C. Lo, B.S., and Michele Barry, M.D.
N Engl J Med 2017; 376:1399-1401 April 13, 2017 DOI: 10.1056/NEJMp1701294

Perspective
Ensuring Access to Injectable Generic Drugs — The Case of Intravesical BCG for Cntenabove for full text]Bladder Cancer
Benjamin J. Davies, M.D., Thomas J. Hwang, A.B., and Aaron S. Kesselheim, M.D., J.D., M.P.H.
N Engl J Med 2017; 376:1401-1403 April 13, 2017 DOI: 10.1056/NEJMp1615697
Limits on access to injectable generic drugs force providers to use potentially less effective alternatives, current patients to discontinue therapy, and some new patients to receive more invasive interventions. Yet shortages of important generic drugs remain frequent.

Pediatrics
April 2017, VOLUME 139 / ISSUE 4
http://pediatrics.aappublications.org/content/139/3?current-issue=y
[Reviewed earlier]

Pharmaceutics
Volume 9, Issue 1 (March 2017)
http://www.mdpi.com/1999-4923/9/1
[Reviewed earlier]

PharmacoEconomics
April 2017, Issue 4, Pages 397-491
http://link.springer.com/journal/40273/35/3/page/1
[Reviewed earlier]

PLOS Currents: Disasters
http://currents.plos.org/disasters/
[Accessed 15 April 2017]
[No new digest content identified]

PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/

[Accessed 15 April 2017]
[No new digest content identified]

PLoS Medicine
http://www.plosmedicine.org/
(Accessed 15 April 2017)
[Website not responding at inquiry]

PLoS Neglected Tropical Diseases
http://www.plosntds.org/
(Accessed 15 April 2017)
[Website not responding at inquiry]

PLoS One
http://www.plosone.org/
[Accessed 15 April 2017]
[Website not responding at inquiry]

PLoS Pathogens
http://journals.plos.org/plospathogens/
[Accessed 15 April 2017]
[Website not responding at inquiry]

PNAS - Proceedings of the National Academy of Sciences of the United States of America
http://www.pnas.org/content/early/
[Accessed 15 April 2017]
Editorial - Biological Sciences - Medical Sciences:
Simply put: Vaccination saves lives
Walter A. Orenstein and
Rafi Ahmed
PNAS 2017 ; published ahead of print April 10, 2017, doi:10.1073/pnas.1704507114
[See full text in Featured Journal Content at top]

Perspective: Emerging infectious diseases: A proactive approach
David E. Bloom, Steven Black, and Rino Rappuoli
PNAS 2017 ; published ahead of print April 10, 2017, doi:10.1073/pnas.1701410114
Abstract
Infectious diseases are now emerging or reemerging almost every year. This trend will continue because a number of factors, including the increased global population, aging, travel, urbanization, and climate change, favor the emergence, evolution, and spread of new pathogens. The approach used so far for emerging infectious diseases (EIDs) does not work from the technical point of view, and it is not sustainable. However, the advent of platform

technologies offers vaccine manufacturers an opportunity to develop new vaccines faster and to reduce the investment to build manufacturing facilities, in addition to allowing for the possible streamlining of regulatory processes. The new technologies also make possible the rapid development of human monoclonal antibodies that could become a potent immediate response to an emergency. So far, several proposals to approach EIDs have been made independently by scientists, the private sector, national governments, and international organizations such as the World Health Organization (WHO). While each of them has merit, there is a need for a global governance that is capable of taking a strong leadership role and making it attractive to all partners to come to the same table and to coordinate the global approach.

Biological Sciences - Ecology - Physical Sciences - Statistics:

El Niño and the shifting geography of cholera in Africa

Sean M. Moore, Andrew S. Azman, Benjamin F. Zaitchik, Eric D. Mintz, Joan Brunkard, Dominique Legros, Alexandra Hill, Heather McKay, Francisco J. Luquero, David Olson, and Justin Lessler

PNAS 2017 ; published ahead of print April 10, 2017, doi:10.1073/pnas.1617218114

Significance

In the wake of the 2015–2016 El Niño, multiple cholera epidemics occurred in East Africa, including the largest outbreak since the 1997–1998 El Niño in Tanzania, suggesting a link between El Niño and cholera in Africa. However, little evidence exists for this link. Using high-resolution mapping techniques, we found the cholera burden shifts to East Africa during and following El Niño events. Throughout Africa, cholera incidence increased three-fold in El Niño-sensitive regions, and 177 million people experienced an increase in cholera incidence. Without treatment, the case fatality rate can reach 50%, but accessible, appropriate care nearly eliminates mortality. Climatic forecasts predicting El Niño events 6–12 mo in advance could trigger public health preparations and save lives.

Abstract

The El Niño Southern Oscillation (ENSO) and other climate patterns can have profound impacts on the occurrence of infectious diseases ranging from dengue to cholera. In Africa, El Niño conditions are associated with increased rainfall in East Africa and decreased rainfall in southern Africa, West Africa, and parts of the Sahel. Because of the key role of water supplies in cholera transmission, a relationship between El Niño events and cholera incidence is highly plausible, and previous research has shown a link between ENSO patterns and cholera in Bangladesh. However, there is little systematic evidence for this link in Africa. Using high-resolution mapping techniques, we find that the annual geographic distribution of cholera in Africa from 2000 to 2014 changes dramatically, with the burden shifting to continental East Africa—and away from Madagascar and portions of southern, Central, and West Africa—where almost 50,000 additional cases occur during El Niño years. Cholera incidence during El Niño years was higher in regions of East Africa with increased rainfall, but incidence was also higher in some areas with decreased rainfall, suggesting a complex relationship between rainfall and cholera incidence. Here, we show clear evidence for a shift in the distribution of cholera incidence throughout Africa in El Niño years, likely mediated by El Niño's impact on local climatic factors. Knowledge of this relationship between cholera and climate patterns coupled with ENSO forecasting could be used to notify countries in Africa when they are likely to see a major shift in their cholera risk.

Prehospital & Disaster Medicine

Volume 32 - Issue 2 - April 2017
https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue
[Reviewed earlier]

Preventive Medicine
Volume 97, Pages 1-108 (April 2017)
http://www.sciencedirect.com/science/journal/00917435/96
[Reviewed earlier]

Proceedings of the Royal Society B
12 April 2017; volume 284, issue 1852
http://rspb.royalsocietypublishing.org/content/284/1852?current-issue=y
Genetics and genomics
Research article:
Adaptation to infectious disease exposure in indigenous Southern African populations
Katharine A. Owers, Per Sjödin, Carina M. Schlebusch, Pontus Skoglund, Himla Soodyall, Mattias Jakobsson
Abstract
Genetic analyses can provide information about human evolutionary history that cannot always be gleaned from other sources. We evaluated evidence of selective pressure due to introduced infectious diseases in the genomes of two indigenous southern African San groups—the Khomani who had abundant contact with other people migrating into the region and the more isolated Ju|'hoansi. We used a dual approach to test for increased selection on immune genes compared with the rest of the genome in these groups. First, we calculated summary values of statistics that measure genomic signatures of adaptation to contrast selection signatures in immune genes and all genes. Second, we located regions of the genome with extreme values of three selection statistics and examined these regions for enrichment of immune genes. We found stronger and more abundant signals of selection in immune genes in the Khomani than in the Ju|'hoansi. We confirm this finding within each population to avoid effects of different demographic histories of the two populations. We identified eight immune genes that have potentially been targets of strong selection in the Khomani, whereas in the Ju|'hoansi, no immune genes were found in the genomic regions with the strongest signals of selection. We suggest that the more abundant signatures of selection at immune genes in the Khomani could be explained by their more frequent contact with immigrant groups, which likely led to increased exposure and adaptation to introduced infectious diseases.

Public Health Ethics
Volume 10, Issue 1 April 2017
http://phe.oxfordjournals.org/content/current
[Reviewed earlier]

Public Health Reports
Volume 132, Issue 2, March/April 2017

http://phr.sagepub.com/content/current
[Reviewed earlier]

Qualitative Health Research
Volume 27, Issue 5, April 2017
http://qhr.sagepub.com/content/current
Special Issue: End of Life
[New issue; No digest content identified]

Reproductive Health
http://www.reproductive-health-journal.com/content
[Accessed 15 April 2017]
[No new digest content identified]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
Recently Published Articles -
http://www.paho.org/journal/index.php?option=com_content&view=featured&Itemid=101
[Reviewed earlier]

Risk Analysis
February 2017 Volume 37, Issue 2 Pages 193–397
http://onlinelibrary.wiley.com/doi/10.1111/risa.2017.37.issue-2/issuetoc
[Reviewed earlier]

Risk Management and Healthcare Policy
Volume 10, 2017
https://www.dovepress.com/risk-management-and-healthcare-policy-archive56
[Reviewed earlier]

Science
14 April 2017 Vol 356, Issue 6334
http://www.sciencemag.org/current.dtl
Editorial
Research integrity revisited
By Marcia McNutt, Robert M. Nerem
Science14 Apr 2017 : 115
Summary
The U.S. public and private sectors invest billions of dollars and countless hours of highly skilled labor into scientific research every year, an investment that delivers enormous benefits to society. Integrity is indispensable to the orderly and efficient progress of this research. Regrettably, there have been some well-publicized breakdowns in scientific integrity and

reported cases of irreproducible research. A new report from the U.S. National Academies of Sciences, Engineering, and Medicine (NASEM), Fostering Integrity in Research, recommends specific steps to secure a future based on integrity and reliability (www.nap.edu/catalog/21896/). These include establishing a new Research Integrity Advisory Board (RIAB) and taking stronger actions to discourage and eliminate practices that are clearly detrimental to research.

Personalized tumor vaccines keep cancer in check
By Jocelyn Kaiser
Science14 Apr 2017 : 122 Restricted Access
A new approach enlists a tumor's own mutated proteins.
Summary

A new approach to fighting cancer that tailors a vaccine to mutated proteins in an individual's tumor is gaining traction. In two small clinical trials, a personalized vaccine appears to have helped prevent early relapses in a total of 12 people with skin cancer. These "neoantigen" vaccines also may have helped several others by boosting the power of a new type of cancer drug that uses a different mechanism to unleash an immune attack on the tumor. The two studies, one presented last week at the annual meeting of the American Association for Cancer Research in Washington, D.C., are promising. But larger trials will be needed to show whether the vaccines help extend the lives of cancer patients.

Feature
Epidemic Insurance
Jon Cohen
Science 14 Apr 2017:
Vol. 356, Issue 6334, pp. 125-127
DOI: 10.1126/science.356.6334.125
Summary

In the wake of the West Africa Ebola epidemic that ended in 2015, public health officials, pharmaceutical companies, government scientists, and academic researchers have struggled to improve the way the world responds to outbreaks of emerging infections. The most powerful tool, a vaccine, does not exist for dozens of these diseases and a new push is underway to streamline R&D for these commercially unattractive products. A new organization, the Coalition for Epidemic Preparedness Innovations (CEPI), was launched and has raised half a billion dollars to work on three of these vaccines. GlaxoSmithKline, one of only four large vaccinemakers in the world, has proposed devoting one of its idle manufacturing plants to be a facility dedicated to making vaccines for emerging infections, and is seeking CEPI funding. But other vaccinemakers have different ideas about how best to improve the response. And many of the people at the front of reinventing the way the world responds to emerging infections stress that the problem in need of fixing is much larger than simply manufacturing novel vaccines.

Science Translational Medicine
12 April 2017 Vol 9, Issue 385
http://stm.sciencemag.org/
[New issue; No digest content identified]
Focus

Engagement of the medical-technology sector with society

By David Williams, Elazer R. Edelman, Milica Radisic, Cato Laurencin, Darrel Untereker
Science Translational Medicine12 Apr 2017 Full Access
The medical-technology sector must educate society in an unbiased rational way about the successes and benefits of biotechnology innovation.

A dose-dependent plasma signature of the safety and immunogenicity of the rVSV-Ebola vaccine in Europe and Africa

By Angela Huttner, Christophe Combescure, Stéphane Grillet, Mariëlle C. Haks, Edwin Quinten, Christine Modoux, Selidji Todagbe Agnandji, Jessica Brosnahan, Julie-Anne Dayer, Ali M. Harandi, Laurent Kaiser, Donata Medaglini, Tom Monath, VEBCON and VSV-EBOVAC Consortia, Pascale Roux-Lombard, Peter G. Kremsner, Tom H. M. Ottenhoff, Claire-Anne Siegrist
Science Translational Medicine12 Apr 2017 Restricted Access
A specific plasma signature reveals the critical role of monocytes in the VSV-vectored Ebola vaccine immunogenicity and safety.
Monocytes make their mark in Ebola vaccination
A VSV-vectored Ebola vaccine was used in Guinea during the recent outbreak and has now been shown to be incredibly effective in preventing infection. However, the vaccine itself did cause somewhat severe reactions in some subjects, including fever and arthritis. Huttner et al. examined longitudinal plasma samples from vaccine recipients in Europe and Africa to identify a signature of the immune response and adverse events. The signature of monocyte-derived cytokines held true in both cohorts, suggesting that it could also be applied to other vaccine trials to determine immunogenicity and reactogenicity.
Abstract
The 2014–2015 Ebola epidemic affected several African countries, claiming more than 11,000 lives and leaving thousands with ongoing sequelae. Safe and effective vaccines could prevent or limit future outbreaks. The recombinant vesicular stomatitis virus–vectored Zaire Ebola (rVSV-ZEBOV) vaccine has shown marked immunogenicity and efficacy in humans but is reactogenic at higher doses. To understand its effects, we examined plasma samples from 115 healthy volunteers from Geneva who received low-dose (LD) or high-dose (HD) vaccine or placebo. Fifteen plasma chemokines/cytokines were assessed at baseline and on days 1, 2 to 3, and 7 after injection. Significant increases in monocyte-mediated MCP-1/CCL2, MIP-1β/CCL4, IL-6, TNF-α, IL-1Ra, and IL-10 occurred on day 1. A signature explaining 68% of cytokine/chemokine vaccine-response variability was identified. Its score was higher in HD versus LD vaccinees and was associated positively with vaccine viremia and negatively with cytopenia. It was higher in vaccinees with injection-site pain, fever, myalgia, chills, and headache; higher scores reflected increasing severity. In contrast, HD vaccinees who subsequently developed arthritis had lower day 1 scores than other HD vaccinees. Vaccine dose did not influence the signature despite its influence on specific outcomes. The Geneva-derived signature associated strongly ($\rho = 0.97$) with that of a cohort of 75 vaccinees from a parallel trial in Lambaréné, Gabon. Its score in Geneva HD vaccinees with subsequent arthritis was significantly lower than that in Lambaréné HD vaccinees, none of whom experienced arthritis. This signature, which reveals monocytes' critical role in rVSV-ZEBOV immunogenicity and safety across doses and continents, should prove useful in assessments of other vaccines.

Social Science & Medicine
Volume 177, Pages 1-288 (March 2017)

http://www.sciencedirect.com/science/journal/02779536/177
[Reviewed earlier]

Travel Medicine and Infectious Diseases
January-February, 2017 Volume 15
http://www.travelmedicinejournal.com/
[Reviewed earlier]

Tropical Medicine & International Health
April 2017 Volume 22, Issue 4 Pages 371–512
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2017.22.issue-4/issuetoc
[Reviewed earlier]

Vaccine
Volume 35, Issue 19, Pages 2531-2612 (2 May 2017)
http://www.sciencedirect.com/science/journal/0264410X/35/19
Original Research Article
Influenza vaccination responses: Evaluating impact of repeat vaccination among health care workers
Pages 2558-2568
Vivian K.Y. Leung, Louise A. Carolan, Leon J. Worth, Susan A. Harper, Heidi Peck, Danielle Tilmanis, Karen L. Laurie, Monica A. Slavin, Sheena G. Sullivan
Abstract
Objective
To compare the antibody response to influenza between health care workers (HCWs) who have received multiple vaccinations (high vaccination group) and those who have received fewer vaccinations (low vaccination group).
Design
Prospective serosurvey.
Setting
Tertiary referral hospital.
Participants
Healthcare workers.
Methods
Healthcare workers were vaccinated with the 2015 southern hemisphere trivalent influenza vaccine. Influenza antibody titres were measured pre-vaccination, 21–28 days post-vaccination and 6 months post-vaccination. Antibody titres were measured using the haemagglutination inhibition assay. Levels of seropositivity and estimated geometric mean titres were calculated.
Results
Of the 202 HCWs enrolled, 182 completed the study (143 high vaccination and 39 low vaccination). Both vaccination groups demonstrated increases in post-vaccination geometric mean titres, with greater gains in the low vaccination group. Seropositivity remained high in both high and low vaccination groups post-vaccination. The highest fold rise was observed among HCWs in the low vaccination group against the H3N2 component of the vaccine.
Conclusions

Both high and low vaccination groups in our study demonstrated protective antibody titres post-vaccination. The findings from the current study are suggestive of decreased serological response among highly vaccinated HCWs. More studies with larger sample sizes and a greater number of people in the vaccine-naïve and once-vaccinated groups are required to confirm or refute these findings before making any policy changes.

Vaccination and blood sampling acceptability during Ramadan fasting month: A cross-sectional study in Conakry, Guinea

Original Research Article
Pages 2569-2574
Nathan Peiffer-Smadja, Ramatou Ouedraogo, Eric D'Ortenzio, Papa Ndiaga Cissé, Zahra Zeggani, Abdoul Habib Beavogui, Sylvain Landry Faye, Frédéric Le Marcis, Yazdan Yazdanpanah, Vinh-Kim Nguyen
Abstract
Introduction
There are few data on the acceptability of vaccination or blood sampling during Ramadan fasting month in Muslim countries. This could impact vaccination campaigns, clinical trials or healthcare during Ramadan.
Methods
Using a semi-structured questionnaire, we conducted a cross-sectional study on 201 practising Muslims and 10 religious leaders in Conakry, Guinea in the wake of the recent epidemic Ebola epidemic. Acceptability of vaccination and blood sampling during Ramadan were investigated as well as reasons for refusal.
Results
Vaccination was judged acceptable during Ramadan by 46% (93/201, 95% CI 0.40–0.53) of practising Muslims versus 80% (8/10, 95% CI 0.49–0.94) of religious leaders (p = 0.11). Blood sampling was judged acceptable during Ramadan by 54% (108/201, 95% CI 0.47–0.60) of practising Muslims versus 80% (8/10, 95% CI 0.49–0.94) of religious leaders (p = 0.19). The percentage of participants that judged both blood sampling and vaccination acceptable during Ramadan was 40% (81/201, 95% CI 0.34–0.47) for practising Muslims versus 80% (8/10, 95% CI 0.49–0.94) for religious leaders (p = 0.048). The most common reasons for refusal of vaccination or blood sampling were that nothing should enter or leave the body during Ramadan (43%), that adverse events could lead to breaking the fast (32%), that blood should not be seen during Ramadan (9%) and that the Quran explicitly forbids it (9%).
Discussion
Although most Muslims leaders and scientists consider that injections including immunization and blood sampling should be authorized during Ramadan, many Muslims in our study judged vaccination or blood sampling unacceptable when fasting. Widely available recommendations on healthcare during Ramadan would be useful to inform Muslims.

Assessment of sex-specific differences in adverse events following immunization reporting in Ontario, 2012–15

Original Research Article
Pages 2600-2604
Tara Harris, Jyotsna Nair, Jill Fediurek, Shelley L. Deeks
Abstract
We assessed sex-specific trends within passive vaccine safety surveillance in Ontario, Canada. AEFIs reported following vaccines administered between 2012 and 2015 were included. There

were 2466 AEFI reports; 66.2% were female. Annualized reporting rates were 5.9 and 3.1 per 100,000 population, for females and males respectively. The female:male reporting rate ratio (RRR) was 1.9. Sex-specific differences by age group were greatest in adults 18–64 years (RRR 6.3); whereas there were no differences in children <10 years. Vaccine-specific RRRs were highest for vaccines recommended for routine use in adults or high risk populations. All event categories were female-predominant. The highest event-specific RRRs were for oculorespiratory syndrome (5.1), anaesthesia/paraesthesia (4.6) and anaphylaxis (3.0). Serious AEFIs (n=113) were more evenly distributed (57.5% female, RRR 1.3) than non-serious (66.6% female, RRR 1.9). AEFI reporting among females was consistently elevated within the passive surveillance system in Ontario. Further study of the relationship between sex/gender and AEFI reporting is needed.

Vaccine: Development and Therapy
https://www.dovepress.com/vaccine-development-and-therapy-archive111
(Accessed 15 April 2017)
[No new content]

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 15 April 2017)
[No new digest content identified]

Value in Health
April 2017 Volume 20, Issue 4, p519-726
http://www.valueinhealthjournal.com/current
Patient-Reported Outcomes
Balancing the Optimal and the Feasible: A Practical Guide for Setting Up Patient Registries for the Collection of Real-World Data for Health Care Decision Making Based on Dutch Experiences
Saskia de Groot, Naomi van der Linden, Margreet G. Franken, Hedwig M. Blommestein, Brenda Leeneman, Ellen van Rooijen, J.J.M. (Koos) van der Hoeven, Michel W. Wouters, Hans M. Westgeest, Carin A. Uyl-de Groot
p627–636
Published online: April 6, 2016
Abstract
Objectives
The aim of this article was to provide practical guidance in setting up patient registries to facilitate real-world data collection for health care decision making.
Methods
This guidance was based on our experiences and involvement in setting up patient registries in oncology in the Netherlands. All aspects were structured according to 1) mission and goals ("the Why"), 2) stakeholders and funding ("the Who"), 3) type and content ("the What"), and 4) identification and recruitment of patients, data handling, and pharmacovigilance ("the How").
Results

The mission of most patient registries is improving patient health by improving the quality of patient care; monitoring and evaluating patient care is often the primary goal ("the Why"). It is important to align the objectives of the registry and agree on a clear and functional governance structure with all stakeholders ("the Who"). There is often a trade off between reliability, validity, and specificity of data elements and feasibility of data collection ("the What"). Patient privacy should be carefully protected, and address (inter-)national and local regulations. Patient registries can reveal unique safety information, but it can be challenging to comply with pharmacovigilance guidelines ("the How").
Conclusions
It is crucial to set up an efficient patient registry that serves its aims by collecting the right data of the right patient in the right way. It can be expected that patient registries will become the new standard alongside randomized controlled trials due to their unique value.

Methodology
Cost-Effectiveness Thresholds in Global Health: Taking a Multisectoral Perspective
Michelle Remme, Melisa Martinez-Alvarez, Anna Vassall
p699–704
Published online: January 3, 2017
Open Access
Abstract
Good health is a function of a range of biological, environmental, behavioral, and social factors. The consumption of quality health care services is therefore only a part of how good health is produced. Although few would argue with this, the economic framework used to allocate resources to optimize population health is applied in a way that constrains the analyst and the decision maker to health care services. This approach risks missing two critical issues: 1) multiple sectors contribute to health gain and 2) the goods and services produced by the health sector can have multiple benefits besides health. We illustrate how present cost-effectiveness thresholds could result in health losses, particularly when considering health-producing interventions in other sectors or public health interventions with multisectoral outcomes. We then propose a potentially more optimal second best approach, the so-called cofinancing approach, in which the health payer could redistribute part of its budget to other sectors, where specific nonhealth interventions achieved a health gain more efficiently than the health sector's marginal productivity (opportunity cost). Likewise, other sectors would determine how much to contribute toward such an intervention, given the current marginal productivity of their budgets. Further research is certainly required to test and validate different measurement approaches and to assess the efficiency gains from cofinancing after deducting the transaction costs that would come with such cross-sectoral coordination.

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

Public Health
Volume 148, July 2017, Pages 66–68
Short Communication
Zika, sexual transmission and prudent public health policy

K.M. Folkers, , A.L. Caplan, L.H. Igel

Highlights

:: There is significant debate about whether the Zika virus can be considered a sexually transmitted infection (STI).

:: Epidemiologically, Zika may not be an STI, but considering it one contributes to prudent public health policy.

:: Classifying Zika as an STI may increase access to testing, identify at risk partners, and educate the public on safer sex.

Birth Defects Research

Early View

Brief Report

Major Birth Defects after Vaccination Reported to the Vaccine Adverse Event Reporting System (VAERS), 1990 to 2014

PL Moro, J Cragan, P Lewis, L Sukumaran

DOI: 10.1002/bdra.2362

Abstract

Background

Major birth defects are important infant outcomes that have not been well studied in the postmarketing surveillance of vaccines given to pregnant women. We assessed the presence of major birth defects following vaccination in the Vaccine Adverse Event Reporting System (VAERS), a national spontaneous reporting system used to monitor the safety of vaccines in the United States.

Methods

We searched VAERS for reports of major birth defects during January 1, 1990, through December 31, 2014. We excluded birth defects from vaccines that had been studied in pregnancy registries or other epidemiological studies (e.g., human papilloma virus, varicella, measles/mumps/rubella, and anthrax vaccines). Birth defects were categorized into trimester of vaccination and classified based on the organs and/or systems affected. If several birth defects affecting different systems were described, we classified those as multiple body systems. Empirical Bayesian data mining was used to assess for disproportionate reporting.

Results

We identified 50 reports of major birth defects; in 28 reports, the vaccine was given during the first trimester; 25 were reports with single vaccines administered. Birth defects accounted for 0.03% of all reports received by VAERS during the study period and 3.2% of pregnancy reports; reported defects affected predominately the musculoskeletal (N = 10) or nervous (N = 10) systems. No unusual clusters or specific birth defects were identified.

Conclusion

This review of the VAERS database found that major birth defects were infrequently reported, with no particular condition reported disproportionally. Birth defects after routine maternal vaccination will continue to be monitored in VAERS for signals to prompt future studies. Birth Defects Research 00:000–000, 2017.

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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 15 April 2017
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 15 April 2017
[No new, unique, relevant content]

The Economist
http://www.economist.com/
Accessed 15 April 2017
[No new, unique, relevant content]

Financial Times
http://www.ft.com/home/uk
Accessed 15 April 2017
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 15 April 2017
The March For Science May Be Flawed, But It's More Than Worthy Of Your Support
Kavin Senapathy, Contributor
Apr 14, 2017
This march is representative of a fight that began long before President Trump—the one of the scientific method as an ever-standing touchstone of the truth versus exploitation of science to bolster alternative facts.

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 15 April 2017
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/
Accessed 15 April 2017
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 15 April 2017
Polio in Afghanistan: 'Americans bomb our children daily, why would they care?'
Sune Engel Rasmussen
10 April 2017
After being denied access by the Taliban for 15 months, health workers this week resumed a vaccination campaign against polio in parts of Kunduz province in northern Afghanistan.

The Taliban block on polio vaccinations left an estimated 170,000 children without inoculation, endangering a campaign that has almost eradicated the disease in Afghanistan. Days before the Taliban allowed vaccinators access, a 14-month-old girl in the Afghan province of Kunduz was found to have been paralysed by polio.

Until it was blocked, leaving about 170,000 children in Kunduz province without inoculations, the scheme had almost eradicated the disabling viral disease in Afghanistan. But polio can spread quickly, with even a single case potentially enough to widen the disease's footprint. When the girl in Kunduz's Dasht-e-Archi district became the third child this year diagnosed with polio, Taliban commanders relented.

Local commanders have long been the main obstacle to polio vaccinators in Kunduz. Qari Bashir, the Taliban health chief in the province, had demanded construction of a clinic in Char Dara district to treat civilians and wounded fighters, on a par with clinics in government-held areas. But the WHO does not build trauma clinics.

Speaking to the Guardian, Bashir confirmed his demand for a clinic but said there were other concerns. Chief among them was a suspicion among villagers that polio teams could be infiltrated by spies.

Polio was a top issue in village council meetings, Bashir said. But while some locals argued he was obliged to allow vaccinations, others warned him not to trust foreign-run health teams, a scepticism Bashir shared.

"Every day, the Americans are bombing Afghan children. I don't think this was so important to them," he said…

New Yorker
http://www.newyorker.com/
Accessed 15 April 2017
[No new, unique, relevant content]

New York Times

http://www.nytimes.com/
Accessed 15 April 2017
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 15 April 2017
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 15 April 2017
[No new, unique, relevant content]

Think Tanks et al

Brookings
http://www.brookings.edu/
[No new relevant content]

Center for Global Development
http://www.cgdev.org/page/press-center
Accessed 15 April 2017
[No new relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 15 April 2017
[No new relevant content]

CSIS
https://www.csis.org/
Accessed 15 April 2017
[No new relevant content]

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CVEP is a program of the GE2P2 Global Foundation – whose purpose and mission is to advance ethical and scientific rigor in research and evidence generation for governance, policy and practice in health, human rights action, humanitarian response, heritage stewardship, education

and sustainable development – serving governments, international agencies, INGOs, civil society organizations (CSOs), commercial entities, consortia and alliances. CVEP maintains an academic affiliation with the Division of Medical Ethics, NYU School of Medicine, and an operating affiliation with the Vaccine Education Center of Children's Hospital of Philadelphia [CHOP].

Support for this service is provided by the Bill & Melinda Gates Foundation; Aeras; IAVI; PATH; the International Vaccine Institute (IVI); and industry resource members Janssen/J&J, Pfizer, PRA Health Sciences, Sanofi Pasteur U.S.,Takeda, Valera (list in formation), and the Developing Countries Vaccine Manufacturers Network (DCVMN).

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

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