April 28, 2020

VoICE: Using high-impact evidence for advocacy

Introduction to the Value of Immunization Compendium of Evidence (VoICE)

World Immunization Week 2020 Webinar

JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

INTERNATIONAL
VACCINE ACCESS
CENTER

Introductions

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Webinar Outline

1. VoICE: Turning evidence into advocacy
2. Immunization economics: Poverty reduction
3. Advocacy evidence: Immunization and disease outbreaks
4. Immunization as a tool for healthcare system strengthening
5. Discussion/Q&A

Research

Peer-reviewed publication

VoICE
The Value of Immunization Compendium of Evidence

Policymakers

Practitioners

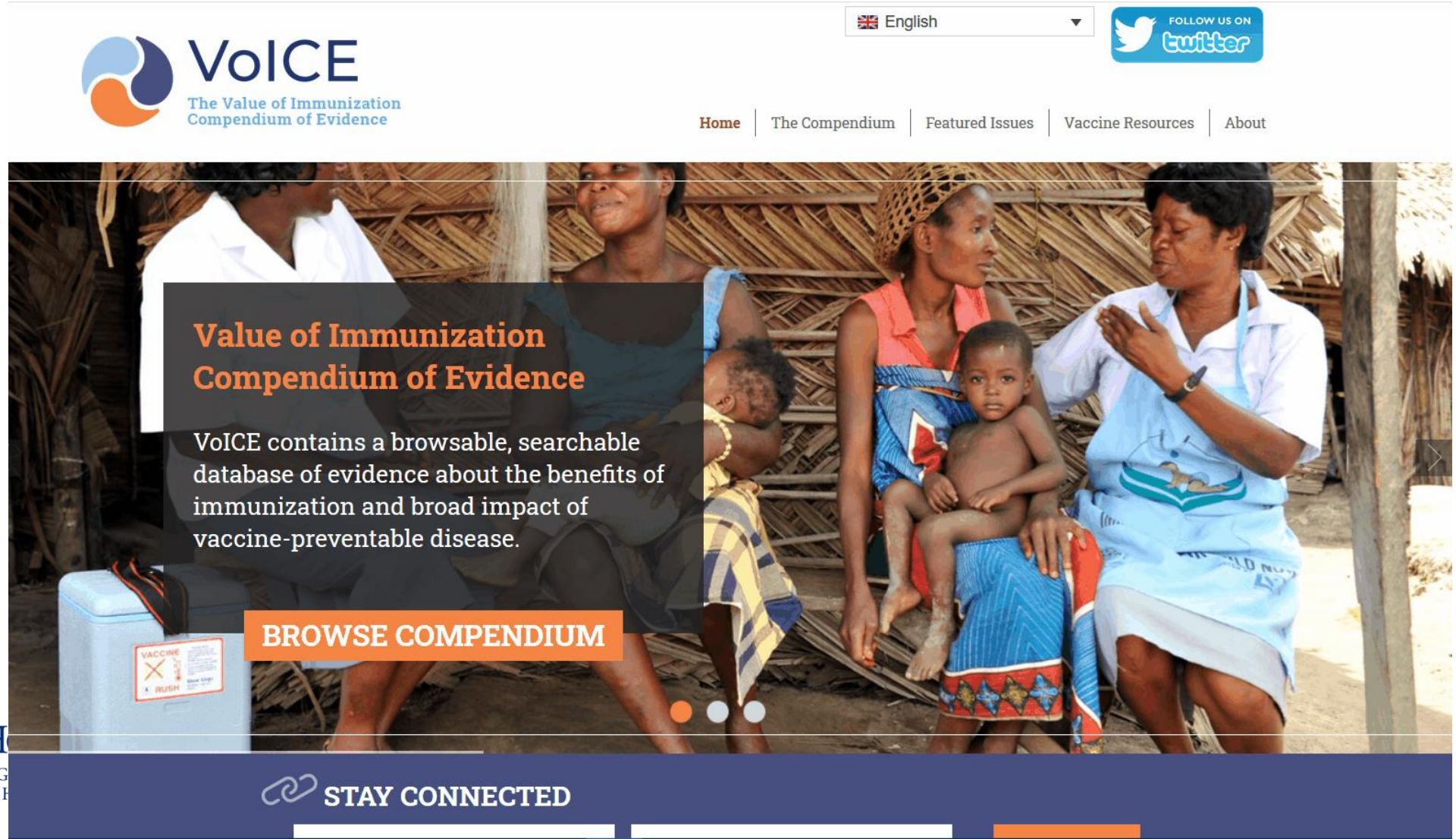
Immunization advocates

VoICE contains a searchable database of credible, scientific evidence paired with advocacy messaging on the broad benefits of immunization

- Monthly systematic review of vaccine literature
- Search by term, vaccine, location
- Key concepts paired to peer-reviewed research and study summaries

The VoICE Compendium
A Database of Evidence for Advocacy

Using the VoICE Compendium Database



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Use Case:
Immunization Programs Help Reduce Poverty

Immunization Programs Help Reduce Poverty

BROWSE TOPICS

- Health
- Education
- Economics
  - Cost Effectiveness
  - Cost of Treating Illness
  - Economic Growth and Productivity
  - **Poverty**
  - Return on Investment
- Equity
- Health Systems and Integration
- Global Issues

Poverty

The **Poverty** sub-topic includes information on the interactions between and the impact of vaccine-preventable diseases and immunization on the wealth status of individuals and families.

6 KEY CONCEPTS

Vaccines represent a valuable pro-poor intervention that not only improves health but also protects poor households from catastrophic and improverishing health expenditures.

VIEW EVIDENCE >

Children living in poverty are less likely to receive their vaccines on time, increasing their vulnerability to infections.

VIEW EVIDENCE >

Vaccines can help people avoid economic impoverishment resulting from medical costs.

VIEW EVIDENCE >

Vaccination can help to diminish or eliminate the increased mortality risk of children living in poverty.

VIEW EVIDENCE >

In addition to causing substantial child mortality, pneumonia also pushes many families into poverty; Vaccination can protect against both.

Vaccines can help people avoid economic impoverishment resulting from medical costs.

CLOSE EVIDENCE

Key Evidence: A study modeling the relationship between disease and poverty in Ethiopia found that among the top 20 causes of death in Ethiopia, diarrhea and lower respiratory infections (LRIs) are the top two drivers of medical impoverishment. It is estimated that in 2013, out-of-pocket direct medical costs for diarrheal disease drove an estimated 164,000 households below the poverty line (representing 47% of all the diarrhea cases), and LRIs led to an estimated 59,000 cases of poverty (17% of LRI cases). Of the top 10 health-associated drivers of poverty, four are at least partially vaccine-preventable (1. Diarrhea, 2. LRI, 4. TB. 10. Pertussis).

View Publication >

Key Evidence: Costs for treatment for rotavirus at a large urban hospital in Malaysia led one third of families to experience catastrophic health expenditures (CHC). When direct and indirect costs of treating rotavirus were considered, almost 9 in 10 families spent more than 10% of their monthly household income on treating rotavirus. In addition, 6% of families were pushed into poverty after paying for treatment.

View Publication >

Key Evidence: In a study modeling the economic impact of immunization in 41 low- and middle-income countries, the authors estimate that 24 million cases of medical impoverishment would be averted through the use of vaccines administered from 2016-2030. The largest proportion of poverty cases averted would occur in the poorest 40% of these populations, demonstrating that vaccination can provide financial risk protection to the most economically vulnerable.

View Publication >

Immunization Programs Help Reduce Poverty

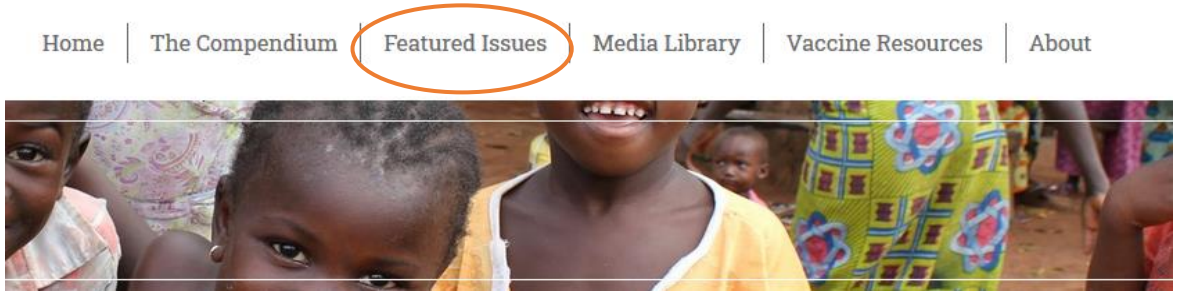
Key Concept

Vaccines can help people avoid economic impoverishment resulting from medical costs.

Key Evidence: In a study modeling the economic impact of immunization in 41 low- and middle-income countries, the authors estimate that 24 million cases of medical impoverishment would be averted through the use of vaccines administered from 2016-2030. The largest proportion of poverty cases averted would occur in the poorest 40% of these populations, demonstrating that vaccination can provide financial risk protection to the most economically vulnerable.

Chang, A.Y., Riumallo-Herl, C., Perales, N.A., et al. 2018. The equity impact vaccines may have on averting deaths and medical impoverishment in developing countries. Health Affairs. 37(2).

View Publication >



Equity and Poverty Reduction Impact of Vaccines

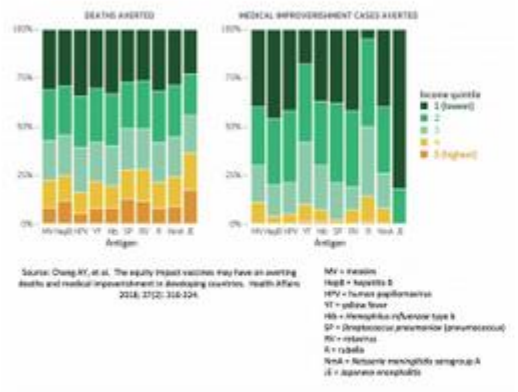
A piece of Key Evidence is typically < 100 words

Featured Issues take a deep dive into a topic, typically closer to 1,000 words

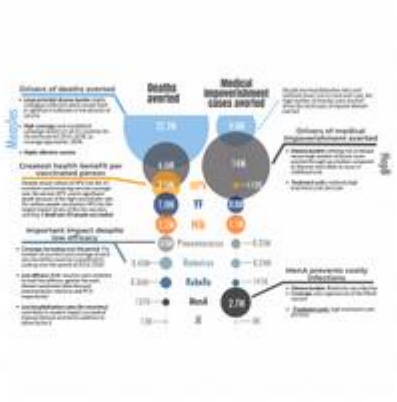
Provide more robust synthesis of the evidence on a given topic

Media Library

To download files from the VoICE Media Library, click on the media you wish to download, then right click to save the media locally.



Deaths and medical impoverishment averted by vaccines infographic



Drivers of deaths and cases of medical impoverishment averted in 41 countries infographic

Financial risks of medical impoverishment for families living near the poverty line infographic

FILTER BY TOPIC

Poverty

FILTER BY TYPE

All

POVERTY ×

Advocacy evidence: Immunization and disease outbreaks

Immunization and Disease Outbreaks

Outbreaks

Pre-emptive emergency preparedness delivers a high return on investment in the the event of an infectious disease outbreak.

VIEW EVIDENCE >

Outbreaks of vaccine-preventable diseases have costly impacts on health systems and governments.

VIEW EVIDENCE >

Disease outbreaks significantly impact a country's economy due to productivity losses and impact on the tourism, import and transportation industries.

VIEW EVIDENCE >

Immunization and Disease Outbreaks

Featured Issues

Vaccine-preventable Outbreaks: Becoming All Too Common and Costly

- Highlights a curated selection of high-quality scientific evidence from credible sources
- Key messages put this evidence into advocacy-friendly language
- Includes in-depth detailed synthesis of evidence and infographics

Immunization and Disease Outbreaks

Evidence on Full Immunization for Healthcare Workers

- Vaccination of healthcare workers is especially critical to minimizing the spread of an emerging outbreak
- Several studies have demonstrated the significant return on investment to be had by ensuring HCWs are fully immunized
- Estimated ROI on vaccinating healthcare workers against pertussis estimated 2.5 – 4 x return on investment

Calugar A, Ortega-Sanchez I, Tiwari T et al. 2006. Nosocomial pertussis: Costs of an outbreak and benefits of vaccinating health care workers. *CID*. 42.

Tariq, L., Mangen, M. J., Hövels, A., 2015. Modelling the return on investment of preventatively vaccinating healthcare workers against pertussis. *BMC Infectious Disease*. 15(1).

Immunization Strengthens Health Systems

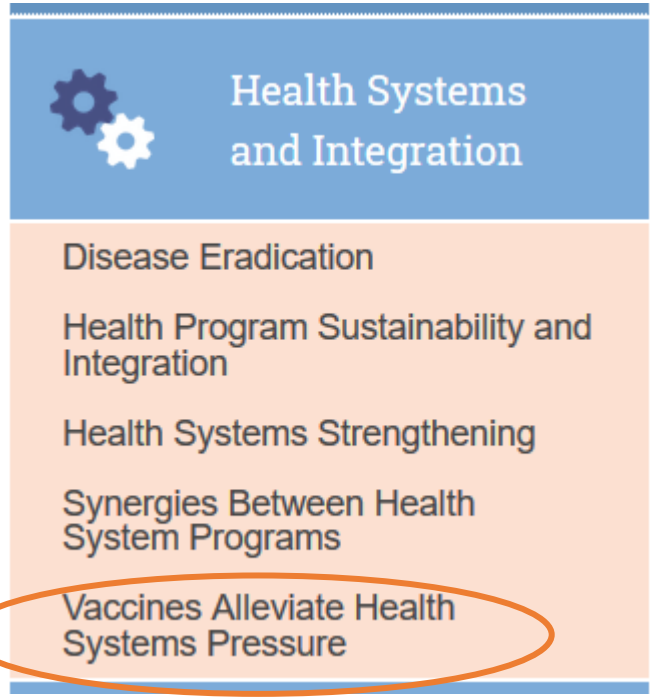
Immunization Can Reduce Burdens on Health Systems During Outbreaks

"Routine immunisation is absolutely critical always, but is particularly critical at a time like this because if other outbreaks occur, they will overwhelm the health system."

- Seth Berkley, CEO Gavi Vaccine Alliance

"Outbreaks of vaccine-preventable diseases could be catastrophic for communities and health systems already battling the impacts of COVID-19, and substantively increase sickness and fatalities"

Immunization reduces burdens on health systems during outbreaks



Immunization can decrease hospital admissions, thus alleviating pressure on overburdened health systems.

Studies have found major decreases in hospitalization in young children after vaccine introductions for rotavirus and pneumococcal conjugate vaccine (PCV):

- **80% decline in rotavirus hospitalization in U.S. children <5**
- **57% decline in rotavirus outpatient and ED visits in U.S. children <5**
- **33% decline in diarrhea hospitalizations in Botswana in infants**
- **73% decrease in invasive pneumococcal disease in NZ children <6**

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Thank you!

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