



IPV implementation update

Diana Chang Blanc, *IVB/EPI HQ*
SAGE meeting, Geneva, 17 October 2017

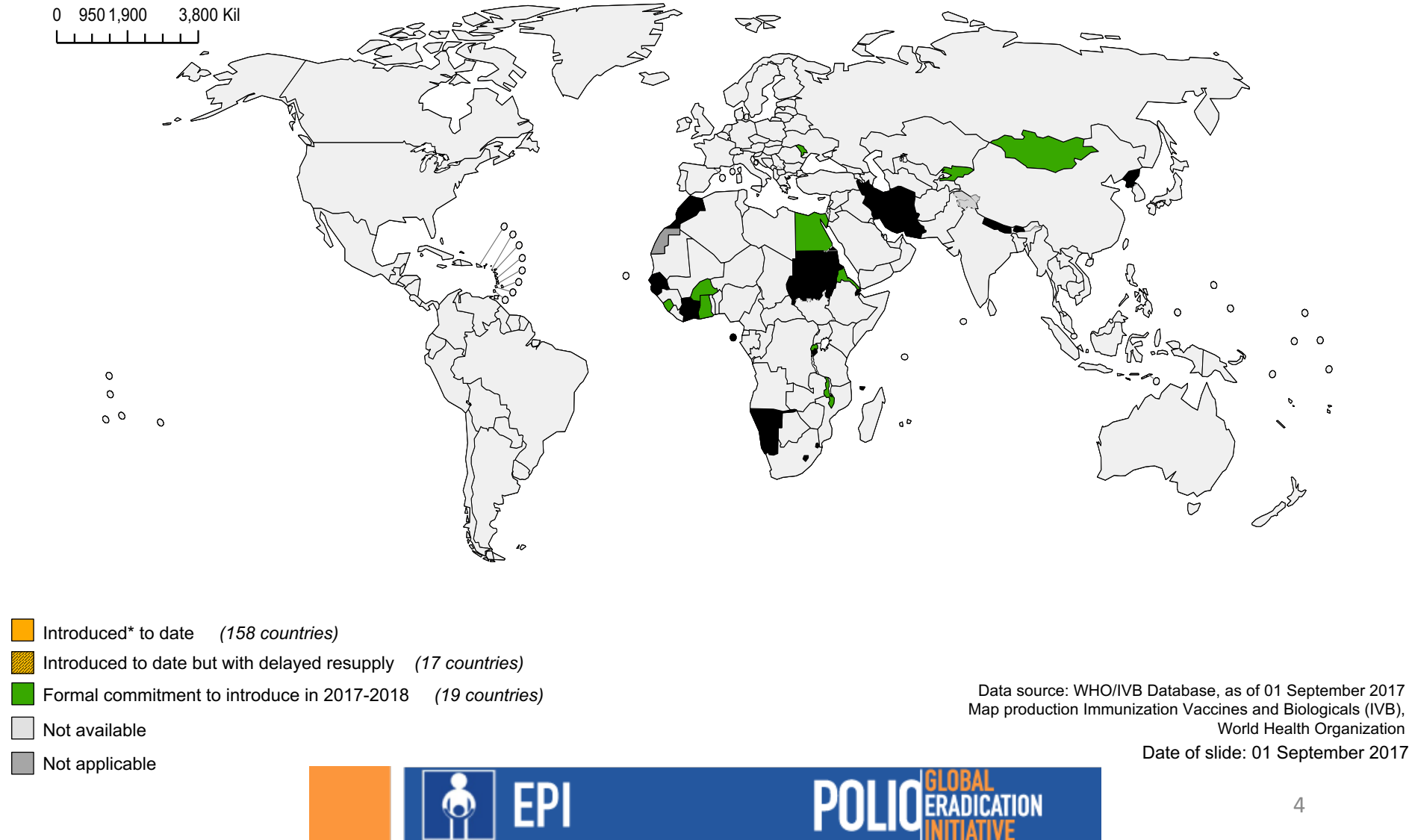
Outline

- **Overall IPV and fIPV implementation status**
- **Grading of risk in Tier 3 and Tier 4 countries**
- **Planned roll out of IPV in 2017-18**
- **fIPV catchup for missed cohorts (post May 2016)**

Overall IPV implementation status

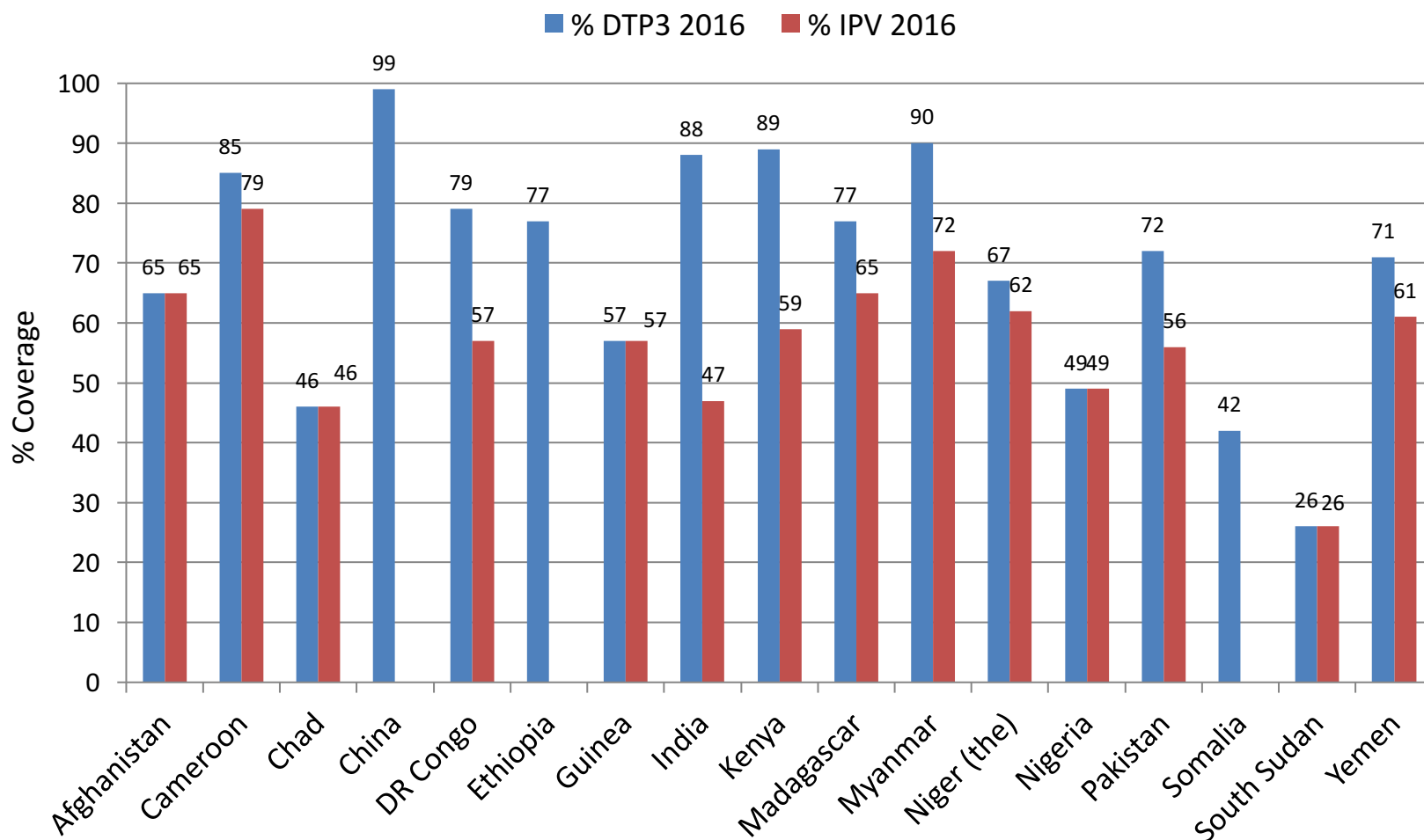
- By end of 2015, all 126 OPV-using countries **committed** to implement one-dose IPV
- However, manufacturers of prequalified IPV drastically reduced quantities of vaccine allocated to UNICEF/WHO (>50% reduction)
 - **Postponed IPV introduction in 18 low risk countries**
 - **Delayed resupply in 2016 to 17 low risk countries** that had previously introduced
 - 18% of global birth cohort not able to introduce or facing stock outs
 - Difficult to meet additional demands of IPV
- **IPV will liberate in 2018-19, but will be tight** -- available supply allocated based on risk of VDPV2

Countries using IPV vaccine to date and formal decision to introduce and with supply disruptions



WHO/UNICEF estimates of immunization coverage

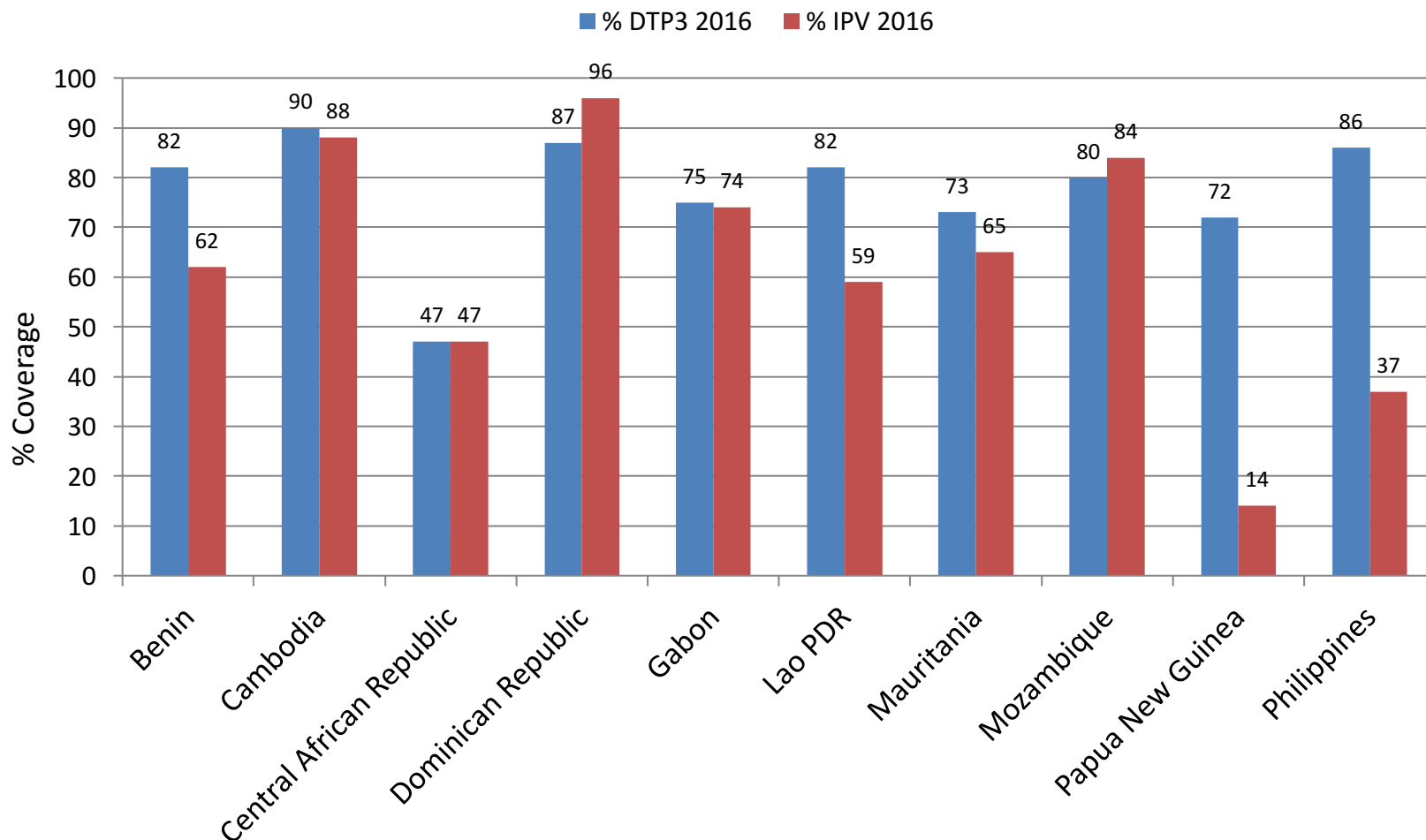
Tier 1 IPV and DTP3, 2016



Source: WHO and UNICEF estimates of immunization coverage: 2016 revision

WHO/UNICEF estimates of immunization coverage

Tier 2 IPV and DTP3, 2016



Source: WHO and UNICEF estimates of immunization coverage: 2016 revision

IPV implementation in GPEI POB supported countries

- Of the 126 OPV-using countries, 16 non-Gavi were eligible for IPV introduction support by the GPEI based on their income status and the polio risk
 - Support consisted of vaccine introduction grant and 1 year initial catalytic procurement
- Due to the supply constraints
 - **Egypt** and **Turkmenistan** have not yet introduced
 - **Morocco, Swaziland** and **Iran** have not been resupplied
- **All these countries will have supply available** as per the roll out plan according to their level of risk

Fractional dose IPV: Global implementation

- **Routine Immunization (2 fIPV at 6 and 14 weeks)**
 - **SEARO**
 - Rolled out nationally in **India** and **Sri Lanka** (19% of global cohort)
 - **Bangladesh** Q4 2017, **Nepal** for Q1 2018 (3% of global cohort)
 - **PAHO**
 - PAHO TAG recommended 14 countries to implement a 2 fractional dose sequential schedule (represent 6% of global cohort)
 - **Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua** are conducting trainings in Q4 2017
 - Discussions underway with other regions (**AFRO, EMRO**)
- **Additional fIPV experiences**
 - SIAs in small geographical areas of **India, Pakistan** in response to VDPV2 detections

Fractional dose feasibility assessment in AFRO

- RITAG recommended AFRO Tier 3 & 4 countries to consider using 2 fIPV doses, if able to do so
- Framework developed to assess country readiness and assist countries in decision-making about moving to fIPV
- The assessment included current programme practices and capacities as well as risk factors such as size of missed cohorts
- Preliminary results indicate that **Burkina Faso, Burundi, Cabo Verde, Gambia, Ghana, Rwanda, Sao Tome and Principe, Togo, Tanzania and Zimbabwe** could implement and benefit from fIPV implementation
- The analysis presented at EPI managers' meetings in September 2017

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Grading of Risk in Tier 3 and Tier 4

- In April 2017, SAGE recommended a review of the tier classification with respect to prioritization of IPV
- *Imperial College* analyzed the risk of a VDPV2 outbreak in all tier 3 and 4 countries based on the following risk factors:
 - **Estimated # children under 5 years old susceptible to type 2 poliovirus**
 - **Child mortality rate as a proxy for poliovirus transmission efficiency (reproduction number)**
 - **Migration from countries with circulating VDPV2 (Nigeria, Pakistan, DRC and Syria, in 2016-17)**
 - **Reported number of people with primary immunodeficiency shedding vaccine-derived poliovirus (iVDPV) during 2000-2012**

Grading of Risk among Tier 3 and Tier 4

- Tier 3 countries that are graded at highest risk of VDPV2 outbreak are, in order of priority: **Iran, Egypt and Sudan**
 - These countries will be in the top of priority for allocation of available IPV
- Tier 4 countries that are graded at highest risk of VDPV2 outbreak are, in order of priority: **Tanzania** and **Viet Nam**
 - IPV supply will be available for Tier 4 countries immediately after Tier 3 countries
- In summary, **all Tier 3 and 4 countries will have full dose supply available starting from Oct 2017 to end of Q1 2018**
- **WHO/UNICEF communication** have gone out to country offices with revised timelines, so countries can finalise introduction plans

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Planned roll out of IPV in remaining countries, 2017-18

Delayed introductions			
Tier 3		Tier 4	
Turkmenistan	Oct 17	Tanzania	Nov-Dec 17
Egypt	Nov-Dec 17	Vietnam	Jan-Feb 18
Eritrea	Jan-Feb 18	Ghana	Jan-Feb 18
Sierra Leone	Jan-Feb 18	Kyrgyzstan	Jan-Feb 18
Burkina Faso	Jan-Feb 18	Moldova	Jan-Feb 18
Tajikistan	Jan-Feb 18	Rwanda	Jan-Feb 18
		Togo	Feb-Mar 18
		Zimbabwe	Feb-Mar 18
		Zambia	Feb-Mar 18
		Uzbekistan	Feb-Mar 18
		Malawi	Feb-Mar 18
		Mongolia	Feb-Mar 18

Delayed resupply			
Tier 3		Tier 4	
Iran	Nov-Dec 17	Lesotho	Jan-Feb 18
Nepal	Q4 2017	Sao Tome	Jan-Feb 18
Sudan	Jan-Feb 18	Bhutan	Jan-Feb 18
Cote d'Ivoire	Jan-Feb 18	Comoros	Feb-Mar 18
Guinea Bissau	Jan-Feb 18	Gambia	Feb-Mar 18
Senegal	Jan-Feb 18	DPRK	Feb-Mar 18
Burundi	Jan-Feb 18	Swaziland	Feb-Mar 18
		Djibouti	Feb-Mar 18
		Namibia	SPC
		Morocco	SPC



EPI

POLIO GLOBAL
ERADICATION
INITIATIVE

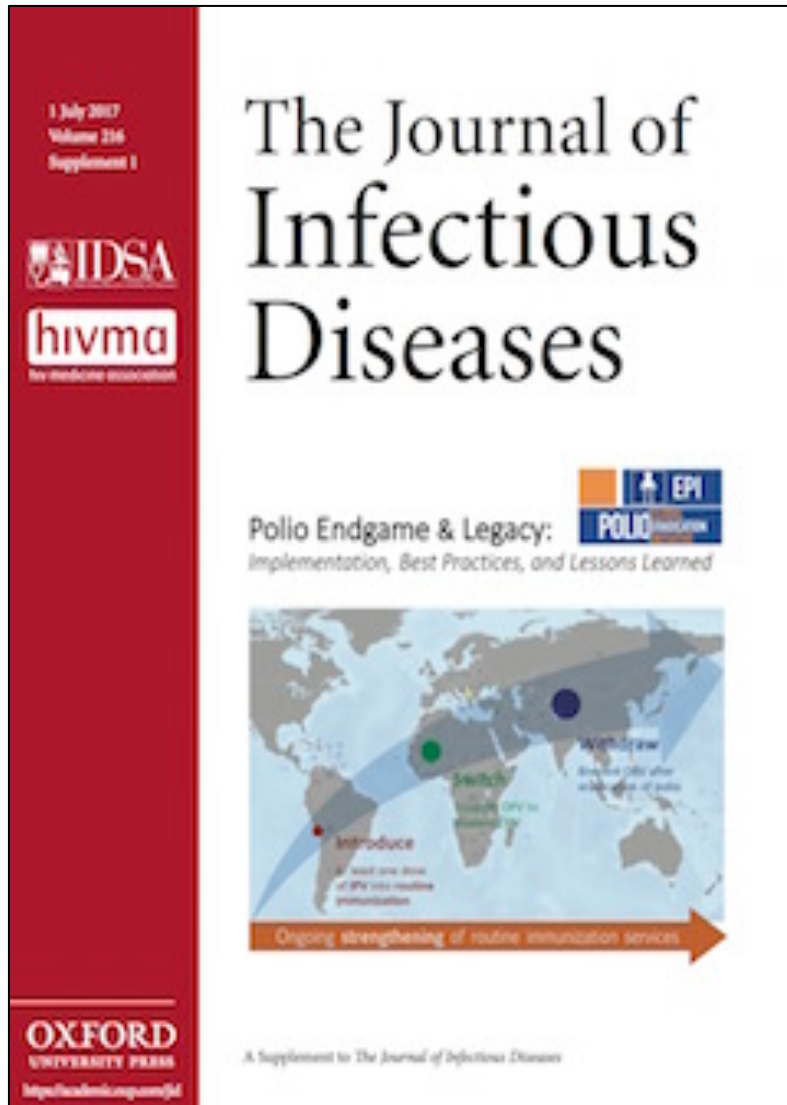
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Catch up of missed cohorts

- In September 2017, SAGE WG recommended that catch up activities should provide what it is provided through RI in each country
 - Catch up with 1 full dose: if the country is providing 1 full dose in RI
 - Catch up with 2 fIPV: If the country is providing 2 fIPV in RI
- Estimated **27 million children will have been missed in countries with no IPV since the tOPV switch (btwn May 2016-Oct 2017)**
 - **Highest risk countries:** Egypt 3.6m, Sudan 1.5m, Iran 1.8m, Tanzania 3m
- Due to current supply shortage
 - Supply for **1 full dose** catch up will only be available in 2019 (exact time to be determined in 2018 when manufacturers confirm 2019 plan)
 - Assuming Jan 2018 introduction in 4 highest risk countries, they alone will have around 11 million children unvaccinated for IPV

Polio Endgame & Legacy-Implementation, Best Practices, and Lessons Learned



Volume 216, Issue suppl_1

1 July 2017

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Thank you!

