Vaccines and Global Health: The Week in Review
3 February 2018
Center for Vaccine Ethics & Policy (CVEP)

This weekly digest targets news, events, announcements, articles and research in the vaccine and global health ethics and policy space and is aggregated from key governmental, NGO, international organization and industry sources, key peer-reviewed journals, and other media channels. This summary proceeds from the broad base of themes and issues monitored by the Center for Vaccine Ethics & Policy in its work: it is not intended to be exhaustive in its coverage.

*Vaccines and Global Health: The Week in Review is also **posted in pdf form** and as a set of blog posts at https://centerforvaccineethicsandpolicy.net. This blog allows full-text searching of over 8,000 entries.*

Comments and suggestions should be directed to
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Milestones :: Perspectives

PLOS Currents: Disasters
http://currents.plos.org/disasters/
[Accessed 3 February 2018]
Research Article

Infectious Disease Risk and Vaccination in Northern Syria after 5 Years of Civil War: The MSF Experience

February 2, 2018 ·
Alan de Lima Pereira, Rosamund Southgate, Hikmet Ahmed, Penelope O'Connor, Vanessa Cramond, Annick Lenglet
Abstract
Introduction: In 2015, following an influx of population into Kobanê in northern Syria, Médecins Sans Frontières (MSF) in collaboration with the Kobanê Health Administration (KHA) initiated primary healthcare activities. A vaccination coverage survey and vaccine-preventable disease (VPD) risk analysis were undertaken to clarify the VPD risk and vaccination needs. This was followed by a measles Supplementary Immunization Activity (SIA). We describe the methods and results used for this prioritisation activity around vaccination in Kobanê in 2015.
Methods: We implemented a pre-SIA survey in 135 randomly-selected households in Kobanê using a vaccination history questionnaire for all children <5 years. We conducted a VPD Risk Analysis using MSF 'Preventive Vaccination in Humanitarian Emergencies' guidance to prioritize antigens with the highest public health threat for mass vaccination activities. A Measles SIA was then implemented and followed by vaccine coverage survey in 282 randomly-selected households targeting children <5 years.
Results: The pre-SIA survey showed that 168/212 children (79.3%; 95%CI=72.7-84.6%) had received one vaccine or more in their lifetime. Forty-three children (20.3%; 95%CI: 15.1-26.6%) had received all vaccines due by their age; only one was <12 months old and this child had received all vaccinations outside of Syria. The VPD Risk Analysis prioritised measles, Haemophilus Influenza type B (Hib) and Pneumococcus vaccinations. In the measles SIA, 3410 children aged 6-59 months were vaccinated. The use of multiple small vaccination sites to reduce risks associated with crowds in this active conflict setting was noted as a lesson learnt. The post-SIA survey estimated 82% (95%CI: 76.9-85.9%; n=229/280) measles vaccination coverage in children 6-59 months.
Discussion: As a result of the conflict in Syria, the progressive collapse of the health care system in Kobanê has resulted in low vaccine coverage rates, particularly in younger age groups. The repeated displacements of the population, attacks on health institutions and exodus of healthcare workers, challenge the resumption of routine immunization in this conflict setting and limit the use of SIAs to ensure sustainable immunity to VPDs. We have shown that the risk for several VPDs in Kobanê remains high.
Conclusion: We call on all health actors and the international community to work towards re-establishment of routine immunisation activities as a priority to ensure that children who have had no access to vaccination in the last five years are adequately protected for VPDs as soon as possible.

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Yellow Fever

Eliminating Yellow Fever Epidemics (EYE) Strategy: Meeting demand for yellow fever vaccines :: A joint statement by WHO, UNICEF and Gavi

29 January 2018

Vaccination is the most powerful known measure for yellow fever prevention: a single dose can provide life-long immunity at a cost of approximately US$1. Ensuring adequate vaccine supply is available to reach all those at-risk is a constant challenge and the main purpose of the Eliminate Yellow Fever Epidemics (EYE) Strategy partnership, steered by WHO, UNICEF and Gavi, the Vaccine Alliance.

Yellow Fever vaccines are currently manufactured by four WHO-prequalified suppliers. Since 2001, annual yellow fever vaccine production has quadrupled from 20 million to 80 million doses. Output is estimated to increase even further in the coming years. Through the EYE partnership, 1,4 billion yellow fever vaccine doses are expected to be delivered to countries with high yellow fever risk by 2026.

Despite efforts to increase yellow fever vaccine production, there is still a risk that supply will fail to meet demand in Africa if demand reaches the highest projected levels, according to a Gavi study1. In seeking to address this eventuality, the EYE Partnership works closely with manufacturers and yellow fever at-risk countries to plan and ensure vaccines are available in the locations and volume required.

Expanded needs for yellow fever vaccine are a result of a resurgence of yellow fever epidemics in Africa and more recently in Latin America. These resurgences are due to a combination of changing epidemiology and other risk factors including population movement and climate change. These needs are being addressed through routine immunization, preventive mass campaigns, catch-up campaigns (where vaccine coverage is low) and outbreak response (when vaccines need to be supplied rapidly to avoid further spread of the disease).

The International Coordination Group (ICG) coordinates the timely and equitable provision of vaccines during outbreaks. It maintains an emergency stockpile of 6 million doses of yellow fever vaccine funded by Gavi, which is continually replenished.

Demand for yellow fever vaccine has also increased in recent years due to the growing number of countries implementing routine immunization programmes with the support of Gavi. Another important part of the rising demand is the result of efforts, carried out within the framework of the EYE Strategy, to guarantee that yellow fever at-risk countries effectively implement preventive mass vaccination campaigns of all age groups, which frequently require large supply.

With the aim of identifying areas at highest risk, a comprehensive risk analysis and prioritization methodology is being developed to identify areas which should be given priority for preventive mass campaigns. An inaugural meeting on this topic was held on 14-15 December 2017 gathering global experts in WHO, Geneva. Outcomes from the meeting, including risk maps, will support EYE to optimize the allocation of vaccine resources.

Within the framework of the EYE Strategy, detailed plans for vaccine roll-out based on epidemiological risks and priorities are being elaborated. They will support the matching of

vaccine supply and demand. This effort is informed by previous work in this area, such as the introduction of the Meningococcal meningitis A vaccine in Africa (MenAfriVac), in 2011, an example of vaccine stock management within the framework of an integrated disease and outbreak control strategy.

WHO, UNICEF, Gavi and all EYE partners are committed to ensuring that every person at-risk of yellow fever is protected. Through combined effort, we are confident that yellow fever epidemics can be eliminated by 2026, and that vaccine supplies can be managed to adequately meet demand.

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Yellow fever: a major threat to public health
Editorial
The Lancet | 3 February 2018
The world's largest fractional-dose vaccination campaign for yellow fever started on Jan 25 in Brazil, with the support of WHO. The campaign attempts to avoid the urban transmission cycle, not seen in the country since 1942. 33 people have died due to yellow fever between Jan 14 and 23, while the number of confirmed cases in the country has reached more than 130.

Although more cases of yellow fever were recorded in Brazil in 2016–17, the recent outbreak has extended into a much larger area, including highly populated cities, making it more threatening to public health. These large cities are infested by Aedes aegypti, the urban yellow fever vector, which can transmit the disease from person to person. The number of people at risk is also increasing in other tropical regions, such as South America and Africa.

Due to a global shortage of the vaccine, in outbreak emergencies WHO recommends fractional dosing to protect more people by using less antigen in each dose. Whereas studies have shown that a fifth of the standard dose can provide the same immunity as the standard full dose for at least 12 months, it is not clear how long the immunity ultimately lasts.

For routine immunisation, the standard full dose, recommended by WHO since 2013, is thought to confer lifelong protection, although supporting evidence for this view is not strong. Some Brazilian experts believe that a booster vaccine 10 years after the primary vaccination should be administered to guarantee lifetime protection.

As a zoonotic disease, with a reservoir in non-human primates, it is unlikely that yellow fever will be eradicated. However, epidemics can be prevented if populations are protected by routine immunisation and if mass vaccination campaigns are implemented quickly in response to an outbreak. A coalition of partners led by WHO, UNICEF, and Gavi, the Vaccine Alliance, aims to eliminate yellow fever epidemics worldwide by 2026. To achieve this goal, there is an urgent need for research to clarify the duration of protective levels of immunity provided by fractionated and full-dose yellow fever vaccines to support development of effective vaccination programmes.

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17 January 2018

DCVMN and the Future Vaccine Manufacturing Hub launched a novel partnership for responsible innovation in emerging countries

[See Milestones above for more detail] London - A new research hub has been set up in the UK to improve vaccine coverage in developing countries and improve the response to life-threatening outbreaks like Ebola and Zika through the rapid deployment of vaccines.

This new effort, called the Future Vaccine Manufacturing Hub, led by Imperial College London and including other world-leading institutions, with a £10million funding by the UK's Department for Health, will be collaborating with the Developing Countries Vaccine Manufacturers' Network (DCVMN) on manufacturing projects initially in Bangladesh, China, India, Uganda and Vietnam, with expansion into other countries. The hub will build on new developments in life sciences, immunology and process systems to address challenges.

New approaches to be explored include the rapid production of yeast and bacterially-expressed particles that mimic components of infectious agents; development of synthetic RNA vaccines; manufacturing design and protein stabilization to preserve vaccines at high temperatures, avoiding the need for cold-chain.

There are currently 19.5 million infants that do not have access to basic vaccines and the deaths of one-third of children under five could be prevented with vaccinations. Lead investigator on the project, Professor Robin Shattock, said: "Many of these deaths, whether they are a result of polio, diphtheria measles or other infections, could be prevented through immunization, and the research hub will look to overcome hurdles in this field. We will also help to empower countries most at risk of infections to meet their local vaccine needs."

"We are privileged to join the Hub's research and educational efforts, collaborating with the Imperial College London, to advance the incorporation of new vaccine manufacturing technologies in emerging countries to benefit its people" said Dr. Sonia Pagliusi, Executive Secretary of DCVMN International.

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Engineering and Physical Sciences Research Council (EPSRC) [U.K.] Grant

Future Vaccine Manufacturing Hub: Advancing the manufacture and deployment of cost effective vaccines

EPSRC Grant Reference: EP/R013764/1 01 December 201 7—31 March 2021 £9,947,570
PI: Shattock, Professor RJ, Imperial College London

Grant Summary

Vaccine manufacturing systems have undergone evolutionary optimisation over the last 60 years, with occasional disruptions due to new technology (e.g. mammalian cell cultures replacing egg-based systems for seasonal influenza vaccine manufacture). Global vaccination programmes have been a great success but the production and distribution systems from vaccines still suffer from costs associated with producing and purifying vaccines and the need to store them between 2 and 8 degrees C. This can be a challenge in the rural parts of low and middle income countries where 24 million children do not have access to appropriate vaccinations every year. An additional challenge is the need to rapidly respond to new threats, such as the Ebola and Zika viruses, that continue to emerge.

The development of a "first responder" strategy for the latter means that there are two different types of challenges that future vaccine manufacturing systems will have to overcome:

1. How to design a flexible modular production system, that once a new threat is identified

and sequenced, can switch into manufacturing mode and produce of the order of 10,000 doses in a matter of weeks as part of localised containment strategy?
2. How to improve and optimise existing manufacturing processes and change the way vaccines are manufactured, stabilised and stored so that costs are reduced, efficiencies increased and existing and new diseases prevented effectively?

Our proposed programme has been developed with LMIC partners as an integrated approach that will bring quick wins to challenge 2 while building on new developments in life sciences, immunology and process systems to bring concepts addressing challenge 1 to fruition.

Examples of strategies for challenge 1 are RNA vaccines. The significant advantage of synthetic RNA vaccines is the ability to rapidly manufacture many thousands of doses within a matter of weeks. This provides a viable business model not applicable to other technologies with much longer lag phases for production (viral vectors, mammalian cell culture), whereby procurement of the vaccine can be made on a needs basis avoiding the associated costs of stockpiling vaccines for rapid deployment, monitoring their on going stability and implementing a cycle of replacement of expired stock. In addition, low infrastructure and equipment costs make it feasible to establish manufacture in low-income settings, where all required equipment has potential to be run from a generator driven electrical supply in the event of power shortage. This fits the concept of a distributed, flexible platform technology, in that once a threat is identified, the specific genetic code can be provided to the manufacturing process and the doses of the specific vaccine can be produced without delay. Additional concepts that we will explore in this category include the rapid production of yeast and bacterially expressed particles that mimic membrane expressed components of pathogenic viruses and bacteria.

Examples of strategies for challenge 2 build on our work on protein stabilisation which has been shown to preserve the function of delicate protein enzymes at temperatures over 100 degrees C. We shall exploit this knowledge to develop new vaccine stabilisation and formulation platforms. These can be used in two ways: (a) to support the last few miles of delivery from centralised cold chains to patients through reformulation and (b) for direct production of thermally stable forms, i.e. vaccines that retain their activity for months despite being not being refrigerated.

We believe that the best way to deliver these step changes in capability and performance is through a team-based approach that applies deep integration in two dimensions: between UK and LMIC partners to ensure that all the LMIC considerations are "baked in" from the start and between different disciplines accounting for the different expertise that will be required to meet the challenges.

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Dengvaxia
We continue to monitor developments associated with Dengvaxia. We did not identify any new press releases or statements on the Sanofi website.

'Stop PAO autopsies on suspected Dengvaxia victims'

Ex-DOH chief Esperanza Cabral and other doctors urge the DOJ to stop PAO's autopsies on 14 children who supposedly died due to Dengvaxia
February 03, 2018
By Michael Bueza

MANILA, Philippines – A group of doctors, including former health secretary Esperanza Cabral, urged the Department of Justice (DOJ) to stop the Public Attorney's Office (PAO) from conducting autopsies on 14 children who supposedly died due to the controversial dengue vaccine Dengvaxia.

In a statement Saturday, February 3, the group Doctors for Public Welfare said it makes "no sense for any more families to be subjected to the torture of having a loved one exhumed and cut up, only to find out that no useful information was derived from the cruel act."

"We urge the Department of Justice to order the PAO to stop performing autopsies on these children, and to leave the matter of determining the cause of death to competent forensic pathologists," the doctors said.

The group issued the statement after forensic pathologists from the University of the Philippines-Philippine General Hospital (UP-PGH) presented their diagnosis on these deaths on Friday, February 2…

Kids' vaccination rate down to 60% after Dengvaxia scare – DOH

Health Undersecretary Enrique Domingo appeals to parents to continue getting 'tried and tested' vaccines for their children to avoid diseases like polio, diphtheria, measles, and tetanus
February 02, 2018
By Mara Cepeda

MANILA, Philippines – The Department of Health (DOH) is alarmed as more and more parents are refusing to avail of the government's various vaccination programs following the Dengvaxia mess.

Health Undersecretary Enrique Domingo said on Friday, February 2, that only about 60% of Filipino children are getting their scheduled vaccines, when the DOH's annual vaccination rate target is around 85%.

"I think we are down to 60% coverage, kasi dati gusto natin diyan mga 85% (because we usually want the figure at 85%). I don't know exactly the exact figures but siguro (maybe) by the end of the year, we'll get a more exact figure. But the local experience right now is the uptake of our vaccination programs is really going down," Domingo in a press conference on Friday.

The health official made the statement on the same day that the DOH and the experts panel from the University of the Philippines-Philippine General Hospital bared the results of the analysis of 14 cases of children who died after getting vaccinated with Sanofi Pasteur's Dengvaxia dengue vaccine.

Three vaccinated children developed and died of dengue, 9 died due to various diseases they got after their vaccination, while the cause of death of the last two cases remain unknown.

Domingo explained that parents have become so scared after Sanofi announced Dengvaxia may lead a person to develop severe dengue if he or she had not been infected by the virus prior to immunization. (READ: TIMELINE: Dengue immunization program for public school students)

The parents are now refusing to avail of free government vaccines that could prevent their kids from getting other preventable diseases like polio and measles.

Domingo said this explains the recent measles outbreak in Davao. He added parents are even avoiding deworming initiatives from the DOH.

"We really just like to implore all of our parents na kung nagkaroon po tayo ng duda, kung nagkaroon po talaga tayo ng problema dito sa bakunang [Dengvaxia na] ito, hindi po dapat madamay 'yong ibang bakuna (We really just like to implore all of our parents that if you have doubts, if you had problems with the Dengvaxia vaccine, don't let other vaccines be affected by it)," said Domingo.

"[Ito ay] dahil napakarami nating bakuna na magpoprotekta sa anak ninyo, sa polio, sa diphtheria, sa tigdas, sa tetanus. Mga tried and tested po ito at kailangan maibigay ito sa ating mga anak," he added. (This is because we have countless other vaccines that can protect your child from polio, diphtheria, measles, and tetanus. They are tried and tested, and it is vital that your children get them.)

Health Secretary Francisco Duque III made the same appeal to parents as soon as he suspended the dengue vaccination program in December 2017…

Philippines: 3 Deaths May Be Linked to Dengue Vaccinations

New York Times | 2 February 2018

MANILA, Philippines — Philippine health officials said Friday that the deaths of three children injected with a Sanofi Pasteur dengue vaccine may have "causal association" to the inoculation, including two who may have died because the vaccine failed.

The Philippine government halted its massive immunization drive last year after Sanofi said a study showed the vaccine may increase the risks of dengue in people vaccinated prior to infection. More than 830,000 children were injected with the Dengvaxia vaccine, health officials said.

"This issue continues to sow fear and confusion, especially to the parents of children who have been injected with Dengvaxia," Health Secretary Francisco Duque III's office said in a statement. "We aim to give clarity on the issues with an honest and objective reporting of the evidence and science."

Duque said further study was needed on the vaccine. Investigators found no evidence the rest of the 14 reported child deaths were related to the vaccine.

Dr. Juliet Sio-Aguilar, who led the investigation, told a news conference that only one of the three dead children had developed dengue antibodies, which would have served as a protection against an infection, but still died.

"We really want to know what happened," she said.

Sanofi Pasteur officials did not immediately issue any comment.

DOH CONVENES COMMAND CONFERENCE ON DENGVAXIA

Secretary Duque issues directives to regions and hospitals to prioritize the needs of vaccinated children

Republic of the Philippines – Department of Health
Press Release/ January 30, 2018
[text bolding from original]

To formulate policy and set guidelines on addressing the issues surrounding the rollout of Dengvaxia vaccine, the Department of Health under the leadership of Secretary Francisco T. Duque III held a command conference bringing together the Department's Executive

Committee, Regional Directors, Hospital Chiefs and program managers, experts from the Research Institute for Tropical Medicine and the Food and Drug Administration, members of the Expert Panel on Dengvaxia, and the World Health Organization Representative Office in the Philippines.

Chaired by DOH Chief-of-Staff Undersecretary Mario Villaverde, the high-level conference provided a valuable opportunity for the top DOH officials from all over the country to update themselves on the issues and concerns associated with Dengvaxia, share the best practices and challenges faced by affected regions, and discuss guidelines prepared by the Task Force convened by the Secretary of Health in December of last year.

Secretary Duque closed the conference by issuing a set of directives to be immediately pursued and enforced by the entire DOH which will be subject to amendments as the need arises during their implementation.

SECRETARY'S DIRECTIVES

"Considering all the discussions, resolutions, and other outputs of this Joint Executive Committee Meeting and Command Conference on Dengvaxia, I, the Secretary of Health, hereby direct the following:

The Dengue Task Force:

(a) has approved in principle three interim guidelines to address the issues and concerns as a result of the Dengue vaccination initiative subject to the final review of the Expert Panel:

[i] **Surveillance** – instituting a mechanism of enhanced surveillance over the next five years initially covering admitted cases following immunization, and then expanding to a reporting system covering outpatient settings through health centers, clinics, LGUs, and regional offices.

[ii] **Dengue case management and patient referral** – emphasizing on the early diagnosis and proper case management of Dengue; and, establishing a network of both public and private hospitals which can provide services to patients.

[iii] **Risk communication** – giving correct information to allay unfounded fears based on misconceptions; provide basic information on Dengue and the 4S approach to prevent infection; constantly updating the public on DOH's efforts in addressing the concerns of vaccinees; and, designating public health advocates at the regional offices and hospitals who can help patients navigate through the health system so that their health needs are adequately and expeditiously addressed.

These interim guidelines are immediately effective once approved subject to specific period of implementation and revisions as we learn more from our experience.

(b) shall review the policy and processes on the introduction of new antigens in our national immunization program;

(c) shall study other proposed guidelines to enhance the delivery of public health vaccination programs;

[i] Financing and reimbursement of hospitalized cases of adverse events following immunization using PhilHealth, the Medical Assistance Program, and other possible financing sources. For the regional offices to negotiate with private providers not to charge beyond the PhilHealth case rates.

[ii] Vaccine Injury Compensation;

[iii] Autopsy of alleged deaths following Dengvaxia immunization; and,

[iv] Laboratory diagnosis and confirmatory test.

(d) shall pursue possible legislative reforms that emerged from this issue by:
[i] Strengthening the mandate of RITM to be an independent research arm on infectious diseases, not influenced by the industry; and,
[ii] Strengthening the independence of FDA in exercising its mandate to protect the public in regulating health products.

(e) shall be constantly vigilant about possible/emerging concerns that may arise from this issue.
In relation to this, I would also like to reiterate my request to the Expert Panel to give guidance to the DOH on determining the causality of adverse events specifically following Dengue vaccine immunization.

The Regional Directors are to do the following:
(a) give a human face to the efforts of the DOH by reaching out to the parents and patients, and to show compassion particularly to the bereaved parents and relatives;
(b) document, sustain, and institutionalize best practices that have been developed in the course of addressing the crisis in their respective areas; and,
(c) lead the operationalization of policies in their covered provinces/cities and provide feedback.

The Concerned DOH Hospitals are to:
[a] extend their utmost service to appropriately manage the health and psychosocial concerns of Dengvaxia vaccinees;
[b] raise the level of scientific and administrative discussion among personnel and officials to further enhance the capabilities of their respective units in dealing with such crisis.

For the future directions of the Department on public health programs:
[a] The design and implementation of public health programs should consider the universal principles of respect for persons, beneficence, nonmaleficence, and justice.
[b] Exercise of prudence in introducing new health technologies, noting that they should be based on rigorous scientific and economic evaluation, considering other factors when implementing the program in the real world.

I would like to extend my heartfelt gratitude to everyone present today. Your participation and cooperation are vital in addressing these issues on Dengvaxia. I anticipate with optimism the same degree of participation and cooperation in operationalizing these directives in the days to come. With this, I give my full trust and confidence in the decisions you will make as well as the execution of such directives in your own respective offices."

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Featured Journal Content

PLOS Medicine
30 January 2018

What's coming for health science and policy in 2018? Global experts look ahead in their field

The PLOS Medicine Editors, Soumya Swaminathan, Robin S. Room, Louise C. Ivers, Graham Hillis, Rebecca F. Grais, Zulfiqar A. Bhutta, Peter Byass

[Excerpts]

Infectious disease outbreaks in Yemen: A man-made disaster that has a solution

Louise Ivers

One thousand days of war in Yemen have resulted in many thousands of civilian deaths as well as deliberate destruction of health infrastructure and water infrastructure and disruption in the payment of thousands of public servants [12]. Restrictions on imports have prevented access to food, medicine, and humanitarian supplies [13]. In 2017, almost 1 million cases of suspected cholera were reported in the country, and although laboratory infrastructure is lacking to confirm every single case, the sheer scale of the epidemic of watery diarrhea is staggering. Frontline workers have privately reported their fears that cholera is being deliberately used as a weapon of war by parties to the conflict. Publicly, despite pleas from health workers and UN agencies for humanitarian space to provide relief, blockades and bombings continue. Diphtheria cases are now also on the rise—a painful disease, with a high mortality rate that occurs when vaccination rates are too low.

These epidemics, as well as the dire lack of access to food (already 400,000 children with severe acute malnourishment), do not bode well for 2018 [14]. Even if the fighting stopped tomorrow, the impact of these health crises would be felt for a generation. The continued hostilities are like a genocidal experiment to demonstrate just how badly the destruction of a health system can destroy the health of a nation. Every one of these medical emergencies—cholera, diphtheria, famine—is completely preventable and treatable. Without an end to the conflict, or at a minimum an agreement to open corridors of reliable safe humanitarian access, the ordinary people of Yemen will continue to suffer despite the fact that the public health community has the knowledge and the tools to stop the epidemics and save lives.

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Beyond words: US federal funding for public health and science

Rebecca Grais

According to media reports, Centers for Disease Control and Prevention (CDC) officials prohibited the use of 7 words and phrases in developing budget requests [21]. CDC and US Department of Health and Human Services (HHS) officials responded to reports by stating that there was no ban or censorship [22,23]. Media coverage has centered on either condoning the "ban" as evidence of the administration's commitment to reducing government spending or on denouncing it as yet another piece of evidence of the administration's antiscience agenda.

There is no doubt that evidence-based policy solutions and protecting vulnerable populations have not been a priority of this administration, with or without a word ban. Budget cuts or simply maintaining current funding to the CDC, as well as to National Institutes of Health (NIH) and other science and public health agencies and initiatives, will be felt directly through the scale back of existing public health programs, research funding, and initiatives. They will be felt indirectly by reinforcing the message that certain populations and conditions are not of interest to the US government. Cuts or removal of some programs, such as the HHS Secretary's Minority AIDS Initiative Fund (SMAIF) [24], which provides funding to reduce HIV-related health disparities in racial and ethnic minority communities, would have dire consequences for the most vulnerable. Irrespective of whether words are banned or simply avoided by CDC staff, the

consequences of such cutbacks remain the same for vulnerable populations, whose words are often not heard at all.

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Emergencies

POLIO

Public Health Emergency of International Concern (PHEIC)

Polio this week as of 31 January 2018 [GPEI]

:: New on http://polioeradication.org/: As part of the GPEI's plan to capture and share lessons learnt since its inception, the programme has released detailed best practice guides for active surveillance for polio eradication, monitoring the quality of polio eradication campaign performance, and microplanning.

:: Last week, Member states and partners met to discuss polio transition and keeping the world polio-free after eradication at the WHO Executive Board Meeting.

:: Chris Maher, a long-time polio eradicator and a central part of the polio programme, has been recognised in the Australia Day honours list named as an Officer of the Order of Australia. His recognition comes for his distinguished service to community and international public health through technical, operational and management roles in the global eradication of poliomyelitis.

:: Weekly country updates as of 31 January 2018

Afghanistan:

:: Advance notification has been received of two new cases of wild poliovirus type 1 (WPV1) in Kandahar province. One case occurred in Shawalikot district, with onset on 5 January 2018, and one occurred in Boldak district, with onset on 6 January 2018. These cases will be confirmed in next week's data reporting, raising the number of officially reported WPV1 cases in Afghanistan in 2018 to three.

:: Five new WPV1 positive environmental samples were reported this week. One sample was collected in Lashkargah district, Hilmand province on 26 December 2017, and one was collected in Kandahar district, Kandahar province, on 27 December 2017. On 8 January 2018, two samples were collected in Kandahar district, Kandahar province and one sample was collected from Lashkargah district, Hilmand province.…

Pakistan:

:: Two new WPV1 positive environmental samples have been reported, one collected from Sindh province, and one from Balochistan province.

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Syria cVDPV2 outbreak situation report 32, 30 January 2018

Situation update 30 January 2018

:: No new cases of cVDPV2 were reported this week. The total number of cVDPV2 cases remains 74. The most recent case (by date of onset of paralysis) is 21 September 2017 from Boukamal district, Deir Ez-Zor governorate.

:: The first round (mOPV2) of the second phase of the outbreak response has been completed in all the targeted governorates (Deir Ez-Zor, Homs, Hasakah and Raqqa). The

campaign was extended for 2 days in some areas to ensure low performing pockets were covered.

:: According to administrative reports a total of 665 736 children under 5 years were vaccinated with mOPV2, representing 96% of the total estimated target.

:: On 29 January, the Syrian Ministry of Health, World Health Organization and UNICEF met with a communication specialist deployed to support the outbreak response to coordinate on the implementation of communication microplans at lower district and lower levels.

:: Preparations continue for the second vaccination round which will utilize IPV. Global Polio Eradication Initiative (GPEI) partners continue to assist.

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WHO Grade 3 Emergencies [to 3 February 2018]

The Syrian Arab Republic

:: Syria cVDPV2 outbreak situation report 32, 30 January 2018

[See Polio above for detail]

Iraq - *No new announcements identified*

Nigeria - *No new announcements identified.*

South Sudan - *No new announcements identified.*

Yemen - *No new announcements identified.*

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WHO Grade 2 Emergencies [to 3 February 2018]

Bangladesh/Myanmar: Rakhine Conflict 2017

:: Over 350,000 children to get additional dose of diphtheria vaccine in Cox's Bazar

SEAR/PR/1678

28 January 2018, Cox's Bazar, Bangladesh – Stepping up efforts to curtail the ongoing diphtheria outbreak in Cox's Bazar, WHO and UNICEF are working with Ministry of Health and Family Welfare to vaccinate over 350,000 children in the Rohingya camps and makeshift settlements with an additional dose of diphtheria vaccine.

"An additional dose of diphtheria vaccine is expected to further boost immunity of vulnerable children and help restrict diphtheria. These intense campaigns demonstrate the commendable efforts being made by Bangladesh to protect the health of a vulnerable population," said Dr Bardan Jung Rana, World Health Organization's ai Representative to Bangladesh…

:: Weekly Situation Report #11 - 29 January 2018

Central African Republic

:: Responding to forgotten crises - Together with the United Nations Central Emergency Response Fund 27 January 2017

Democratic Republic of the Congo

:: Cholera in Kinshasa - WHO is redeploying experts to control the epidemic

15 January 2018 Kinshasa -- On a 24-hour working visit to the Democrati Republic of Congo's capital, heavily affected by the cholera epidemic, Dr Matshidiso MOETI, WHO Regional Director for Africa, told the Minister of Health, Public Health, Dr Oly ILUNGA Monday, of a reinforced

emergency support mechanism putting all the experts from the Country Office and those deployed in the Democratic Republic of the Congo (epidemiologists, logisticians, data managers, specialists in communication on risks, social mobilization and community engagement etc.) available to the DPS to strengthen the response against cholera.

Cameroon - *No new announcements identified*
Ethiopia - *No new announcements identified.*
Libya - *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.

Syrian Arab Republic

:: 2 Feb 2018 Monitoring Violence Against Health Care: Annual Report, 2017
:: Assistant-Secretary-General for Humanitarian Affairs and Deputy Emergency Relief Coordinator, Ms. Ursula Mueller, Statement to the Security Council on Syria, 30 January 2018 Report from UN Office for the Coordination of Humanitarian Affairs Published on 30 Jan 2018
:: Turkey | Syria: Recent Developments in Northwestern Syria (Idleb Governorate and Afrin District) (as of 30 January 2018)

Yemen

:: 31 Jan 2018 Yemen: Escalation of armed clashes in Aden - Flash Update 3 | 31 January 2018
:: 30 Jan 2018 Statement by the Humanitarian Coordinator for Yemen Ad Interim, Stephen Anderson, on the Situation in Aden [EN/AR]

DRC - *No new announcements identified.*
Iraq - *No new announcements identified.*

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UN OCHA – Corporate Emergencies

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

ROHINGYA REFUGEE CRISIS

:: ISCG Situation Update: Rohingya Refugee Crisis, Cox's Bazar | 27 January 2018

Ethiopia

:: 29 Jan 2018 Ethiopia: Conflict Displacement Situation Report (23 January 2018)
:: Emergency Relief Coordinator and Under-Secretary-General for Humanitarian Affairs, Mark Lowcock, remarks at the High-Level Event on the New Way of Working Published on 28 Jan 2018

Somalia
:: Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, Mark Lowcock: Opening Remarks at the Launch of the 2018 Somalia Humanitarian Response Plan and the Resilience and Recovery Framework Published on 30 Jan 2018

Nigeria - *No new announcements identified.*

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Editor's Note:
We will cluster these recent emergencies as below and continue to monitor the WHO webpages for updates and key developments.

EBOLA/EVD [to 3 February 2018]
http://www.who.int/ebola/en/
- *No new announcements identified.*

MERS-CoV [to 3 February 2018]
http://www.who.int/emergencies/mers-cov/en/
:: **Middle East respiratory syndrome coronavirus (MERS-CoV) – Saudi Arabia** 26 January 2018
Between 9 December 2017 and 17 January 2018, the National IHR Focal Point of The Kingdom of Saudi Arabia reported 20 additional cases of Middle East Respiratory Syndrome (MERS), including nine deaths. In addition, one death from a previously reported case was reported to WHO…
:: MERS situation update, December 2017
At the end of December 2017, a total of 2,127 laboratory-confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV), including 757 associated deaths (case–fatality rate: 35.6%) were reported globally; the majority of these cases were reported from Saudi Arabia (1753 laboratory-confirmed cases, including 683 related deaths with a case–fatality rate of 38.9%). During the month of December, 6 laboratory-confirmed cases of MERS were reported globally as follows- 4 cases in Saudi Arabia including one associated death, one case in United Arab of Emirates and one case in Malaysia. No health-care associated transmission or hospital outbreak was reported during this month. The demographic...

Yellow Fever [to 3 February 2018]
http://www.who.int/csr/disease/yellowfev/en/
:: Eliminating Yellow Fever Epidemics (EYE) Strategy: Meeting demand for yellow fever vaccines A joint statement by WHO, UNICEF and Gavi. 29 January 2018
[See Milestones above for more detail]

Zika virus [to 3 February 2018]
http://www.who.int/csr/disease/zika/en/
- *No new announcements identified.*

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WHO & Regional Offices [to 3 February 2018]

Latest news

High levels of antibiotic resistance found worldwide, new data shows

29 January 2018 — WHO's first release of surveillance data on antibiotic resistance reveals high levels of resistance to a number of serious bacterial infections in both high- and low-income countries.

Cervical cancer prevention and control is saving lives in the Republic of Korea

2 February 2018 – The Republic of Korea is demonstrating how it is possible, through investment and expanded universal health coverage, to reduce illness and death through cervical cancer prevention and control, also a key focus of World Cancer Day on 4 February

Highlights

Proposed members announced for WHO Independent Commission on NCDs

January 2018 – Leaders in health, politics and development have accepted to participate in the first-ever WHO Independent Global High-level Commission on Noncommunicable diseases (NCDs), which aims to identify and propose bold and practical ways to curb the world's leading causes of death and illness.

Kiribati Butiraoi ferry disaster

January 2018 – WHO and UNICEF send their deepest condolences to the people of Kiribati following the recent Butiraoi ferry disaster. This is a tragic event for the country of Kiribati, and we extend our thoughts to those affected families and communities. WHO and UNICEF are closely coordinating with the Government of Kiribati to support the emergency response.

$46 billion in productivity lost to cancer in major emerging economies

January 2018 – A new study published today in the journal Cancer Epidemiology evaluates for the first time the cost of productivity lost due to premature cancer deaths in several major emerging economies.

First online consultation of the Nurturing Care Framework for Early Childhood Development

January 2018 – In the first of two online consultations, WHO is seeking feedback from stakeholders on a global framework for early childhood development. This process will guide policy, programme, and budget support focused on early childhood development and the first 1000 days after conception, at country level.

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Weekly Epidemiological Record, 26 January 2018, vol. 93, 04/05 (pp. 33–44)

:: Meeting of the International Task Force for Disease Eradication, October 2017
:: Fact sheet on tuberculosis (updated January 2018)

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WHO Regional Offices

Selected Press Releases, Announcements

WHO African Region AFRO

Selected Featured News

:: Tanzania prepares to provide vaccination against cervical cancer
02 February 2018

:: Major stakeholders review MoU on Routine Immunization progress in Borno and Kano states
01 February 2018

:: WCO-Gambia staff introduced to the new Emergency Response Framework (ERF)
31 January 2018

:: WHO urges Karonga District Health Office to intensify Cholera outbreak interventions in identified risk areas of the district 31 January 2018

:: Advancing NTD elimination in Sierra Leone 31 January 2018

WHO Region of the Americas PAHO

No new digest content identified.

WHO South-East Asia Region SEARO

:: 'Big 6' countries of WHO South-East Asia Region meet to close measles' immunity gap, accelerate elimination efforts SEAR/PR/1679

New Delhi, 31 January 2018 – With nearly 4.8 million children in WHO South-East Asia Region missing measles vaccination every year, the 'big six' countries of the Region today shared their immunization challenges and lessons learnt for accelerating efforts to eliminate measles and control rubella by the year 2020.

"Eliminating measles would avert half a million deaths, while controlling rubella and Congenital Rubella Syndrome would promote health of pregnant woman and the infants they give life to," said Dr Poonam Khetrapal Singh, Regional Director for WHO South-East Asia.

Two of the Region's countries – Bhutan and Maldives – eliminated measles in 2017 while the others are carrying out large-scale immunization drives to achieve the same.

Nearly 500 million children in the Region are planned to be reached with measles and rubella containing vaccines through routine immunization and supplementary immunization campaigns in the next two years. Sharing challenges and lessons learnt from various recent achievements and initiatives will help member countries address their unique problems to close the immunity gap against measles, rubella and CRS, she said…

:: Over 350,000 children to get additional dose of diphtheria vaccine in Cox's Bazar 28 January 2018,

WHO European Region EURO

:: Raising awareness of the link between alcohol and cancer 02-02-2018

:: Mayors unite in Copenhagen for a future of healthy cities 29-01-2018

WHO Eastern Mediterranean Region EMRO

:: WHO responds to humanitarian needs in Benghazi with the support of ECHO 28 January 2018

:: Afghanistan introduces rotavirus vaccine to protect infants and young children against severe diarrhoea 27 January 2018

WHO Western Pacific Region

No new digest content identified.

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CDC/ACIP [to 3 February 2018]
http://www.cdc.gov/media/index.html
https://www.cdc.gov/vaccines/acip/index.html
ACIP
February 21-22, 2018 Draft Meeting Agenda[2 pages]
Register for upcoming February ACIP meeting
February 21-22, 2018
Deadline for registration:
Non-US Citizens: January 24, 2018
US Citizens: February 5, 2018

MMWR News Synopsis for February 2, 2018 / No. 4
https://www.cdc.gov/mmwr/index2018.html
:: Notes from the Field: Public Health Response to a Human Immunodeficiency Virus Outbreak Associated with Unsafe Injection Practices — Roka Commune, Cambodia, 2016

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Africa CDC [to 3 February 2018]
https://au.int/en/africacdc
No new digest content identified.

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China CDC [to 3 February 2018]
http://www.chinacdc.cn/en/ne/
No new digest content identified.

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Announcements

AERAS [to 3 February 2018]
http://www.aeras.org/pressreleases
No new digest content identified.

BMGF - Gates Foundation [to 3 February 2018]
http://www.gatesfoundation.org/Media-Center/Press-Releases
No new digest content identified.

CEPI – Coalition for Epidemic Preparedness Innovations [to 3 February 2018]
http://cepi.net/
24 January 2018

CEPI announces new permanent board

Media release, , London - Coalition for Epidemic Preparedness Innovations

Today, CEPI, the coalition launched one year ago to finance and coordinate the development of new vaccines to prevent and contain epidemics, announces the establishment of its new permanent Board.

The Board includes global leaders who have made extraordinary contributions to protecting and improving health, and who bring a wealth of expertise to CEPI as it moves into the next phase of its development.

CEPI's new Board will have twelve members. Eight seats will be held by independent members, while four seats have been reserved for investors. The independent members are:

:: Dr Awa Coll-Seck, Minister of State and Former Minister of Health and social welfare of the Republic of Senegal

:: Jane Halton, (Chair), former Secretary of the Australian Department of Finance

:: Professor Cherry Gagandeep Kang, Christian Medical College Vellore

:: Dr Joanne Liu, International President, MSF

:: Dr John Nkengasong, Director of the Africa Centers for Disease Control and Prevention

:: Professor Peter Piot, Director of the London School of Hygiene & Tropical Medicine

:: Dr David Reddy, CEO, Medicines for Malaria Venture

:: Dr Rajeev Venkayya, President, Global Vaccine Business Unit, Takeda Pharmaceutical Company Limited

The four investor seats will be named by CEPI's newly formed Investors Council. It is anticipated that three seats will be held by sovereign investors and one by a philanthropic investor.

Dr Richard Hatchett, CEO of CEPI, said: "I'm delighted to welcome these eminent experts to our Board. This is a seminal moment in CEPI's development as we invest in developing the vaccines and capabilities that the world currently lacks to prepare against future epidemics. CEPI is fortunate to have a Board of this calibre to advise us as we deliver our mission to make the world safer through new vaccines."

EDCTP [to 3 February 2018]

http://www.edctp.org/

The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria as well as other poverty-related and neglected infectious diseases in sub-Saharan Africa, with a focus on phase II and III clinical trials

No new digest content identified.

Emory Vaccine Center [to 3 February 2018]

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

Jan. 30, 2018

2018 Japan Prize is awarded to Emory immunologist Max Cooper

By Sarah Mars Bowie | Woodruff Health Sciences Center |

The Japan Prize Foundation has announced Max D. Cooper, MD, as a laureate of the 2018 Japan Prize. Alongside Dr. Jacques Miller, Cooper is being awarded the prize in the category "Medical Science and Medicinal Science" for the discovery of the dual nature of adaptive

immunity, which identified the cellular building blocks of the immune system as we understand it today.

The annual Japan Prize awards recognize individuals who are pioneers in their respective fields of medicinal science and resources, energy, environment and social infrastructure…

European Medicines Agency [to 3 February 2018]
http://www.ema.europa.eu/ema/
01/02/2018
Strengthened guidance on follow-up and risk management for ATMP developers

Guideline to streamline procedures and better address the specific requirements of ATMP developers published for consultation…

European Vaccine Initiative [to 3 February 2018]
http://www.euvaccine.eu/news-events
No new digest content identified.

FDA [to 3 February 2018]
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
January 30, 2018
FDA, USDA announce formal agreement to bolster coordination and collaboration

U.S. Agriculture Secretary Sonny Perdue and FDA Commissioner Scott Gottlieb, M.D. announced at the White House today a formal agreement aimed at making the oversight of food more efficient and effective by bolstering coordination between the two agencies. The formal agreement outlines efforts to increase interagency collaboration, efficiency and effectiveness on produce safety and biotechnology activities, while providing clarity to manufacturers.

"Today, Commissioner Gottlieb and I signed a formal agreement to promote coordination and the streamlining of capacities and obligations on shared concerns and jurisdiction," said Secretary Perdue. "Congress passed the Food Safety Modernization Act and assigned responsibilities to the USDA and the FDA. The USDA has the knowledge and expertise to support the FDA's work related to farming. We at the USDA have a motto: Do Right, and Feed Everyone. We believe this joint effort will help us move one step closer to that goal."…

Fondation Merieux [to 3 February 2018]
http://www.fondation-merieux.org/
No new digest content identified.

Gavi [to 3 February 2018]
http://www.gavi.org/library/news/press-releases/
No new digest content identified.

GHIT Fund [to 3 February 2018]

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

Global Fund [to 3 February 2018]
http://www.theglobalfund.org/en/news/?topic=&type=NEWS;&country=
News
Burkina Faso and Global Fund Launch New Grants to Accelerate Progress against HIV, TB and Malaria
01 February 2018
OUAGADOUGOU – Burkina Faso and the Global Fund strengthened their partnership by launching four new grants that move toward ending epidemics of HIV, tuberculosis, malaria and strengthen health systems with a focus on community health systems and data quality.
The new investments will support efforts to scale up HIV programs to achieve the 90-90-90 targets by enrolling more than 93,000 people on antiretroviral treatment by 2020, and expanding HIV services, including access to prevention and treatment for key populations. The new grants also aim to strengthen the country's supply-chain management, improve TB case detection, and procure 12 million mosquito nets for the 2019 mass distribution campaign.
…The four grants, worth a total of EUR130 million for the 2018-2020 implementation period, bring the total amount of Global Fund grants allocated to Burkina Faso to EUR427 million. The grants will be managed by le Programme d'Appui au Développement Sanitaire, le Comité National de Lutte contre le Sida — and l'Initiative Privée pour la lutte contre le SIDA/IPC…

News
Tanzania and Global Fund Sign New Grants to Accelerate End of Epidemics
30 January 2018
The Global Fund and health partners in Tanzania yesterday signed grant agreements to work toward ending the epidemics of HIV, tuberculosis and malaria.

Hilleman Laboratories [to 3 February 2018]
http://www.hillemanlabs.org/
No new digest content identified.

Human Vaccines Project [to 3 February 2018]
http://www.humanvaccinesproject.org/media/press-releases/
No new digest content identified.

IAVI [to 3 February 2018]
https://www.iavi.org/
No new digest content identified.

IFFIm

http://www.iffim.org/library/news/press-releases/
No new digest content identified.

IVAC [to 3 February 2018]
https://www.jhsph.edu/research/centers-and-institutes/ivac/index.html
No new digest content identified.

IVI [to 3 February 2018]
http://www.ivi.int/
No new digest content identified.

JEE Alliance [to 3 February 2018]
https://www.jeealliance.org/
No new digest content identified.

MSF/Médecins Sans Frontières [to 3 February 2018]
http://www.doctorswithoutborders.org/news-stories/press/press-releases
Press release
Liberia: MSF Opens Pediatric Surgery Program
MONROVIA, LIBERIA/NEW YORK, JANUARY 31, 2018—Doctors Without Borders/Médecins Sans Frontières (MSF) opened a pediatric surgical program at Bardnesville Junction Hospital (BJH) on the outskirts of Liberia's capital Monrovia on Jan. 11, with a goal of making surgical care more available for children in the country.

Press release
Syria: Deadly Airstrikes Damage Hospital Supported by MSF in Idlib
AMMAN, JORDAN/NEW YORK, JANUARY 29, 2018—Two airstrikes hit a hospital supported by Doctors Without Borders/Médecins Sans Frontières (MSF) in Syria's Idlib governorate today, causing deaths and injuries and seriously damaging the facility, according to the hospital manager, who contacted MSF.

Press release
Mediterranean: 99 People Rescued From Sinking Dinghy, Many Others Presumed Drowned
New York, January 28, 2018—In a nightmarish day on the Mediterranean Sea yesterday, 99 survivors from a sinking rubber boat were rescued by the Aquarius, a search and rescue vessel run by the international medical humanitarian organization Doctors Without Borders/Médecins Sans Frontières (MSF) and SOS MEDITERRANEE. An unknown number of men, women, and children are missing and presumed drowned. Two women are confirmed dead.

NIH [to 3 February 2018]
http://www.nih.gov/news-events/news-releases
February 1, 2018

The Human Genome Project is awarded the Thai 2017 Prince Mahidol Award for the field of medicine

February 1, 2018 — The award will be received on behalf of the project by NHGRI Director Dr. Eric Green.

NIH launches partnership to improve success of clinical trials for patients with Parkinson's disease

January 30, 2018 — Effort is part of the Accelerating Medicines Partnership to speed development of disease-altering treatments.

Roadmap to guide progress toward replacing animal use in toxicity testing

January 30, 2018 — Framework aims to provide more human relevant toxicology data.

PATH [to 3 February 2018]
http://www.path.org/news/index.php
Announcement | February 01, 2018
LabCorp CEO Dave King becomes PATH board chair

PATH is pleased to announce that its board of directors has confirmed David P. King as board chair. Mr. King, who is chairman and CEO of LabCorp, a leading global life sciences company, has served on the PATH board since 2013.

"As a PATH board member, Dave has applied his private-sector experience to the biggest health challenges facing our world," said Steve Davis, PATH's president and CEO. "He is a brilliant business leader who is deeply committed to health equity, and we are delighted that he is now our board chair."

Mr. King succeeds Dean Allen, who recently completed a three-year term as board chair…

Press release | January 31, 2018
DRC government steps up commitment to eliminating sleeping sickness by 2020
International partners support government in innovative approach to fight devastating disease

Announcement | January 30, 2018
New research consortium to evaluate evidence for single-dose HPV vaccination
Leading health and research institutions come together to evaluate the evidence for potential single-dose HPV vaccination schedule.

The Single-Dose HPV Vaccine Evaluation Consortium, coordinated by PATH and encompassing nine leading research institutions, has begun work to collate and synthesize existing evidence and evaluate new data on the potential for single-dose human papillomavirus (HPV) vaccine delivery.

While 80 countries and territories have introduced HPV vaccines on a two- or three-dose schedule into their national immunization schedules, rollout in low- and lower-middle-income countries has lagged. If demonstrated to be effective, single-dose HPV vaccination could significantly accelerate national vaccine introduction by simplifying programs and lowering procurement and delivery costs.

Funded by the Bill & Melinda Gates Foundation, the consortium will review existing evidence and evaluate new information available from trials and other observational studies on the effectiveness of a single-dose schedule in order to inform global policy discussions and guidance around HPV vaccination. A group of modeling experts within the consortium will also analyze

data, identify critical data gaps, and conduct exploratory what-if scenarios to estimate the impact and cost-effectiveness of a single-dose schedule versus non-vaccination or two-dose schedules to inform decision-making.

The consortium, coordinated by PATH, includes Harvard University, the London School of Hygiene & Tropical Medicine, Université Laval, the University of British Columbia, the US Centers for Disease Control and Prevention, the US National Cancer Institute, Wits Reproductive Health and HIV Institute, and the World Health Organization.

In addition to the consortium members, representatives from the following institutions serve as advisors: the British Columbia Provincial Health Services Authority; International Agency for Research on Cancer; Medical Research Council Unit, The Gambia; Instituto Nacional de Salud Pública de Mexico; and Quebec Institut National de Santé Publique.

Announcement | January 29, 2018

PATH statement on official relations status with the World Health Organization

Executive Board votes for admission of PATH into official relations with the WHO

A statement from PATH's Geneva Office Director Philippe Guinot follows:

"As PATH celebrates 40 years of supporting global health innovation, we welcome the approval of our official relations status with the World Health Organization. We have enjoyed a very close and productive collaborative relationship with WHO, and look forward to continuing to work side-by-side toward the advancement of public health in the future."

Sabin Vaccine Institute [to 3 February 2018]

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

No new digest content identified.

UNAIDS [to 3 February 2018]

http://www.unaids.org/en

31 January 2018

African human rights body urges renewed efforts on human rights in response to HIV

On 27 January, the African Commission on Human and Peoples' Rights (the African Commission) launched a groundbreaking report, HIV, the law and human rights in the African human rights system: key challenges and opportunities for rights-based responses.

The report addresses the key human rights challenges in the response to HIV, including inequality and discrimination towards people living with HIV, access to treatment and restrictive intellectual property regimes, conflict and migration, coercive HIV testing and counselling, restrictions on civil society and the criminalization of people living with HIV and key populations.

While noting the progress made in the response to HIV in Africa, the report expresses concerns about the populations left behind—young women and girls, prisoners, sex workers, men who have sex with men, transgender people and people who use drugs.

As well as the challenges, the report also highlights good practices from across the continent for responding to them, including law and policy reform, progressive court decisions and programmes to advance human rights protection and access to HIV and health services.

The development of the report is the result of three years of work involving inputs from various stakeholders, including people living with and affected by HIV, civil society and members of key populations.

UNICEF [to 3 February 2018]
https://www.unicef.org/media/
31 January 2018
3 in 10 young people in conflict or disaster-stricken countries are illiterate - UNICEF
NEW YORK, 31 January 2018 – Nearly 3 in 10 young people aged between 15 and 24 years old – 59 million – living in countries affected by conflict or disaster are illiterate, triple the global rate, UNICEF said today.

UNICEF seeks $3.6 billion in emergency assistance for 48 million children caught up in catastrophic humanitarian crises
NEW YORK/GENEVA, 30 January 2018 – UNICEF appealed today for $3.6 billion to provide lifesaving humanitarian assistance to 48 million children living through conflict, natural disasters and other emergencies in 51 countries in 2018.

Vaccine Confidence Project [to 3 February 2018]
http://www.vaccineconfidence.org/
No new digest content identified.

Vaccine Education Center – Children's Hospital of Philadelphia [to 3 February 2018]
http://www.chop.edu/centers-programs/vaccine-education-center
No new digest content identified.

Wellcome Trust [to 3 February 2018]
https://wellcome.ac.uk/news
News / Published: 25 January 2018
What our new strategy means for the Public Engagement Fund
We've developed an ambitious new strategy for our public engagement work and, as a result, we are making some changes to the Public Engagement Fund.
When we launched the Public Engagement Fund in January 2017 we said that the fund would evolve – as we learned from its implementation, and to reflect Wellcome's changing vision. After the changes, funding will still be open to anyone with a great project for engaging the public in Wellcome's mission of improving health…

News / Published: 22 January 2018
New Wellcome office in Berlin will bolster global partnerships
News / Published: 22 January 2018
Wellcome is planning to open a small office in the German capital later this year so that we can work more closely with our international partners on shared priorities…

The Wistar Institute [to 3 February 2018]
https://www.wistar.org/news/press-releases
No new digest content identified.

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BIO [to 3 February 2018]
https://www.bio.org/insights/press-release
No new digest content identified.

DCVMN – Developing Country Vaccine Manufacturers Network [to 3 February 2018]
http://www.dcvmn.org/
17 January 2018
DCVMN and the Future Vaccine Manufacturing Hub launched a novel partnership for responsible innovation in emerging countries
[See Milestones above for more detail]

IFPMA [to 3 February 2018]
http://www.ifpma.org/resources/news-releases/
No new digest content identified.

PhRMA [to 3 February 2018]
http://www.phrma.org/press-room
No new digest content identified.

Industry Watch [to 3 February 2018]
:: **Takeda's Zika Vaccine Candidate Receives U.S. FDA Fast Track Designation**
January 29, 2018
The Fast Track designation highlights the significance of Zika and the need for a safe and effective vaccine to protect vulnerable populations
A Phase 1 clinical trial (ZIK-101) was recently initiated to evaluate Takeda's Zika vaccine candidate (TAK-426) in the continental U.S. and U.S. territories
Takeda's Zika program is supported by federal funds from Biomedical Advanced Research and Development Authority (BARDA), within the Office of the Assistant Secretary for Preparedness and Response in the U.S. Department of Health and Human Services

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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
February 2018 Volume 46, Issue 2, p123-244
http://www.ajicjournal.org/current
Major Articles
Systematic review of electronic surveillance of infectious diseases with emphasis on antimicrobial resistance surveillance in resource-limited settings
Pinyo Rattanaumpawan, Adhiratha Boonyasiri, Sirenda Vong, Visanu Thamlikitkul
p139–146
Published online: October 10, 2017
Abstract
Background
Electronic surveillance of infectious diseases involves rapidly collecting, collating, and analyzing vast amounts of data from interrelated multiple databases. Although many developed countries have invested in electronic surveillance for infectious diseases, the system still presents a challenge for resource-limited health care settings.
Methods
We conducted a systematic review by performing a comprehensive literature search on MEDLINE (January 2000-December 2015) to identify studies relevant to electronic surveillance of infectious diseases. Study characteristics and results were extracted and systematically reviewed by 3 infectious disease physicians.
Results
A total of 110 studies were included. Most surveillance systems were developed and implemented in high-income countries; less than one-quarter were conducted in low-or middle-income countries. Information technologies can be used to facilitate the process of obtaining laboratory, clinical, and pharmacologic data for the surveillance of infectious diseases, including antimicrobial resistance (AMR) infections. These novel systems require greater resources; however, we found that using electronic surveillance systems could result in shorter times to detect targeted infectious diseases and improvement of data collection.
Conclusions
This study highlights a lack of resources in areas where an effective, rapid surveillance system is most needed. The availability of information technology for the electronic surveillance of infectious diseases, including AMR infections, will facilitate the prevention and containment of such emerging infectious diseases.

Middle East respiratory syndrome coronavirus transmission among health care workers: Implication for infection control
Sarah H. Alfaraj, Jaffar A. Al-Tawfiq, Talal A. Altuwaijri, Marzouqa Alanazi, Nojoom Alzahrani, Ziad A. Memish
p165–168
Published online: September 25, 2017

American Journal of Preventive Medicine
February 2018 Volume 54, Issue 2, p157-324
http://www.ajpmonline.org/current
Research Articles
Immunization Practices of U.S. Obstetrician/Gynecologists for Pregnant Patients

Sean T. O'Leary, Laura E. Riley, Megan C. Lindley, Mandy A. Allison, Lori A. Crane, Laura P. Hurley, Brenda L. Beaty, Michaela Brtnikova, Margaret Collins, Alison P. Albert, Allison K. Fisher, Angela J. Jiles, Allison Kempe
p205–213
Published online: December 12, 2017

Nativity Disparities in Human Papillomavirus Vaccination Among U.S. Adults
…few studies have explored whether vaccination differences exist by nativity status. Vaccination disparities have the potential to exacerbate HPV-related cancer disparities in the long term if left unaddressed. Therefore, the authors investigated whether there were significant differences in HPV vaccination initiation (one or more doses) and completion (three or more doses) between U.S.-born and foreign-born men and women.
Ashley E. Pérez, Madina Agénor, Kristi E. Gamarel, Don Operario
p248–258
Published online: December 11, 2017

Review Articles
The Cost of Interventions to Increase Influenza Vaccination: A Systematic Review
Laura J. Anderson, Paul Shekelle, Emmett Keeler, Lori Uscher-Pines, Roberta Shanman, Sally Morton, Gursel Aliyev, Teryl K. Nuckols
p299–315
Published in issue: February 2018

American Journal of Public Health
February 2018 108(2)
http://ajph.aphapublications.org/toc/ajph/current
SOCIAL IMPACT BONDS
Social Impact Bonds as a Funding Method for Health and Social Programs: Potential Areas of Concern
Amy S. Katz, Benjamin Brisbois, Suzanne Zerger and Stephen W. Hwang
108(2), pp. 210–215
Abstract
Social Impact Bonds (SIBs) represent a new way to finance social service and health promotion programs whereby different types of investors provide an upfront investment of capital. If a given program meets predetermined criteria for a successful outcome, the government pays back investors with interest. Introduced in the United Kingdom in 2010, SIBs have since been implemented in the United States and across Europe, with some uptake in other jurisdictions.

We identify and explore selected areas of concern related to SIBs, drawing from literature examining market-based reforms to health and social services and the evolution of the SIB funding mechanism. These areas of concern include increased costs to governments, restricted program scope, fragmented policymaking, undermining of public-sector service provision, mischaracterization of the root causes of social problems, and entrenchment of systemically produced vulnerabilities.

We argue that it is essential to consider the long-term, aggregate, and contextualized effects of SIBs in order to evaluate their potential to contribute to public health. We conclude that such

evaluations must explore the assumptions underlying the "common sense" arguments often used in support of SIBs.

American Journal of Tropical Medicine and Hygiene
Volume 98, Issue 1, 2018
http://www.ajtmh.org/content/journals/14761645/98/1
[Reviewed earlier]

Annals of Internal Medicine
16 January 2018 Vol: 168, Issue 2
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http://www.biomedcentral.com/bmchealthservres/content
(Accessed 27 January 2018)
Research article
General service and child immunization-specific readiness assessment of healthcare facilities in two selected divisions in Bangladesh
Service readiness of health facilities is an integral part of providing comprehensive quality healthcare to the community. Comprehensive assessment of general and service-specific (i.e. child immunization) rea...
Authors: Md. Shajedur Rahman Shawon, Gourab Adhikary, Md. Wazed Ali, Md. Shamsuzzaman, Shahabuddin Ahmed, Nurul Alam, Katya A. Shackelford, Alexander Woldeab, Stephen S. Lim, Aubrey Levine, Emmanuela Gakidou and Md. Jasim Uddin
Citation: BMC Health Services Research 2018 18:39
Published on: 25 January 2018

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 27 January 2018)
Research article

Cost-effectiveness of increasing vaccination in high-risk adults aged 18–64 Years: a model-based decision analysis

Adults aged 18–64 years with comorbid conditions are at high risk for complications of certain vaccine-preventable diseases, including influenza and pneumococcal disease. The 4 Pillars™ Practice Transformation...

Authors: Angela R. Wateska, Mary Patricia Nowalk, Richard K. Zimmerman, Kenneth J. Smith and Chyongchiou J. Lin

Citation: BMC Infectious Diseases 2018 18:52

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(Accessed 27 January 2018)

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BMC Public Health

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(Accessed 27 January 2018)

Research article

Evaluation of two health education interventions to improve the varicella vaccination: a randomized controlled trial from a province in the east China

We evaluated the effect of two Elaboration Likelihood Model (ELM)-based health educational interventions on varicella vaccine (VarV) vaccination among pregnant women in a province in the east China.

Authors: Yu Hu, Qian Li and Yaping Chen

Citation: BMC Public Health 2018 18:144

Published on: 16 January 2018

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January 2018 - Volume 8 - 1
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January 2018 Volume 44, Issue 1 Pages 1–171
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[Reviewed earlier]

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Volume 6(2); July 2017
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[Reviewed earlier]

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February 2018 - Volume 31 - Issue 1
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Developing World Bioethics
December 2017 Volume 17, Issue 3 Pages 141–216
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Disaster Medicine and Public Health Preparedness
Volume 11 - Issue 6 - December 2017
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January 2018 Volume 42, Issue 1 Pages 1–203
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Volume 146 - Issue 1 - January 2018
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Special Issue: Im/Mobilities and Dis/Connectivities in Medical Globalization: How Global is Global Health? Guest Editors: Dominik Mattes and Hansjörg Dilger
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January 2018; Vol. 37, No. 1
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[Reviewed earlier]

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Volume 19, Issue 2, December 2017
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Volume 13 - Issue 1 - January 2018
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Volume 33, Issue 1, 1 January 2018
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Humanitarian Exchange Magazine
http://odihpn.org/magazine/the-humanitarian-consequences-of-violence-in-central-america/
Number 70 October 2017
Special Feature: The Lake Chad Basin: an overlooked crisis?
by Humanitarian Practice Network October 2017
The 70th edition of Humanitarian Exchange, co-edited with Joe Read, focuses on the humanitarian crisis in Nigeria and the Lake Chad Basin. The violence perpetrated by Boko Haram and the counter-insurgency campaign in Nigeria, Cameroon, Chad and Niger has created a humanitarian crisis affecting some 17 million people. Some 2.4 million have been displaced, the vast majority of them in north-eastern Nigeria. Many are living in desperate conditions, without access to sufficient food or clean water. The Nigerian government's focus on defeating Boko Haram militarily, its reluctance to acknowledge the scale and gravity of the humanitarian crisis and the corresponding reticence of humanitarian leaders to challenge that position have combined to undermine the timeliness and effectiveness of the response…
[Reviewed earlier]

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Volume 14, Issue 1 2018
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Vol 5, No 1 (2018) January 2018
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JAMA
January 23/30, 2018, Vol 319, No. 4, Pages 319-418
http://jama.jamanetwork.com/issue.aspx
Viewpoint
Improving Public Health Requires Inclusion of Underrepresented Populations in Research
Catherine Y. Spong, MD; Diana W. Bianchi, MD
JAMA. 2018;319(4):337-338. doi:10.1001/jama.2017.19138
Advances in genomics have ushered in promising therapies tailored to the individual. Personalized medicine is promoted and has begun to positively influence care. For example, medications such as trastuzumab for the 30% of breast cancers that overexpress ERBB2 and vemurafenib for patients with late-stage melanoma who carry the V600E variant have been beneficial.1 Despite these advances, for many sectors of the population—children, older adults,

pregnant and lactating women, and individuals with physical and intellectual disabilities—limited evidence-based therapies optimized to their specific medical needs exist. Combined, these groups comprise as much as 58% of the US population (eTable in the Supplement). Research focusing on or at the very least includes members of these groups is critically needed.

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January 2018, Vol 172, No. 1, Pages 1-104
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[Reviewed earlier]

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January 2018 - Volume 16 - Issue 1
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[Reviewed earlier]

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February 2018 Volume 62, Issue 2, Supplement, S1-S140
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Volume 43, Issue 1, February 2018
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Volume 13, Issue 1, February 2018
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February 2018 - Volume 72 - 2
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November 2017 Volume 10, Issue 4 Pages 241–333
http://onlinelibrary.wiley.com/doi/10.1111/jebm.2017.10.issue-4/issuetoc
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Volume 20, Issue 1, February 2018
https://link.springer.com/journal/10903/20/1/page/1
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Volume 15, Issue 4, 2017
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Volume 217, Issue 3, 1 Feb 2018
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Vol 20, No 1 (2018): January
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Volume 66, Issue 12, December 2017
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Volume 4, Issue 4 (2017)
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Volume 6, Issue 4 December 2017
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Journal of Pediatrics
February 2018 Volume 193, p1-280
http://www.jpeds.com/current
Editor's Choice
Smart use of vaccines
Sarah S. Long
Published in issue: February 2018
Abstract

The increasing complexities of the recommended immunization schedule and vaccine products available make it almost impossible for even the best informed and intentioned practitioners and staff to get it perfect. Mistakes are "costly," leaving some children sub-optimally protected from vaccine-targeted diseases (and in some scenarios requiring extra doses), while other children may be over-immunized. In this volume of The Journal, Rodgers et al report a study of the frequency and cost of vaccinations administered outside minimum and maximum recommended ages despite using what currently is likely to be one of the "smartest" electronic systems that aims to prevent these errors. Data included examination and analysis of de-identified information throughout 2014 from 6 Centers for Disease Control and Prevention Sentinel Sites of Immunization Information Systems in 6 states, representing approximately 10% of the US population <19 years of age. The system possesses advanced functionality available at the point of clinical care.

In most regards, the findings are reassuring. Among roughly 3.4 million doses of vaccines with maximum age recommendations, only 0.3% of doses were given after the maximum age. Among roughly 7.5 million doses of vaccines with minimum age recommendations, only 0.1% of doses were administered before the minimum age. Monetary costs could accrue when an unnecessary dose was given after a maximum age (eg, Prevnar given after the fifth birthday) or an inadequate dose given required re-vaccination (eg, a 0.25 mL dose of Fluzone Quadrivalent given after the third birthday when a dose of 0.5 mL is recommended). The most costly errors of administration before a minimum recommended age are those requiring re-vaccination. This report identified approximately $291 000 in direct and indirect re-vaccination costs that would have been incurred in 1 year in this sample population if each error identified was corrected. An estimated annual cost on a national level would be 10-fold, ie, almost 3 million dollars.

Immunizations are a critical pillar of our children's health, and a precious resource. Until an impossibly smart computer program can be brought to bear at the point of care to integrate each patient's unique immunization record and need, and to preclude misuse, we will have to strive to be advocates for as well as best protectors of the precious resource.

Editorials

How to Make Pediatric Trials Better: Transparency and Accountability of Trial Registration and Reporting

Ana Marušić, Shelly M. Pranić

Published online: November 22, 2017

Original Articles

Frequency and Cost of Vaccinations Administered Outside Minimum and Maximum Recommended Ages—2014 Data From 6 Sentinel Sites of Immunization Information Systems

Loren Rodgers, Lauren Shaw, Raymond Strikas, Beth Hibbs, JoEllen Wolicki, Cristina V. Cardemil, Cindy Weinbaum

p164–171

Published online: December 14, 2017

The Conduct and Reporting of Child Health Research: An Analysis of Randomized Controlled Trials Published in 2012 and Evaluation of Change over 5 Years

Allison Gates, Lisa Hartling, Ben Vandermeer, Patrina Caldwell, Despina G. Contopoulos-Ioannidis, Sarah Curtis, Ricardo M. Fernandes, Terry P. Klassen, Katrina Williams, Michele P. Dyson

p237–244.e37

Published online: November 21, 2017

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January/February 2018 - Volume 24 - Issue 1

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[Reviewed earlier]

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Volume 39, Issue 1, February 2018

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Journal of the Royal Society – Interface

01 January 2018; volume 15, issue 138

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Volume 25, Issue 1, 1 January 2018
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December 2017, volume 91, issue 24
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Jan 27, 2018 Volume 391 Number 10118 p281-400 e2-e4
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Jan 2018 Volume 6 Number 1 e1-e120
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Volume 22, Issue 1, January 2018
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Volume 38, Issue 1, January 2018
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A Multidisciplinary Journal of Population Health and Health Policy
December 2017 Volume 95, Issue 4 Pages 683–896
http://onlinelibrary.wiley.com/doi/10.1111/milq.2017.95.issue-4/issuetoc
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Nature
Volume 553 Number 7689 pp380-530 25 January 2018
http://www.nature.com/nature/current_issue.html
EDITORIAL
Science after a year of President Trump
After 12 months in office, Trump's effects on science have been as bad as feared.

Science must get ready for the next global flu crisis
A universal flu vaccine is the only serious defence against a future flu pandemic.

Nature Medicine
January 2018, Volume 24 No 1 pp1-112
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[Reviewed earlier]

Nature Reviews Immunology
January 2018 Vol 18 No 1
http://www.nature.com/nri/journal/v18/n1/index.html
[New issue; No digest content identified]

New England Journal of Medicine
January 25, 2018 Vol. 378 No. 4
http://www.nejm.org/toc/nejm/medical-journal
Perspective
History of Medicine: PEPFAR — 15 Years and Counting the Lives Saved
Anthony S. Fauci, M.D., and Robert W. Eisinger, Ph.D.
In the long history of successful public health initiatives, such as those leading to the eradication of smallpox, the elimination of polio throughout most of the world, and the marked reduction globally in vaccine-preventable childhood diseases, few programs have matched the impact of one that began in 2003, the President's Emergency Plan for AIDS Relief, or PEPFAR. This innovative program has had an unprecedented impact on the pandemic of HIV and AIDS…

Treating and Preventing HIV with Generic Drugs — Barriers in the United States
Erika G. Martin, Ph.D., M.P.H., and Bruce R. Schackman, Ph.D.

Combination antiretroviral therapy (ART) has dramatically improved survival rates among people with HIV and is a mainstay of HIV prevention; evidence shows that durable viral suppression prevents the transmission of infection. In addition, preexposure prophylaxis (PrEP) is an emerging approach to preventing HIV acquisition for certain high-risk groups. Generic ART medications offer the potential for treating and preventing HIV with fewer resources. Generic versions of lamivudine, abacavir, and efavirenz became available in the United States within the past 6 years at prices lower than their brand-name counterparts, a generic version of PrEP (emtricitabine and tenofovir disoproxil fumarate) was approved in 2016, and generic versions of tenofovir disoproxil are expected later in 2018. Yet most of the discussion about the availability of generic HIV drugs focuses on low- and middle-income countries…

Pediatrics
January 2018, VOLUME 141 / ISSUE
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[Reviewed earlier]

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Volume 9, Issue 4 (December 2017)
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Volume 36, Issue 1, January 2018
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http://www.plosmedicine.org/
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Research Article

The cost-effectiveness of alternative vaccination strategies for polyvalent meningococcal vaccines in Burkina Faso: A transmission dynamic modeling study

The introduction of a conjugate vaccine for serogroup A Neisseria meningitidis *has dramatically reduced disease in the African meningitis belt. In this context, important questions remain about the performance of different vaccine policies that target remaining serogroups. Here, we estimate the health impact and cost associated with several alternative vaccination policies in Burkina Faso. The introduction of a conjugate vaccine for serogroup A* Neisseria meningitidis *has dramatically reduced disease in the African meningitis belt. In this context, important questions remain about the performance of different vaccine policies that target remaining serogroups. Here, we estimate the health impact and cost associated with several alternative vaccination policies in Burkina Faso.*

Reza Yaesoubi, Caroline Trotter, Caroline Colijn, Maziar Yaesoubi, Anaïs Colombini, Stephen Resch, Paul A. Kristiansen, F. Marc LaForce, Ted Cohen

| published 24 Jan 2018 PLOS Medicine
https://doi.org/10.1371/journal.pmed.1002495

PLoS Neglected Tropical Diseases

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(Accessed 27 January 2018)
[No new digest content identified]

PLoS One

http://www.plosone.org/
[Accessed 27 January 2018]

Research Article

The influence of political ideology and trust on willingness to vaccinate

Bert Baumgaertner, Juliet E. Carlisle, Florian Justwan

Research Article | published 25 Jan 2018 PLOS ONE
https://doi.org/10.1371/journal.pone.0191728

Abstract

In light of the increasing refusal of some parents to vaccinate children, public health strategies have focused on increasing knowledge and awareness based on a "knowledge-deficit" approach. However, decisions about vaccination are based on more than mere knowledge of risks, costs, and benefits. Individual decision making about vaccinating involves many other factors including those related to emotion, culture, religion, and socio-political context. In this paper, we use a nationally representative internet survey in the U.S. to investigate socio-political characteristics to assess attitudes about vaccination. In particular, we consider how political ideology and trust affect opinions about vaccinations for flu, pertussis, and measles. Our findings demonstrate that ideology has a direct effect on vaccine attitudes. In particular, conservative respondents are less likely to express pro-vaccination beliefs than other individuals. Furthermore, ideology also has an indirect effect on immunization propensity. The ideology variable predicts an indicator capturing trust in government medical experts, which in turn helps to explain individual-level variation with regards to attitudes about vaccine choice.

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http://journals.plos.org/plospathogens/
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Volume 32 - Issue 6 - December 2017
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Volume 106, Pages 1-236 (January 2018)
http://www.sciencedirect.com/science/journal/00917435/106
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10 January 2018; volume 285, issue 1870
http://rspb.royalsocietypublishing.org/content/285/1870?current-issue=y
[Reviewed earlier]

Public Health
January 2018 Volume 154
http://www.publichealthjrnl.com/current
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Volume 10, Issue 3 November 2017
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Vaccine Exemption Policies – A Discussion
[Reviewed earlier]

Public Health Reports
Volume 133, Issue 1, January/February 2018
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Qualitative Health Research
Volume 28, Issue 3, February 2018
http://qhr.sagepub.com/content/current
Special Issue: Methods
A Guide to Field Notes for Qualitative Research: Context and Conversation
Julia Phillippi, Jana Lauderdale
First Published April 5, 2017; pp. 381–388
Abstract
Field notes are widely recommended in qualitative research as a means of documenting needed contextual information. With growing use of data sharing, secondary analysis, and metasynthesis, field notes ensure rich context persists beyond the original research team. However, while widely regarded as essential, there is not a guide to field note collection within the literature to guide researchers. Using the qualitative literature and previous research experience, we provide a concise guide to collection, incorporation, and dissemination of field notes. We provide a description of field note content for contextualization of an entire study as well as individual interviews and focus groups. In addition, we provide two "sketch note" guides, one for study context and one for individual interviews or focus groups for use in the field. Our guides are congruent with many qualitative and mixed methodologies and ensure contextual information is collected, stored, and disseminated as an essential component of ethical, rigorous qualitative research.

Research Ethics
Volume 13, Issue 3-4, July-October 2017
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January 2018 Volume 38, Issue 1 Pages 1–211
http://onlinelibrary.wiley.com/doi/10.1111/risa.2018.38.issue-1/issuetoc
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Risk Management and Healthcare Policy
Volume 10, 2017
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Science
26 January 2018 Vol 359, Issue 6374
http://www.sciencemag.org/current.dtl
In Depth
Critics see only risks, no benefits in horsepox paper
By Kai Kupferschmidt
Science26 Jan 2018 : 375-376 Restricted Access
Scientists say their labmade virus could make a new smallpox vaccine. Others call it a "mistake" and a "stunt."
Summary
A highly controversial study in which researchers synthesized the horsepox virus from scratch was finally published in PLOS ONE on 19 January. The study stirred alarm when *Science* first reported about it in July 2017 because it might give would-be terrorists a recipe to construct smallpox virus, a major human scourge vanquished in 1980. And now that the paper is out, many scientists say it doesn't answer the most pressing question: Why did they do it? The team claims its work, funded by Tonix, a pharmaceutical company headquartered in New York City, could lead to a safer, more effective vaccine against smallpox. But safe smallpox vaccines already exist, and critics say there is no market for a horsepox-based replacement.

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24 January 2018 Vol 10, Issue 425
http://stm.sciencemag.org/
[New issue; No digest content identified]

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Volume 190, Pages 1-278 (October 2017)
http://www.sciencedirect.com/science/journal/02779536/190?sdc=1
[Reviewed earlier]

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November-December, 2017 Volume 20
http://www.travelmedicinejournal.com/
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Tropical Medicine & International Health
January 2018 Volume 23, Issue 1 Pages i–iv, 1–119
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2018.23.issue-1/issuetoc
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Vaccine
Volume 36, Issue 4 Pages 427-594 (25 January 2018)
https://www.sciencedirect.com/journal/vaccine/vol/36/issue/4
Regular papers

How close are countries of the WHO European Region to achieving the goal of vaccinating 75% of key risk groups against influenza? Results from national surveys on seasonal influenza vaccination programmes, 2008/2009 to 2014/2015
Open access - Original research article
Pages 442-452
Pernille Jorgensen, Jolita Mereckiene, Suzanne Cotter, Kari Johansen, ... Caroline Brown

Parent perceptions of dentists' role in HPV vaccination
Original research article
Pages 461-466
Gabriela E. Lazalde, Melissa B. Gilkey, Melanie L. Kornides, Annie-Laurie McRee
Offering HPV vaccine in settings beyond the traditional medical home holds promise for increasing the currently low levels of coverage. As adolescents frequently visit dentists, dental practices may be one such alternative vaccination setting. This study assessed parent attitudes about the roles dental providers could play in HPV prevention, including vaccine provision.

Willingness to accept a future influenza A(H7N9) vaccine in Beijing, China
Original research article
Pages 491-497
Shuangsheng Wu, Jianting Su, Peng Yang, Haiyan Zhang, ... Quanyi Wang

Bacillus Calmette-Guérin (BCG) vaccine: A global assessment of demand and supply balance
Open access - Original research article
Pages 498-506
Tania Cernuschi, Stefano Malvolti, Emily Nickels, Martin Friede

HIV population-level adaptation can rapidly diminish the impact of a partially effective vaccine
Open access - Original research article
Pages 514-520
Joshua T. Herbeck, Kathryn Peebles, Paul T. Edlefsen, Morgane Rolland, ... Steven M. Goodreau
Development of an HIV vaccine might be essential to ending the HIV/AIDS pandemic. However, vaccines can result in the emergence and spread of vaccine-resistant strains. Indeed, analyses of breakthrough infections in the HIV phase 3 vaccine trial RV144 identified HIV genotypes with differential rates of transmission in vaccine and placebo recipients. We hypothesized that, for HIV vaccination programs based on partially effective vaccines similar to RV144, HIV adaptation will rapidly diminish the expected vaccine impact.

Healthcare worker's attitude to seasonal influenza vaccination in the South Tyrolean province of Italy: barriers and facilitators
Original research article

Pages 535-544
Andrea Rabensteiner, Alessandra Buja, Dagmar Regele, Martin Fischer, Vincenzo Baldo

Measuring vaccine acceptance among Canadian parents: A survey of the Canadian Immunization Research Network
Original research article
Pages 545-552
Eve Dubé, Dominique Gagnon, Manale Ouakki, Julie A. Bettinger, ... Devon Greyson

Safety of vaccines that have been kept outside of recommended temperatures: Reports to the Vaccine Adverse Event Reporting System (VAERS), 2008–2012
Original research article
Pages 553-558
Beth F. Hibbs, Elaine Miller, Jing Shi, Kamesha Smith, ... Tom T. Shimabukuro

Predictors of measles vaccination coverage among children 6–59 months of age in the Democratic Republic of the Congo
Open access - Original research article
Pages 587-593
Hayley R. Ashbaugh, Nicole A. Hoff, Reena H. Doshi, Vivian H. Alfonso, ... Anne W. Rimoin
Highlights
:: DRC's overall measles vaccination coverage level of 70% is too low to halt the spread of measles.
:: Socioeconomic variables and residence are associated with vaccination coverage disparities.
:: Vaccination coverage and data quality are linked, and as such, dated records must be increased.

Vaccine: Development and Therapy
https://www.dovepress.com/vaccine-development-and-therapy-archive111
(Accessed 27 January 2018)
[No new digest content identified]

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 27 January 2018)
[No new digest content identified]

Value in Health
January 2018 Volume 21, Issue 1, p1-116
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

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

WHO-WIPO-WTO Technical Symposium on Sustainable Development Goals: Innovative technologies to promote healthy lives and well-being*

Date of the event: 26 February 2018 (09:00 to 17:15)
Location: Geneva, Switzerland (WHO Headquarters, Executive Board Room)
The event is open to Geneva-based delegations to WHO, WIPO and WTO, representatives of international and philanthropic organizations, experts on intellectual property and trade, civil society organizations and interested individuals and organizations.
The provisional programme of the event is available here.
Further details about the Symposium can be accessed here.
Background
The post-2015 Agenda for Sustainable Development sets out an ambitious plan for action: to reach and empower the most vulnerable and take action in areas of critical importance for humanity and the planet. The Sustainable Development Goals usher in a new era of global development that seeks to leave no one behind. Achievement of the SDGs will require a delicate choreography of interplay between all stakeholders.

Access to, and innovation in, health technologies is a requisite element for ensuring progress toward universal health coverage and achievement of the SDGs, namely SDG 3 Ensure healthy lives and promote well-being for all at all ages. Scientific progress, advances in health technologies and improved trade have contributed to unprecedented improvements in health outcomes. However, gains in life expectancy and quality of life are unequally distributed between low-, middle-, and high-income countries. Troubling inequalities in the burden of disease are, in part, attributed to the disparate access to health technologies. As a fundamental human right, the right of everyone to enjoy the highest attainable standard of physical and mental health obliges governments to ensure appropriate access to essential medicines.

The seventh technical symposium organized by WHO, WIPO, WTO will discuss challenges and opportunities for the international community to ensure that innovative technologies are developed and reach patients in order to realize the right to health and the health-related SDGs. The Symposium will offer a forum for an evidence-based exchange of views and experiences of the various stakeholders and representatives of the relevant sectors. Innovative, inclusive, and multi-stakeholder initiatives and partnerships that research, develop and facilitate access to novel, needs-based health technologies will be highlighted. The exchange will provide the basis for discussion and allow participants to achieve a better understanding of the benefits, drawbacks, and impact of the various available options.

The joint technical symposia convened by WHO, WIPO and WTO build on the collaborative work undertaken by the three agencies to enhance capacity, including the trilateral study "Promoting Access to Medical Technologies and Innovation."

* * * *

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
February 2018 Volume 46, Issue 2, p123-244
http://www.ajicjournal.org/current
[Reviewed earlier]

American Journal of Preventive Medicine
February 2018 Volume 54, Issue 2, p157-324
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
February 2018 108(2)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
Volume 98, Issue 1, 2018
http://www.ajtmh.org/content/journals/14761645/98/1
[Reviewed earlier]

Annals of Internal Medicine
16 January 2018 Vol: 168, Issue 2
http://annals.org/aim/issue
[Reviewed earlier]

BMC Cost Effectiveness and Resource Allocation
http://resource-allocation.biomedcentral.com/
(Accessed 3 February 2018)
[No new digest content identified]

BMJ Global Health
December 2017; volume 2, issue 4
http://gh.bmj.com/content/2/4?current-issue=y
[Reviewed earlier]

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 3 February 2018)
[No new digest content identified]

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 3 February 2018)
[No new digest content identified]

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 3 February 2018)
Debate
27 January 2018
Fake facts and alternative truths in medical research
Authors: Bjørn Hofmann
Background
Fake news and alternative facts have become commonplace in these so-called "post-factual times." What about medical research - are scientific facts fake as well? Many recent disclosures have fueled the claim that scientific facts are suspect and that science is in crisis. Scientists appear to engage in facting interests instead of revealing interesting facts. This can be observed in terms of what has been called polarised research, where some researchers continuously publish positive results while others publish negative results on the same issue – even when based on the same data. In order to identify and address this challenge, the objective of this study is to investigate how polarised research produce "polarised facts." Mammography screening for breast cancer is applied as an example

BMC Medicine
http://www.biomedcentral.com/bmcmed/content
(Accessed 27 January 2018)
Research article
Rotavirus vaccine impact and socioeconomic deprivation: an interrupted time-series analysis of gastrointestinal disease outcomes across primary and secondary care in the UK
Rotavirus causes severe gastroenteritis in infants and young children worldwide. The UK introduced the monovalent rotavirus vaccine (Rotarix®) in July 2013. Vaccination is free of charge to parents, with two d...

Authors: Daniel Hungerford, Roberto Vivancos, Jonathan M. Read, Miren Iturriza-Gómara, Neil French and Nigel A. Cunliffe
Citation: BMC Medicine 2018 16:10
Published on: 29 January 2018

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
(Accessed 27 January 2018)
[No new digest content identified]

BMC Public Health
http://bmcpublichealth.biomedcentral.com/articles
(Accessed 3 February 2018)
Research article
Interventions to reduce post-acute consequences of diarrheal disease in children: a systematic review
Although acute diarrhea often leads to acute dehydration and electrolyte imbalance, children with diarrhea also suffer long term morbidity, including recurrent or prolonged diarrhea, loss of weight, and linear...
Authors: Patricia B. Pavlinac, Rebecca L. Brander, Hannah E. Atlas, Grace C. John-Stewart, Donna M. Denno and Judd L. Walson
Citation: BMC Public Health 2018 18:208
Published on: 1 February 2018

BMC Research Notes
http://www.biomedcentral.com/bmcresnotes/content
(Accessed 27 January 2018)
[No new digest content identified]

BMJ Open
February 2018 - Volume 8 - 2
http://bmjopen.bmj.com/content/current
[New issue; No digest content identified]

Bulletin of the World Health Organization
Volume 96, Number 2, February 2018, 77-144
http://www.who.int/bulletin/volumes/96/2/en/
RESEARCH
Implementation research: reactive mass vaccination with single-dose oral cholera vaccine, Zambia
Marc Poncin, Gideon Zulu, Caroline Voute, Eva Ferreras, Clara Mbwili Muleya, Kennedy Malama, Lorenzo Pezzoli, Jacob Mufunda, Hugues Robert, Florent Uzzeni, Francisco J Luquero, Elizabeth

Chizema & Iza Ciglenecki
http://dx.doi.org/10.2471/BLT.16.189241
Abstract
Objective
To describe the implementation and feasibility of an innovative mass vaccination strategy – based on single-dose oral cholera vaccine – to curb a cholera epidemic in a large urban setting.
Method
In April 2016, in the early stages of a cholera outbreak in Lusaka, Zambia, the health ministry collaborated with Médecins Sans Frontières and the World Health Organization in organizing a mass vaccination campaign, based on single-dose oral cholera vaccine. Over a period of 17 days, partners mobilized 1700 health ministry staff and community volunteers for community sensitization, social mobilization and vaccination activities in 10 townships. On each day, doses of vaccine were delivered to vaccination sites and administrative coverage was estimated.
Findings
Overall, vaccination teams administered 424 100 doses of vaccine to an estimated target population of 578 043, resulting in an estimated administrative coverage of 73.4%. After the campaign, few cholera cases were reported and there was no evidence of the disease spreading within the vaccinated areas. The total cost of the campaign – 2.31 United States dollars (US$) per dose – included the relatively low cost of local delivery – US$ 0.41 per dose.
Conclusion
We found that an early and large-scale targeted reactive campaign using a single-dose oral vaccine, organized in response to a cholera epidemic within a large city, to be feasible and appeared effective. While cholera vaccines remain in short supply, the maximization of the number of vaccines in response to a cholera epidemic, by the use of just one dose per member of an at-risk community, should be considered.

SYSTEMATIC REVIEWS

Lessons learnt from implementation of the International Health Regulations: a systematic review

— Amitabh B Suthar, Lisa G Allen, Sara Cifuentes, Christopher Dye & Jason M Nagata
http://dx.doi.org/10.2471/BLT.16.189100
Abstract
Objective
To respond to the World Health Assembly call for dissemination of lessons learnt from countries that have begun implementing the International Health Regulations, 2005 revision; IHR (2005).
Methods
In November 2015, we conducted a systematic search of the following online databases and sources: PubMed®, Embase®, Global Health, Scopus, World Health Organization (WHO) Global Index Medicus, WHO Bulletin on IHR Implementation and the International Society for Disease Surveillance. We included identified studies and reports summarizing national experience in implementing any of the IHR (2005) core capacities or their components. We excluded studies that were theoretical or referred to IHR (1969). Qualitative systematic review methodology, including meta-ethnography, was used for qualitative synthesis.
Findings
We analysed 51 articles from 77 countries representing all WHO Regions. The meta-syntheses identified a total of 44 lessons learnt across the eight core capacities of IHR (2005). Major themes included the need to mobilize and sustain political commitment; to adapt global requirements based on local sociocultural, epidemiological, health system and economic

contexts; and to conduct baseline and follow-up assessments to monitor the status of IHR (2005) implementation.
Conclusion
Although experiences of IHR (2005) implementation covered a wide global range, more documentation from Africa and Eastern Europe is needed. We did not find specific areas of weakness in monitoring IHR (2005); sustained monitoring of all core capacities is required to ensure effective systems. These lessons learnt could be adapted by countries in the process of meeting IHR (2005) requirements.

POLICY & PRACTICE
Pandemic risk: how large are the expected losses?
— Victoria Y Fan, Dean T Jamison & Lawrence H Summers
http://dx.doi.org/10.2471/BLT.17.199588
Abstract
There is an unmet need for greater investment in preparedness against major epidemics and pandemics. The arguments in favour of such investment have been largely based on estimates of the losses in national incomes that might occur as the result of a major epidemic or pandemic. Recently, we extended the estimate to include the valuation of the lives lost as a result of pandemic-related increases in mortality. This produced markedly higher estimates of the full value of loss that might occur as the result of a future pandemic. We parametrized an exceedance probability function for a global influenza pandemic and estimated that the expected number of influenza-pandemic-related deaths is about 720,000 per year. We calculated that the expected annual losses from pandemic risk to be about 500 billion United States dollars – or 0.6% of global income – per year. This estimate falls within – but towards the lower end of – the Intergovernmental Panel on Climate Change's estimates of the value of the losses from global warming, which range from 0.2% to 2% of global income. The estimated percentage of annual national income represented by the expected value of losses varied by country income grouping: from a little over 0.3% in high-income countries to 1.6% in lower-middle-income countries. Most of the losses from influenza pandemics come from rare, severe events.

Child Care, Health and Development
January 2018 Volume 44, Issue 1 Pages 1–171
http://onlinelibrary.wiley.com/doi/10.1111/cch.v44.1/issuetoc
[Reviewed earlier]

Clinical and Experimental Vaccine Research
Volume 6(2); July 2017
http://ecevr.org/
[Reviewed earlier]

Clinical Therapeutics
January 2018 Volume 40, Issue 1, p1-180
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

Conflict and Health
http://www.conflictandhealth.com/
[Accessed 27 January 2018]
[No new digest content identified]

Contemporary Clinical Trials
Volume 64, Pages 1-280 (January 2018)
https://www.sciencedirect.com/science/journal/15517144/64
[Reviewed earlier]

Current Opinion in Infectious Diseases
February 2018 - Volume 31 - Issue 1
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

Developing World Bioethics
December 2017 Volume 17, Issue 3 Pages 141–216
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2017.17.issue-3/issuetoc
[Reviewed earlier]

Development in Practice
Volume 28, Issue 1, 2018
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Disaster Medicine and Public Health Preparedness
Volume 11 - Issue 6 - December 2017
https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/latest-issue
[Reviewed earlier]

Disasters
January 2018 Volume 42, Issue 1 Pages 1–203
http://onlinelibrary.wiley.com/doi/10.1111/disa.2017.41.issue-4/issuetoc
[Reviewed earlier]

EMBO Reports
01 December 2017; volume 18, issue 12
http://embor.embopress.org/content/18/12?current-issue=y

[Reviewed earlier]

Emerging Infectious Diseases
Volume 24, Number 2—February 2018
http://wwwnc.cdc.gov/eid/
[New issue; No digest content identified]

Epidemics
Volume 21, Pages 1-88 (December 2017)
http://www.sciencedirect.com/science/journal/17554365
[Reviewed earlier]

Epidemiology and Infection
Volume 146 - Issue 1 - January 2018
https://www.cambridge.org/core/journals/epidemiology-and-infection/latest-issue
[Reviewed earlier]

The European Journal of Public Health
Volume 27, Issue 6, 1 December 2017
https://academic.oup.com/eurpub/issue/27/6
[Reviewed earlier]

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

Global Health: Science and Practice (GHSP)
December 2017 | Volume 5 | Number 4
http://www.ghspjournal.org/content/current
[Reviewed earlier]

Global Public Health
Volume 13, 2017 Issue 3
http://www.tandfonline.com/toc/rgph20/current
Special Issue: Im/Mobilities and Dis/Connectivities in Medical Globalization: How Global is Global Health? Guest Editors: Dominik Mattes and Hansjörg Dilger
[Reviewed earlier]

Globalization and Health

http://www.globalizationandhealth.com/
[Accessed 27 January 2018]
[No new digest content identified]

Health Affairs
January 2018; Vol. 37, No. 1
https://www.healthaffairs.org/toc/hlthaff/current
Culture Of Health, Medicare & More
[Reviewed earlier]

Health and Human Rights
Volume 19, Issue 2, December 2017
http://www.hhrjournal.org/
Special Section on Romani People and the Right to Health
[Reviewed earlier]

Health Economics, Policy and Law
Volume 13 - Issue 1 - January 2018
https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue
[Reviewed earlier]

Health Policy and Planning
Volume 33, Issue 1, 1 January 2018
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Health Research Policy and Systems
http://www.health-policy-systems.com/content
[Accessed 27 January 2018]
[No new digest content identified]

Humanitarian Exchange Magazine
http://odihpn.org/magazine/the-humanitarian-consequences-of-violence-in-central-america/
Number 70 October 2017
Special Feature: The Lake Chad Basin: an overlooked crisis?
by Humanitarian Practice Network October 2017
The 70th edition of Humanitarian Exchange, co-edited with Joe Read, focuses on the humanitarian crisis in Nigeria and the Lake Chad Basin. The violence perpetrated by Boko Haram and the counter-insurgency campaign in Nigeria, Cameroon, Chad and Niger has created a humanitarian crisis affecting some 17 million people. Some 2.4 million have been displaced, the vast majority of them in north-eastern Nigeria. Many are living in desperate conditions, without access to sufficient food or clean water. The Nigerian government's focus on defeating

Boko Haram militarily, its reluctance to acknowledge the scale and gravity of the humanitarian crisis and the corresponding reticence of humanitarian leaders to challenge that position have combined to undermine the timeliness and effectiveness of the response…
[Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 14, Issue 1 2018
http://www.tandfonline.com/toc/khvi20/current
[Reviewed earlier]

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 27 January 2018]
[No new digest content identified]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 27 January 2018]
[No new digest content identified]

International Health
Volume 9, Issue 6, 1 November 2017
http://inthealth.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Community Medicine and Public Health
Vol 5, No 1 (2018) January 2018
http://www.ijcmph.com/index.php/ijcmph/issue/view/34
[Reviewed earlier]

International Journal of Epidemiology
Volume 46, Issue 6, December 2017
https://academic.oup.com/ije/issue/46/6
[Reviewed earlier]

International Journal of Human Rights in Healthcare
Vol. 10 Issue: 5 2017
http://www.emeraldinsight.com/toc/ijhrh/10/5
[Reviewed earlier]

International Journal of Infectious Diseases
January 2018 Volume 66, p1-156
http://www.ijidonline.com/issue/S1201-9712(17)X0013-1
[Reviewed earlier]

JAMA
January 23/30, 2018, Vol 319, No. 4, Pages 319-418
http://jama.jamanetwork.com/issue.aspx
[Reviewed earlier]

JAMA Pediatrics
January 2018, Vol 172, No. 1, Pages 1-104
http://archpedi.jamanetwork.com/issue.aspx
[Reviewed earlier]

JBI Database of Systematic Review and Implementation Reports
January 2018 - Volume 16 - Issue 1
http://journals.lww.com/jbisrir/Pages/currenttoc.aspx
[Reviewed earlier]

Journal of Adolescent Health
February 2018 Volume 62, Issue 2, Supplement, S1-S140
http://www.jahonline.org/issue/S1054-139X(17)X0029-3
[Reviewed earlier]

Journal of Community Health
Volume 43, Issue 1, February 2018
https://link.springer.com/journal/10900/43/1/page/1
[Reviewed earlier]

Journal of Empirical Research on Human Research Ethics
Volume 13, Issue 1, February 2018
http://journals.sagepub.com/toc/jre/current
[Reviewed earlier]

Journal of Epidemiology & Community Health
February 2018 - Volume 72 - 2
http://jech.bmj.com/content/current
[New issue; No digest content identified]

Journal of Evidence-Based Medicine
November 2017 Volume 10, Issue 4 Pages 241–333
http://onlinelibrary.wiley.com/doi/10.1111/jebm.2017.10.issue-4/issuetoc
[Website not responding at inquiry]

Journal of Global Ethics
Volume 13, Issue 2, 2017
http://www.tandfonline.com/toc/rjge20/current
[Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 28, Number 4, November 2017
https://muse.jhu.edu/issue/37451
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 20, Issue 1, February 2018
https://link.springer.com/journal/10903/20/1/page/1
[Reviewed earlier]

Journal of Immigrant & Refugee Studies
Volume 15, Issue 4, 2017
http://www.tandfonline.com/toc/wimm20/current
[Reviewed earlier]

Journal of Infectious Diseases
Volume 217, Issue 3, 1 Feb 2018
https://academic.oup.com/jid/issue
[New issue; No digest content identified]

Journal of Medical Ethics
February 2018 - Volume 44 - 2
http://jme.bmj.com/content/current
Research ethics
Paper: Informed consent in cluster randomised trials: new and common ethical challenges (30 January, 2018)
Sapfo Lignou
Abstract
Cluster randomised trials are an increasingly important methodological tool in health research but they present challenges to the informed consent requirement. In the relatively limited literature on the ethics of cluster research there is not much clarity about the reasons for which seeking informed consent in cluster randomised trials may be morally challenging. In this paper,

I distinguish between the cases where informed consent in cluster trials may be problematic due to the distinct features of 'population-based' interventions, which have not been adequately discussed in the research ethics literature, and the cases where informed consent may be problematic for reasons that investigators also encounter in other research designs. I claim that informed consent requirements in cluster trials should be adjusted to the level of risk involved, arguing for a more comprehensive notion of research risk than that currently found in the research ethics guidelines, and the amount of freedom to be sacrificed in relation to a particular research aim. I conclude that these two factors are the most important to consider when assessing whether a cluster study should proceed when informed consent is infeasible or difficult to obtain.

Journal of Medical Internet Research
Viewpoint
The Significance of Witness Sensors for Mass Casualty Incidents and Epidemic Outbreaks
Chih-Long Pan, Chih-Hao Lin, Yan-Ren Lin, Hsin-Yu Wen, Jet-Chau Wen
J Med Internet Res 2018 (Feb 02); 20(2):e39
ABSTRACT
Due to the increasing number of natural and man-made disasters, mass casualty incidents occur more often than ever before. As a result, health care providers need to adapt in order to cope with the overwhelming patient surge. To ensure quality and safety in health care, accurate information in pandemic disease control, death reduction, and health quality promotion should be highlighted. However, obtaining precise information in real time is an enormous challenge to all researchers of the field. In this paper, innovative strategies are presented to develop a sound information network using the concept of "witness sensors." To overcome the reliability and quality limitations of information obtained through social media, researchers must focus on developing solutions that secure the authenticity of social media messages, especially for matters related to health. To address this challenge, we introduce a novel concept based on the two elements of "witness" and "sensor." Witness sensors can be key players designated to minimize limitations to quality of information and to distinguish fact from fiction during critical events. In order to enhance health communication practices and deliver valid information to end users, the education and management of witness sensors should be further investigated, especially for implementation during mass casualty incidents and epidemic outbreaks.

Journal of Medical Microbiology
Volume 66, Issue 12, December 2017
http://jmm.microbiologyresearch.org/content/journal/jmm/66/12
[Reviewed earlier]

Journal of Patient-Centered Research and Reviews
Volume 5, Issue 1 (2018)
https://digitalrepository.aurorahealthcare.org/jpcrr/
Health Disparities and Inequities: Part II
[New issue; No digest content identified]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 6, Issue 4 December 2017
https://academic.oup.com/jpids/issue
[Reviewed earlier]

Journal of Pediatrics
February 2018 Volume 193, p1-280
http://www.jpeds.com/current
[Reviewed earlier]

Journal of Pharmaceutical Policy and Practice
https://joppp.biomedcentral.com/
[Accessed 27 January 2018]
[No new digest content identified]

Journal of Public Health Management & Practice
January/February 2018 - Volume 24 - Issue 1
http://journals.lww.com/jphmp/pages/default.aspx
[Reviewed earlier]

Journal of Public Health Policy
Volume 39, Issue 1, February 2018
https://link.springer.com/journal/41271/39/1/page/1
[Reviewed earlier]

Journal of the Royal Society – Interface
01 January 2018; volume 15, issue 138
http://rsif.royalsocietypublishing.org/content/current
[Reviewed earlier]

Journal of Travel Medicine
Volume 25, Issue 1, 1 January 2018
https://academic.oup.com/jtm/issue/25/1
[Reviewed earlier]

Journal of Virology
December 2017, volume 91, issue 24
http://jvi.asm.org/content/current
[Reviewed earlier]

The Lancet
Jan 27, 2018 Volume 391 Number 10118 p281-400 e2-e4
http://www.thelancet.com/journals/lancet/issue/current
Editorial

Yellow fever: a major threat to public health

The Lancet | 3 February 2018

The world's largest fractional-dose vaccination campaign for yellow fever started on Jan 25 in Brazil, with the support of WHO. The campaign attempts to avoid the urban transmission cycle, not seen in the country since 1942. 33 people have died due to yellow fever between Jan 14 and 23, while the number of confirmed cases in the country has reached more than 130.

Although more cases of yellow fever were recorded in Brazil in 2016–17, the recent outbreak has extended into a much larger area, including highly populated cities, making it more threatening to public health. These large cities are infested by Aedes aegypti, the urban yellow fever vector, which can transmit the disease from person to person. The number of people at risk is also increasing in other tropical regions, such as South America and Africa.

Due to a global shortage of the vaccine, in outbreak emergencies WHO recommends fractional dosing to protect more people by using less antigen in each dose. Whereas studies have shown that a fifth of the standard dose can provide the same immunity as the standard full dose for at least 12 months, it is not clear how long the immunity ultimately lasts.

For routine immunisation, the standard full dose, recommended by WHO since 2013, is thought to confer lifelong protection, although supporting evidence for this view is not strong. Some Brazilian experts believe that a booster vaccine 10 years after the primary vaccination should be administered to guarantee lifetime protection.

As a zoonotic disease, with a reservoir in non-human primates, it is unlikely that yellow fever will be eradicated. However, epidemics can be prevented if populations are protected by routine immunisation and if mass vaccination campaigns are implemented quickly in response to an outbreak. A coalition of partners led by WHO, UNICEF, and Gavi, the Vaccine Alliance, aims to eliminate yellow fever epidemics worldwide by 2026. To achieve this goal, there is an urgent need for research to clarify the duration of protective levels of immunity provided by fractionated and full-dose yellow fever vaccines to support development of effective vaccination programmes.

The Lancet Commissions

The Lancet Commission on pollution and health

Philip J Landrigan, Richard Fuller, Nereus J R Acosta, Olusoji Adeyi, Robert Arnold, Niladri (Nil) Basu, Abdoulaye Bibi Baldé, Roberto Bertollini, Stephan Bose-O'Reilly, Jo Ivey Boufford, Patrick N Breysse, Thomas Chiles, Chulabhorn Mahidol, Awa M Coll-Seck, Maureen L Cropper, Julius Fobil, Valentin Fuster, Michael Greenstone, Andy Haines, David Hanrahan, David Hunter, Mukesh Khare, Alan Krupnick, Bruce Lanphear, Bindu Lohani, Keith Martin, Karen V Mathiasen, Maureen A McTeer, Christopher J L Murray, Johanita D Ndahimananjara, Frederica Perera, Janez Potočnik, Alexander S Preker, Jairam Ramesh, Johan Rockström, Carlos Salinas, Leona D Samson, Karti Sandilya, Peter D Sly, Kirk R Smith, Achim Steiner, Richard B Stewart, William A Suk, Onno C P van Schayck, Gautam N Yadama, Kandeh Yumkella, Ma Zhong

462

Pollution is the largest environmental cause of disease and premature death in the world today. Diseases caused by pollution were responsible for an estimated 9 million premature deaths in 2015—16% of all deaths worldwide—three times more deaths than from AIDS, tuberculosis, and malaria combined and 15 times more than from all wars and other forms of violence. In the most severely affected countries, pollution-related disease is responsible for more than one death in four.

Lancet Global Health
Feb 2018 Volume 6 Number 2 e121-e228
http://www.thelancet.com/journals/langlo/issue/current

Articles

Monitoring universal health coverage within the Sustainable Development Goals: development and baseline data for an index of essential health services

Daniel R Hogan, Gretchen A Stevens, Ahmad Reza Hosseinpoor, Ties Boerma

Summary

Background

Achieving universal health coverage, including quality essential service coverage and financial protection for all, is target 3.8 of the Sustainable Development Goals (SDG). As a result, an index of essential health service coverage indicators was selected by the UN as SDG indicator 3.8.1. We have developed an index for measuring SDG 3.8.1, describe methods for compiling the index, and report baseline results for 2015.

Methods

16 tracer indicators were selected for the index, which included four from within each of the categories of reproductive, maternal, newborn, and child health; infectious disease; non-communicable diseases; and service capacity and access. Indicator data for 183 countries were taken from UN agency estimates or databases, supplemented with submissions from national focal points during a WHO country consultation. The index was computed using geometric means, and a subset of tracer indicators were used to summarise inequalities.

Findings

On average, countries had primary data since 2010 for 72% of the final set of indicators. The median national value for the service coverage index was 65 out of 100 (range 22–86). The index was highly correlated with other summary measures of health, and after controlling for gross national income and mean years of adult education, was associated with 21 additional years of life expectancy over the observed range of country values. Across 52 countries with sufficient data, coverage was 1% to 66% lower among the poorest quintile as compared with the national population. Sensitivity analyses suggested ranks implied by the index are fairly stable across alternative calculation methods.

Interpretation

Service coverage within universal health coverage can be measured with an index of tracer indicators. Our universal health coverage service coverage index is simple to compute by use of available country data and can be refined to incorporate relevant indicators as they become available through SDG monitoring.

Funding

Ministry of Health, Japan, and the Rockefeller Foundation.

Progress on catastrophic health spending in 133 countries: a retrospective observational study
Adam Wagstaff, Gabriela Flores, Justine Hsu, Marc-François Smitz, Kateryna Chepynoga, Leander R Buisman, Kim van Wilgenburg, Patrick Eozenou

Progress on impoverishing health spending in 122 countries: a retrospective observational study
Adam Wagstaff, Gabriela Flores, Marc-François Smitz, Justine Hsu, Kateryna Chepynoga, Patrick Eozenou

Prevalence of chronic obstructive pulmonary disease in the global population with HIV: a systematic review and meta-analysis
Jean Joel Bigna, Angeladine Malaha Kenne, Serra Lem Asangbeh, Aurelie T Sibetcheu
e193

Lancet Infectious Diseases
Feb 2018 Volume 18 Number 2 p123-226 e33-e63
http://www.thelancet.com/journals/laninf/issue/current
Editorial
The dengue vaccine dilemma
The Lancet Infectious Diseases

Articles
Immunogenicity and safety of one versus two doses of tetravalent dengue vaccine in healthy children aged 2–17 years in Asia and Latin America: 18-month interim data from a phase 2, randomised, placebo-controlled study
Xavier Sáez-Llorens, Vianney Tricou, Delia Yu, Luis Rivera, José Jimeno, Ana Cecilia Villarreal, Epiphany Dato, Sonia Mazara, Maria Vargas, Manja Brose, Martina Rauscher, Suely Tuboi, Astrid Borkowski, Derek Wallace
Summary
Background
Development of vaccines that are effective against all four dengue virus serotypes (DENV-1–4) in all age groups is important. Here, we present 18-month interim data from an ongoing study undertaken to assess the immunogenicity and safety of Takeda's tetravalent dengue vaccine (TDV) candidate over 48 months in children living in dengue-endemic countries.
Methods
We undertook a phase 2, multicentre, randomised, double-blind, placebo-controlled study at three sites in the Dominican Republic, Panama, and the Philippines. We randomly assigned children aged 2–17 years to receive either two TDV doses 3 months apart (group 1), one TDV dose (group 2), one TDV dose and a booster dose 1 year later (group 3), or placebo (group 4). We did the randomisation (1:2:5:1) using an interactive web response system stratified by age. The primary endpoint of this 18-month interim analysis was DENV serotype-specific antibody geometric mean titres (GMTs) in the per-protocol immunogenicity subset on days 1, 28, 91, 180, 365, 393, and 540. Secondary safety endpoints were the proportions of participants with serious adverse events and with virologically confirmed dengue in the safety set, and solicited and unsolicited adverse events in the immunogenicity subset. This trial is registered with ClinicalTrials.gov, number NCT02302066.

Findings
Between Dec 5, 2014, and Feb 13, 2015, 1800 children were randomly assigned to group 1 (n=201), group 2 (n=398), group 3 (n=1002), and group 4 (n=199). 1794 participants received at least one dose of TDV or placebo (safety set), of whom 562 participated in the immunogenicity subset and 509 were included in the per-protocol set. Antibody titres remained elevated 18 months after vaccination in all TDV groups. At day 540, in groups 1, 2, 3, and 4, respectively, DENV-1 GMTs were 476 (95% CI 286–791), 461 (329–647), 1056 (804–1388), and 92 (49–173); DENV-2 GMTs were 1212 (842–1744), 1242 (947–1628), 1457 (1182–1796), and 177 (93–337); DENV-3 GMTs were 286 (171–478), 298 (205–433), 548 (411–730), and 78 (44–137); and DENV-4 GMTs were 98 (65–150), 102 (75–139), 172 (133–222), and 33 (21–52). Limited differences in GMTs were observed between groups 1 and 2 (in which participants received one and two doses of TDV, respectively). In baseline-seronegative participants, a 1-year booster clearly increased GMTs. Vaccine-related unsolicited adverse events occurred in 14 (2%) of 562 participants, but no vaccine-related serious adverse events arose. Symptomatic, virologically confirmed dengue was recorded in 21 (1·3%) of 1596 participants vaccinated with TDV compared with nine (4·5%) of 198 placebo recipients.
Interpretation
TDV was well tolerated and immunogenic against all four dengue serotypes, irrespective of baseline dengue serostatus. These data provide proof of concept for TDV and support the ongoing phase 3 efficacy assessment of two doses 3 months apart.
Funding
Takeda Vaccines.

Pneumococcal conjugate vaccine 13 delivered as one primary and one booster dose (1 + 1) compared with two primary doses and a booster (2 + 1) in UK infants: a multicentre, parallel group randomised controlled trial

David Goldblatt, Jo Southern, Nick J Andrews, Polly Burbidge, Jo Partington, Lucy Roalfe, Marta Valente Pinto, Vasilli Thalasselis, Emma Plested, Hayley Richardson, Matthew D Snape, Elizabeth Miller

Open Access

Review

Antimicrobial resistance among children in sub-Saharan Africa

Phoebe C M Williams, David Isaacs, James A Berkley

Open Access

Summary
Antimicrobial resistance is an important threat to international health. Therapeutic guidelines for empirical treatment of common life-threatening infections depend on available information regarding microbial aetiology and antimicrobial susceptibility, but sub-Saharan Africa lacks diagnostic capacity and antimicrobial resistance surveillance. We systematically reviewed studies of antimicrobial resistance among children in sub-Saharan Africa since 2005. 18 of 1075 articles reviewed met inclusion criteria, providing data from 67,451 invasive bacterial isolates from inconsistently defined populations in predominantly urban tertiary settings. Among neonates, Gram-negative organisms were the predominant cause of early-onset neonatal sepsis, with a high prevalence of extended-spectrum β-lactamase-producing organisms. Gram-positive bacteria were responsible for a high proportion of infections among children beyond the neon atal period, with high reported prevalence of non-susceptibility to treatment advocated by the WHO therapeutic guidelines. There are few up-to-date or representative studies given the

magnitude of the problem of antimicrobial resistance, especially regarding community-acquired infections. Research should focus on differentiating resistance in community-acquired versus hospital-acquired infections, implementation of standardised reporting systems, and pragmatic clinical trials to assess the efficacy of alternative treatment regimens.

Lancet Respiratory Medicine
Feb 2018 Volume 6 Number 2 p75-160 e5-e7
http://www.thelancet.com/journals/lanres/issue/current
[New issue; No digest content identified]

Lancet Respiratory Medicine
Jan 2018 Volume 6 Number 1 p1-74 e1-e4
http://www.thelancet.com/journals/lanres/issue/current
[Reviewed earlier]

Maternal and Child Health Journal
Volume 22, Issue 1, January 2018
https://link.springer.com/journal/10995/22/1/page/1
[Reviewed earlier]

Medical Decision Making (MDM)
Volume 38, Issue 2, February 2018
http://mdm.sagepub.com/content/current
Original Articles
Using Cluster Analysis to Group Countries for Cost-effectiveness Analysis: An Application to Sub-Saharan Africa
Louise B. Russell, Gyan Bhanot, Sun-Young Kim, Anushua Sinha
First Published August 19, 2017; pp. 139–149
Abstract
Objective. To explore the use of cluster analysis to define groups of similar countries for the purpose of evaluating the cost-effectiveness of a public health intervention—maternal immunization—within the constraints of a project budget originally meant for an overall regional analysis.
Methods. We used the most common cluster analysis algorithm, K-means, and the most common measure of distance, Euclidean distance, to group 37 low-income, sub-Saharan African countries on the basis of 24 measures of economic development, general health resources, and past success in public health programs. The groups were tested for robustness and reviewed by regional disease experts.
Results. We explored 2-, 3- and 4-group clustering. Public health performance was consistently important in determining the groups. For the 2-group clustering, for example, infant mortality in Group 1 was 81 per 1,000 live births compared with 51 per 1,000 in Group 2, and 67% of children in Group 1 received DPT immunization compared with 87% in Group 2. The experts preferred four groups to fewer, on the ground that national decision makers would more readily recognize their country among four groups.

Conclusions. Clusters defined by K-means clustering made sense to subject experts and allowed a more detailed evaluation of the cost-effectiveness of maternal immunization within the constraint of the project budget. The method may be useful for other evaluations that, without having the resources to conduct separate analyses for each unit, seek to inform decision makers in numerous countries or subdivisions within countries, such as states or counties.

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
December 2017 Volume 95, Issue 4 Pages 683–896
http://onlinelibrary.wiley.com/doi/10.1111/milq.2017.95.issue-4/issuetoc
[Reviewed earlier]

Nature
Volume 554 Number 7690 pp5-132 1 February 2018
http://www.nature.com/nature/current_issue.html
[New issue; No digest content identified]

Nature Medicine
January 2018, Volume 24 No 1 pp1-112
http://www.nature.com/nm/journal/v24/n1/index.html
[Reviewed earlier]

Nature Reviews Immunology
January 2018 Vol 18 No 1
http://www.nature.com/nri/journal/v18/n1/index.html
[New issue; No digest content identified]

New England Journal of Medicine
February 1, 2018 Vol. 378 No. 5
http://www.nejm.org/toc/nejm/medical-journal
Health Policy Report
The Challenging Quest to Improve Rural Health Care
John K. Iglehart
In the United States, rural populations have a lower life expectancy than urban populations and face shortages of health care providers. This report discusses the challenges facing rural health care systems and efforts to expand the rural health care workforce.

Pediatrics
February 2018, VOLUME 141 / ISSUE 2
http://pediatrics.aappublications.org/content/141/2?current-issue=y
[New issue; No digest content identified]

Pharmaceutics
Volume 9, Issue 4 (December 2017)
http://www.mdpi.com/1999-4923/9/4
[Reviewed earlier]

PharmacoEconomics
Volume 36, Issue 1, January 2018
https://link.springer.com/journal/40273/36/1/page/1
[Reviewed earlier]

PLOS Currents: Disasters
http://currents.plos.org/disasters/
[Accessed 3 February 2018]
Research Article
Infectious Disease Risk and Vaccination in Northern Syria after 5 Years of Civil War: The MSF Experience
February 2, 2018 ·
Alan de Lima Pereira, Rosamund Southgate, Hikmet Ahmed, Penelope O'Connor, Vanessa Cramond, Annick Lenglet
Abstract
Introduction: In 2015, following an influx of population into Kobanê in northern Syria, Médecins Sans Frontières (MSF) in collaboration with the Kobanê Health Administration (KHA) initiated primary healthcare activities. A vaccination coverage survey and vaccine-preventable disease (VPD) risk analysis were undertaken to clarify the VPD risk and vaccination needs. This was followed by a measles Supplementary Immunization Activity (SIA). We describe the methods and results used for this prioritisation activity around vaccination in Kobanê in 2015.
Methods: We implemented a pre-SIA survey in 135 randomly-selected households in Kobanê using a vaccination history questionnaire for all children <5 years. We conducted a VPD Risk Analysis using MSF 'Preventive Vaccination in Humanitarian Emergencies' guidance to prioritize antigens with the highest public health threat for mass vaccination activities. A Measles SIA was then implemented and followed by vaccine coverage survey in 282 randomly-selected households targeting children <5 years.
Results: The pre-SIA survey showed that 168/212 children (79.3%; 95%CI=72.7-84.6%) had received one vaccine or more in their lifetime. Forty-three children (20.3%; 95%CI: 15.1-26.6%) had received all vaccines due by their age; only one was <12 months old and this child had received all vaccinations outside of Syria. The VPD Risk Analysis prioritised measles, Haemophilus Influenza type B (Hib) and Pneumococcus vaccinations. In the measles SIA, 3410 children aged 6-59 months were vaccinated. The use of multiple small vaccination sites to reduce risks associated with crowds in this active conflict setting was noted as a lesson learnt. The post-SIA survey estimated 82% (95%CI: 76.9-85.9%; n=229/280) measles vaccination coverage in children 6-59 months.
Discussion: As a result of the conflict in Syria, the progressive collapse of the health care system in Kobanê has resulted in low vaccine coverage rates, particularly in younger age groups. The repeated displacements of the population, attacks on health institutions and exodus of healthcare workers, challenge the resumption of routine immunization in this conflict

setting and limit the use of SIAs to ensure sustainable immunity to VPDs. We have shown that the risk for several VPDs in Kobanê remains high.
Conclusion: We call on all health actors and the international community to work towards re-establishment of routine immunisation activities as a priority to ensure that children who have had no access to vaccination in the last five years are adequately protected for VPDs as soon as possible.

PLoS Currents: Outbreaks
http://currents.plos.org/outbreaks/
[Accessed 27 January 2018]
[No new digest content identified]

PLoS Medicine
http://www.plosmedicine.org/
(Accessed 3 February 2018)
Editorial
What's coming for health science and policy in 2018? Global experts look ahead in their field
The PLOS Medicine Editors , Soumya Swaminathan, Robin S. Room, Louise C. Ivers, Graham Hillis, Rebecca F. Grais, Zulfiqar A. Bhutta, Peter Byass
| published 30 Jan 2018 PLOS Medicine
https://doi.org/10.1371/journal.pmed.1002498

PLoS Neglected Tropical Diseases
http://www.plosntds.org/
(Accessed 3 February 2018)
Policy Platform
Improved tools and strategies for the prevention and control of arboviral diseases: A research-to-policy forum
Piero Olliaro, Florence Fouque, Axel Kroeger, Leigh Bowman, Raman Velayudhan, Ana Carolina Santelli, Diego Garcia, Ronald Skewes Ramm, Lokman H. Sulaiman, Gustavo Sanchez Tejeda, Fabiàn Correa Morales, Ernesto Gozzer, César Basso Garrido, Luong Chan Quang, Gamaliel Gutierrez, Zaida E. Yadon, Silvia Runge-Ranzinger
| published 01 Feb 2018 PLOS Neglected Tropical Diseases
https://doi.org/10.1371/journal.pntd.0005967
Abstract
Background
Research has been conducted on interventions to control dengue transmission and respond to outbreaks. A summary of the available evidence will help inform disease control policy decisions and research directions, both for dengue and, more broadly, for all Aedes-borne arboviral diseases.
Method
A research-to-policy forum was convened by TDR, the Special Programme for Research and Training in Tropical Diseases, with researchers and representatives from ministries of health, in order to review research findings and discuss their implications for policy and research.

Results
The participants reviewed findings of research supported by TDR and others.
Surveillance and early outbreak warning. Systematic reviews and country studies identify the critical characteristics that an alert system should have to document trends reliably and trigger timely responses (i.e., early enough to prevent the epidemic spread of the virus) to dengue outbreaks. A range of variables that, according to the literature, either indicate risk of forthcoming dengue transmission or predict dengue outbreaks were tested and some of them could be successfully applied in an Early Warning and Response System (EWARS).
Entomological surveillance and vector management. A summary of the published literature shows that controlling Aedes vectors requires complex interventions and points to the need for more rigorous, standardised study designs, with disease reduction as the primary outcome to be measured. House screening and targeted vector interventions are promising vector management approaches. Sampling vector populations, both for surveillance purposes and evaluation of control activities, is usually conducted in an unsystematic way, limiting the potentials of entomological surveillance for outbreak prediction.
Combining outbreak alert and improved approaches of vector management will help to overcome the present uncertainties about major risk groups or areas where outbreak response should be initiated and where resources for vector management should be allocated during the interepidemic period.
Conclusions
The Forum concluded that the evidence collected can inform policy decisions, but also that important research gaps have yet to be filled.

PLoS One
http://www.plosone.org/
[Accessed 27 January 2018]
Research Article
Dynamic re-immunization of off-treatment childhood cancer survivors: An implementation feasibility study
Jennifer H. Han, Kathryn M. Harmoney, Elif Dokmeci, Jacqueline Torrez, Cathy M. Chavez, Loretta Cordova de Ortega, John F. Kuttesch, Martha Muller, Stuart S. Winter
Research Article | published 01 Feb 2018 PLOS ONE
https://doi.org/10.1371/journal.pone.0191804

PLoS Pathogens
http://journals.plos.org/plospathogens/
[Accessed 27 January 2018]
[No new digest content identified]

PNAS - Proceedings of the National Academy of Sciences of the United States of America
http://www.pnas.org/content/early/
[Accessed 3 February 2018]
Insecurity, polio vaccination rates, and polio incidence in northwest Pakistan
Amol A. Verma, Marcia P. Jimenez, Rudolf H. Tangermann, S. V. Subramanian and Fahad Razak

PNAS 2018; published ahead of print January 29, 2018,
https://doi.org/10.1073/pnas.1711923115

Significance

The international spread of poliovirus has been declared a Public Health Emergency of International Concern by the World Health Organization, and Pakistan is one of only three countries that have never stopped poliovirus circulation. We analyzed polio incidence and polio vaccination data from 32 districts of northwest Pakistan and constructed a measure of insecurity based on journalistic reports of deaths and injuries resulting from conflict-related security incidents. Insecurity was associated with reduced vaccinator access, reduced polio vaccination, and increased polio incidence. These findings provide strong scientific evidence that insecurity is an important obstacle to global polio eradication.

Abstract

Pakistan is one of three countries in which endemic transmission of poliovirus has never been stopped. Insecurity is often cited but poorly studied as a barrier to eradicating polio. We analyzed routinely collected health data from 32 districts of northwest Pakistan and constructed an index of insecurity based on journalistic reports of the monthly number of deaths and injuries resulting from conflict-related security incidents. The primary outcomes were the monthly incidence of paralytic polio cases within each district between 2007 and 2014 and the polio vaccination percentage from 666 district-level vaccination campaigns between 2007 and 2009, targeting ∼5.7 million children. Multilevel Poisson regression controlling for time and district fixed effects was used to model the association between insecurity, vaccinator access, vaccination rates, and polio incidence. The number of children inaccessible to vaccinators was 19.7% greater (95% CI: 19.2–20.2%), and vaccination rates were 5.3% lower (95% CI: 5.2–5.3%) in "high-insecurity" campaigns compared with "secure" campaigns. The unadjusted mean vaccination rate was 96.3% (SD=8.6) in secure campaigns and 88.3% (SD=19.2) in high-insecurity campaigns. Polio incidence was 73.0% greater (95% CI: 30–131%) during high-insecurity months (unadjusted mean = 0.13 cases per million people, SD=0.71) compared with secure months (unadjusted mean=1.23 cases per million people, SD=4.28). Thus, insecurity was associated with reduced vaccinator access, reduced polio vaccination, and increased polio incidence in northwest Pakistan. These findings demonstrate that insecurity is an important obstacle to global polio eradication.

Prehospital & Disaster Medicine

Volume 32 - Issue 6 - December 2017
https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue
[Reviewed earlier]

Preventive Medicine

Volume 106, Pages 1-236 (January 2018)
http://www.sciencedirect.com/science/journal/00917435/106
[Reviewed earlier]

Proceedings of the Royal Society B

10 January 2018; volume 285, issue 1870
http://rspb.royalsocietypublishing.org/content/285/1870?current-issue=y

[Reviewed earlier]

Public Health
February 2018 Volume 155, In Progress
http://www.publichealthjrnl.com/current
[New issue; No digest content identified]

Public Health Ethics
Volume 10, Issue 3 November 2017
http://phe.oxfordjournals.org/content/current
Original Articles
Health as an Intermediate End and Primary Social Good
Greg Walker
Public Health Ethics, Volume 11, Issue 1, 1 April 2018, Pages 6–19,
https://doi.org/10.1093/phe/phx009
Abstract
The article propounds a justification of public health interventionism grounded on personal health as an intermediate human end in the ethical domain, on an interpretation of Aristotle. This goes beyond the position taken by some liberals that health should be understood as a prudential good alone. A second, but independent, argument is advanced in the domain of the political, namely, that population health can be justified as a political value in its own right as a primary social good, following an interpretation of John Rawls's evolved understanding of such goods in his later works. The article sets the scene for these positions by highlighting how liberal theories focusing on freedom as non-interference, or making the harm principle the basis of legitimate public health interventions, undercut the capacity of the state to actively promote population health. The article points to theoretical resources on legitimacy and liberty—the 'salient coordinator account' of authority and freedom as non-domination—that may help avoid this risk. The role of reflective equilibrium incorporating incompletely theorized mid-level principles is emphasized to ensure that interventions are soundly justified. The application of these principles would ensure that interventions do not exceed the proper moral/political boundaries limiting the role of government.

Public Health and Normative Public Goods
Richard H Dees
Public Health Ethics, Volume 11, Issue 1, 1 April 2018, Pages 20–26,
https://doi.org/10.1093/phe/phx020
Abstract
Public health is concerned with increasing the health of the community at whole. Insofar as health is a 'good' and the community constitutes a 'public', public health by definition promotes a 'public good'. But 'public good' has a particular and much more narrow meaning in the economics literature, and some commentators have tried to limit the scope of public health to this more narrow meaning of a 'public good'. While such a move makes the content of public health less controversial, it also strips important goals from the realm of public health, goals that traditionally have been, and morally should be, a part of it. Instead, I will argue, while public health should be defined by public goods, it should be defined by a broader conception of

public goods that I shall call 'normative public goods', goods that ought to be treated as if they were public goods in the more narrow sense.

Public Health Reports
Volume 133, Issue 1, January/February 2018
http://phr.sagepub.com/content/current
[Reviewed earlier]

Qualitative Health Research
Volume 28, Issue 3, February 2018
http://qhr.sagepub.com/content/current
Special Issue: Methods
[Reviewed earlier]

Research Ethics
Volume 13, Issue 3-4, July-October 2017
http://journals.sagepub.com/toc/reab/current
[Reviewed earlier]

Reproductive Health
http://www.reproductive-health-journal.com/content
[Accessed 3 February 2018]
Commentary
'What gets measured gets managed': revisiting the indicators for maternal and newborn health programmes
The health of women and children are critical for global development. The Sustainable Development Goals (SDG) agenda and the Global Strategy for Women's, Children's, and Adolescent's Health 2016–2030 aim to re...
Authors: A. C. Moran, A. B. Moller, D. Chou, A. Morgan, S. El Arifeen, C. Hanson, L. Say, T. Diaz, I. Askew and A. Costello
Citation: Reproductive Health 2018 15:19
Published on: 2 February 2018

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

Risk Analysis
January 2018 Volume 38, Issue 1 Pages 1–211
http://onlinelibrary.wiley.com/doi/10.1111/risa.2018.38.issue-1/issuetoc
[Reviewed earlier]

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

Science
02 February 2018 Vol 359, Issue 6375
http://www.sciencemag.org/current.dtl
[New issue; No digest content identified]

Science Translational Medicine
31 January 2018 Vol 10, Issue 426
http://stm.sciencemag.org/
Research Articles
Eradication of spontaneous malignancy by local immunotherapy
By Idit Sagiv-Barfi, Debra K. Czerwinski, Shoshana Levy, Israt S. Alam, Aaron T. Mayer, Sanjiv S. Gambhir, Ronald Levy
Science Translational Medicine31 Jan 2018 Full Access
In situ vaccination with low doses of TLR ligands and anti-OX40 antibodies can cure widespread cancers in preclinical models.
Abstract
Deliver locally, act globally
Mobilizing endogenous T cells to fight tumors is the goal of many immunotherapies. Sagiv-Barfi et al. investigated a combination therapy in multiple types of mouse cancer models that could provide sustainable antitumor immunity. Specifically, they combined intratumoral delivery of a TLR9 ligand with OX40 activation to ramp up T cell responses. This dual immunotherapy led to shrinkage of distant tumors and long-term survival of the animals, even in a stringent spontaneous tumor model. Both of these stimuli are in clinical trials as single agents and could likely be combined at great benefit for cancer patients.
Abstract
It has recently become apparent that the immune system can cure cancer. In some of these strategies, the antigen targets are preidentified and therapies are custom-made against these targets. In others, antibodies are used to remove the brakes of the immune system, allowing preexisting T cells to attack cancer cells. We have used another noncustomized approach called in situ vaccination. Immunoenhancing agents are injected locally into one site of tumor, thereby triggering a T cell immune response locally that then attacks cancer throughout the body. We have used a screening strategy in which the same syngeneic tumor is implanted at two separate sites in the body. One tumor is then injected with the test agents, and the resulting immune response is detected by the regression of the distant, untreated tumor. Using this assay, the combination of unmethylated CG–enriched oligodeoxynucleotide (CpG)—a Toll-like receptor 9 (TLR9) ligand—and anti-OX40 antibody provided the most impressive results. TLRs are components of the innate immune system that recognize molecular patterns on pathogens. Low doses of CpG injected into a tumor induce the expression of OX40 on CD4+ T cells in the microenvironment in mouse or human tumors. An agonistic anti-OX40 antibody can then trigger

a T cell immune response, which is specific to the antigens of the injected tumor. Remarkably, this combination of a TLR ligand and an anti-OX40 antibody can cure multiple types of cancer and prevent spontaneous genetically driven cancers.

Social Science & Medicine
Volume 190, Pages 1-278 (October 2017)
http://www.sciencedirect.com/science/journal/02779536/190?sdc=1
[Reviewed earlier]

Travel Medicine and Infectious Diseases
November-December, 2017 Volume 20
http://www.travelmedicinejournal.com/
[Reviewed earlier]

Tropical Medicine & International Health
February 2018 Volume 23, Issue 2 Pages i–iv, 121–250
http://onlinelibrary.wiley.com/doi/10.1111/tmi.2018.23.issue-2/issuetoc
Reviews
Sustained adoption of water, sanitation and hygiene interventions: systematic review (pages 122–135)
Nina A. Martin, Kristyna R. S. Hulland, Robert Dreibelbis, Farhana Sultana and Peter J. Winch
Version of Record online: 8 DEC 2017 | DOI: 10.1111/tmi.13011
Abstract
Objective
To understand factors that influence sustained adoption of water, sanitation and hygiene (WASH) technologies or behaviours.
Methods
Systematic review of the current literature. Articles were gathered from databases of peer-reviewed articles and grey literature, and screened for relevance. After exclusion, we created a descriptive map of 148 articles and analysed in-depth 44 articles that had an explicit focus on promoting or evaluating sustained adoption or programme sustainability. Twenty-two of these articles met our definition of measuring sustained adoption.
Results
Definitions of sustained adoption varied widely and were often inadequate, making comparison of sustained adoption across studies difficult. The time frame for measurements of sustained adoption is frequently inadequate for examination of longer-term behaviour change.
Conclusions
Ideally, an evaluation should specify the project period and describe the context surrounding adoption, make measurements at multiple time points, diversify measurement methods and describe and measure a range of factors affecting sustained adoption. Additional consideration needs to be given to developing behaviour change models that emphasise factors related to sustained adoption, and how they differ from those related to initial adoption.

Original Research Papers

Context matters: a multicountry analysis of individual- and neighbourhood-level factors associated with women's sanitation use in sub-Saharan Africa (pages 173–192)

Samantha Winter, Robert Dreibelbis and Francis Barchi
Version of Record online: 26 DEC 2017 | DOI: 10.1111/tmi.13016

Vaccine

Volume 36, Issue 5 Pages 595-770 (29 January 2018)
https://www.sciencedirect.com/journal/vaccine/vol/36/issue/5
Regular papers

The vaccine hesitancy scale: Psychometric properties and validation

Original research article
Pages 660-667
Gilla K. Shapiro, Ovidiu Tatar, Eve Dube, Rhonda Amsel, ... Zeev Rosberger

Abstract

Introduction

The SAGE Working Group on Vaccine Hesitancy developed a vaccine hesitancy measure, the Vaccine Hesitancy Scale (VHS). This scale has the potential to aid in the advancement of research and immunization policy but has not yet been psychometrically evaluated.

Methods

Using a cross-sectional design, we collected self-reported survey data from a large national sample of Canadian parents from August to September 2016. An online questionnaire was completed in English or French. We used exploratory and confirmatory factor analysis to identify latent constructs underlying parents' responses to 10 VHS items (response scale 1–5, with higher scores indicating greater hesitancy). In addition to the VHS, measures included socio-demographics items, vaccine attitudes, parents' human papillomavirus (HPV) vaccine decision-making stage, and vaccine refusal.

Results

A total of 3779 Canadian parents completed the survey in English (74.1%) or French (25.9%). Exploratory and confirmatory factor analysis revealed a two-factor structure best explained the data, consisting of 'lack of confidence' ($M = 1.98$, $SD = 0.72$) and 'risks' ($M = 3.07$, $SD = 0.95$). Significant Pearson correlations were found between the scales and related vaccine attitudes. ANOVA analyses found significant differences in the VHS sub-scales by parents' vaccine decision-making stages ($p < .001$). Independent samples t-tests found that the VHS sub-scales were associated with HPV vaccine refusal and refusing another vaccine ($p < .001$). Socio-demographic differences in the VHS were found; however, effect sizes were small ($\eta 2 < 0.02$).

Conclusions

The VHS was found to have two factors that have construct and criterion validity in identifying vaccine hesitant parents. A limitation of the VHS was few items that loaded on the 'risks' component and a lack of positively and negatively worded items for both components. Based on these results, we suggest modifying the wording of some items and adding items on risk perceptions.

Assessing determinants of the intention to accept a pertussis cocooning vaccination: A survey among healthcare workers in maternity and paediatric care

Open access - Original research article
Pages 736-743

Olga Visser, Marlies E.J.L. Hulscher, Laura Antonise-Kamp, Reinier Akkermans, ... Jeannine L.A. Hautvast

Content and accuracy of vaccine information on pediatrician blogs
Original research article
Pages 765-770
Mersine A. Bryan, Hailey Gunningham, Megan A. Moreno

Vaccine: Development and Therapy
https://www.dovepress.com/vaccine-development-and-therapy-archive111
(Accessed 27 January 2018)
[No new digest content identified]

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 27 January 2018)
Open Access Review
Radiation and Anti-Cancer Vaccines: A Winning Combination
by Alexandra Cadena, Taylor R. Cushman, Clark Anderson, Hampartsoum B. Barsoumian, James W. Welsh and Maria Angelica Cortez
Vaccines 2018, 6(1), 9; doi:10.3390/vaccines6010009 - 30 January 2018
Abstract
The emerging combination of radiation therapy with vaccines is a promising new treatment plan in the fight against cancer. While many cancer vaccines such as MUC1, p53 CpG oligodeoxynucleotide, and SOX2 may be great candidates for antitumor vaccination, there still remain many investigations to be done into possible vaccine combinations. One fruitful partnership that has emerged are anti-tumor vaccines in combination with radiation. Radiation therapy was previously thought to be only a tool for directly or indirectly damaging DNA and therefore causing cancer cell death. Now, with much preclinical and clinical data, radiation has taken on the role of an in situ vaccine. With both cancer vaccines and radiation at our disposal, more and more studies are looking to combining vaccine types such as toll-like receptors, viral components, dendritic-cell-based, and subunit vaccines with radiation. While the outcomes of these combinatory efforts are promising, there is still much work to be covered. This review sheds light on the current state of affairs in cancer vaccines and how radiation will bring its story into the future

Open Access Review
Challenges and Achievements in Prevention and Treatment of Smallpox
by Sharon Melamed, Tomer Israely and Nir Paran
Vaccines 2018, 6(1), 8; doi:10.3390/vaccines6010008 - 29 January 2018
Abstract
Declaration of smallpox eradication by the WHO in 1980 led to discontinuation of the worldwide vaccination campaign. The increasing percentage of unvaccinated individuals, the existence of its causative infectious agent variola virus (VARV), and the recent synthetic achievements increase the threat of intentional or accidental release and reemergence of smallpox. Control of smallpox would require an emergency vaccination campaign, as no other protective measure

has been approved to achieve eradication and ensure worldwide protection. Experimental data in surrogate animal models support the assumption, based on anecdotal, uncontrolled historical data, that vaccination up to 4 days postexposure confers effective protection. The long incubation period, and the uncertainty of the exposure status in the surrounding population, call for the development and evaluation of safe and effective methods enabling extension of the therapeutic window, and to reduce the disease manifestations and vaccine adverse reactions. To achieve these goals, we need to evaluate the efficacy of novel and already licensed vaccines as a sole treatment, or in conjunction with immune modulators and antiviral drugs. In this review, we address the available data, recent achievements, and open questions

Value in Health
January 2018 Volume 21, Issue 1, p1-116
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

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

Frontiers in Immunology
Accepted on 22 January 2018
doi: 10.3389/fimmu.2018.00180
Research Topic [9 articles]
Reassessing twenty years of vaccine development against tuberculosis
UE Schaible, SHE Kaufmann -
Tuberculosis remains the most threatening bacterial infection worldwide with 10.4 million infections and a death toll of 1.7 million people in 2016 according to World Health Organization (WHO) statistics (WHO, 2016). This makes tuberculosis the deadliest infectious disease of all. To those not familiar with this situation, this generally comes as a big surprise because drugs, diagnostics and a vaccine are available as control measures. Currently, means of interventions, however, are insufficient and better ones are urgently needed for early detection, successful treatment and efficacious prevention.

20 years ago, in March 1997, the (WHO) had reported on the successful introduction of a novel therapeutic regiment, directly observed treatment, short course (DOTS). Compared to a 41% cure rate of other treatment programs, DOTS achieved a 77% rate. In a scenario, when tuberculosis was estimated to kill annually at least one quarter of all patients worldwide, DOTS was therefore hailed as important milestone in tuberculosis control. It was hoped that the global tuberculosis epidemic could be controlled by the beginning of the 21st century, whereas otherwise an increase to nearly 9 million annual cases by 2005 was projected. Indeed, numbers of deaths have been reduced by 2017, however, 10.8 million new tuberculosis cases in 2016, as well as the global increase in incidences of patients infected with multi-drug resistant (MDR) strains spoiled the success story. Number of cases with MDR tuberculosis resistance against the two frontline drugs, rifampicin and isoniazid, tripled between 2009 and 2016 to 480.000 cases.

Alarmingly, in several East European and Central Asian countries, the rate of MDR tuberculosis cases already exceeds 50% (WHO, 2017). Importantly, treatment of MDR patients comes with a significant economic burden to both, the individual as well as the society (Dheda et al., 2017). Despite the glimmer of hope provided by the recent introduction into the clinics of two new anti-mycobacterial drugs, Bedaquilin and Delamanid, patients with strains resistant to these new drugs have already been reported (Bloemberg et al, 2015).

Consequently, the G20 leader's declaration from June 2017 explicitly singled out MDR tuberculosis to be tackled with highest priority over other infections (G20 Leader's Declaration, 2017). This has led to the WHO Global Ministerial Conference on "Ending TB in Sustainable Development Era: A Multisectoral Response" in Moscow, November 16-17, 2017 (http://www.who.int/tb/features_archive/Online_Consultation_MinisterialConferenceDeclaration/en/), which will be followed by The Stop TB Partnership Board Meeting in Delhi, March 2018 (www.stoptb.org). These two meetings are paving the way for the planned high level meeting of heads of state on tuberculosis to be held at the UN in New York, September 2018. Thus, tuberculosis has finally gotten on the agenda of political decision makers.

Tuberculosis is caused by members of the Mycobacterium (M.) tuberculosis complex, facultative intracellular bacteria able to thrive within otherwise potent innate defense cells, such as macrophages. More than 90 % of all individuals infected with M. tuberculosis remain in a lifelong latent stage by immunity mediated sequestering of the mycobacteria within granulomas. Reactivation of a latent infection occurs in the remaining 10 %, usually due to subdued to severe immune suppressive conditions. Thus, in principle, human immunity is able to control - but likely not sterilely eliminate - the infection.

Unfortunately, the daunting race between the development of new therapeutic compounds and the evolution of resistance mutations will hardly produce a winner. This cycle can only be broken by enhancing population wide immune protection through a better vaccine. Immune protection of the only anti-tuberculosis vaccine currently in use, M. bovis Bacillus Calmette Guerin (BCG) is limited to severe disseminated primary infections in early childhood. In contrast, its protective efficacy against pulmonary tuberculosis in all age groups is dissatisfying and geographically highly diverse with the tropical areas showing the lowest efficacy rates. Despite worldwide vaccination coverage, the impact of BCG on the steep decrease of tuberculosis incidence rates in the developed world is therefore questionable and can rather be attributed to improved social, housing and nutritional conditions, better health care, surveillance and treatment systems. Consequently, the last 20 years saw tremendous efforts to improve vaccination strategies against tuberculosis.

For this Research Topic, we assembled experts to review and assess the current status of novel anti-tuberculosis vaccine candidates, their efficacy and prospects for implementation as well as the pitfalls and possible measures for improvement. Different rational approaches of vaccine design were followed in recent years and the first novel vaccine candidates are currently being evaluated in clinical phases II and III, and initial results chastening the expectations. Therefore, a critical reassessment of all candidates is inevitable. The different strategies followed include genetically improved BCG strains, attenuated M. tuberculosis variants, recombinant viral vectors and subunit vaccine candidates combined with novel more potent adjuvants. In addition, immune targets of novel vaccine types and immune enhancing strategies to improve vaccination efficacy have been identified.

In our Research Topic, Cardona summarizes how our current knowledge of the immune responses to M. tuberculosis can instruct vaccine design. The lessons learned from the old BCG vaccine and its future potential is detailed by Dockrell & Smith. The TBVAC2020 consortium consisting of a large number of European researchers and funded by the European Union, summarizes the different tuberculosis vaccine candidates, which they are developing and where they stand. This review also includes a comprehensive table of all current tuberculosis vaccine types studied. Nieuwenhuizen et al. discuss the current state of the promising recombinant BCG VPM1002, which has advanced into clinical phase III. Gonzalo-Asensio et al. review the attenuated vaccine strain MTBVAC, which is based on the deletion of two virulence associated genes in a clinical M. tuberculosis isolate. The role of polyfunctional CD4+ T cells in immune protection against M. tuberculosis is summarized by Lewinsohn et al. To enhance vaccine efficacy, different strategies, which can modulate innate immunity during vaccination are discussed by Schaible et al., whereas Lang & Schick look into how helminth infections affect anti-tuberculosis immunity at the macrophage level.
In summary, we believe that this Research Topic provides an excellent overview on the current state of anti-tuberculosis vaccine and corresponding research and the prospect of vaccine success and failure.

Cancer Epidemiology
Volume 53, April 2018, Pages 27–34
https://www.sciencedirect.com/science/journal/18777821/53/supp/C
Research Reports
Descriptive patterns and trends
Productivity losses due to premature mortality from cancer in Brazil, Russia, India, China, and South Africa (BRICS): A population-based comparison
Highlights
:: Lost productivity can be a complementary measure of cancer burden.
:: Lost productivity due to cancer in BRICS is significant – $46.3 billion annually.
:: China had the largest total productivity loss, due to population size.
:: South Africa had the highest cost per cancer death, and India the lowest.
:: Country differences highlight the need for localised cancer control strategies.
Abstract
Background
Over two-thirds of the world's cancer deaths occur in economically developing countries; however, the societal costs of cancer have rarely been assessed in these settings. Our aim was to estimate the value of productivity lost in 2012 due to cancer-related premature mortality in the major developing economies of Brazil, the Russian Federation, India, China and South Africa (BRICS).
Methods
We applied an incidence-based method using the human capital approach. We used annual adult cancer deaths from GLOBOCAN2012 to estimate the years of productive life lost between cancer death and pensionable age in each country, valued using national and international data for wages, and workforce statistics. Sensitivity analyses examined various methodological assumptions.Results
The total cost of lost productivity due to premature cancer mortality in the BRICS countries in 2012 was $46·3 billion, representing 0·33% of their combined gross domestic product. The

largest total productivity loss was in China ($28 billion), while South Africa had the highest cost per cancer death ($101,000). Total productivity losses were greatest for lung cancer in Brazil, the Russian Federation and South Africa; liver cancer in China; and lip and oral cavity cancers in India.
Conclusion
Locally-tailored strategies are required to reduce the economic burden of cancer in developing economies. **Focussing on tobacco control, vaccination programs and cancer screening, combined with access to adequate treatment, could yield significant gains for both public health and economic performance of the BRICS countries.**

International Journal of Environmental Research and Public Health
2018, 15, 185; doi:10.3390/ijerph15020185
Article
Exploring Facilitators and Barriers to Initiation and Completion of the Human Papillomavirus (HPV) Vaccine Series among Parents of Girls in a Safety Net System
Sean T. O'Leary 1,2,*, Steven Lockhart 2, Juliana Barnard 1,2, Anna Furniss 2,
Miriam Dickinson 2,3, Amanda F. Dempsey 1,2, Shannon Stokley 4, Steven Federico 5,
Michael Bronsert 2 and Allison Kempe 1,2,6
Abstract: Objective: To assess, among parents of predominantly minority, low-income adolescent girls who had either not initiated (NI) or not completed (NC) the HPV vaccine series, attitudes and other factors important in promoting the series, and whether attitudes differed by language preference.
Design/Methods: From August 2013–October 2013, we conducted a mail survey among parents of girls aged 12–15 years randomly selected from administrative data in a Denver safety net system; 400 parents from each group (NI and NC) were targeted. Surveys were in English or Spanish.
Results: The response rate was 37% (244/660; 140 moved or gone elsewhere; 66% English-speaking, 34% Spanish-speaking). Safety attitudes of NIs and NCs differed, with 40% NIs vs. 14% NCs reporting they thought HPV vaccine was unsafe ($p < 0.0001$) and 43% NIs vs. 21% NCs that it may cause long-term health problems ($p < 0.001$). Among NCs, 42% reported they did not know their daughter needed more shots (English-speaking, 20%, Spanish-speaking 52%) and 39% reported that "I wasn't worried about the safety of the HPV vaccine before, but now I am" (English-speaking, 23%, Spanish-speaking, 50%). Items rated as very important among NIs in the decision regarding vaccination included: more information about safety (74%), more information saying it prevents cancer (70%), and if they knew HPV was spread mainly by sexual contact (61%).
Conclusions: Safety concerns, being unaware of the need for multiple doses, and low perceived risk of infection remain significant barriers to HPV vaccination for at-risk adolescents. Some parents' safety concerns do not appear until initial vaccination.

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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 3 February 2018
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 3 February 2018
3 Feb 2018
Philippines gripped by dengue vaccine fears

The Economist
http://www.economist.com/
Accessed 3 February 2018
[No new, unique, relevant content]

Financial Times
http://www.ft.com/home/uk
Accessed 3 February 2018
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 3 February 2018
Despite Doubters, Moderna Raises $500 Million, Is Now Worth $7 Billion
Matthew Herper, Forbes Staff

Moderna Therapeutics, a biotechnology firm that is developing drugs that work on a genetic messaging system that is essentially to all living cells, has raised $500 million from a group of new and current investors.

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 3 February 2018
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/

Accessed 3 February 2018
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 3 February 2018
[No new, unique, relevant content]

Huffington Post UK
http://www.huffingtonpost.co.uk/
Accessed 3 February 2018
Why It's Our Duty To Get Immunised
| 29 January 2018
…The flu outbreak is just one example of a crisis which could have been averted if the public was more proactive in its approach to managing its own health. The flu vaccine is widely available, for the price of a cinema ticket and at multiple convenient locations on the high street, ranging from independent pharmacies to high street chains and even supermarkets.

New Yorker
http://www.newyorker.com/
Accessed 3 February 2018
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 3 February 2018
U.S. Flu Outbreak Worsens; Hospitalizations Highest in Nearly a Decade: CDC
The U.S. flu outbreak worsened over the past week as more people headed to doctors' offices and emergency rooms, with hospitalizations at the highest in nearly 10 years, U.S. health officials said on Friday.
Feb. 2, 2018

India Wants to Give Half a Billion People Free Health Care
1 February 2018
India announced on Thursday a sweeping plan to give half a billion poor Indians free access to health care, as Prime Minister Narendra Modi seeks to address rising demands for greater economic and social protections before national elections next year….The health care plan, part of the government's 2018-19 budget presented on Thursday, would offer 100 million families up to 500,000 rupees, or about $7,860, of coverage each year. That sum, while small by Western standards, would be enough to cover the equivalent of five heart surgeries in India. Officials did not outline eligibility requirements, and many details of the program have yet to be finalized.

Scientific American
https://www.scientificamerican.com/
Accessed 3 February 2018
Seth Berkley: A Completely Preventable Public Health Crisis
1 February 2018
An outbreak of diphtheria in a Rohingya refugee camp in Bangladesh makes it clear that these

people were living in substandard conditions before they fled Myanmar
… This deadly respiratory disease is as preventable as it is infectious, thanks to one of the most widely available vaccines in the world. So, while the densely populated conditions may have facilitated the spread of the disease, the refugee camps are not the cause. The fact that there is a diphtheria outbreak in the first place is a clear indication that these people did not have access to even the most basic vaccines and brings into question the conditions they were living in before they arrived at the camp. This outbreak is not the product of conditions within the camps, but rather a deadly legacy of the conditions in which they had been living before they fled Myanmar.

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 3 February 2018
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 3 February 2018
[No new, unique, relevant content]

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Think Tanks et al

Brookings
http://www.brookings.edu/
Accessed 3 February 2018
[No new relevant content]

Center for Global Development
http://www.cgdev.org/page/press-center
Accessed 3 February 2018
[No new relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 3 February 2018
[No new relevant content]

CSIS
https://www.csis.org/
Accessed 3 February 2018
[No new relevant content]

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

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