

Session 2: HPV Vaccination Progress and Impact of single dose

Impact of single dose on HPV vaccination coverage

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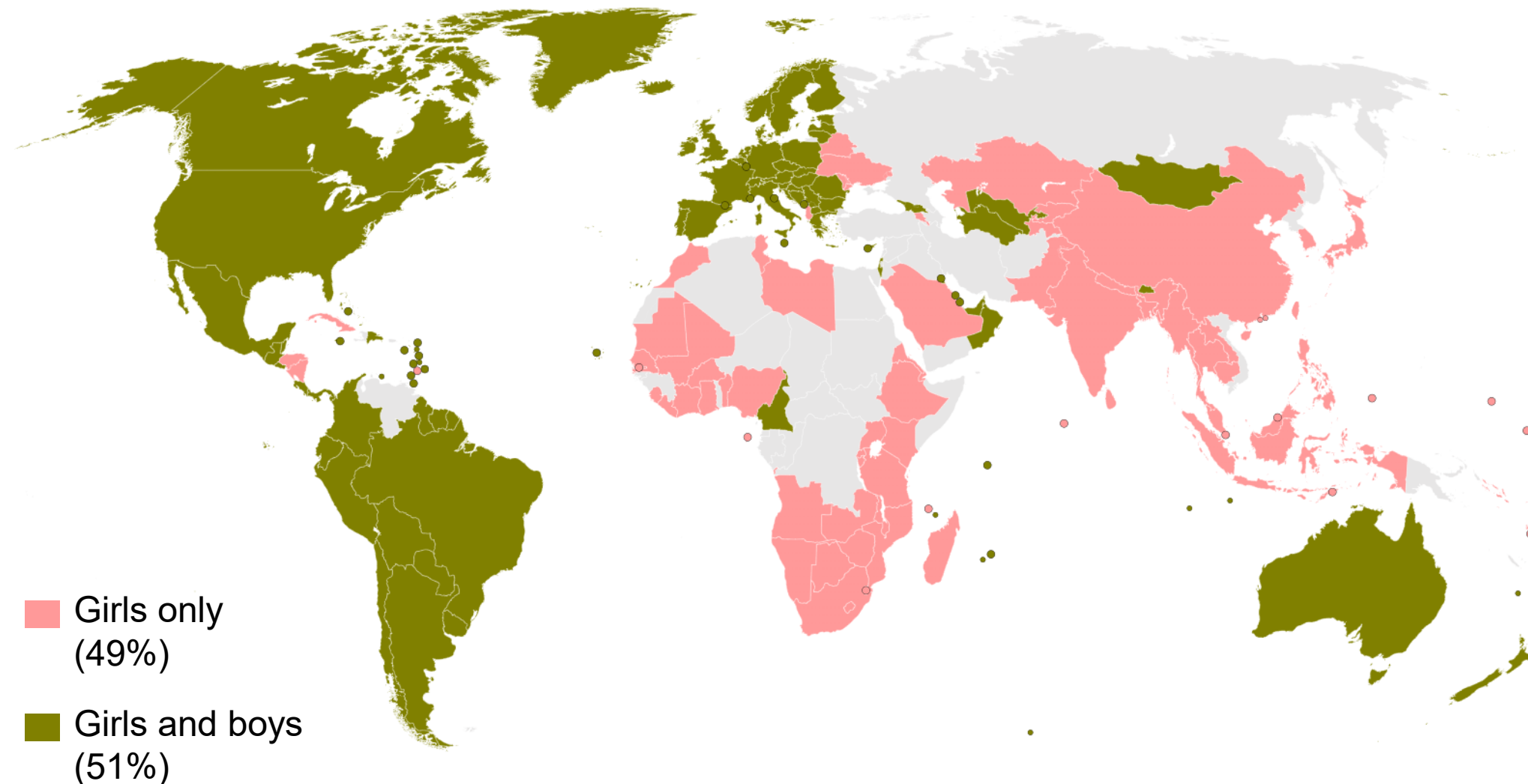
METHODS COVERAGE ESTIMATES

HPV VACCINATION

CERVICAL CANCER SCREENING

Periodicity	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> Every 3 years
Year publication first edition	<ul style="list-style-type: none"> Since 2019, WHO/UNICEF annually updates HPV vaccination coverage estimates for 194 Member States from 2010 onwards 	<ul style="list-style-type: none"> In 2022 first edition (estimates for 2019) In 2025 second edition (estimates for 2022). New: specific estimates of HPV-based screening coverage
Data sources / Methods	<ul style="list-style-type: none"> Administrative and survey data reported through the WHO/UNICEF Joint Reporting Form. + country-by country review of available data informed and constrained by a set of heuristics; no statistical or mathematical models are used. 	<ul style="list-style-type: none"> Administrative and survey data + statistical models including missing data treatment
WHO country consultation	Yes	Yes
References	<ul style="list-style-type: none"> Methods: Bruni et al 2021 Prev Med Data: https://immunizationdata.who.int/global/wiise-detail-page/human-papillomavirus-(hpv)-vaccination-coverage 	<ul style="list-style-type: none"> Methods and results: Bruni, Serrano et al 2022 Lancet Glob Health Data: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-cervical-cancer-screening-among-women-aged-30-49-years-%28-%29

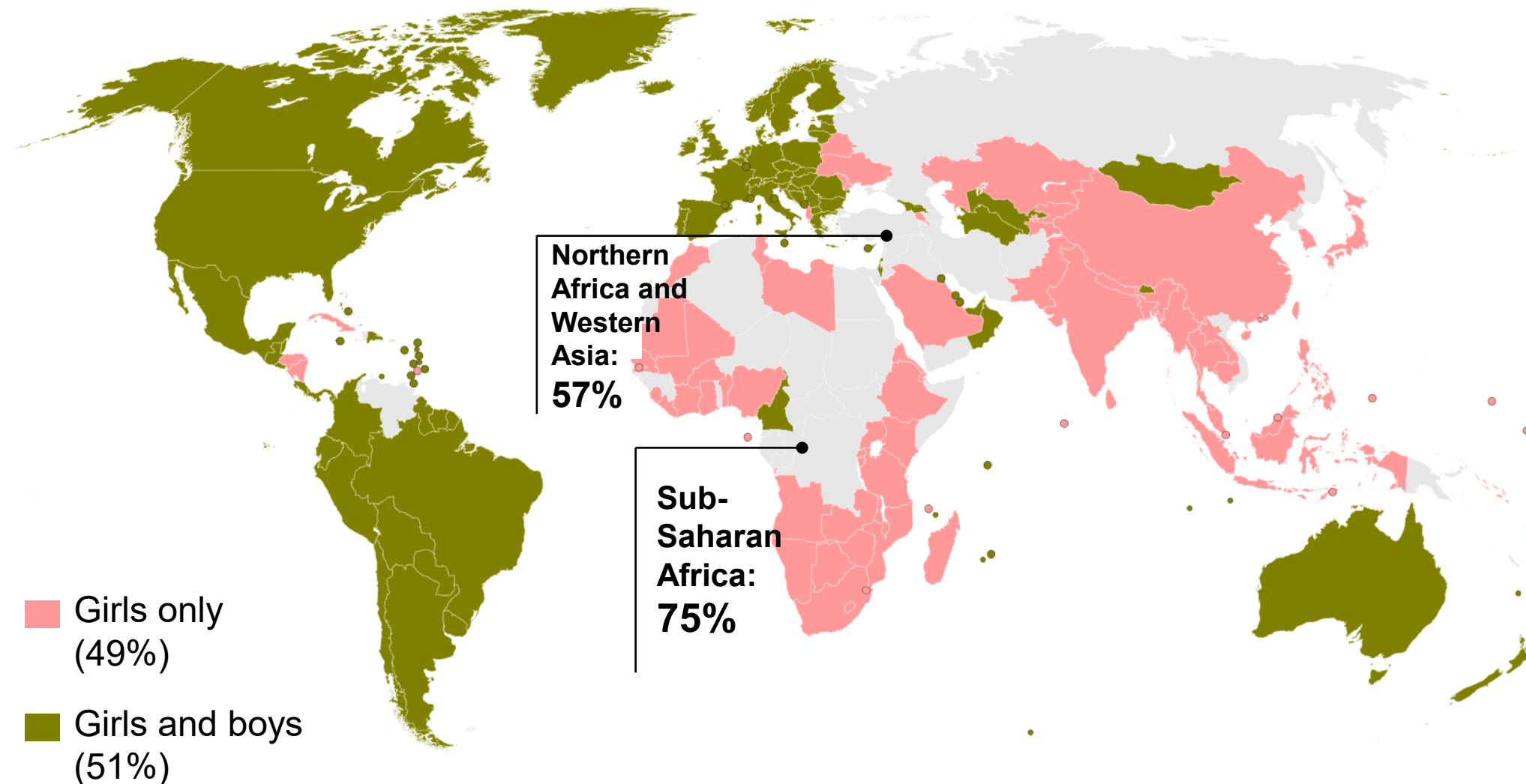
Countries with HPV vaccination in their national schedule – May 2026



By May 2026, 85% of countries (N = 165/194) have introduced the HPV vaccine into their national schedule.

Delivery is mainly school-based in 64% of countries, health facility-based in 21%, and mixed in 15%.

Countries with HPV vaccination in their national schedule – May 2026

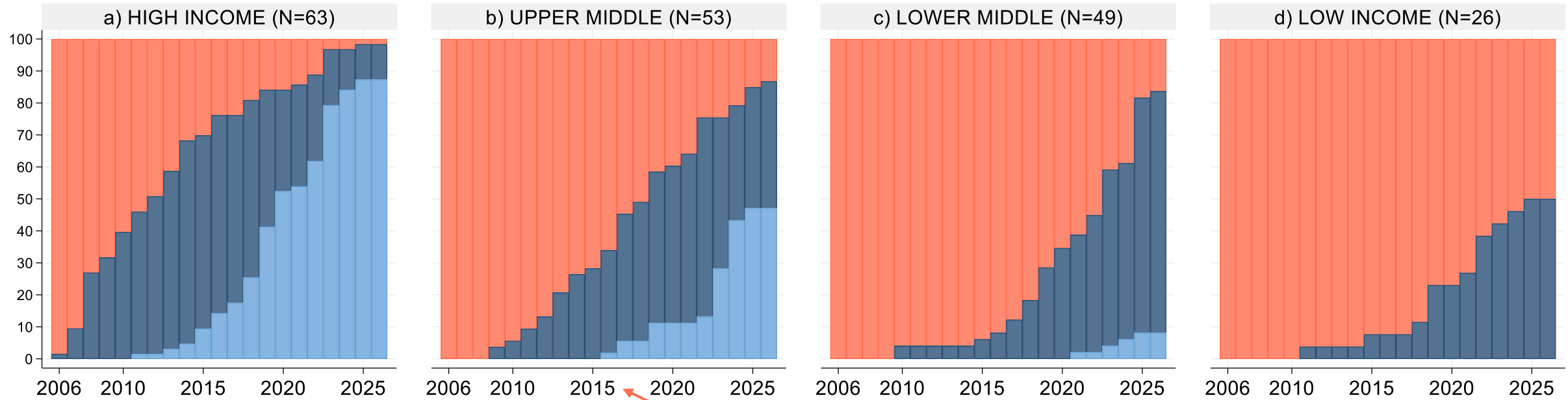


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Cumulative % of countries with HPV vaccination programs by country-income level, year and target genders

Not introduced (orange) Girls only (dark blue) Girls and boys (light blue)



2006 First licensure

2009 WHO recommends routine HPV vaccination in girls

2014 WHO recommends 2-dose schedule
2017 WHO Males only when affordable

2020 WHO Global Strategy to Accelerate the Elimination of Cervical Cancer

2012, Gavi starts subsidizing HPV vaccine introduction in eligible LMICs

2022 WHO recommends single-dose schedule

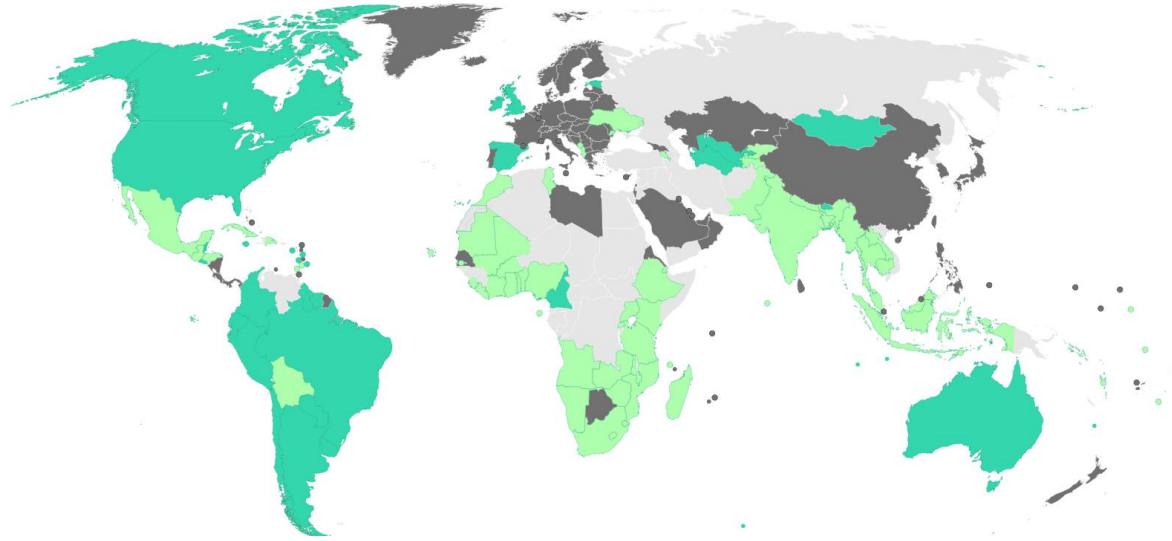
March 2026: **98%** of countries with HPV
87% both girls and boys

87% of countries with HPV
47% both girls and boys

84% of countries with HPV
8% both girls and boys

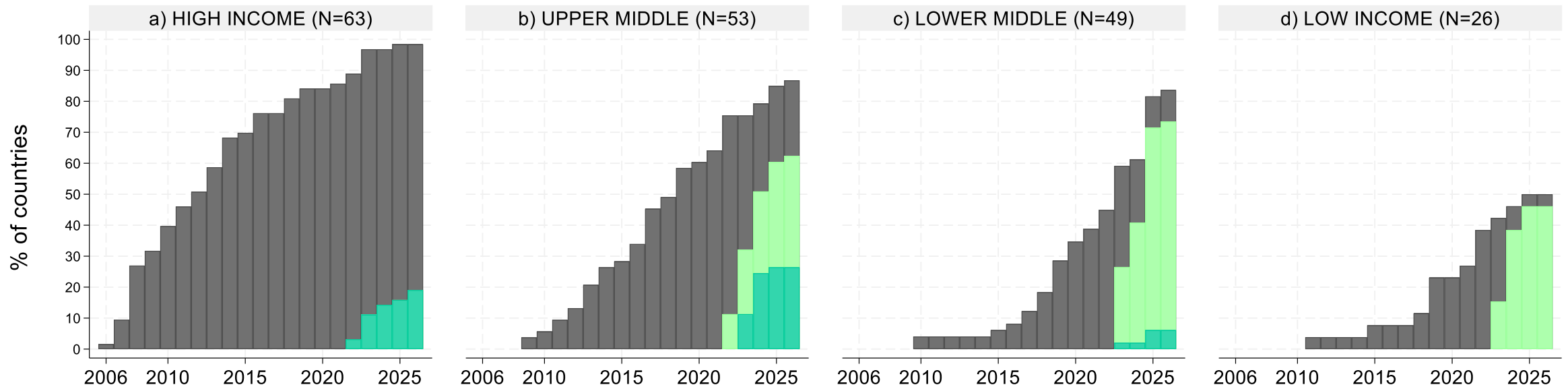
50% of countries with HPV
0% both girls and boys

By May 2026, of the 165 countries with HPV vaccination in their national schedule, 96 (58%) have adopted a single-dose schedule, 88% are LMIC



Of 49 new introductions in the last four years, 29 introduced HPV vaccination directly as a single dose programme

2 Doses
 1 Dose - Girls only
 1 Dose - Girls and boys

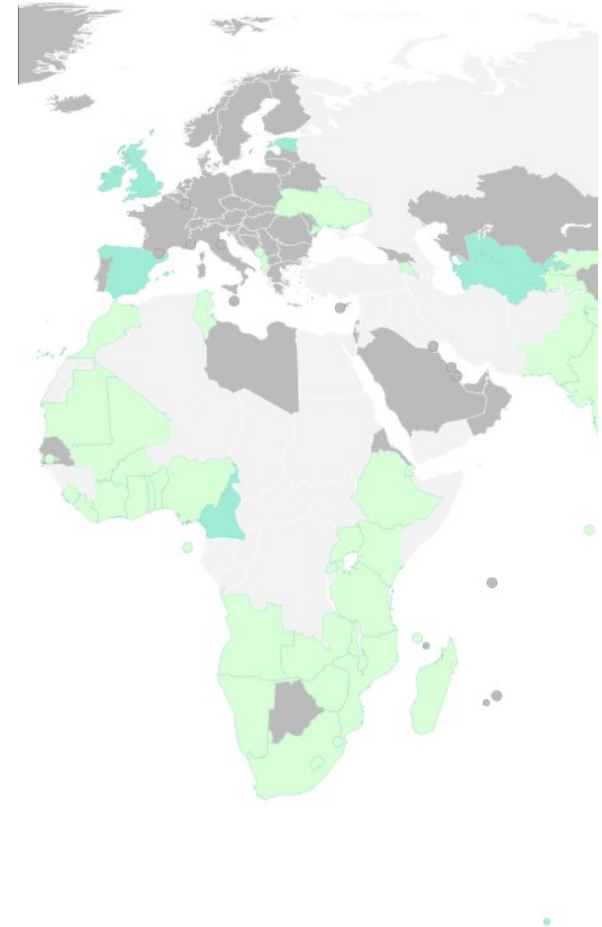


Transition to single-dose: extension of age eligibility and extension to boys.

96 countries have adopted a single-dose HPV vaccination schedule

- 1) New introductions with single dose (N=29)
 - 69% (20 countries) started with multi-age cohorts (MAC)

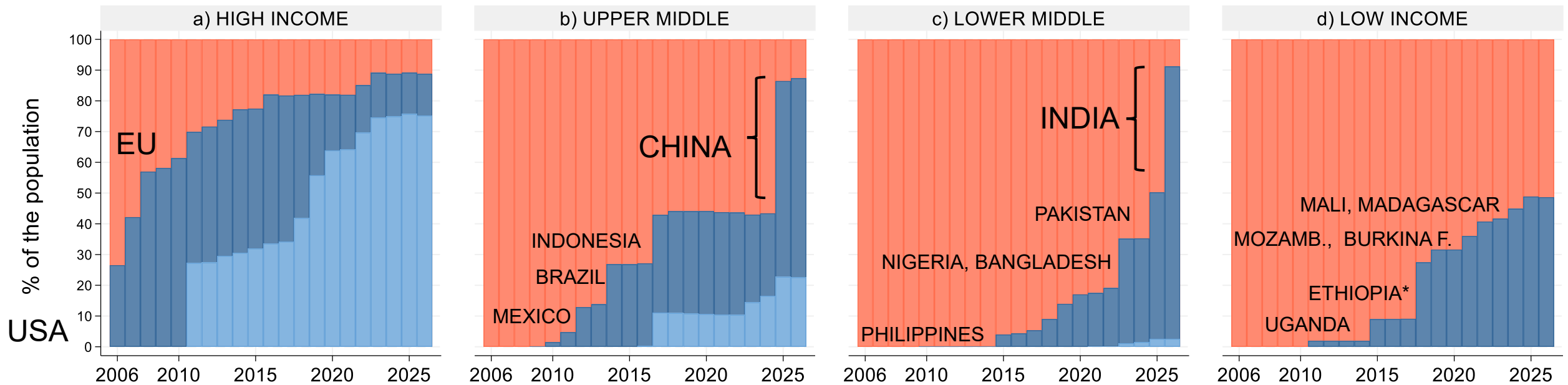
- 2) Countries switching from 2 doses (n = 67):
 - 41% (27 countries) expanded age cohorts in girls
 - 30% (20 countries) introduced boys or expanded male cohorts
 - 16% (11 countries) already boys vaccination or extensive catch-up programmes



Not all countries have the same population size

% of Girls

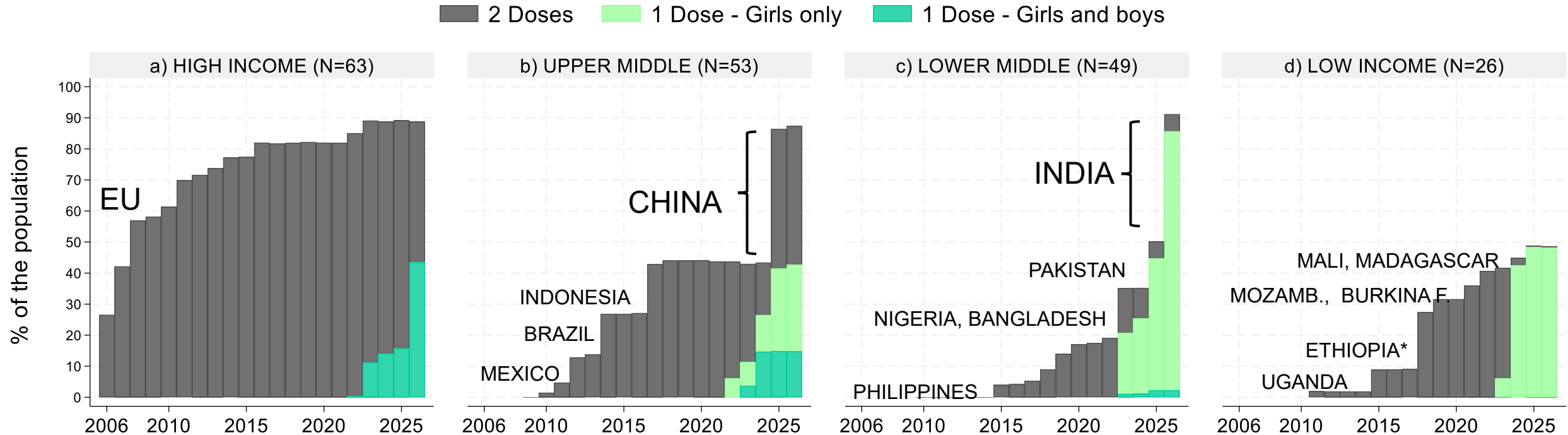
Not introduced Girls only Girls and boys



* Ethiopia is currently in a temporary state of non-classification according to the World Bank's income classification. However, for this analysis, we have classified it as a low-income country, which is how it was classified in previous years.

Not all countries have the same population size

% of Girls

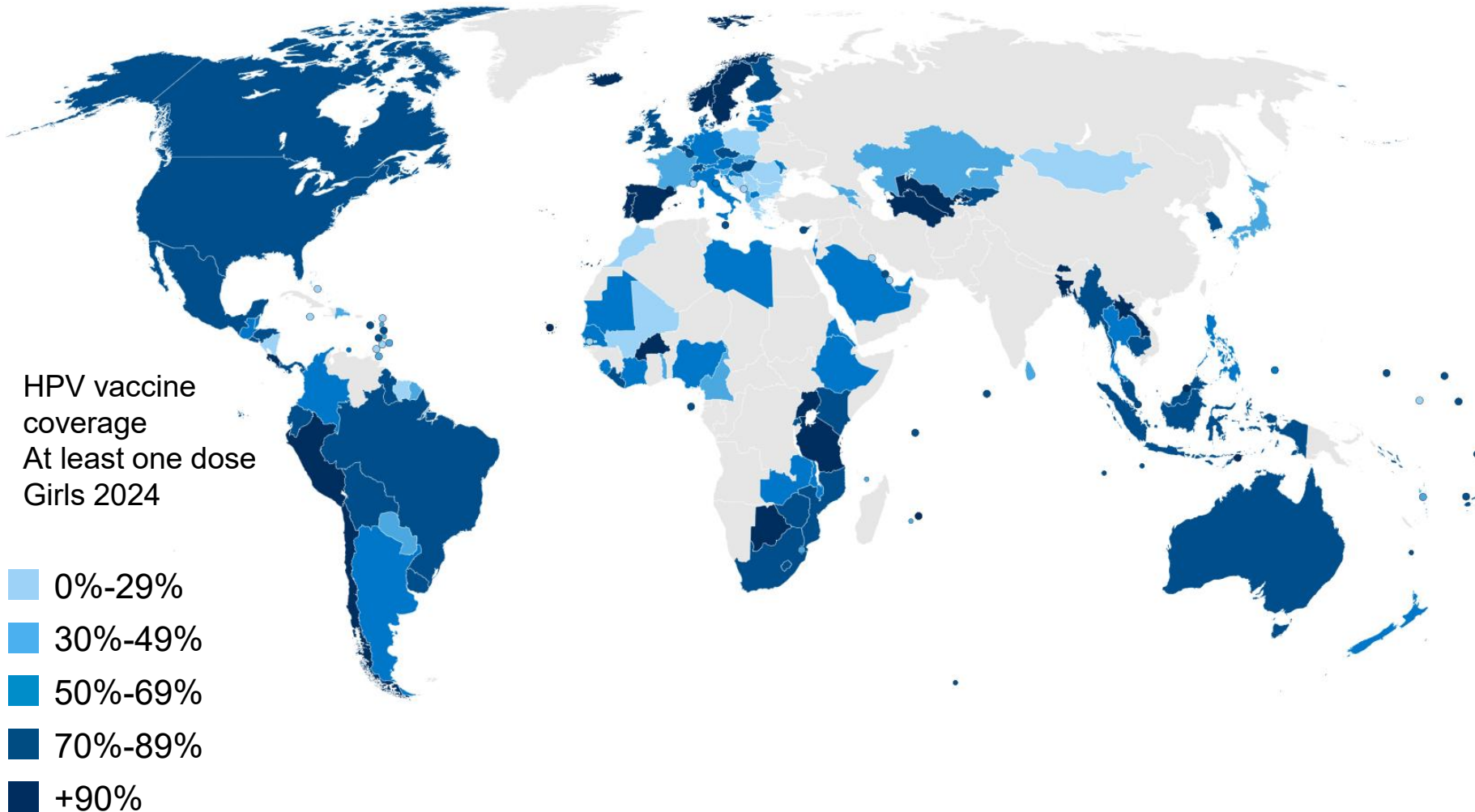


In 2026, 85% of girls live in a country with an HPV vaccination programme

More than 60% of girls will be eligible for HPV vaccination under a single-dose schedule

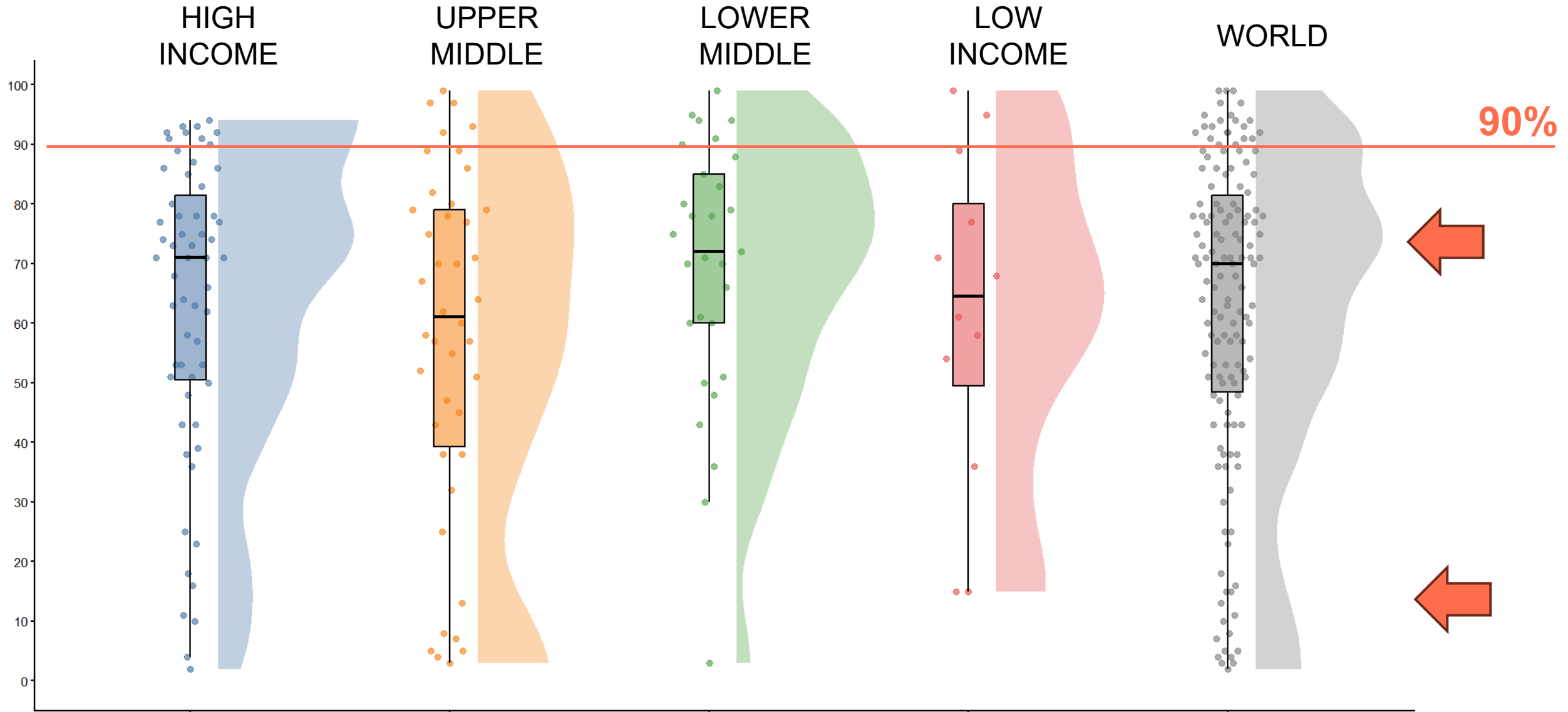
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HPV vaccine coverage for at least one dose (Girls, 2024)



Mean programme coverage By SDG region	
Australia and New Zealand	63
Central and Southern Asia	78
Eastern and South-Eastern Asia	73
Europe and Northern America	60
Latin America and the Caribbean	58
Northern Africa and Western Asia	44
Oceania (excl. AUS/NZL)	68
Sub-Saharan Africa	67
WORLD	63

HPV vaccine coverage for at least one dose (Girls, 2024)

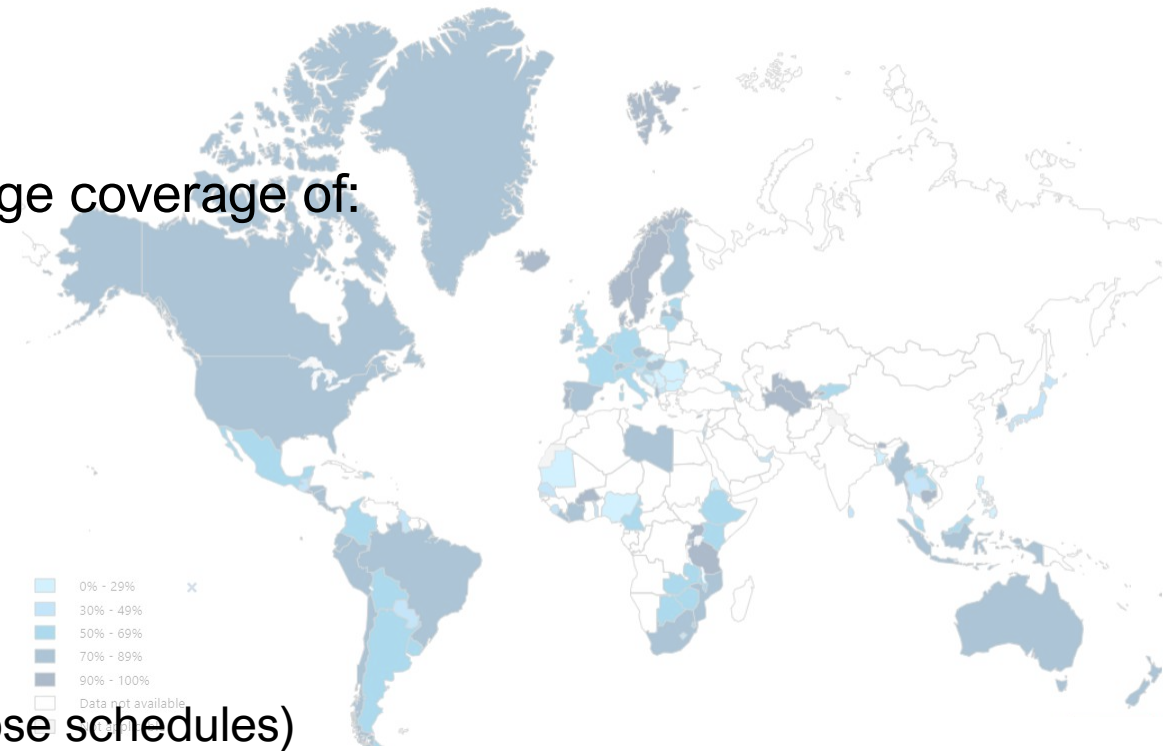


HPV vaccine coverage for at least one dose (Girls, year before and after switching to single-dose). 2024 estimates

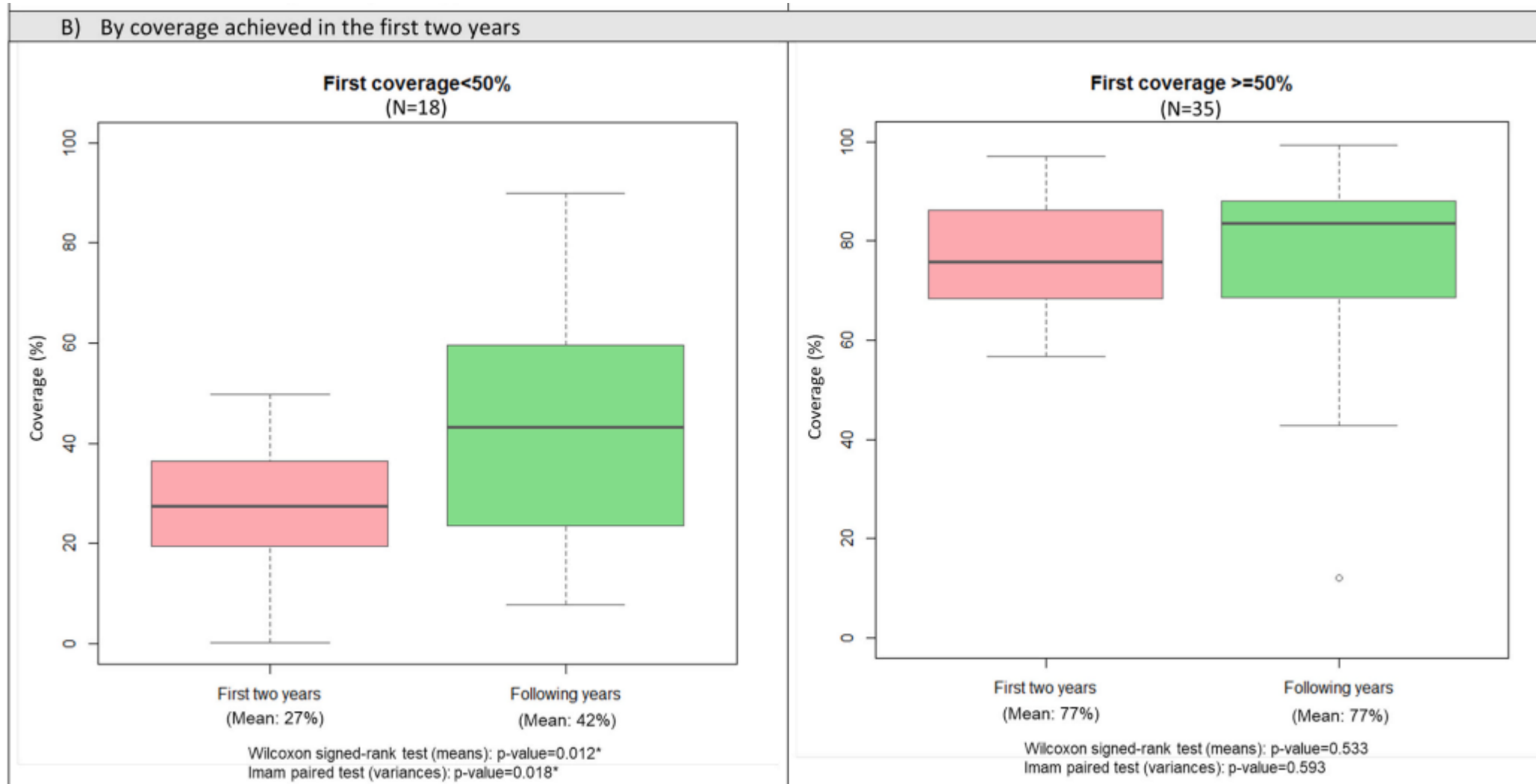
	Mean programme coverage	
	Before	After
HIGH INCOME	68	68
N countries: 12		
UPPER MIDDLE	55	59
N countries: 27		
LOWER MIDDLE	64	70
N countries: 18		
LOW INCOME	66	64
N countries: 9		

WHO/UNICEF HPV VACCINE NATIONAL ESTIMATES

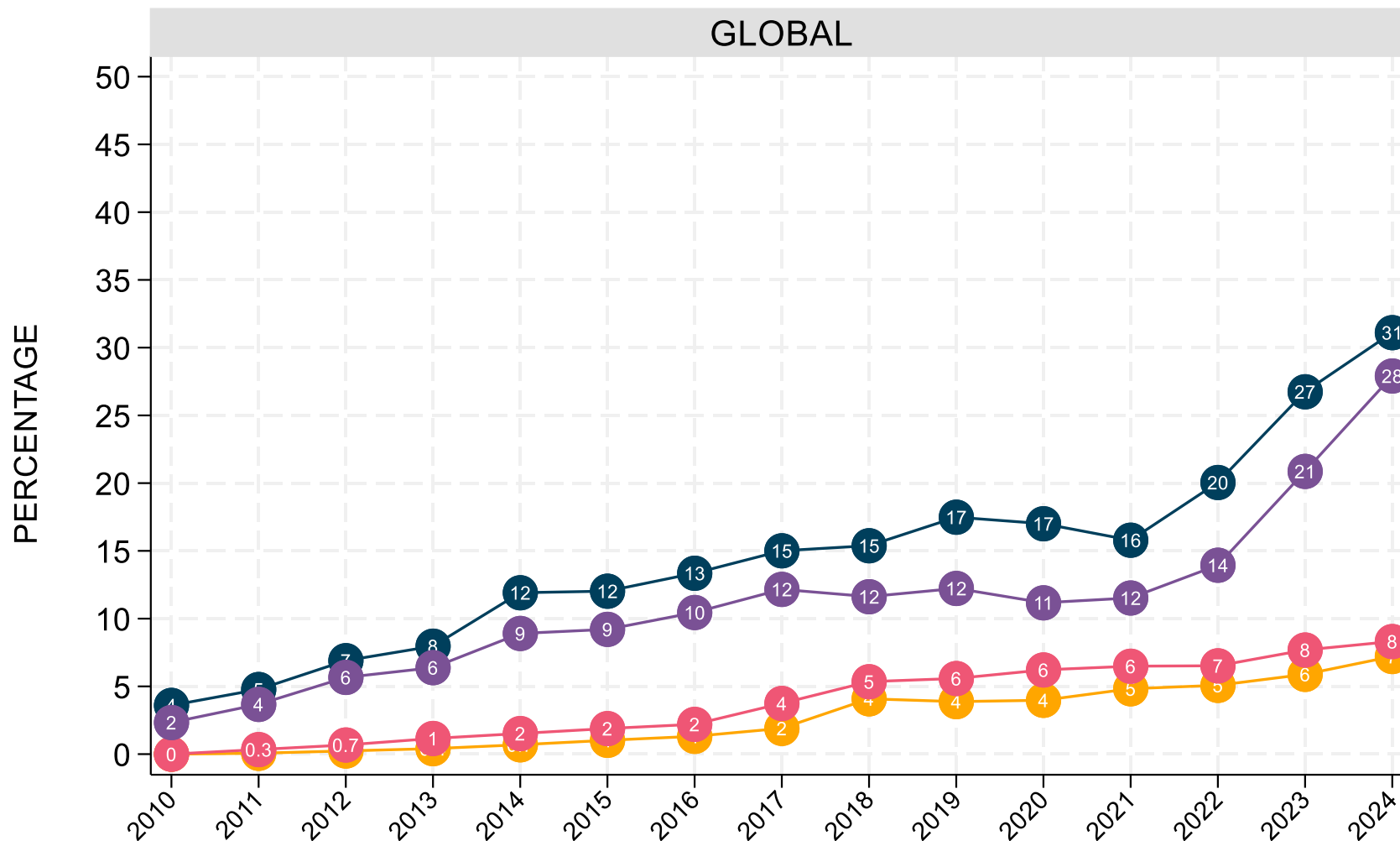
- Program performance is suboptimal in many countries, including high-income countries with more resources. In 2024 only 23 countries reached coverages for the first dose higher than 90%
- In 2019, the programs had an average coverage of :
 - **67%** for the first dose of the vaccine
 - **53%** for the final dose
- After COVID, in 2021, the programs had an average coverage of:
 - **55%** for the first dose of the vaccine
 - **44%** for the final dose
- In 2024:
 - **63%** for the first dose of the vaccine
 - **57%** for the final dose *(includes single-dose schedules)



Comparison of HPV1 coverage between the first two years and subsequent years



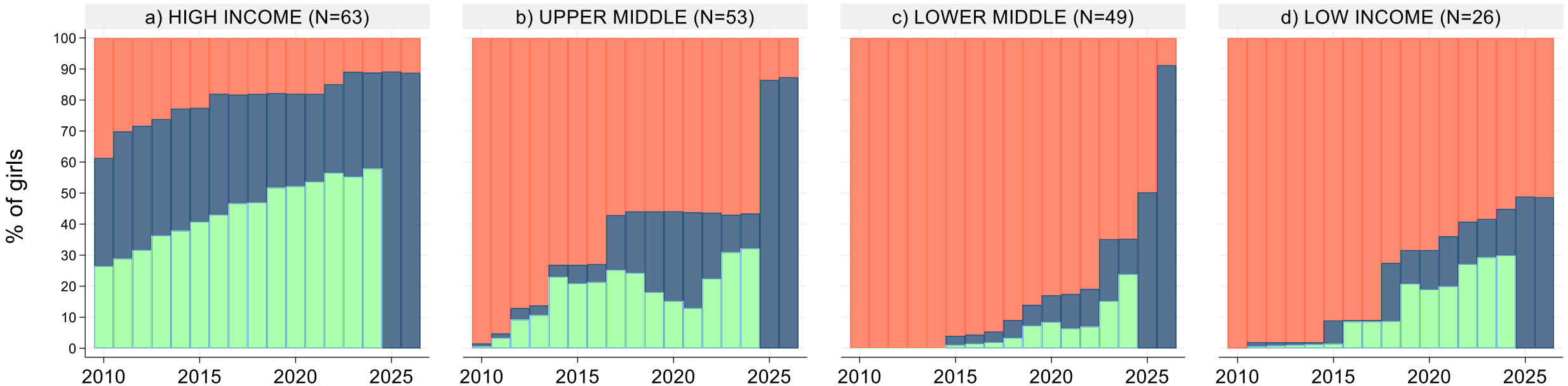
Global HPV vaccination programme coverage, weighted by population size



- In 2024 we estimated that 31% of girls worldwide had received at least one dose of the HPV vaccine.
- HPV vaccination coverage is recovering after the decline caused by the pandemic.
- Impact of the single-dose strategy since 2022

Proportion of girls by income level and HPV vaccination coverage (at least one dose)

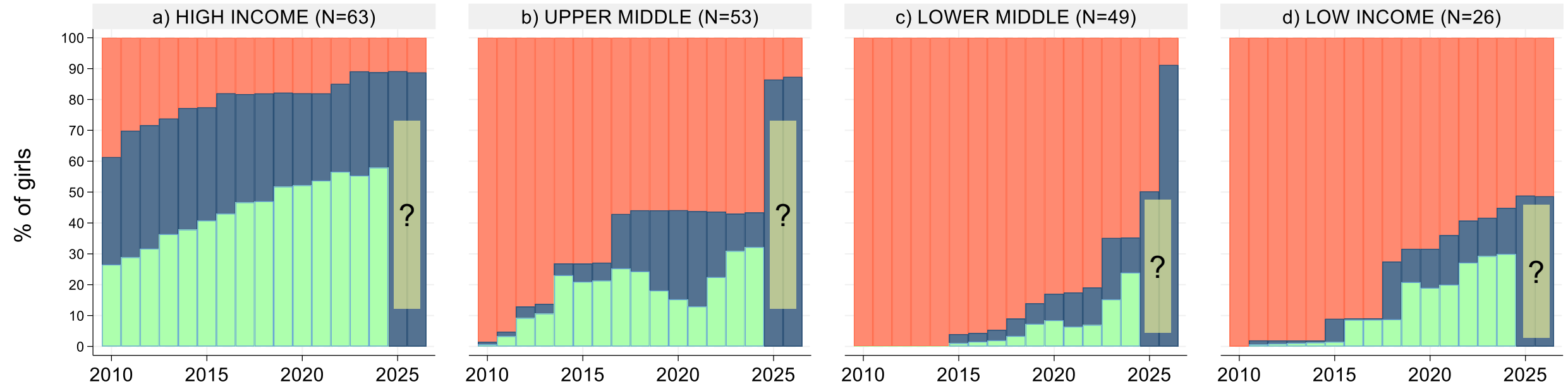
Not introduced Unvaccinated Vaccinated



2025-26 coverages still not available. 2025 Estimates will be released in July 15th 2026

Proportion of girls by income level and HPV vaccination coverage (at least one dose)

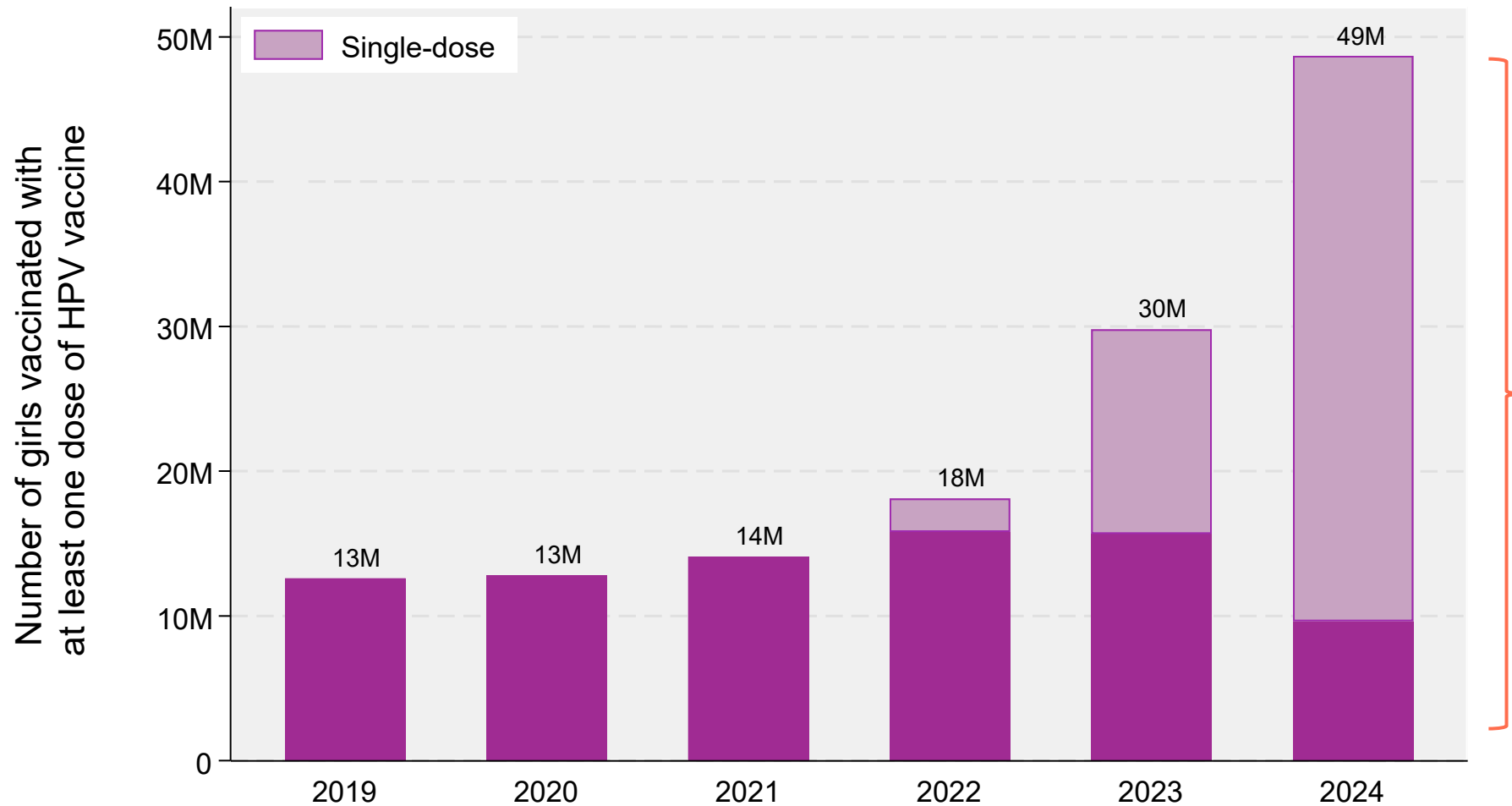
Not introduced Unvaccinated Vaccinated



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Single dose – number of girls vaccinated

Millions of girls aged 9-14 vaccinated with a first dose of HPV vaccine



CONCLUSIONS

- More girls and boys were vaccinated in 2024 than ever before, facilitated by **introductions in high-population countries and the adoption of single-dose and multi-age cohort strategies.**
- The recent introductions in China and India could change the global HPV vaccination coverage picture in the next years
- There are still 30 countries that have yet to introduce HPV vaccination in their national schedules
- However, despite the single-dose regimen, the average programme performance remains low and far from the 2030 target.
 - **31% global HPV vaccination coverage in girls (at least one dose)**
 - **63% mean performance of HPV vaccination coverage programme**
- Very few countries achieve final coverages higher than 90%.
- Most of the countries showed increasing or stable trends. Among the countries that started with lower coverages, the increasing trends were more common.
- The next challenge is performance, not only introduction: many countries still remain far from the 90% target with suboptimal coverages

Acknowledgements



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