CEO Board update

Seth Berkley, MD 7th December 2016, Côte d'Ivoire



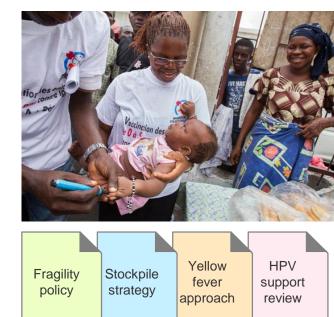


Immunising children together www.gavi.org



Côte d'Ivoire: road to recovery

- **High coverage** before crisis: 85% in 2010
- During crisis coverage dropped: 62% in 2011
- Rapid system recovery waived coverage requirement for pneumococcal and rotavirus vaccines in 2014
- Focus on routine improved coverage: pentavalent 83%, pneumococcal 72% in 2015
- HPV demonstration project: 98% coverage, preparation for national introduction
- No Ebola cases despite bordering Guinea and Sierra Leone





Côte d'Ivoire: issues remain

- Yellow fever: campaign 2011-2012, no confirmed cases since but routine coverage just 49%
- Equity: focus on low-coverage districts and communities
- Data quality: country-tailored approach has plan to improve quality and flow of data from service delivery to national level
- **Sustainability:** challenge to shift from preparatory to accelerated transition (expected by 2020)

VACCINS ADMINISTRES	NOMBRE DE PERSONNES VACCINEES	POURCENTAGE CONVERTURE NACCINE 169% 195% 90% 148%		
VPO.0	000			
VPO. 1	111			
VPO.2	186			
VPO.3	215			
STC HepB-Hib 1	99			
DTC HepB-Hib2	163			
DTC HepB-Hib3	197	179%		
VPI	171	155 % 97 % 147 % 163 %		
PCV-13. 1	107			
PCV 13 . 2	162			
PCV 13. 3	180			
Rougeole	359	326%		
Fièvre Jaune	334	304 %		
VAT 1	22	17%		
VATZ	16	12%		
VAT 3	14	-11% 7%		
VAT 4	9			
VAT 5	3	2%		



Reporting back on Board decisions

Malaria vaccine pilots

June 2016: Board approved funding for pilots

- June Board approved up to US\$ 27.5m for pilots, to be matched by other donors
- Full funding now secured for first phase:
 - Global Fund: US\$ 15m
 - UNITAID: US\$ 9.6m





- WHO responded to Gavi's review committee request to reduce budget: 8% reduction means pilots should go ahead
- Historic partnership to tackle one of the biggest child killers

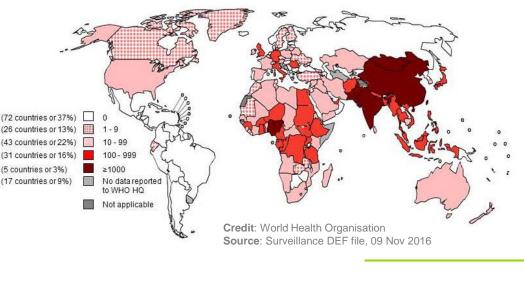


Measles-rubella strategy

Dec 2015: Board approved new strategy

- **Implementation**: 10 applications so far, implementation from 2017
- Joint appraisals: incidence, coverage, surveillance
- **Ownership**: countries selffinancing 1st dose from 2018
- **Sustainability**: long-term planning, focus on routine
- Enhanced analysis: changed Ethiopia targets, high potential for modelling to improve results

Number of Reported Measles Cases with onset date from Apr 2016 to Sep 2016 (6M period)

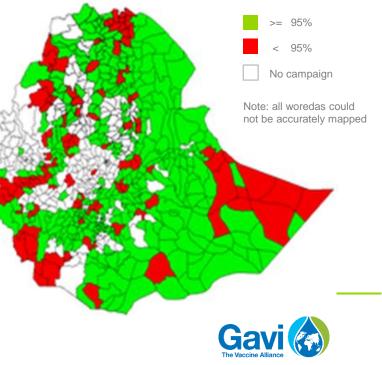




Ethiopia: targeted measles campaign

- 2013 nationwide campaign: 98% administrative coverage, 90.6% survey
- Continued outbreaks 2013-15
- Oct/Nov 2015, Apr 2016 campaigns
 - April 2016: 94% average survey coverage in targeted woredas (districts)
- Jan 2017 targeted campaign
 - Adjusted after epidemiological analysis
 - Targeting woredas not covered before or below 90% coverage
 - Post-campaign coverage survey





India partnership strategy

Acceleration in new vaccine introductions

	2011-2015	2016			2017			2018		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Pentavalent	\checkmark			Transition to domestic funding						
Measles & rubella						\checkmark			\checkmark	√ *
Pneumococcal						\checkmark				\checkmark
Rotavirus		√*				✓* tentative			✓ tentative	
HPV					✓* one state					
IPV	some states	all sta	ites		Transition to domestic funding					

✓ Expansion to additional states/union territories

✓* Funded by the Government of India

Gavi Board meeting 7 December 2016

Dec 2015: Board approved India strategy



Pneumonia vaccines to be introduced in 5 states

The Indian EXPRESS

Union Health Minister J P Nadda said with its introduction, a new milestone will be achieved in expanding the coverage of full immunisation in Himachal Pradesh.



By: PTI | New Delhi | Published:November 8, 2016 5:08 pm



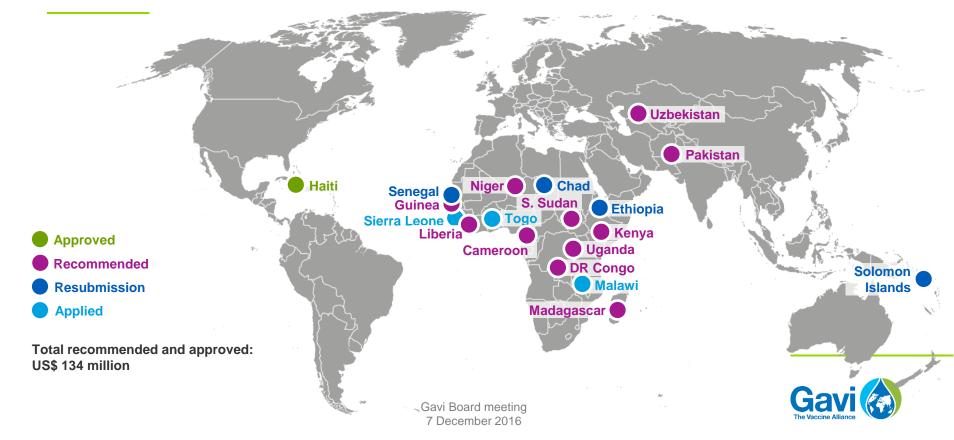
Health Minister JP Nadda. (File)



Global landscap

Cold chain equipment platform

June 2015: Board approved US\$ 50m initial investment



Cold chain equipment platform

Changed marketplace in first 11 months :

- 15 new prequalified devices
- 2 manufacturers: 10-year warranty for solar direct drive fridges
- First 5-year warranty for ice-lined fridges

Financial forecast for the strategy period includes price reductions from market shaping activities

June 2015: Board approved US\$ 50m initial investment



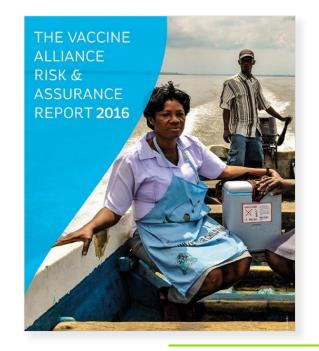
Solar fridge in Mbankana village, DRC



Risk management

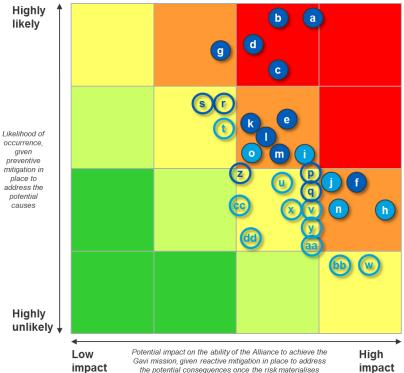
- Plan approved by Board in December 2014 largely implemented
- New teams and processes operational, embedded in business as usual
- Enhanced understanding of risk at Alliance and country level
- Increased Board engagement: risk policy & risk appetite, April 2016 retreat
- This meeting: risk & assurance report

Dec 2014: Board approved the risk policy





Alliance top risks ranked against likelihood and impact Current risk exposure, taking into account existing mitigation



VERY HIGH RISK

- a. Country management capacity
- b. Data quality
- c. Transition readiness

Programmatic risk



d. Country performance post-transition

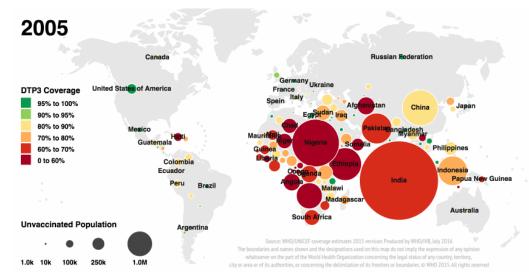
HIGH RISK

- e. Outbreaks disrupt immunisation
- f. Vaccine confidence
- g. Misuse by countries
- h. Donor support
- i. Partner capacity
- j. Strategic relevance
- k. Supply shortages
- I. Frequent or unplanned campaigns
- m. HSIS value for money
- n. Secretariat disruption
- o. Forecasting variability



Nigeria risk: critical need to get back on track

- 7th lowest coverage among Gavi-supported countries below eg Afghanistan, Mali, DRC
- Acute fragility, especially in northern states
- Entering transition in 2017
- Misuse of funds
- No longer polio free

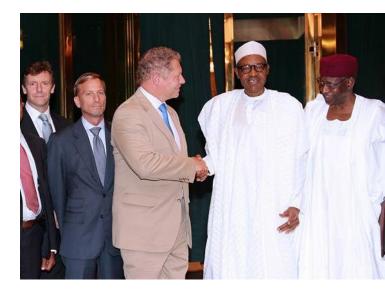






Nigeria: moving in the right direction

- Visit with Mark Dybul and President Buhari in July
- Replaced leadership of National Primary Healthcare Development Agency
- Commitment to repay misused funds
- Plan to improve country systems
- Plan for Alliance-wide visit Q2 2017

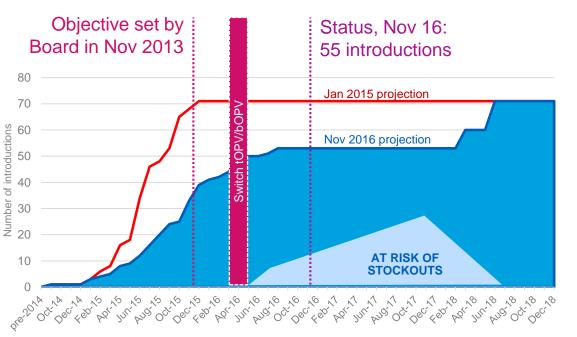




Inactivated polio vaccine (IPV)

Dec 2013: Board approved support for IPV

- 55 countries introduced
- Continued delays due to supply shortages
 - Further delays scaling up production: <40% of awarded supply available 2014-17
 - 15% of doses procured by UNICEF used in SIAs 2014-16
- Use of fractional doses, evaluating other options





IPV launches since the June Board meeting

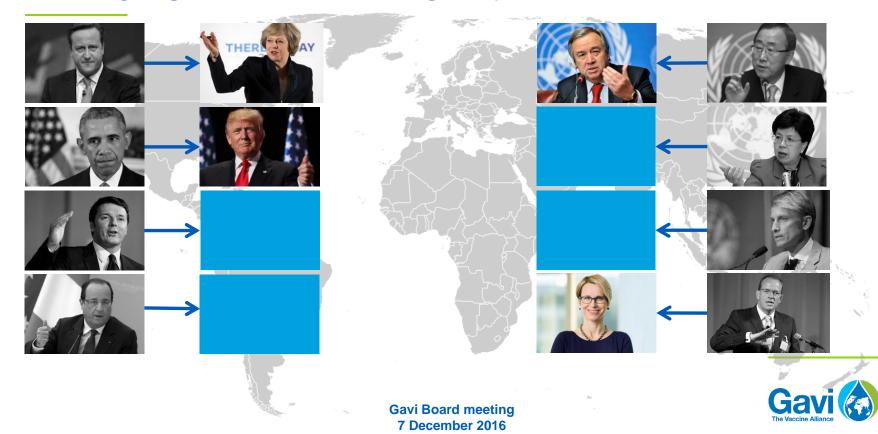






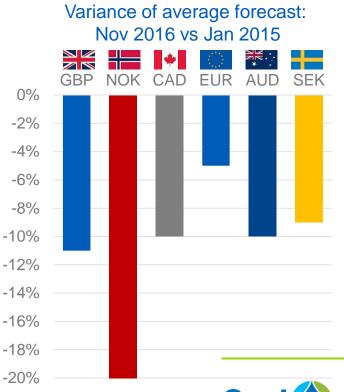
Global landscape

Changing leaders among key donors and partners



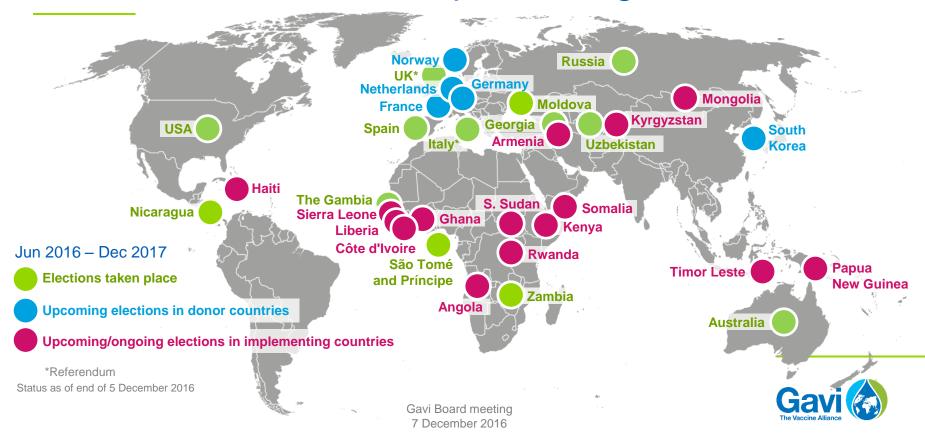
Brexit and exchange rate risk

- Worked with donors to sign most grant agreements before UK referendum
- Hedging policy protects against currency exposure for two years
 - 75% of UK core contribution for 2016 hedged prior to Brexit
 - ~50% of 2017 non-US\$ income hedged
- Exposure of \$146m through 2020 vs. forecast if rates stay at current level
- Remaining contributions through 2020 will be progressively hedged Gavi Board meeting 7 December 2016





Elections in donor and implementing countries



Global Fund replenishment



MONTRÉAL 2016



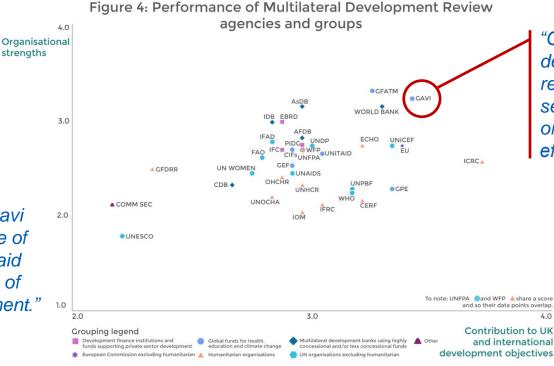


DFID: Multilateral Development Review 2016



"Organisations like Gavi are in many ways one of the best parts of our aid effort, saving millions of lives with our investment."

strengths



"Critical role in delivering concrete results in challenging settings and all-round organisational effectiveness."

4.0

Donor support: intensifying engagement

- New donors: Monaco (Nov), Switzerland by end 2016 (tbc)
- Italy, Saudi Arabia signed agreements
- Increasing engagement in emerging markets, including private sector
- 83% of Berlin pledges signed by the end of the year
- Most unsigned pledges from countries that can only sign annual agreements









Sustainable development goal (SDG) indicator

Vaccines included in two health targets:

- Target 3.8: achieve UHC and access to affordable medicines and vaccines for all
- **Target 3b**: support the research and development of vaccines... provide access to affordable essential medicines and vaccines

Two indicators accepted:

- 3.8: investigating indicators to measure fully immunised child moving beyond DTP3
- **3b:** indicator based on GVAP 90/80 target

UN Stats Commission to give final endorsement in March 2017



Global Vaccine Action Plan: 5/6 mid-point targets missed

NOT ACHIEVED DTP3: All countries >90% national coverage >80% in every district by end 2015

NOT ACHIEVED

Polio: transmission stopped by end 2014

NOT ACHIEVED

Maternal & neonatal tetanus: eliminated by 2015

NOT ACHIEVED

NOT ACHIEVED

Measles: eliminated in 4 regions by end 2015

Rubella: eliminated in 2 regions by end 2015

ACHIEVED

Introduction of under-utilised vaccines: At least 90 low- or middle-income countries to have introduced one or more such vaccines by 2015 —



Further, faster, fairer: Save the Children report

"We must ensure that **every last child** – regardless of where they are born, and their level of poverty or social exclusion – has **access to immunisation** as an early priority in **building UHC**... "It is possible – it just requires repewed political

"It is possible – it just requires renewed political leadership, commitment and investment. We must act now."



Reaching every last child with immunisation



Declarations on migration and refugees

UNGA declaration to protect rights of refugees and migrants, including to "**improve the delivery of humanitarian and development assistance to those countries most affected**"

Addis declaration by African Ministers of Health in February called on Gavi to "consider refugees and internally displaced populations as eligible recipients of Gavi support for vaccines and operational costs"







Reduced pneumococcal vaccine prices for refugees



Working with partners such as Gavi, GSK is proposing to provide Synflorix at the deeply discounted price of **\$3.05 per dose** to charities who fund and deliver immunisation programmes to refugees and displaced people.



Today's announcement of a new and specific pricing tier [...] builds on Pfizer's longstanding support for humanitarian emergency relief around the world.

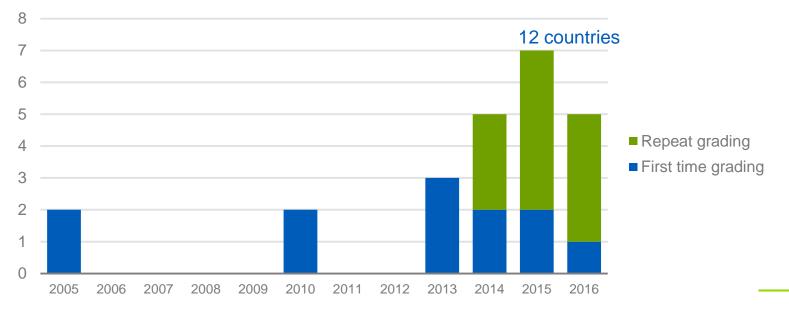
19 September 2016

11 November 2016



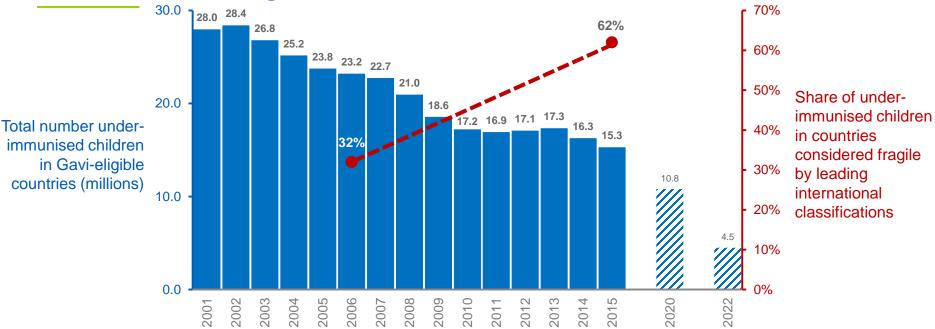
Record number of emergencies

Number of Grade 3 emergencies 2005-2016





Increasing share of under-immunised children in fragile countries



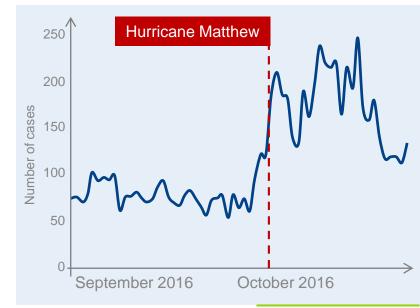
Total number of under-immunised based on number of eligible countries 2001-2015 (excluding China) and forecasted numbers of Gavi-supported countries in 2020 and 2022. Note: In 2015, 14.9 million under-immunised children lived in the 68 countries eligible for Gavi support in the 2016-2020 strategy period. Country fragility classification sources: World Bank lists of Low-Income Countries Under Stress in 2006, 2015 countries are identified based on a broad definition of fragility using the WB harmonised list, Fund for Peace Fragile states top 3 categories and OECD countries fragile in all dimensions. Under-immunised burden sources: WUENIC 2016, United Nations Population Division; World Population Prospects



Fragility: Hurricane Matthew devastates Haiti

Gavi Board meeting 7 December 2016

- Poorest country in Western
 Hemisphere
- Cholera: >5,800 suspected cases
- Nov: Gavi funded 1m doses through global stockpile
- Post-hurricane phase could aggravate
 Zika + other mosquito-borne diseases
- First country to be approved for Gavi's cold chain equipment platform support



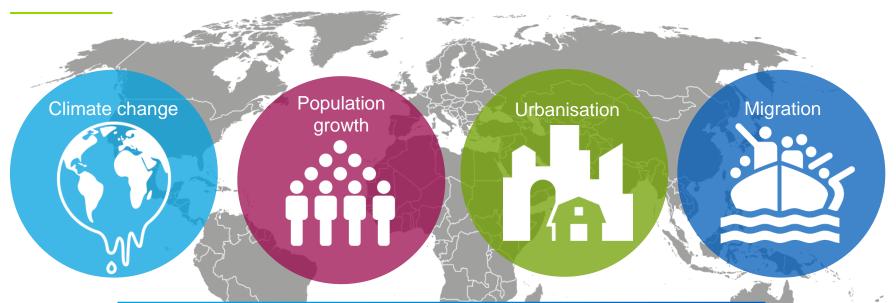
Source: Ministère de la Santé Publique et de la Population d'Haïti



Distribution of daily suspect cholera cases in Haiti



Growing risk factors

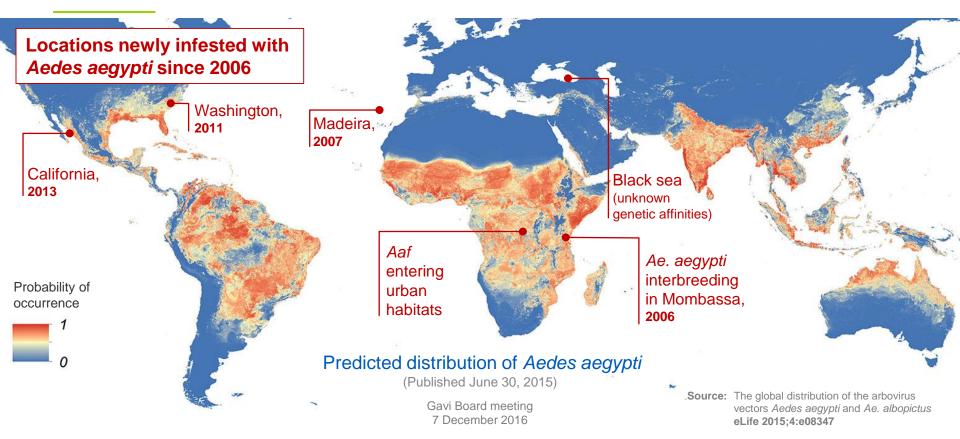


increasing health threats



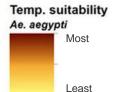


Growing risk factors: Aedes aegypti distribution



Alliance fit for purpose

Growing risk factors: Aedes aegypti suitability



Temperature suitability for Aedes aegypti

(Published June 30, 2015)

Gavi Board meeting 7 December 2016 Source: The global distribution of the arbovirus vectors Aedes aegypti and Ae. albopictus eLife 2015;4:e08347

Growing risk factors: migration

CHINA Yellow fever cases related to ANGOLA outbreak 27 April 2016

1 million people Net migrants arriving Net migrants leaving

Examples of main migrant routes

Main country-to-country net migration 2010-2015

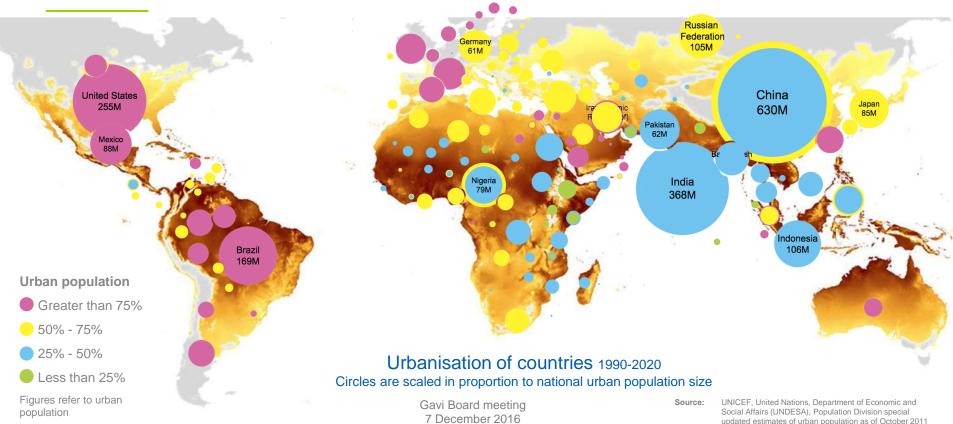
ANGOLA

Gavi Board meeting 7 December 2016

Source: UN Population Division's estimates for Total Migrant Stock, 2015







Yellow fever outbreak: unprecedented need

- Stockpile 6m doses, exceptional Gavi support: 16.8m doses in 2016
- Yellow fever campaign in August: 15.5m people immunised in Angola & DRC
 - Angola funded operational costs, 50% of vaccine costs
 - Fractional doses in Kinshasa
- Worked with WHO on new strategy

Yellow fever infected districts in Angola



No new confirmed cases in Angola since June 2016

~20% reduction in RI coverage (admin data)



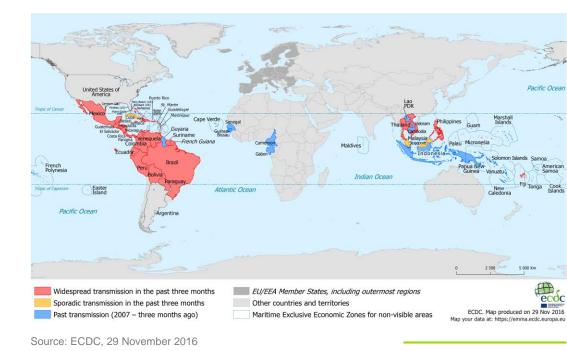


Zika: 67 countries affected since 2015

Currently no vaccine or treatment, but:

- 30+ vaccines in development
- 2 vaccines in phase 1 trials
- Another starting trials in 2018

Once developed could be part of package for adolescent girls, with HPV vaccine



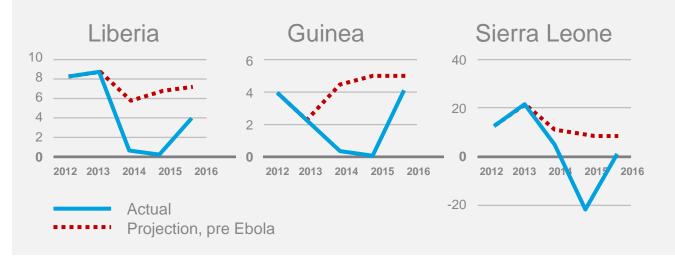
Gavi The Vaccine Alliance

The economic impact of outbreaks

Total cost of **Ebola** in the 3 countries: **US\$ 2.8 billion**

Cost of Zika in Latin America and the Caribbean: **US\$ 3.5 billion** (2016)





Sources: World Bank: Ebola: 2015-2015 West Africa Ebola Crisis: Impact Update (May 2016; World Bank: The short-term economic costs of Zika in Latin America and the Caribbean (February 2016)

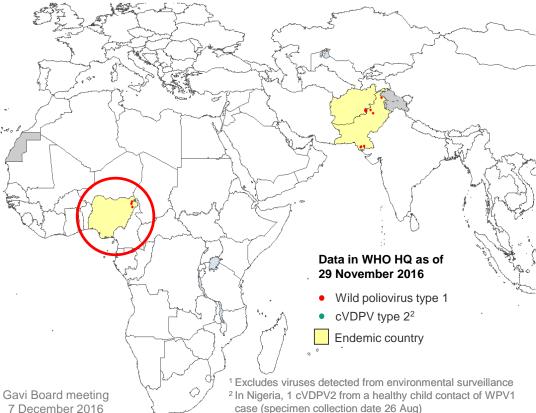


Setback to polio eradication Wild poliovirus & cVDPV cases^{1,2} in the last six months³

- Nigeria no longer polio free
- Very likely to miss end-2016 target of ending wild poliovirus transmission

		Number of WPV1 cases		Number of WPV infected districts	
Country	Onset of most recent case	Current	Same period last year	Current	Same period last year
Nigeria	21-Aug-16	4	0	3	0
AFR	21-Aug-16	4		3	0
Pakistan	03-Nov-16	7	18	5	8
Afghanistan	12-Oct-16	6	13	1	10
EMR	03-Nov-16	13	31	6	18
Global	03-Nov-16	17	31	9	18

³ Current rolling 6 months: 30 May 2016 – 29 November 2016 Same period previous year: 30 May 2015 - 29 November 2015



7 December 2016

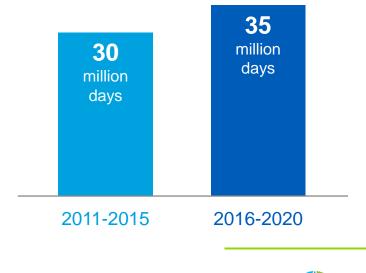
UN General Assembly: antimicrobial resistance



21 SEPTEMBER 2016, UN HEADQUARTERS, NEW YORK

Declaration recognised that:

"the keys to tackling antimicrobial resistance are: the **prevention and control of infections** in humans and animals, including **immunization**, monitoring and surveillance of antimicrobial resistance..." **Days of antibiotic use prevented** by Gavi support for Hib, pneumococcal and meningitis A vaccines:





Alliance fit for purpose

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, Examples ,

Alliance working closely together at every level



Health Minister, Niger, discussing JA at ICC

Oversee implementation of PEF

Coordinate Alliance operational issues

Joint appraisals

Provide technical guidance in key areas

Countries and partners

review implementation progress & performance

Strengthened interagency

coordination committees

Regional working groups provide input along the way



(ICCs)

Starting to scale up new tools

- Joint appraisals
- Partners' Engagement Framework
- Health system and immunisation strengthening support
- Cold chain equipment optimisation platform
- Grant performance frameworks
- Country risk matrix
- Programme capacity assessments
- Audits

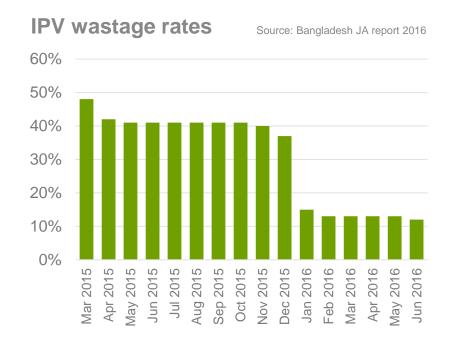




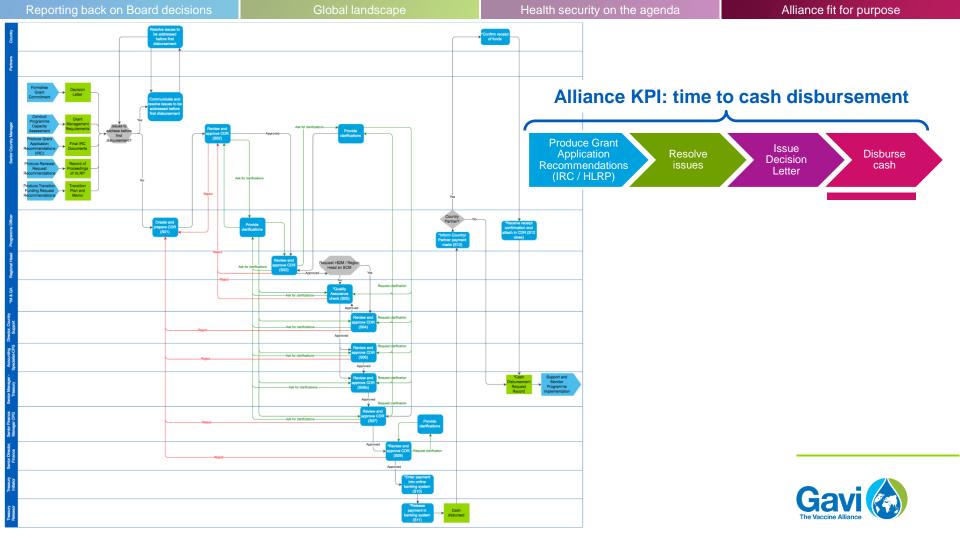


Bangladesh: Alliance model in action

- Excessive wastage highlighted by full country evaluation
- Triggered dialogue with partners
- Implementation of multi-dose policy incorporated into PEF monitoring matrix
- Integrated into joint appraisals
- Starting to see impact

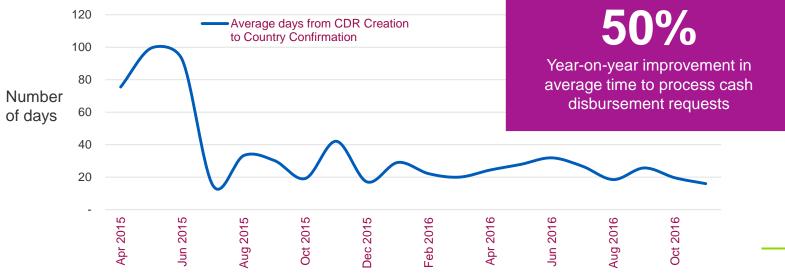






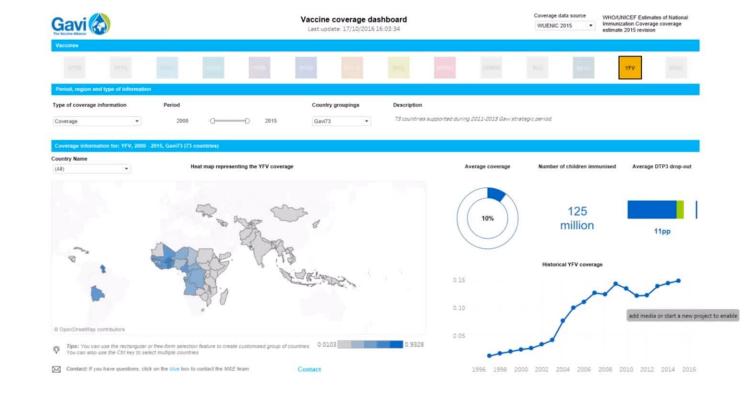
Reduction in time to process cash disbursements

Improved workflow and visibility has led to a 50% year-on-year reduction in the average time to process cash disbursement requests





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Health campus







At this Board meeting

For Board decision:

- Fragile settings, emergencies and displaced people
- Risk management
- Review of Gavi support for HPV vaccine
- Gavi's support for emergency vaccine stockpiles
- Gavi's continued role in yellow fever control
- Cold chain equipment optimisation platform

Consent agenda:

• Country engagement framework



Addressing fragility, emergencies and displaced people in Gavi countries

- 2015: ~70% of Gavi funds invested in fragile countries
- Of the top-10 countries with highest under-5 mortality, 8 are in emergency states
- Gavi countries among top refugee hosting countries worldwide

New principles for: Fragility | Emergencies | Displaced people



Gavi's support for emergency vaccine stockpiles





Gavi's continued role in yellow fever control

- Aligned with new WHO EYE strategy
- Increases available supply
- More transparency and accountability
- Aligns routine, campaigns, stockpiles
- Prioritises routine

US\$ 150m additional investment = 95m more vaccine doses, 180,000 additional deaths averted





Review of HPV vaccine support

23 countries launched HPV demonstration projects, but only 2 went national

Honduras also went national in 2016, but received only 50% support (exceptional catalytical country)

Gavi-supported national introductions (2)

Gavi-supported demonstration projects (23)

Gavi-eligible, no support so far (42)





Review of HPV vaccine support: proposed shifts

Move beyond demonstration programmes

allowing countries to introduce nationwide directly

Vaccinate multi-age cohort within age range 9-14 years in the year of introduction

Faster roll-out

Bigger impact:

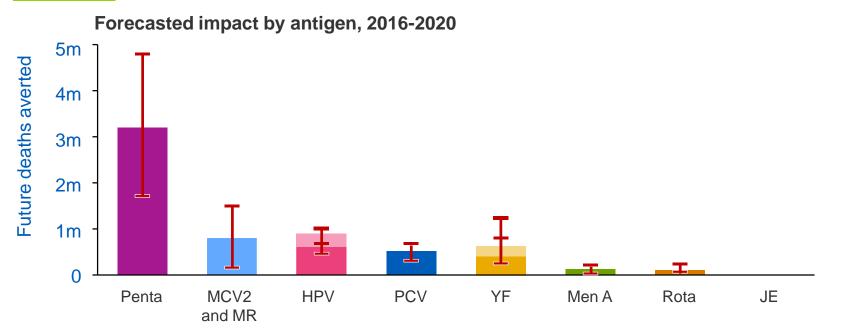
Additional investment of **0.8%** of 2016-2020 expenditure = **5%** increase in total number of deaths averted by Gavi programmes

- Increased herd effects, but smaller number of countries initially benefiting
- **Sustainability** to be demonstrated



Alliance fit for purpose

HPV and yellow fever: two of Gavi's most impactful vaccines



Sources: OP v14 - Joint impact modelling by Gavi, the Vaccine Alliance and the Bill & Melinda Gates Foundation. For MCV2 and MR: Strategic Demand Forecast v12. Numbers on click for yellow fever and HPV reflect proposed strategy changes. Note: future deaths averted for Japanese Encephalitis are below the visible threshold.



Alliance fit for purpose

HPV partnerships: integration and demand



Organisation of African First Ladies Against HIV/AIDS













Operational partnerships

Increasing private sector engagement





Strategic Training Executive Programme (STEP) for supply chain managers, East & West Africa



zipline

Drone launch to test vaccine delivery, Rwanda



PHILIPS

Data collection and integration workshop, Uganda



Board papers and myGavi

- Shorter pack, more papers on myGavi:
 - June 2016: pack 1+2: 341 pages, myGavi: 28 pages
 - Dec 2016: pack: 296 pages, myGavi: 203 pages











Reach every child www.gavi.org