



HPV Vaccination Program

Cross-country learning and best practices.

Regional Overview of HPV vaccination in the Western Pacific

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Global strategy to accelerate the elimination of cervical cancer

VISION: A world without cervical cancer

THRESHOLD: All countries to reach < 4 cases/100,000 women years

2030 CONTROL TARGETS

90%

of girls fully vaccinated with HPV vaccine by 15 years of age

70%

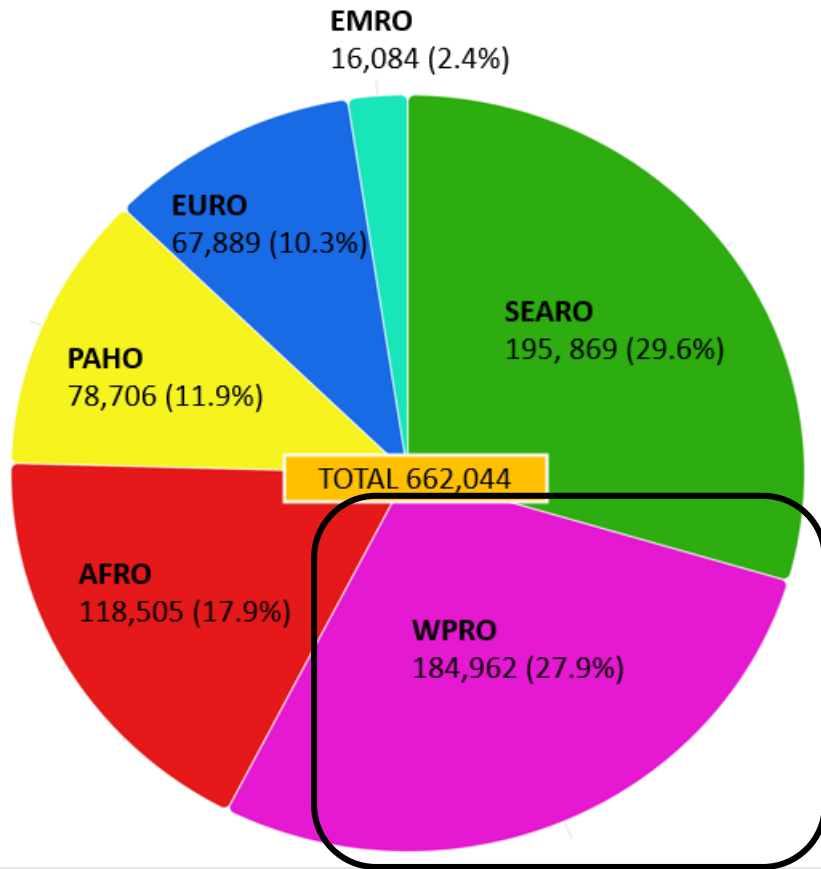
of women screened with a high precision test at 35 and 45 years of age

90%

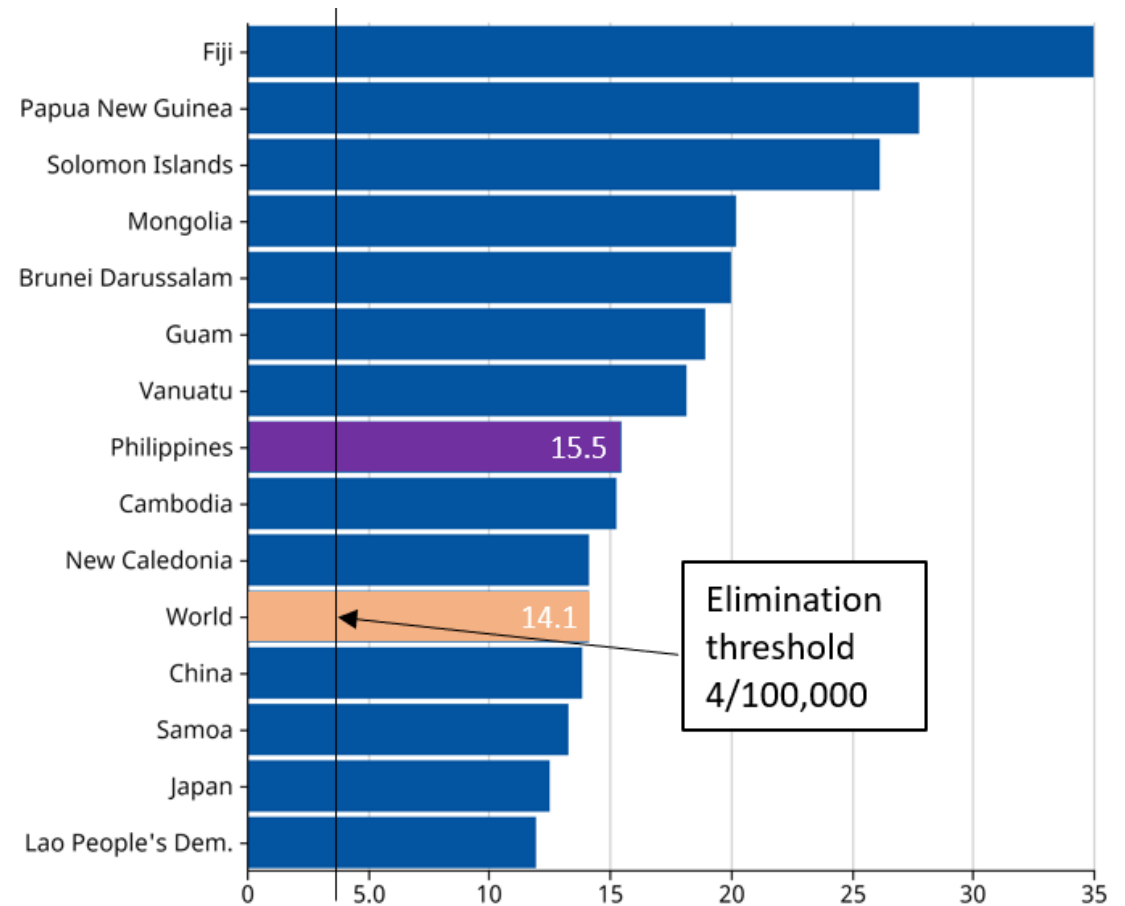
of women identified with cervical disease receive treatment and care

SDG 2030: Target 3.4 – 30% reduction in mortality from cervical cancer

Global and regional burden of cervical cancer



Estimated total annual CxCa cases by WHO Region

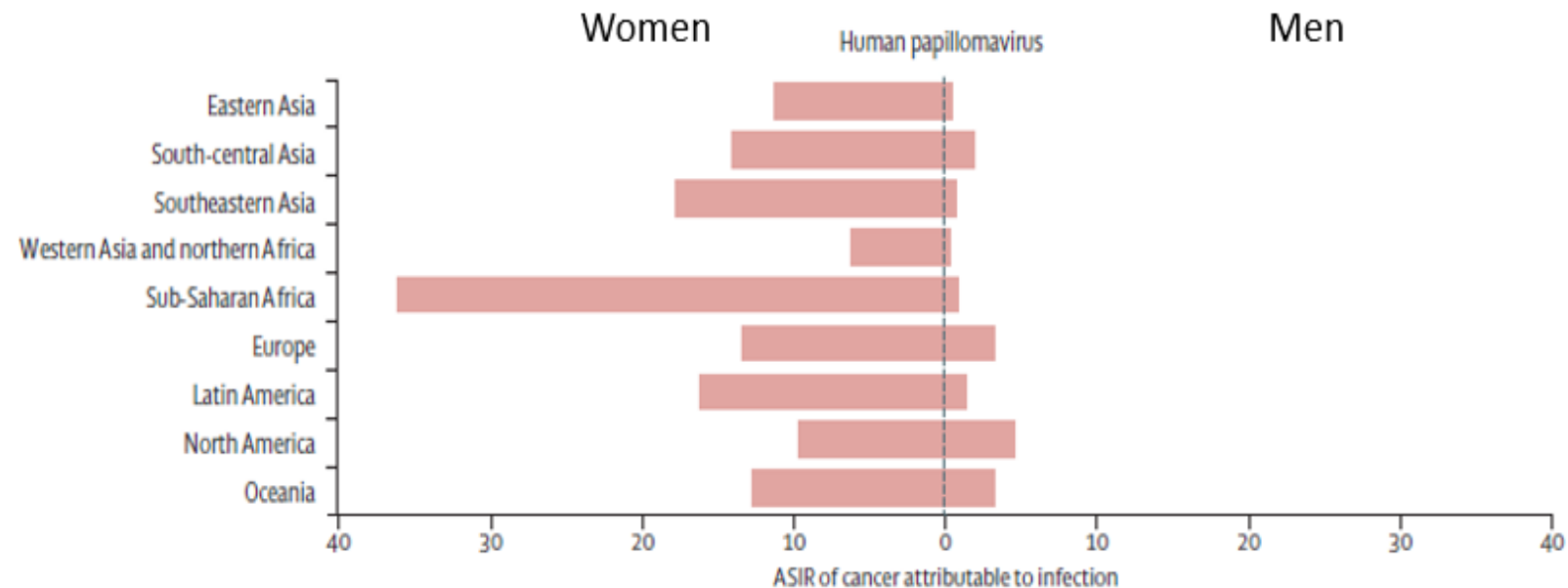


Age standardized CxCa incidence in WPR countries

Majority of *HPV related cancers* are cervical cancer

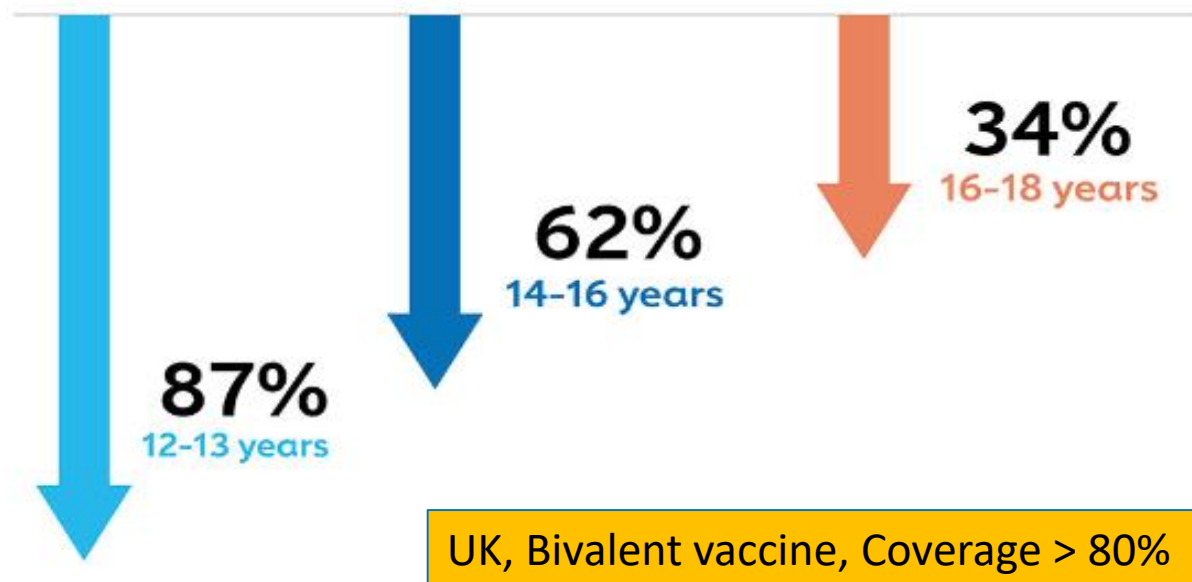
Cervical cancer represents **~80% of HPV-attributable cancer burden**, with **women** bearing around **90%** of HPV-attributable cancer cases (~700K) worldwide.

Age-adjusted incidence rate of HPV related cancer, by sex and region



HPV vaccination strongly reduces invasive cervical cancer

Estimated relative reduction in cervical cancer rates
compared with the unvaccinated cohort



Source: Falcaro, M., Castañon, A., Ndlela, B., Checchi, M., Soldan, K., Lopez-Bernal, J., ... & Sasieni, P. (2021). The effects of the national HPV vaccination programme in England, UK, on cervical cancer and grade 3 cervical intraepithelial neoplasia incidence: a register-based observational study. *The Lancet*, 398(10316), 2084-2092.

- HPV vaccination in 12-13 y.o. girls resulted in **87% reduction** in invasive cervical cancer
- Vaccination at older ages (e.g. 14-16 y.o. and 16-18 y.o. girls) showed effectiveness reduced with age (due to a higher proportion of girls already exposed to HPV infection) but resulted in **62%** and **34%** reductions in cancer rates, respectively.

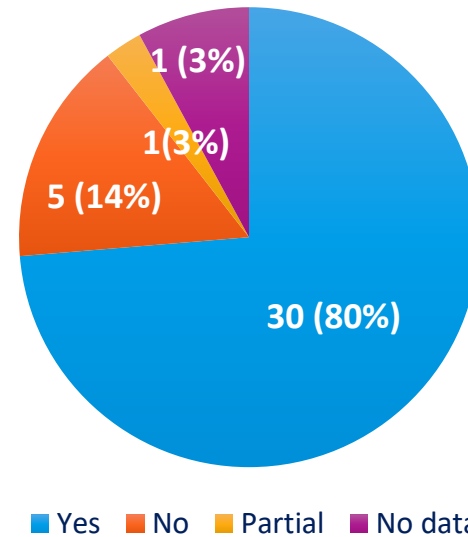
Similar reductions in invasive cancers reported from:

Sweden (Lei et al, 2020), **Denmark** (Kjaer et al, 2021), **Scotland** (Palmer et al, 2024)

HPV introduction in the Western Pacific Countries



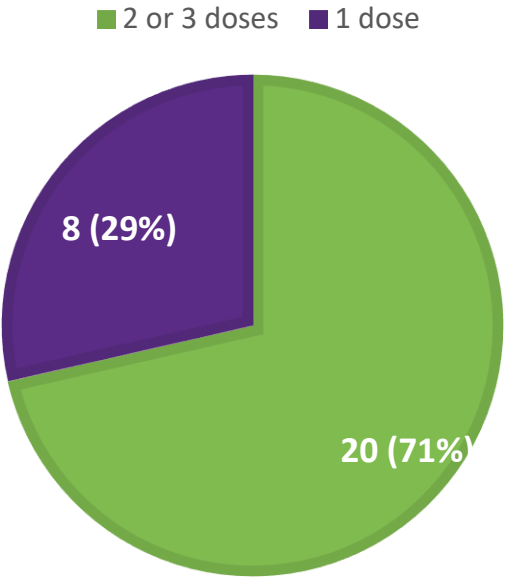
Countries with HPV vaccination in *National Immunization Program*



- **Yes:** 30 countries/areas including KIR (Q4/2023)
- **Partial** (i.e. not introduced into NIP but only in a few provinces): 1 (PHL)
- **No:** 5 countries/areas including CHN*, PYF, PNG, VNM, **MNG** (introducing this year)
- **No data:** 1 (Pitcairn)

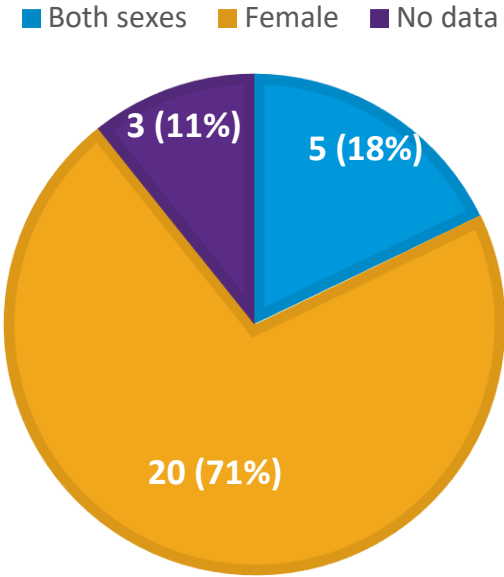
HPV schedule and targeted sex in the *WPR countries*

HPV SCHEDULE



Including two countries (**MYS and LAO**), which switched to 1 dose (in 2023/2024)

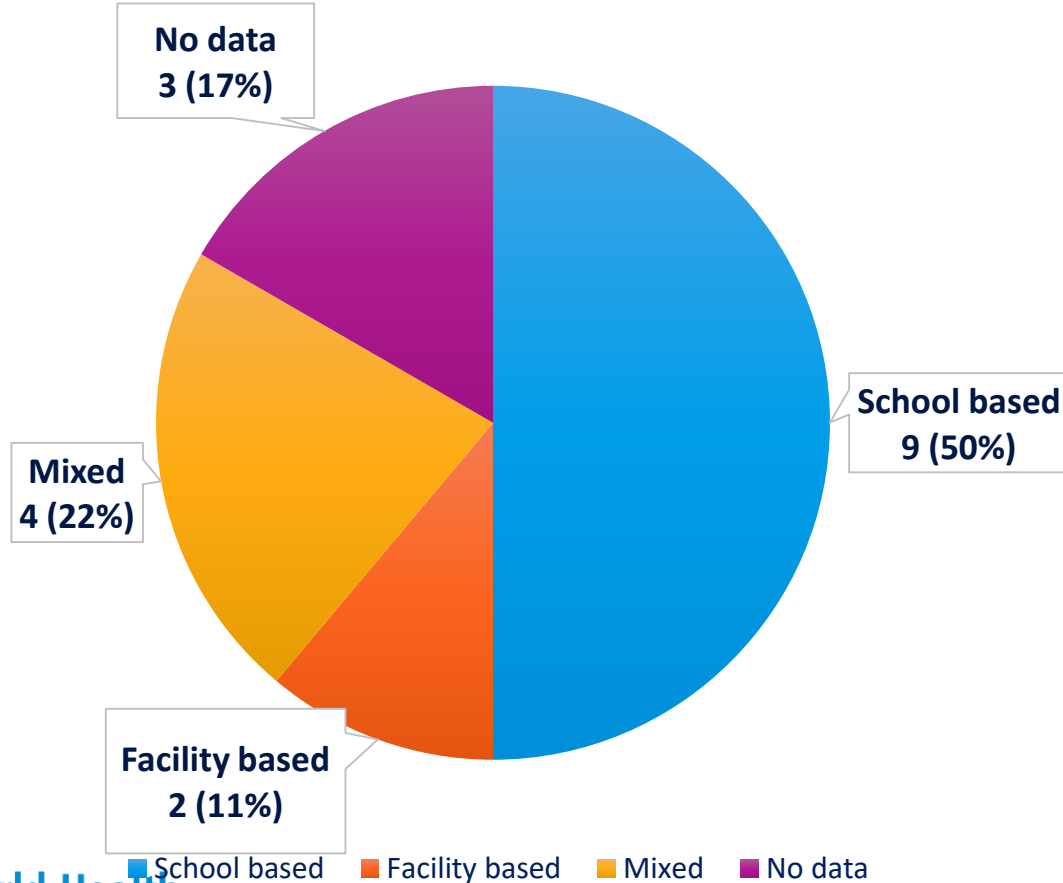
TARGETED SEX



Both sexes: 5 countries (AUS, NCL, NIU, NZL, MNP)

HPV vaccination by service delivery in WPR countries

No. of countries by Service Delivery type



- Among Total 18 countries reported about HPV introduction in NIP, 50% countries using school-based HPV vaccination
- Mixed: school-based + facility-based or outreach

HPV vaccination coverage in WPR countries

- HPV vaccination coverage varies by country and by year.
- Among countries reported HPV vaccination coverage, the regional coverage ranges from **17% to 35% in 2020-2023, which is far below than 2030 target (90%).**

Country/Area	Coverage 2020	Coverage 2021	Coverage 2022	Coverage 2023
Australia	72.0%	81.8%	80.3%	85.9%
Brunei Darussalam	94.5%	87.1%	90.5%	93.0%
Cambodia				99.3%
China, Hong Kong SAR		86.1%	88.8%	91.9%
China, Macao SAR	89.7%	92.5%	94.5%	90.9%
Cook Islands				48.9%
Fiji			98.0%	77.7%
Japan	0.8%	1.9%	7.1%	26.2%
Lao People's Democratic Republic		36.8%	17.7%	31.5%
Malaysia		13.2%		
Marshall Islands	28.8%	36.3%		22.7%
Micronesia (Federated States of)	19.5%	32.1%	20.5%	47.9%
Nauru			40.2%	
New Caledonia				36.7%
New Zealand	61.8%	50.8%	55.2%	
Niue				100.0%
Northern Mariana Islands	93.4%	91.7%	13.8%	94.4%
Palau		13.2%	35.1%	4.4%
Philippines		0.3%		11.7%
Republic of Korea	68.2%	65.7%		64.3%
Samoa			87.3%	87.1%
Singapore			89.4%	88.6%
Solomon Islands	52.9%	6.6%	5.2%	
Tonga			20.4%	28.2%
Tuvalu		33.3%	79.8%	84.3%
Western Pacific Region	32.1%	16.9%	27.8%	34.7%

WPR-ITAG Recommendations (June 2024)

- **HPV vaccine introduction** into national immunization program is highly recommended for all countries that have not yet introduced into their NIPs
- Consider the **dose optimization strategy for HPV vaccination** especially for countries, which have limited resources and other barriers to overcome low coverage.
- Undertake closer analysis of which **girls are currently not being reached** by HPV vaccination programmes

Key take-home messages

- To reach Elimination target of 90%, introduction in remaining countries and low coverage continue to be **main challenges**:
 - The **regional coverage far lower (<35%) than 2030 target (90%)** for the global cervical cancer elimination
- Based on current evidence, optimized HPV schedule could be used to introduce HPV vaccination and increase higher coverage & protection
 - Globally, *nearly half of all girls vaccinated in 2023 were part of 1-dose schedules!*
 - Use the saved resources to increase coverage through program revitalization – *e.g. communication, programme re-design and strengthening and catch-up opportunities*

Thank you

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