CEO BOARD UPDATE

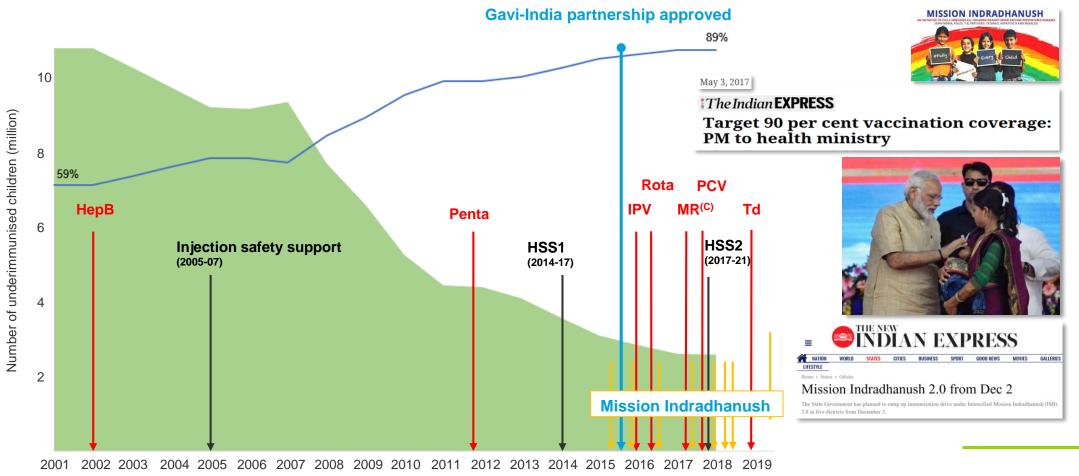
Seth Berkley, CEO 4 December 2019, New Delhi





www.gavi.org

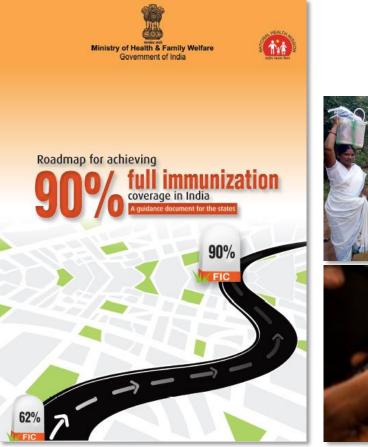
Gavi-India partnership: catalysing transformation of world's largest immunisation programme





India DTP3 coverage

Gavi-India partnership: looking ahead





- Coverage and equity support through HSS2: 2017-2021
- On track for transition and already selffinancing penta, IPV, rota, MR and select HSS innovations
- Partnership in market shaping on vaccines and exploring collaboration on cold chain technologies
- Gavi donor since 2013



Key developments in global landscape



2019 Lasker~Bloomberg Public Service Award honours the Vaccine Alliance







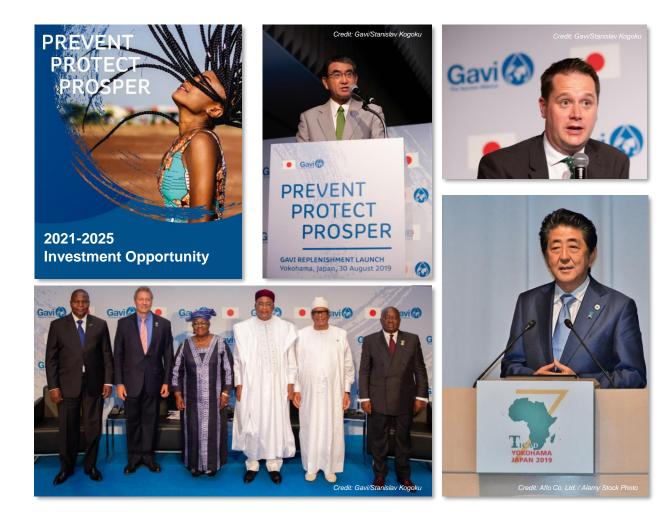




"For providing sustained access to childhood vaccines around the globe, saving millions of lives, and for highlighting the power of immunization to prevent disease"



Gavi's third replenishment launch (TICAD7, Japan, August 2019)



"We are immensely proud of the results Gavi has achieved with Japan's support and we are committed to help Gavi to further its mission going into its next period."

Masahiko Kiya Ambassador for TICAD Deputy-Assistant Minister for Foreign Affairs Government of Japan



Preparing for Gavi's third replenishment: 2020

DFID 🥹 @DFID_UK

The UK with <u>@gavi</u> will hold a major international vaccination conference on 3-4 June 2020 to raise funds needed to immunise 300 million people and save over seven million lives

#VaccinesWork



5:51 PM - Nov 5, 2019 - Twitter Web App

74 Retweets 137 Likes

- January: 20th anniversary celebration at Davos
- March: High-level meeting hosted by Liverpool School of Tropical Medicine
- 3-4 June: Pledging conference in London
 - Strong and sustained support across political spectrum in UK despite ongoing challenges and uncertainty



Other replenishments: 2019







AFRICAN DEVELOPMENT BANK GROUP

AfDB, Johannesburg, December



International Development Association WORLD BANK GROUP

IDA19, Stockholm, December



Launch of Global Action Plan (GAP) at 74th UNGA

- Intensive 18-month involvement to develop plan
- Collaboration for purpose: ongoing partnerships with most signatories
- Gavi leading "Sustainable financing" accelerator with Global Fund and World Bank
- Also engaging on other accelerators, especially "Primary health care"

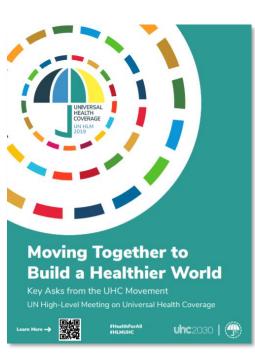




Growing focus on primary health care in global health and development agenda

Immunization Today and in the next Decade Developing together the vision and strategy for immunization 2021-2030

Draft Zero for Co-creation by 14 June 2019





Primary Health Care on the Road to Universal Health Coverage 2019 MONITORING REPORT CONFERENCE EDITION Levels & Trends in Child Mortality

Report 2019 Estimates developed by the UN Interagency Group for Child Mortality Estimation



unicef (World Health (World BANK GROUP) Uniced Nations



Intensified Gavi and Global Fund collaboration



- 1. Coordination, planning, sharing of information, joint visits, etc.
- 2. Increased engagement (fiduciary management, co-investments)
- 3. No collaboration



Intensified Gavi and Global Fund collaboration

For example, in **Haiti**:

- Gavi and Global Fund co-investing in community health workers
- Joint LMIS support through RFP process
- Potential cost-sharing TA for government capacity building in supply chain improvement plans

Collaborating in 54 countries

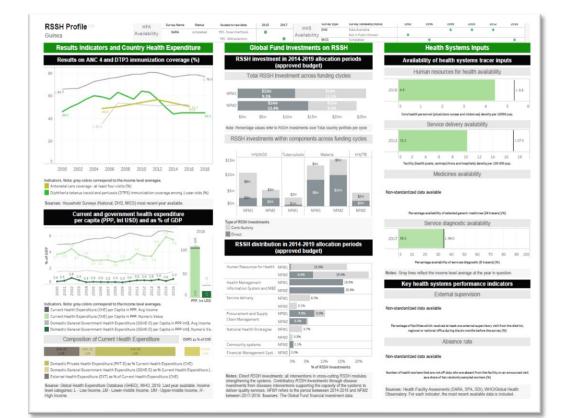
- 1. Coordination, planning, sharing of information, joint visits, etc.
- 2. Increased engagement (fiduciary management, co-investments).
- 3. No collaboration





Better coordination: Gavi, Global Fund investments

Gavi to share use of Global Fund dashboard for common view of health systems performance



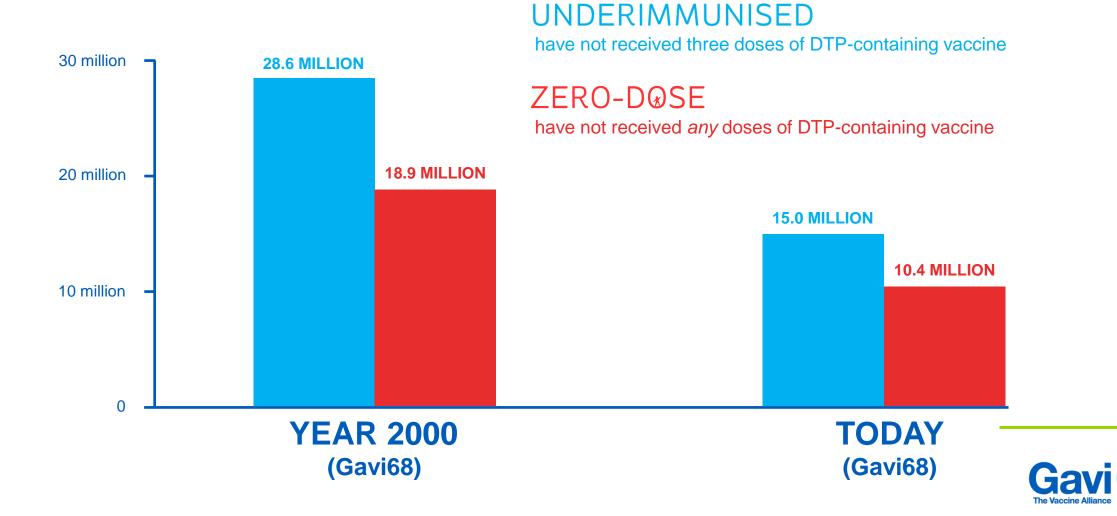
Several countries planning for new Gavi, Global Fund HSS grants at similar time in 2020:

Afghanistan Benin Burundi CAR Djibouti DPR Korea Kenya Kyrgyzstan Madagascar Mali Myanmar Pakistan Senegal South Sudan Sudan Syria

Also coordinating country dialogue and planning with Global Financing Facility (GFF) and Global Fund in 2nd wave GFF countries Working differently to reach zero-dose communities and strengthen primary health care



Decline in underimmunised and zero-dose children



Most in need, hardest to reach

10.4 million ZERO-D@SE children

live in Gavi-supported countries (80% of global total)

unimmunised against life-threatening diseases, unreached by routine health services



Zero-dose children live in clusters of inequity







Zero-dose children live in clusters of inequity







Outbreak in a zero-dose cluster

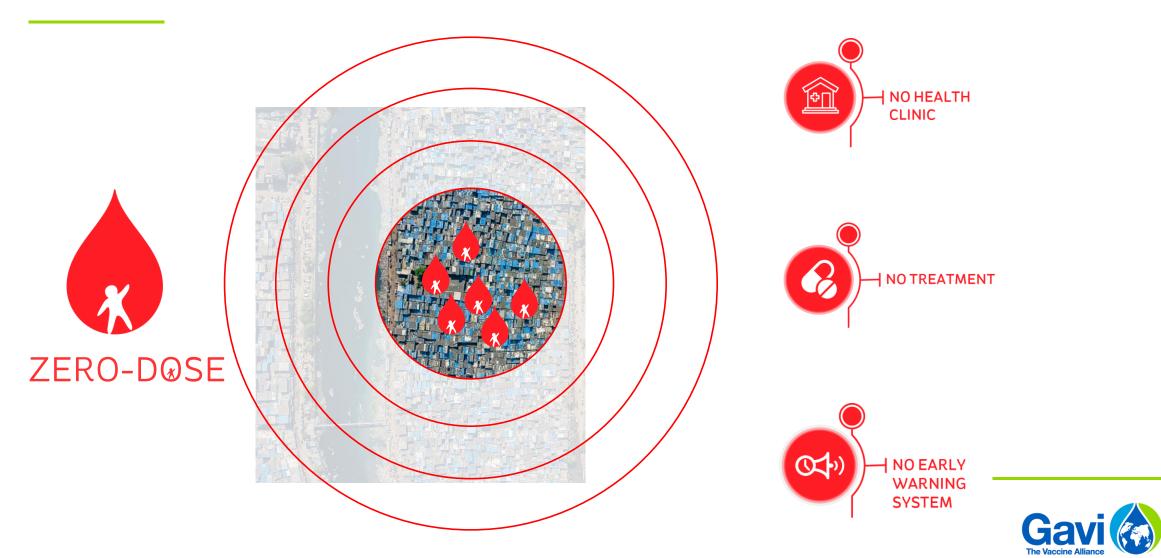


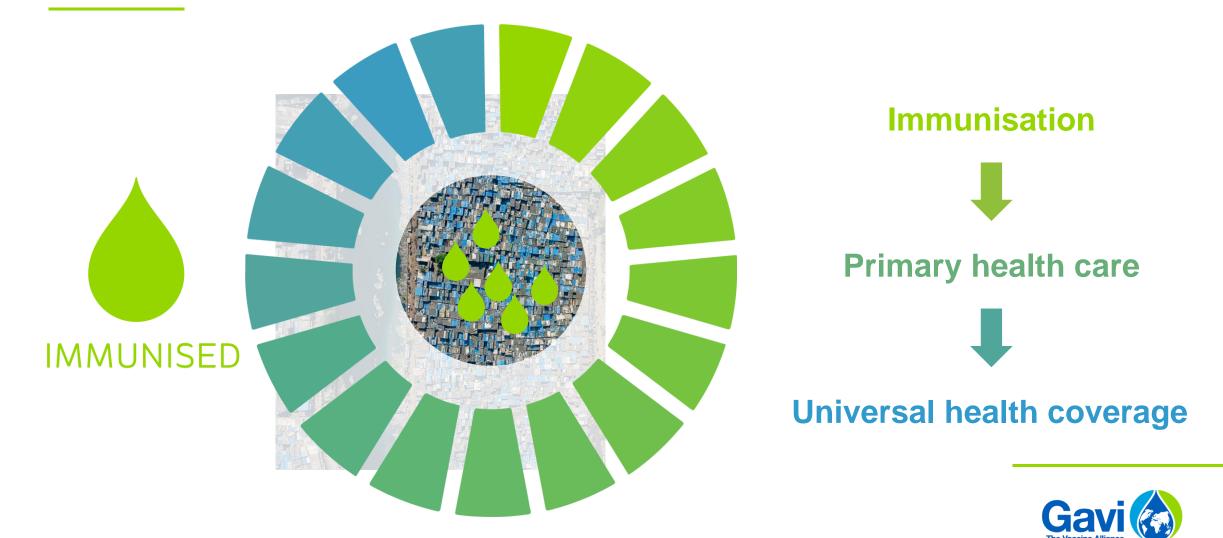
Image credit: @johnny_miller_photography

Reaching zero-dose children



Image credit: @johnny_miller_photography

Reaching zero-dose children forges equity in health care



Reaching zero-dose children transforms communities



Gavi The Vaccine Alliance

Image credit: @johnny_miller_photography

Zero-dose children live in clusters of inequity

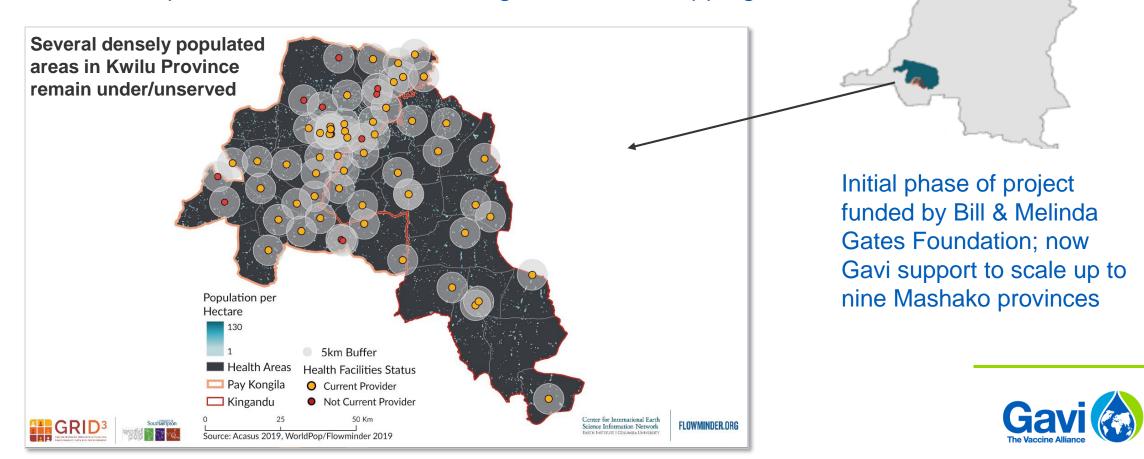






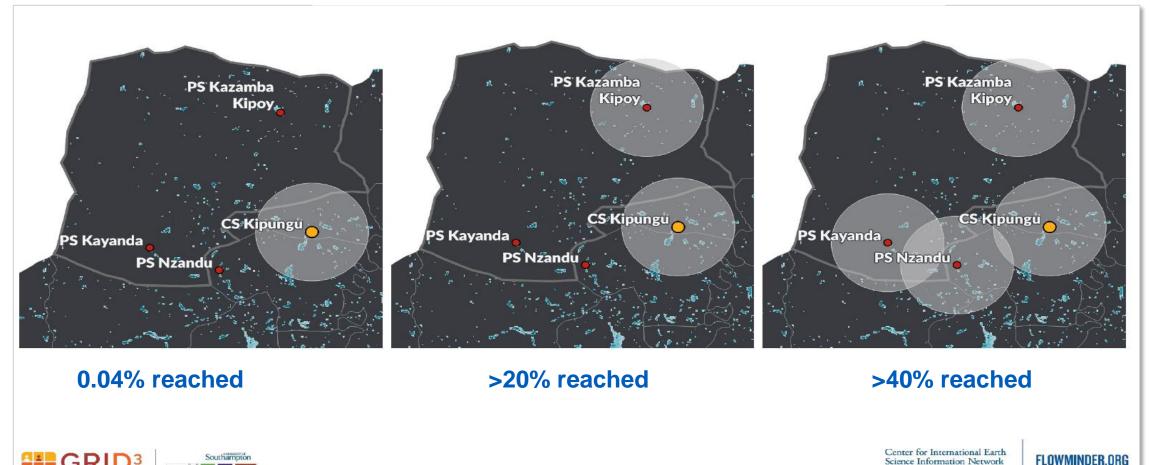
Using improved data to identify zero-dose children in DRC

Focus on improved denominator, coverage data, GIS mapping



Availability of functional health services: better planning to increase access in DRC

Kimbwalu health area, Kwilu Province, DRC



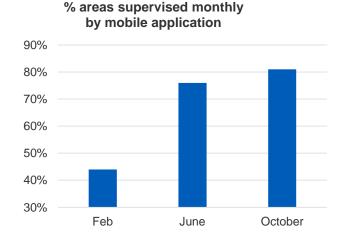
TH INSTITUTE | COLUMBIA UNIVERSITY

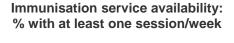
Mashako Plan, DRC: progress in strengthening routine immunisation, coverage and equity

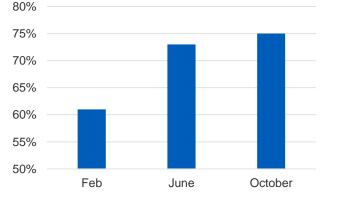
- Political leadership: Meeting in July 2019 chaired by President Tshisekedi with all provincial governors
 - Declaration to strengthen RI & sustain polio gains
 - Subsequently US\$ 3 million in co-financing

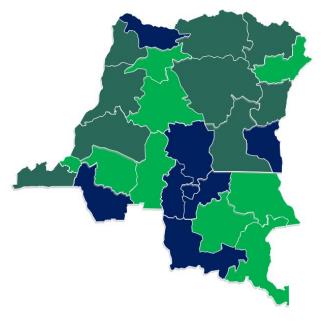
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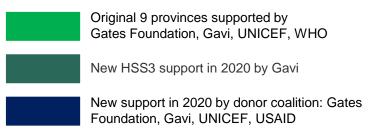
Mashako Plan approach to be scaled in new HSS application











Credit: Application Gestion PEV RDC

Reaching zero-dose children in Mali: Gavi support targeting key barriers



Weak management and accountability, especially at decentralised levels

- Identification and engagement of **local leaders**
- Robust community-level microplans, monitoring frameworks and dashboards



Addressing demand and gender-related barriers

- Mapping and engaging local women's associations
- Door-to-door sensitisation and defaulter tracking
- Monitoring demand via
 WhatsApp, monthly reviews

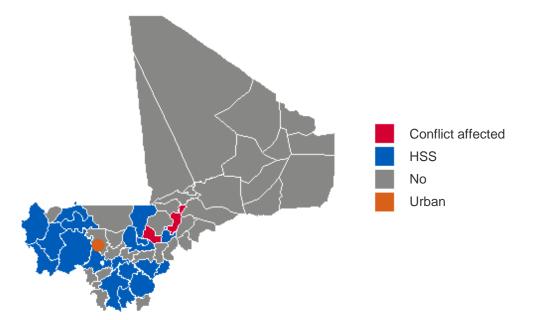


Enhancing service delivery

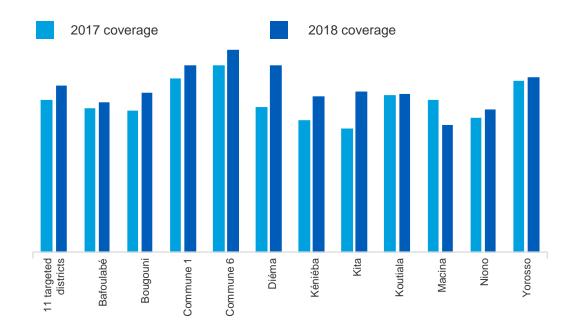
- Immunisation services in meeting places (eg, markets, mosques)
- **Urban:** Facility hours aligned to community needs
- Insecure/hard to reach:
 Integrated and mobile strategies
 including through CSOs

Reaching zero-dose children in Mali: progress in strengthening coverage and equity

HSS grant re-oriented in 2017 to target 23 of 75 districts with >70% of underimmunised



Penta3 coverage increased by 8% in target districts between 2017 and 2018 (admin data)



Mali has increased number of children reached with penta3 by 12% and reduced number of zero-dose children by >20% since 2015 (WUENIC data)



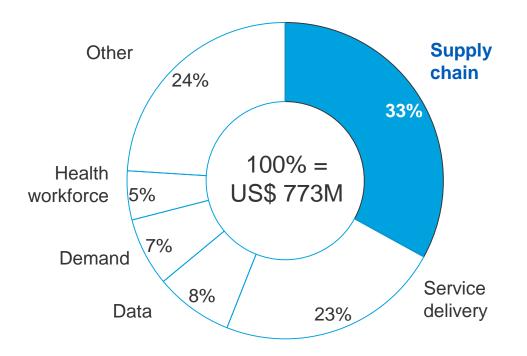
Gavi HSS investments driving improvement in supply chains

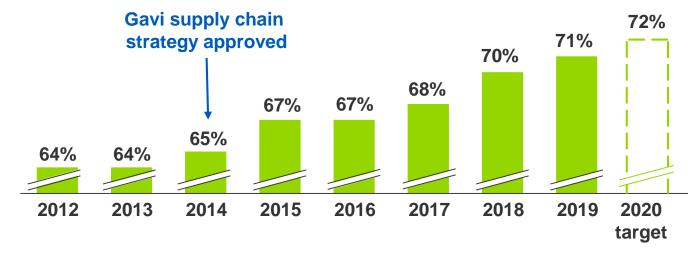
Supply chain largest HSS investment ...

... contributing to significant supply chain improvement

Approved HSS grants 2016-2019

Average Effective Vaccine Management scores, Gavi68

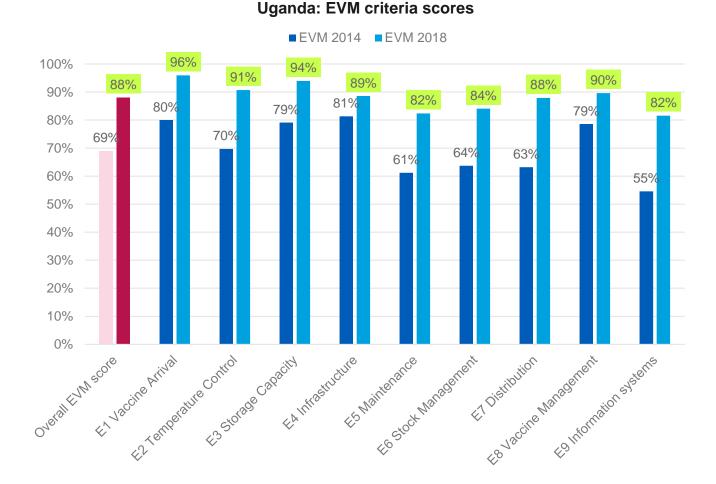




32 out of 40 countries with new EVM since beginning of 2015 have improved, by average of 9%

Uganda: supply chain performance transformed since 2014 with Gavi HSS and TA support

- After 2014 EVM, Alliance helped Uganda develop improvement plan (EVM IP)
- US\$ 8.4M of HSS invested in EVM IP implementation, with technical support from Alliance partners
- EVM IP mainstreamed into programme with reviews at all levels down to health facility
- Vaccines integrated into broader health supply chain managed by National Medical Store



Uganda: UPS-FIT partnership addressing critical remaining supply chain gaps

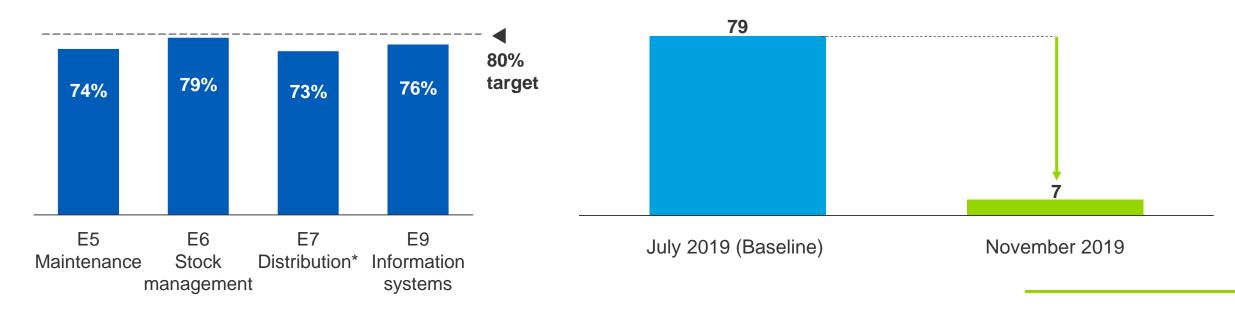


Key supply chain functions at last mile below 80% target

2018 EVM score at service delivery level

Partnership outsources distribution; checks stock and cold chain at facilities in 3 districts

Facilities with stock-outs (172 health facilities)



Starting to co-deliver some Global Fund commodities

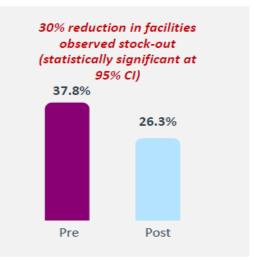


* Score for district level since districts are responsible for distribution to facilities

India's Electronic Vaccine Intelligence Network

Facilities Reported Stock-out of any Antigen (%)

Facilities reported Stock-Out



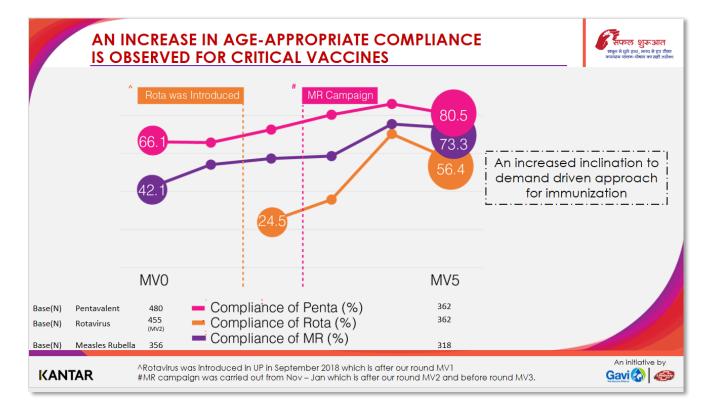
Instances per Facility 40% reduction in instances of stock out 1 instance 0.6 instance Pre Post Mean Duration of Stock-out 37% reduction in mean duration of Stock-out 13.1 Days 8.3 Days Pre Post





Government of India and Unilever: unlocking gender-related barriers to demand and coverage

First phase of *Safal Shuruaat* ("Successful Beginning") partnership shows encouraging results – now being scaled up to 14 districts (15M population)





Reporting back on previous Board decisions



"The Alliance at its Best": innovating to respond to Ebola

Credit: wwwnc.cdc.gov

nature

News 12 NOVEMBER 2019 UPDATE 13 NOVEMBER 2019 **'Make Ebola a thing of the past': first vaccine against deadly virus approved**

The drug, which has already been given to hundreds of thousands of people in the Democratic Republic of the Congo, can now be distributed more widely.



WHO prequalifies Ebola vaccine, paving the way for its use in highrisk countries

- Mar. '14: Ebola outbreak starts in West Africa
- Oct. '14: Board approves US\$ 390M exceptional, time-limited Ebola envelope for response
- Jan. '16: Advance Purchase Commitment with Merck enables continuously replenished stockpile of 300,000 doses of experimental vaccine; 255,000 doses used (as of 23 November 2019)
- Nov. '19: Merck vaccine granted marketing approval by EMA/EC, followed by WHO prequalification
- Dec. '19: Board to decide on future Ebola programme



World Polio Day 2019: celebrating global eradication of WPV3

WPV3 eradication confirmed in October 2019; WPV2 eradicated in 2015







Overall eradication effort facing setbacks: urgent action required to change course

- Gavi now full partner in GPEI
- Latest data
 - WPV1 resurgence: 112 cases in 2019 to date versus 29 cases in 2018
 - cVDPV cases up from 2018 and spreading
 - Recent outbreaks in Angola, CAR, DRC
- Risks
 - Delays to eradication and impact on RI/ "essential immunisation" as countries battle outbreaks with multiple campaigns
- Strengthening Gavi-GPEI collaboration
 - Improve coordination and synergies with polio –use of data, delivery systems and outbreak response
 - Routine immunisation: improve quality and integration; win hearts and minds

INDEPENDENT

MONITORING

BOARD

Global WPV1 & cVDPV cases¹, previous 12 months²

Latest onset:

WPV1 cases

cVDPV1 cases

cVDPV2 cases

THE ART OF

SIRVIVAI ·

THE POLIO VIRUS CONTINUES TO EXPLOIT HUMAN FRAILTIES

OF THE

GLOBAL POLIC

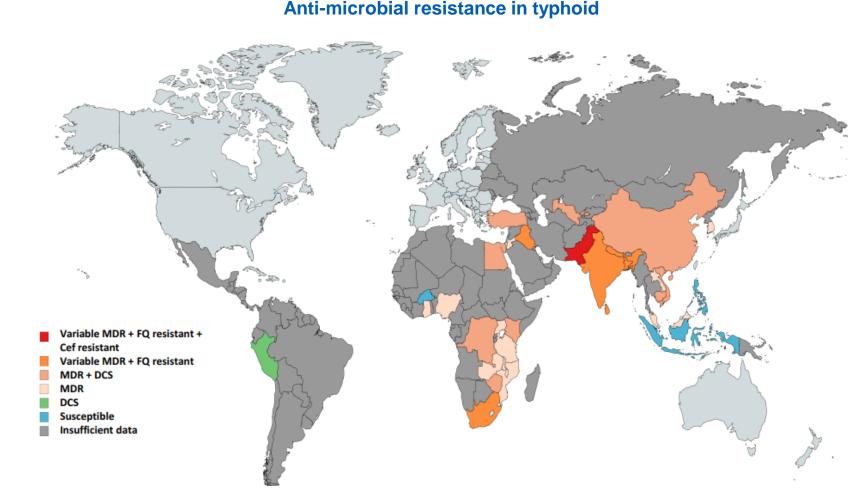
ERADICATION

INITIATIVE

Drug resistant typhoid reported in parts of Asia and Africa, increasing need for prevention

- In 2016, Pakistan became first country to report extensively drug resistant typhoid (XDR)
- XDR cases reported in UK, USA, Canada, Australia, Denmark, Taiwan, Ireland – all with travel history to Pakistan (Sindh and Punjab)

Credit: Dr Zulfi Bhutta, SAGE, October 2017

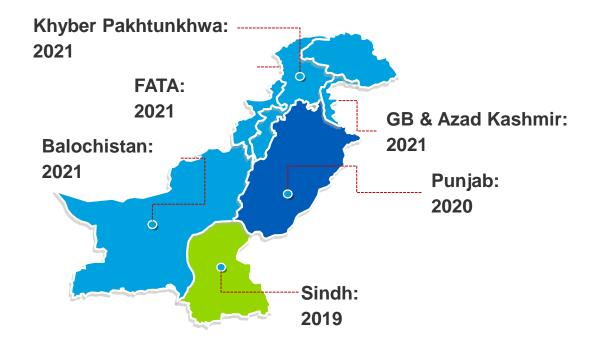


Pakistan: first country to introduce TCV into routine programme with recent campaign launch in Sindh

- Ongoing outbreak of XDR typhoid
- 3 phases, targeted, wide-age (9m-15y): Phase 1 catch-up campaign completed; RI introduction initiated



Introduction year by provincial area



Approvals for 2020 Gavi-supported TCV introduction in Liberia and Zimbabwe

Nigeria: progress update

Accountability Framework (AF)

- National AF signed in June 2019
- Plans underway to develop tailored sub-national AFs
- Country already increasing domestic vaccine funding (2019: US\$ 43M released; 2020: US\$ 61M committed)

Progress on Gavi support

- New support approved for meningitis A, measles, yellow fever; national-level HSS and CCEOP
- HSS applications for eight target states recently submitted
- First of ~10,000 cold chain equipment already being deployed
- High-level Alliance mission scheduled for mid-December
- Vaccine management & data systems: improvement ongoing

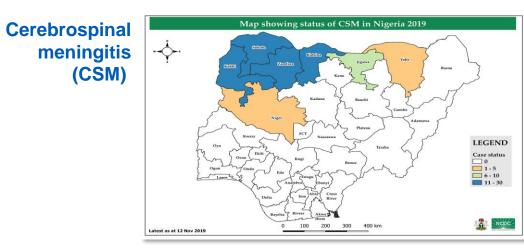


Credit: Adrian Brooks

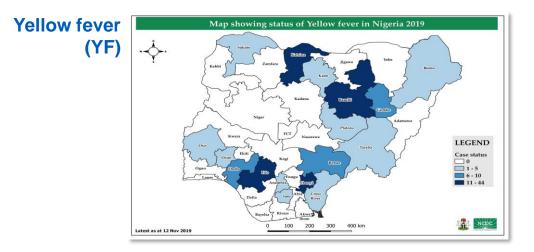


Nigeria: urging integrated activities in face of continued infectious disease outbreaks









Syrian Arab Republic: complex situation requiring tailored engagement

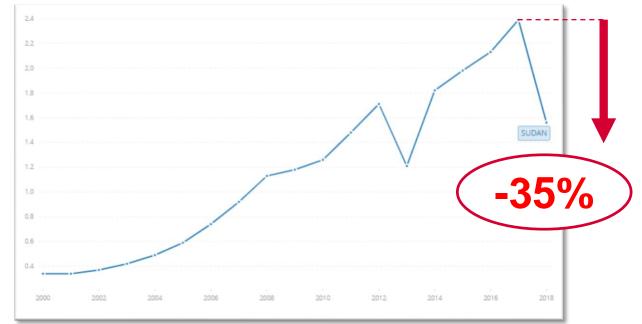
- Board approved exceptional support for Syria for 2017-18, extended to end 2019 ("whole country approach")
- Syria now Gavi-eligible
- Vaccine support application received for IPV, penta, M*-MR
- Possible need for exceptional flexibility until application(s) approved to avoid vaccine stock-outs





Sudan eligibility

- Latest GNI per capita (pc): US\$ 1,560;
 under Gavi eligibility threshold (US\$ 1,630)
- Due to enter accelerated transition in 2020
- Based on three-year GNI pc average, forecast to re-enter eligibility in 2021
- Board decision sought to maintain eligibility (on consent agenda)
 - Similar to Congo Republic
- Funding Policy review proposing new approach to address future cases



Sudan: GNI per capita, Atlas method (current US\$) Source: https://data.worldbank.org



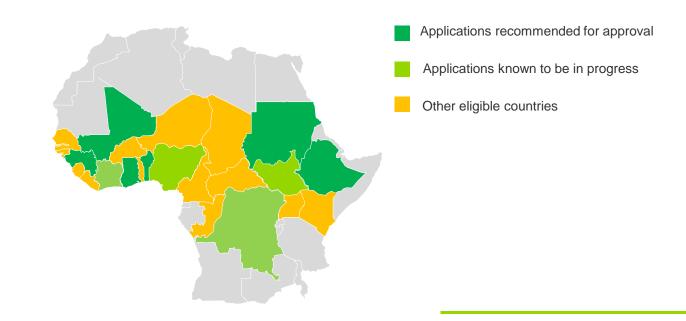
Gavi yellow fever (YF) diagnostic procurement support: early progress

Promising progress on diagnostic test kit availability



- UNICEF-SD organised manufacturer outreach based on WHO Target Product Profiles
- Six manufacturers with promising kits
- At least one manufacturer developing new technology based on Gavi decision to engage

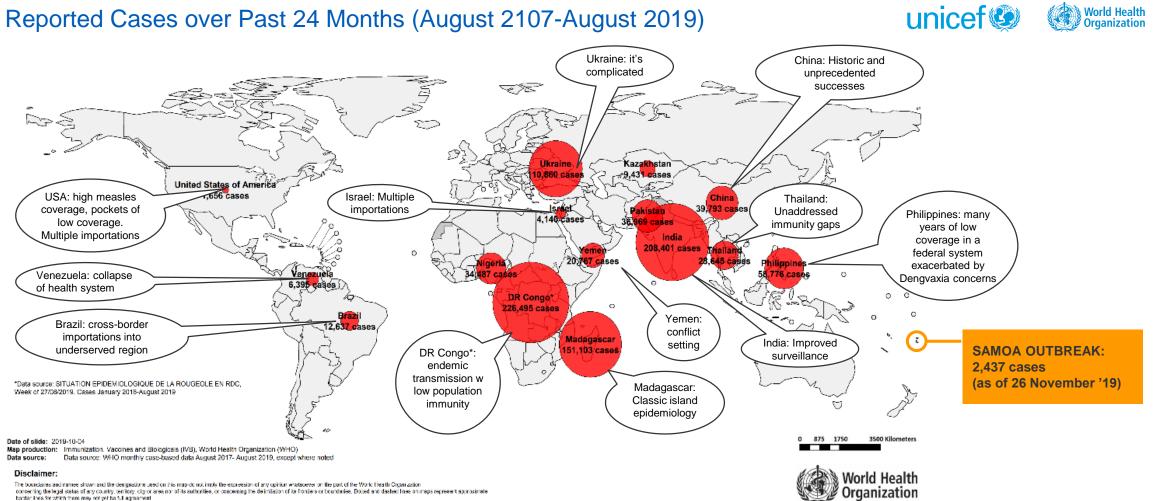
IRC already approved six countries for reagent support





Tackling ongoing measles outbreaks

Credit: Alliance Partners, October 2019



World Health Organization, WHO, 2018, All rights reserved

Measles vaccine prevents measles-induced "immune amnesia"

Incomplete genetic reconstitution of B cell pools contributes to prolonged immunosuppression after measles

Velislava N. Petrova^{1,*}, Bevan Sawatsky², Alvin X. Han^{3,4}, Brigitta M. Laksono⁵, Lisa Walz^{2,†}, Edyth Parker⁴, Kathrin Piepe... + See all authors and affiliations

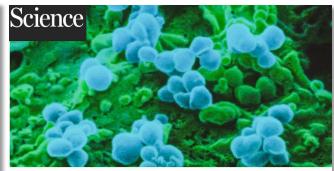
Science Immunology 01 Nov 2019: Vol. 4, Issue 41, eaay6125 DOI: 10.1126/sciimmunol.aay6125

VIRAL IMMUNOLOGY

Measles virus infection diminishes preexisting antibodies that offer protection from other pathogens

Michael J. Mina^{1,2,3}*+, Tomasz Kula^{1,2}, Yumei Leng¹, Mamie Li², Rory D. de Vries⁴, Mikael Knip^{5,6}, Heli Siljander^{5,6}, Marian Rewers⁷, David F. Choy⁸, Mark S. Wilson⁸, H. Benjamin Larman⁹, Ashley N. Nelson¹⁰‡, Diane E. Griffin¹⁰, Rik L. de Swart⁴, Stephen J. Elledge^{1,2,11}†

Measles virus is directly responsible for more than 100,000 deaths yearly. Epidemiological studies have associated measles with increased morbidity and mortality for years after infection, but the reasons why are poorly understood. Measles virus infects immune cells, causing acute immune suppression. To identify and quantify long-term effects of measles on the immune system, we used VirScan, an assay that tracks antibodies to thousands of pathogen epitopes in blood. We studied 77 unvaccinated children before and 2 months after natural measles virus infection. Measles caused elimination of 11 to 73% of the antibody repertoire across individuals. Recovery of antibodies was detected after natural reexposure to pathogens. Notably, these immune system effects were not observed in infants vaccinated against MMR (measles, mumps, and rubella), but were confirmed in measles-infected macaques. The reduction in humoral immune memory after measles infection generates potential vulnerability to future infections, underscoring the need for widespread vaccination.



Measles virus (blue) targets B cells, responsible for immune "memory." NIBSC/SCIENCE SOURCE

How measles causes the body to 'forget' past infections by other microbes

By Eva Frederick Oct. 31, 2019 , 2:00 PM



Measles makes body 'forget' how to fight infection





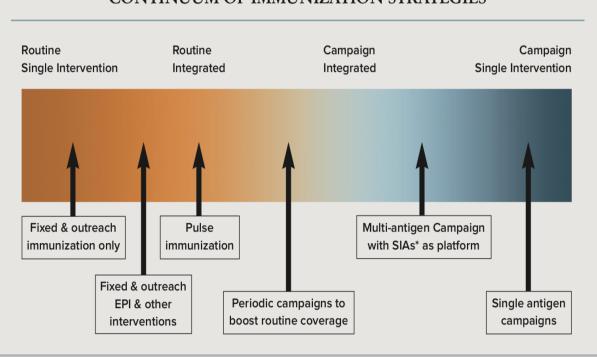
Spectrum of immunisation approaches to achieve high, equitable measles coverage and control

WHO Strategic Advisory Group of Experts (SAGE) on Immunization, October 2019:

"Given the current global context, SAGE concluded that ... eradication is not a realistic outcome in the short-to-medium term. SAGE recommended that an eradication goal and target date be considered only when substantial, measurable progress has been made in ensuring the programme conditions necessary to achieve elimination."

WHO: Weekly Epidemiological Record.22 November 2019. No.47, 2019, 94, 541-560

Growing recognition of range of control strategies beyond campaigns



CONTINUUM OF IMMUNIZATION STRATEGIES

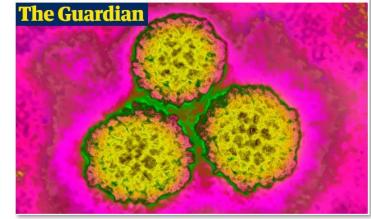
HPV: addressing inequities and programmatic challenges in a supply-constrained environment

- Global supply shortage continuing
- Demand skewed by: inclusion of boys; widening recommended age group; and cervical cancer elimination agenda
- Market dynamics also skewed in favour of low-incidence/high-paying markets



HPV vaccine to be given to boys in effort to slash cancer rates

Move by NHS could prevent more than 100,000 cancers across UK by 2058



Conters for Disease Control and Prevention

Grading of Recommendations Assessment, Development and Evaluation (GRADE) for use of HPV vaccine in adults ages 27 through 45 years

Merck forced to borrow half of CDC stockpiles of Gardasil to meet

demand

By Ben Hargreaves C^{*} 30-Oct-2019 - Last undated on 30-Oct-2019 at 11:48 GMT



Merck announces that it has reallocated Gardasil from the US CDC stockpiles, as a surge in demand sees revenues from the vaccine rise 26% year-on-year.



Kenya introduces HPV vaccine in routine immunisation programme



Gavi @ @gavi · 17h Gavi is proud to be partnering with @WHOKenya and @UNICEFKenya to support the @MOH_Kenya's fight against cervical cancer!



Ministry of Health @ @MOH_Kenya Sicily Kariuki; HPV vaccine will be launched on Friday 18th October 2019 in Mombasa County. For maximum protection, all girls aged 10 years must receive 2 doses of the vaccine, 6 months apart.

- Eastern Africa highest reported cervical cancer incidence in sub-Saharan Africa. In Kenya:
 - Most frequent cancer among women ages 15-44
 - ~5,250 new cases annually
- Kenya among eight countries to introduce HPV vaccine by end 2019
- Impact: ~800,000 10-year-old girls protected against cervical cancer annually



Vaccine Innovation Prioritisation Strategy (VIPS)

Phase I: Nine platform innovations shortlisted



Microarray patches (MAPs)



Solid-dose implants



Heat stable/controlled temperature chain (CTC) qualified liquid formulations



Compact prefilled autodisable devices (cPADs)



Dual-chamber delivery devices



Combined vaccine vial monitor (VVM) and threshold indicator (TI)



AD sharps injury protection (SIP) syringes



Freeze damage resistant liquid formulations



Barcodes/ radio-frequency identification (RFID)

Phase II





BILL& MELINDA GATES foundation







Note: Innovation pictures are just examples of innovations

Alliance and Secretariat update



Strengthening Alliance health

• Alliance Health Survey (AHS)

- Third AHS completed in October 2019
- Overall results stable colleagues continue to be proud Alliance members
- Challenges: trust, information-sharing;
 discussion with Alliance members planned in 2020

Alliance collaboration

- Seven regional team-building retreats organised
- **Social mixers** for Alliance partners in Geneva
- Two joint onboarding sessions conducted
- Co-working spaces: Exchanges facilitated between Gavi Secretariat, UNICEF and WHO at global and regional levels
- Quarterly brown-bag webinars on key Alliance topics



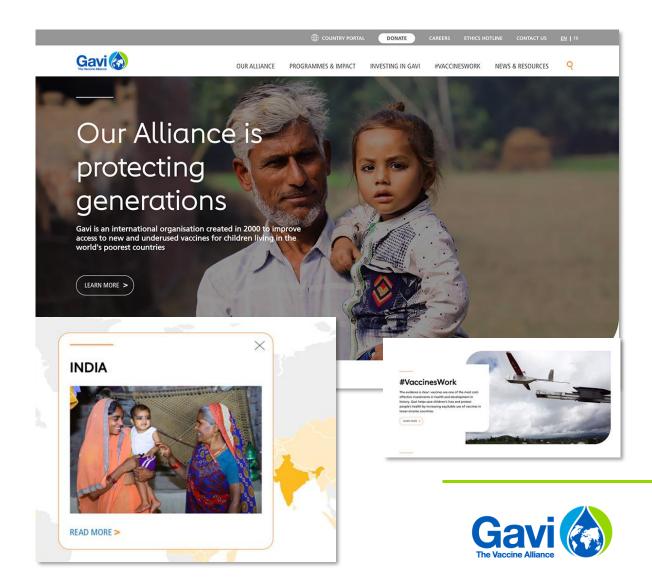


Social mixer for Alliance partners Global Health Campus November 2019



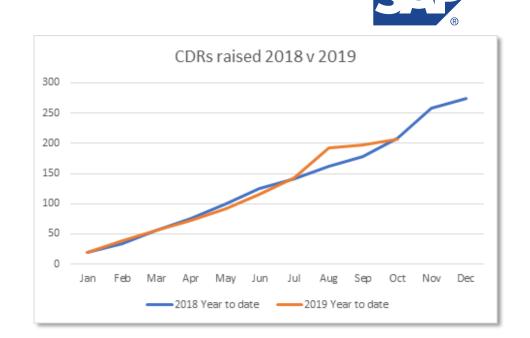
New Gavi.org: now live

- More vivid multimedia user experience; translations in progress
- Easy access to Country Portal
- Smart platform streamlines publishing
- **#VaccinesWork** section includes features by Alliance partners



Successful implementation of SAP enterprise resource planning (ERP) platform

- Significant milestone in modernising, integrating financial/operational systems
- Launched on 1 October; already made millions in payments to partners
- Natural learning curve and challenges in adaptation may slightly affect end-of-year targets
- Additional functionality to be implemented in early 2020





Gavi Secretariat update

New senior hires



Laura Boehner Chief Technology and Knowledge Officer



Jelena Madir Director, Legal



Gavi was launched on 31 January 2000 in Davos





Gavi will celebrate 20 years of saving lives in January 2020 in Davos









>760 million children vaccinated





>**760** million children vaccinated

>**960** million campaign immunisations





>**760** million children vaccinated

>960 million campaign immunisations

>13 million deaths averted





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60% global birth cohort supported





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70% fewer deaths due to vaccine-preventable diseases





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Vaccines against **17** infectious diseases



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Vaccines against **17** infectious diseases

433 vaccine introductions and campaigns



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~140 million stockpile doses shipped



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20 years of keeping people healthy





धन्यवद

THANK YOU



www.gavi.org