Human Papillomavirus and Related Diseases Report

ASIA

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Abbreviations

Table 1: Abbreviations

Abbreviation	Full term
HPV	Human papillomavirus
HPV Information Centre	ICO/IARC Information Centre on HPV and Cancer
GW	Genital warts
RRP	Recurrent respiratory papillomatosis
SIL	Squamous intraepithelial lesions
LSIL	Low-grade cervical lesions
HSIL	High-grade cervical lesions
ICC	Invasive cervical cancer
CIS	Carcinoma in situ
CIN	Cervical intraepithelial neoplasia
AIN2/3	Anal intraepithelial neoplasia of grade 2 and/or 3
VIN 2/3	Vulvar intraepithelial neoplasia of grade 2 and/or 3
VaIN 2/3	Vaginal intraepithelial neoplasia of grade 2 and/or 3
PeIN 2/3	Penile intraepithelial neoplasia of grade 2 and/or 3
95% CI	95% confidence interval
N	Number of cases tested
HPV Prev	HPV prevalence
ASR	Age-standardised rate
MSM	Men who have sex with men
Non MSM	Heterosexual men
SCC	Squamous cell carcinomas
STI	Sexually transmitted infections
HIV/AIDS	Human immunodeficiency virus/acquired immunodeficiency syndrome
TS	Type specific
EIA	Enzyme immunoassay
RLBM	Reverse line blotting method
RFLP	Restriction fragment length polymorphism
RHA	Reverse hybridisation assay
RLH	Reverse line hybridisation
LiPA	Line probe assay
SBH	Southern blot hybridisation
ISH	In situ hybridisation
MABA	Micro array-based assay
LBA	Line blot assay
HC2	Hybrid Capture 2
SAT	Suspension array technology
PCR	Polymerase chain reaction
SPF	Short primer fragment
q-PCR	Quantitative polymerase chain reaction
RLBH	Reverse line blot hybridisation
RT-PCR	Real-time polymerase chain reaction
DBH	Dot blot hybridisation
HR	High risk
DSA	Direct sequence analysis
MAA	Microchip array assay

Executive summary

Human papillomavirus (HPV) infection is now a well-established cause of cervical cancer and there is growing evidence of HPV being a relevant factor in other anogenital cancers (anus, vulva, vagina and penis) as well as head and neck cancers. HPV types 16 and 18 are responsible for about 70% of all cervical cancer cases worldwide. HPV vaccines that prevent HPV 16 and 18 infections are now available and have the potential to reduce the incidence of cervical and other anogenital cancers.

This report provides key information for Asia on: cervical cancer; other anogenital cancers and head and neck cancers; HPV-related statistics; factors contributing to cervical cancer; cervical cancer screening practises; HPV vaccine introduction; and other relevant immunization indicators. The report is intended to strengthen the guidance for health policy implementation of primary and secondary cervical cancer prevention strategies in the region.

Asia has a population of 1786.49 million women aged 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 351,720 women are diagnosed with cervical cancer and 199,902 die from the disease. Cervical cancer ranks* as the 4th most frequent cancer among women in Asia.

* Ranking of cervical cancer incidence to other cancers among all women according to highest incidence rates (ranking 1st) excluding non-melanoma skin cancer. Ranking is based on crude incidence rates (actual number of cervical cancer cases). Ranking using age-standardized rate (ASR) may differ.

Table 2: Key statistics

Population	Asia	Central Asia	Eastern Asia	South-Eastern Asia	Southern Asia	Western Asia
Women at risk for cervical cancer (Female population aged >=15 yrs) in millions	1,786.5	27.0	688.6	257.6	714.9	98.3
Burden of cervical cancer and other HPV-related cancer						
Annual number of new cervical cancer cases	351,720	4,945	129,567	68,623	143,183	143,183
Annual number of cervical cancer deaths	199,902	2,678	66,436	38,530	89,307	89,307
Standardized incidence rates per 100,000 population:						
Cervical cancer	12.7	12.7	10.8	17.8	15.4	4.14
Anal cancer						
Men	0.33	0.78	0.24	0.37	0.45	0.29
Women	0.26	0.60	0.22	0.26	0.31	0.22
Vulva cancer	0.41	0.70	0.33	0.57	0.46	0.47
Vaginal cancer	0.34	0.29	0.17	0.25	0.69	0.21
Penile cancer	0.74	0.19	0.40	0.83	1.35	0.08
Oropharyngeal cancer						
Men	1.27	1.11	0.63	1.05	2.44	0.29
Women	0.26	0.47	0.13	0.27	0.49	0.12
Oral cavity cancer						
Men	6.51	4.52	2.55	3.32	13.6	2.23
Women	2.44	1.55	1.19	1.82	4.73	1.27
Laryngeal cancer						
Men	3.36	2.51	2.41	3.07	4.67	5.29
Women	0.43	0.35	0.26	0.31	0.74	0.54
Burden of cervical HPV infection						
Prevalence (%) of HPV 16 and/or HPV 18 among women with:						
Normal cytology	3.4	-	3.4	3.0	4.4	4.4
Low-grade cervical lesions (LSIL/CIN-1)	21.2	-	20.3	27.4	30.2	30.2
High-grade cervical lesions (HSIL/ CIN-2 / CIN-3 / CIS)	42.1	-	41.0	33.4	63.4	63.4
Cervical cancer	68.9	-	65.0	70.4	80.3	80.3

LSIL, low-grade intraepithelial lesions; HSIL, high-grade intraepithelial lesions; CIN, cervical intraepithelial neoplasia; CIS, carcinoma in-situ.

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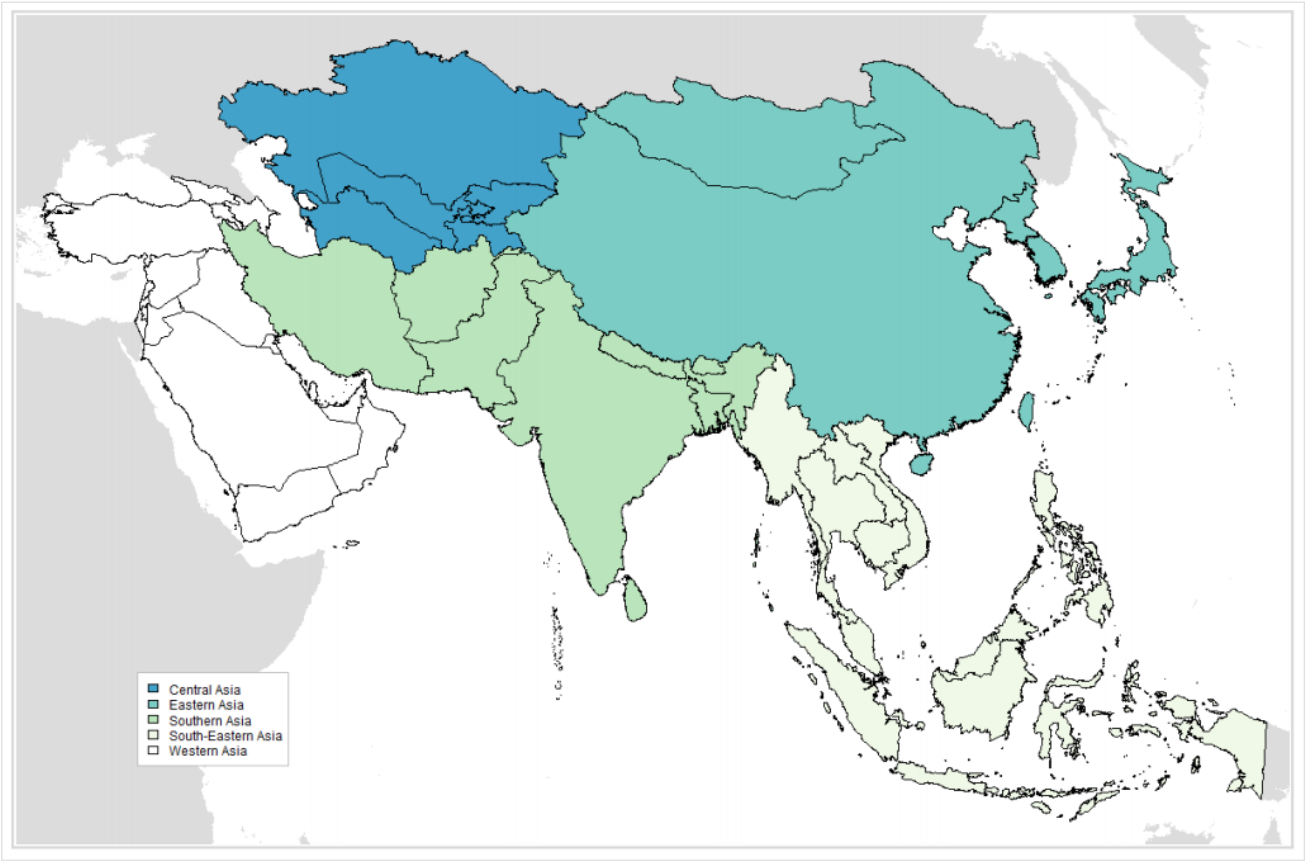
Figure 1: Asian regions



The HPV Information Centre aims to compile and centralize updated data and statistics on HPV and HPV-related cancers. This report aims to summarize the data available to fully evaluate the burden of disease in Asia and to facilitate stakeholders and relevant bodies of decision makers to formulate recommendations on the prevention of cervical cancer and other HPV-related cancers. Data include relevant cancer statistic estimates, epidemiological determinants of cervical cancer such as demographics, socioeconomic factors, risk factors, burden of HPV infection in women and men, and cervical screening and immunization practices. The report is structured into the following sections:

Section 2, Demographic and socioeconomic factors. This section summarizes the sociodemographic profile of Asia. For analytical purposes, Asia is divided in these regions: Central Asia, Eastern Asia, Southern Asia, South-Eastern Asia, and Western Asia

Section 3, Burden of HPV related cancers. This section describes the current burden of invasive cervical cancer and other HPV-related cancers in Asia with estimates of prevalence, incidence and mortality rates. Information in other HPV-related cancers includes other anogenital cancers (anus, vulva, vagina, and penis) and head and neck cancers (oral cavity, oropharyngeal, and larynx).

Section 4, HPV related statistics. This section reports on prevalence of HPV and HPV type-specific distribution in Asia, in women with normal cytology, precancerous lesions and invasive cervical cancer. In addition, the burden of HPV in other anogenital cancers (anus, vulva, vagina, and penis), head and neck cancers (oral cavity, oropharynx, and larynx) and men are presented.

Section 5, Factors contributing to cervical cancer. This section describes factors that can modify the natural history of HPV and cervical carcinogenesis such as smoking, parity, oral contraceptive use and co-infection with HIV.

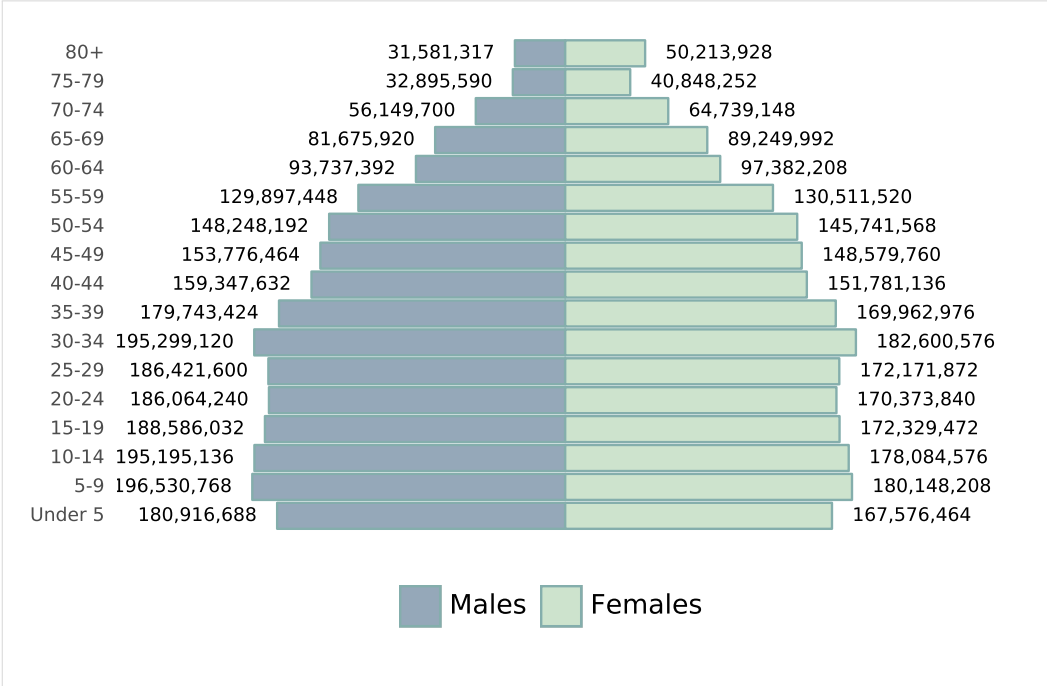
Section 6, Sexual and reproductive health behaviour indicators. This section presents sexual and reproductive behaviour indicators that may be used as proxy measures of risk for HPV infection and anogenital cancers, such as age at first sexual intercourse, average number of sexual partners, and anal intercourse among others.

Section 7, HPV preventive strategies. This section presents preventive strategies that include basic characteristics and performance of cervical cancer screening status, status of HPV vaccine licensure introduction, and recommendations for national immunization programmes.

Section 8, Protective factors for cervical cancer. This section presents the prevalence of male circumcision and condom use.

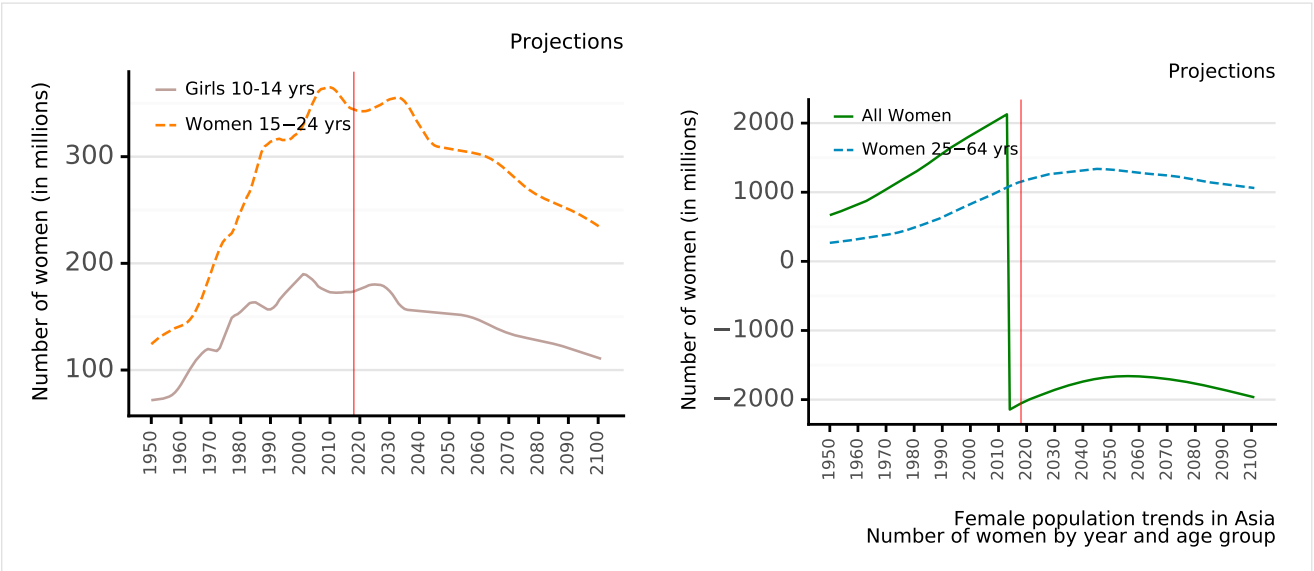
2 Demographic and socioeconomic factors

Figure 2: Population pyramid of Asia for 2022



Data accessed on 30 Jul 2022
Please refer to original source for methods of estimation.
Year of estimate: 2022
Data Sources:
United Nations, Department of Economic and Social Affairs, Population Division (2022). World Population Prospects 2022, Online Edition. [Accessed on July 30, 2022].

Figure 3: Population trends in four selected age groups in Asia



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Data Sources:
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Table 3: Population estimates in Asia for 2022 (in millions)

	Males			Females		
Region Country	**10-14 years**	**15+ years**	**Total**	**10-14 years**	**15+ years**	**Total**
Asia	195.2	1823.42	2396.07	178.08	1786.49	2312.3
Central Asia	3.69	25.5	37.82	3.5	27.04	38.65
Kazakhstan	0.9	6.34	9.28	0.86	7.24	10.01
Kyrgyzstan	0.34	2.07	3.23	0.33	2.24	3.35
Tajikistan	0.55	3.12	4.96	0.52	3.15	4.9
Turkmenistan	0.31	2.14	3.16	0.29	2.25	3.22
Uzbekistan	1.58	11.82	17.19	1.49	12.16	17.16
Eastern Asia	52.56	695.2	844.27	45.44	688.56	819.21
China	46.98	594.51	727.84	40.16	582.37	698.08
Taiwan	0.51	10.26	11.82	0.47	10.6	12.05
DPR Korea	0.81	10.35	12.88	0.78	10.75	13.15
Japan	2.73	52.96	60.4	2.61	56.77	63.88
Mongolia	0.17	1.11	1.67	0.16	1.17	1.7
Republic of Korea	1.19	22.75	25.88	1.12	22.99	25.95
South-Eastern Asia	28.94	253.44	339.78	27.2	257.61	338.61
Brunei	0.02	0.18	0.23	0.02	0.17	0.22
Cambodia	0.82	5.76	8.26	0.78	6.06	8.42
Indonesia	12.18	102.54	138.27	11.56	102.45	136.34
Laos	0.38	2.59	3.77	0.37	2.58	3.71
Malaysia	1.29	13.28	17.25	1.22	12.77	16.5
Myanmar	2.28	20.0	26.87	2.18	20.6	27.11
Philippines	5.91	40.11	58.22	5.51	39.58	56.45
Singapore	0.12	2.75	3.12	0.12	2.5	2.84
Thailand	2.1	29.02	34.79	1.98	31.4	36.85
Timor-Leste	0.08	0.44	0.68	0.07	0.43	0.65
Viet Nam	3.75	36.76	48.32	3.4	39.09	49.52
Southern Asia	95.86	740.28	1021.95	88.53	714.94	976.51
Afghanistan	2.63	11.5	20.49	2.51	11.51	20.09
Bangladesh	7.81	61.7	84.45	7.57	63.97	85.85
Bhutan	0.03	0.32	0.41	0.03	0.28	0.37
India	65.59	540.76	728.81	59.54	511.45	683.51
Iran	3.36	33.86	44.58	3.22	33.48	43.68
Maldives	0.02	0.24	0.3	0.02	0.17	0.22
Nepal	1.49	10.06	14.56	1.44	11.48	15.81
Pakistan	14.02	73.88	117.83	13.32	73.77	115.69
Sri Lanka	0.9	7.95	10.5	0.88	8.83	11.3
Western Asia	14.15	109.01	152.24	13.42	98.33	139.32
Armenia	0.1	0.95	1.25	0.09	1.26	1.53
Azerbaijan	0.46	3.79	5.1	0.4	4.09	5.23
Bahrain	0.05	0.76	0.91	0.05	0.41	0.56
Georgia	0.13	1.35	1.76	0.12	1.6	1.99
Iraq	2.67	13.48	22.03	2.54	13.83	21.96
Israel	0.39	3.18	4.47	0.38	3.27	4.5
Jordan	0.62	3.98	5.83	0.61	3.63	5.42
Kuwait	0.18	2.1	2.59	0.14	1.25	1.66
Lebanon	0.28	1.91	2.69	0.27	2.12	2.86
Oman	0.17	2.14	2.77	0.17	1.17	1.77
Qatar	0.07	1.73	1.95	0.06	0.53	0.74
Saudi Arabia	1.58	16.01	20.84	1.51	10.69	15.29
Palestine	0.31	1.56	2.59	0.31	1.6	2.6
Syria	1.48	7.24	10.81	1.41	7.37	10.78
Turkey	3.32	32.45	42.64	3.15	32.77	42.45
United Arab Emirates	0.23	5.79	6.53	0.22	2.18	2.87
Yemen	2.08	10.06	16.84	1.98	10.02	16.48

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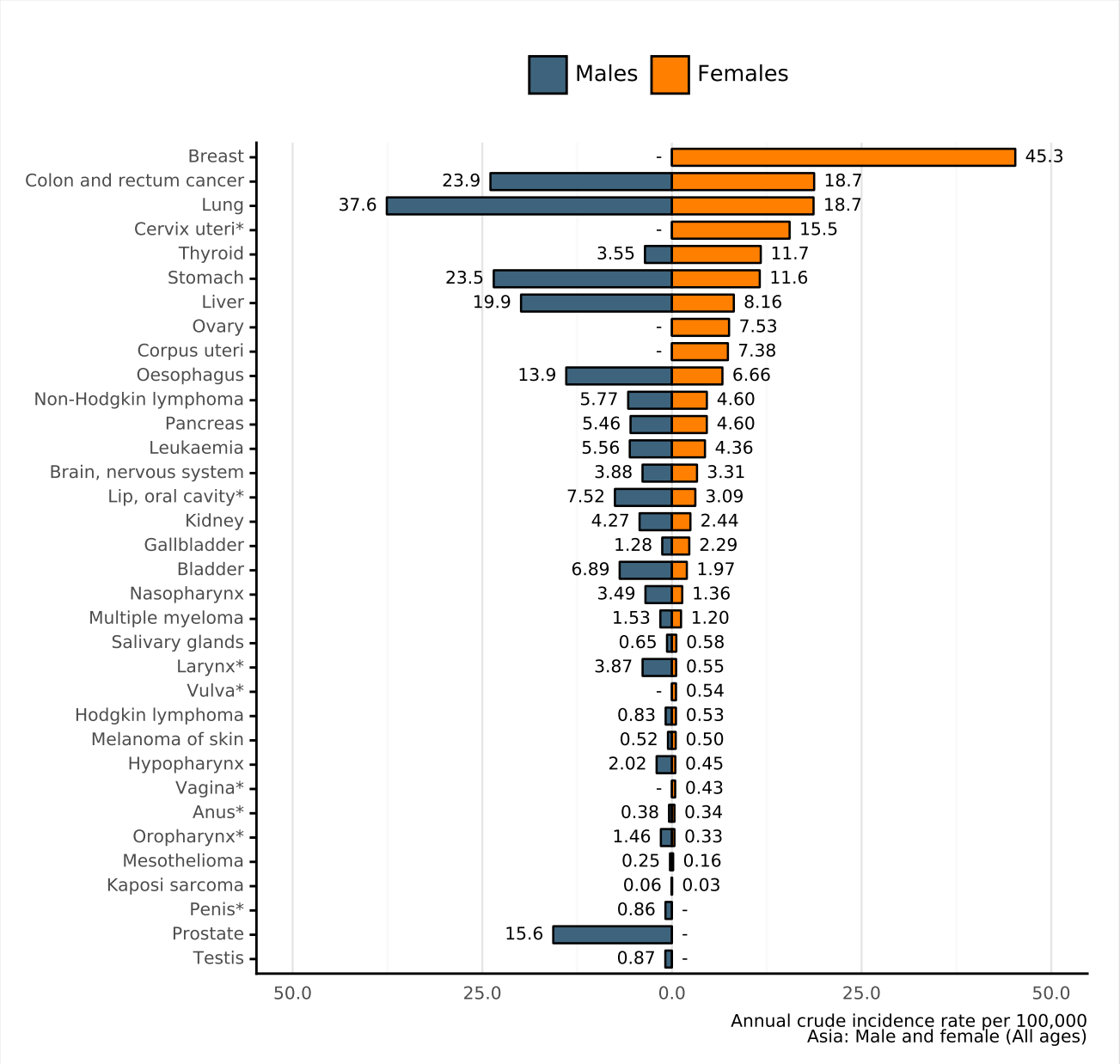
3 Burden of HPV related cancers

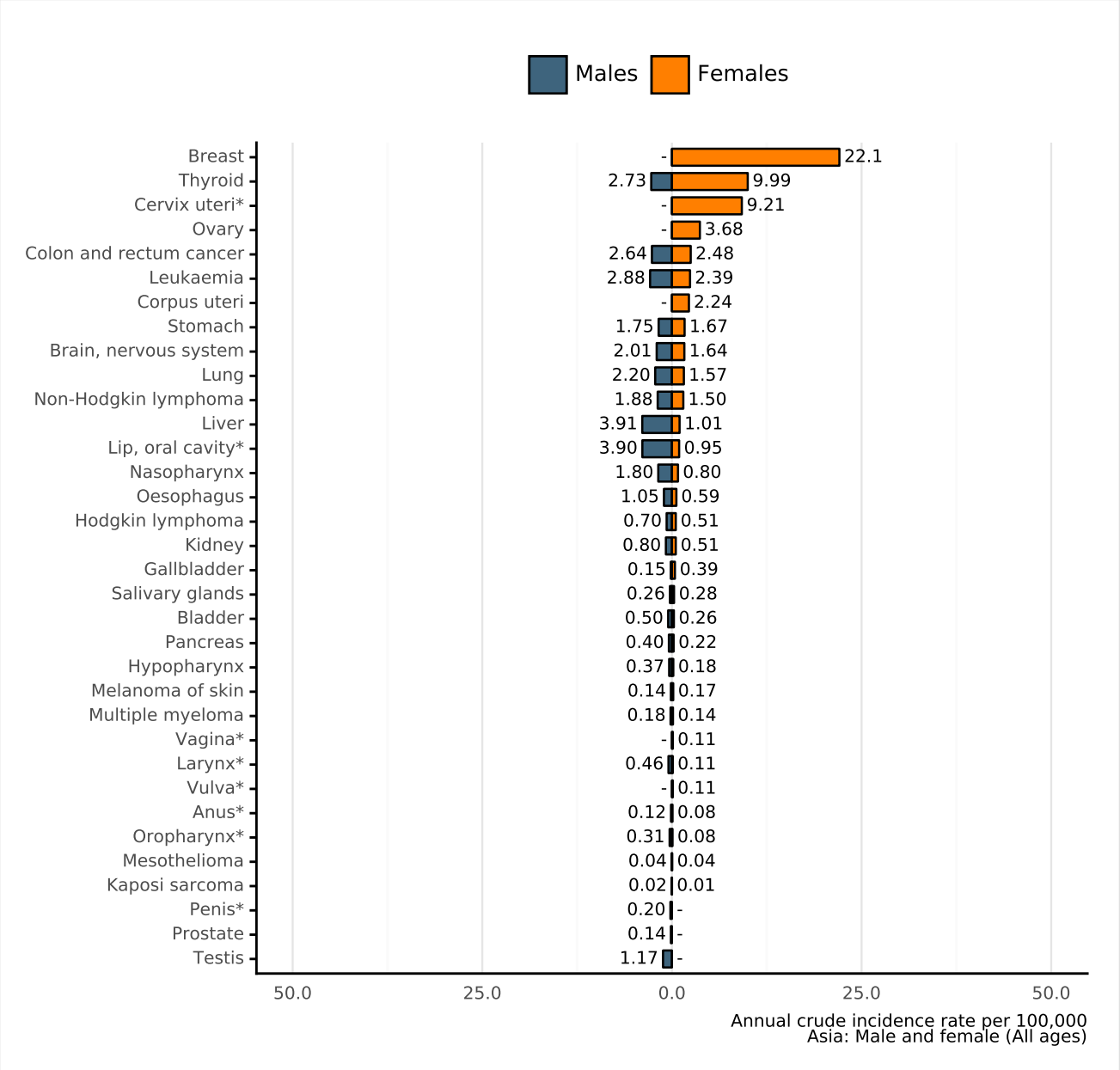
3.1 HPV related cancers incidence

Figure 4: Comparison of HPV related cancers incidence to other cancers in men and women of all ages in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
Non-melanoma skin cancer is not included
Rates per 100,000 men per year.
Rates per 100,000 women per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 5: Comparison of HPV related cancers incidence to other cancers among men and women 15-44 years of age in Asia (estimates for 2020)



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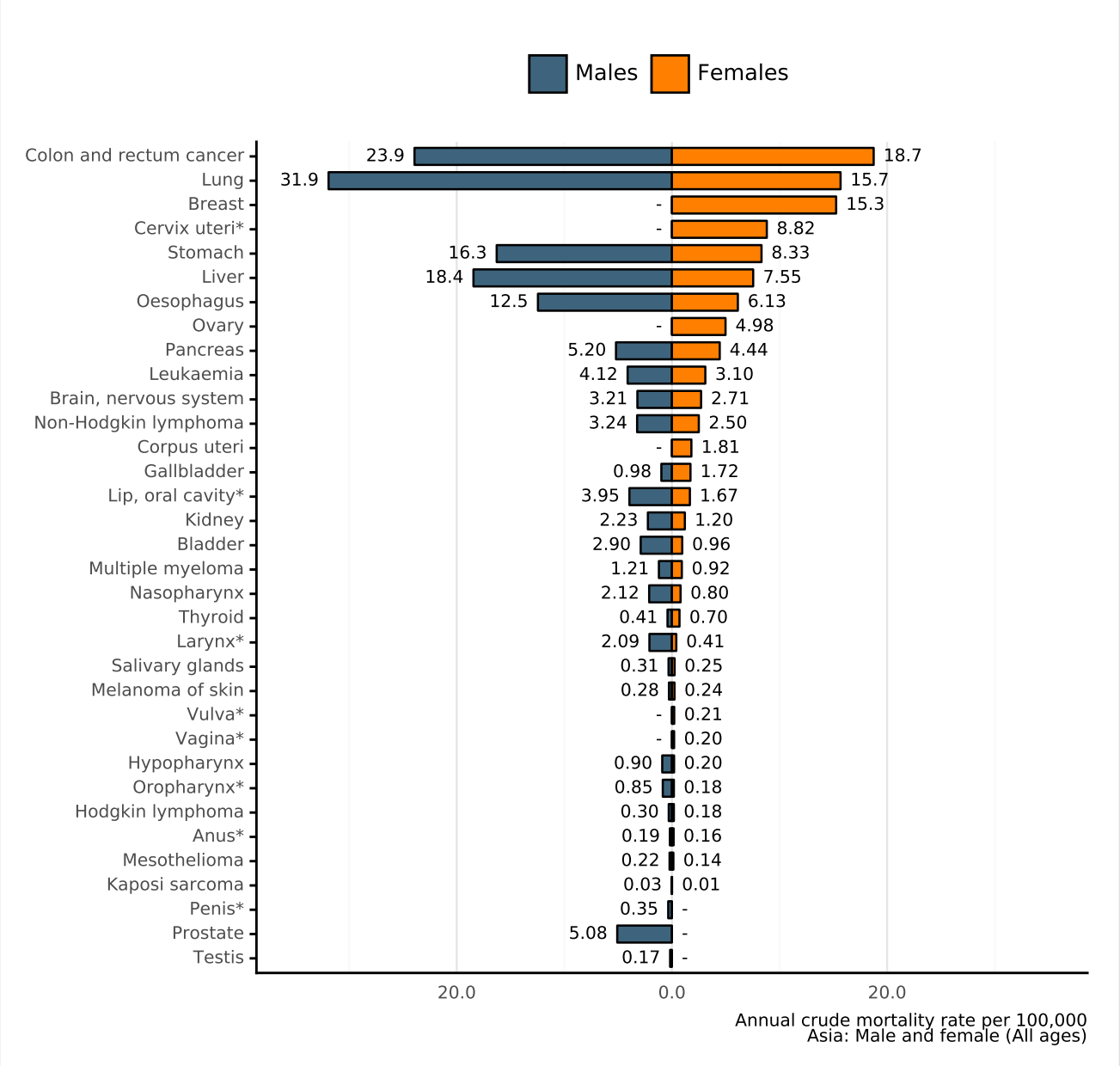
3.2 HPV related cancers mortality

Figure 6: Comparison of HPV related cancers mortality to other cancers in men and women of all ages in Asia (estimates for 2020)



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Non-melanoma skin cancer is not included
Rates per 100,000 men per year.
Rates per 100,000 women per year.
Data Sources:
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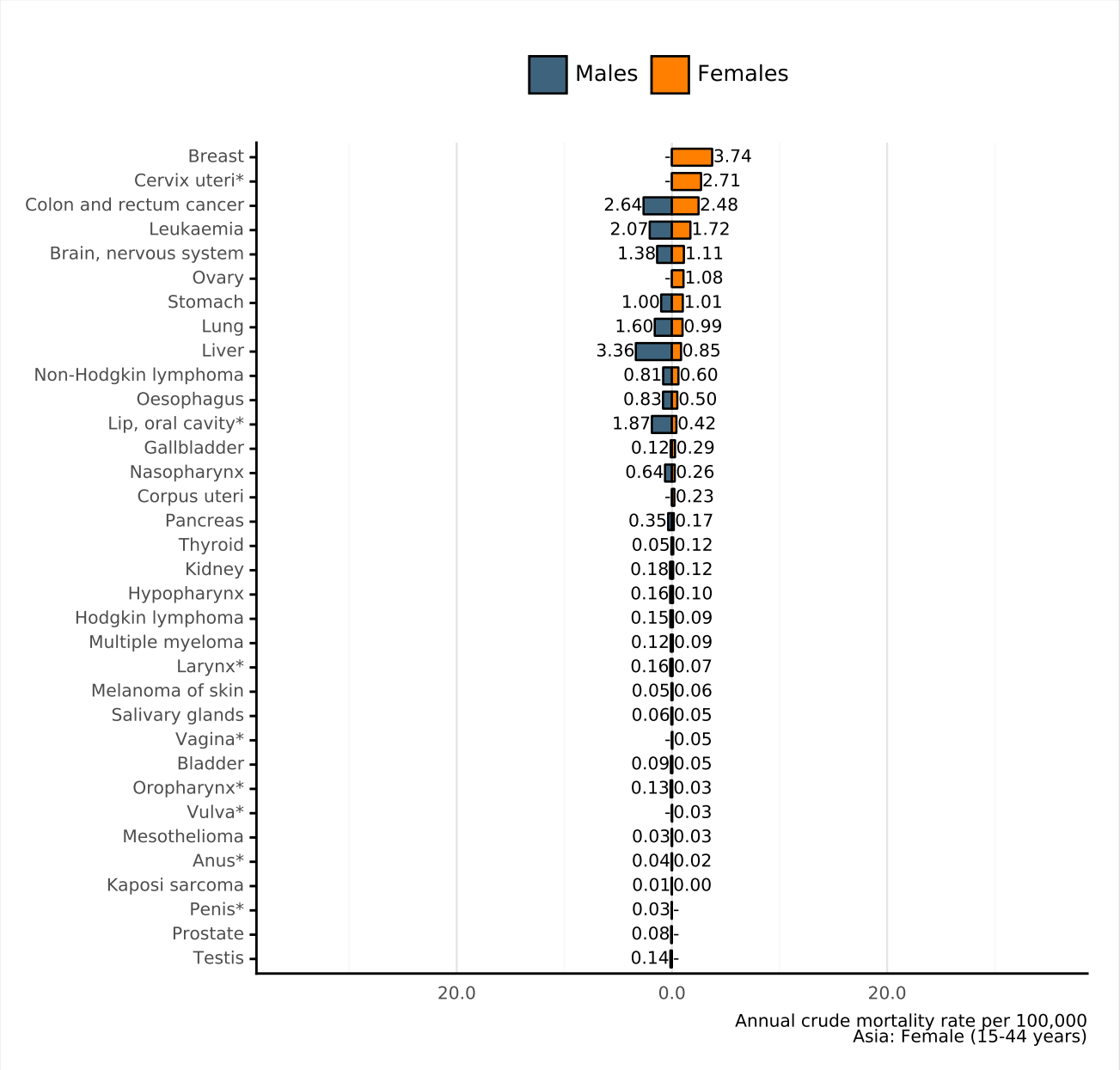
Figure 7: Comparison of HPV related cancers mortality to other cancers among men and women 15-44 years of age in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

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Non-melanoma skin cancer is not included
Rates per 100,000 men per year.
Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.3 Cervical cancer

Cancer of the cervix uteri is the 4^{th} most common cancer among women worldwide, with an estimated 604,127 new cases and 341,831 deaths in 2020. Worldwide, mortality rates of cervical cancer are substantially lower than incidence with a ratio of mortality to incidence to 57% (GLOBOCAN 2020). The majority of cases are squamous cell carcinoma followed by adenocarcinomas. *(Vaccine 2006, Vol. 24, Suppl 3; Vaccine 2008, Vol. 26, Suppl 10; Vaccine 2012, Vol. 30, Suppl 5; IARC Monographs 2007, Vol. 90)*

This section describes the current burden of invasive cervical cancer in Asia and in comparison to geographic region, including estimates of the annual number of new cases, deaths, incidence, and mortality rates.

3.3.1 Cervical cancer incidence

Key Stats.

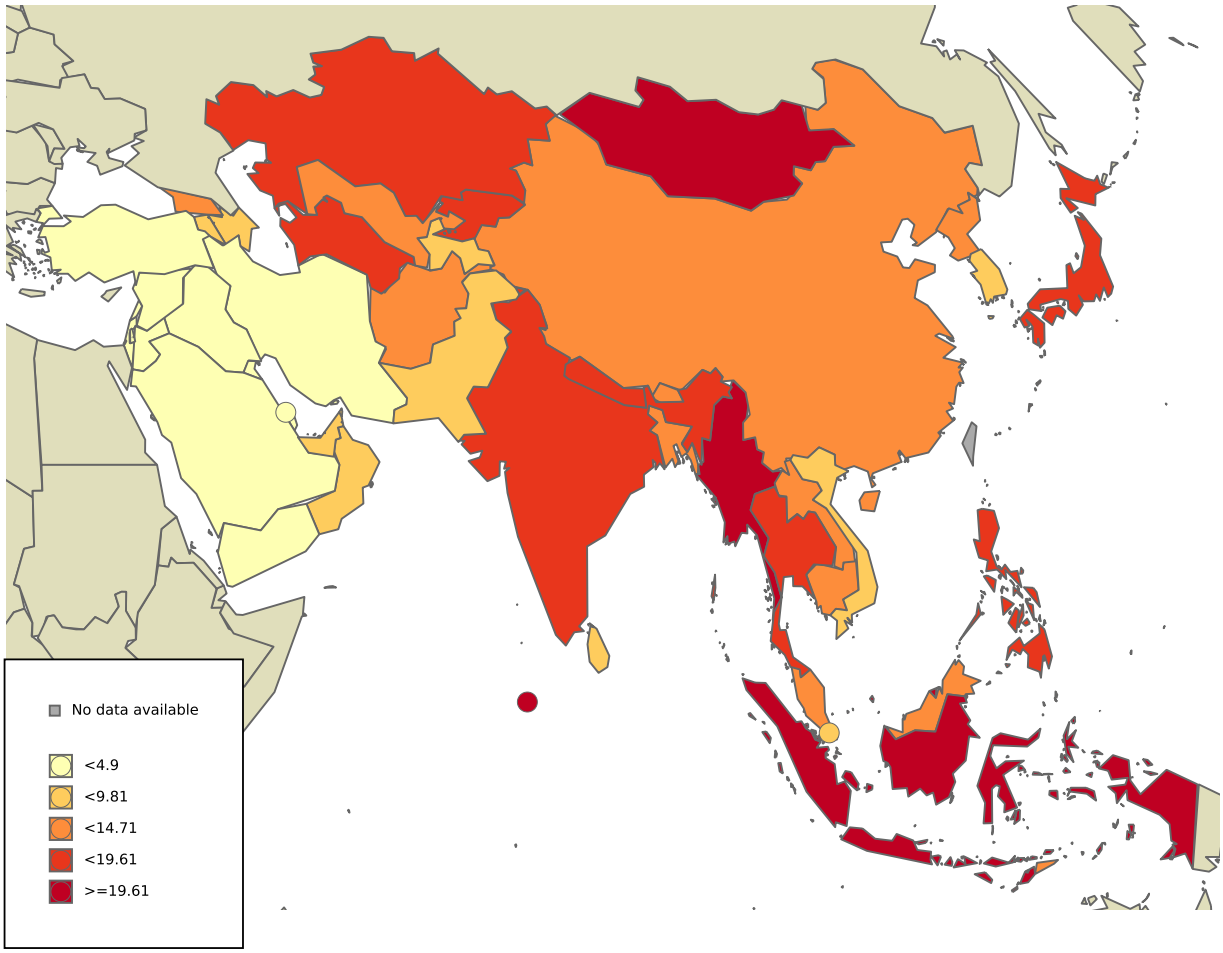
About **351,720 new cervical cancer cases** are diagnosed **annually** in **Asia** (estimations for 2020).

Cervical cancer **ranks* as the 4th leading cause** of female cancer in **Asia**.

Cervical cancer is the **3rd most common** female cancer in **women aged 15 to 44 years in Asia**.

* Ranking of cervical cancer incidence to other cancers among all women according to highest incidence rates (ranking 1st) excluding non-melanoma skin cancer. Ranking is based on crude incidence rates (actual number of cervical cancer cases). Ranking using age-standardized rate (ASR) may differ.

Figure 8: Age-standardised incidence rates of cervical cancer in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

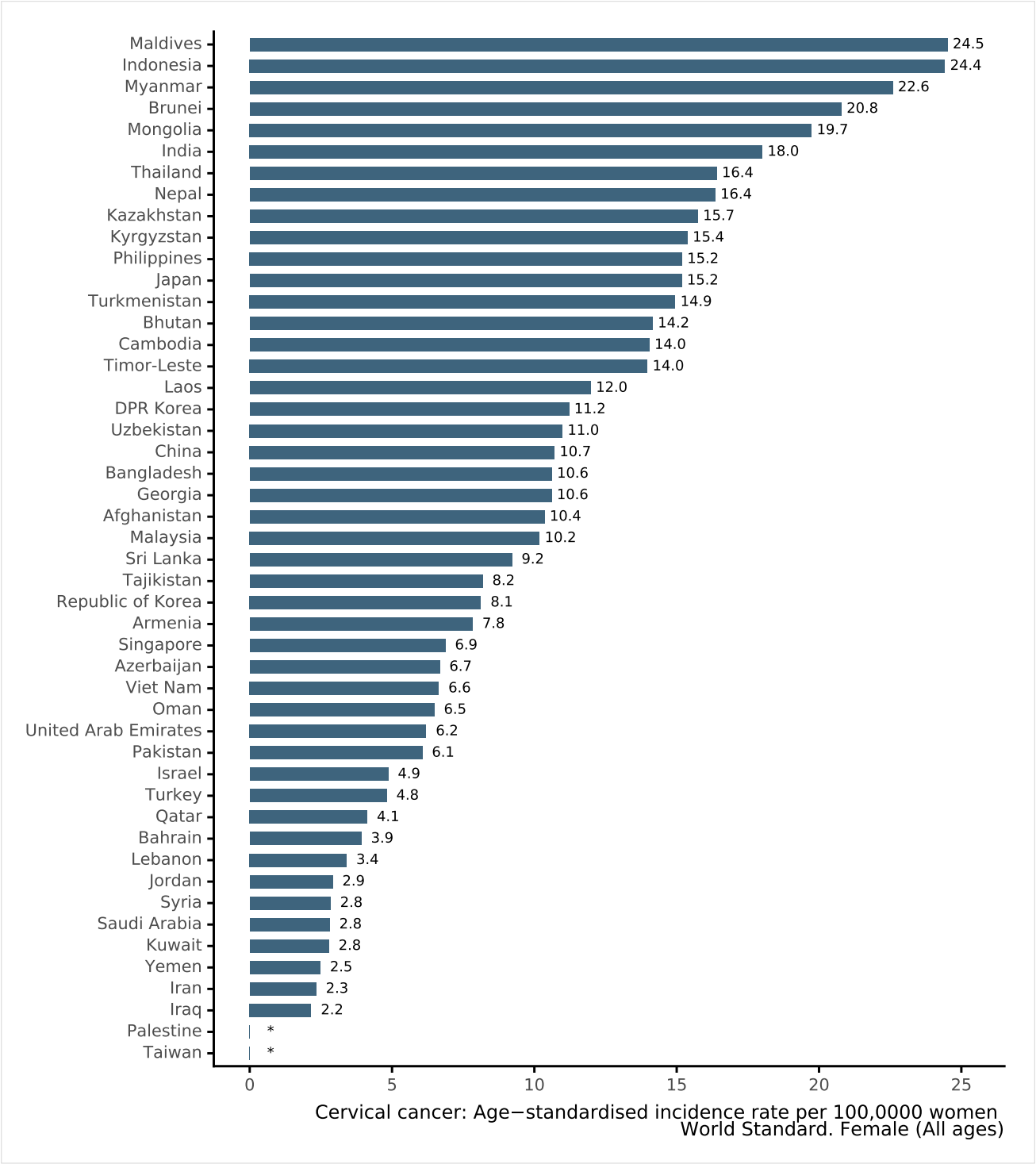
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 9: Age-standardised incidence rate of cervical cancer cases attributable to HPV by country in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

* No rates are available

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Table 4: Incidence of cervical cancer in Asia (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	351,720	[339,675-364,192.1]	15.5	12.7	1.35	4	3
Central Asia	4,945	[1,677-1,882.9]	13.2	12.7	1.32	2	2
Kazakhstan	1,777	[1,677-1,882.9]	18.4	15.7	1.58	2	2
Kyrgyzstan	498	[392-632.7]	15.1	15.4	1.59	2	2
Tajikistan	322	[262.7-394.7]	6.80	8.18	0.80	3	2
Turkmenistan	461	[385.7-551]	15.1	14.9	1.53	2	2
Uzbekistan	1,887	[1,616.8-2,202.3]	11.3	11.0	1.17	2	2
Eastern Asia	129,567	[126,381.1-132,833.1]	15.8	10.8	1.08	7	3
China	109,741	[106,977.9-112,575.5]	15.6	10.7	1.08	6	3
Japan	12,785	[11,424.7-14,307.2]	19.8	15.2	1.37	10	2
Republic of Korea	3,218	[3,061.9-3,382.1]	12.6	8.12	0.78	9	3
Mongolia	334	[291.5-382.8]	20.1	19.7	2.10	2	1
DPR Korea	1,970	[1,684.5-2,303.9]	15.0	11.2	1.11	4	2
South-Eastern Asia	68,623	[64,656.6-72,832.8]	20.5	17.8	1.91	2	2
Brunei	54	[36.2-80.5]	25.7	20.8	2.07	4	2
Indonesia	36,633	[33,763.5-39,746.4]	27.0	24.4	2.69	2	2
Cambodia	1,135	[647.8-1,988.5]	13.3	14.0	1.47	2	2
Laos	371	[211.8-650]	10.2	12.0	1.26	4	3
Myanmar	7,129	[4,069.1-12,489.9]	25.3	22.6	2.25	1	1
Malaysia	1,740	[1,616.6-1,872.9]	11.1	10.2	1.12	4	2
Philippines	7,897	[7,306.2-8,535.6]	14.5	15.2	1.61	2	2
Singapore	309	[254.8-374.8]	11.1	6.87	0.68	11	5
Thailand	9,158	[8,563.1-9,794.2]	25.6	16.4	1.70	3	2
Timor-Leste	65	[37.1-113.9]	9.97	14.0	1.46	2	2
Viet Nam	4,132	[3,786.7-4,508.8]	8.48	6.64	0.70	8	5
Southern Asia	143,183	[883-1,630.8]	15.2	15.4	1.72	2	2
Afghanistan	1,200	[883-1,630.8]	6.33	10.4	1.07	2	2
Bangladesh	8,268	[6,083.7-11,236.5]	10.2	10.6	1.16	2	2
Bhutan	47	[41.7-52.9]	13.0	14.2	1.50	1	1
India	123,907	[119,237.2-128,759.6]	18.7	18.0	2.01	2	2
Iran	1,056	[956.8-1,165.4]	2.54	2.33	0.25	14	10
Sri Lanka	1,407	[1,314.8-1,505.7]	12.6	9.21	1.04	2	4
Maldives	46	[33.8-62.5]	23.3	24.5	2.82	2	2
Nepal	2,244	[1,926.1-2,614.3]	14.2	16.4	1.81	1	2
Pakistan	5,008	[3,805.2-6,591]	4.67	6.06	0.68	3	2
Western Asia	5,402	[4,559-6,400.8]	4.07	4.14	0.45	12	6
United Arab Emirates	123	[87.6-172.8]	4.03	6.20	0.73	5	3
Armenia	178	[166.5-190.3]	11.3	7.83	0.81	8	2
Azerbaijan	425	[374.5-482.3]	8.38	6.67	0.74	5	3
Bahrain	21	[11.6-37.9]	3.49	3.92	0.48	8	8
Georgia	327	[305.8-349.6]	15.7	10.6	1.10	5	3
Iraq	286	[248.5-329.1]	1.44	2.16	0.25	15	12
Israel	245	[194-309.3]	5.64	4.86	0.49	15	4
Jordan	115	[84-157.4]	2.28	2.91	0.32	11	10
Kuwait	53	[36.8-76.3]	3.20	2.78	0.32	8	3
Lebanon	124	[99.5-154.6]	3.66	3.40	0.37	10	9
Oman	88	[59.1-131.1]	5.07	6.48	0.71	4	3
Palestine	64	[12.7-322.2]	2.55	4.82	0.62	10	17
Qatar	23	[6.10-86.6]	3.21	4.13	0.53	5	3
Saudi Arabia	358	[190.9-671.4]	2.44	2.81	0.31	8	8
Syria	215	[42.7-1,082.4]	2.46	2.84	0.31	11	10
Turkey	2,532	[2,042.5-3,138.9]	5.93	4.81	0.51	12	5
Yemen	225	[102.7-493]	1.52	2.48	0.29	12	8

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

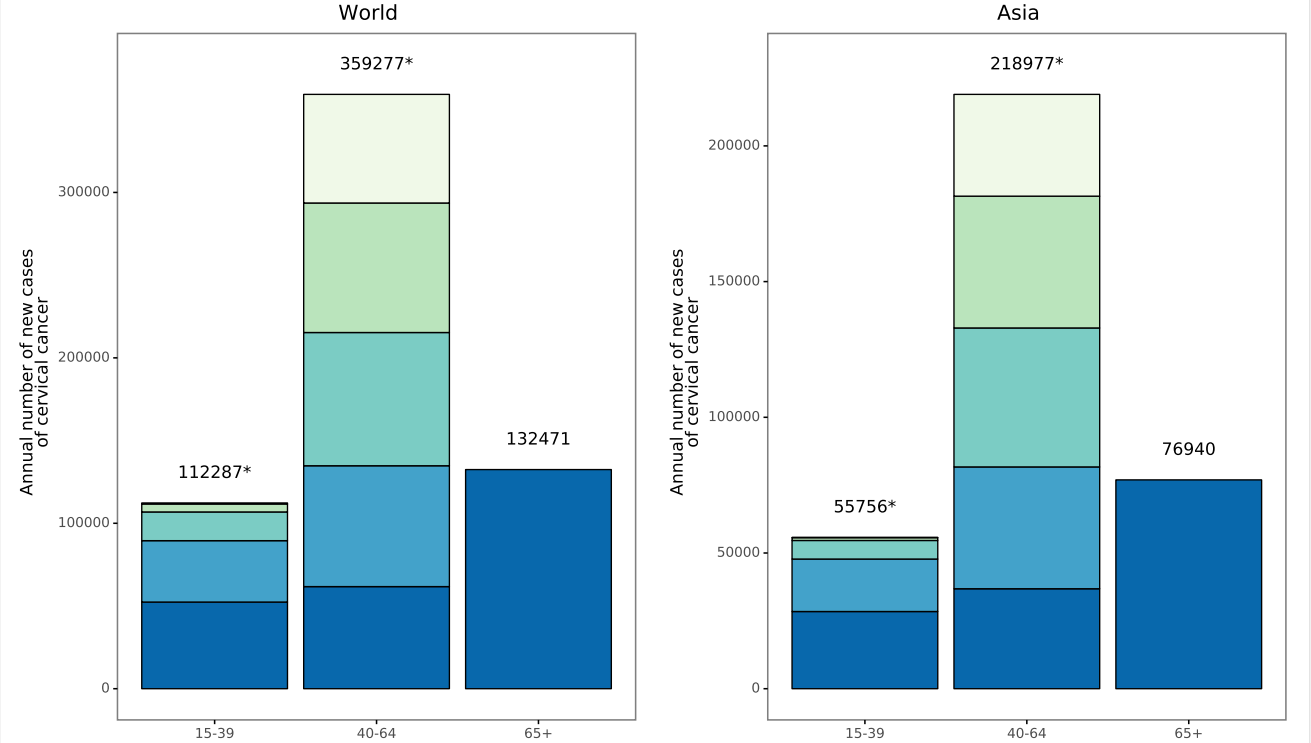
[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 10: Annual number of new cases of cervical cancer in the World and Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

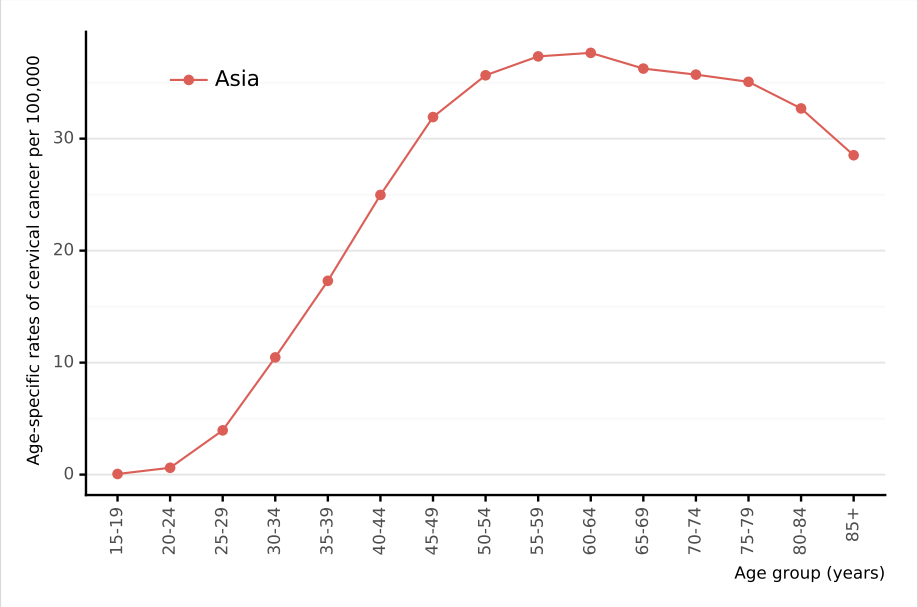
* World: 15-19 yrs: 616 cases. 20-24 yrs: 4819 cases. 25-29 yrs: 17357 cases. 30-34 yrs: 37106 cases. 35-39 yrs: 52389 cases. 40-44 yrs: 65657 cases. 45-49 yrs: 78299 cases. 50-54 yrs: 80544 cases. 55-59 yrs: 73053 cases. 60-64 yrs: 61724 cases.

* Asia: 15-19 yrs: 96 cases. 20-24 yrs: 1040 cases. 25-29 yrs: 6846 cases. 30-34 yrs: 19334 cases. 35-39 yrs: 28440 cases. 40-44 yrs: 37501 cases. 45-49 yrs: 48560 cases. 50-54 yrs: 51201 cases. 55-59 yrs: 44885 cases. 60-64 yrs: 36830 cases.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 11: Age-specific incidence rates of cervical cancer in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

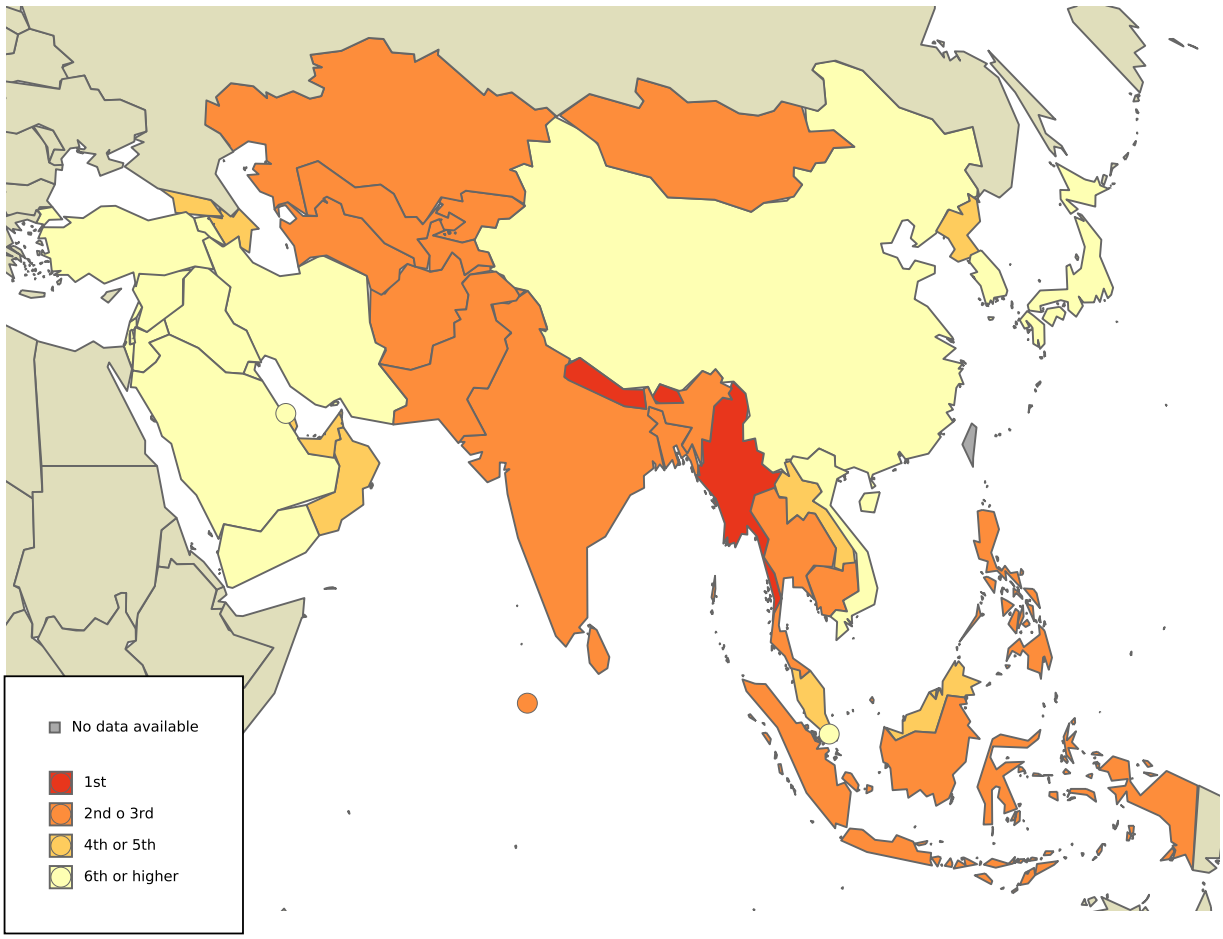
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

Data Sources:

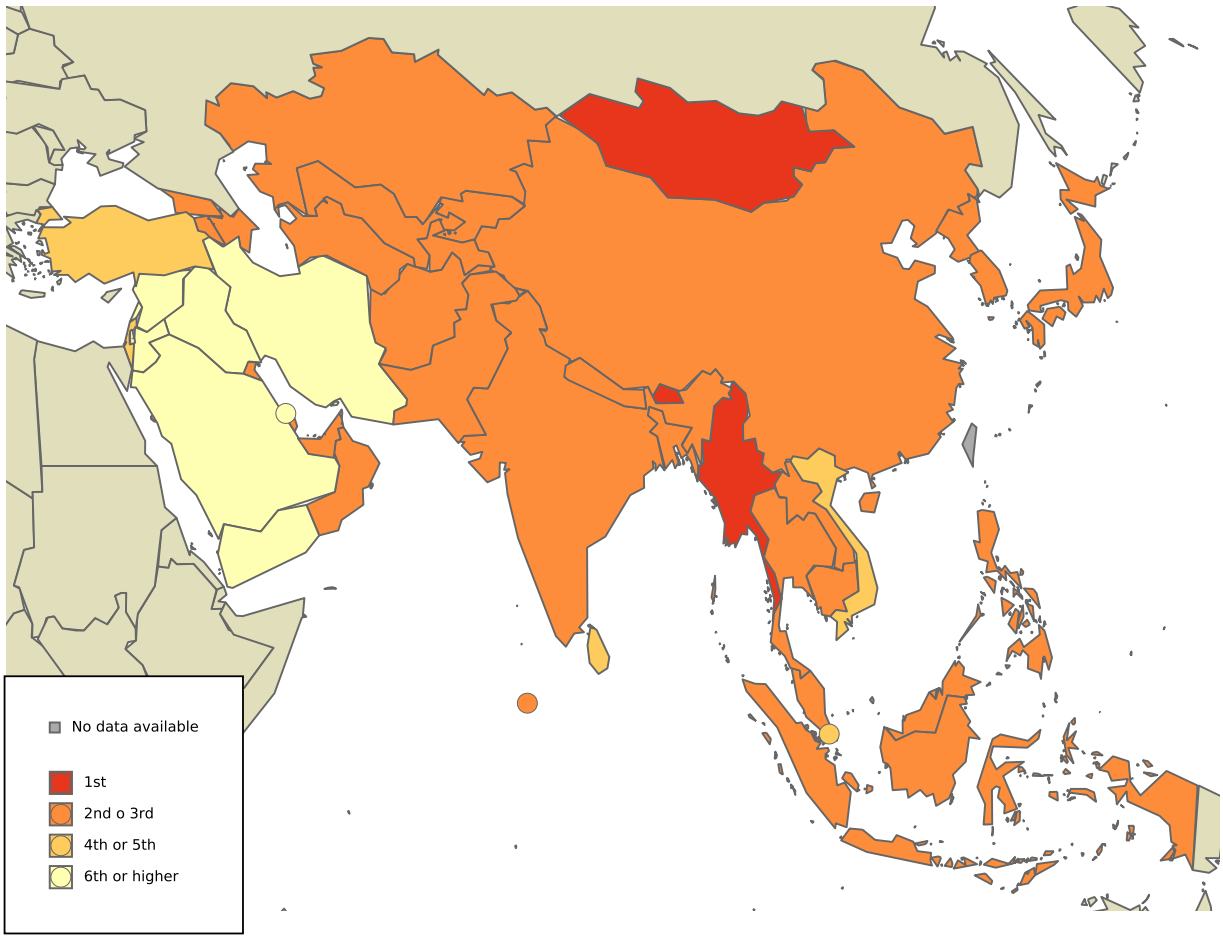
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 12: Ranking of cervical cancer versus other cancers among all women, according to incidence rates in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Non-melanoma skin cancer is not included
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 13: Ranking of cervical cancer versus other cancers among women aged 15-44 years, according to incidence rates in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Non-melanoma skin cancer is not included
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.3.2 Cervical cancer mortality

Key Stats.

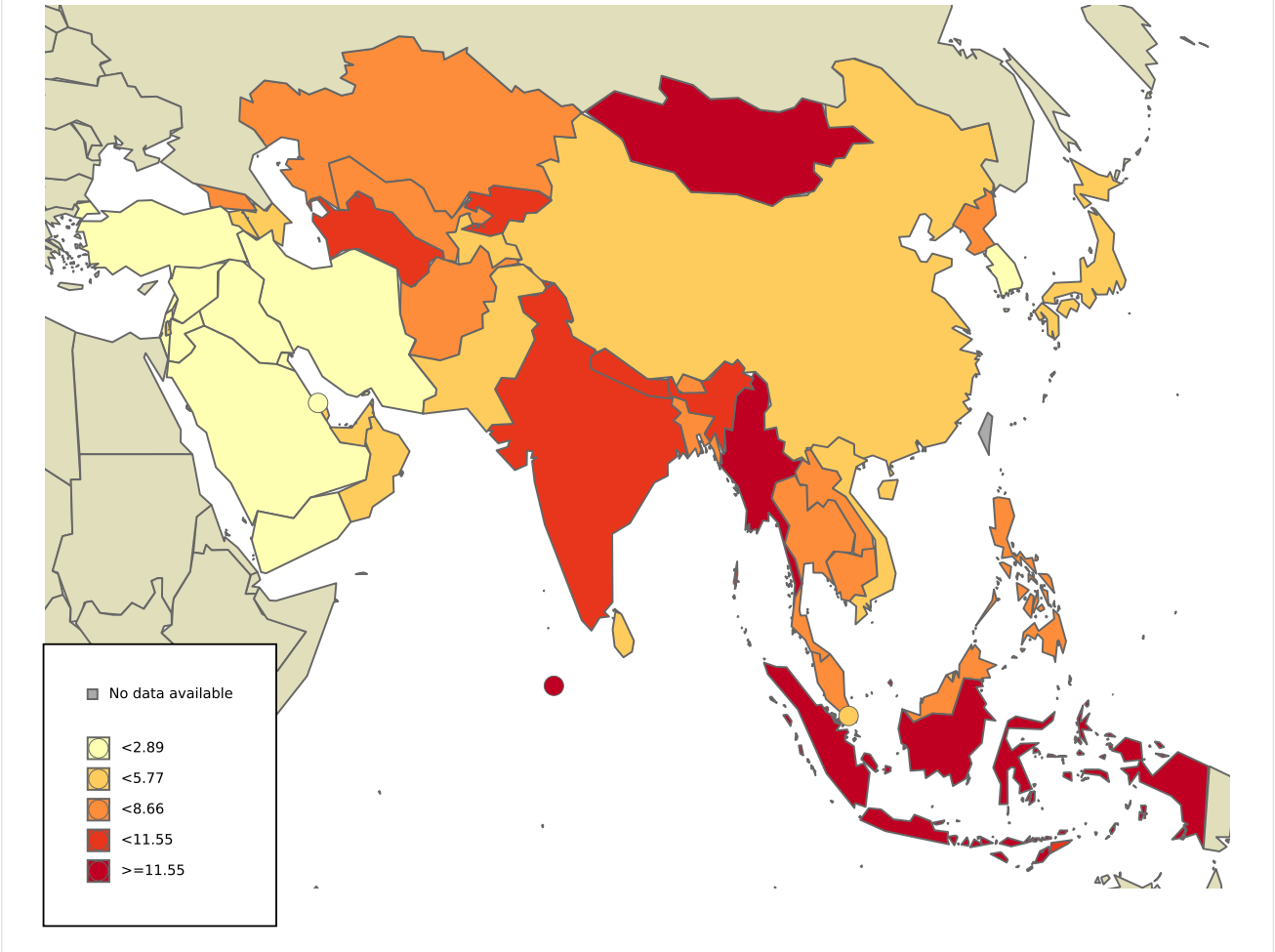
About **199,902 new cervical cancer cases** are diagnosed **annually** in **Asia** (estimations for 2020).

Cervical cancer **ranks* as the 4th leading cause** of female cancer in **Asia**.

Cervical cancer is the **3rd most common** female cancer in **women aged 15 to 44 years in Asia**.

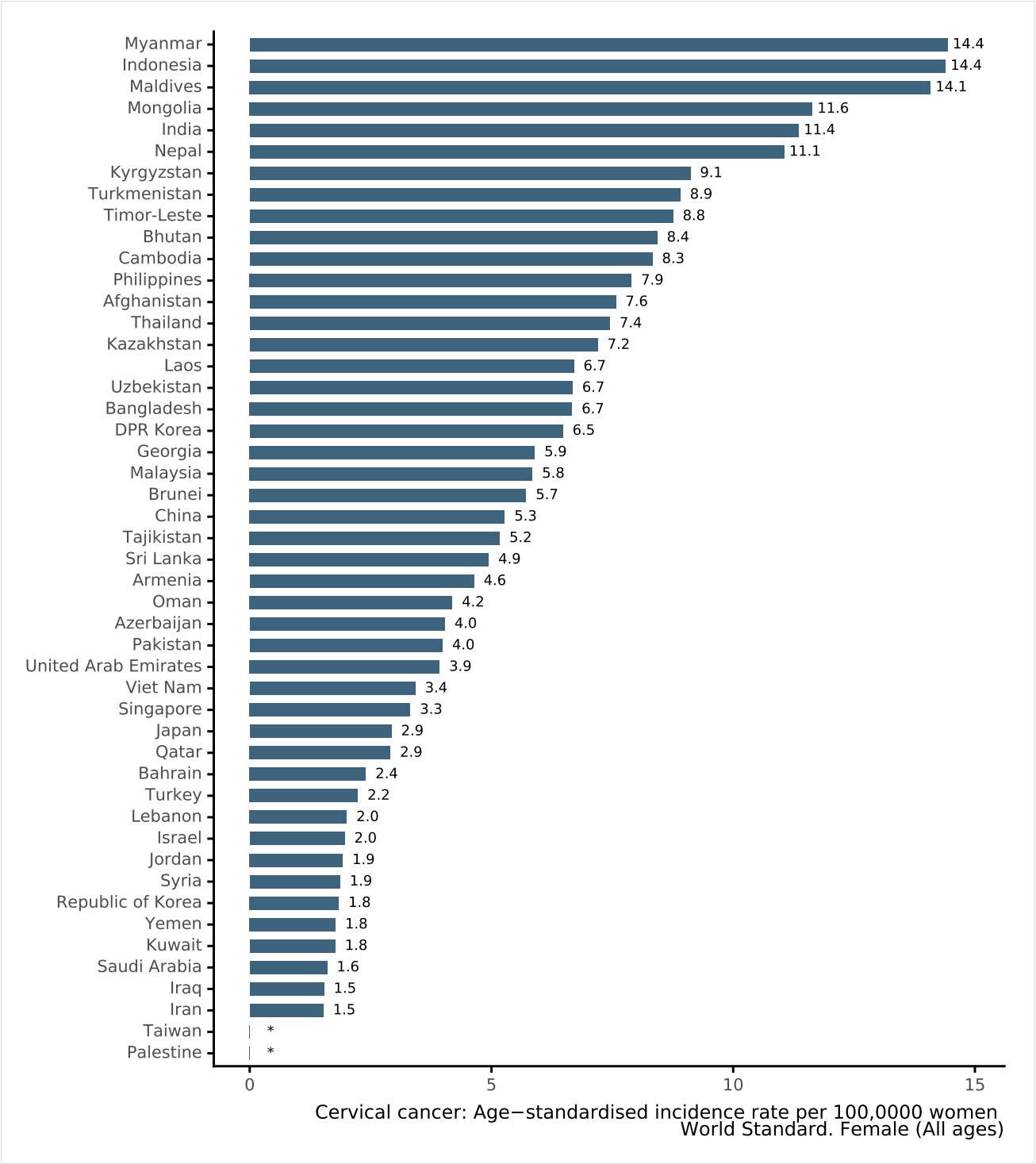
* Ranking of cervical cancer incidence to other cancers among all women according to highest incidence rates (ranking 1st) excluding non-melanoma skin cancer. Ranking is based on crude incidence rates (actual number of cervical cancer cases). Ranking using age-standardized rate (ASR) may differ.

Figure 14: Age-standardised mortality rates of cervical cancer in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 women per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 15: Age-standardised mortality rate of cervical cancer cases attributable to HPV by country in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

* No rates are available

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Table 5: Mortality of cervical cancer Asia (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	199,902	[188,272.7-212,249.6]	8.82	7.05	0.81	4	2
Central Asia	2,678	[769-904.4]	7.14	7.00	0.77	3	2
Kazakhstan	834	[769-904.4]	8.63	7.20	0.76	4	1
Kyrgyzstan	286	[234.6-348.6]	8.67	9.11	1.01	1	1
Tajikistan	190	[159.7-226]	4.02	5.17	0.52	3	2
Turkmenistan	265	[226.6-310]	8.65	8.91	0.97	2	2
Uzbekistan	1,103	[969.5-1,254.9]	6.58	6.68	0.76	3	2
Eastern Asia	66,436	[63,239.9-69,793.7]	8.08	4.95	0.57	8	3
China	59,060	[56,090-62,187.3]	8.37	5.27	0.61	7	3
Japan	4,213	[4,016.8-4,418.8]	6.51	2.93	0.31	9	3
Republic of Korea	1,014	[921.6-1,115.6]	3.96	1.84	0.17	10	4
Mongolia	182	[147.2-225]	10.9	11.6	1.22	3	1
DPR Korea	1,128	[879.5-1,446.8]	8.56	6.48	0.64	6	2
South-Eastern Asia	38,530	[36,257.7-40,944.7]	11.5	9.98	1.16	3	2
Brunei	14	[7.60-25.9]	6.65	5.72	0.70	5	3
Indonesia	21,003	[19,331.7-22,818.7]	15.5	14.4	1.73	2	2
Cambodia	643	[400.7-1,031.9]	7.51	8.33	0.94	4	2
Laos	191	[119-306.5]	5.27	6.70	0.77	6	4
Myanmar	4,497	[2,802.1-7,217.1]	16.0	14.4	1.54	1	1
Malaysia	991	[918.4-1,069.3]	6.30	5.85	0.67	5	4
Philippines	4,052	[3,737.3-4,393.2]	7.43	7.89	0.88	4	4
Singapore	172	[140.3-210.9]	6.17	3.32	0.37	8	4
Thailand	4,705	[4,337.8-5,103.3]	13.1	7.45	0.83	5	2
Timor-Leste	39	[24.3-62.6]	5.98	8.76	0.98	2	2
Viet Nam	2,223	[2,019.4-2,447.1]	4.56	3.42	0.39	7	8
Southern Asia	89,307	[618.6-1,094.9]	9.50	9.75	1.12	2	2
Afghanistan	823	[618.6-1,094.9]	4.34	7.57	0.83	2	2
Bangladesh	4,971	[3,736.6-6,613.2]	6.10	6.67	0.76	3	2
Bhutan	27	[23.9-30.5]	7.47	8.43	0.94	2	1
India	77,348	[74,245.5-80,580.2]	11.7	11.4	1.30	2	2
Iran	644	[584.3-709.8]	1.55	1.52	0.17	12	10
Sri Lanka	780	[716.4-849.3]	7.00	4.94	0.57	4	5
Maldives	24	[18.9-30.4]	12.1	14.1	1.78	2	2
Nepal	1,493	[1,251.4-1,781.2]	9.46	11.1	1.22	1	1
Pakistan	3,197	[2,403.1-4,253.1]	2.98	3.99	0.46	5	3
Western Asia	2,951	[2,640.3-3,298.3]	2.23	2.30	0.27	12	8
United Arab Emirates	59	[38-91.7]	1.93	3.92	0.49	4	4
Armenia	115	[78.8-167.9]	7.33	4.64	0.52	8	2
Azerbaijan	256	[220.1-297.8]	5.04	4.03	0.48	6	3
Bahrain	12	[5.70-25.5]	2.00	2.40	0.31	10	6
Georgia	204	[160.4-259.4]	9.77	5.89	0.65	6	2
Iraq	193	[160.8-231.6]	0.97	1.54	0.19	11	11
Israel	121	[86.8-168.8]	2.78	1.96	0.22	13	4
Jordan	71	[48-105.1]	1.41	1.92	0.22	12	9
Kuwait	28	[17.3-45.2]	1.69	1.77	0.23	9	4
Lebanon	73	[55.2-96.5]	2.15	2.01	0.24	12	9
Oman	50	[30.5-81.9]	2.88	4.19	0.49	3	4
Palestine	44	[9.30-209.2]	1.75	3.40	0.43	11	20
Qatar	11	[2.30-52.3]	1.54	2.91	0.36	7	4
Saudi Arabia	179	[75.2-426.2]	1.22	1.60	0.18	9	7
Syria	137	[28.8-651.5]	1.57	1.87	0.22	12	9
Turkey	1,245	[1,101.3-1,407.5]	2.92	2.23	0.25	12	8
Yemen	153	[63.6-368.3]	1.03	1.77	0.21	12	9

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

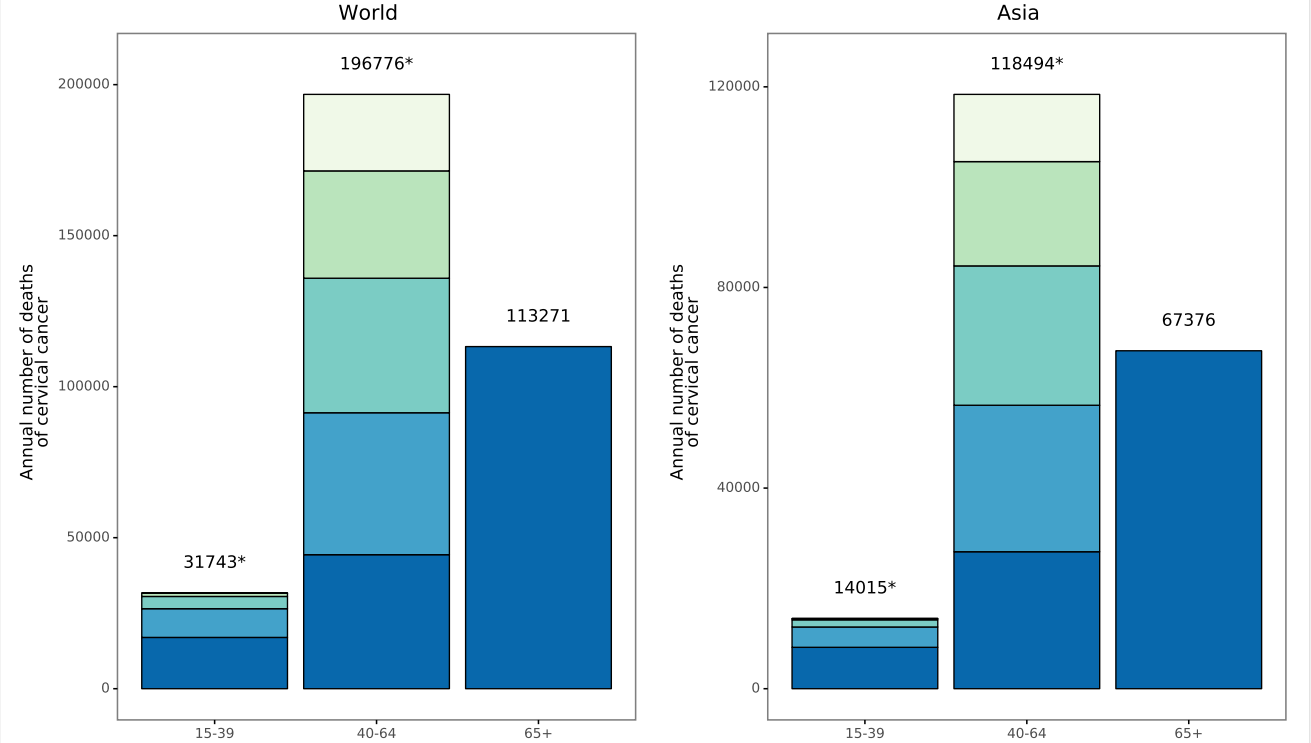
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 16: Annual number of deaths of cervical cancer in the World and Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

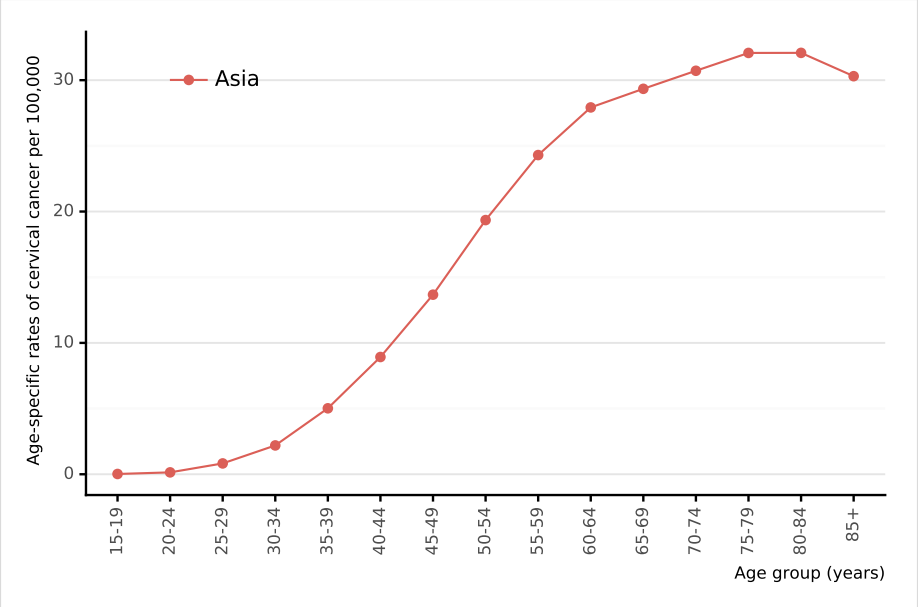
* World: 15-19 yrs: 144 cases. 20-24 yrs: 1055 cases. 25-29 yrs: 4057 cases. 30-34 yrs: 9506 cases. 35-39 yrs: 16981 cases. 40-44 yrs: 25334 cases. 45-49 yrs: 35535 cases. 50-54 yrs: 44540 cases. 55-59 yrs: 46997 cases. 60-64 yrs: 44370 cases.

* Asia: 15-19 yrs: 36 cases. 20-24 yrs: 245 cases. 25-29 yrs: 1429 cases. 30-34 yrs: 4053 cases. 35-39 yrs: 8252 cases. 40-44 yrs: 13403 cases. 45-49 yrs: 20793 cases. 50-54 yrs: 27784 cases. 55-59 yrs: 29204 cases. 60-64 yrs: 27310 cases.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 17: Age-specific mortality rates of cervical cancer in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

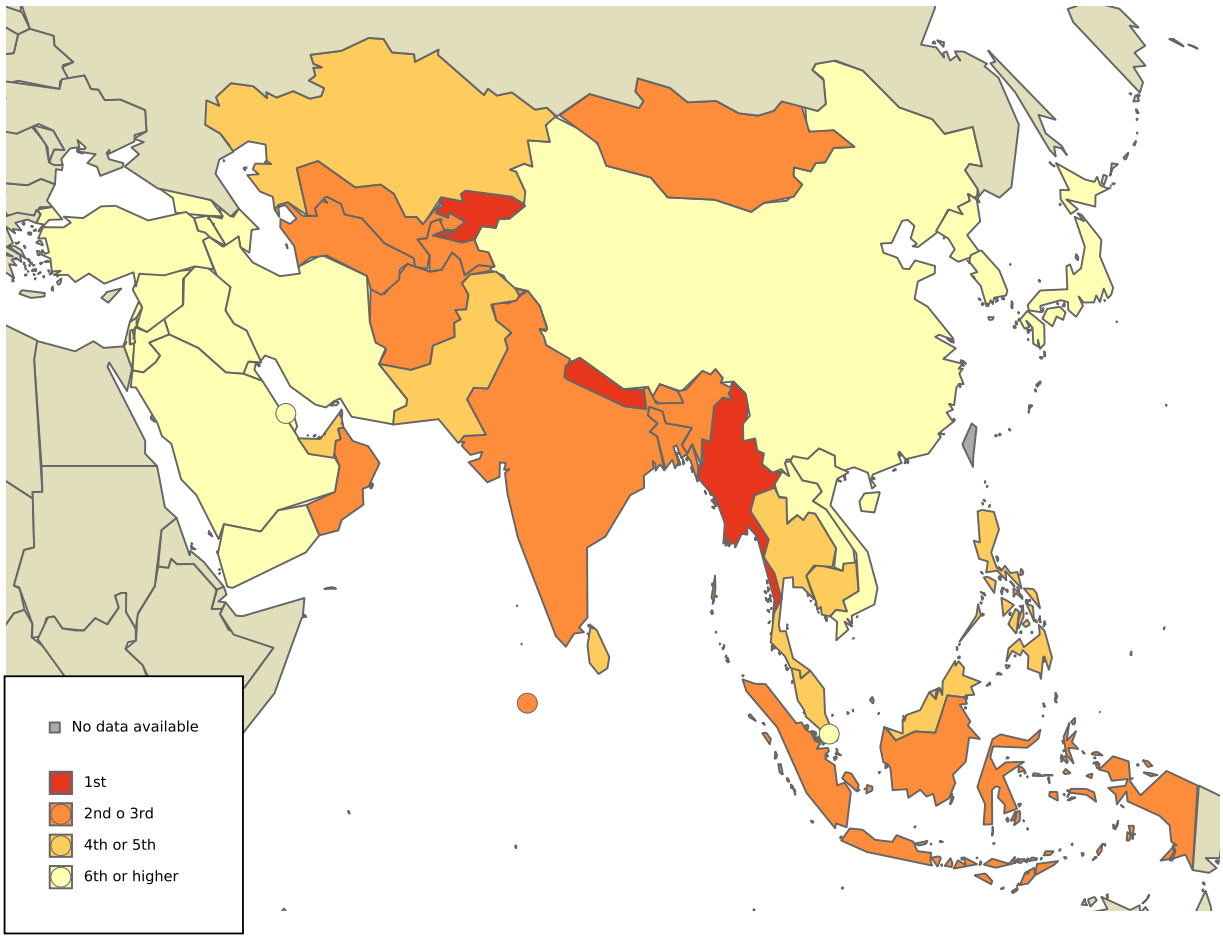
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

Data Sources:

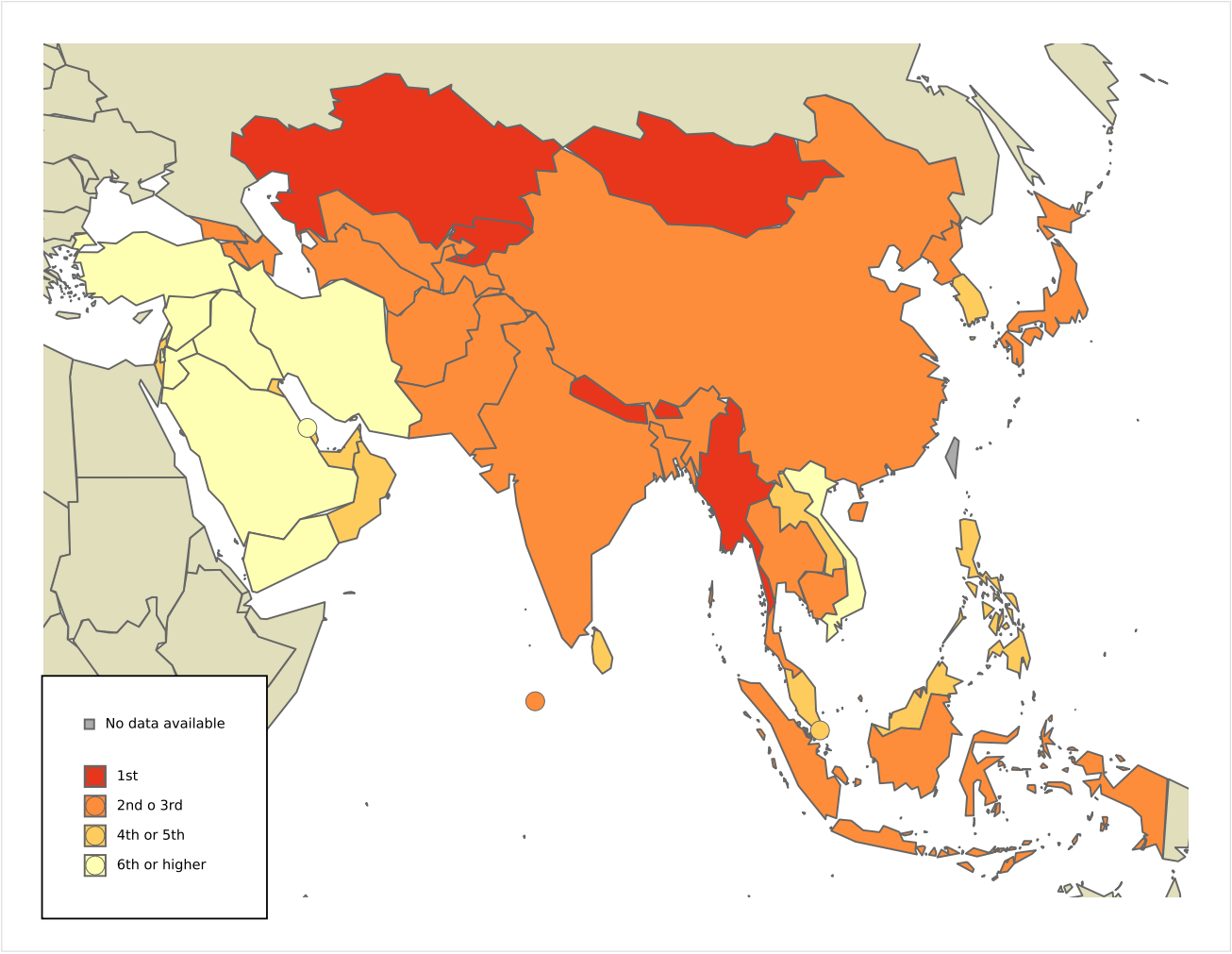
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 18: Ranking of cervical cancer versus other cancers among all women, according to mortality rates in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Non-melanoma skin cancer is not included
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 19: Ranking of cervical cancer versus other cancers among women aged 15-44 years, according to mortality rates in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Non-melanoma skin cancer is not included
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.4 Anogenital cancers other than the cervix

3.4.1 Anal cancer

3.4.1.1 Anal cancer incidence

Table 6: Incidence of anal cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	7,601	[5,951.7-9,707.3]	0.34	0.26	0.03	28	28
Central Asia	221	[29.5-74.8]	0.59	0.60	0.07	22	20
Kazakhstan	47	[29.5-74.8]	0.49	0.36	0.04	26	28
Kyrgyzstan	8	[2.30-27.5]	0.24	0.27	0.03	26	23
Tajikistan	11	[3.50-34.2]	0.23	0.29	0.03	22	20
Turkmenistan	21	[12-36.7]	0.69	0.72	0.09	21	18
Uzbekistan	134	[78.8-228]	0.80	0.85	0.10	18	18
Eastern Asia	3,241	[2,727-3,851.9]	0.39	0.22	0.02	25	25
China	2,351	[1,981.8-2,788.9]	0.33	0.20	0.02	25	25
Japan	572	[451.9-724]	0.88	0.26	0.03	23	24
Republic of Korea	224	[180.5-278]	0.87	0.40	0.05	22	25
Mongolia	3	[0.80-11.5]	0.18	0.22	0.03	27	28
DPR Korea	23	[4.90-108.6]	0.17	0.11	0.01	28	27
South-Eastern Asia	1,054	[486.4-2,284.1]	0.31	0.26	0.03	26	25
Brunei	0	[0-10]	0	0	0	30	21
Indonesia	272	[96.6-765.9]	0.20	0.19	0.02	26	26
Cambodia	16	[5.30-48.6]	0.19	0.22	0.02	27	30
Laos	9	[3-27.3]	0.25	0.34	0.03	27	29
Myanmar	84	[27.7-254.9]	0.30	0.26	0.03	24	24
Malaysia	69	[40.2-118.4]	0.44	0.41	0.05	23	31
Philippines	90	[40.2-201.5]	0.16	0.17	0.02	28	26
Singapore	22	[9.40-51.5]	0.79	0.43	0.04	24	23
Thailand	174	[111.5-271.6]	0.49	0.25	0.03	26	26
Timor-Leste	0	[0-3]	0	0	0	22	25
Viet Nam	318	[160.9-628.6]	0.65	0.47	0.05	21	22
Southern Asia	2,801	[8.40-209.2]	0.30	0.31	0.04	27	29
Afghanistan	42	[8.40-209.2]	0.22	0.39	0.05	25	21
Bangladesh	104	[20.9-518.1]	0.13	0.16	0.02	29	29
Bhutan	0	[0-2.20]	0	0	0	29	30
India	2,341	[1,799.4-3,045.5]	0.35	0.35	0.04	27	28
Iran	66	[46.3-94.1]	0.16	0.16	0.01	25	27
Sri Lanka	50	[34-73.4]	0.45	0.28	0.03	26	28
Maldives	0	[0-5]	0	0	0	19	15
Nepal	17	[4.70-61.9]	0.11	0.12	0.00	26	21
Pakistan	181	[66.6-492.1]	0.17	0.22	0.02	29	28
Western Asia	284	[126.2-639.1]	0.21	0.22	0.03	28	30
United Arab Emirates	7	[1.70-29.4]	0.23	0.39	0.05	23	19
Armenia	1	[0.70-1.50]	0.06	0.04	0.01	28	19
Azerbaijan	28	[13.9-56.2]	0.55	0.40	0.04	24	30
Bahrain	0	[0-10.2]	0	0	0	28	27
Georgia	4	[2.70-6]	0.19	0.05	0	27	20
Iraq	17	[9.60-30]	0.09	0.15	0.02	28	26
Israel	21	[12.8-34.4]	0.48	0.35	0.05	27	30
Jordan	8	[2.60-24.9]	0.16	0.22	0.02	27	28
Kuwait	3	[0.80-11.9]	0.18	0.29	0.02	25	24
Lebanon	10	[4.40-22.5]	0.30	0.25	0.03	27	26
Oman	4	[0.70-21.8]	0.23	0.33	0.05	24	21
Palestine	1	[0.10-11.1]	0.04	0.06	0.01	29	29
Qatar	6	[0.50-71.5]	0.84	2.90	0.26	17	25
Saudi Arabia	29	[14.5-58.1]	0.20	0.32	0.04	24	29
Syria	15	[1.30-166.9]	0.17	0.21	0.02	27	30
Turkey	123	[46.3-326.6]	0.29	0.22	0.03	28	30
Yemen	7	[0.90-55.8]	0.05	0.10	0.01	29	31

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be

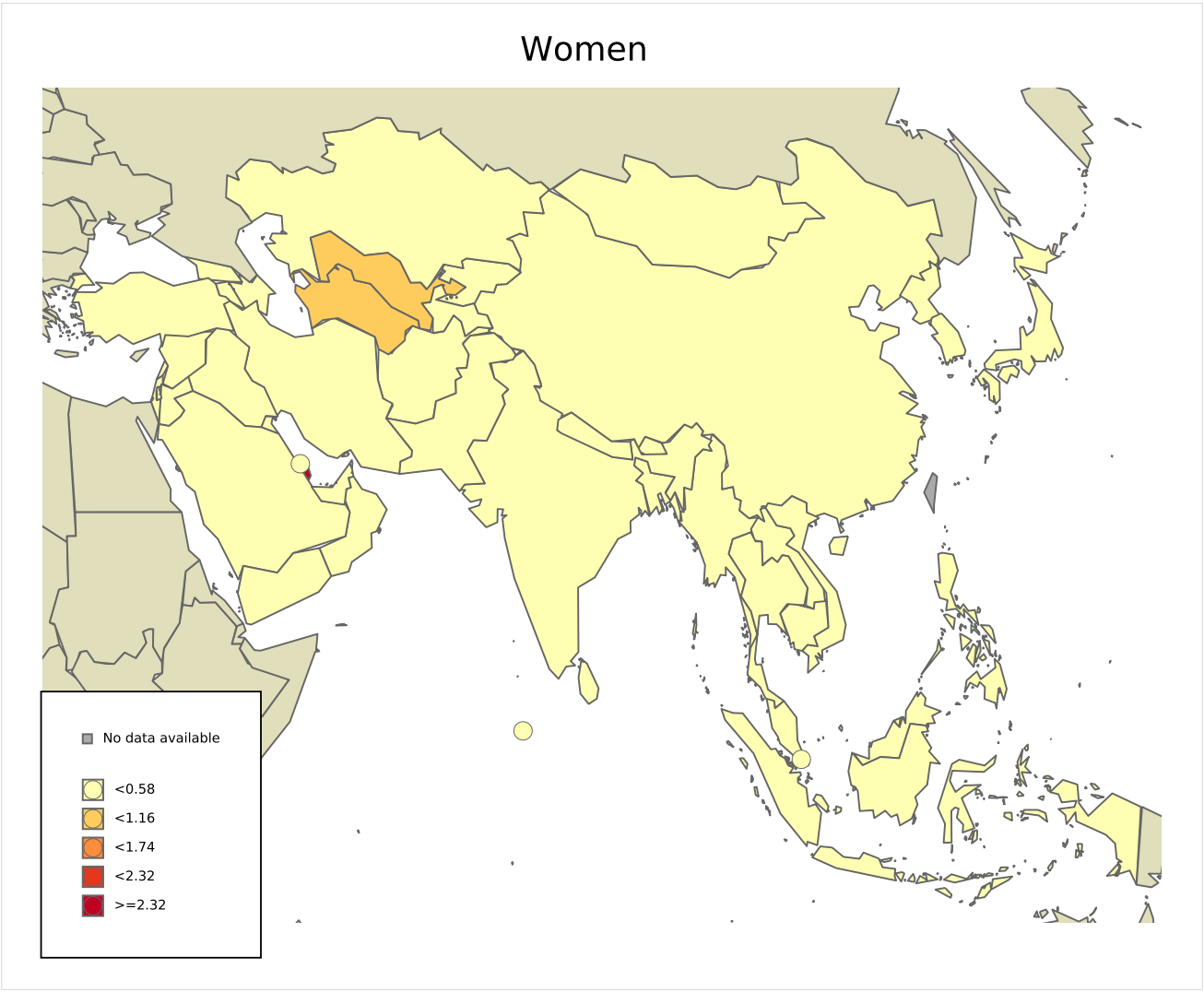
expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 20: Age-standardised incidence rates of anal cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Table 7: Incidence of anal cancer in men by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All men	Men 15-44 years
Asia	9,044	[7,266.5-11,256.4]	0.38	0.33	0.04	26	26
Central Asia	241	[12.6-49.7]	0.65	0.78	0.09	19	15
Kazakhstan	25	[12.6-49.7]	0.27	0.28	0.03	27	25
Kyrgyzstan	4	[0.80-20.9]	0.12	0.16	0.02	27	27
Tajikistan	20	[9.90-40.4]	0.42	0.58	0.06	15	11
Turkmenistan	22	[10.7-45.3]	0.74	0.95	0.11	22	19
Uzbekistan	170	[85.3-338.6]	1.02	1.23	0.15	16	13
Eastern Asia	3,151	[2,680.5-3,704]	0.37	0.24	0.03	27	26
China	2,498	[2,133.6-2,924.7]	0.34	0.23	0.03	26	24
Japan	484	[380-616.4]	0.78	0.31	0.04	27	24
Republic of Korea	107	[75.4-151.9]	0.42	0.23	0.03	26	24
Mongolia	1	[0.10-7.50]	0.06	0.06	0.01	27	28
DPR Korea	13	[1.30-133.4]	0.10	0.09	0.01	27	27
South-Eastern Asia	1,227	[592.1-2,542.8]	0.37	0.37	0.04	26	24
Brunei	0	[0-10]	0	0	0	25	19
Indonesia	490	[181.9-1,320.3]	0.36	0.38	0.04	24	23
Cambodia	22	[8.50-57]	0.27	0.28	0.03	26	16
Laos	4	[1.50-10.4]	0.11	0.12	0.01	26	27
Myanmar	96	[37.1-248.7]	0.37	0.43	0.04	23	22
Malaysia	22	[13-37.3]	0.13	0.13	0.02	27	26
Philippines	113	[61.5-207.5]	0.21	0.26	0.03	25	23
Singapore	38	[17.8-81.1]	1.24	0.70	0.10	25	26
Thailand	181	[118.5-276.4]	0.53	0.35	0.04	26	23
Timor-Leste	0	[0-2.60]	0	0	0	28	11
Viet Nam	261	[125.8-541.5]	0.54	0.51	0.05	23	24
Southern Asia	4,068	[12.3-398.8]	0.41	0.45	0.05	25	24
Afghanistan	70	[12.3-398.8]	0.35	0.68	0.08	20	18
Bangladesh	277	[48.6-1,577.9]	0.33	0.35	0.04	25	21
Bhutan	0	[0-1.90]	0	0	0	25	26
India	3,111	[2,510.2-3,855.6]	0.43	0.46	0.05	25	24
Iran	122	[93.1-159.8]	0.29	0.28	0.03	23	23
Sri Lanka	73	[53.8-99]	0.71	0.52	0.06	22	26
Maldives	0	[0-5.70]	0	0	0	20	25
Nepal	23	[9.90-53.6]	0.17	0.17	0.02	26	14
Pakistan	392	[192.2-799.7]	0.34	0.46	0.06	24	19
Western Asia	357	[167.4-761.5]	0.24	0.29	0.03	25	25
United Arab Emirates	5	[0.90-27.4]	0.07	0.15	0.03	24	24
Armenia	1	[0.60-1.70]	0.07	0.06	0	27	27
Azerbaijan	47	[26.8-82.4]	0.93	0.83	0.08	21	23
Bahrain	3	[0.40-21.4]	0.27	0.48	0.07	21	21
Georgia	6	[3.60-9.90]	0.32	0.20	0.03	27	26
Iraq	20	[12.4-32.3]	0.10	0.19	0.02	25	25
Israel	24	[14.5-39.6]	0.56	0.44	0.05	24	23
Jordan	11	[3.90-30.7]	0.21	0.28	0.03	24	20
Kuwait	7	[2.10-23.4]	0.27	0.30	0.02	22	24
Lebanon	6	[2.40-15.1]	0.17	0.17	0.03	26	26
Oman	21	[4.20-103.8]	0.62	1.63	0.21	21	26
Palestine	8	[0.70-96.9]	0.31	0.61	0.07	22	26
Qatar	4	[0.30-47.7]	0.18	0.32	0.04	22	26
Saudi Arabia	54	[30.4-96.1]	0.27	0.30	0.04	22	20
Syria	14	[1.20-169.5]	0.16	0.22	0.02	25	23
Turkey	110	[42-288.1]	0.26	0.23	0.03	27	26
Yemen	16	[1.30-203.2]	0.11	0.24	0.03	22	26

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

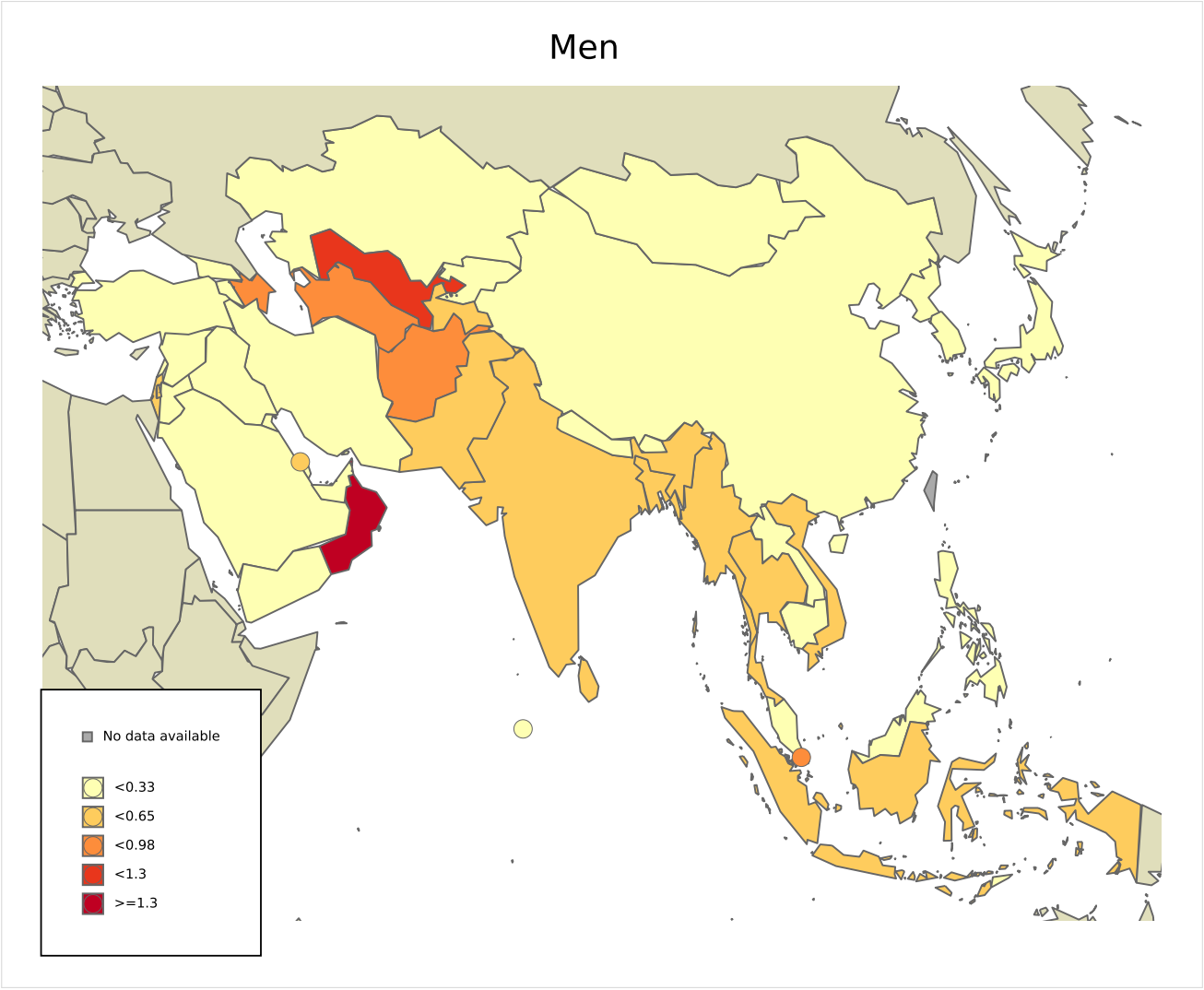
[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 21: Age-standardised incidence rates of anal cancer among men in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.4.1.2 Anal cancer mortality

Table 8: Mortality of anal cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	3,570	[2,573.9-4,951.6]	0.16	0.12	0.01	29	30
Central Asia	119	[17.5-41.8]	0.32	0.33	0.04	21	20
Kazakhstan	27	[17.5-41.8]	0.28	0.22	0.02	27	22
Kyrgyzstan	5	[1.80-14]	0.15	0.18	0.02	27	24
Tajikistan	5	[1.90-13]	0.11	0.13	0.01	22	22
Turkmenistan	10	[2.60-38.6]	0.33	0.34	0.04	23	18
Uzbekistan	72	[54.5-95.1]	0.43	0.47	0.06	16	18
Eastern Asia	1,454	[1,117-1,892.6]	0.18	0.09	0.01	25	28
China	1,080	[803.3-1,452.1]	0.15	0.09	0.01	25	28
Japan	281	[235.2-335.7]	0.43	0.09	0.01	23	24
Republic of Korea	59	[43.7-79.7]	0.23	0.08	0.01	22	28
Mongolia	2	[0.30-11.5]	0.12	0.18	0.04	25	19
DPR Korea	9	[1.10-73.1]	0.07	0.04	0.00	28	29
South-Eastern Asia	443	[199-986]	0.13	0.11	0.01	27	29
Brunei	0	[0-8.50]	0	0	0	31	17
Indonesia	104	[36.3-297.9]	0.08	0.07	0.01	27	27
Cambodia	8	[3.10-20.4]	0.09	0.12	0.01	26	29
Laos	4	[1.60-10.2]	0.11	0.18	0.02	28	25
Myanmar	30	[11.8-76.5]	0.11	0.09	0.01	27	26
Malaysia	32	[17.5-58.5]	0.20	0.19	0.02	23	29
Philippines	31	[12.5-76.7]	0.06	0.06	0.01	28	29
Singapore	7	[2.70-18.2]	0.25	0.12	0.01	24	22
Thailand	63	[39.1-101.5]	0.18	0.08	0.01	27	30
Timor-Leste	0	[0-2.60]	0	0	0	24	19
Viet Nam	164	[77.5-347.1]	0.34	0.22	0.02	23	22
Southern Asia	1,440	[5.40-106.9]	0.15	0.16	0.02	28	28
Afghanistan	24	[5.40-106.9]	0.13	0.24	0.03	26	24
Bangladesh	58	[13-258.4]	0.07	0.09	0.01	29	29
Bhutan	0	[0-2.30]	0	0	0	23	13
India	1,216	[918.7-1,609.6]	0.18	0.18	0.02	28	29
Iran	30	[20.3-44.4]	0.07	0.07	0.01	27	28
Sri Lanka	23	[14.2-37.3]	0.21	0.13	0.02	25	28
Maldives	0	[0-3.30]	0	0	0	26	17
Nepal	9	[2-40.1]	0.06	0.07	0.00	26	22
Pakistan	80	[28.3-226.2]	0.07	0.10	0.01	29	28
Western Asia	114	[42.6-305.1]	0.09	0.09	0.01	28	31
United Arab Emirates	3	[0.50-19.3]	0.10	0.29	0.04	22	27
Armenia	0	[0-6.40]	0	0	0	31	27
Azerbaijan	22	[9.60-50.6]	0.43	0.31	0.03	22	26
Bahrain	0	[0-17.2]	0	0	0	30	28
Georgia	2	[0.60-6.60]	0.10	0.02	0	28	22
Iraq	9	[4.30-18.8]	0.05	0.08	0.01	27	29
Israel	3	[0.90-9.90]	0.07	0.02	0	28	30
Jordan	3	[0.70-12.1]	0.06	0.10	0.01	27	28
Kuwait	1	[0.20-5.80]	0.06	0.15	0	24	19
Lebanon	5	[1.80-14]	0.15	0.12	0.02	27	25
Oman	2	[0.30-15]	0.12	0.24	0.05	25	23
Palestine	0	[0-10.2]	0	0	0	31	31
Qatar	3	[0.20-51.7]	0.42	1.47	0.13	19	15
Saudi Arabia	11	[4.80-25.3]	0.07	0.13	0.02	24	27
Syria	5	[0.50-51.1]	0.06	0.07	0.01	27	27
Turkey	38	[14.2-101.4]	0.09	0.07	0.01	28	30
Yemen	7	[0.70-71.5]	0.05	0.10	0.01	26	31

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

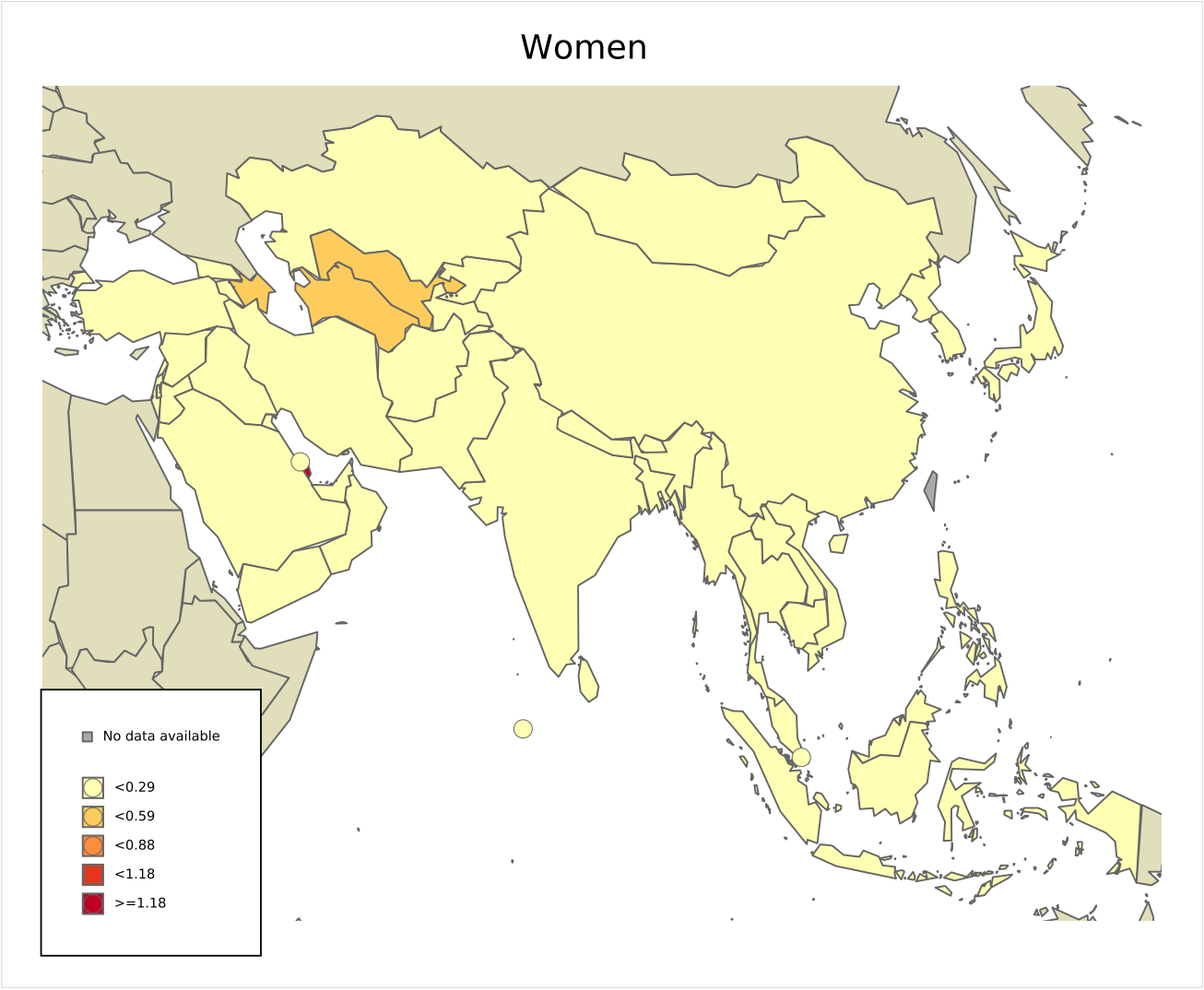
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 22: Age-standardised mortality rates of anal cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 women per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Table 9: Mortality of anal cancer in men by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All men	Men 15-44 years
Asia	4,550	[3,348.7-6,182.3]	0.19	0.17	0.02	26	25
Central Asia	133	[9.70-29.7]	0.36	0.44	0.05	19	18
Kazakhstan	17	[9.70-29.7]	0.19	0.19	0.02	27	24
Kyrgyzstan	2	[0.50-8]	0.06	0.07	0.01	26	20
Tajikistan	13	[7.20-23.5]	0.27	0.42	0.04	15	13
Turkmenistan	12	[2.80-51.8]	0.40	0.52	0.06	21	19
Uzbekistan	89	[69.3-114.4]	0.53	0.66	0.08	16	15
Eastern Asia	1,642	[1,297.5-2,077.9]	0.19	0.12	0.01	26	27
China	1,331	[1,037.6-1,707.4]	0.18	0.12	0.01	26	27
Japan	250	[202.5-308.7]	0.40	0.13	0.01	23	22
Republic of Korea	36	[24.5-53]	0.14	0.08	0.01	25	23
Mongolia	0	[0-9.50]	0	0	0	28	24
DPR Korea	9	[5.50-14.7]	0.07	0.06	0.01	27	23
South-Eastern Asia	612	[287.8-1,301.5]	0.18	0.19	0.02	26	27
Brunei	0	[0-2.50]	0	0	0	21	20
Indonesia	262	[95.7-717.6]	0.19	0.21	0.02	25	26
Cambodia	5	[2.20-11.2]	0.06	0.09	0.01	26	22
Laos	2	[0.90-4.50]	0.05	0.10	0.01	26	25
Myanmar	37	[16.6-82.6]	0.14	0.19	0.02	25	25
Malaysia	10	[5.50-18.1]	0.06	0.06	0.01	28	27
Philippines	61	[30.8-120.8]	0.11	0.15	0.02	25	24
Singapore	8	[3.10-20.4]	0.26	0.13	0.02	24	23
Thailand	70	[44.5-110.2]	0.21	0.12	0.01	24	25
Timor-Leste	0	[0-2.20]	0	0	0	18	22
Viet Nam	157	[70.3-350.5]	0.32	0.31	0.03	20	26
Southern Asia	2,003	[8.10-206.9]	0.20	0.22	0.03	24	23
Afghanistan	41	[8.10-206.9]	0.21	0.42	0.05	21	19
Bangladesh	138	[27.3-696.6]	0.17	0.18	0.02	25	20
Bhutan	0	[0-2]	0	0	0	28	21
India	1,560	[1,241.1-1,960.8]	0.22	0.23	0.03	24	23
Iran	46	[33.7-62.8]	0.11	0.11	0.01	25	24
Sri Lanka	31	[21.1-45.5]	0.30	0.22	0.03	23	27
Maldives	0	[0-4.80]	0	0	0	17	10
Nepal	11	[4.10-29.3]	0.08	0.08	0.01	24	13
Pakistan	176	[83.9-369.2]	0.15	0.22	0.03	24	24
Western Asia	160	[73.2-349.8]	0.11	0.14	0.02	25	26
United Arab Emirates	2	[0.20-18.1]	0.03	0.11	0.02	26	24
Armenia	0	[0-5.70]	0	0	0	28	18
Azerbaijan	33	[16.9-64.5]	0.65	0.58	0.06	17	28
Bahrain	1	[0.10-11.1]	0.09	0.24	0.04	20	11
Georgia	3	[0.90-9.90]	0.16	0.10	0.01	27	24
Iraq	14	[7.50-26.1]	0.07	0.13	0.02	23	26
Israel	5	[1.80-14]	0.12	0.10	0.01	27	18
Jordan	6	[1.70-21.4]	0.12	0.17	0.02	23	18
Kuwait	3	[0.60-14.3]	0.11	0.21	0.02	22	22
Lebanon	3	[0.90-9.60]	0.09	0.08	0.01	25	24
Oman	11	[1.60-74.3]	0.33	0.76	0.10	19	24
Palestine	4	[0.40-44.4]	0.15	0.33	0.04	23	20
Qatar	2	[0.10-34.5]	0.09	0.23	0.03	21	16
Saudi Arabia	21	[10.5-41.9]	0.10	0.11	0.01	22	24
Syria	5	[0.50-55.4]	0.06	0.08	0.01	26	27
Turkey	37	[20-68.3]	0.09	0.09	0.01	27	26
Yemen	10	[0.60-172.3]	0.07	0.15	0.02	22	26

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

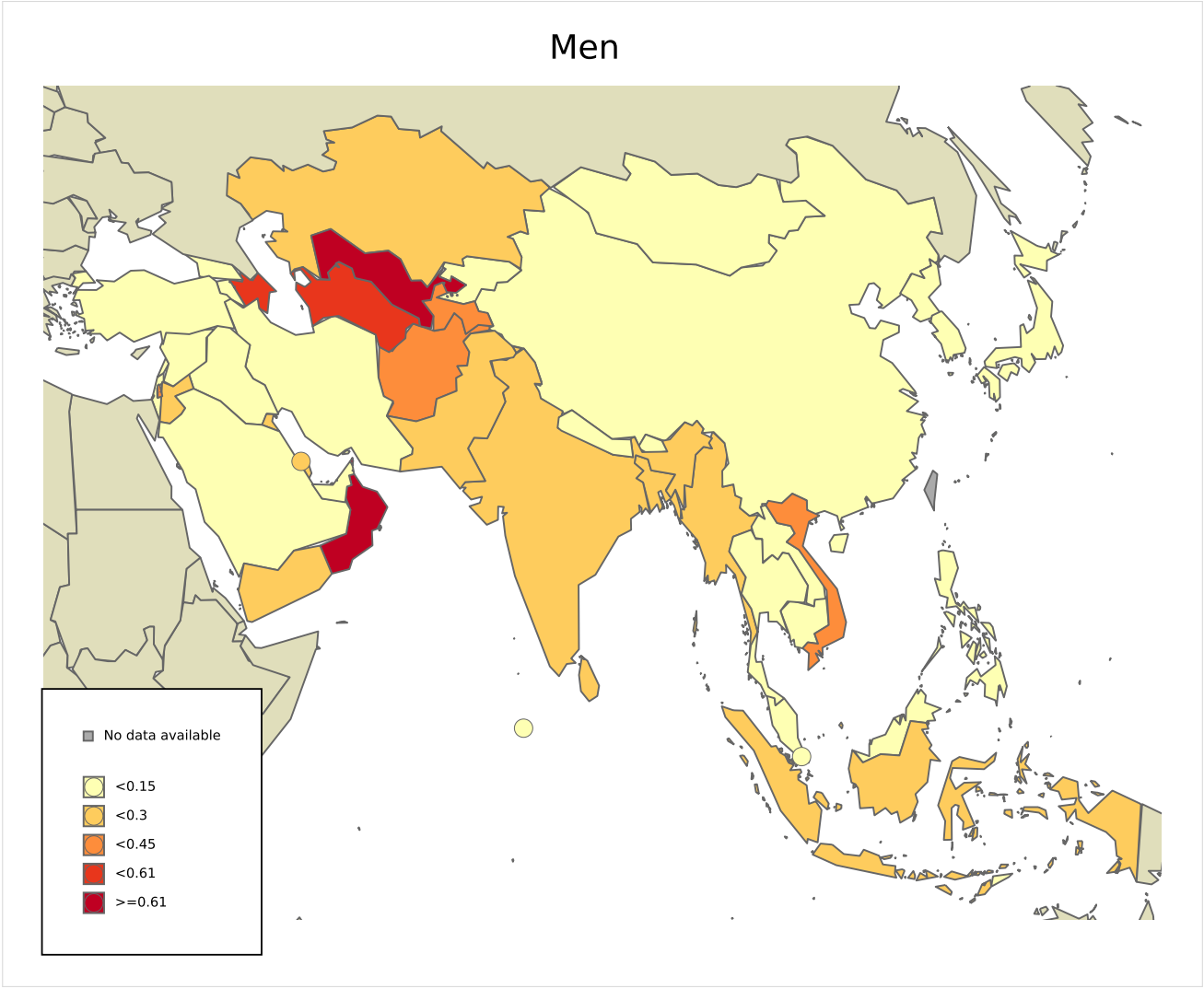
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 23: Age-standardised mortality rates of anal cancer among men in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 men per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.4.2 Vulvar cancer

3.4.2.1 Vulvar cancer incidence

Table 10: Incidence of vulvar cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	12,181	[10,152-14,615.5]	0.54	0.41	0.05	23	27
Central Asia	258	[98.9-155.5]	0.69	0.70	0.08	20	22
Kazakhstan	124	[98.9-155.5]	1.28	0.95	0.12	18	20
Kyrgyzstan	34	[16.7-69.2]	1.03	1.12	0.13	15	13
Tajikistan	9	[2.50-31.9]	0.19	0.33	0.04	25	29
Turkmenistan	16	[12.2-20.9]	0.52	0.58	0.07	24	28
Uzbekistan	75	[47-119.7]	0.45	0.48	0.06	22	22
Eastern Asia	4,999	[4,421.3-5,652.2]	0.61	0.33	0.03	23	24
China	3,323	[2,888.3-3,823.1]	0.47	0.29	0.03	23	24
Japan	1,283	[849.4-1,937.9]	1.98	0.47	0.05	20	25
Republic of Korea	222	[165.4-298.1]	0.87	0.39	0.05	23	23
Mongolia	7	[2.70-18.1]	0.42	0.52	0.04	20	22
DPR Korea	51	[17.1-151.9]	0.39	0.24	0.03	24	23
South-Eastern Asia	2,205	[1,392.3-3,491.9]	0.66	0.57	0.07	21	19
Brunei	2	[0.20-16.4]	0.95	0.80	0.05	18	27
Indonesia	1,328	[855.6-2,061.3]	0.98	0.92	0.11	15	14
Cambodia	36	[1.90-671.3]	0.42	0.47	0.05	22	25
Laos	21	[1.10-391.6]	0.58	0.73	0.08	20	23
Myanmar	144	[7.70-2,685.3]	0.51	0.48	0.06	21	21
Malaysia	50	[31.7-78.8]	0.32	0.30	0.03	27	24
Philippines	158	[86.6-288.2]	0.29	0.31	0.04	25	28
Singapore	39	[19.1-79.6]	1.40	0.70	0.08	20	24
Thailand	258	[176.3-377.5]	0.72	0.40	0.04	22	22
Timor-Leste	0	[0-18.6]	0	0	0	26	26
Viet Nam	169	[114-250.5]	0.35	0.24	0.02	25	24
Southern Asia	4,111	[9.70-156.7]	0.44	0.46	0.06	26	28
Afghanistan	39	[9.70-156.7]	0.21	0.42	0.05	26	29
Bangladesh	264	[65.7-1,060.6]	0.32	0.39	0.05	23	25
Bhutan	0	[0-1.90]	0	0	0	25	19
India	3,447	[2,733.1-4,347.4]	0.52	0.51	0.06	25	29
Iran	46	[31.3-67.6]	0.11	0.10	0.01	29	28
Sri Lanka	53	[37.5-74.9]	0.48	0.32	0.03	25	20
Maldives	0	[0-4]	0	0	0	30	23
Nepal	23	[10.9-48.5]	0.15	0.18	0.02	25	22
Pakistan	239	[74.8-763.2]	0.22	0.30	0.03	26	27
Western Asia	608	[344.2-1,074]	0.46	0.47	0.06	25	27
United Arab Emirates	2	[0.20-17.9]	0.07	0.21	0.05	29	26
Armenia	11	[8.90-13.6]	0.70	0.35	0.05	22	22
Azerbaijan	15	[6.60-34]	0.30	0.25	0.03	27	27
Bahrain	1	[0.10-10.2]	0.17	0.16	0.02	23	23
Georgia	50	[40.5-61.7]	2.39	1.00	0.13	18	27
Iraq	28	[17.9-43.8]	0.14	0.25	0.04	25	28
Israel	77	[58.7-101.1]	1.77	1.07	0.12	20	24
Jordan	12	[4.30-33.4]	0.24	0.32	0.04	25	23
Kuwait	1	[0.10-6.70]	0.06	0.08	0.01	26	29
Lebanon	44	[30.2-64.1]	1.30	1.10	0.13	19	18
Oman	5	[1-25.1]	0.29	0.37	0.04	23	18
Palestine	5	[0.40-60.5]	0.20	0.33	0.05	25	21
Qatar	0	[0-11.9]	0	0	0	24	18
Saudi Arabia	14	[6-32.4]	0.10	0.14	0.01	27	27
Syria	40	[3.30-484.4]	0.46	0.56	0.07	23	23
Turkey	286	[150.2-544.5]	0.67	0.49	0.06	24	27
Yemen	17	[1.30-215.9]	0.11	0.24	0.03	22	29

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

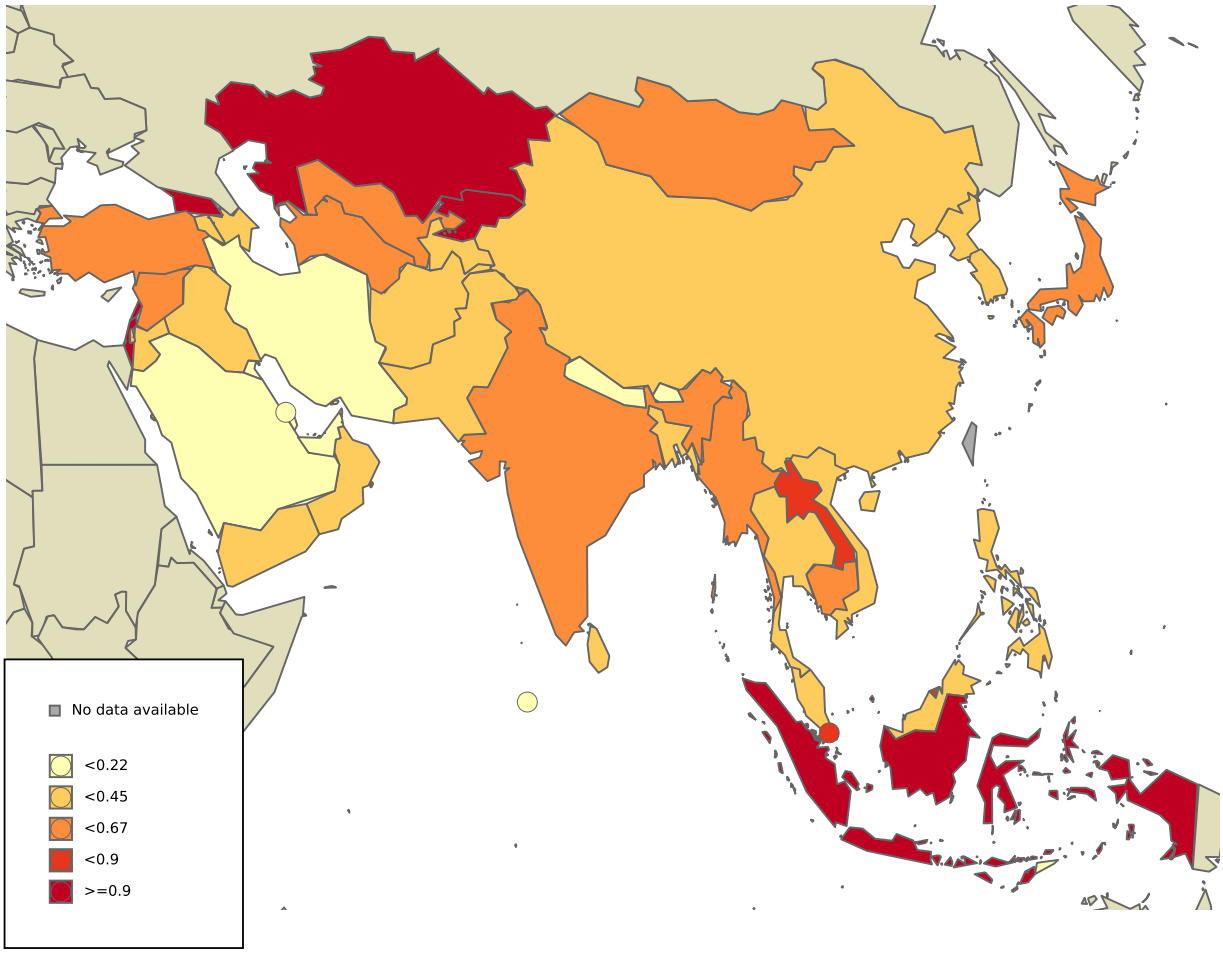
[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 24: Age-standardised incidence rates of vulvar cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.4.2.2 Vulvar cancer mortality

Table 11: Mortality of vulvar cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	4,826	[3,694-6,304.9]	0.21	0.16	0.02	24	28
Central Asia	127	[47.3-83.9]	0.34	0.35	0.04	20	27
Kazakhstan	63	[47.3-83.9]	0.65	0.46	0.05	19	24
Kyrgyzstan	15	[8.30-27.1]	0.45	0.53	0.07	18	28
Tajikistan	4	[1.40-11.6]	0.08	0.14	0.01	26	25
Turkmenistan	10	[2.40-41]	0.33	0.37	0.04	22	28
Uzbekistan	35	[23.5-52.1]	0.21	0.23	0.02	24	25
Eastern Asia	1,662	[1,304.2-2,117.9]	0.20	0.10	0.01	23	25
China	1,228	[937.3-1,608.9]	0.17	0.10	0.01	23	24
Japan	325	[274.2-385.2]	0.50	0.09	0.01	21	28
Republic of Korea	41	[28.7-58.6]	0.16	0.06	0.01	24	31
Mongolia	4	[1.40-11.8]	0.24	0.30	0.02	22	26
DPR Korea	28	[7.60-102.6]	0.21	0.12	0.01	24	19
South-Eastern Asia	763	[477.4-1,219.5]	0.23	0.19	0.02	23	19
Brunei	0	[0-8.50]	0	0	0	27	25
Indonesia	442	[282.7-691]	0.33	0.31	0.04	18	15
Cambodia	15	[1.30-177]	0.18	0.21	0.02	22	24
Laos	9	[0.80-106.2]	0.25	0.32	0.04	22	24
Myanmar	54	[4.60-637.2]	0.19	0.18	0.02	23	25
Malaysia	15	[9-24.9]	0.10	0.09	0.01	29	27
Philippines	61	[32.7-113.9]	0.11	0.12	0.01	25	27
Singapore	11	[5-24.2]	0.39	0.18	0.01	21	16
Thailand	90	[59.9-135.3]	0.25	0.13	0.01	23	25
Timor-Leste	0	[0-11.8]	0	0	0	29	27
Viet Nam	66	[42.8-101.8]	0.14	0.08	0.01	26	27
Southern Asia	2,019	[6.60-87.5]	0.21	0.23	0.03	25	29
Afghanistan	24	[6.60-87.5]	0.13	0.27	0.03	27	30
Bangladesh	136	[37.3-496]	0.17	0.20	0.02	24	24
Bhutan	0	[0-2]	0	0	0	31	27
India	1,694	[1,322.8-2,169.3]	0.26	0.25	0.03	25	30
Iran	14	[3.60-54.8]	0.03	0.03	0.00	30	29
Sri Lanka	22	[14.3-34]	0.20	0.12	0.01	26	26
Maldives	0	[0-4.50]	0	0	0	19	26
Nepal	10	[4.20-23.7]	0.06	0.08	0.01	24	30
Pakistan	119	[35.6-397.7]	0.11	0.15	0.02	28	27
Western Asia	255	[169.6-383.4]	0.19	0.19	0.02	25	30
United Arab Emirates	1	[0.10-17.2]	0.03	0.17	0.04	28	19
Armenia	7	[3.40-14.6]	0.45	0.22	0.03	22	20
Azerbaijan	8	[3-21.3]	0.16	0.13	0.02	27	24
Bahrain	0	[0-17.2]	0	0	0	25	24
Georgia	27	[17.5-41.7]	1.29	0.50	0.06	18	27
Iraq	14	[7.80-25]	0.07	0.13	0.02	25	28
Israel	31	[20.6-46.5]	0.71	0.32	0.03	19	16
Jordan	5	[1.40-17.9]	0.10	0.14	0.02	26	24
Kuwait	0	[0-11.1]	0	0	0	27	25
Lebanon	24	[14.9-38.7]	0.71	0.58	0.07	20	23
Oman	2	[0.30-13.6]	0.12	0.16	0.02	23	28
Palestine	2	[0.20-22.2]	0.08	0.17	0.04	25	22
Qatar	0	[0-1.70]	0	0	0	21	23
Saudi Arabia	5	[1.80-13.7]	0.03	0.05	0.00	29	30
Syria	26	[2.30-288.3]	0.30	0.38	0.04	22	25
Turkey	93	[60.8-142.3]	0.22	0.15	0.02	25	27
Yemen	10	[0.60-172.3]	0.07	0.15	0.02	24	28

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

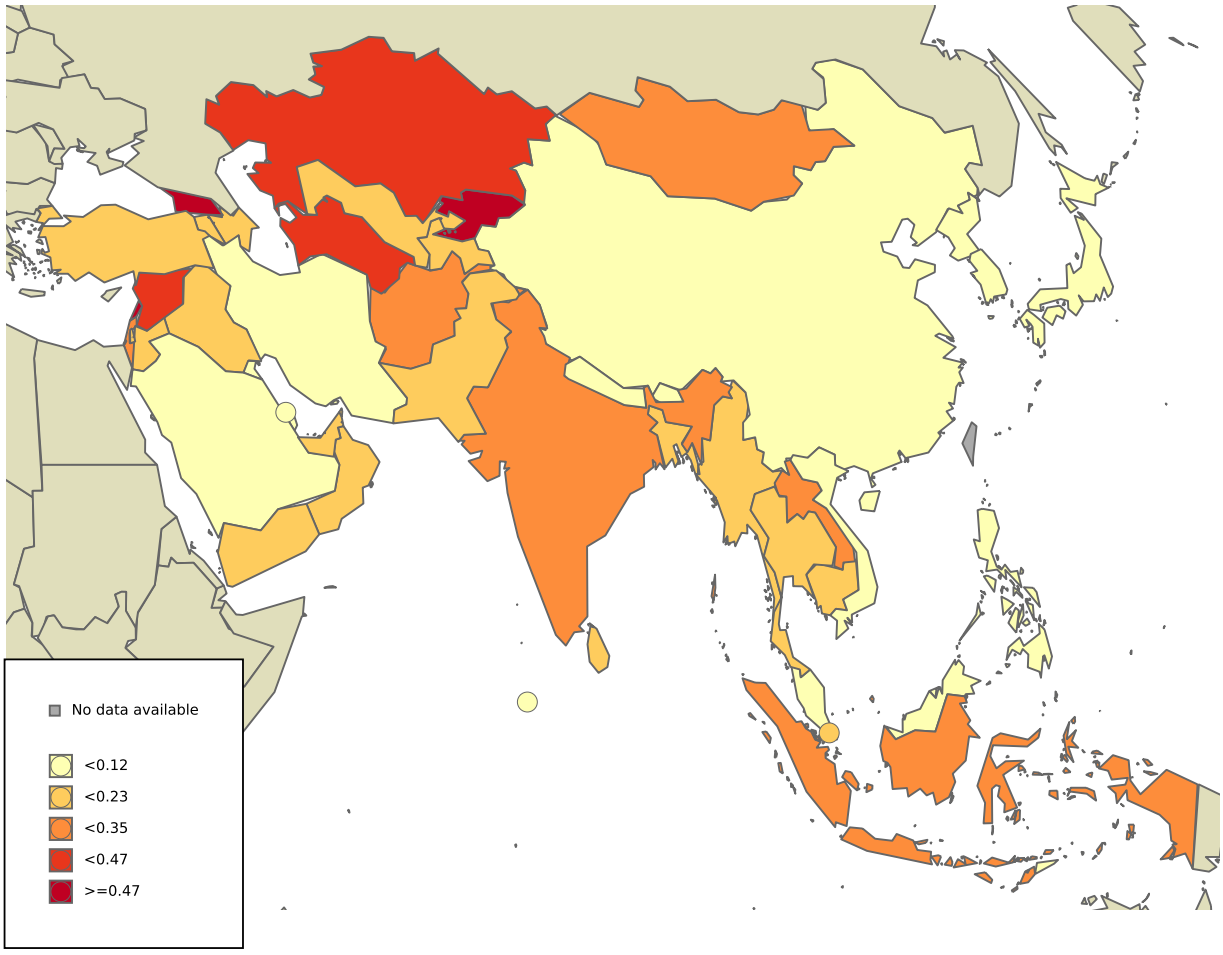
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 25: Age-standardised mortality rates of vulvar cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.4.3 Vaginal cancer

3.4.3.1 Vaginal cancer incidence

Table 12: Incidence of vaginal cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	9,762	[7,601.9-12,535.9]	0.43	0.34	0.04	27	25
Central Asia	104	[35.1-71.2]	0.28	0.29	0.04	29	29
Kazakhstan	50	[35.1-71.2]	0.52	0.40	0.05	24	24
Kyrgyzstan	9	[1.90-42.3]	0.27	0.32	0.05	24	30
Tajikistan	1	[0.70-1.50]	0.02	0.02	0.00	28	30
Turkmenistan	7	[4.50-10.8]	0.23	0.26	0.04	28	27
Uzbekistan	37	[18.7-73.4]	0.22	0.26	0.04	28	31
Eastern Asia	2,226	[1,804-2,746.7]	0.27	0.17	0.02	27	26
China	1,640	[1,334.7-2,015.2]	0.23	0.16	0.02	27	26
Japan	390	[291.1-522.5]	0.60	0.20	0.02	27	26
Republic of Korea	81	[58.2-112.7]	0.32	0.15	0.02	26	26
Mongolia	8	[3-21.3]	0.48	0.66	0.09	18	23
DPR Korea	32	[10.3-99]	0.24	0.16	0.02	27	25
South-Eastern Asia	954	[470.9-1,932.7]	0.29	0.25	0.03	28	28
Brunei	0	[0-10]	0	0	0	26	28
Indonesia	473	[224.9-994.8]	0.35	0.33	0.04	22	24
Cambodia	11	[3.50-35]	0.13	0.15	0.02	28	26
Laos	7	[2.20-22.3]	0.19	0.24	0.03	28	27
Myanmar	73	[22.9-232.3]	0.26	0.24	0.03	27	29
Malaysia	53	[33.3-84.2]	0.34	0.30	0.03	26	28
Philippines	97	[49.5-189.9]	0.18	0.19	0.02	27	27
Singapore	20	[7.50-53.6]	0.72	0.36	0.05	25	27
Thailand	165	[102.2-266.3]	0.46	0.26	0.03	27	27
Timor-Leste	0	[0-3.20]	0	0	0	27	27
Viet Nam	55	[23.9-126.7]	0.11	0.08	0.01	30	30
Southern Asia	6,216	[3.90-103.7]	0.66	0.69	0.08	22	22
Afghanistan	20	[3.90-103.7]	0.11	0.21	0.03	29	30
Bangladesh	262	[50.5-1,358.1]	0.32	0.37	0.05	24	27
Bhutan	1	[0.50-2.20]	0.28	0.33	0.04	21	20
India	5,518	[4,512.3-6,747.9]	0.83	0.81	0.09	19	20
Iran	41	[28.1-59.9]	0.10	0.09	0.01	30	29
Sri Lanka	63	[46.2-86]	0.57	0.38	0.03	23	26
Maldives	0	[0-5.20]	0	0	0	31	24
Nepal	33	[14.2-76.9]	0.21	0.25	0.04	22	28
Pakistan	278	[84.8-911.3]	0.26	0.34	0.04	23	25
Western Asia	262	[114.7-598.5]	0.20	0.21	0.02	29	28
United Arab Emirates	1	[0.10-9]	0.03	0.05	0.01	30	27
Armenia	2	[1.40-2.80]	0.13	0.08	0.02	27	23
Azerbaijan	4	[0.80-20.5]	0.08	0.06	0.01	31	31
Bahrain	0	[0-10.2]	0	0	0	26	20
Georgia	13	[9.10-18.5]	0.62	0.27	0.03	23	19
Iraq	19	[11.6-31]	0.10	0.15	0.02	27	27
Israel	25	[15.5-40.4]	0.58	0.37	0.04	26	25
Jordan	11	[3.60-33.9]	0.22	0.30	0.04	26	24
Kuwait	1	[0.10-9.50]	0.06	0.08	0.01	27	28
Lebanon	11	[5.30-22.7]	0.32	0.29	0.03	25	24
Oman	3	[0.40-22.7]	0.17	0.26	0.03	27	30
Palestine	4	[0.30-48.4]	0.16	0.24	0.04	26	22
Qatar	0	[0-11.9]	0	0	0	25	17
Saudi Arabia	4	[1-15.9]	0.03	0.04	0.01	31	31
Syria	17	[1.40-205.9]	0.19	0.24	0.03	26	26
Turkey	111	[38.7-318.7]	0.26	0.21	0.02	30	29
Yemen	36	[6-217.2]	0.24	0.36	0.03	21	16

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

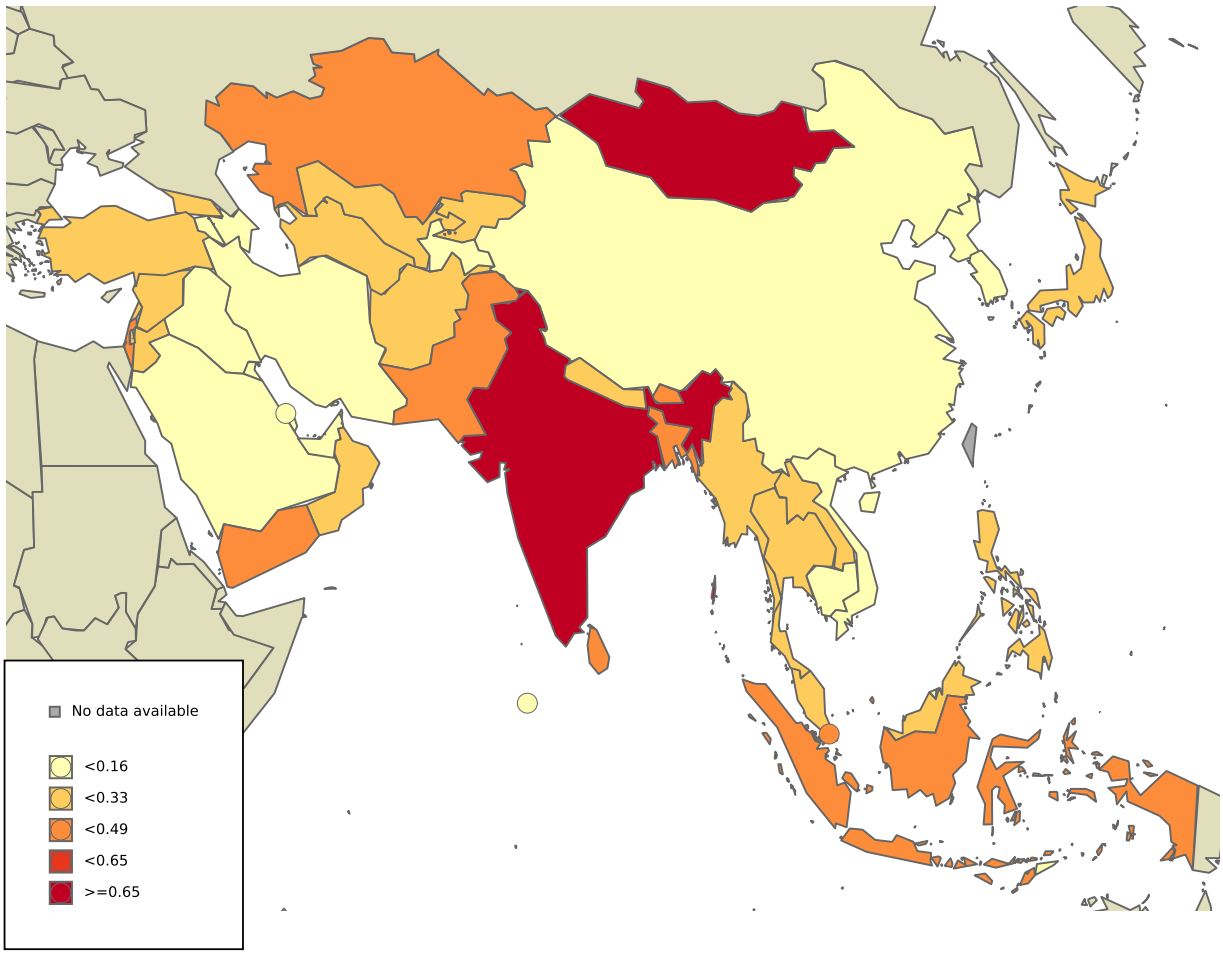
[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 26: Age-standardised incidence rates of vaginal cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 women per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.4.3.2 Vaginal cancer mortality

Table 13: Mortality of vaginal cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	4,607	[3,083.4-6,883.5]	0.20	0.16	0.02	25	25
Central Asia	46	[13.5-35.8]	0.12	0.13	0.02	29	31
Kazakhstan	22	[13.5-35.8]	0.23	0.18	0.02	28	29
Kyrgyzstan	3	[0.80-10.9]	0.09	0.11	0.02	29	29
Tajikistan	0	[0-3.50]	0	0	0	29	23
Turkmenistan	4	[1-16]	0.13	0.16	0.03	28	31
Uzbekistan	17	[9.50-30.5]	0.10	0.12	0.02	29	31
Eastern Asia	923	[657-1,296.5]	0.11	0.06	0.01	28	26
China	682	[465.4-999.3]	0.10	0.06	0.01	28	27
Japan	171	[137.2-213.1]	0.26	0.06	0.01	27	26
Republic of Korea	31	[20.4-47]	0.12	0.05	0.00	26	25
Mongolia	5	[1.60-15.4]	0.30	0.43	0.08	18	27
DPR Korea	13	[3.40-50.2]	0.10	0.06	0.01	26	26
South-Eastern Asia	463	[223.3-959.9]	0.14	0.12	0.01	26	28
Brunei	0	[0-8.50]	0	0	0	26	13
Indonesia	218	[102.4-464.1]	0.16	0.15	0.02	23	23
Cambodia	6	[2.30-15.9]	0.07	0.08	0.01	29	31
Laos	6	[2.30-15.9]	0.17	0.22	0.03	24	31
Myanmar	41	[15.4-108.9]	0.15	0.13	0.02	25	29
Malaysia	23	[13.7-38.6]	0.15	0.13	0.01	26	31
Philippines	49	[23-104.3]	0.09	0.10	0.01	27	28
Singapore	9	[3.90-20.6]	0.32	0.15	0.02	22	26
Thailand	82	[49.1-137]	0.23	0.12	0.01	24	27
Timor-Leste	0	[0-2.70]	0	0	0	28	26
Viet Nam	29	[11.6-72.7]	0.06	0.04	0.00	30	30
Southern Asia	3,060	[3.20-69.3]	0.33	0.34	0.04	23	22
Afghanistan	15	[3.20-69.3]	0.08	0.15	0.02	29	28
Bangladesh	125	[27-577.9]	0.15	0.18	0.02	26	27
Bhutan	1	[0.40-2.30]	0.28	0.33	0.04	18	28
India	2,723	[2,197.5-3,374.2]	0.41	0.40	0.05	20	18
Iran	14	[7-28.2]	0.03	0.03	0.00	31	30
Sri Lanka	27	[18.3-39.9]	0.24	0.16	0.01	23	27
Maldives	0	[0-4.40]	0	0	0	21	27
Nepal	19	[7.10-50.5]	0.12	0.14	0.02	22	31
Pakistan	136	[39.6-467]	0.13	0.17	0.02	26	25
Western Asia	115	[52.2-253.3]	0.09	0.09	0.01	27	29
United Arab Emirates	0	[0-2.60]	0	0	0	30	22
Armenia	1	[0.30-3.60]	0.06	0.04	0.01	27	19
Azerbaijan	2	[0.30-14.1]	0.04	0.03	0.00	31	31
Bahrain	0	[0-17.2]	0	0	0	24	21
Georgia	8	[3.40-18.8]	0.38	0.17	0.02	24	17
Iraq	10	[5.30-18.9]	0.05	0.09	0.01	26	27
Israel	7	[2.80-17.7]	0.16	0.06	0.01	26	17
Jordan	7	[1.70-28.1]	0.14	0.20	0.03	24	22
Kuwait	0	[0-17.2]	0	0	0	26	26
Lebanon	7	[2.80-17.5]	0.21	0.17	0.02	24	24
Oman	0	[0-11.1]	0	0	0	29	29
Palestine	2	[0.20-22.2]	0.08	0.17	0.04	26	19
Qatar	0	[0-17.2]	0	0	0	22	24
Saudi Arabia	2	[0.40-10]	0.01	0.02	0.00	31	31
Syria	10	[0.90-110.9]	0.11	0.14	0.01	26	26
Turkey	36	[21.2-61.1]	0.08	0.06	0.01	29	29
Yemen	23	[3.10-172.2]	0.16	0.26	0.02	21	17

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

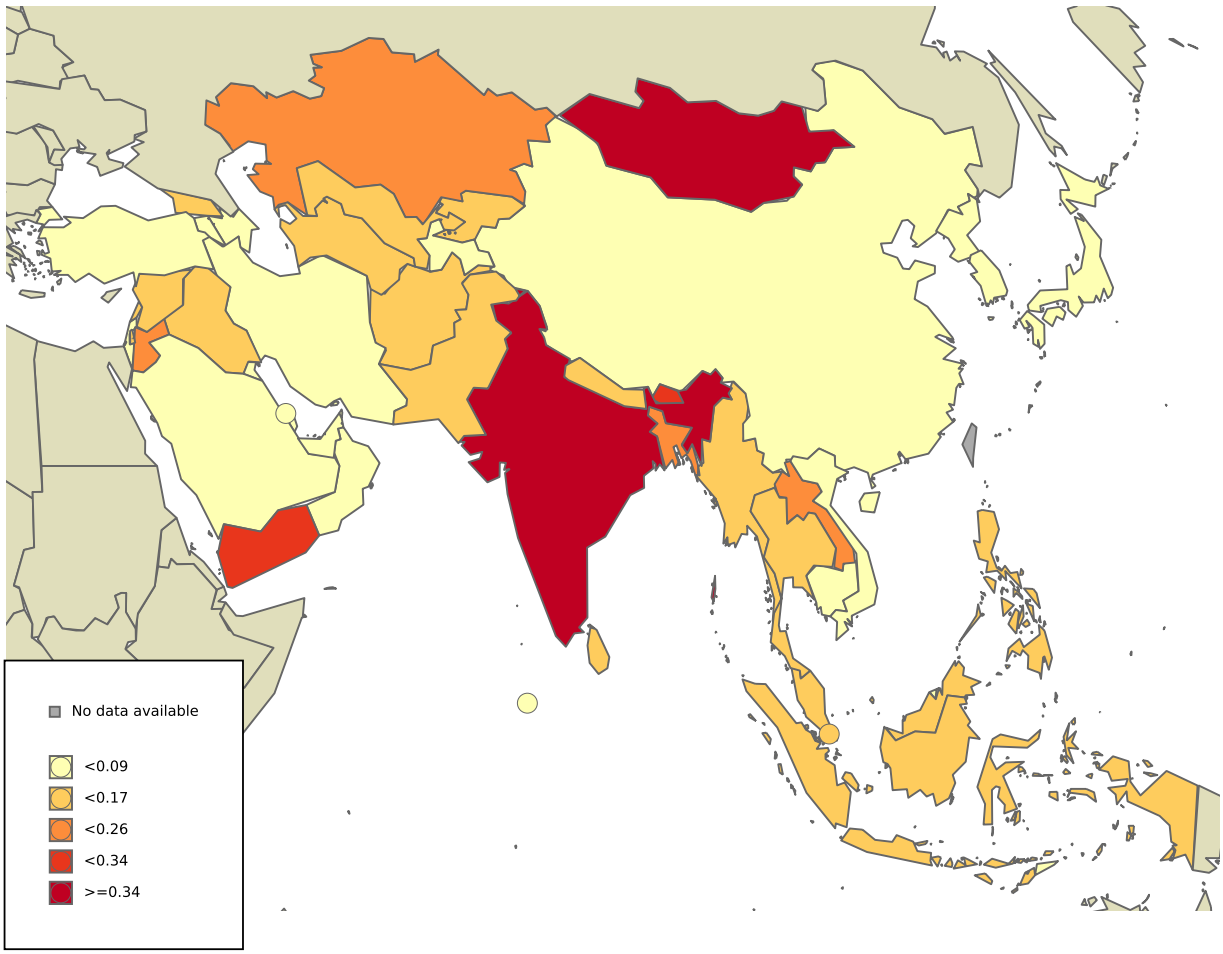
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 27: Age-standardised mortality rates of vaginal cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 women per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.4.4 Penile cancer

3.4.4.1 Penile cancer incidence

Table 14: Incidence of penile cancer in men by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All men	Men 15-44 years
Asia	20,315	[17,288.8-23,870.9]	0.86	0.74	0.09	22	21
Central Asia	54	[23.3-52.5]	0.15	0.19	0.02	28	28
Kazakhstan	35	[23.3-52.5]	0.38	0.42	0.05	25	24
Kyrgyzstan	10	[1.70-58.9]	0.31	0.37	0.04	23	23
Tajikistan	0	[0-1.60]	0	0	0	28	22
Turkmenistan	2	[1.20-3.30]	0.07	0.07	0.01	28	26
Uzbekistan	7	[2-24.7]	0.04	0.06	0.01	28	28
Eastern Asia	5,369	[4,726.9-6,098.2]	0.63	0.40	0.04	25	23
China	4,628	[4,092.4-5,233.7]	0.62	0.42	0.05	21	21
Japan	512	[397.5-659.6]	0.83	0.25	0.03	26	28
Republic of Korea	98	[67.6-142.1]	0.38	0.20	0.02	27	26
Mongolia	3	[0.90-10.1]	0.19	0.21	0.03	22	21
DPR Korea	51	[12.5-207.7]	0.40	0.35	0.04	24	25
South-Eastern Asia	2,791	[2,154.7-3,615.2]	0.84	0.83	0.10	22	21
Brunei	0	[0-10]	0	0	0	28	25
Indonesia	1,017	[561.1-1,843.4]	0.74	0.74	0.09	20	15
Cambodia	87	[31-243.9]	1.07	1.44	0.15	17	14
Laos	38	[13.6-106.5]	1.04	1.41	0.16	19	18
Myanmar	339	[120.9-950.3]	1.29	1.49	0.18	19	18
Malaysia	66	[41.4-105.3]	0.40	0.39	0.05	25	23
Philippines	126	[67.1-236.5]	0.23	0.28	0.03	24	22
Singapore	30	[12.5-72.2]	0.98	0.56	0.07	27	23
Thailand	691	[540.4-883.6]	2.03	1.32	0.15	20	14
Timor-Leste	0	[0-2.80]	0	0	0	20	22
Viet Nam	397	[277.1-568.8]	0.82	0.76	0.09	19	22
Southern Asia	12,011	[1.70-71.1]	1.20	1.35	0.16	17	20
Afghanistan	11	[1.70-71.1]	0.06	0.12	0.02	27	28
Bangladesh	640	[99.1-4,135]	0.77	0.82	0.09	18	14
Bhutan	4	[2.70-6]	0.98	0.98	0.08	16	11
India	10,677	[9,217.9-12,367]	1.49	1.61	0.20	15	17
Iran	47	[29.5-74.8]	0.11	0.11	0.01	26	28
Sri Lanka	114	[90-144.4]	1.11	0.86	0.10	21	18
Maldives	0	[0-6.50]	0	0	0	25	21
Nepal	185	[112.1-305.3]	1.39	1.70	0.18	13	12
Pakistan	333	[27.6-4,017.6]	0.29	0.41	0.05	25	26
Western Asia	90	[16.6-486.8]	0.06	0.08	0.01	28	28
United Arab Emirates	2	[0.20-17.9]	0.03	0.08	0.00	28	27
Armenia	7	[4.50-11]	0.50	0.36	0.03	25	19
Azerbaijan	6	[0.60-60.6]	0.12	0.13	0.02	28	24
Bahrain	0	[0-10.2]	0	0	0	26	23
Georgia	22	[14-34.5]	1.16	0.68	0.08	22	28
Iraq	1	[0.10-9]	0.00	0.00	0.00	28	28
Israel	7	[3-16.2]	0.16	0.14	0.02	28	26
Jordan	1	[0.10-10.7]	0.02	0.04	0.00	28	28
Kuwait	1	[0.10-9.50]	0.04	0.04	0.00	28	26
Lebanon	9	[3.90-20.7]	0.26	0.25	0.03	24	28
Oman	1	[0.10-11]	0.03	0.03	0.00	28	28
Palestine	0	[0-8.10]	0	0	0	28	23
Qatar	1	[0.10-11.9]	0.05	0.09	0.01	26	22
Saudi Arabia	4	[0.70-22.9]	0.02	0.03	0.01	28	28
Syria	5	[0.60-40.3]	0.06	0.09	0.01	27	26
Turkey	23	[2-270.1]	0.06	0.05	0.01	28	28
Yemen	0	[0-12.7]	0	0	0	28	24

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

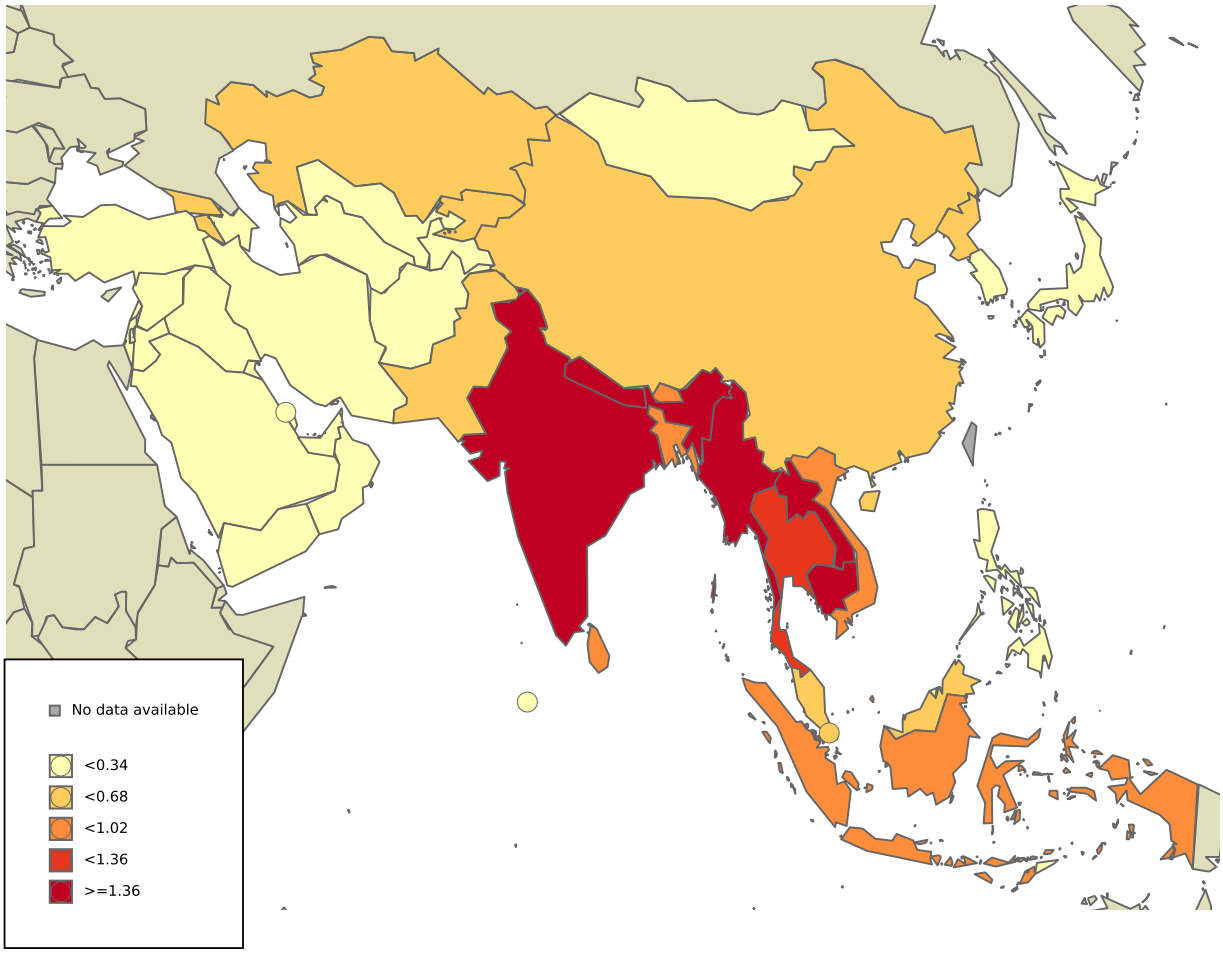
[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 28: Age-standardised incidence rates of penile cancer among men in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.4.4.2 Penile cancer mortality

Table 15: Mortality of penile cancer in men by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All men	Men 15-44 years
Asia	8,189	[5,922.4-11,323]	0.35	0.30	0.03	21	26
Central Asia	19	[6-23.9]	0.05	0.06	0.01	28	28
Kazakhstan	12	[6-23.9]	0.13	0.14	0.02	28	27
Kyrgyzstan	3	[0.70-13.2]	0.09	0.10	0.01	25	18
Tajikistan	0	[0-4.20]	0	0	0	28	28
Turkmenistan	1	[0.20-4.80]	0.03	0.04	0.00	28	26
Uzbekistan	3	[1-8.80]	0.02	0.02	0.00	28	28
Eastern Asia	1,788	[1,395.5-2,291]	0.21	0.13	0.01	25	24
China	1,565	[1,214.2-2,017.2]	0.21	0.14	0.01	25	24
Japan	155	[123.3-194.9]	0.25	0.07	0.01	25	26
Republic of Korea	22	[13.2-36.6]	0.09	0.04	0.00	26	27
Mongolia	1	[0.20-4.90]	0.06	0.09	0.01	25	15
DPR Korea	20	[3-135.3]	0.16	0.13	0.01	25	26
South-Eastern Asia	1,034	[788.9-1,355.3]	0.31	0.32	0.03	22	21
Brunei	0	[0-8.50]	0	0	0	26	8
Indonesia	347	[189.6-635.1]	0.25	0.26	0.03	22	17
Cambodia	39	[16.3-93.1]	0.48	0.72	0.07	20	12
Laos	17	[7.10-40.6]	0.47	0.65	0.08	19	13
Myanmar	152	[63.7-362.7]	0.58	0.72	0.08	19	19
Malaysia	23	[13.6-38.8]	0.14	0.14	0.01	24	25
Philippines	45	[22.2-91.3]	0.08	0.11	0.01	26	23
Singapore	6	[1.90-19.2]	0.20	0.11	0.01	25	26
Thailand	258	[189-352.3]	0.76	0.47	0.05	20	15
Timor-Leste	0	[0-2.40]	0	0	0	23	15
Viet Nam	147	[99-218.4]	0.30	0.28	0.03	21	23
Southern Asia	5,311	[0.90-28.4]	0.53	0.60	0.07	19	27
Afghanistan	5	[0.90-28.4]	0.03	0.06	0.01	28	28
Bangladesh	246	[43.3-1,396]	0.30	0.33	0.04	21	25
Bhutan	1	[0.70-1.50]	0.24	0.30	0.04	21	19
India	4,760	[4,070-5,566.9]	0.66	0.72	0.08	19	27
Iran	22	[13.1-37]	0.05	0.05	0.00	27	27
Sri Lanka	50	[37.2-67.3]	0.49	0.37	0.04	20	26
Maldives	0	[0-5.30]	0	0	0	23	17
Nepal	111	[62.2-198]	0.83	0.99	0.11	16	15
Pakistan	116	[69.4-194]	0.10	0.14	0.02	26	28
Western Asia	37	[8.70-157.9]	0.03	0.03	0.00	28	28
United Arab Emirates	1	[0.10-17.2]	0.01	0.07	0	27	20
Armenia	4	[1.50-10.4]	0.29	0.18	0.01	24	27
Azerbaijan	2	[0.10-31.8]	0.04	0.05	0.00	28	27
Bahrain	0	[0-17.2]	0	0	0	24	27
Georgia	11	[5.80-20.7]	0.58	0.33	0.03	24	22
Iraq	0	[0-17.2]	0	0	0	28	28
Israel	2	[0.50-7.30]	0.05	0.03	0.01	28	28
Jordan	0	[0-17.2]	0	0	0	28	28
Kuwait	0	[0-17.2]	0	0	0	28	20
Lebanon	5	[1.70-14.3]	0.15	0.13	0.01	24	28
Oman	0	[0-17.2]	0	0	0	28	28
Palestine	0	[0-7.50]	0	0	0	26	23
Qatar	0	[0-2.50]	0	0	0	23	25
Saudi Arabia	2	[0.30-15]	0.01	0.01	0.00	28	28
Syria	3	[0.40-22.5]	0.03	0.05	0.01	28	25
Turkey	7	[2.10-23.3]	0.02	0.02	0.00	28	28
Yemen	0	[0-2.50]	0	0	0	28	23

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

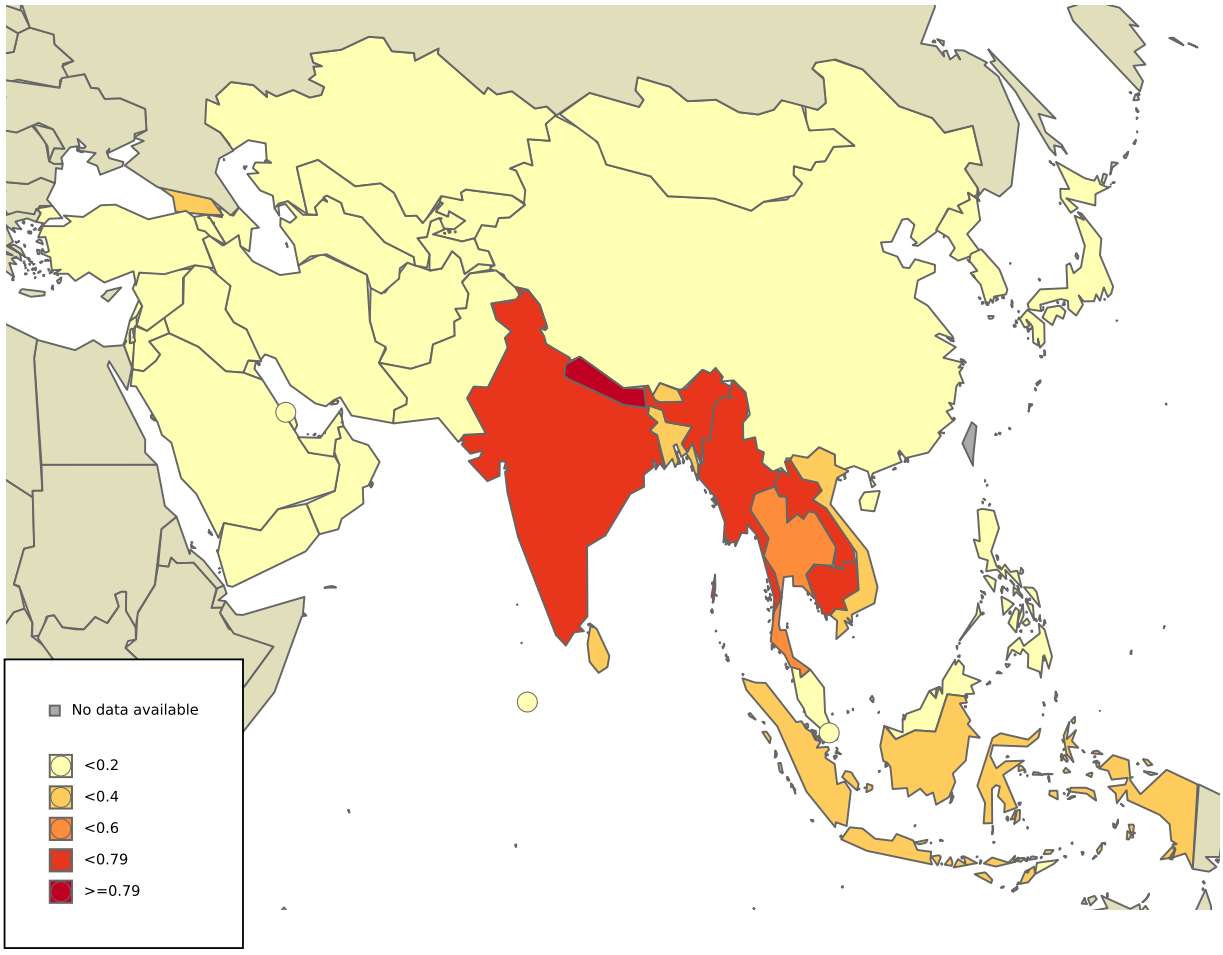
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 29: Age-standardised mortality rates of penile cancer among men in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.5 Head and neck cancers

3.5.1 Oropharyngeal cancer

3.5.1.1 Oropharyngeal cancer incidence

Table 16: Incidence of oropharyngeal cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	7,579	[5,782.4-9,933.9]	0.33	0.26	0.03	29	29
Central Asia	176	[30.4-66.6]	0.47	0.47	0.05	23	21
Kazakhstan	45	[30.4-66.6]	0.47	0.36	0.04	27	23
Kyrgyzstan	5	[1.40-17.7]	0.15	0.18	0.02	29	28
Tajikistan	9	[3.70-22]	0.19	0.27	0.02	23	22
Turkmenistan	19	[11.3-31.9]	0.62	0.68	0.08	23	22
Uzbekistan	98	[59.1-162.4]	0.58	0.61	0.07	19	19
Eastern Asia	1,812	[1,424-2,305.7]	0.22	0.13	0.01	29	28
China	1,232	[969.7-1,565.3]	0.17	0.11	0.01	29	29
Japan	430	[332.6-555.9]	0.66	0.29	0.03	25	27
Republic of Korea	81	[63.3-103.7]	0.32	0.16	0.02	27	27
Mongolia	6	[2-18.4]	0.36	0.46	0.03	21	17
DPR Korea	13	[3.60-47.3]	0.10	0.06	0.01	29	31
South-Eastern Asia	1,012	[521.2-1,965]	0.30	0.27	0.03	27	23
Brunei	0	[0-10]	0	0	0	31	18
Indonesia	440	[205.5-942.2]	0.32	0.31	0.04	23	22
Cambodia	32	[7.60-135.4]	0.37	0.38	0.04	23	16
Laos	10	[2.40-42.3]	0.28	0.31	0.03	26	24
Myanmar	78	[18.4-330.2]	0.28	0.25	0.03	25	25
Malaysia	32	[18.8-54.4]	0.20	0.18	0.02	29	22
Philippines	126	[63.7-249]	0.23	0.24	0.02	26	23
Singapore	13	[3.80-44.5]	0.47	0.25	0.03	27	25
Thailand	179	[114.7-279.4]	0.50	0.32	0.03	24	20
Timor-Leste	0	[0-4.20]	0	0	0	30	11
Viet Nam	102	[56.9-183]	0.21	0.16	0.02	27	27
Southern Asia	4,430	[9.40-234.1]	0.47	0.49	0.06	25	27
Afghanistan	47	[9.40-234.1]	0.25	0.46	0.05	24	27
Bangladesh	586	[117.6-2,919.3]	0.72	0.82	0.10	19	20
Bhutan	2	[1.40-2.90]	0.55	0.45	0.02	17	12
India	3,442	[2,796.8-4,236]	0.52	0.51	0.06	26	27
Iran	49	[32.1-74.8]	0.12	0.12	0.01	28	26
Sri Lanka	38	[25.4-56.8]	0.34	0.23	0.03	28	25
Maldives	0	[0-5]	0	0	0	27	31
Nepal	14	[3.80-51]	0.09	0.11	0.02	28	30
Pakistan	252	[78.9-804.7]	0.24	0.36	0.04	25	30
Western Asia	149	[40.2-552.3]	0.11	0.12	0.01	31	31
United Arab Emirates	4	[0.60-26.7]	0.13	0.22	0.03	25	28
Armenia	0	[0-1.60]	0	0	0	31	26
Azerbaijan	14	[6.70-29.1]	0.28	0.24	0.03	28	29
Bahrain	0	[0-10.2]	0	0	0	30	28
Georgia	3	[1.80-4.90]	0.14	0.05	0.00	28	31
Iraq	4	[1.30-12]	0.02	0.03	0.01	31	30
Israel	5	[1.70-14.9]	0.12	0.09	0.01	30	28
Jordan	2	[0.30-16]	0.04	0.06	0.00	28	29
Kuwait	0	[0-9.50]	0	0	0	30	27
Lebanon	5	[1.40-17.8]	0.15	0.15	0.02	28	31
Oman	2	[0.20-21.9]	0.12	0.18	0.02	30	31
Palestine	1	[0.10-13.3]	0.04	0.12	0	28	31
Qatar	0	[0-11.9]	0	0	0	29	29
Saudi Arabia	7	[1.70-29.4]	0.05	0.05	0.01	30	25
Syria	7	[0.50-93.1]	0.08	0.11	0.01	28	31
Turkey	50	[9.10-274.7]	0.12	0.09	0.01	31	31
Yemen	45	[5.60-358.4]	0.30	0.71	0.07	20	22

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be

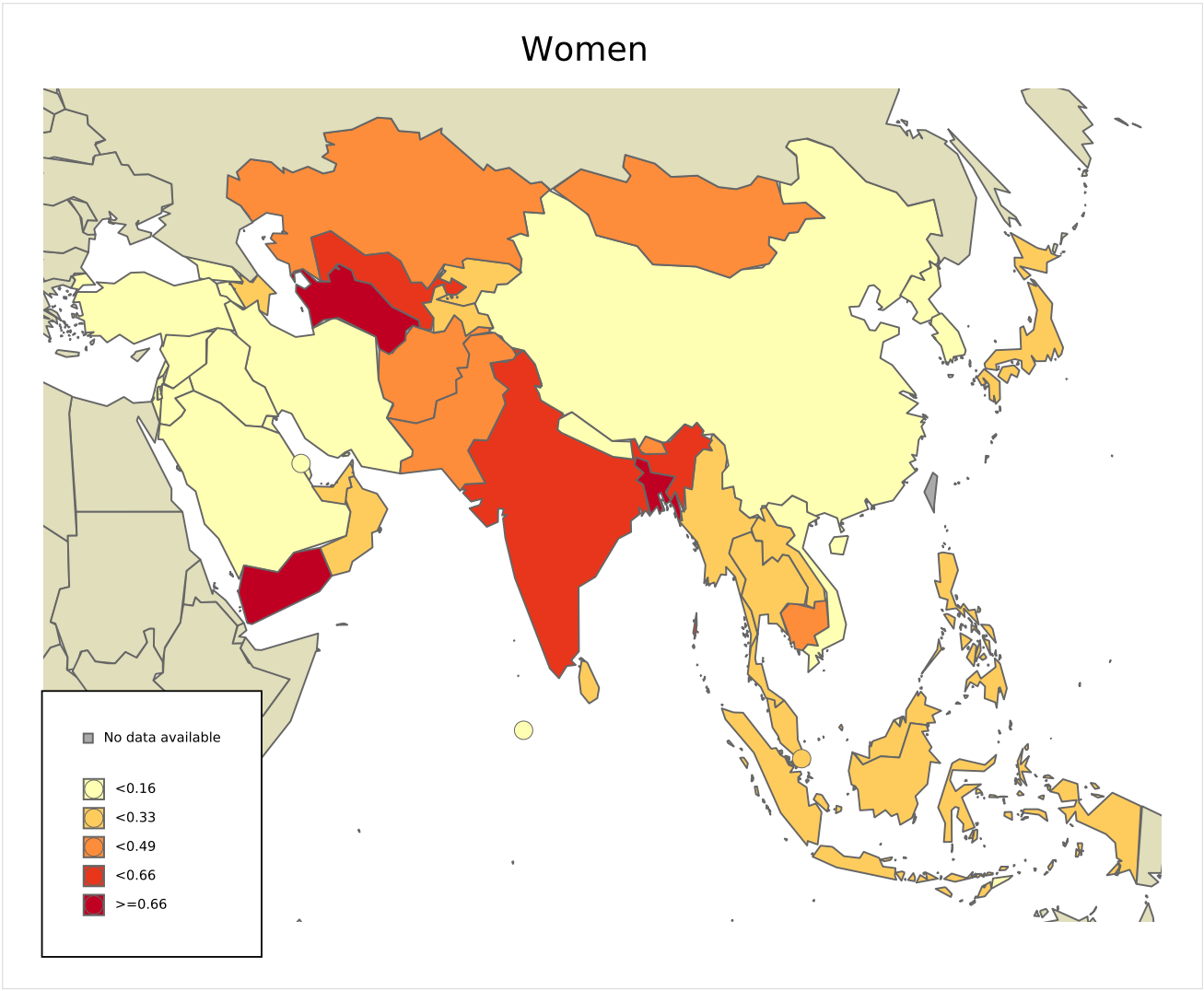
expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 30: Age-standardised incidence rates of oropharyngeal cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Table 17: Incidence of oropharyngeal cancer in men by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All men	Men 15-44 years
Asia	34,597	[30,752.9-38,921.6]	1.46	1.27	0.15	19	19
Central Asia	323	[72.6-124.4]	0.88	1.11	0.14	17	22
Kazakhstan	95	[72.6-124.4]	1.04	1.07	0.14	17	21
Kyrgyzstan	9	[3.70-21.9]	0.28	0.43	0.05	24	28
Tajikistan	13	[5.80-29]	0.27	0.55	0.06	19	28
Turkmenistan	37	[27.1-50.6]	1.25	1.76	0.21	15	27
Uzbekistan	169	[124.7-229]	1.01	1.30	0.16	17	18
Eastern Asia	8,377	[7,528-9,321.7]	0.98	0.63	0.07	20	20
China	4,372	[3,850.2-4,964.5]	0.59	0.39	0.04	24	22
Japan	2,098	[1,438.9-3,059]	3.40	1.48	0.19	20	19
Republic of Korea	564	[476.6-667.4]	2.20	1.22	0.15	18	21
Mongolia	8	[3.20-20.2]	0.50	0.77	0.10	19	26
DPR Korea	60	[20.7-173.6]	0.48	0.36	0.04	22	24
South-Eastern Asia	3,620	[2,885.2-4,541.8]	1.08	1.05	0.13	19	20
Brunei	0	[0-10]	0	0	0	23	23
Indonesia	1,042	[576.6-1,883.1]	0.76	0.76	0.10	19	19
Cambodia	81	[35.4-185.3]	0.99	1.35	0.16	19	17
Laos	27	[11.8-61.8]	0.74	0.98	0.11	21	21
Myanmar	564	[246.5-1,290.2]	2.15	2.30	0.26	14	15
Malaysia	108	[76.3-152.9]	0.65	0.64	0.08	22	21
Philippines	339	[234.6-489.8]	0.62	0.80	0.10	19	24
Singapore	49	[24.2-99.2]	1.60	0.91	0.12	22	21
Thailand	907	[721.3-1,140.5]	2.67	1.77	0.20	17	13
Timor-Leste	0	[0-2.30]	0	0	0	25	21
Viet Nam	503	[376-672.8]	1.04	0.94	0.11	18	19
Southern Asia	21,941	[39.7-272.6]	2.19	2.44	0.29	14	15
Afghanistan	104	[39.7-272.6]	0.52	1.18	0.15	17	23
Bangladesh	3,266	[1,246.2-8,559.5]	3.92	4.32	0.50	7	6
Bhutan	2	[1.60-2.50]	0.49	0.56	0.05	20	24
India	17,175	[15,686.8-18,804.4]	2.40	2.58	0.31	13	15
Iran	75	[54.7-102.8]	0.18	0.17	0.02	25	25
Sri Lanka	379	[332.4-432.1]	3.69	2.86	0.34	11	12
Maldives	0	[0-2.60]	0	0	0	16	24
Nepal	46	[25.3-83.7]	0.34	0.42	0.05	21	24
Pakistan	894	[424.8-1,881.5]	0.79	1.14	0.15	18	20
Western Asia	336	[151.6-744.6]	0.23	0.29	0.04	26	27
United Arab Emirates	7	[1.70-29.4]	0.10	0.24	0.02	23	25
Armenia	5	[3.80-6.60]	0.36	0.26	0.03	26	24
Azerbaijan	25	[14-44.6]	0.49	0.47	0.06	25	22
Bahrain	1	[0.10-10.2]	0.09	0.12	0.01	23	19
Georgia	34	[25.6-45.2]	1.79	1.16	0.17	19	21
Iraq	15	[8.50-26.4]	0.07	0.16	0.02	26	24
Israel	18	[10.2-31.9]	0.42	0.35	0.05	25	27
Jordan	5	[1.20-21.2]	0.10	0.15	0.02	26	25
Kuwait	7	[1.30-37.5]	0.27	0.23	0.03	23	21
Lebanon	4	[1.30-12.1]	0.12	0.09	0.01	27	24
Oman	11	[2.10-57.4]	0.33	0.46	0.04	23	23
Palestine	1	[0.10-9]	0.04	0.09	0.01	26	28
Qatar	1	[0.10-11.9]	0.05	0.05	0.01	27	27
Saudi Arabia	12	[3.80-37.7]	0.06	0.08	0.01	27	27
Syria	8	[0.90-72.2]	0.09	0.13	0.02	26	28
Turkey	169	[76.1-375.1]	0.41	0.38	0.05	25	27
Yemen	13	[1-165.1]	0.09	0.20	0.00	24	28

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

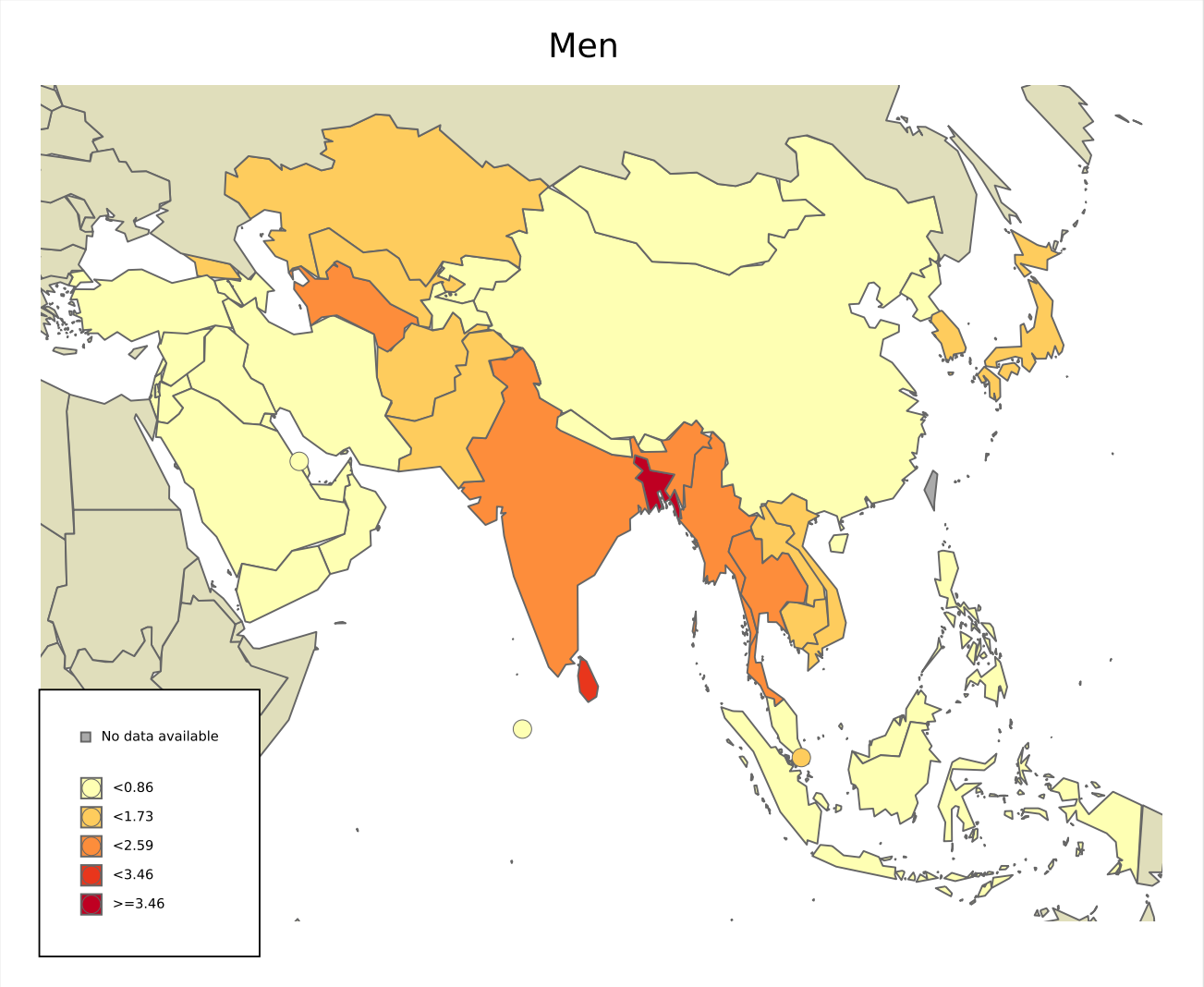
[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 31: Age-standardised incidence rates of oropharyngeal cancer among men in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.5.1.2 Oropharyngeal cancer mortality

Table 18: Mortality of oropharyngeal cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	4,094	[2,701.7-6,203.7]	0.18	0.14	0.02	27	27
Central Asia	117	[19.5-46.1]	0.31	0.31	0.04	23	22
Kazakhstan	30	[19.5-46.1]	0.31	0.25	0.03	24	21
Kyrgyzstan	4	[1.40-11.5]	0.12	0.13	0.02	28	23
Tajikistan	8	[3.80-17]	0.17	0.25	0.02	18	20
Turkmenistan	14	[3.60-54]	0.46	0.51	0.06	17	21
Uzbekistan	61	[45.3-82.2]	0.36	0.38	0.04	18	19
Eastern Asia	777	[539.6-1,118.7]	0.09	0.05	0.01	29	29
China	520	[333.5-810.8]	0.07	0.04	0.00	29	30
Japan	213	[175.4-258.7]	0.33	0.09	0.01	25	25
Republic of Korea	18	[10.4-31.3]	0.07	0.03	0.00	28	24
Mongolia	4	[0.90-17.5]	0.24	0.32	0.02	20	16
DPR Korea	5	[0.90-29.3]	0.04	0.02	0.00	30	31
South-Eastern Asia	441	[224.3-866.8]	0.13	0.11	0.01	28	26
Brunei	0	[0-8.50]	0	0	0	21	20
Indonesia	167	[77-362.1]	0.12	0.12	0.01	24	25
Cambodia	14	[4.20-46.9]	0.16	0.17	0.02	23	16
Laos	4	[1.20-13.4]	0.11	0.15	0.02	27	26
Myanmar	39	[11.6-130.7]	0.14	0.12	0.01	26	28
Malaysia	15	[8.30-27.2]	0.10	0.08	0.01	28	22
Philippines	69	[34-140.1]	0.13	0.13	0.01	24	26
Singapore	5	[1.40-17.9]	0.18	0.09	0.01	28	20
Thailand	80	[49.6-128.9]	0.22	0.12	0.01	26	22
Timor-Leste	0	[0-3.40]	0	0	0	21	23
Viet Nam	48	[25.2-91.3]	0.10	0.07	0.01	28	29
Southern Asia	2,665	[6.10-120.3]	0.28	0.30	0.04	24	27
Afghanistan	27	[6.10-120.3]	0.14	0.27	0.03	23	26
Bangladesh	370	[83-1,648.6]	0.45	0.53	0.07	18	17
Bhutan	1	[0.70-1.50]	0.28	0.24	0	21	15
India	2,066	[1,656-2,577.5]	0.31	0.31	0.04	24	26
Iran	36	[24.1-53.7]	0.09	0.09	0.01	25	25
Sri Lanka	18	[10.9-29.8]	0.16	0.11	0.02	28	25
Maldives	0	[0-3.40]	0	0	0	30	29
Nepal	11	[2.50-49]	0.07	0.09	0.02	23	25
Pakistan	136	[40.7-454.5]	0.13	0.19	0.02	25	29
Western Asia	94	[38.3-230.4]	0.07	0.08	0.01	29	28
United Arab Emirates	2	[0.20-23.5]	0.07	0.14	0.02	23	26
Armenia	0	[0-8.10]	0	0	0	28	30
Azerbaijan	13	[5.40-31.2]	0.26	0.22	0.03	25	22
Bahrain	0	[0-17.2]	0	0	0	23	27
Georgia	2	[0.50-8.60]	0.10	0.03	0.00	29	25
Iraq	3	[0.70-12.5]	0.02	0.03	0.00	31	26
Israel	2	[0.40-10.5]	0.05	0.03	0.01	30	27
Jordan	1	[0.10-12.1]	0.02	0.02	0	28	30
Kuwait	0	[0-17.2]	0	0	0	29	15
Lebanon	3	[0.60-14.4]	0.09	0.09	0.02	29	31
Oman	1	[0.10-17.2]	0.06	0.10	0.01	27	19
Palestine	0	[0-12.1]	0	0	0	28	25
Qatar	0	[0-5.70]	0	0	0	24	11
Saudi Arabia	6	[1.10-32.3]	0.04	0.05	0.01	26	24
Syria	5	[0.40-60.7]	0.06	0.08	0.01	28	29
Turkey	22	[13.4-36]	0.05	0.04	0.00	31	28
Yemen	34	[3.30-347.5]	0.23	0.51	0.06	20	20

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

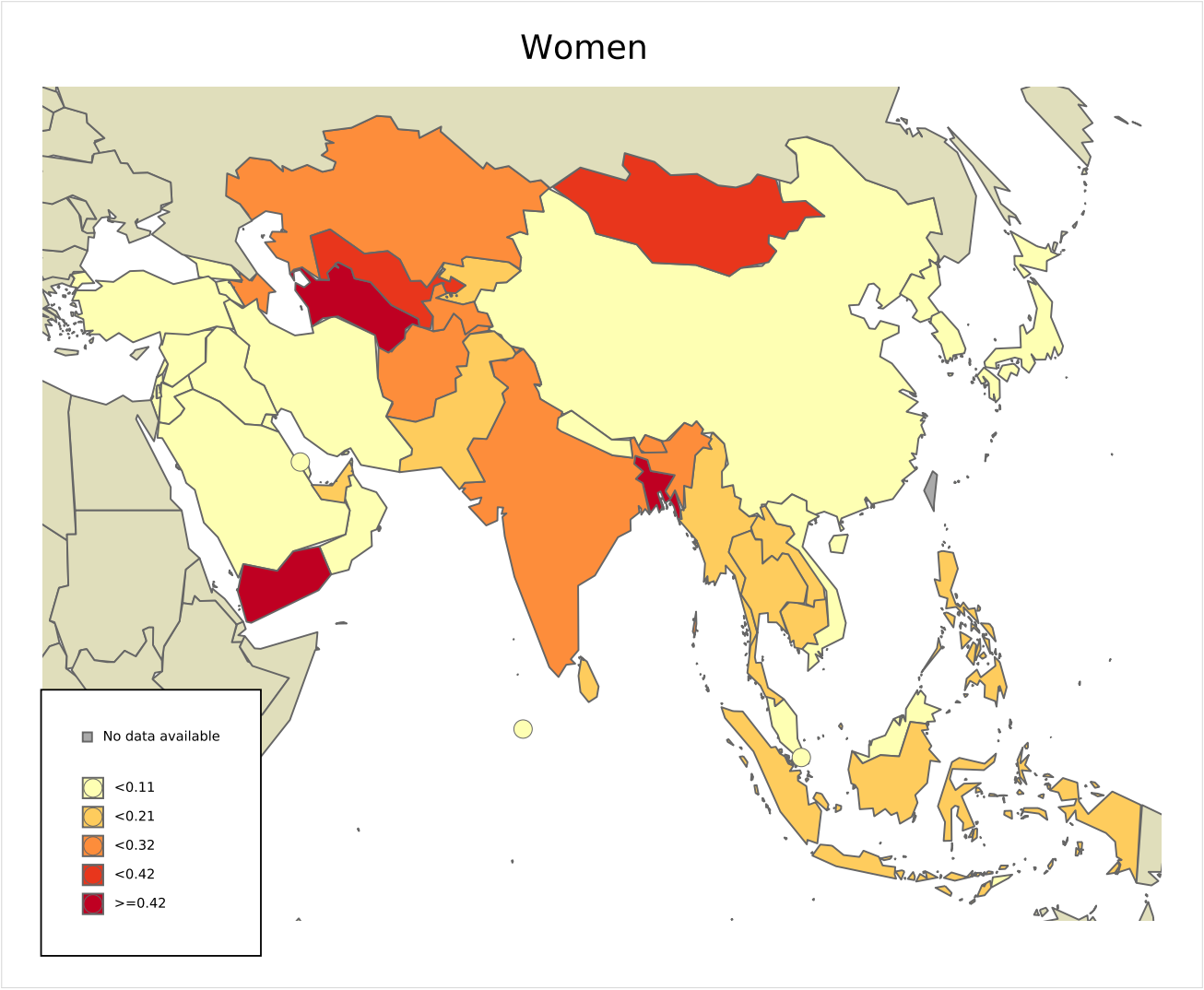
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 32: Age-standardised mortality rates of oropharyngeal cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Table 19: Mortality of oropharyngeal cancer in men by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All men	Men 15-44 years
Asia	20,197	[16,384.4-24,896.7]	0.85	0.74	0.09	19	17
Central Asia	248	[69.6-113.9]	0.67	0.85	0.11	15	20
Kazakhstan	89	[69.6-113.9]	0.98	0.99	0.13	15	19
Kyrgyzstan	8	[3.80-16.8]	0.25	0.40	0.05	21	19
Tajikistan	11	[5.60-21.6]	0.23	0.45	0.05	17	23
Turkmenistan	27	[12-60.7]	0.91	1.26	0.16	14	27
Uzbekistan	113	[90.7-140.8]	0.68	0.87	0.11	14	16
Eastern Asia	4,208	[3,566.5-4,964.9]	0.49	0.31	0.03	20	20
China	2,385	[1,947.8-2,920.4]	0.32	0.21	0.02	20	22
Japan	1,076	[975.1-1,187.3]	1.74	0.55	0.07	18	24
Republic of Korea	172	[136.2-217.2]	0.67	0.35	0.04	18	21
Mongolia	6	[2-17.7]	0.37	0.54	0.05	18	22
DPR Korea	36	[9.80-131.9]	0.29	0.22	0.03	20	24
South-Eastern Asia	2,092	[1,657.6-2,640.3]	0.63	0.62	0.08	18	17
Brunei	0	[0-1.70]	0	0	0	19	24
Indonesia	681	[373.2-1,242.8]	0.49	0.51	0.07	19	15
Cambodia	49	[24.4-98.5]	0.60	0.88	0.11	18	15
Laos	16	[8-32.2]	0.44	0.61	0.07	20	18
Myanmar	332	[165.2-667.3]	1.27	1.42	0.17	16	14
Malaysia	61	[41.4-90]	0.37	0.36	0.05	20	22
Philippines	203	[138.5-297.6]	0.37	0.50	0.06	18	25
Singapore	43	[27.5-67.1]	1.40	0.80	0.11	17	20
Thailand	449	[340.3-592.4]	1.32	0.86	0.10	18	12
Timor-Leste	0	[0-2]	0	0	0	28	26
Viet Nam	258	[187.3-355.3]	0.53	0.49	0.06	17	17
Southern Asia	13,474	[27.7-166.7]	1.35	1.51	0.19	13	14
Afghanistan	68	[27.7-166.7]	0.34	0.77	0.10	15	22
Bangladesh	2,007	[818.8-4,919.2]	2.41	2.69	0.32	9	8
Bhutan	2	[1.60-2.50]	0.49	0.56	0.05	18	27
India	10,637	[9,657.6-11,715.6]	1.48	1.60	0.20	12	13
Iran	55	[39.9-75.9]	0.13	0.13	0.01	24	25
Sri Lanka	198	[167.9-233.4]	1.93	1.49	0.18	14	9
Maldives	0	[0-2.40]	0	0	0	13	27
Nepal	35	[17.5-69.9]	0.26	0.31	0.04	20	26
Pakistan	472	[217.8-1,022.8]	0.42	0.61	0.08	19	20
Western Asia	175	[99.6-307.5]	0.12	0.15	0.02	24	27
United Arab Emirates	5	[0.80-32.2]	0.07	0.21	0.02	20	22
Armenia	4	[1.70-9.50]	0.29	0.20	0.03	25	21
Azerbaijan	14	[7-28]	0.28	0.26	0.03	24	19
Bahrain	1	[0.10-17.2]	0.09	0.12	0.01	21	15
Georgia	26	[16.8-40.2]	1.37	0.89	0.12	16	25
Iraq	11	[5.30-22.9]	0.05	0.12	0.02	26	24
Israel	7	[3.10-16]	0.16	0.11	0.01	25	21
Jordan	3	[0.50-17.4]	0.06	0.11	0.02	25	21
Kuwait	6	[0.70-50.1]	0.23	0.20	0.03	20	13
Lebanon	2	[0.50-8]	0.06	0.05	0.01	26	21
Oman	6	[0.80-42.8]	0.18	0.31	0.02	22	22
Palestine	0	[0-8.30]	0	0	0	28	27
Qatar	0	[0-2]	0	0	0	27	11
Saudi Arabia	9	[2.30-35]	0.04	0.07	0.01	25	26
Syria	6	[0.70-50.1]	0.07	0.10	0.01	25	28
Turkey	64	[47.9-85.5]	0.15	0.15	0.02	24	27
Yemen	11	[0.60-189.5]	0.07	0.17	0.00	21	24

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

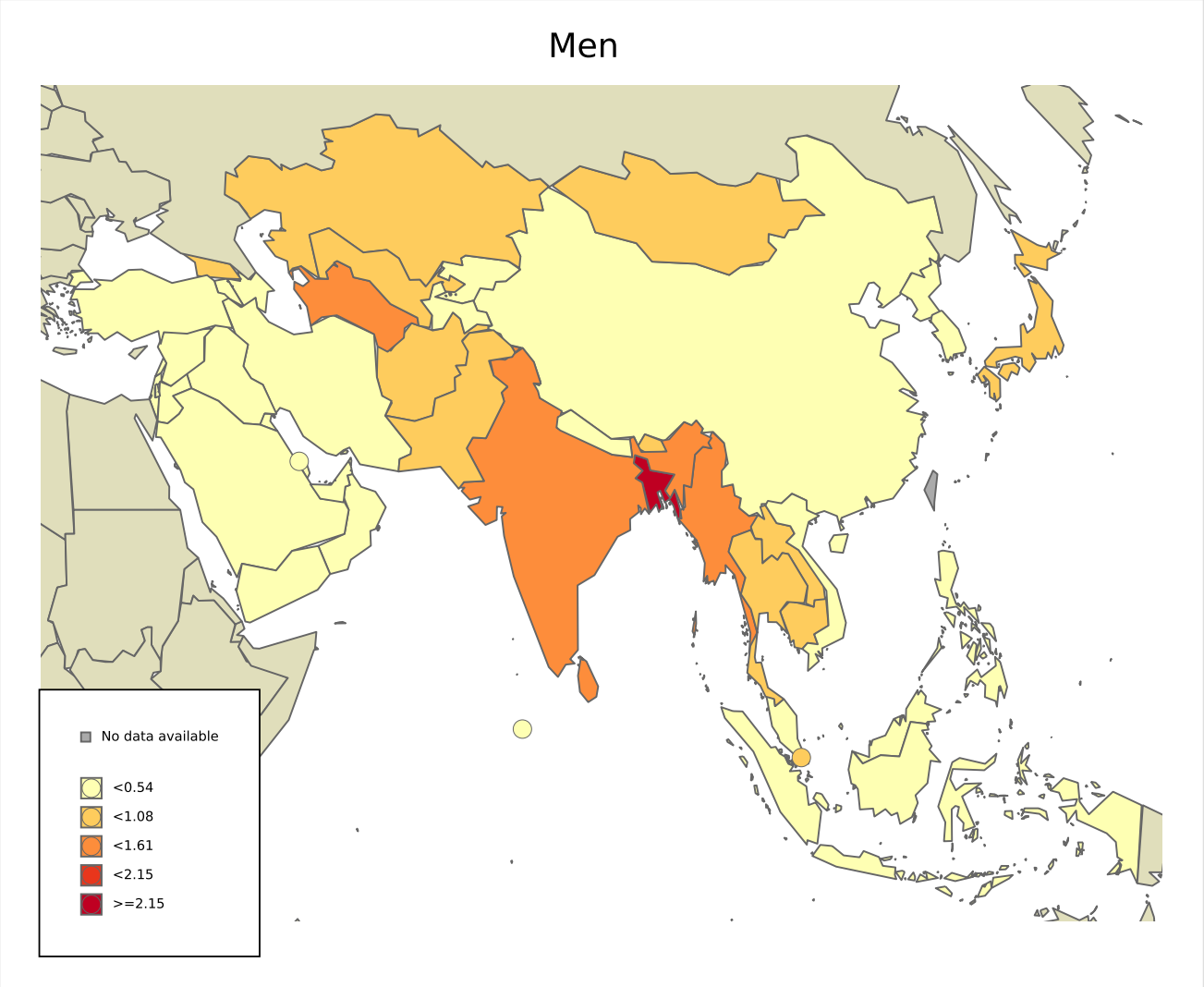
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 33: Age-standardised mortality rates of oropharyngeal cancer among men in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.5.2 Oral cavity cancer

3.5.2.1 Oral cavity cancer incidence

Table 20: Incidence of oral cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	69,964	[64,840-75,493]	3.09	2.44	0.28	15	13
Central Asia	575	[138.8-203.3]	1.53	1.55	0.17	15	15
Kazakhstan	168	[138.8-203.3]	1.74	1.33	0.15	16	17
Kyrgyzstan	26	[13.7-49.3]	0.79	0.84	0.10	18	15
Tajikistan	37	[22.1-62.1]	0.78	1.11	0.10	15	14
Turkmenistan	42	[29.4-59.9]	1.37	1.50	0.19	15	16
Uzbekistan	302	[205.3-444.3]	1.80	1.93	0.22	14	14
Eastern Asia	17,500	[16,363.1-18,715.8]	2.13	1.19	0.13	19	15
China	11,571	[10,718.1-12,491.8]	1.64	1.00	0.12	19	16
Japan	4,236	[3,242.5-5,533.8]	6.54	2.08	0.22	16	13
Republic of Korea	742	[633.1-869.6]	2.90	1.44	0.16	18	14
Mongolia	19	[10-35.9]	1.14	1.30	0.15	16	18
DPR Korea	115	[55.3-239.2]	0.87	0.54	0.06	18	19
South-Eastern Asia	7,084	[6,265.3-8,009.6]	2.12	1.82	0.21	14	14
Brunei	1	[0.10-8.20]	0.48	0.53	0.09	22	16
Indonesia	2,229	[1,591.8-3,121.3]	1.64	1.54	0.18	14	12
Cambodia	253	[13.6-4,717.9]	2.96	3.43	0.40	11	14
Laos	93	[5-1,734.2]	2.57	3.46	0.42	12	14
Myanmar	769	[41.2-14,340.1]	2.73	2.50	0.28	12	12
Malaysia	365	[310.2-429.5]	2.32	2.15	0.26	14	16
Philippines	686	[581.6-809.1]	1.26	1.32	0.15	16	17
Singapore	80	[49.2-130]	2.87	1.60	0.18	19	15
Thailand	2,096	[1,859.3-2,362.8]	5.85	3.05	0.33	11	14
Timor-Leste	6	[0.30-111.9]	0.92	1.35	0.18	14	13
Viet Nam	506	[401.5-637.8]	1.04	0.80	0.09	15	16
Southern Asia	43,148	[147.2-591.3]	4.59	4.73	0.55	4	6
Afghanistan	295	[147.2-591.3]	1.56	2.88	0.33	12	12
Bangladesh	4,629	[2,309.5-9,278.2]	5.68	6.52	0.78	5	6
Bhutan	6	[4.90-7.30]	1.66	2.09	0.29	13	27
India	31,268	[29,416.5-33,236.1]	4.72	4.61	0.53	4	6
Iran	532	[476-594.5]	1.28	1.27	0.14	17	16
Sri Lanka	618	[558.3-684]	5.54	3.82	0.43	8	9
Maldives	0	[0-2]	0	0	0	24	29
Nepal	236	[166.3-334.8]	1.49	1.70	0.19	10	9
Pakistan	5,564	[4,484.1-6,903.9]	5.19	6.97	0.79	2	4
Western Asia	1,657	[1,212.8-2,263.9]	1.25	1.27	0.14	20	18
United Arab Emirates	28	[13.7-57.4]	0.92	1.76	0.24	17	17
Armenia	7	[5.80-8.40]	0.45	0.27	0.03	24	15
Azerbaijan	89	[53.1-149.3]	1.75	1.43	0.15	17	13
Bahrain	4	[0.80-20.7]	0.67	0.90	0.12	20	29
Georgia	33	[27.4-39.7]	1.58	0.72	0.08	20	29
Iraq	138	[113.7-167.5]	0.69	1.06	0.13	18	17
Israel	114	[63.8-203.8]	2.62	1.65	0.18	18	16
Jordan	37	[21.3-64.3]	0.73	1.00	0.10	19	17
Kuwait	19	[10.7-33.9]	1.15	1.50	0.19	17	12
Lebanon	32	[20.9-49.1]	0.94	0.83	0.10	22	22
Oman	16	[7-36.8]	0.92	1.32	0.15	16	15
Palestine	12	[1.50-96.7]	0.48	0.89	0.09	19	19
Qatar	5	[0.40-59.6]	0.70	2.12	0.28	20	31
Saudi Arabia	198	[156.9-249.8]	1.35	1.85	0.21	14	13
Syria	68	[8.40-547.9]	0.78	0.93	0.10	19	20
Turkey	696	[464.5-1,043]	1.63	1.22	0.14	18	19
Yemen	161	[84.9-305.5]	1.09	1.84	0.17	14	14

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

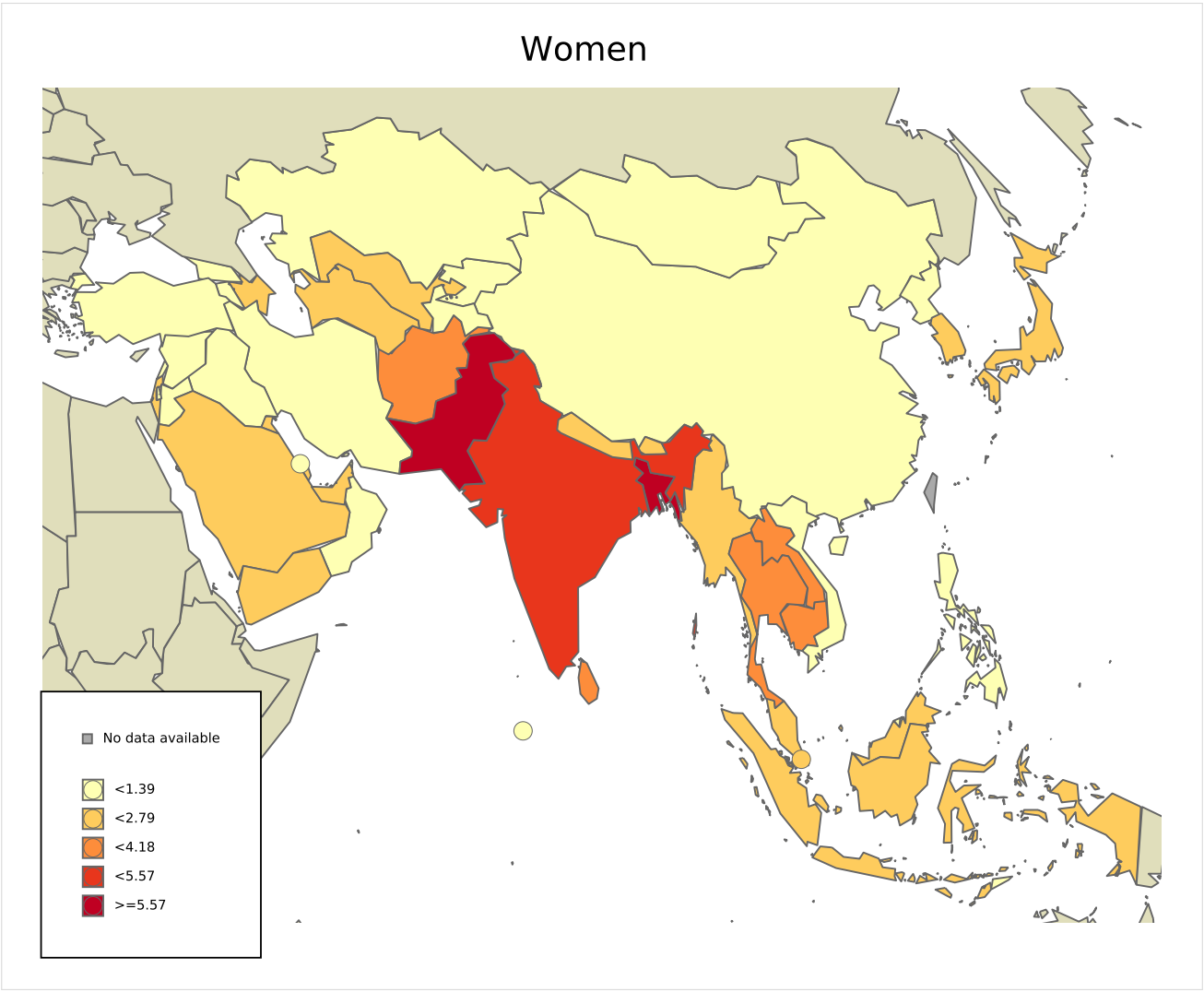
[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 34: Age-standardised incidence rates of oral cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 women per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Table 21: Incidence of oral cancer in men by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All men	Men 15-44 years
Asia	178,396	[168,926.8-188,396]	7.52	6.51	0.72	7	2
Central Asia	1,258	[357.3-459.1]	3.42	4.52	0.53	11	13
Kazakhstan	405	[357.3-459.1]	4.44	4.59	0.58	12	12
Kyrgyzstan	67	[44.1-101.9]	2.08	3.10	0.36	12	18
Tajikistan	42	[24.2-73]	0.87	1.65	0.17	13	15
Turkmenistan	121	[93.9-156]	4.08	5.48	0.67	9	12
Uzbekistan	623	[428.4-906.1]	3.73	5.23	0.58	9	14
Eastern Asia	33,658	[31,886-35,528.5]	3.93	2.55	0.29	15	13
China	18,546	[17,440.4-19,721.6]	2.50	1.68	0.20	16	16
Japan	6,974	[6,057.3-8,029.4]	11.3	4.74	0.56	12	9
Republic of Korea	1,119	[1,016.9-1,231.4]	4.36	2.52	0.28	16	11
Mongolia	16	[8.50-30]	0.99	1.45	0.19	14	12
DPR Korea	196	[95.1-404]	1.55	1.25	0.15	17	19
South-Eastern Asia	11,297	[10,121.5-12,609.1]	3.38	3.32	0.38	11	10
Brunei	1	[0.20-5.60]	0.44	0.68	0.17	21	28
Indonesia	3,551	[2,575.7-4,895.7]	2.58	2.57	0.30	10	10
Cambodia	249	[22.8-2,714.3]	3.05	4.48	0.52	8	11
Laos	112	[10.3-1,220.9]	3.07	4.12	0.46	9	11
Myanmar	1,656	[151.9-18,051.9]	6.32	6.96	0.75	6	8
Malaysia	377	[317.5-447.6]	2.27	2.23	0.24	14	12
Philippines	875	[738.4-1,036.9]	1.59	2.09	0.24	15	13
Singapore	152	[105.9-218.3]	4.96	2.90	0.34	14	12
Thailand	2,674	[2,263.8-3,158.6]	7.87	5.05	0.58	8	8
Timor-Leste	4	[0.40-43.6]	0.60	1.00	0.17	17	20
Viet Nam	1,646	[1,401.3-1,933.4]	3.39	3.09	0.35	13	11
Southern Asia	129,467	[336.8-1,133.9]	12.9	13.6	1.51	1	1
Afghanistan	618	[336.8-1,133.9]	3.09	6.38	0.72	3	3
Bangladesh	9,356	[5,099.2-17,166.4]	11.2	12.4	1.43	3	2
Bhutan	15	[13.2-17.1]	3.66	3.71	0.38	6	7
India	104,661	[100,600.8-108,885.1]	14.6	14.8	1.63	1	1
Iran	607	[545-676]	1.43	1.39	0.15	17	16
Sri Lanka	2,202	[2,085.9-2,324.6]	21.4	16.5	1.92	1	1
Maldives	5	[2.70-9.20]	1.46	2.32	0.25	13	10
Nepal	608	[508.5-727]	4.55	5.52	0.67	3	6
Pakistan	11,395	[9,586.3-13,544.9]	10.0	13.2	1.45	1	1
Western Asia	2,716	[2,056.9-3,586.2]	1.86	2.23	0.26	17	14
United Arab Emirates	54	[32.2-90.6]	0.79	1.47	0.14	11	9
Armenia	40	[35.1-45.6]	2.87	2.03	0.29	16	26
Azerbaijan	113	[76-168]	2.23	2.32	0.27	15	16
Bahrain	14	[6.50-30.3]	1.27	2.02	0.31	12	8
Georgia	155	[136-176.6]	8.15	5.34	0.64	11	18
Iraq	126	[103.2-153.8]	0.62	1.22	0.15	18	21
Israel	90	[60.8-133.3]	2.09	1.60	0.18	19	14
Jordan	60	[39.4-91.4]	1.16	1.68	0.20	18	16
Kuwait	43	[28-66.1]	1.64	1.68	0.20	14	8
Lebanon	52	[37.3-72.6]	1.51	1.40	0.17	17	14
Oman	52	[26.2-103.1]	1.54	2.24	0.27	13	10
Palestine	23	[2.10-255.9]	0.89	1.50	0.18	17	16
Qatar	25	[3.30-189.1]	1.15	2.08	0.37	13	8
Saudi Arabia	254	[199.4-323.5]	1.26	1.63	0.17	15	13
Syria	92	[8.30-1,023.7]	1.05	1.45	0.17	17	17
Turkey	1,407	[1,065.9-1,857.2]	3.38	3.06	0.36	16	15
Yemen	116	[63.2-213]	0.77	1.58	0.19	17	15

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

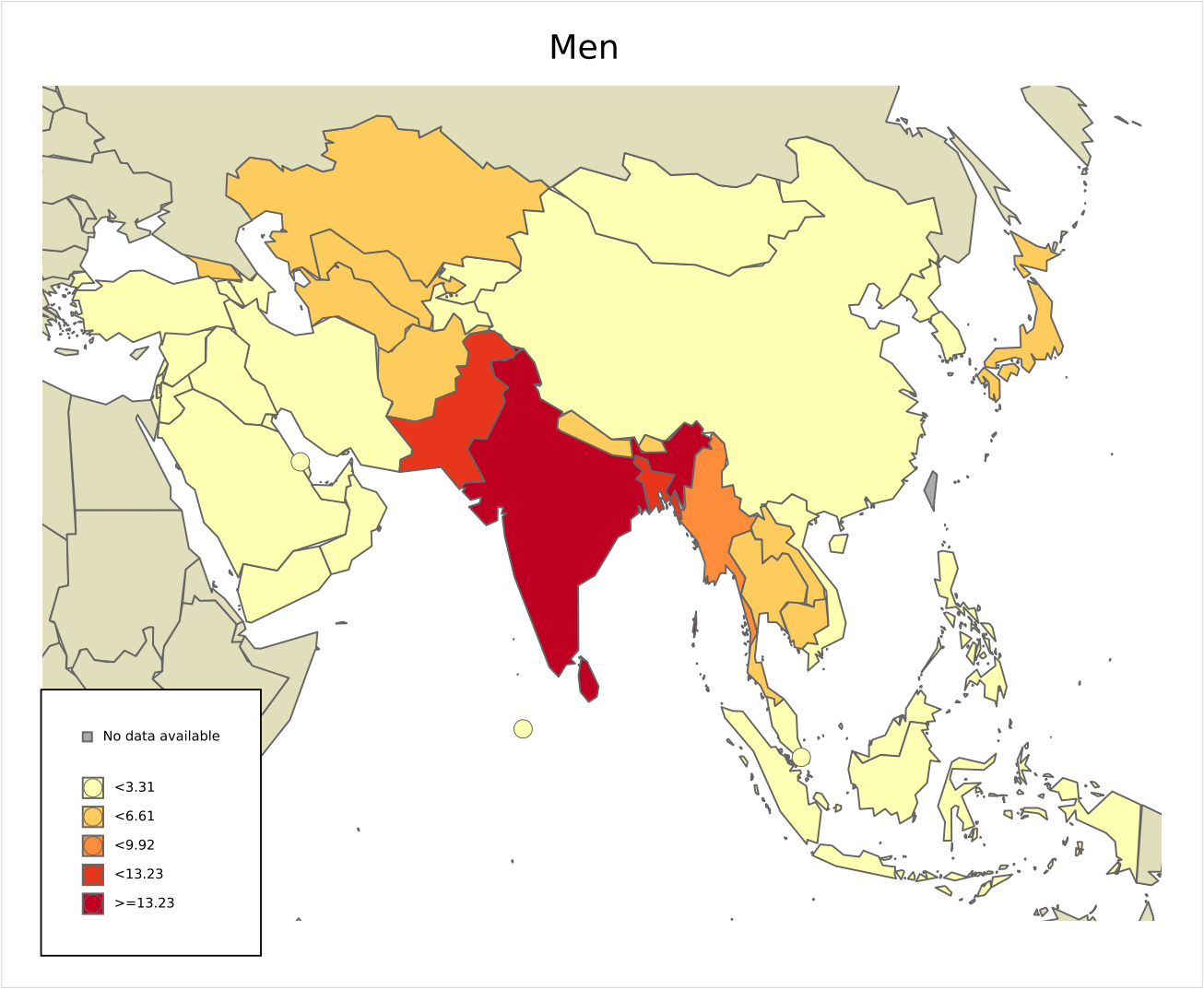
[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 35: Age-standardised incidence rates of oral cancer among men in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 men per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.5.2.2 Oral cavity cancer mortality

Table 22: Mortality of oral cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	37,849	[34,843.5-41,113.8]	1.67	1.30	0.15	15	12
Central Asia	405	[102.7-154.5]	1.08	1.08	0.12	13	13
Kazakhstan	126	[102.7-154.5]	1.30	1.02	0.12	14	14
Kyrgyzstan	18	[10.5-30.7]	0.55	0.57	0.07	16	17
Tajikistan	28	[18.1-43.3]	0.59	0.86	0.08	15	15
Turkmenistan	30	[22-40.9]	0.98	1.06	0.13	14	15
Uzbekistan	203	[147.5-279.3]	1.21	1.29	0.15	13	13
Eastern Asia	7,850	[7,009.5-8,791.4]	0.95	0.47	0.05	19	18
China	5,447	[4,772.2-6,217.2]	0.77	0.44	0.05	20	18
Japan	1,845	[1,697.1-2,005.7]	2.85	0.51	0.04	17	13
Republic of Korea	232	[183.7-292.9]	0.91	0.33	0.03	18	15
Mongolia	9	[4.10-20]	0.54	0.64	0.07	14	15
DPR Korea	62	[23.8-161.3]	0.47	0.24	0.03	19	23
South-Eastern Asia	3,516	[3,094.7-3,994.7]	1.05	0.88	0.09	14	15
Brunei	0	[0-8.50]	0	0	0	23	22
Indonesia	946	[671.8-1,332.1]	0.70	0.65	0.08	14	13
Cambodia	151	[12.8-1,781.7]	1.76	2.11	0.23	11	15
Laos	50	[4.20-590]	1.38	1.91	0.22	12	14
Myanmar	403	[34.2-4,755.3]	1.43	1.32	0.15	14	12
Malaysia	180	[152.1-213]	1.14	1.05	0.12	14	14
Philippines	366	[299.2-447.8]	0.67	0.70	0.07	16	16
Singapore	28	[17.2-45.6]	1.00	0.49	0.05	20	18
Thailand	1,129	[976.6-1,305.1]	3.15	1.47	0.14	12	15
Timor-Leste	5	[0.40-59]	0.77	1.14	0.16	14	25
Viet Nam	258	[200-332.8]	0.53	0.38	0.04	17	18
Southern Asia	25,299	[112.6-410.6]	2.69	2.79	0.33	8	9
Afghanistan	215	[112.6-410.6]	1.13	2.15	0.25	11	12
Bangladesh	2,785	[1,458.3-5,318.8]	3.42	4.01	0.50	6	8
Bhutan	5	[4.10-6.10]	1.38	1.77	0.26	12	17
India	18,074	[16,935.8-19,288.7]	2.73	2.68	0.32	7	9
Iran	224	[190.2-263.8]	0.54	0.55	0.05	19	17
Sri Lanka	299	[263.2-339.7]	2.68	1.83	0.22	7	11
Maldives	0	[0-1.80]	0	0	0	28	31
Nepal	106	[70.8-158.8]	0.67	0.78	0.09	12	11
Pakistan	3,591	[2,869.7-4,493.7]	3.35	4.57	0.54	3	4
Western Asia	779	[619-980.3]	0.59	0.59	0.06	18	17
United Arab Emirates	14	[5.50-35.5]	0.46	0.95	0.14	14	13
Armenia	6	[2.20-16.3]	0.38	0.21	0.03	23	18
Azerbaijan	47	[25.3-87.2]	0.93	0.76	0.08	18	13
Bahrain	3	[0.40-22.5]	0.50	0.72	0.10	17	30
Georgia	20	[12-33.3]	0.96	0.43	0.05	21	28
Iraq	83	[64.5-106.7]	0.42	0.66	0.08	19	16
Israel	27	[17.7-41.3]	0.62	0.26	0.02	21	25
Jordan	21	[10.5-41.9]	0.42	0.58	0.06	20	15
Kuwait	9	[4.20-19.3]	0.54	0.81	0.12	15	13
Lebanon	16	[9.30-27.5]	0.47	0.41	0.05	21	29
Oman	9	[3.20-25.2]	0.52	0.80	0.10	17	12
Palestine	8	[1.10-59.9]	0.32	0.62	0.06	20	27
Qatar	4	[0.20-68.9]	0.56	1.96	0.26	13	9
Saudi Arabia	91	[68.9-120.2]	0.62	0.88	0.10	15	14
Syria	51	[6.80-381.8]	0.58	0.71	0.08	19	17
Turkey	248	[198.7-309.6]	0.58	0.40	0.04	21	21
Yemen	122	[59.5-250]	0.82	1.41	0.13	13	11

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

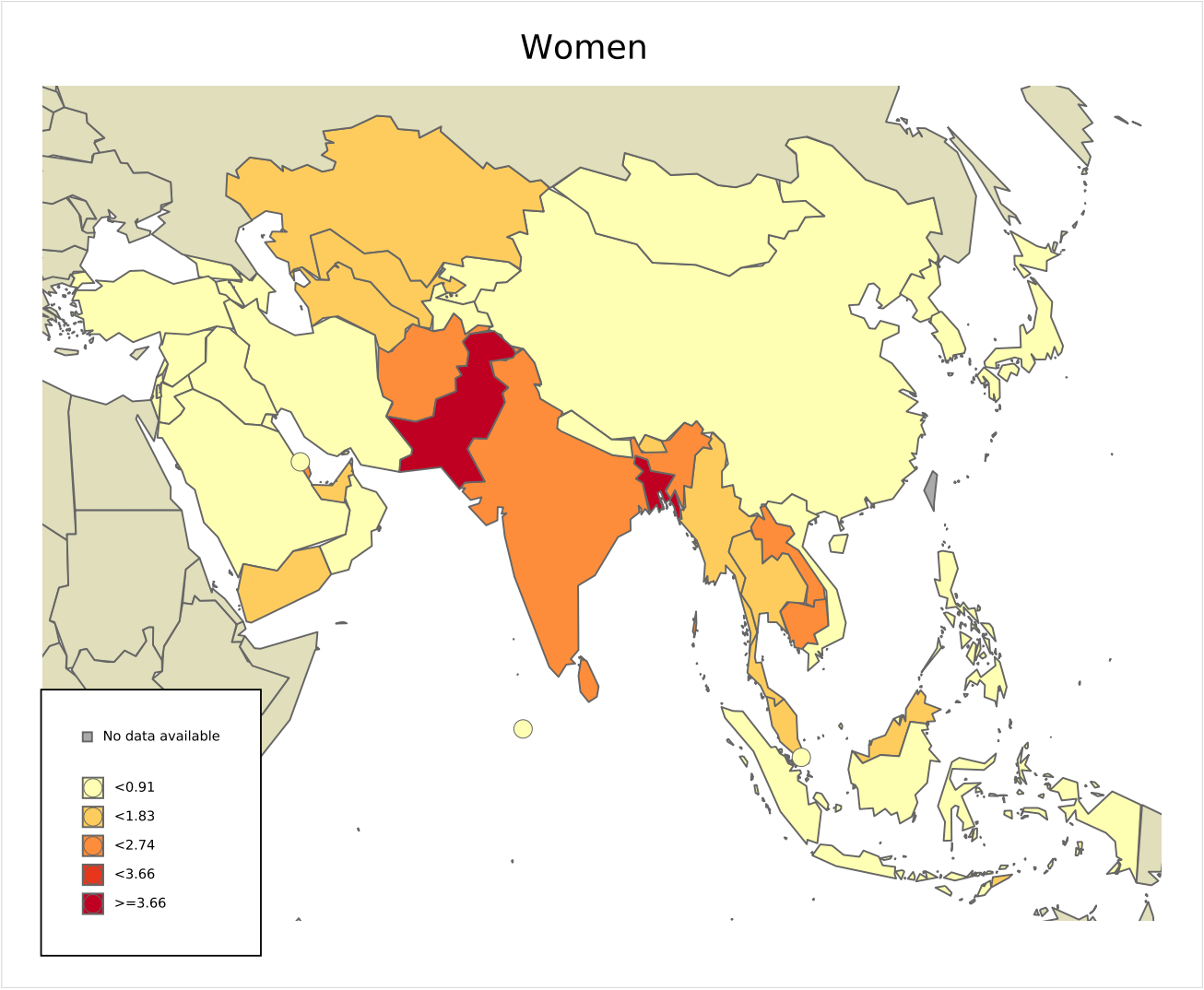
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 36: Age-standardised mortality rates of oral cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 women per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Table 23: Mortality of oral cancer in men by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All men	Men 15-44 years
Asia	93,761	[83,519.8-105,258]	3.95	3.43	0.38	9	4
Central Asia	679	[206.4-279]	1.84	2.40	0.29	12	15
Kazakhstan	240	[206.4-279]	2.63	2.69	0.34	13	14
Kyrgyzstan	42	[29.6-59.6]	1.30	1.80	0.23	11	16
Tajikistan	23	[14.4-36.7]	0.48	0.92	0.10	13	16
Turkmenistan	64	[51.3-79.8]	2.16	2.89	0.36	10	12
Uzbekistan	310	[227.5-422.5]	1.86	2.58	0.30	11	17
Eastern Asia	14,083	[12,818.4-15,472.4]	1.65	1.04	0.11	15	11
China	9,338	[8,440-10,331.6]	1.26	0.84	0.09	17	12
Japan	1,711	[1,574.1-1,859.8]	2.77	0.92	0.10	16	9
Republic of Korea	368	[309.3-437.8]	1.43	0.75	0.08	15	10
Mongolia	12	[6.70-21.5]	0.74	1.52	0.19	14	21
DPR Korea	98	[48.8-197]	0.78	0.61	0.07	16	20
South-Eastern Asia	6,409	[5,717.3-7,184.4]	1.92	1.92	0.21	13	10
Brunei	1	[0.20-6.10]	0.44	0.68	0.17	16	26
Indonesia	2,141	[1,544.7-2,967.4]	1.55	1.59	0.19	12	8
Cambodia	157	[20.9-1,177.8]	1.92	2.98	0.34	10	11
Laos	63	[8.40-472.6]	1.73	2.41	0.26	10	10
Myanmar	1,003	[133.7-7,524.5]	3.83	4.40	0.45	7	10
Malaysia	223	[186.7-266.3]	1.34	1.32	0.13	15	12
Philippines	504	[409.5-620.2]	0.92	1.27	0.13	15	13
Singapore	57	[39.1-83.2]	1.86	1.05	0.13	15	13
Thailand	1,416	[1,157.6-1,732.1]	4.17	2.57	0.28	11	10
Timor-Leste	3	[0.40-22.5]	0.45	0.81	0.14	16	28
Viet Nam	841	[704.5-1,004]	1.73	1.61	0.18	13	11
Southern Asia	71,632	[246.2-761.6]	7.16	7.58	0.86	2	1
Afghanistan	433	[246.2-761.6]	2.17	4.53	0.53	8	4
Bangladesh	5,352	[3,042.7-9,414.1]	6.43	7.17	0.85	3	2
Bhutan	9	[7.90-10.3]	2.19	2.29	0.25	8	8
India	57,216	[54,853.7-59,680]	7.98	8.12	0.92	1	1
Iran	230	[196-270]	0.54	0.53	0.05	16	16
Sri Lanka	1,026	[958.5-1,098.2]	9.99	7.69	0.92	3	3
Maldives	0	[0-1.70]	0	0	0	11	25
Nepal	340	[276.6-418]	2.55	3.09	0.38	5	6
Pakistan	7,026	[5,870.9-8,408.4]	6.18	8.26	0.93	2	1
Western Asia	958	[772.6-1,187.8]	0.66	0.81	0.09	16	17
United Arab Emirates	20	[10.2-39.1]	0.29	0.51	0.07	13	9
Armenia	21	[13-33.8]	1.51	1.07	0.15	14	16
Azerbaijan	54	[33.6-86.8]	1.07	1.10	0.13	15	13
Bahrain	4	[1.50-10.7]	0.36	0.56	0.08	16	7
Georgia	73	[56-95.2]	3.84	2.53	0.31	13	16
Iraq	63	[48.6-81.6]	0.31	0.63	0.08	19	19
Israel	31	[20.7-46.4]	0.72	0.48	0.05	17	19
Jordan	26	[15.4-44]	0.50	0.77	0.09	17	15
Kuwait	16	[9.10-28.2]	0.61	0.65	0.08	15	9
Lebanon	24	[15.7-36.6]	0.70	0.65	0.08	16	12
Oman	18	[7.70-41.9]	0.53	0.77	0.09	17	13
Palestine	13	[1.30-132.9]	0.50	0.93	0.11	17	15
Qatar	8	[0.80-81.8]	0.37	0.83	0.16	15	9
Saudi Arabia	102	[76.3-136.3]	0.51	0.67	0.07	17	13
Syria	59	[5.80-603]	0.67	0.94	0.11	17	14
Turkey	344	[275.8-429]	0.83	0.74	0.08	18	16
Yemen	82	[41.5-161.9]	0.55	1.14	0.14	15	15

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

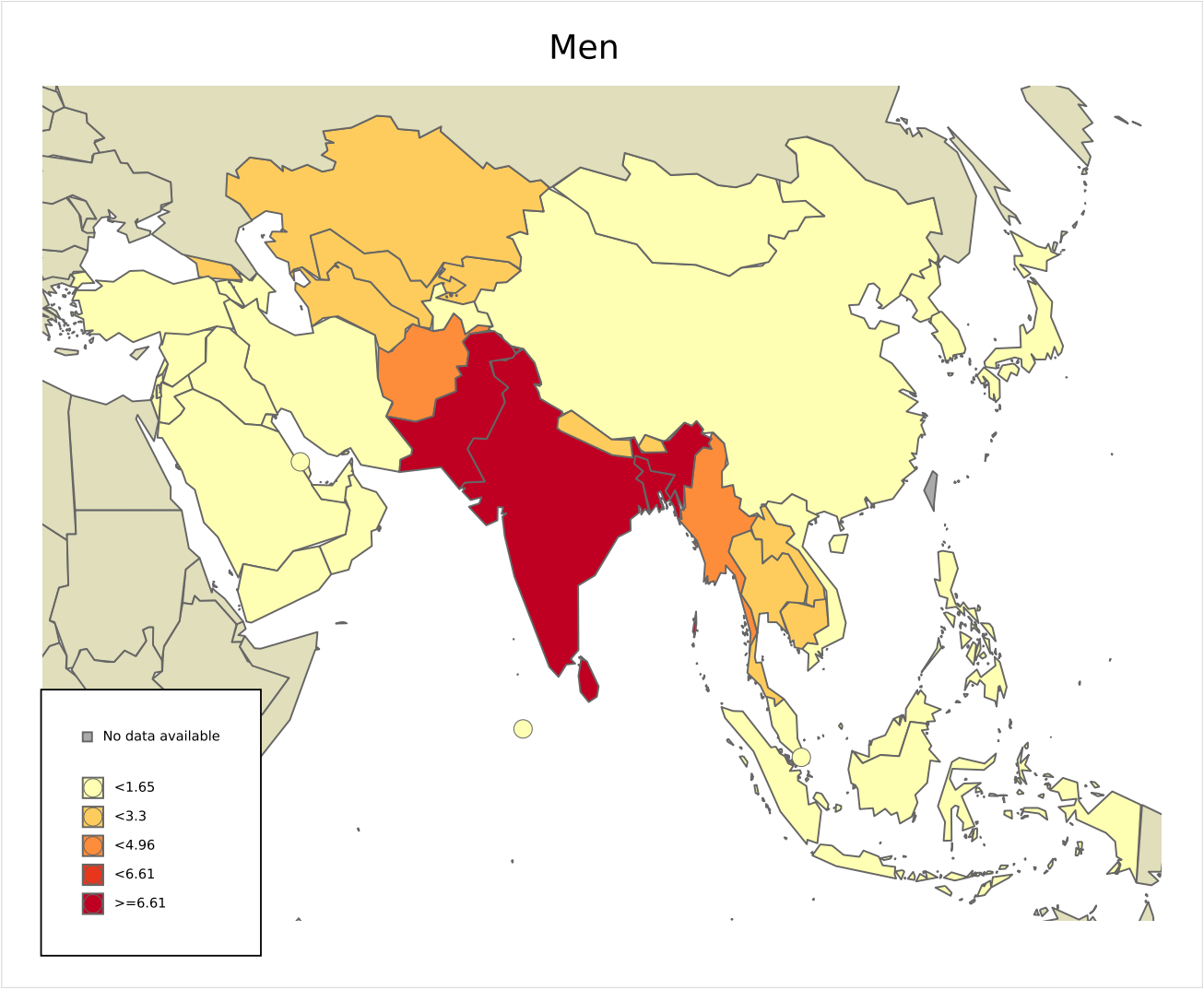
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 37: Age-standardised mortality rates of oral cancer among men in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 men per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.5.3 Laryngeal cancer

3.5.3.1 Laryngeal cancer incidence

Table 24: Incidence of laryngeal cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	12,536	[10,300.5-15,256.7]	0.55	0.43	0.05	22	26
Central Asia	130	[34.4-69.8]	0.35	0.35	0.04	26	27
Kazakhstan	49	[34.4-69.8]	0.51	0.41	0.04	25	22
Kyrgyzstan	7	[2-24]	0.21	0.24	0.03	27	29
Tajikistan	15	[7.20-31.2]	0.32	0.43	0.04	17	21
Turkmenistan	12	[4.50-31.9]	0.39	0.42	0.04	26	26
Uzbekistan	47	[26.2-84.4]	0.28	0.28	0.03	26	24
Eastern Asia	3,831	[3,280.6-4,473.7]	0.47	0.26	0.03	24	29
China	3,264	[2,809.5-3,792.1]	0.46	0.27	0.03	24	28
Japan	371	[282.5-487.2]	0.57	0.21	0.03	28	30
Republic of Korea	64	[45-91]	0.25	0.11	0.01	28	29
Mongolia	5	[1.70-14.7]	0.30	0.36	0.06	23	29
DPR Korea	84	[24.2-291.6]	0.64	0.41	0.05	21	26
South-Eastern Asia	1,215	[630-2,343.1]	0.36	0.31	0.03	24	26
Brunei	1	[0.10-10]	0.48	0.48	0.06	19	23
Indonesia	251	[98-642.8]	0.18	0.17	0.02	27	25
Cambodia	18	[5.20-62.3]	0.21	0.24	0.03	26	20
Laos	12	[3.50-41.5]	0.33	0.44	0.06	25	28
Myanmar	154	[44.5-532.8]	0.55	0.53	0.05	20	28
Malaysia	56	[34.9-89.9]	0.36	0.32	0.04	25	21
Philippines	196	[121.5-316.2]	0.36	0.39	0.04	23	22
Singapore	12	[4.20-34.6]	0.43	0.20	0.02	28	30
Thailand	179	[114-281.2]	0.50	0.26	0.03	25	28
Timor-Leste	0	[0-3.50]	0	0	0	23	18
Viet Nam	336	[185.2-609.7]	0.69	0.50	0.06	19	28
Southern Asia	6,681	[12.5-177]	0.71	0.74	0.09	20	21
Afghanistan	47	[12.5-177]	0.25	0.47	0.05	23	25
Bangladesh	697	[185.1-2,624.7]	0.86	1.00	0.12	16	18
Bhutan	1	[0.60-1.60]	0.28	0.39	0.05	24	26
India	4,507	[3,772.8-5,384.1]	0.68	0.67	0.08	21	22
Iran	495	[433.9-564.7]	1.19	1.21	0.12	19	22
Sri Lanka	97	[70.4-133.6]	0.87	0.55	0.06	18	23
Maldives	0	[0-3.80]	0	0	0	23	18
Nepal	138	[75.8-251.1]	0.87	1.02	0.12	14	19
Pakistan	699	[362.6-1,347.4]	0.65	0.90	0.10	19	21
Western Asia	679	[425-1,084.9]	0.51	0.54	0.06	22	23
United Arab Emirates	3	[0.30-26.9]	0.10	0.40	0.06	26	23
Armenia	10	[7.10-14.2]	0.64	0.35	0.04	23	18
Azerbaijan	47	[27.6-79.9]	0.93	0.72	0.08	21	25
Bahrain	0	[0-10.2]	0	0	0	27	17
Georgia	10	[7.10-14.2]	0.48	0.17	0.02	26	21
Iraq	103	[82.3-128.9]	0.52	0.91	0.12	20	24
Israel	29	[18.7-45]	0.67	0.51	0.06	25	22
Jordan	21	[9.50-46.2]	0.42	0.54	0.05	22	25
Kuwait	3	[0.60-14.8]	0.18	0.31	0.06	24	22
Lebanon	41	[27.9-60.3]	1.21	1.19	0.16	20	23
Oman	3	[0.30-26.7]	0.17	0.27	0.05	26	27
Palestine	6	[0.40-88.7]	0.24	0.41	0.06	23	28
Qatar	0	[0-11.9]	0	0	0	31	22
Saudi Arabia	19	[8.60-41.9]	0.13	0.19	0.02	26	30
Syria	64	[4.30-946.4]	0.73	0.92	0.11	20	25
Turkey	303	[157.2-584]	0.71	0.55	0.06	23	24
Yemen	17	[1.30-215.9]	0.11	0.15	0.02	23	19

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

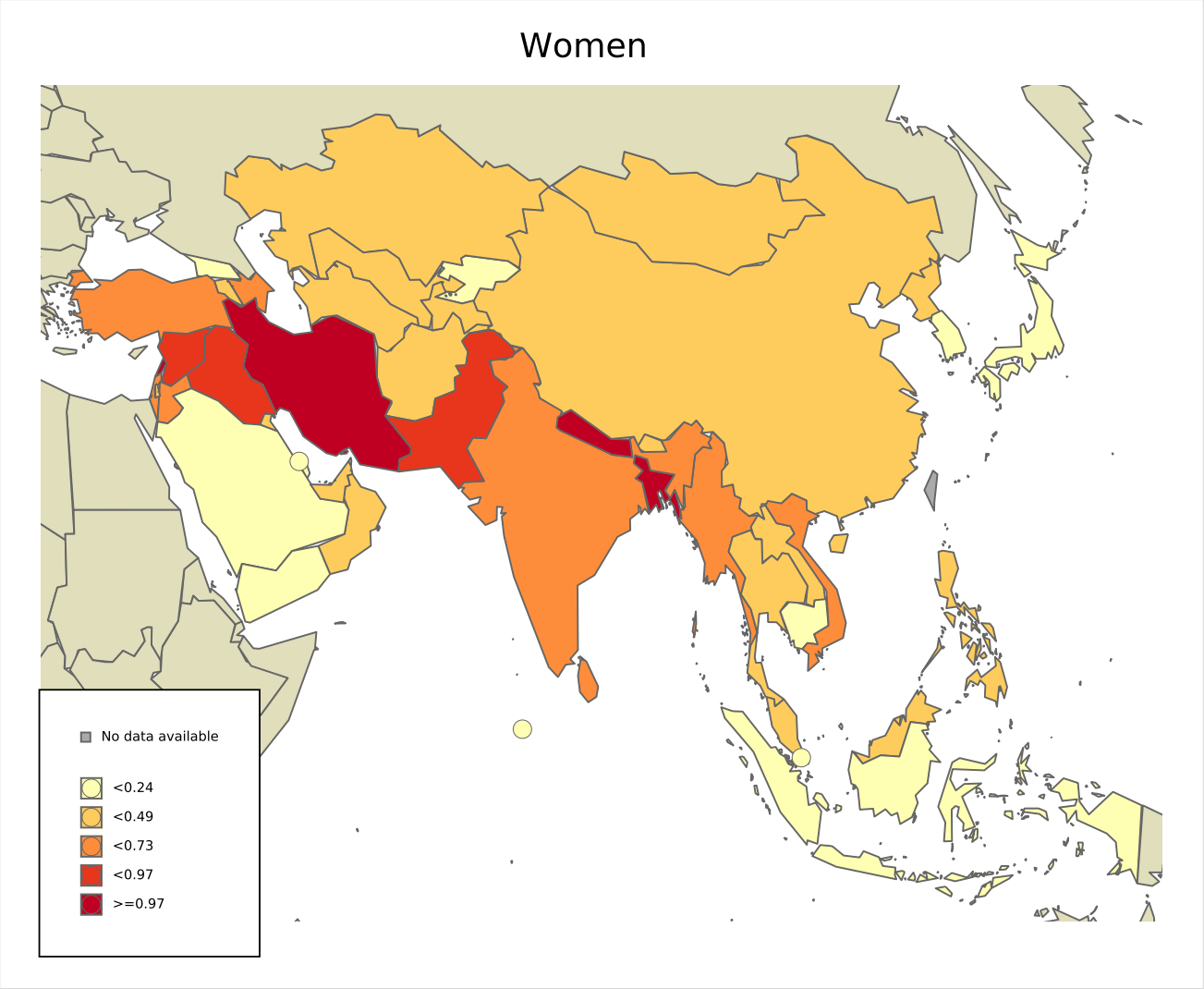
[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today , accessed [27 January 2021].

Figure 38: Age-standardised incidence rates of laryngeal cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Table 25: Incidence of laryngeal cancer in men by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All men	Men 15-44 years
Asia	91,794	[85,968.1-98,014.7]	3.87	3.36	0.41	14	16
Central Asia	734	[403.7-512.9]	1.99	2.51	0.32	14	19
Kazakhstan	455	[403.7-512.9]	4.99	5.08	0.64	10	13
Kyrgyzstan	54	[34-85.7]	1.67	2.43	0.36	13	25
Tajikistan	15	[6.40-34.9]	0.31	0.61	0.08	17	23
Turkmenistan	59	[36.3-95.9]	1.99	2.66	0.35	14	18
Uzbekistan	151	[99.4-229.5]	0.90	1.17	0.14	18	19
Eastern Asia	33,020	[31,412-34,710.3]	3.86	2.41	0.30	16	18
China	25,871	[24,543.4-27,270.4]	3.49	2.29	0.29	15	18
Japan	4,744	[3,916.3-5,746.6]	7.68	2.78	0.36	13	22
Republic of Korea	1,117	[998.2-1,250]	4.35	2.28	0.29	17	23
Mongolia	28	[16.8-46.7]	1.73	2.72	0.32	11	19
DPR Korea	476	[264.3-857.1]	3.78	3.05	0.38	11	15
South-Eastern Asia	10,178	[9,071.8-11,419.1]	3.05	3.07	0.36	12	16
Brunei	2	[0.40-11.1]	0.88	1.04	0.20	18	17
Indonesia	3,412	[2,388.4-4,874.4]	2.48	2.57	0.31	13	13
Cambodia	141	[12.9-1,537]	1.73	2.70	0.32	13	23
Laos	67	[6.10-730.4]	1.83	2.64	0.30	13	15
Myanmar	1,223	[112.2-13,331.8]	4.66	5.23	0.62	8	14
Malaysia	538	[451.5-641.1]	3.23	3.22	0.38	12	16
Philippines	1,354	[1,174.1-1,561.5]	2.46	3.37	0.42	12	18
Singapore	129	[93.6-177.9]	4.21	2.36	0.28	17	27
Thailand	1,621	[1,355.3-1,938.8]	4.77	2.90	0.31	13	15
Timor-Leste	6	[0.60-65.4]	0.90	1.43	0.17	13	12
Viet Nam	1,685	[1,408.8-2,015.3]	3.47	3.24	0.38	12	14
Southern Asia	41,582	[80.7-515.5]	4.15	4.67	0.58	7	12
Afghanistan	204	[80.7-515.5]	1.02	2.30	0.29	14	19
Bangladesh	4,573	[1,809.5-11,556.8]	5.49	6.28	0.78	6	5
Bhutan	10	[8.30-12.1]	2.44	2.62	0.26	10	19
India	30,180	[28,277.4-32,210.6]	4.21	4.55	0.56	7	12
Iran	1,920	[1,788.2-2,061.5]	4.53	4.49	0.52	12	13
Sri Lanka	727	[660.7-800]	7.08	5.34	0.65	6	14
Maldives	5	[2-12.6]	1.46	2.97	0.38	12	17
Nepal	292	[212-402.1]	2.19	2.71	0.29	12	11
Pakistan	3,671	[2,835.5-4,752.6]	3.23	4.79	0.60	10	12
Western Asia	6,280	[5,187.5-7,602.6]	4.31	5.29	0.66	12	13
United Arab Emirates	42	[23.4-75.5]	0.61	1.55	0.18	15	17
Armenia	130	[115.4-146.4]	9.33	7.02	0.89	10	11
Azerbaijan	285	[239.9-338.6]	5.63	5.25	0.65	9	11
Bahrain	12	[4.80-30]	1.09	2.43	0.28	13	16
Georgia	266	[236.2-299.5]	14.0	9.38	1.17	7	9
Iraq	376	[334.8-422.3]	1.85	3.89	0.48	12	15
Israel	178	[118.3-267.9]	4.13	3.27	0.40	15	15
Jordan	181	[140.4-233.3]	3.50	5.00	0.60	10	10
Kuwait	37	[21.4-63.9]	1.42	1.66	0.26	16	20
Lebanon	107	[79.4-144.2]	3.11	2.91	0.38	14	18
Oman	39	[17.3-88]	1.16	1.65	0.19	16	14
Palestine	70	[10.1-483.1]	2.71	5.08	0.60	11	11
Qatar	18	[3.60-90.3]	0.83	1.47	0.24	15	19
Saudi Arabia	179	[133-240.9]	0.89	1.21	0.15	17	19
Syria	242	[35.1-1,670.3]	2.76	3.88	0.48	11	13
Turkey	3,805	[3,205.9-4,516.1]	9.14	8.40	1.03	8	12
Yemen	313	[150.3-651.9]	2.08	4.44	0.52	9	10

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

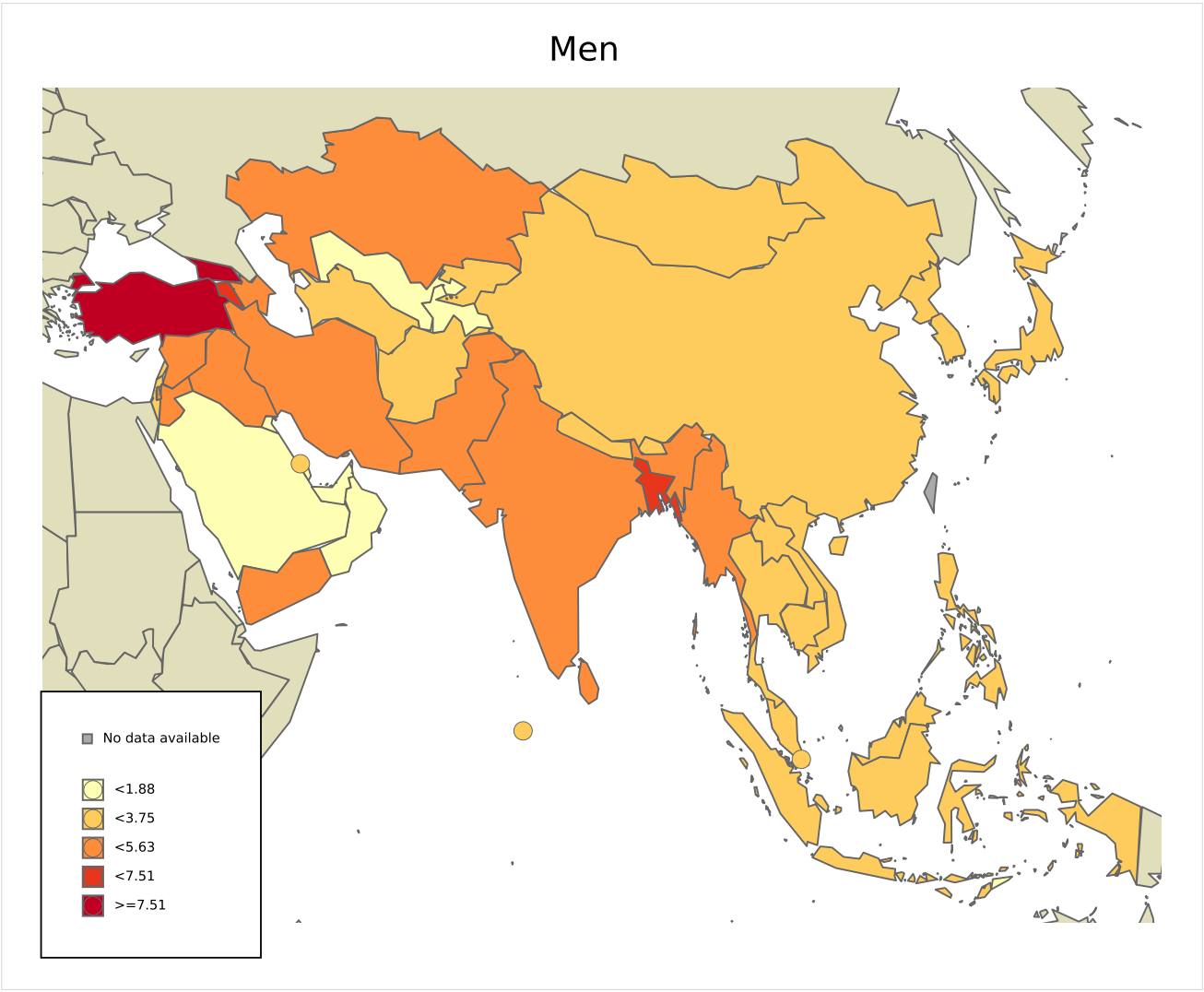
[a] Cumulative risk (incidence) is the probability or risk of individuals getting from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to develop from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 39: Age-standardised incidence rates of laryngeal cancer among men in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 men per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

3.5.3.2 Laryngeal cancer mortality

Table 26: Mortality of laryngeal cancer in women by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All women	Women 15-44 years
Asia	9,228	[7,235.8-11,768.6]	0.41	0.31	0.04	21	22
Central Asia	91	[18.4-45.7]	0.24	0.24	0.03	25	23
Kazakhstan	29	[18.4-45.7]	0.30	0.23	0.03	25	26
Kyrgyzstan	6	[2.10-16.8]	0.18	0.20	0.03	25	26
Tajikistan	12	[6.50-22.2]	0.25	0.34	0.03	16	18
Turkmenistan	9	[3.80-21.1]	0.29	0.31	0.03	24	23
Uzbekistan	35	[21.6-56.8]	0.21	0.22	0.02	25	20
Eastern Asia	2,537	[2,066.8-3,114.2]	0.31	0.16	0.02	21	27
China	2,343	[1,916.5-2,864.5]	0.33	0.19	0.02	21	26
Japan	79	[55-113.4]	0.12	0.03	0.00	29	30
Republic of Korea	31	[20.3-47.3]	0.12	0.04	0.00	27	29
Mongolia	4	[1-15.9]	0.24	0.35	0.05	21	21
DPR Korea	62	[11.8-324.7]	0.47	0.27	0.03	20	25
South-Eastern Asia	863	[443.3-1,680.2]	0.26	0.21	0.02	21	24
Brunei	1	[0.10-8.50]	0.48	0.48	0.06	18	29
Indonesia	162	[62.3-421.4]	0.12	0.11	0.01	25	21
Cambodia	14	[4.90-39.9]	0.16	0.20	0.02	24	21
Laos	9	[3.20-25.6]	0.25	0.34	0.04	21	28
Myanmar	123	[43.2-350.5]	0.44	0.43	0.04	19	23
Malaysia	34	[20-57.7]	0.22	0.20	0.02	22	19
Philippines	135	[82.1-222]	0.25	0.26	0.03	20	19
Singapore	5	[1.50-16.5]	0.18	0.07	0.00	27	17
Thailand	133	[83.8-211.2]	0.37	0.17	0.02	22	26
Timor-Leste	0	[0-2.80]	0	0	0	26	31
Viet Nam	247	[128.2-475.9]	0.51	0.34	0.04	18	23
Southern Asia	5,311	[10.8-127.1]	0.57	0.59	0.07	17	17
Afghanistan	37	[10.8-127.1]	0.20	0.36	0.04	21	19
Bangladesh	572	[166.6-1,964.3]	0.70	0.86	0.11	14	14
Bhutan	1	[0.60-1.70]	0.28	0.39	0.05	22	25
India	3,658	[3,026.5-4,421.1]	0.55	0.55	0.07	17	17
Iran	370	[328.4-416.8]	0.89	0.92	0.09	15	18
Sri Lanka	67	[44.8-100.1]	0.60	0.37	0.05	17	20
Maldives	0	[0-3.10]	0	0	0	11	21
Nepal	82	[41.1-163.8]	0.52	0.63	0.09	15	18
Pakistan	524	[264.9-1,036.4]	0.49	0.69	0.08	17	19
Western Asia	426	[319-568.9]	0.32	0.33	0.04	22	25
United Arab Emirates	2	[0.10-34.5]	0.07	0.25	0.04	26	24
Armenia	9	[4.60-17.6]	0.57	0.32	0.03	20	14
Azerbaijan	29	[15.4-54.7]	0.57	0.44	0.05	20	25
Bahrain	0	[0-17.2]	0	0	0	29	14
Georgia	8	[4-16.1]	0.38	0.14	0.02	23	21
Iraq	74	[55.3-98.9]	0.37	0.67	0.08	20	23
Israel	17	[9.70-29.9]	0.39	0.21	0.03	22	24
Jordan	12	[4.50-32.2]	0.24	0.32	0.03	22	21
Kuwait	2	[0.30-15]	0.12	0.27	0.06	22	21
Lebanon	28	[17.2-45.6]	0.83	0.81	0.11	17	21
Oman	2	[0.10-26.9]	0.12	0.22	0.04	24	25
Palestine	4	[0.30-53.8]	0.16	0.29	0.05	23	30
Qatar	0	[0-17.2]	0	0	0	28	19
Saudi Arabia	12	[4.60-31]	0.08	0.13	0.01	23	28
Syria	46	[3.40-618.5]	0.53	0.68	0.09	21	24
Turkey	169	[128.3-222.5]	0.40	0.28	0.03	23	22
Yemen	12	[0.70-206.8]	0.08	0.12	0.01	22	21

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

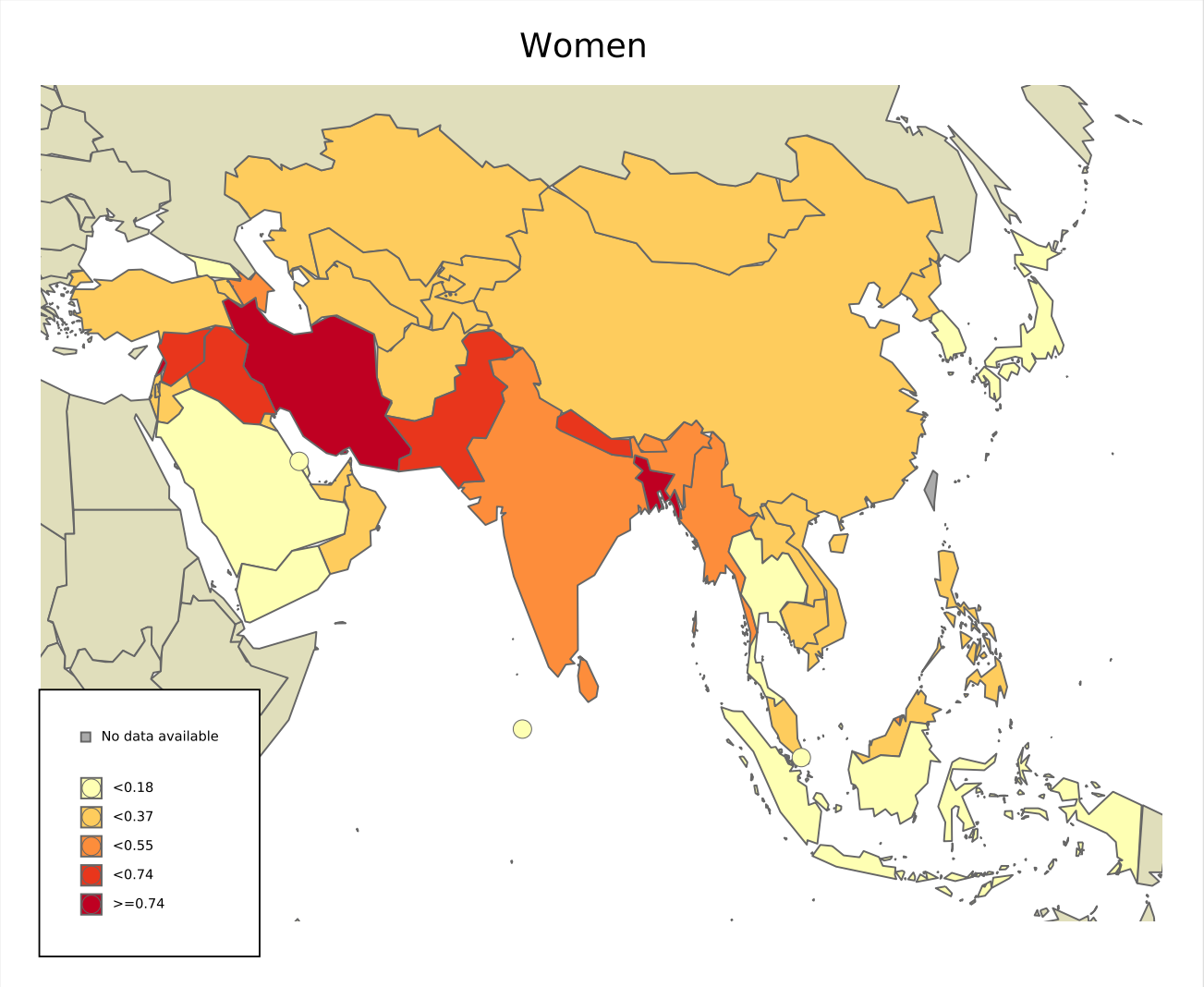
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 40: Age-standardised mortality rates of laryngeal cancer among women in Asia (estimates for 2020)



Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

[a] Rates per 100,000 women per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Table 27: Mortality of laryngeal cancer in men by Asia and sub regions (estimates for 2020)

Area	N Cases	Uncertainty intervals of new cancer cases [95% UI]	Crude rate[b]	ASR[b]	Cumulative risk (%) ages 0-74 years[a]	Ranking	
						All men	Men 15-44 years
Asia	49,621	[44,998.4-54,718.4]	2.09	1.82	0.22	15	14
Central Asia	442	[223.7-299.8]	1.20	1.54	0.20	14	19
Kazakhstan	259	[223.7-299.8]	2.84	2.93	0.39	12	17
Kyrgyzstan	37	[25.2-54.4]	1.15	1.66	0.23	13	22
Tajikistan	11	[5.40-22.4]	0.23	0.45	0.06	16	26
Turkmenistan	38	[24.9-58]	1.28	1.72	0.22	13	17
Uzbekistan	97	[68.6-137.1]	0.58	0.77	0.10	15	19
Eastern Asia	15,261	[14,048.8-16,577.8]	1.78	1.09	0.13	14	17
China	13,471	[12,396.5-14,638.6]	1.82	1.19	0.14	14	16
Japan	866	[783.5-957.2]	1.40	0.37	0.04	19	27
Republic of Korea	339	[293.3-391.9]	1.32	0.65	0.07	16	24
Mongolia	18	[9.60-33.6]	1.11	1.95	0.22	9	26
DPR Korea	317	[149.8-671]	2.51	2.03	0.25	12	14
South-Eastern Asia	5,905	[5,239.3-6,655.4]	1.77	1.82	0.20	14	13
Brunei	1	[0.10-8.50]	0.44	0.68	0.17	15	17
Indonesia	1,984	[1,380.6-2,851.1]	1.44	1.54	0.18	13	12
Cambodia	88	[11.7-660.2]	1.08	1.76	0.20	14	19
Laos	40	[5.30-300.1]	1.10	1.65	0.18	14	12
Myanmar	744	[99.2-5,581.5]	2.84	3.30	0.38	10	12
Malaysia	329	[274.5-394.4]	1.98	1.96	0.19	12	16
Philippines	885	[743.4-1,053.5]	1.61	2.29	0.26	11	17
Singapore	49	[32.8-73.3]	1.60	0.92	0.10	16	25
Thailand	918	[739.2-1,140]	2.70	1.56	0.14	14	13
Timor-Leste	5	[0.70-37.5]	0.75	1.23	0.14	13	19
Viet Nam	862	[707.9-1,049.7]	1.77	1.68	0.19	12	12
Southern Asia	25,077	[65.4-367.3]	2.51	2.86	0.37	9	13
Afghanistan	155	[65.4-367.3]	0.78	1.83	0.24	14	17
Bangladesh	2,647	[1,117.1-6,271.9]	3.18	3.79	0.50	7	12
Bhutan	6	[4.90-7.30]	1.46	1.59	0.19	11	22
India	18,002	[16,795.2-19,295.6]	2.51	2.74	0.36	8	14
Iran	1,292	[1,207.6-1,382.3]	3.05	3.03	0.34	11	12
Sri Lanka	370	[328.1-417.2]	3.60	2.68	0.35	7	16
Maldives	0	[0-2.20]	0	0	0	19	13
Nepal	162	[111.9-234.5]	1.21	1.50	0.17	11	10
Pakistan	2,443	[1,868-3,195]	2.15	3.26	0.43	9	12
Western Asia	2,936	[2,612-3,300.2]	2.01	2.62	0.32	11	15
United Arab Emirates	20	[9.30-42.8]	0.29	0.98	0.10	15	17
Armenia	81	[58.8-111.5]	5.81	4.23	0.55	10	12
Azerbaijan	168	[136.7-206.5]	3.32	3.17	0.40	11	12
Bahrain	6	[1.90-19.2]	0.55	1.43	0.16	14	14
Georgia	205	[164-256.3]	10.8	6.97	0.89	7	13
Iraq	256	[220.2-297.6]	1.26	2.77	0.34	11	15
Israel	74	[52.8-103.7]	1.72	1.15	0.14	15	17
Jordan	97	[70.7-133.2]	1.88	2.88	0.37	11	9
Kuwait	19	[9.30-39]	0.73	0.96	0.14	14	24
Lebanon	65	[43-98.1]	1.89	1.78	0.23	13	17
Oman	27	[9.90-73.9]	0.80	1.32	0.16	13	11
Palestine	43	[6.70-277.2]	1.66	3.34	0.39	11	11
Qatar	9	[1.40-58]	0.42	0.77	0.13	14	21
Saudi Arabia	92	[64.5-131.3]	0.46	0.70	0.09	18	19
Syria	186	[28.8-1,199.2]	2.12	3.09	0.40	11	13
Turkey	1,327	[1,195.4-1,473]	3.19	2.90	0.36	12	20
Yemen	261	[114.7-593.7]	1.74	3.81	0.45	9	9

Data accessed on 27 Jan 2021

For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods

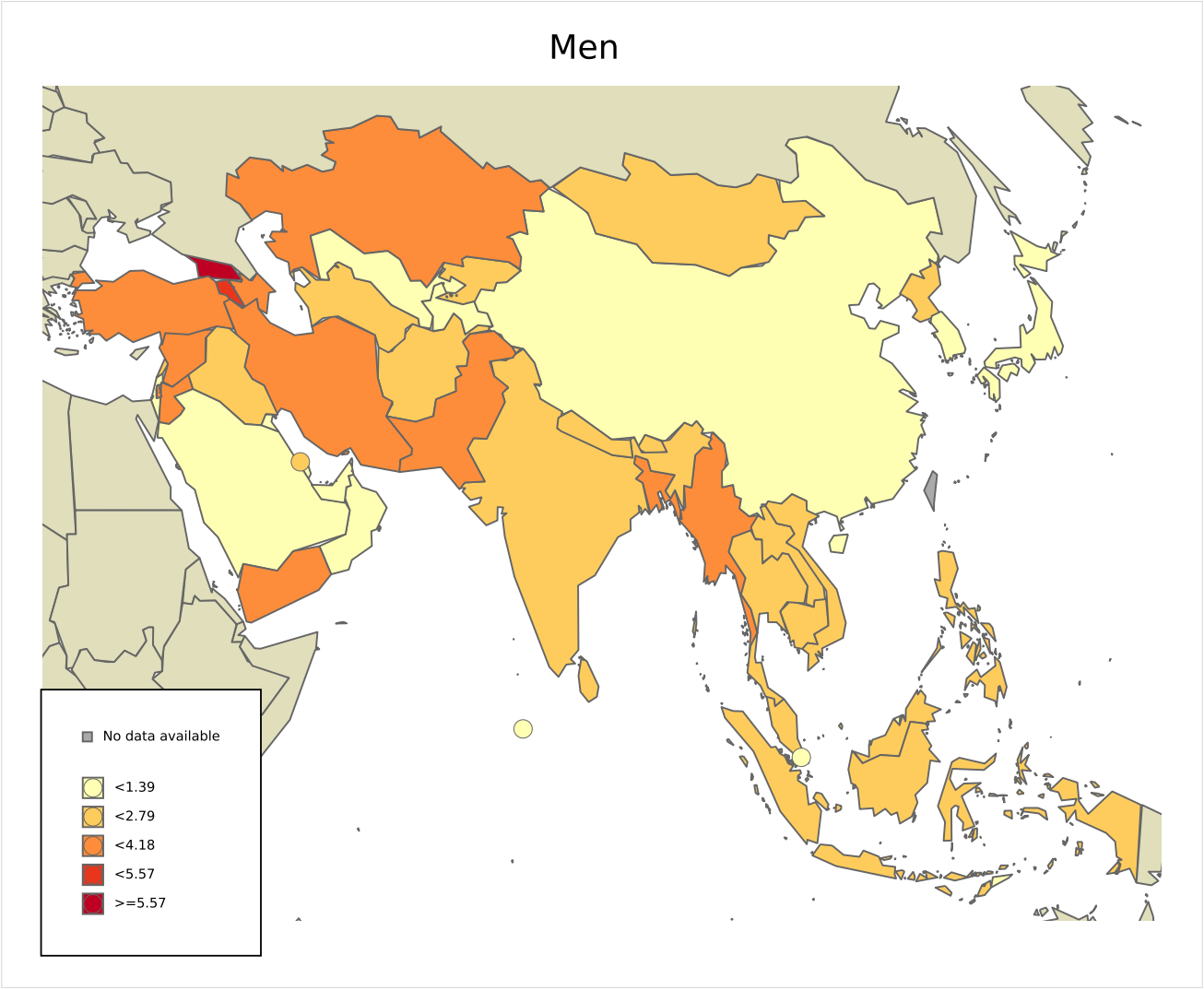
[a] Cumulative risk (mortality) is the probability or risk of individuals dying from the disease during ages 0-74 years. For cancer, it is expressed as the % of new born children who would be expected to die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.

[b] Rates per 100,000 men per year.

Data Sources:

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

Figure 41: Age-standardised mortality rates of laryngeal cancer among men in Asia (estimates for 2020)



Data accessed on 27 Jan 2021
For more detailed methods of estimation please refer to http://gco.iarc.fr/today/data-sources-methods
[a] Rates per 100,000 men per year.
Data Sources:
Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.fr/today, accessed [27 January 2021].

4 HPV related statistics

HPV infection is commonly found in the anogenital tract of men and women with and without clinical lesions. The aetiological role of HPV infection among women with cervical cancer is well-established, and there is growing evidence of its central role in other anogenital sites. HPV is also responsible for other diseases such as recurrent juvenile respiratory papillomatosis and genital warts, both mainly caused by HPV types 6 and 11(Lacey CJ, Vaccine 2006; 24(S3):35). For this section, the methodologies used to compile the information on HPV burden are derived from systematic reviews and meta-analyses of the literature. Due to the limitations of HPV DNA detection methods and study designs used, these data should be interpreted with caution and used only as a guide to assess the burden of HPV infection in the population. (Vaccine 2006, Vol. 24, Suppl 3; Vaccine 2008, Vol. 26, Suppl 10; Vaccine 2012, Vol. 30, Suppl 5; IARC Monographs 2007, Vol. 90).

4.1 HPV burden in women with normal cervical cytology, cervical precancerous lesions or invasive cervical cancer

The statistics shown in this section focus on HPV infection in the cervix uteri. HPV cervical infection results in cervical morphological lesions ranging from normalcy (cytologically normal women) to different stages of precancerous lesions (CIN-1, CIN-2, CIN-3/CIS) and invasive cervical cancer. HPV infection is measured by means of HPV DNA detection in cervical cells (fresh tissue, paraffin embedded or exfoliated cells).

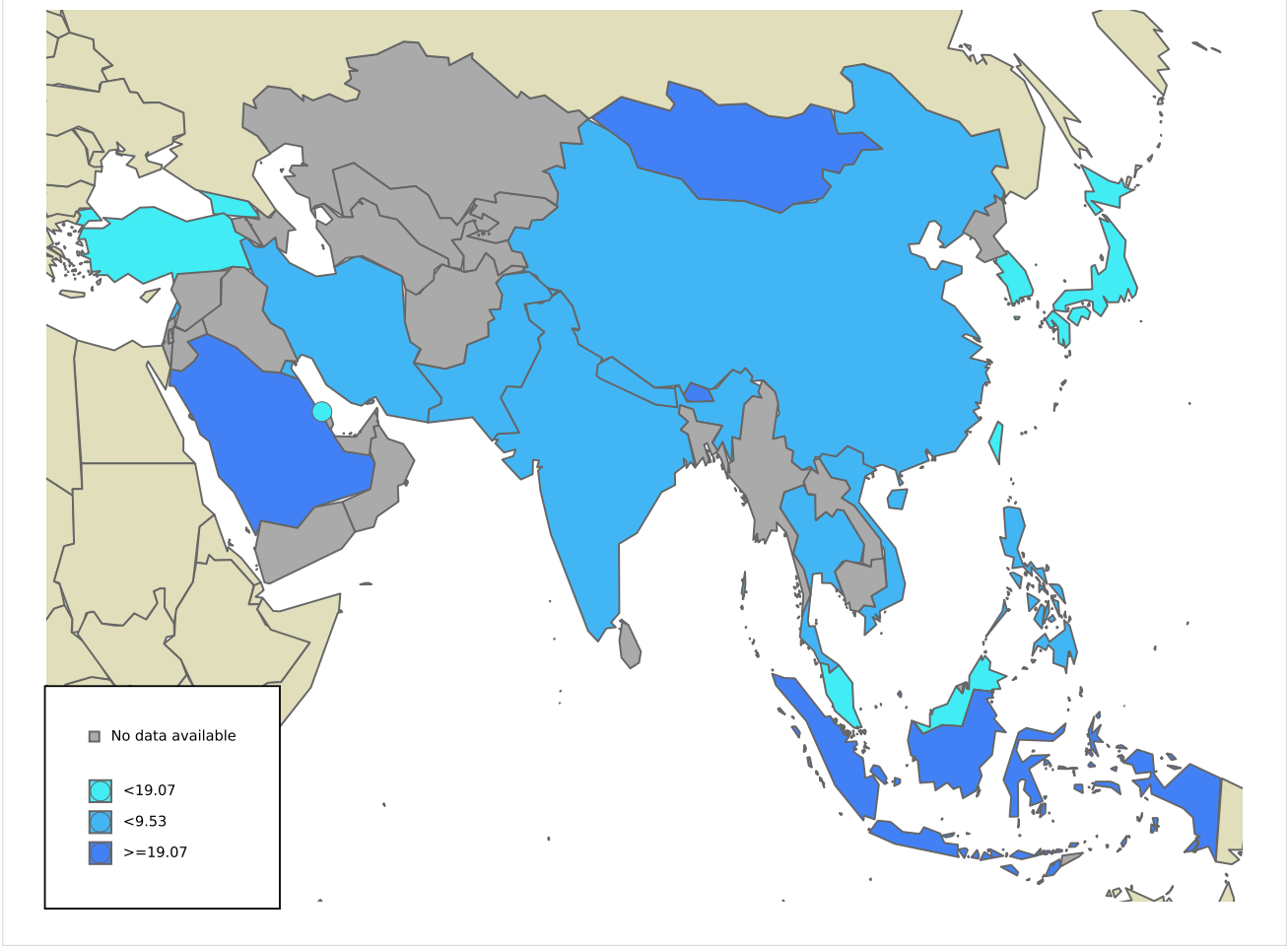
The prevalence of HPV increases with severity of the lesion. HPV causes virtually 100cervical cancer, and an underestimation of HPV prevalence in cervical cancer is most likely due to the limitations of study methodologies. Worldwide, HPV-16 and 18, the two vaccine-preventable types. contribute to over 7016-32% of low-grade cervical lesions. After HPV-16/18, the six most common HPV types are the same in all world regions, namely 31, 33, 35, 45, 52 and 58; these account for an additional 20cancers worldwide (Clifford G et al. Vaccine 2006;24(S3):26-34).

Methods: Prevalence and type distribution of human papillomavirus in cervical carcinoma, low-grade cervical lesions, high-grade cervical lesions and normal cytology: systematic review and meta-analysis

A systematic review of the literature was conducted regarding the worldwide HPV-prevalence and type distribution for cervical carcinoma, low-grade cervical lesions, high-grade cervical lesions and normal cytology from 1990 to 'data as of' indicated in each section. The search terms for the review were 'HPV' AND cerv* using Pubmed. There were no limits in publication language. References cited in selected articles were also investigated. Inclusion criteria were: HPV DNA detection by means of PCR or HC2, a minimum of 20 cases for cervical carcinoma, 20 cases for low-grade cervical lesions, 20 cases for highgrade cervical lesions and 100 cases for normal cytology and a detailed description of HPV DNA detection and genotyping techniques used. The number of cases tested and HPV positive extracted for each study were pooled to estimate the prevalence of HPV DNA and the HPV type distribution globally and by geographical region. Binomial 95% confidence intervals were calculated for each HPV prevalence. For more details refer to the methods document.

4.1.1 HPV prevalence in women with normal cervical cytology

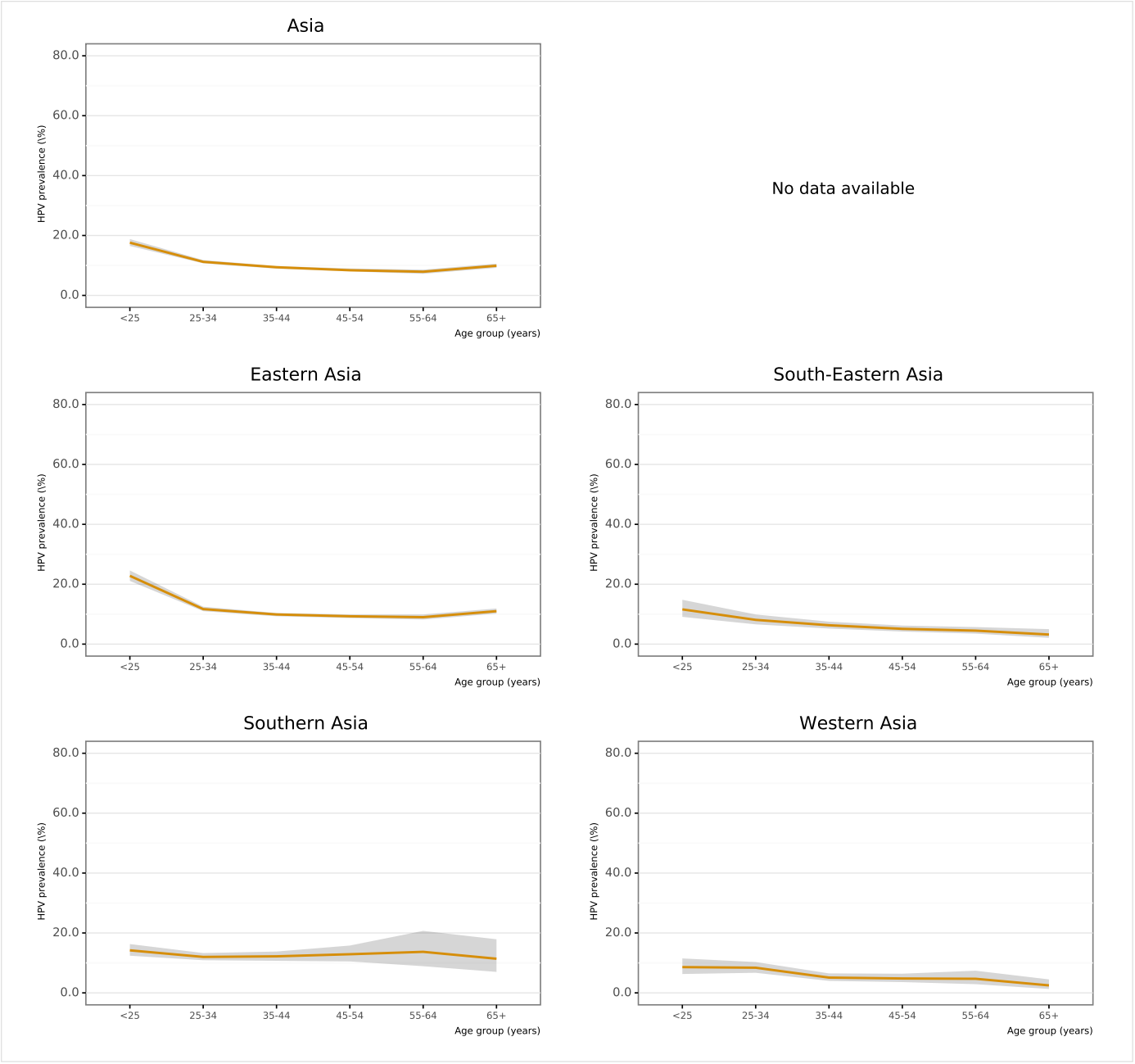
Figure 42: Prevalence of HPV among women with normal cervical cytology in Asia



Data updated on 22 May 2023 (data as of 30 Jun 2015)

Data Sources: See references in Section 9 References.

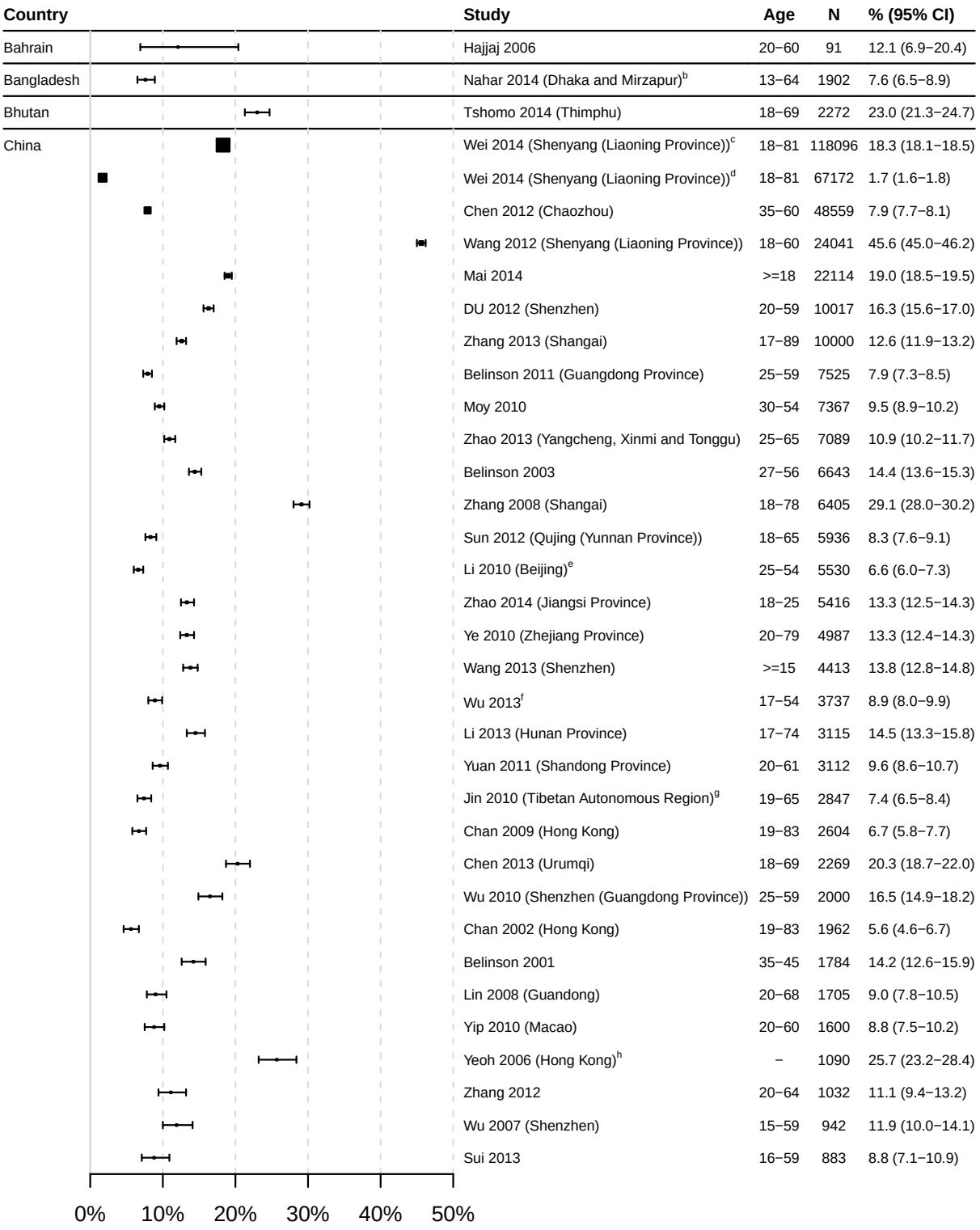
Figure 43: Crude age-specific HPV prevalence (%) and 95% confidence interval in women with normal cervical cytology in Asia and its regions



Data updated on 22 May 2023 (data as of 30 Jun 2014)

Data Sources: See references in Section 9 References.

Figure 44: Prevalence of HPV among women with normal cervical cytology in Asia, by country and study

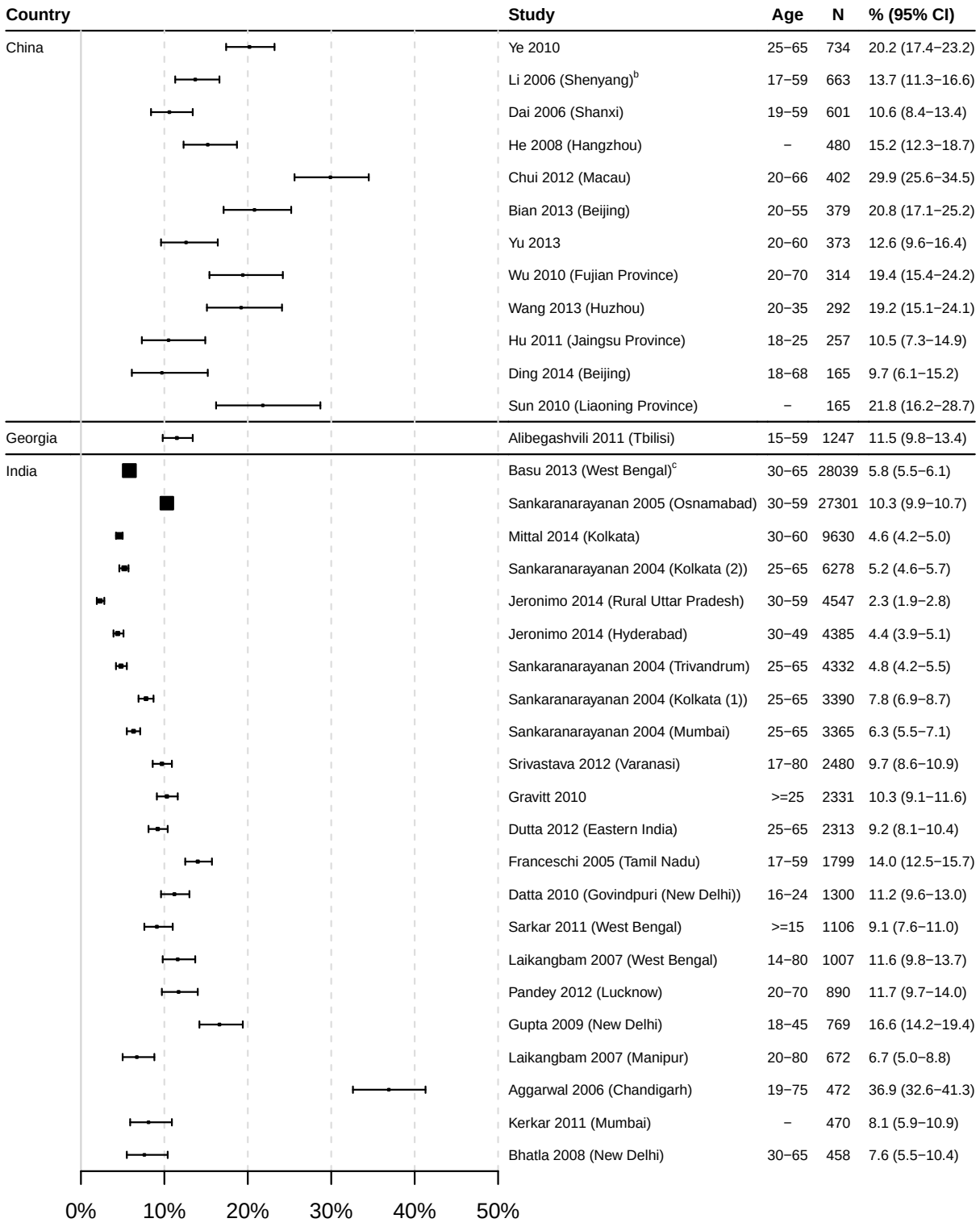


Data updated on 22 May 2023 (data as of 30 Jun 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
[b] Yangcheng and Xiangyuan (Shanxi)
[c] Beijing, Shanghai, Shanxi, Henan, Xinjiang
[d] Lishui County (Zhejiang Province)
[e] Uyghur (Yutian County, Xingjian Province)
[f] Shiquan County (Shaanxi Province)
[g] Shantou City (Guandong Province)

[h] Wufeng County (Hubei Province)
Data Sources: See references in Section 9 References.

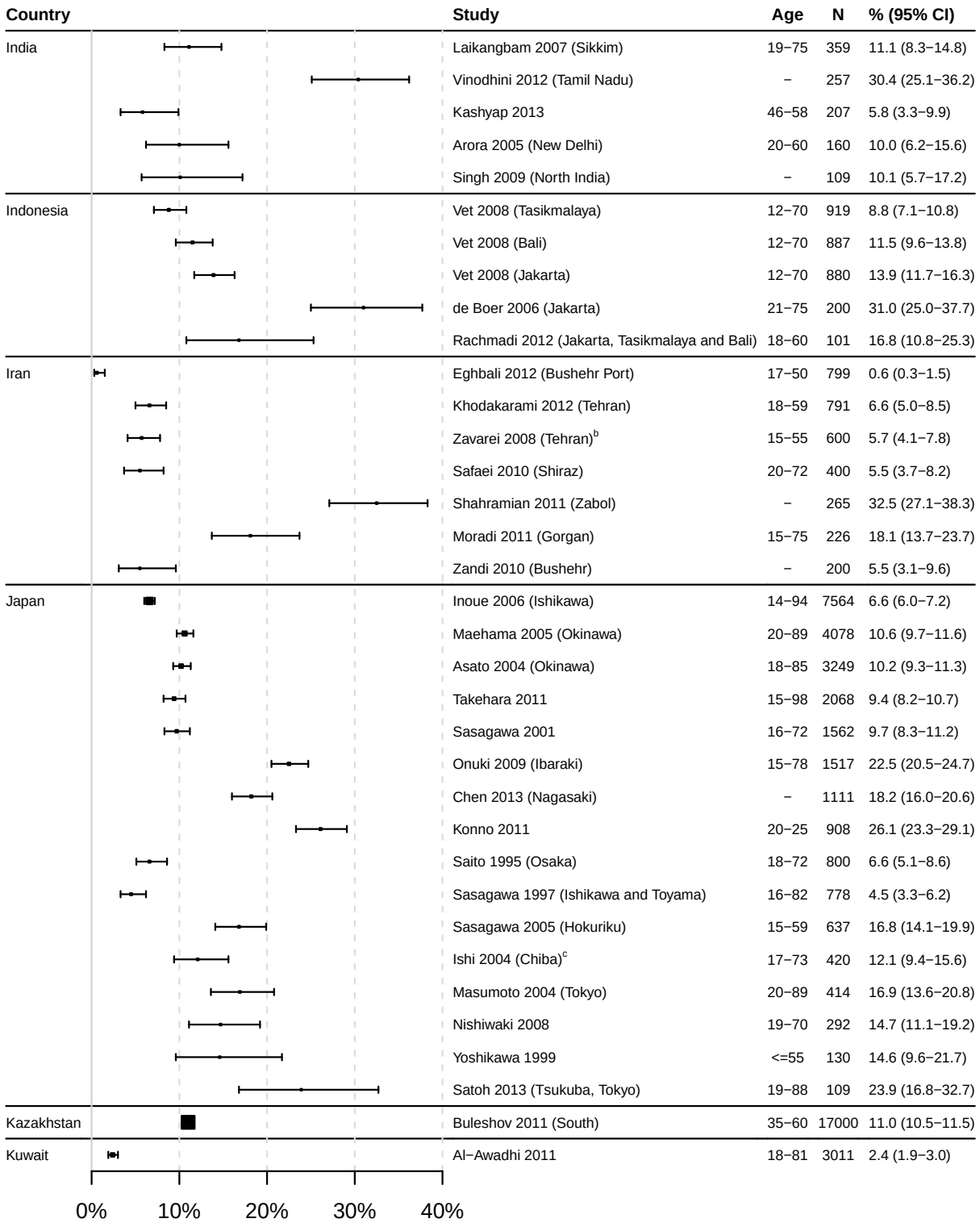
Figure 44: Prevalence of HPV among women with normal cervical cytology in Asia, by country and study (continued)



Data updated on 22 May 2023 (data as of 30 Jun 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
[b] Shanxi, Jiangxi and Gansu Provinces
[c] Medchal Mandal (Andhra Pradesh)
Data Sources: See references in Section 9 References.

Figure 44: Prevalence of HPV among women with normal cervical cytology in Asia, by country and study (continued)

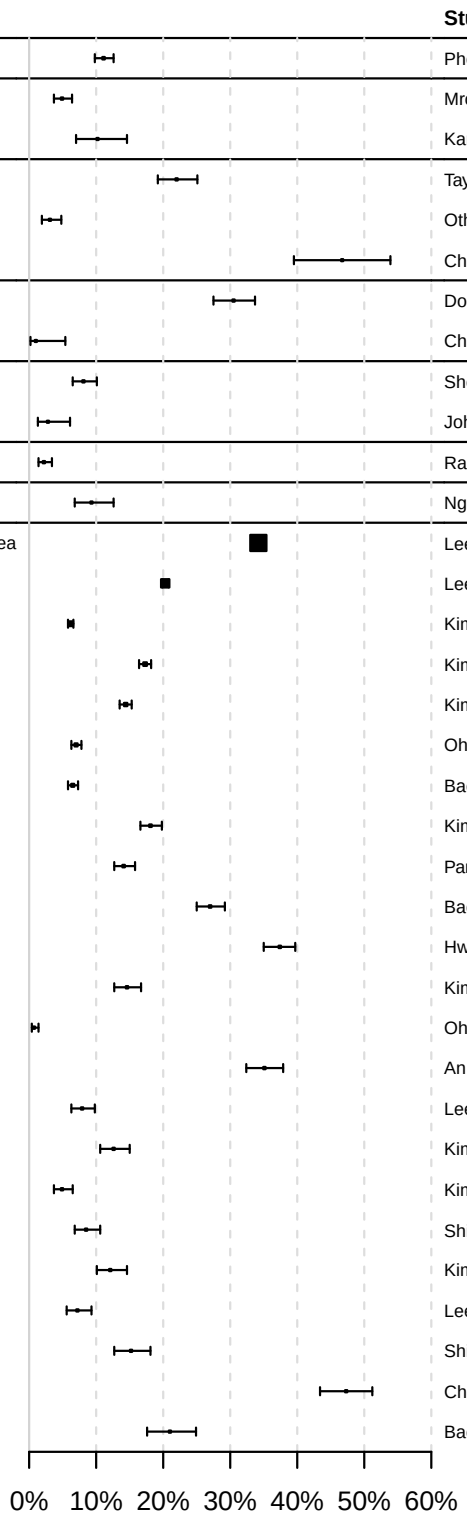


Country	Study	Age	N	% (95% CI)
India	Laikangbam 2007 (Sikkim)	19–75	359	11.1 (8.3–14.8)
	Vinodhini 2012 (Tamil Nadu)	–	257	30.4 (25.1–36.2)
	Kashyap 2013	46–58	207	5.8 (3.3–9.9)
	Arora 2005 (New Delhi)	20–60	160	10.0 (6.2–15.6)
	Singh 2009 (North India)	–	109	10.1 (5.7–17.2)
Indonesia	Vet 2008 (Tasikmalaya)	12–70	919	8.8 (7.1–10.8)
	Vet 2008 (Bali)	12–70	887	11.5 (9.6–13.8)
	Vet 2008 (Jakarta)	12–70	880	13.9 (11.7–16.3)
	de Boer 2006 (Jakarta)	21–75	200	31.0 (25.0–37.7)
	Rachmadi 2012 (Jakarta, Tasikmalaya and Bali)	18–60	101	16.8 (10.8–25.3)
Iran	Eghbali 2012 (Bushehr Port)	17–50	799	0.6 (0.3–1.5)
	Khodakarami 2012 (Tehran)	18–59	791	6.6 (5.0–8.5)
	Zavarei 2008 (Tehran)[b]	15–55	600	5.7 (4.1–7.8)
	Safaei 2010 (Shiraz)	20–72	400	5.5 (3.7–8.2)
	Shahramian 2011 (Zabol)	–	265	32.5 (27.1–38.3)
	Moradi 2011 (Gorgan)	15–75	226	18.1 (13.7–23.7)
	Zandi 2010 (Bushehr)	–	200	5.5 (3.1–9.6)
Japan	Inoue 2006 (Ishikawa)	14–94	7564	6.6 (6.0–7.2)
	Maehama 2005 (Okinawa)	20–89	4078	10.6 (9.7–11.6)
	Asato 2004 (Okinawa)	18–85	3249	10.2 (9.3–11.3)
	Takehara 2011	15–98	2068	9.4 (8.2–10.7)
	Sasagawa 2001	16–72	1562	9.7 (8.3–11.2)
	Onuki 2009 (Ibaraki)	15–78	1517	22.5 (20.5–24.7)
	Chen 2013 (Nagasaki)	–	1111	18.2 (16.0–20.6)
	Konno 2011	20–25	908	26.1 (23.3–29.1)
	Saito 1995 (Osaka)	18–72	800	6.6 (5.1–8.6)
	Sasagawa 1997 (Ishikawa and Toyama)	16–82	778	4.5 (3.3–6.2)
	Sasagawa 2005 (Hokuriku)	15–59	637	16.8 (14.1–19.9)
	Ishi 2004 (Chiba)[c]	17–73	420	12.1 (9.4–15.6)
	Masumoto 2004 (Tokyo)	20–89	414	16.9 (13.6–20.8)
	Nishiwaki 2008	19–70	292	14.7 (11.1–19.2)
	Yoshikawa 1999	<=55	130	14.6 (9.6–21.7)
	Satoh 2013 (Tsukuba, Tokyo)	19–88	109	23.9 (16.8–32.7)
Kazakhstan	Buleshov 2011 (South)	35–60	17000	11.0 (10.5–11.5)
Kuwait	Al–Awadhi 2011	18–81	3011	2.4 (1.9–3.0)

Data updated on 22 May 2023 (data as of 30 Jun 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
[b] Aomori, Tokyo, Fukui, Osaka, Hiroshima, Miyazaki and Kagoshima
[c] Hokuriku(Fukui, Ishikawa and Toyama)
Data Sources: See references in Section 9 References.

Figure 44: Prevalence of HPV among women with normal cervical cytology in Asia, by country and study (continued)

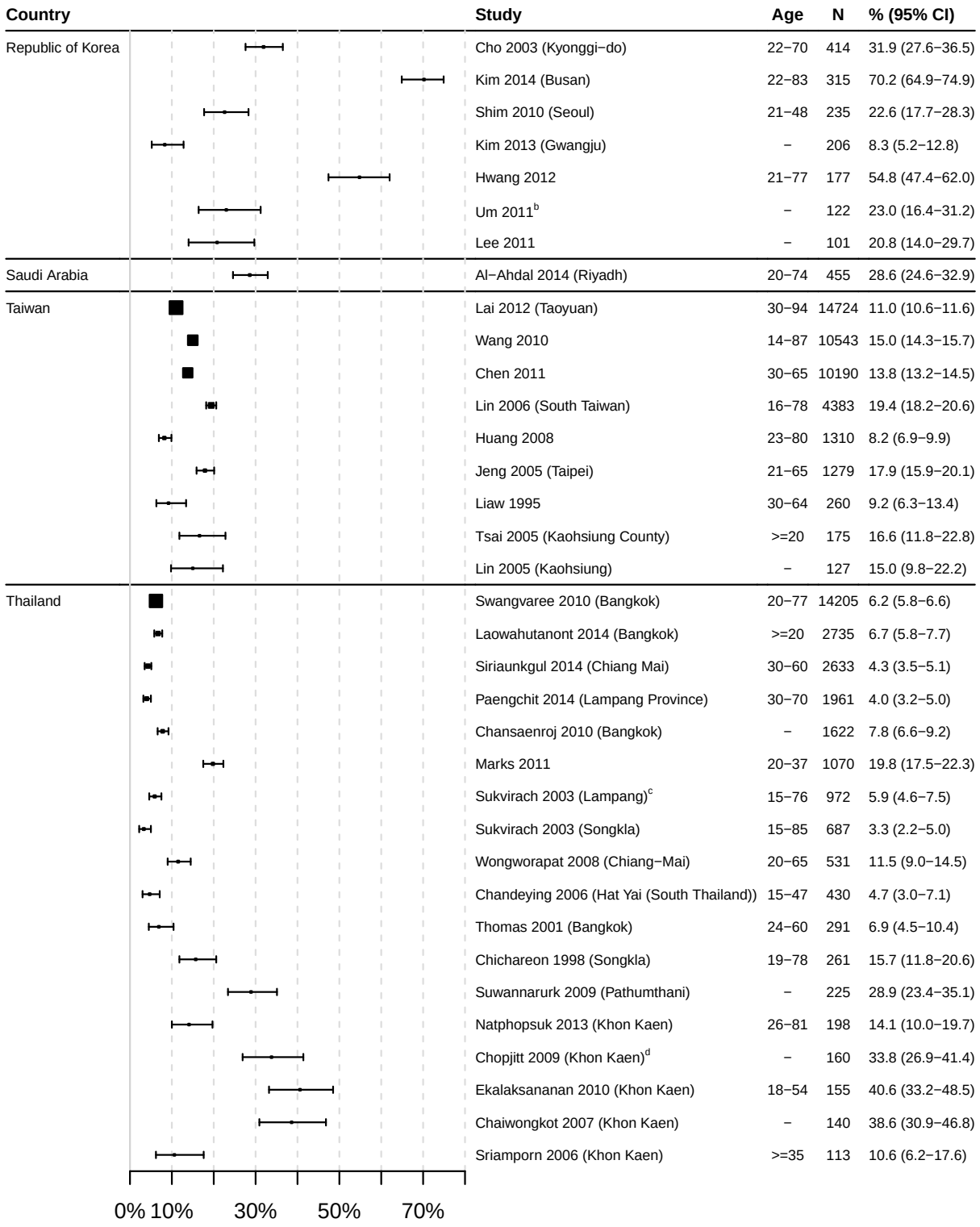


Country	Study	Age	N	% (95% CI)
Laos	Phongsavan 2012	25–48	1922	11.1 (9.8–12.6)
Lebanon	Mroueh 2002	18–70	1026	4.9 (3.7–6.4)
	Karam 2005	20–67	246	10.2 (7.0–14.6)
Malaysia	Tay 2009 (Johor and Singapore)[b]	18–77	745	22.0 (19.2–25.1)
	Othman 2014	–	588	3.1 (1.9–4.8)
	Chong 2010 (Southern Selangor)	19–69	180	46.7 (39.5–53.9)
Mongolia	Dondog 2008 (Ulaanbaatar)	15–59	842	30.5 (27.5–33.7)
	Chimeddorj 2008	–	100	1.0 (0.2–5.4)
Nepal	Sherpa 2010 (Bharatpur (Chitawan Province))	15–59	898	8.1 (6.5–10.1)
	Johnson 2014	16–60	211	2.8 (1.3–6.1)
Pakistan	Raza 2010 (Karachi)	15–59	877	2.2 (1.4–3.4)
Philippines	Ngelangel 1998 (Manila)	21–72	377	9.3 (6.8–12.6)
Republic of Korea	Lee 2012[c]	18–79	60775	34.2 (33.8–34.6)
	Lee 2012 (Suwon)	–	26980	20.3 (19.9–20.8)
	Kim 2012 (Seoul)	–	11800	6.2 (5.8–6.6)
	Kim 2013 (Seoul)	–	6681	17.3 (16.4–18.2)
	Kim 2014 (Cheonan)	19–78	5494	14.4 (13.5–15.3)
	Oh 2009 (Busan and Suwon)	20–69	4467	7.0 (6.3–7.8)
	Bae 2009 (Gyeonggi, Seoul)	30–84	4111	6.5 (5.8–7.3)
	Kim 2013 (Seoul)	21–76	2146	18.1 (16.6–19.8)
	Park 2014	43–57	1938	14.1 (12.7–15.8)
	Bae 2009	15–75	1750	27.0 (25.0–29.2)
	Hwang 2004	18–62	1609	37.4 (35.0–39.7)
	Kim 2012	–	1214	14.6 (12.7–16.7)
	Oh 2001 (Seoul)	23–72	1144	0.7 (0.4–1.4)
	An 2003 (Kyonggi–do)	–	1143	35.1 (32.4–37.9)
	Lee 2014 (Seoul, Busan, Cheonan)	25–79	912	7.9 (6.3–9.8)
	Kim 2010	20–59	902	12.6 (10.6–15.0)
	Kim 2012	20–59	902	4.9 (3.7–6.5)
	Shin 2003 (Busan)[d]	20–74	821	8.5 (6.8–10.6)
	Kim 2014 (Gangnam (Seoul))	25–81	799	12.1 (10.1–14.6)
	Lee 2003 (Seoul)	–	746	7.2 (5.6–9.3)
	Shin 2004 (Busan)	16–29	672	15.2 (12.7–18.1)
	Cho 2011	–	624	47.3 (43.4–51.2)
	Bae 2014 (Seoul)	18–85	471	21.0 (17.6–24.9)

Data updated on 22 May 2023 (data as of 30 Jun 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
[b] Chiang Mai, Khon Kaen, Bangkok, Songkla and Hat Yai
[c] Luang Prabang, Champassack and Vientiane
[d] North-Eastern region os West Malaysia
Data Sources: See references in Section 9 References.

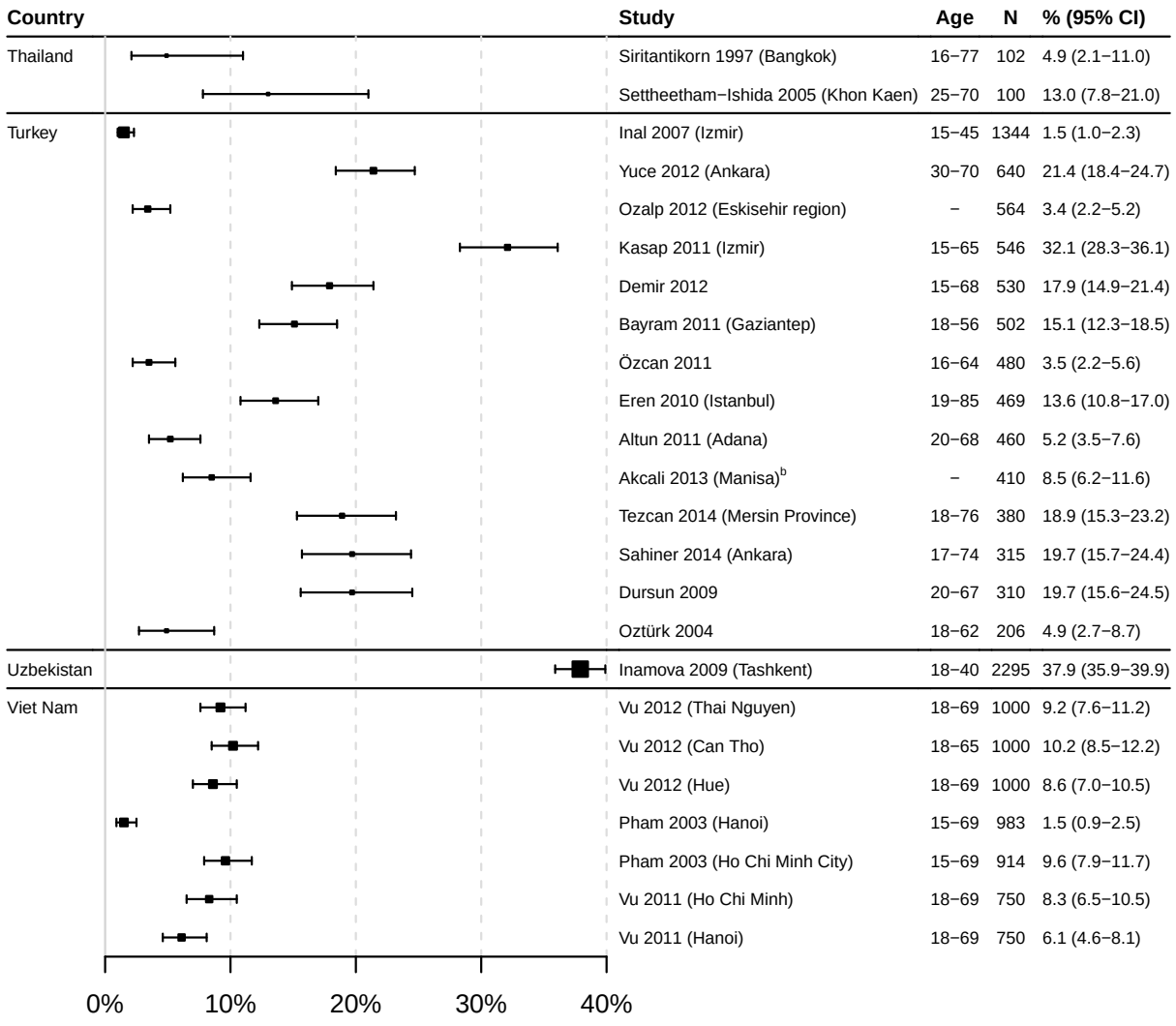
Figure 44: Prevalence of HPV among women with normal cervical cytology in Asia, by country and study (continued)



Data updated on 22 May 2023 (data as of 30 Jun 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
[b] Sanphebagar Village (Achham District)
[c] Sanchi, Chutung, Potzu,Kaoshu, Makung, Paihsa and Huhsi
[d] Istanbul, Ankara, Antalya, Nigde and Elazig
Data Sources: See references in Section 9 References.

Figure 44: Prevalence of HPV among women with normal cervical cytology in Asia, by country and study (continued)



Data updated on 22 May 2023 (data as of 30 Jun 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
[b] Taipei, Taoyuan, Chungli, Hsinchu, Keelung)
Data Sources: See references in Section 9 References.

4.1.2 HPV type distribution among women with normal cervical cytology, precancerous cervical lesions and cervical cancer

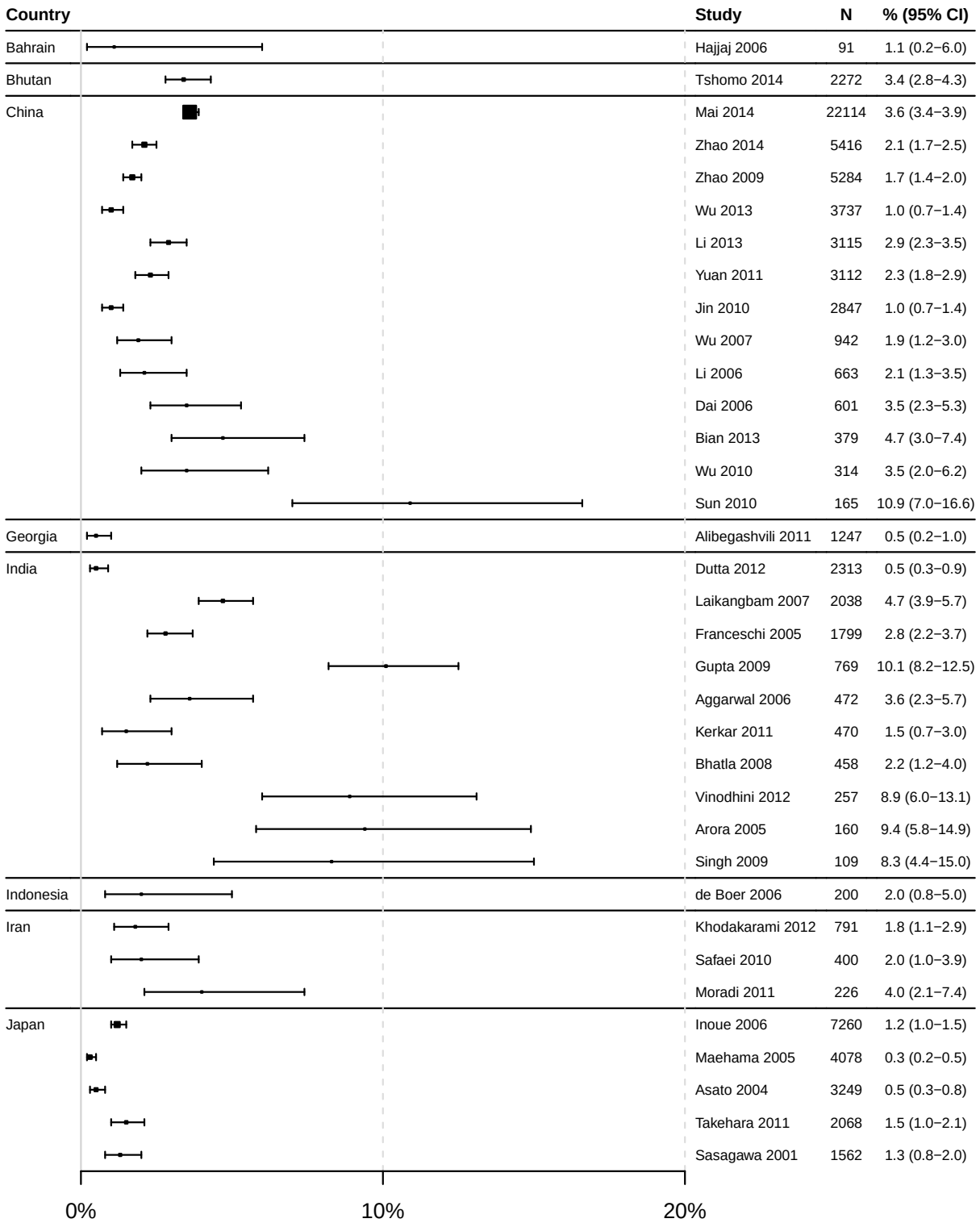
Table 28: Prevalence of HPV16 and HPV18 by cytology in Asia

	No. tested[a]	HPV 16/18 Prevalence % (95% CI)[b]
Normal cytology[1,2]	142676	3.4 (3.3-3.5)
Low-grade lesions[3,4]	7959	21.2 (20.3-22.1)
High-grade lesions[5,6]	13444	42.1 (41.3-42.9)
Cervical cancer[7,8]	20766	68.9 (68.3-69.5)

Data updated on 22 May 2023 (data as of 30 Jun 2015 / 30 Nov 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
[b] 95% Confidence Interval
Data Sources: See references in Section 9 References.

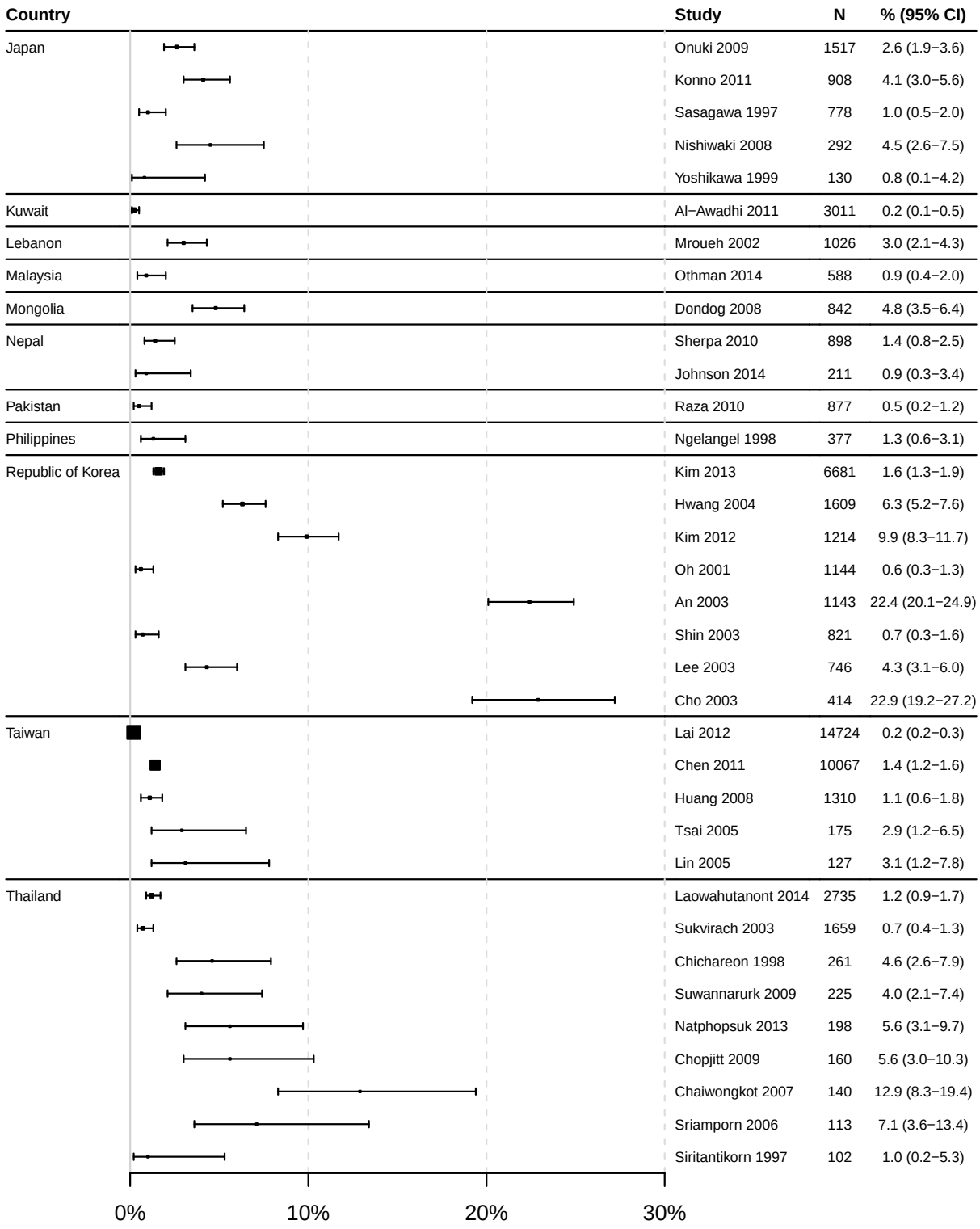
Figure 45: Prevalence of HPV 16 among women with normal cervical cytology in Asia, by country and study



Data updated on 22 May 2023 (data as of 30 Jun 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

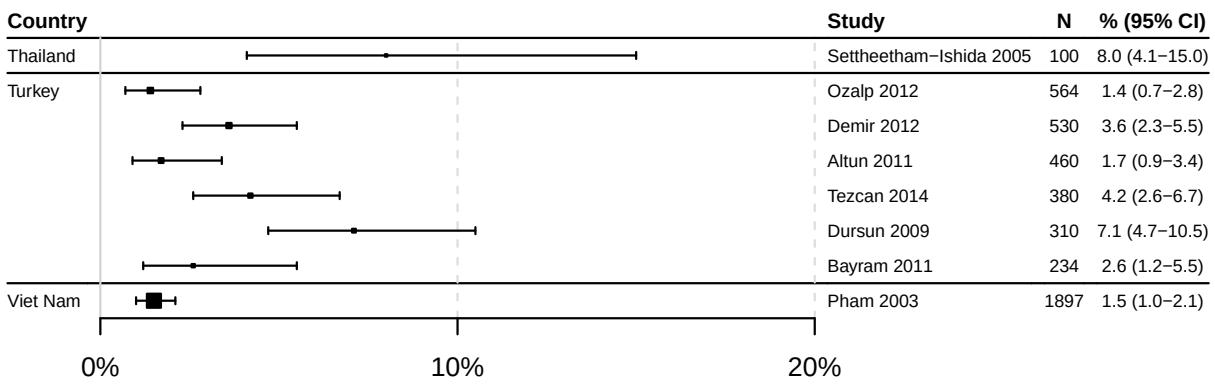
Figure 45: Prevalence of HPV 16 among women with normal cervical cytology in Asia, by country and study (continued)



Data updated on 22 May 2023 (data as of 30 Jun 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

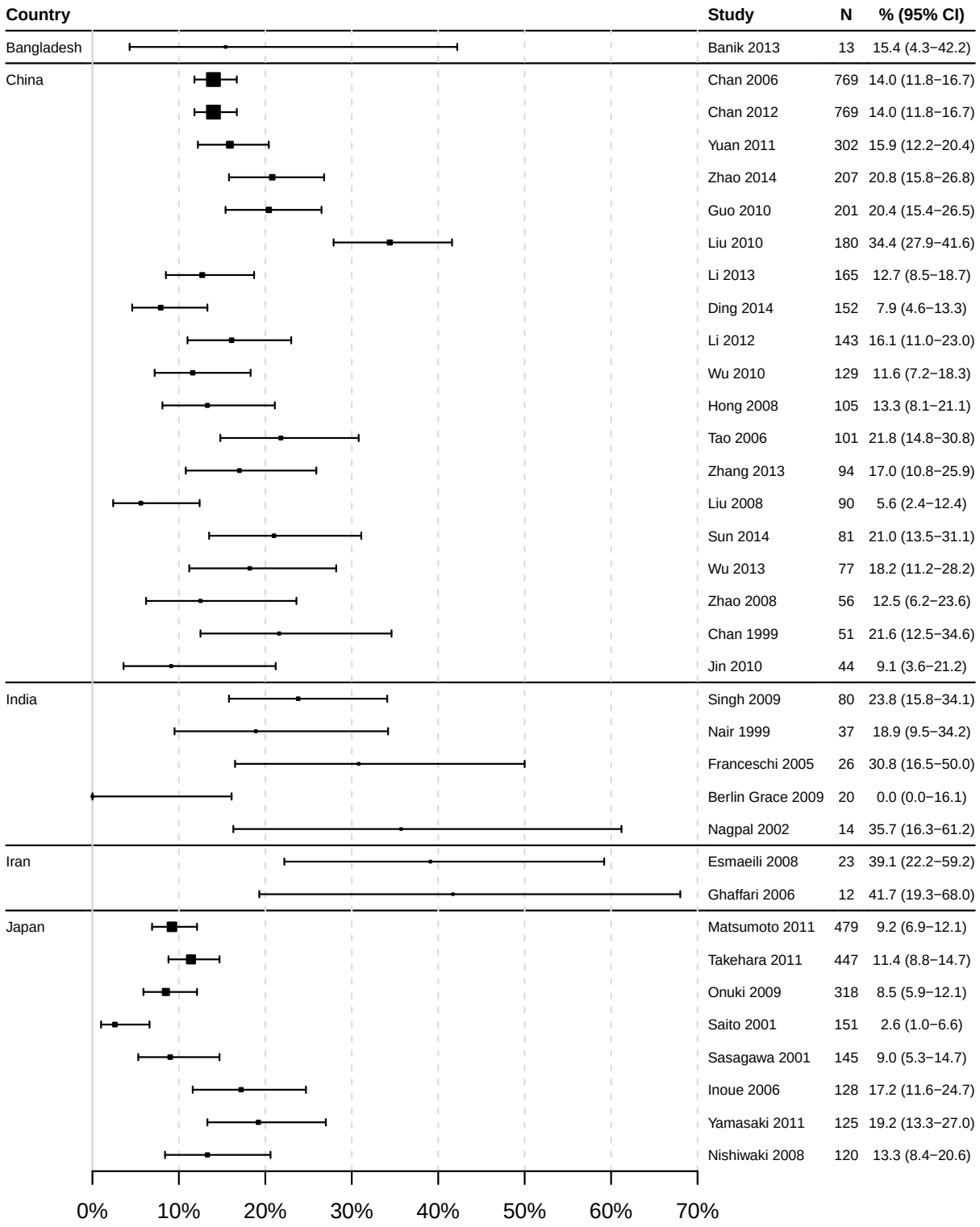
Figure 45: Prevalence of HPV 16 among women with normal cervical cytology in Asia, by country and study (continued)



Data updated on 22 May 2023 (data as of 30 Jun 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

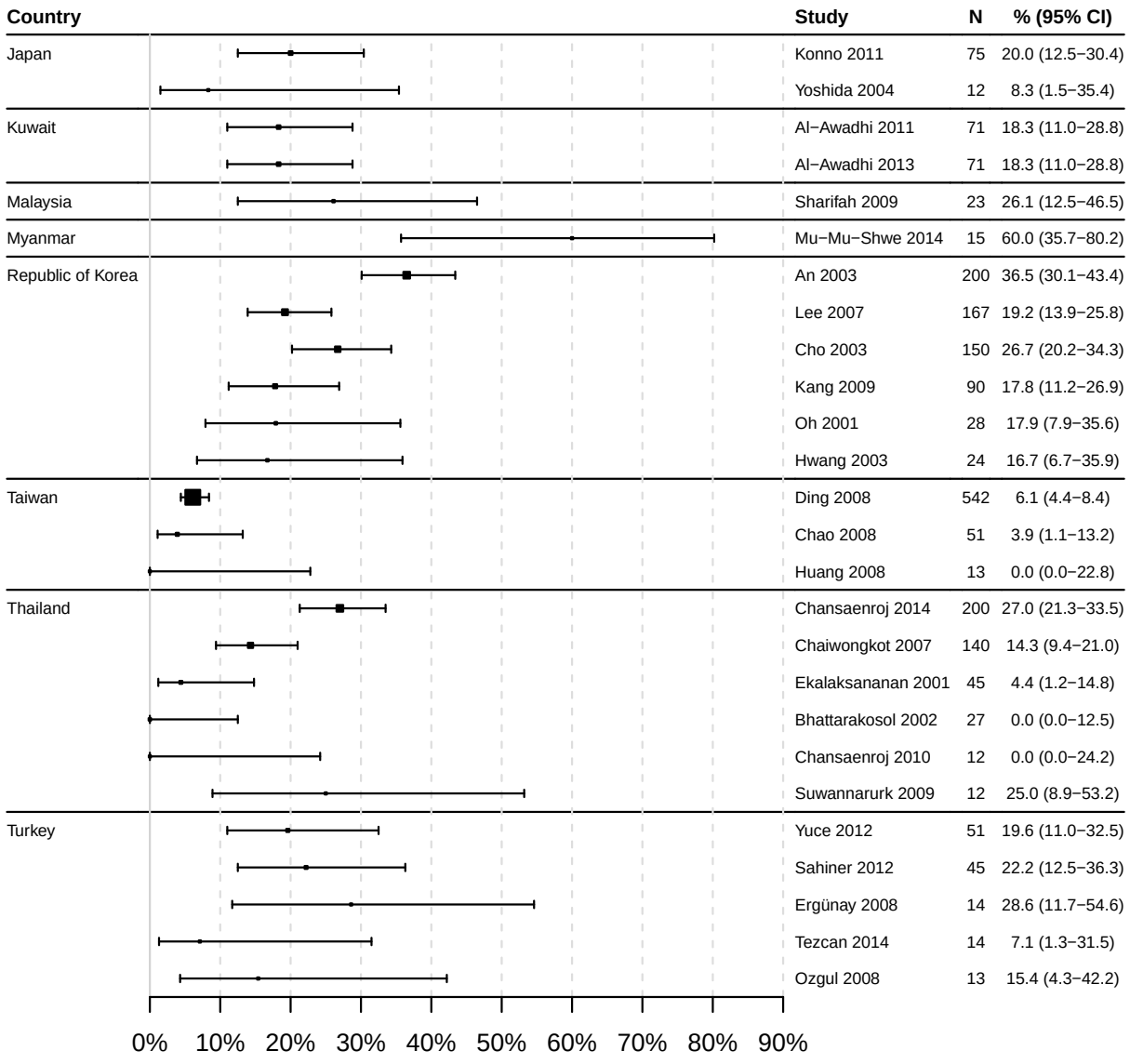
Figure 46: Prevalence of HPV 16 among women with low-grade cervical lesions in Asia, by country and study



Data updated on 22 May 2023 (data as of 30 Jun 2015)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

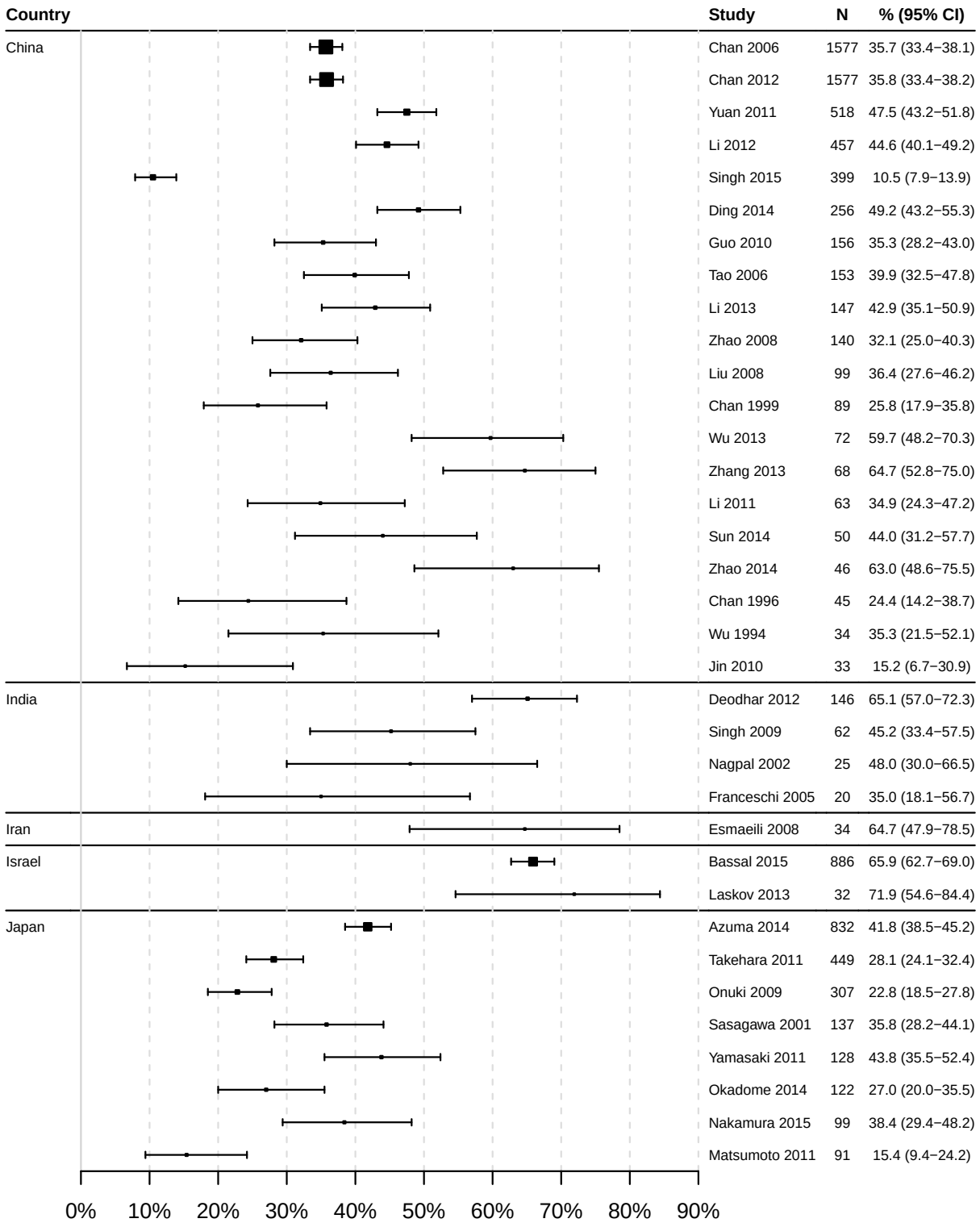
Figure 46: Prevalence of HPV 16 among women with low-grade cervical lesions in Asia, by country and study (continued)



Data updated on 22 May 2023 (data as of 30 Jun 2015)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

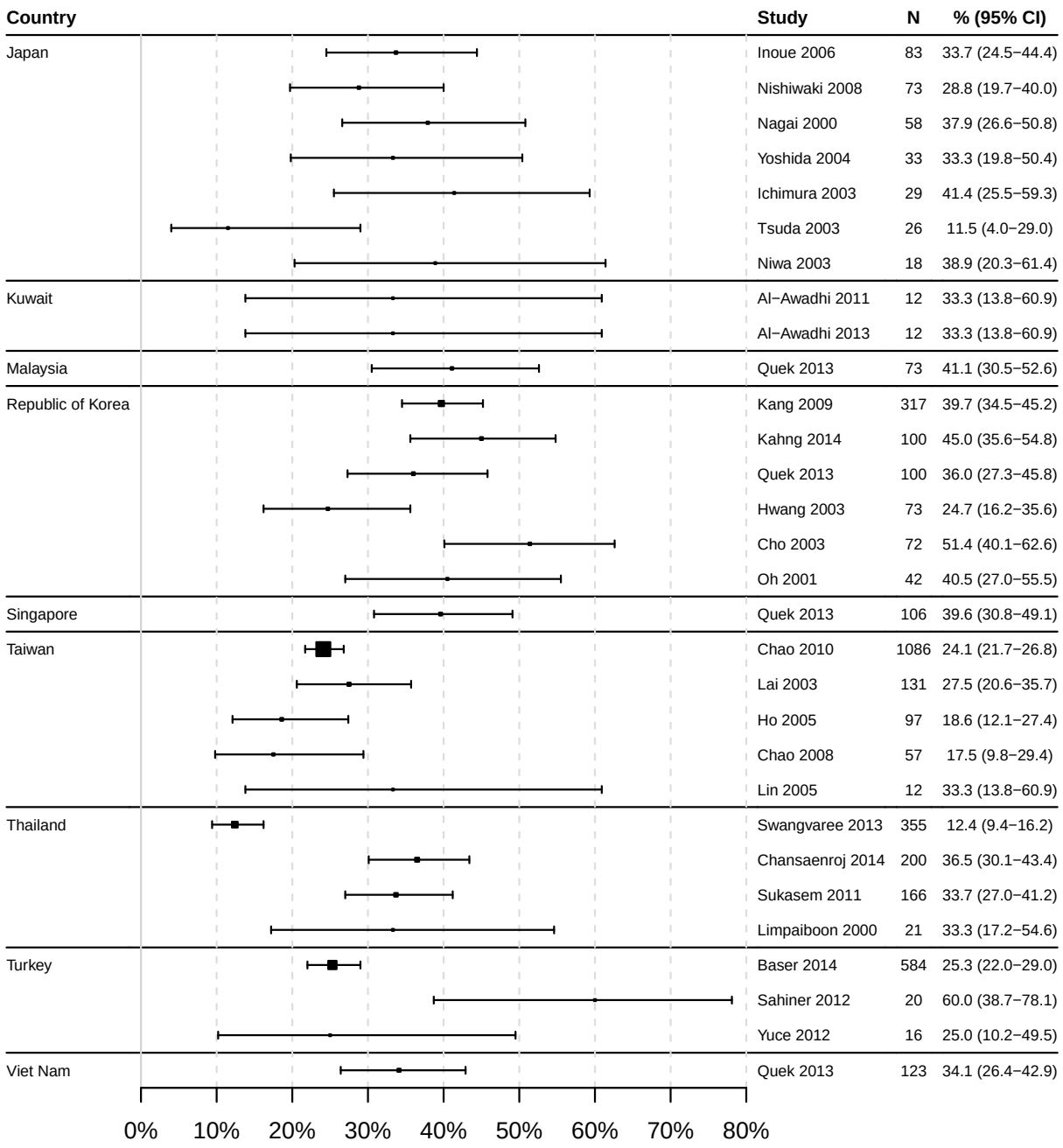
Figure 47: Prevalence of HPV 16 among women with high-grade cervical lesions in Asia, by country and study



Data updated on 22 May 2023 (data as of 30 Jun 2015)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

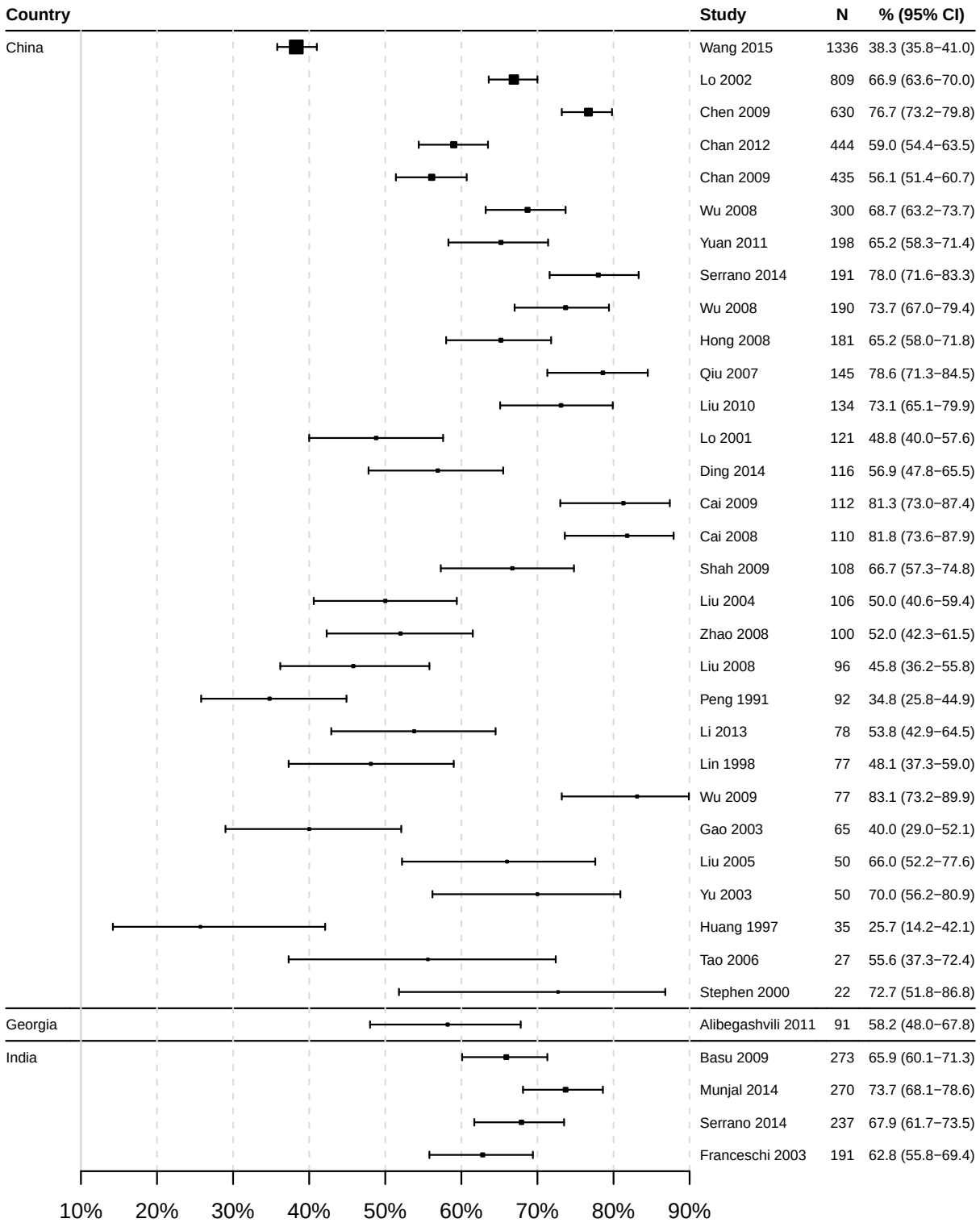
Figure 47: Prevalence of HPV 16 among women with high-grade cervical lesions in Asia, by country and study (continued)



Data updated on 22 May 2023 (data as of 30 Jun 2015)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

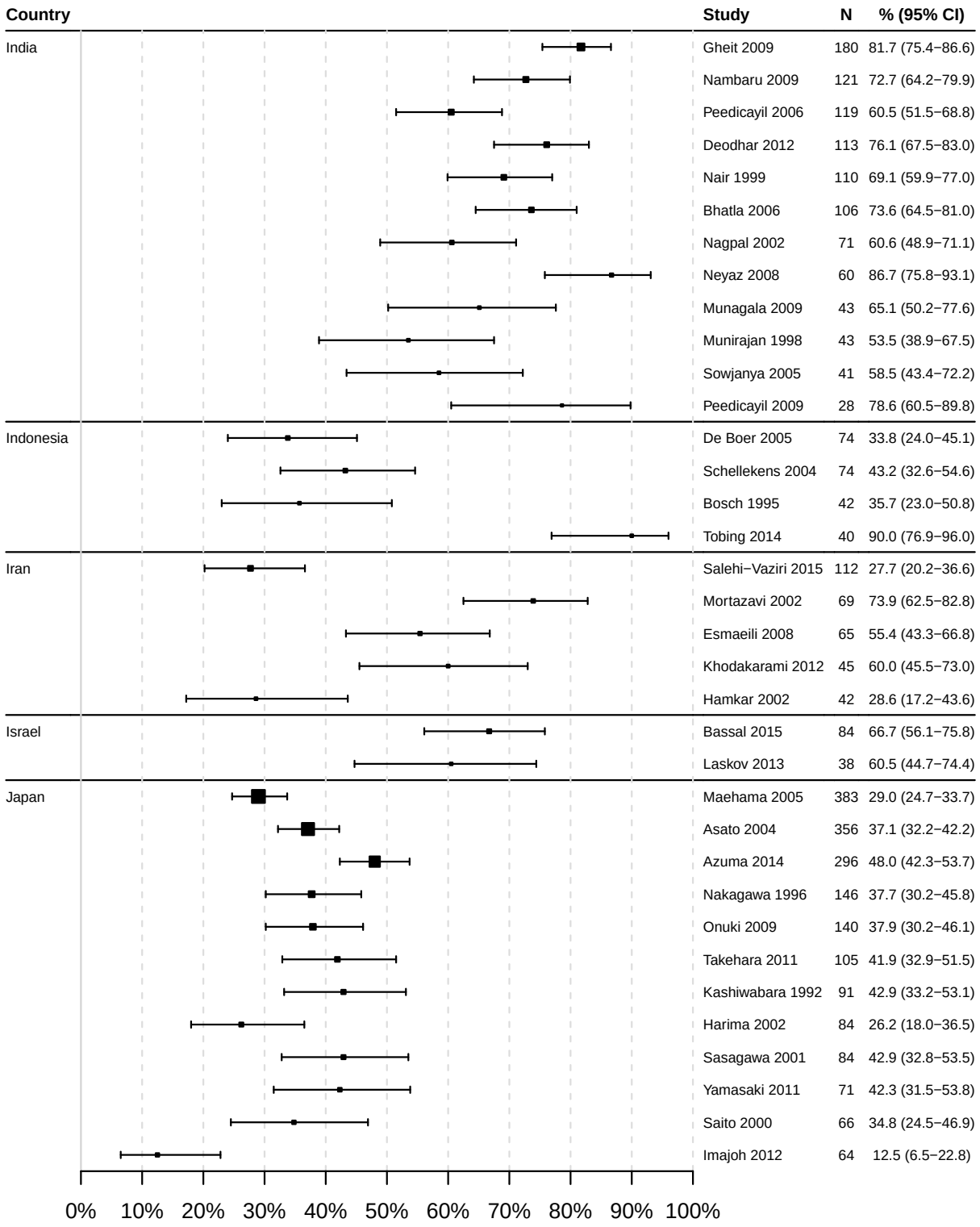
Figure 48: Prevalence of HPV 16 among women with invasive cervical cancer in Asia, by country and study



Data updated on 22 May 2023 (data as of 30 Jun 2015)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

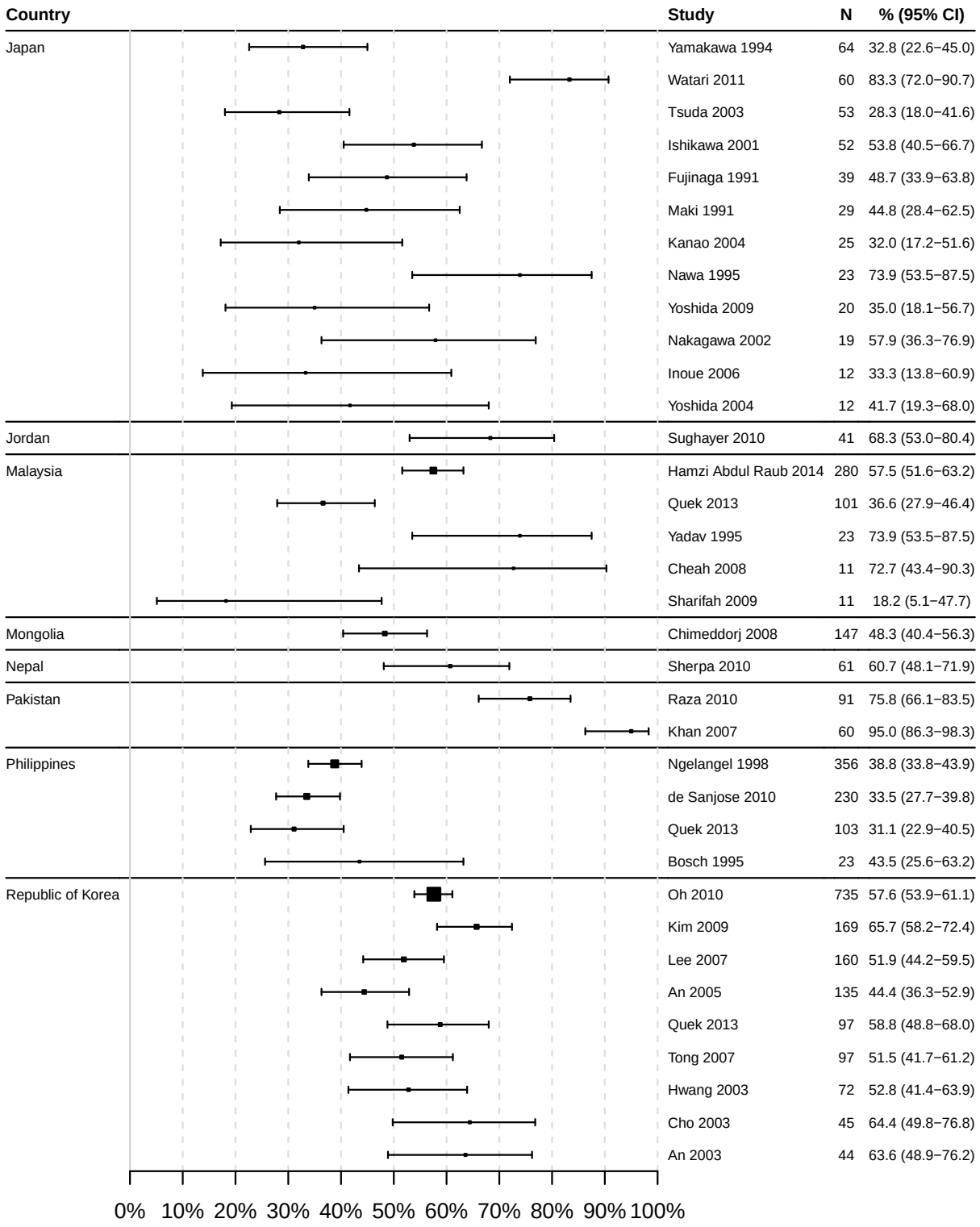
Figure 48: Prevalence of HPV 16 among women with invasive cervical cancer in Asia, by country and study (continued9



Data updated on 22 May 2023 (data as of 30 Jun 2015)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

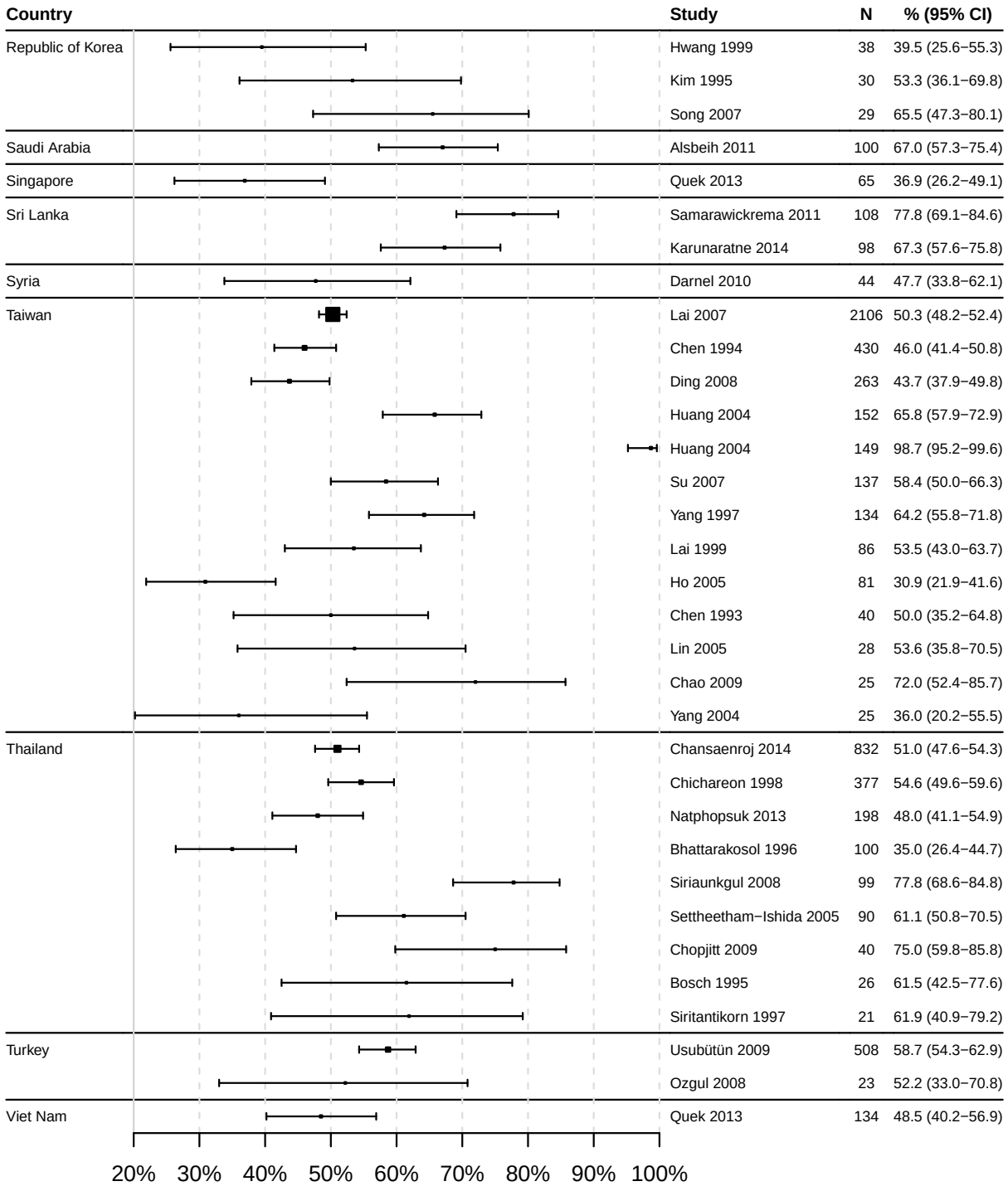
Figure 48: Prevalence of HPV 16 among women with invasive cervical cancer in Asia, by country and study (continued9



Data updated on 22 May 2023 (data as of 30 Jun 2015)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

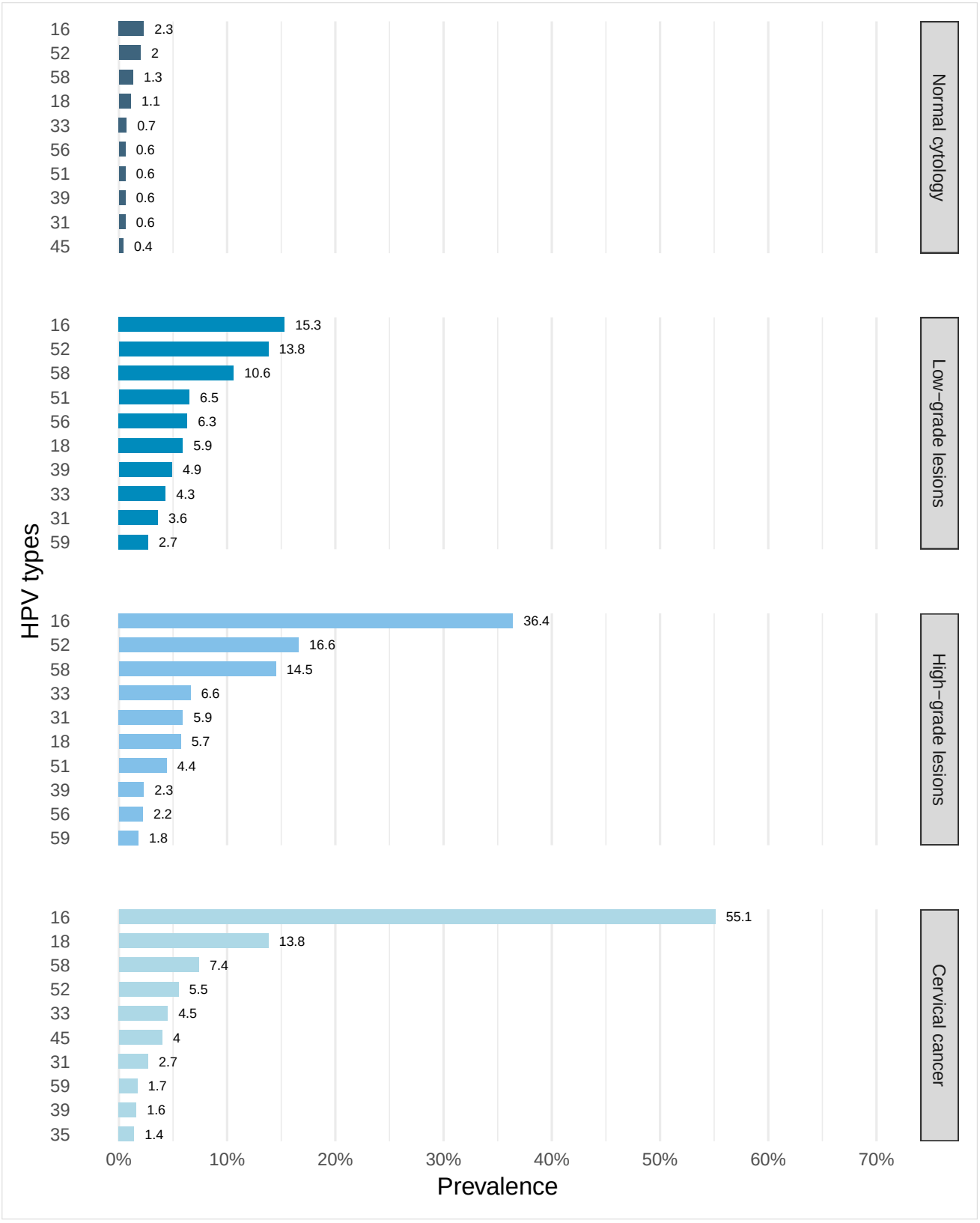
Figure 48: Prevalence of HPV 16 among women with invasive cervical cancer in Asia, by country and study (continued9



Data updated on 22 May 2023 (data as of 30 Jun 2015)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
Data Sources: See references in Section 9 References.

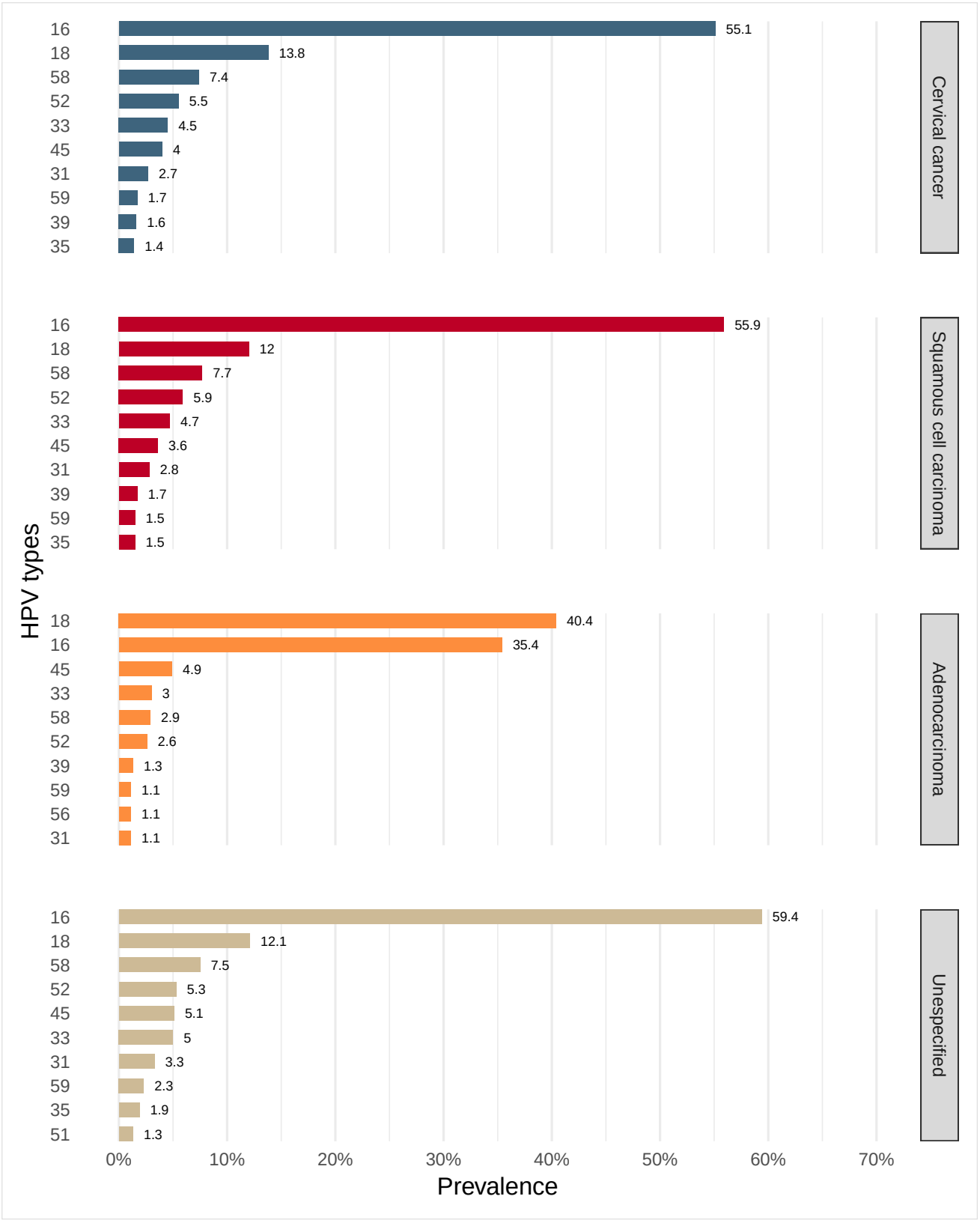
Figure 49: Comparison of the ten most frequent HPV oncogenic types in Asia among women with and without cervical lesions



Data updated on 22 May 2023 (data as of 30 Jun 2015)

Data Sources: See references in Section 9 References.

Figure 50: Comparison of the ten most frequent HPV oncogenic types in Asia among women with invasive cervical cancer by histology



Data updated on 22 May 2023 (data as of 30 Jun 2015)

* No data available. No more types than shown were tested or were positive
Data Sources: See references in Section 9 References.

Table 29: Type-specific HPV prevalence in women with normal cervical cytology, precancerous cervical lesions and invasive cervical cancer in Asia

HPV Type	Normal cytology		Low-grade lesions		High-grade lesions		Cervical cancer	
	No. tested	HPV Prev % (95% CI)	No. tested	HPV Prev % (95% CI)	No. tested	HPV Prev % (95% CI)	No. tested	HPV Prev % (95% CI)
ONCOGENIC HPV TYPES								
High-risk HPV types								
16	142,676	2.3 (2.2-2.4)	7,959	15.3 (14.5-16.1)	13,444	36.4 (35.6-37.3)	20,766	55.1 (54.4-55.7)
18	134,981	1.1 (1.0-1.1)	7,959	5.9 (5.4-6.5)	13,444	5.7 (5.4-6.1)	20,487	13.8 (13.4-14.3)
31	124,291	0.6 (0.6-0.6)	7,383	3.6 (3.2-4.0)	13,108	5.9 (5.5-6.3)	17,691	2.7 (2.5-3.0)
33	124,689	0.7 (0.7-0.8)	7,723	4.3 (3.8-4.7)	13,226	6.6 (6.1-7.0)	18,474	4.5 (4.2-4.8)
35	120,080	0.3 (0.3-0.4)	7,509	1.3 (1.0-1.5)	11,764	1.2 (1.0-1.4)	14,429	1.4 (1.2-1.6)
39	114,047	0.6 (0.6-0.7)	7,029	4.9 (4.4-5.4)	11,886	2.3 (2.0-2.6)	15,287	1.6 (1.4-1.8)
45	116,818	0.4 (0.4-0.4)	7,232	1.1 (0.8-1.3)	12,119	1.5 (1.3-1.8)	13,810	4.0 (3.6-4.3)
51	114,924	0.6 (0.6-0.7)	7,259	6.5 (5.9-7.0)	12,379	4.4 (4.1-4.8)	13,033	1.0 (0.8-1.2)
52	119,710	2.0 (1.9-2.0)	7,363	13.8 (13.0-14.6)	12,653	16.6 (15.9-17.2)	17,552	5.5 (5.2-5.9)
56	119,318	0.6 (0.6-0.7)	6,800	6.3 (5.7-6.9)	11,099	2.2 (1.9-2.5)	14,857	1.1 (0.9-1.2)
58	127,203	1.3 (1.2-1.3)	7,572	10.6 (9.9-11.3)	12,873	14.5 (13.9-15.1)	18,455	7.4 (7.0-7.8)
59	108,317	0.3 (0.3-0.4)	7,236	2.7 (2.3-3.0)	11,823	1.8 (1.5-2.0)	15,723	1.7 (1.5-1.9)
Probable/possible carcinogen								
26	48,365	0.1 (0.0-0.1)	2,942	1.1 (0.8-1.5)	6,483	1.1 (0.9-1.4)	9,437	0.2 (0.1-0.3)
30	17,626	0.2 (0.1-0.2)	1,358	0.5 (0.2-1.1)	897	0.6 (0.2-1.3)	3,411	0.3 (0.2-0.5)
34	39,912	0.1 (0.1-0.1)	2,899	0.4 (0.3-0.8)	4,589	0.1 (0.1-0.3)	6,292	0.2 (0.1-0.3)
53	93,551	0.9 (0.9-1.0)	5,331	5.9 (5.3-6.6)	9,984	3.1 (2.8-3.5)	10,324	0.4 (0.3-0.6)
66	108,810	0.5 (0.5-0.6)	6,483	5.4 (4.9-6.0)	10,905	1.9 (1.7-2.2)	11,837	0.4 (0.3-0.6)
67	48,650	0.2 (0.2-0.3)	2,502	0.8 (0.5-1.2)	5,122	0.9 (0.7-1.2)	7,244	0.4 (0.3-0.6)
68	107,640	0.7 (0.6-0.7)	6,435	3.7 (3.3-4.2)	11,165	2.0 (1.8-2.3)	12,525	0.8 (0.6-0.9)
69	49,323	0.2 (0.1-0.2)	2,609	0.3 (0.2-0.7)	6,535	0.4 (0.3-0.6)	4,633	0.1 (0.1-0.3)
70	60,013	0.5 (0.5-0.6)	3,846	0.9 (0.7-1.3)	7,701	0.9 (0.8-1.2)	10,278	0.4 (0.3-0.5)
73	34,763	0.1 (0.1-0.2)	2,451	0.8 (0.5-1.3)	5,412	0.7 (0.5-0.9)	9,120	0.3 (0.2-0.4)
82	57,581	0.1 (0.1-0.2)	2,803	1.1 (0.8-1.6)	7,307	2.2 (1.9-2.6)	9,491	0.2 (0.2-0.4)
85	30,111	0.1 (0.1-0.1)	1,842	0.3 (0.1-0.6)	3,285	0.0 (0.0-0.1)	-	-
97	-	-	-	-	-	-	270	0.0 (0.0-1.4)
LOW RISK HPV TYPES								
6	180,673	0.6 (0.6-0.6)	5,371	2.9 (2.5-3.3)	11,183	1.1 (1.0-1.4)	13,305	0.3 (0.2-0.4)
11	177,993	0.6 (0.5-0.6)	5,336	2.8 (2.4-3.2)	11,129	2.0 (1.8-2.3)	12,694	0.4 (0.3-0.5)
32	36,887	0.1 (0.1-0.2)	71	0.0 (0.0-5.1)	-	-	1,790	0.1 (0.0-0.4)
40	35,117	0.3 (0.2-0.3)	1,509	0.9 (0.6-1.6)	3,515	0.2 (0.1-0.4)	6,649	0.0 (0.0-0.1)
42	165,435	0.3 (0.2-0.3)	2,062	2.1 (1.6-2.9)	5,034	0.7 (0.5-1.0)	7,804	0.3 (0.2-0.5)
43	158,464	0.2 (0.2-0.2)	783	0.9 (0.4-1.8)	2,531	0.0 (0.0-0.2)	6,012	0.0 (0.0-0.1)
44	163,767	0.2 (0.2-0.2)	1,868	1.8 (1.3-2.5)	4,794	1.5 (1.2-1.9)	6,999	0.1 (0.1-0.2)
54	58,532	0.4 (0.4-0.5)	1,827	2.4 (1.8-3.2)	4,055	2.0 (1.6-2.4)	7,190	0.2 (0.1-0.3)
55	-	-	-	-	-	-	-	-
57	16,021	0.0 (0.0-0.0)	223	0.9 (0.2-3.2)	1,100	0.6 (0.3-1.3)	2,686	0.0 (0.0-0.1)
61	50,340	0.2 (0.2-0.3)	1,526	2.0 (1.4-2.9)	2,474	2.2 (1.7-2.8)	7,366	0.6 (0.4-0.8)
62	31,658	0.4 (0.4-0.5)	1,056	6.6 (5.3-8.3)	1,911	3.8 (3.0-4.7)	3,050	0.4 (0.2-0.6)
64	-	-	-	-	-	-	-	-
71	45,179	0.2 (0.2-0.3)	1,211	0.7 (0.4-1.4)	2,518	0.8 (0.5-1.2)	3,596	0.1 (0.1-0.3)
72	46,949	0.4 (0.3-0.5)	1,117	0.4 (0.1-0.9)	1,973	0.4 (0.2-0.8)	4,125	0.1 (0.0-0.2)
74	31,406	0.3 (0.3-0.4)	278	0.7 (0.2-2.6)	460	0.0 (0.0-0.8)	3,517	0.1 (0.0-0.3)
81	139,461	0.7 (0.6-0.7)	1,432	5.1 (4.1-6.4)	2,552	2.5 (2.0-3.2)	3,948	0.2 (0.1-0.4)
83	48,034	0.1 (0.0-0.1)	1,208	0.8 (0.5-1.5)	2,999	0.4 (0.2-0.7)	3,755	0.0 (0.0-0.1)
84	47,885	0.4 (0.3-0.5)	1,208	2.4 (1.7-3.4)	2,999	1.3 (1.0-1.8)	3,378	0.1 (0.1-0.3)
86	10,641	0.1 (0.0-0.1)	-	-	-	-	-	-
87	-	-	71	0.0 (0.0-5.1)	-	-	-	-
89	18,028	0.1 (0.1-0.2)	840	1.0 (0.5-1.9)	1,589	1.1 (0.7-1.7)	3,448	0.1 (0.0-0.3)
90	15,317	0.5 (0.4-0.7)	71	2.8 (0.8-9.7)	-	-	1,490	0.1 (0.0-0.4)
91	4,896	0.2 (0.1-0.4)	71	0.0 (0.0-5.1)	-	-	2,509	0.0 (0.0-0.2)

Data updated on 22 May 2023 (data as of 30 Jun 2015 / 30 Nov 2014)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
Data Sources: See references in Section 9 References.

Table 30: Type-specific HPV prevalence among invasive cervical cancer cases in Asia by histology

HPV Type	Any Histology		Squamous cell carcinoma		Adenocarcinoma		Unespecified	
	No. tested	HPV Prev % (95% CI)	No. tested	HPV Prev % (95% CI)	No. tested	HPV Prev % (95% CI)	No. tested	HPV Prev % (95% CI)
ONCOGENIC HPV TYPES								
High-risk HPV types								
16	20,766	55.1 (54.4-55.7)	14,450	55.9 (55.1-56.7)	1,496	35.4 (33.0-37.9)	5,280	59.4 (58.0-60.7)
18	20,487	13.8 (13.4-14.3)	14,171	12.0 (11.5-12.6)	1,496	40.4 (37.9-42.9)	5,280	12.1 (11.3-13.0)
31	17,691	2.7 (2.5-3.0)	12,459	2.8 (2.5-3.1)	1,202	1.1 (0.6-1.8)	4,490	3.3 (2.8-3.8)
33	18,474	4.5 (4.2-4.8)	12,940	4.7 (4.3-5.1)	1,368	3.0 (2.2-4.0)	4,626	5.0 (4.4-5.6)
35	14,429	1.4 (1.2-1.6)	9,758	1.5 (1.3-1.7)	1,124	0.5 (0.2-1.2)	3,729	1.9 (1.5-2.3)
39	15,287	1.6 (1.4-1.8)	11,338	1.7 (1.5-2.0)	1,090	1.3 (0.8-2.1)	2,997	1.2 (0.9-1.7)
45	13,810	4.0 (3.6-4.3)	9,785	3.6 (3.3-4.0)	1,195	4.9 (3.8-6.2)	3,290	5.1 (4.4-5.9)
51	13,033	1.0 (0.8-1.2)	9,256	1.0 (0.8-1.2)	1,060	0.4 (0.1-1.0)	2,899	1.3 (0.9-1.8)
52	17,552	5.5 (5.2-5.9)	12,855	5.9 (5.5-6.3)	1,315	2.6 (1.9-3.6)	3,842	5.3 (4.6-6.0)
56	14,857	1.1 (0.9-1.2)	10,956	1.2 (1.0-1.4)	1,225	1.1 (0.7-1.9)	3,092	0.7 (0.5-1.1)
58	18,455	7.4 (7.0-7.8)	13,007	7.7 (7.2-8.2)	1,315	2.9 (2.1-3.9)	4,593	7.5 (6.8-8.3)
59	15,723	1.7 (1.5-1.9)	11,753	1.5 (1.3-1.8)	1,225	1.1 (0.6-1.8)	3,161	2.3 (1.9-2.9)
Probable/possible carcinogen								
26	9,437	0.2 (0.1-0.3)	-	-	-	-	-	-
30	3,411	0.3 (0.2-0.5)	2,352	0.4 (0.2-0.7)	228	0.0 (0.0-1.7)	892	0.1 (0.0-0.6)
34	6,292	0.2 (0.1-0.3)	4,459	0.2 (0.1-0.3)	603	0.2 (0.0-0.9)	1,365	0.1 (0.0-0.5)
53	10,324	0.4 (0.3-0.6)	-	-	-	-	-	-
66	11,837	0.4 (0.3-0.6)	8,667	0.4 (0.3-0.6)	1,007	0.2 (0.1-0.7)	2,301	0.4 (0.2-0.7)
67	7,244	0.4 (0.3-0.6)	5,459	0.4 (0.3-0.7)	575	0.2 (0.0-1.0)	1,664	0.2 (0.1-0.6)
68	12,525	0.8 (0.6-0.9)	8,582	0.7 (0.5-0.9)	1,112	0.6 (0.3-1.3)	2,969	1.0 (0.7-1.4)
69	4,633	0.1 (0.1-0.3)	-	-	-	-	-	-
70	10,278	0.4 (0.3-0.5)	-	-	-	-	-	-
73	9,120	0.3 (0.2-0.4)	-	-	-	-	-	-
82	9,491	0.2 (0.2-0.4)	6,970	0.2 (0.2-0.4)	724	0.0 (0.0-0.5)	1,861	0.3 (0.1-0.7)
85	-	-	-	-	-	-	-	-
97	270	0.0 (0.0-1.4)	270	0.0 (0.0-1.4)	-	-	-	-
LOW RISK HPV TYPES								
6	13,305	0.3 (0.2-0.4)	-	-	-	-	-	-
11	12,694	0.4 (0.3-0.5)	-	-	-	-	-	-
32	1,790	0.1 (0.0-0.4)	-	-	-	-	-	-
40	6,649	0.0 (0.0-0.1)	-	-	-	-	-	-
42	7,804	0.3 (0.2-0.5)	5,675	0.3 (0.2-0.5)	668	0.1 (0.0-0.8)	1,596	0.4 (0.2-0.8)
43	6,012	0.0 (0.0-0.1)	-	-	-	-	-	-
44	6,999	0.1 (0.1-0.2)	5,118	0.1 (0.1-0.3)	647	0.0 (0.0-0.6)	1,257	0.2 (0.0-0.6)
54	7,190	0.2 (0.1-0.3)	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-
57	2,686	0.0 (0.0-0.1)	-	-	-	-	-	-
61	7,366	0.6 (0.4-0.8)	-	-	-	-	-	-
62	3,050	0.4 (0.2-0.6)	-	-	-	-	-	-
64	-	-	-	-	-	-	-	-
71	3,596	0.1 (0.1-0.3)	-	-	-	-	-	-
72	4,125	0.1 (0.0-0.2)	-	-	-	-	-	-
74	3,517	0.1 (0.0-0.3)	-	-	-	-	-	-
81	3,948	0.2 (0.1-0.4)	-	-	-	-	-	-
83	3,755	0.0 (0.0-0.1)	-	-	-	-	-	-
84	3,378	0.1 (0.1-0.3)	-	-	-	-	-	-
86	-	-	-	-	-	-	-	-
87	-	-	-	-	-	-	-	-
89	3,448	0.1 (0.0-0.3)	-	-	-	-	-	-
90	1,490	0.1 (0.0-0.4)	-	-	-	-	-	-
91	2,509	0.0 (0.0-0.2)	-	-	-	-	-	-

Data updated on 22 May 2023 (data as of 30 Jun 2015)

The samples for HPV testing come from cervical specimens (fresh/fixed biopsies or exfoliated cells)
[a] Number of women tested
[b] 95% Confidence Interval
Data Sources: See references in Section 9 References.

4.1.3 HPV type distribution among HIV+ women with normal cervical cytology

Table 31: Studies on HPV prevalence among HIV+ women with normal cytology in Asia

Study	HPV detection method and targeted HPV types	No. Tested[a]	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
			%	(95% CI)[b]	
-	-	-	-	-	-

Data updated on 22 May 2023 (data as of 31 Dec 2011)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; PCR: Polymerase Chain Reaction; TS: Type Specific
[a] Number of women tested
[b] 95% Confidence Interval
Data Sources: See references in Section 9 References.

4.1.4 Terminology

Cytologically normal women
No abnormal cells are observed on the surface of their cervix upon cytology.

Cervical Intraepithelial Neoplasia (CIN) / Squamous Intraepithelial Lesions (SIL)
SIL and CIN are two commonly used terms to describe precancerous lesions or the abnormal growth of squamous cells observed in the cervix. SIL is an abnormal result derived from cervical cytological screening or Pap smear testing. CIN is a histological diagnosis made upon analysis of cervical tissue obtained by biopsy or surgical excision. The condition is graded as CIN 1, 2 or 3, according to the thickness of the abnormal epithelium (1/3, 2/3 or the entire thickness).

Low-grade cervical lesions (LSIL/CIN-1)
Low-grade cervical lesions are defined by early changes in size, shape, and number of abnormal cells formed on the surface of the cervix and may be referred to as mild dysplasia, LSIL, or CIN-1.

High-grade cervical lesions (HSIL/ CIN-2 / CIN-3 / CIS)
High-grade cervical lesions are defined by a large number of precancerous cells on the surface of the cervix that are distinctly different from normal cells. They have the potential to become cancerous cells and invade deeper tissues of the cervix. These lesions may be referred to as moderate or severe dysplasia, HSIL, CIN-2, CIN-3 or cervical carcinoma in situ (CIS).

Carcinoma in situ (CIS)
Preinvasive malignancy limited to the epithelium without invasion of the basement membrane. CIN 3 encompasses the squamous carcinoma in situ.

Invasive cervical cancer (ICC) / Cervical cancer
If the high-grade precancerous cells invade the basement membrane is called ICC. ICC stages range from stage I (cancer is in the cervix or uterus only) to stage IV (the cancer has spread to distant organs, such as the liver).

Invasive squamous cell carcinoma
Invasive carcinoma composed of cells resembling those of squamous epithelium.

Adenocarcinoma
Invasive tumour with glandular and squamous elements intermingled.

4.2 HPV burden in anogenital cancers other than cervix

Methods: Prevalence and type distribution of human papillomavirus in carcinoma of the vulva, vagina, anus and penis: systematic review and meta-analysis

A systematic review of the literature was conducted on the worldwide HPV-prevalence and type distribution for anogenital carcinomas other than cervix from January 1986 to 'data as of' indicated in each section. The search terms for the review were 'HPV' AND (anus OR anal) OR (penile) OR vagin* OR vulv* using Pubmed. There were no limits in publication language. References cited in selected articles were also investigated. Inclusion criteria were: HPV DNA detection by means of PCR, a minimum of 10 cases by lesion and a detailed description of HPV DNA detection and genotyping techniques used. The number of cases tested and HPV positive cases were extracted for each study to estimate the prevalence of HPV DNA and the HPV type distribution. Binomial 95% confidence intervals were calculated for each HPV prevalence.

4.2.1 Anal cancer and precancerous anal lesions

Anal cancer is similar to cervical cancer with respect to overall HPV DNA positivity, with approximately 100% of anal squamous cell carcinoma cases associated with HPV infection worldwide (de Martel C et al. Lancet Glob Health 2020;8(2):e180-e190). HPV16 is the most common type detected, representing 73% of all HPV-positive tumours. HPV18 is the second most common type detected and is found in approximately 5% of cases. HPV DNA is also detected in the majority of precancerous anal lesions (AIN) (91.5% in AIN1 and 93.9% in AIN2/3) (De Vuyst H et al. Int J Cancer 2009; 124: 1626-36). In this section, the burden of HPV among cases of anal cancers and precancerous anal lesions in Asia are presented.

Table 32: Studies on HPV prevalence among anal cancer cases in Asia (male and female)

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
India	Alemany 2015	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	52	80.8	(68.1-89.2)	HPV 16 (67.3), HPV 18 (3.8), HPV 35 (3.8), HPV 56 (1.9), HPV 58 (1.9)
Republic of Korea	Alemany 2015	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	52	80.8	(68.1-89.2)	HPV 16 (67.3), HPV 18 (3.8), HPV 35 (3.8), HPV 56 (1.9), HPV 58 (1.9)
Bangladesh	Alemany 2015	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	52	80.8	(68.1-89.2)	HPV 16 (67.3), HPV 18 (3.8), HPV 35 (3.8), HPV 56 (1.9), HPV 58 (1.9)
Republic of Korea	Yhim 2011	PCR, TS (HPV 6, 11, 16, 18, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 56, 58, 59, 66, 68, 69)	47	74.5	(60.5-84.7)	HPV 16 (66.0), HPV 58 (6.4), HPV 35 (2.1)
Republic of Korea	Youk 2001	PCR-MY09/11, PCR-L1C1/C2, PCR-E6, PCR-E7, TS (HPV 16, 18)	21	100.0	(84.5-100.0)	HPV 16 (100.0)

Data updated on 22 May 2023 (data as of 30 Jun 2015)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific;
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

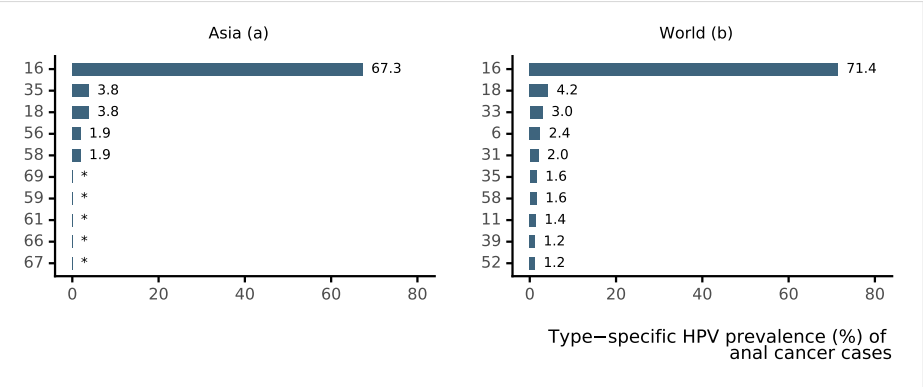
Table 33: Studies on HPV prevalence among cases of AIN2/3 in Asia

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
Thailand	Phanuphak 2013	PCR L1-Consensus primer, PCR-E6, PCR-E7, LBA (HPV 6, 11, 16, 18, 26, 31, 33, 34, 35, 39, 40, 42, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 62, 66, 67, 68, 69, 70, 71, 72, 73, 81, 82, 83, 84)	41	82.9	(68.7-91.5)	HPV 40 (51.2), HPV 53 (26.8), HPV 16 (24.4), HPV 11 (19.5), HPV 58 (17.1)

Data updated on 22 May 2023 (data as of 30 Jun 2015)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific;
AIN 2/3: Anal intraepithelial neoplasia of grade 2/3
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

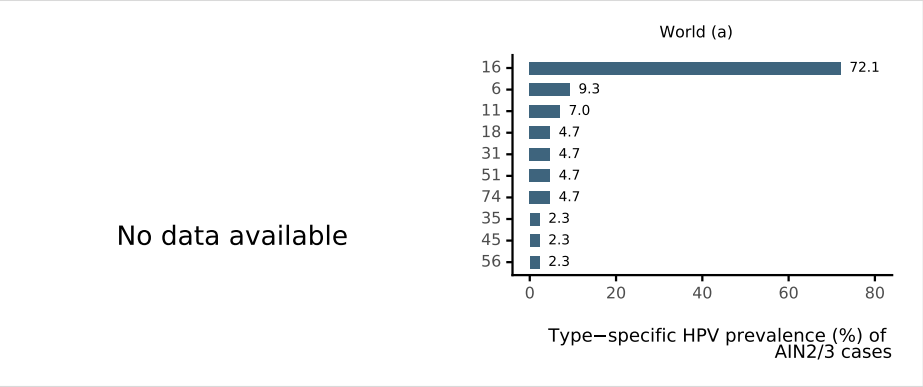
Figure 51: Comparison of the ten most frequent HPV types in anal cancer cases in Asia and the World



Data updated on 22 May 2023 (data as of 30 Jun 2014)

[a] Includes cases from Bangladesh,India and South Korea
[b] Includes cases from Europe (Bosnia-Herzegovina, Czech Republic, France, Germany, Poland, Portugal, Slovenia, Spain and United Kingdom); America (Chile, Colombia, Ecuador, Guatemala, Honduras, Mexico, Paraguay and United States); Africa (Mali, Nigeria and Senegal); Asia (Bangladesh,India and South Korea)
[*] No data available. No more types than shown were tested or were positive.
Data Sources: See references in Section 9 References.

Figure 52: Comparison of the ten most frequent HPV types in AIN 2/3 cases in Asia and the World



Data updated on 22 May 2023 (data as of 30 Jun 2014)

AIN 2/3: Anal intraepithelial neoplasia of grade 2/3
[a] Includes cases from Europe (Bosnia-Herzegovina, Czech Republic, France, Germany, Poland, Portugal, Slovenia, Spain and United Kingdom); America (Chile, Colombia, Ecuador, Guatemala, Honduras, Mexico, Paraguay)
Data Sources: See references in Section 9 References.

4.2.2 Vulvar cancer and precancerous vulvar lesions

HPV attribution for vulvar cancer is 48% among age 15-54 years, 28% among age 55-64 years, and 15% among age 65+ worldwide (de Martel C et al. Lancet Glob Health 2020;8(2):e180-e190). Vulvar cancer has two distinct histological patterns with two different risk factor profiles: (1) basaloid/warty types (2) keratinising types. Basaloid/warty lesions are more common in young women, are frequently found adjacent to VIN, are very often associated with HPV DNA detection (86%), and have a similar risk factor profile as cervical cancer. Keratinising vulvar carcinomas represent the majority of the vulvar lesions (>60%). These lesions develop from non HPV-related chronic vulvar dermatoses, especially lichen sclerosus and/or squamous hyperplasia, their immediate cancer precursor lesion is differentiated VIN, they occur more often in older women, and are rarely associated with HPV (6%) or with any of the other risk factors typical of cervical cancer. HPV prevalence is frequently detected among cases of high-grade VIN (VIN2/3) (85.3%). HPV 16 is the most common type detected followed by HPV 33 (De Vuyst H et al. Int J Cancer 2009; 124: 1626-36).In this section, the HPV burden among cases of vulvar cancer cases and precancerous vulvar lesions in Asia are presented.

Table 34: Studies on HPV prevalence among vulvar cancer cases in Asia

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		
				%	(95% CI)[a]	Prevalence of 5 most frequent HPVs, HPV type (%)
Turkey	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	188	28.7	(22.7-35.6)	HPV 16 (18.1), HPV 18 (1.6), HPV 44 (1.6), HPV 45 (1.1), HPV 52 (1.1)
Bangladesh	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	188	28.7	(22.7-35.6)	HPV 16 (18.1), HPV 18 (1.6), HPV 44 (1.6), HPV 45 (1.1), HPV 52 (1.1)
Taiwan	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	188	28.7	(22.7-35.6)	HPV 16 (18.1), HPV 18 (1.6), HPV 44 (1.6), HPV 45 (1.1), HPV 52 (1.1)
India	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	188	28.7	(22.7-35.6)	HPV 16 (18.1), HPV 18 (1.6), HPV 44 (1.6), HPV 45 (1.1), HPV 52 (1.1)
Kuwait	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	188	28.7	(22.7-35.6)	HPV 16 (18.1), HPV 18 (1.6), HPV 44 (1.6), HPV 45 (1.1), HPV 52 (1.1)
Philippines	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	188	28.7	(22.7-35.6)	HPV 16 (18.1), HPV 18 (1.6), HPV 44 (1.6), HPV 45 (1.1), HPV 52 (1.1)
Israel	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	188	28.7	(22.7-35.6)	HPV 16 (18.1), HPV 18 (1.6), HPV 44 (1.6), HPV 45 (1.1), HPV 52 (1.1)

Continued on next page

Table 34 – continued from previous page

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
Lebanon	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	188	28.7	(22.7-35.6)	HPV 16 (18.1), HPV 18 (1.6), HPV 44 (1.6), HPV 45 (1.1), HPV 52 (1.1)
Republic of Korea	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	188	28.7	(22.7-35.6)	HPV 16 (18.1), HPV 18 (1.6), HPV 44 (1.6), HPV 45 (1.1), HPV 52 (1.1)
Japan	Nagano 1996	PCR-L1C1/C2, RFLP (HPV 6, 11, 16, 18, 30, 31, 33, 34, 35, 39, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 68, 70)	11	72.7	(43.4-90.3)	HPV 16 (36.4), HPV 18 (9.1), HPV 51 (9.1), HPV 56 (9.1), HPV 6 (9.1)
Thailand	Ngamkham 2013	EIA (HPV 6, 11, 16, 18, 26, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 57, 58, 59, 66, 68, 70, 71, 72, 73, 81, 82, 83, 84, 89)	25	44	(26.7-62.9)	HPV 16 (36.0), HPV 33 (8.0), HPV 35 (8.0), HPV 18 (4.0), HPV 58 (4.0)
Japan	Osakabe 2007	PCR-L1C1/C2, RFLP (HPV 6, 11, 16, 18, 31, 33, 42, 52, 58)	21	23.8	(10.6-45.1)	HPV 16 (14.3), HPV 52 (4.8), HPV 6 (4.8)

Data updated on 22 May 2023 (data as of 30 Jun 2015)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific;
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

Table 35: Studies on HPV prevalence among VIN 2/3 cases in Asia

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
Turkey	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	20	100	(83.9-100.0)	HPV 16 (80.0), HPV 18 (5.0), HPV 33 (5.0), HPV 35 (5.0), HPV 54 (5.0)
Taiwan	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	20	100	(83.9-100.0)	HPV 16 (80.0), HPV 18 (5.0), HPV 33 (5.0), HPV 35 (5.0), HPV 54 (5.0)
India	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	20	100	(83.9-100.0)	HPV 16 (80.0), HPV 18 (5.0), HPV 33 (5.0), HPV 35 (5.0), HPV 54 (5.0)
Bangladesh	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	20	100	(83.9-100.0)	HPV 16 (80.0), HPV 18 (5.0), HPV 33 (5.0), HPV 35 (5.0), HPV 54 (5.0)
Philippines	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	20	100	(83.9-100.0)	HPV 16 (80.0), HPV 18 (5.0), HPV 33 (5.0), HPV 35 (5.0), HPV 54 (5.0)

Continued on next page

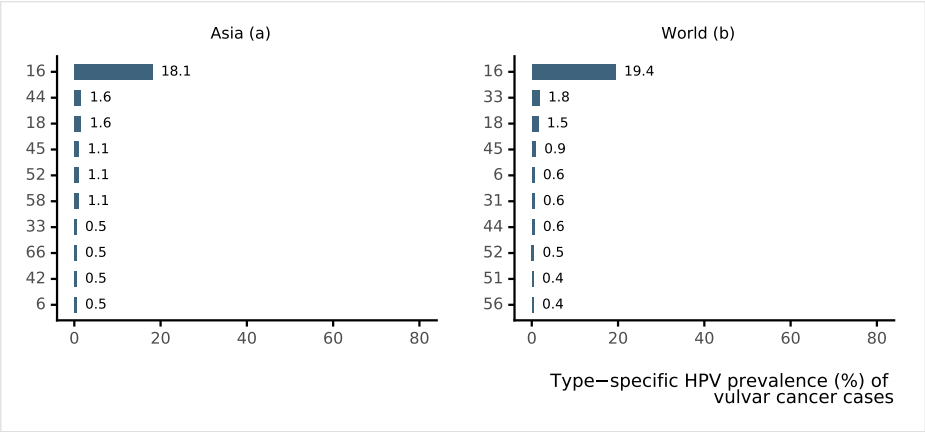
Table 35 – continued from previous page

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
Israel	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	20	100	(83.9-100.0)	HPV 16 (80.0), HPV 18 (5.0), HPV 33 (5.0), HPV 35 (5.0), HPV 54 (5.0)
Republic of Korea	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	20	100	(83.9-100.0)	HPV 16 (80.0), HPV 18 (5.0), HPV 33 (5.0), HPV 35 (5.0), HPV 54 (5.0)
Kuwait	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	20	100	(83.9-100.0)	HPV 16 (80.0), HPV 18 (5.0), HPV 33 (5.0), HPV 35 (5.0), HPV 54 (5.0)
Lebanon	de Sanjosé 2013	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 34, 35, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 66, 67, 68, 69, 70, 73, 74, 82, 83, 87, 89, 91)	20	100	(83.9-100.0)	HPV 16 (80.0), HPV 18 (5.0), HPV 33 (5.0), HPV 35 (5.0), HPV 54 (5.0)

Data updated on 22 May 2023 (data as of 30 Jun 2015)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific;
VIN 2/3: Vulvar intraepithelial neoplasia of grade 2/3
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

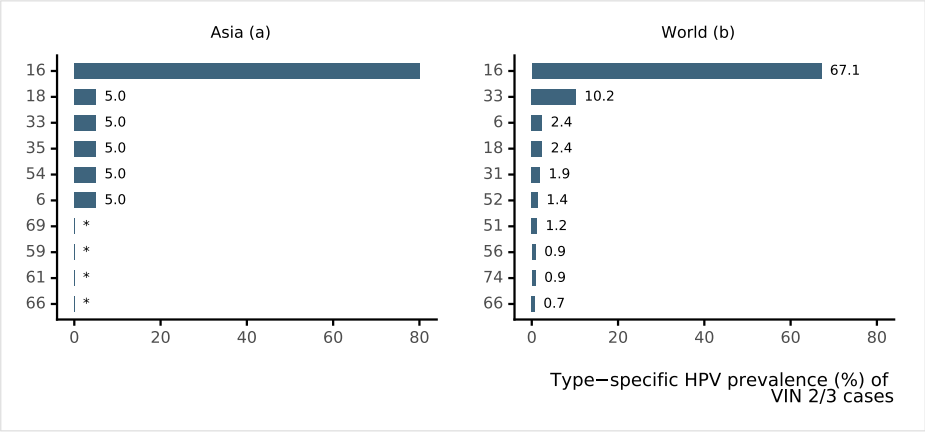
Figure 53: Comparison of the ten most frequent HPV types in cases of vulvar cancer in Asia and the World



Data updated on 22 May 2023 (data as of 30 Jun 2015)

[a] Includes cases from Bangladesh, India, Israel, South Korea, Kuwait, Lebanon, Philippines, Taiwan and Turkey.
[b] Includes cases from America (Argentina, Brazil, Chile, Colombia, Ecuador, Guatemala, Honduras, Mexico, Paraguay, Uruguay, United States of America and Venezuela); Africa (Mali, Mozambique, Nigeria, and Senegal); Oceania (Australia and New Zealand); Europe (Austria, Belarus, Bosnia-Herzegovina, Czech Republic, France, Germany, Greece, Italy, Poland, Portugal, Spain and United Kingdom); and in Asia (Bangladesh, India, Israel, South Korea, Kuwait, Lebanon, Philippines, Taiwan and Turkey)
Data Sources: See references in Section 9 References.

Figure 54: Comparison of the ten most frequent HPV types in VIN 2/3 cases in Asia and the World



Data updated on 22 May 2023 (data as of 30 Jun 2014)

VIN 2/3: Vulvar intraepithelial neoplasia of grade 2/3
[a] Includes cases from Bangladesh, India, Israel, South Korea, Kuwait, Lebanon, Philippines, Taiwan and Turkey.
[b] Includes cases from America (Argentina, Brazil, Chile, Colombia, Ecuador, Guatemala, Honduras, Mexico, Paraguay, Uruguay and Venezuela); Oceania (Australia and New Zealand); Europe (Austria, Belarus, Bosnia-Herzegovina, Czech Republic, France, Germany, Greece, Italy, Poland, Portugal, Spain and United Kingdom); and in Asia (Bangladesh, India, Israel, South Korea, Kuwait, Lebanon, Philippines, Taiwan and Turkey)
[*] No data available. No more types than shown were tested or were positive.
Data Sources: See references in Section 9 References.

4.2.3 Vaginal cancer and precancerous vaginal lesions

Vaginal and cervical cancers share similar risk factors and it is generally accepted that both carcinomas share the same aetiology of HPV infection although there is limited evidence available. Women with vaginal cancer are more likely to have a history of other ano-genital cancers, particularly of the cervix, and these two carcinomas are frequently diagnosed simultaneously. HPV DNA is detected among 78% of invasive vaginal carcinomas and 91% of high-grade vaginal neoplasias (VaIN2/3). HPV16 is the most common type in high-grade vaginal neoplasias and it is detected in at least 78% of HPV-positive carcinomas (de Martel C et al. Lancet Glob Health 2020;8(2):e180-e190; De Vuyst H et al. Int J Cancer 2009; 124:1626-36). In this section, the HPV burden among cases of vaginal cancer cases and precancerous vaginal lesions in Asia are presented.

Table 36: Studies on HPV prevalence among vaginal cancer cases in Asia

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
Turkey	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82)	46	71.7	(57.5-82.7)	HPV 16 (41.3), HPV 33 (4.3), HPV 68 (4.3), HPV 18 (2.2), HPV 26 (2.2)
Taiwan	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82)	46	71.7	(57.5-82.7)	HPV 16 (41.3), HPV 33 (4.3), HPV 68 (4.3), HPV 18 (2.2), HPV 26 (2.2)
India	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82)	46	71.7	(57.5-82.7)	HPV 16 (41.3), HPV 33 (4.3), HPV 68 (4.3), HPV 18 (2.2), HPV 26 (2.2)
Bangladesh	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82)	46	71.7	(57.5-82.7)	HPV 16 (41.3), HPV 33 (4.3), HPV 68 (4.3), HPV 18 (2.2), HPV 26 (2.2)
Philippines	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82)	46	71.7	(57.5-82.7)	HPV 16 (41.3), HPV 33 (4.3), HPV 68 (4.3), HPV 18 (2.2), HPV 26 (2.2)
Israel	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82)	46	71.7	(57.5-82.7)	HPV 16 (41.3), HPV 33 (4.3), HPV 68 (4.3), HPV 18 (2.2), HPV 26 (2.2)
Republic of Korea	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82)	46	71.7	(57.5-82.7)	HPV 16 (41.3), HPV 33 (4.3), HPV 68 (4.3), HPV 18 (2.2), HPV 26 (2.2)
Kuwait	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82)	46	71.7	(57.5-82.7)	HPV 16 (41.3), HPV 33 (4.3), HPV 68 (4.3), HPV 18 (2.2), HPV 26 (2.2)
Lebanon	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82)	46	71.7	(57.5-82.7)	HPV 16 (41.3), HPV 33 (4.3), HPV 68 (4.3), HPV 18 (2.2), HPV 26 (2.2)

Data updated on 22 May 2023 (data as of 30 Jun 2015)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific;
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

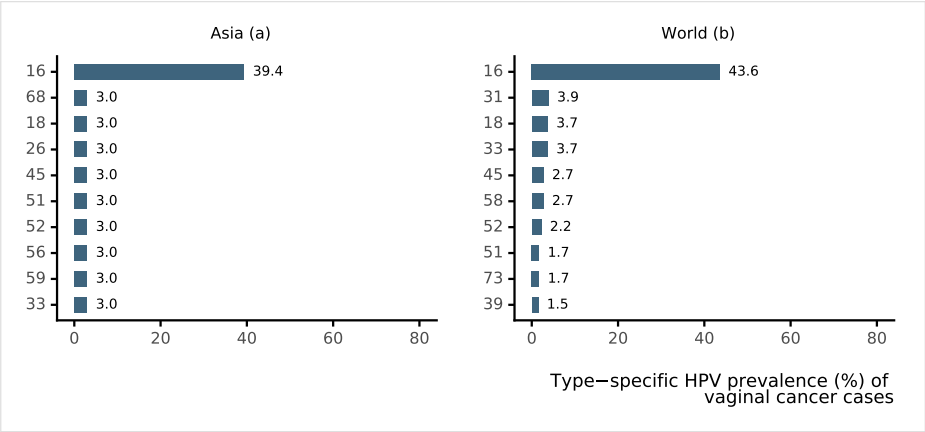
Table 37: Studies on HPV prevalence among VaIN 2/3 cases in Asia

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
Bangladesh	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82, 89)	13	100	(77.2-100.0)	HPV 16 (53.8), HPV 52 (15.4), HPV 59 (15.4), HPV 45 (7.7), HPV 73 (7.7)
Turkey	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82, 89)	13	100	(77.2-100.0)	HPV 16 (53.8), HPV 52 (15.4), HPV 59 (15.4), HPV 45 (7.7), HPV 73 (7.7)
Taiwan	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82, 89)	13	100	(77.2-100.0)	HPV 16 (53.8), HPV 52 (15.4), HPV 59 (15.4), HPV 45 (7.7), HPV 73 (7.7)
India	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82, 89)	13	100	(77.2-100.0)	HPV 16 (53.8), HPV 52 (15.4), HPV 59 (15.4), HPV 45 (7.7), HPV 73 (7.7)
Philippines	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82, 89)	13	100	(77.2-100.0)	HPV 16 (53.8), HPV 52 (15.4), HPV 59 (15.4), HPV 45 (7.7), HPV 73 (7.7)
Israel	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82, 89)	13	100	(77.2-100.0)	HPV 16 (53.8), HPV 52 (15.4), HPV 59 (15.4), HPV 45 (7.7), HPV 73 (7.7)
Republic of Korea	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82, 89)	13	100	(77.2-100.0)	HPV 16 (53.8), HPV 52 (15.4), HPV 59 (15.4), HPV 45 (7.7), HPV 73 (7.7)
Kuwait	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82, 89)	13	100	(77.2-100.0)	HPV 16 (53.8), HPV 52 (15.4), HPV 59 (15.4), HPV 45 (7.7), HPV 73 (7.7)
Lebanon	Alemany 2014	PCR-SPF10, EIA, (HPV 6, 11, 16, 18, 26, 30, 31, 33, 35, 39, 42, 45, 51, 52, 53, 56, 58, 59, 66, 67, 68, 69, 73, 82, 89)	13	100	(77.2-100.0)	HPV 16 (53.8), HPV 52 (15.4), HPV 59 (15.4), HPV 45 (7.7), HPV 73 (7.7)
Japan	Sugase 1997	PCR, TS, Sequencing (HPV 6, 11, 16, 18, 20, 21, 22, 23, 26, 30, 31, 32, 33, 34, 35, 38, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 66, 67, 68, 69, 70, 71, 72, 73, 74, 80, 81, 82, 83, 84, 85, 86, 87, 89, 90, 91)	18	100	(82.4-100.0)	HPV 16 (16.7), HPV 58 (16.7), HPV 53 (11.1), HPV 67 (11.1), HPV 35 (5.6)

Data updated on 22 May 2023 (data as of 30 Jun 2015)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific;
VAIN 2/3: Vaginal intraepithelial neoplasia of grade 2/3
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

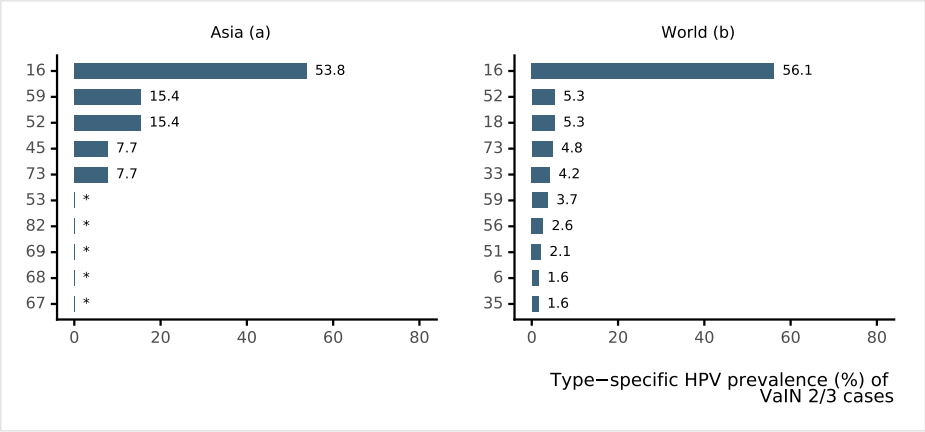
Figure 55: Comparison of the ten most frequent HPV types in cases of vaginal cancer in Asia and the World



Data updated on 22 May 2023 (data as of 30 Jun 2015)

[a] Includes cases from Bangladesh, India, Israel, South Korea, Kuwait, Philippines, Taiwan and Turkey
[b] Includes cases from Europe (Austria, Belarus, Czech Republic, France, Germany, Greece, Poland, Spain and United Kingdom); America (Argentina, Brazil, Chile, Colombia, Ecuador, Guatemala, Mexico, Paraguay, Uruguay, United states of America and Venezuela); Africa (Mozambique, Nigeria); Asia (Bangladesh, India, Israel, South Korea, Kuwait, Philippines, Taiwan and Turkey); and Oceania (Australia)
Data Sources: See references in Section 9 References.

Figure 56: Comparison of the ten most frequent HPV types in VaIN 2/3 cases in Asia and the World



Data updated on 22 May 2023 (data as of 30 Jun 2014)

VAIN 2/3: Vaginal intraepithelial neoplasia of grade 2/3
[a] Includes cases from Australia, Bangladesh, India, Israel, South Korea, Kuwait, Philippines, Taiwan and Turkey.
[b] Includes cases from Europe (Austria, Belarus, Czech Republic, France, Germany, Greece, Poland, Spain and United Kingdom); America (Argentina, Brazil, Chile, Colombia, Ecuador, Guatemala, Mexico, Paraguay, Uruguay, United states of America and Venezuela); Asia (Bangladesh, India, Israel, South Korea, Kuwait, Philippines, Taiwan and Turkey); and Oceania (Australia)
[*] No data available. No more types than shown were tested or were positive.
Data Sources: See references in Section 9 References.

4.2.4 Penile cancer and precancerous penile lesions

HPV DNA is detectable in approximately 51% of all penile cancers (de Martel C et al. Lancet Glob Health 2020;8(2):e180-e190). Among HPV-related penile tumours, HPV16 is the most common type detected, followed by HPV18 and HPV types 6/11 (Miralles C et al. J Clin Pathol 2009;62:870-8). Over 95% of invasive penile cancers are SCC and the most common penile SCC histologic sub-types are keratinising (49%), mixed warty-basaloid (17%), verrucous (8%), warty (6%), and basaloid (4%). HPV is commonly detected in basaloid and warty tumours but is less common in keratinising and verrucous tumours. In this section, the HPV burden among cases of penile cancer cases and precancerous penile lesions in Asia are presented.

Table 38: Studies on HPV prevalence among penile cancer cases in Asia

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
China	Chan 1994	PCR Type specific for HPV16/18	41	19.5	(10.2-34.0)	HPV 16 (9.8), HPV 18 (9.8)
Viet Nam	Do 2013	PCR-SPF10, PCR-E6, qPCR, LiPA (HPV 6, 11, 16, 18, 26, 31, 33, 35, 39, 40, 43, 44, 45, 51, 52, 54, 56, 58, 59, 66, 68, 69, 70, 71, 73, 74, 82)	120	22.5	(15.9-30.8)	HPV 16 (20.0), HPV 11 (0.8), HPV 18 (0.8), HPV 33 (0.8), HPV 58 (0.8)
Japan	Iwasawa 1993	PCR type specific for HPV 16,18 and 33	111	63.1	(53.8-71.5)	HPV 16 (61.3), HPV 18 (1.8)
Thailand	Senba 2006	PCR SPF10, ISH	65	81.5	(70.4-89.1)	HPV 18 (55.4), HPV 6 (40.0), HPV 34 (3.1), HPV 11 (1.5), HPV 22 (1.5)
Japan	Suzuki 1994	PCR consensus primers on L1 and E6 (6,11,16,18,31,33,42,52,58	13	53.8	(29.1-76.8)	HPV 16 (30.8), HPV 33 (15.4), HPV 31 (7.7)
Japan	Yanagawa 2008	PCR-L1C1/C2, RFLP (HPV 6, 11, 16, 18, 31, 33, 42, 52, 58)	26	11.5	(4.0-29.0)	HPV 16 (11.5)

Data updated on 22 May 2023 (data as of 30 Jun 2014)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific;
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

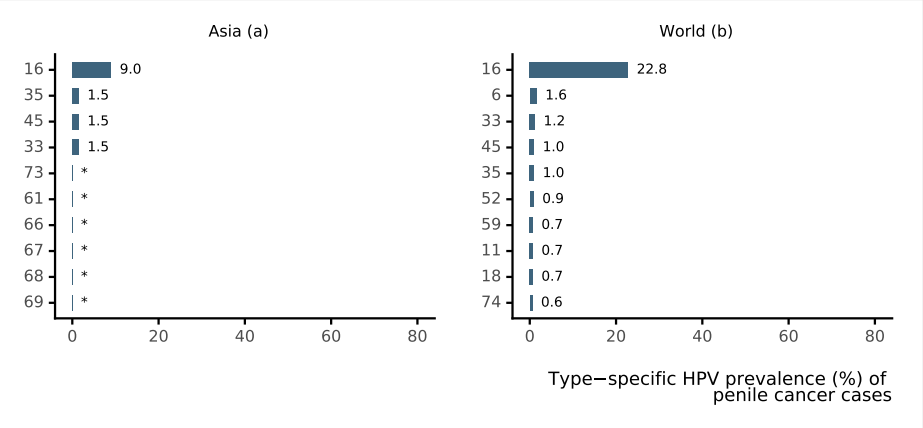
Table 39: Studies on HPV prevalence among PeIN 2/3 cases in Asia

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
-	No data available	-	-	-	-	

Data updated on 22 May 2023 (data as of 30 Jun 2014)

PeIN 2/3: Penile intraepithelial neoplasia of grade 2/3
DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific;
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

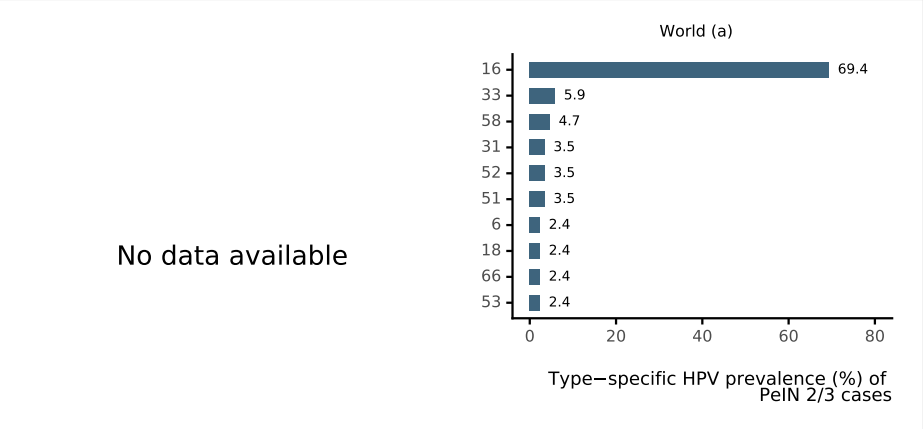
Figure 57: Comparison of the ten most frequent HPV types in cases of penile cancer in Asia and the World



Data updated on 22 May 2023 (data as of 30 Jun 2015)

[a] Includes cases from Bangladesh, India, South Korea, Lebanon, Philippinesy
[b] Includes cases from Australia, Bangladesh, India, South Korea, Lebanon, Philippines, Chile, Colombia, Ecuador, Guatemala, Honduras, Mexico, Paraguay, Venezuela and United States, Mozambique, Nigeria, Senegal, Czech Republic, France, Greece, Poland, Portugal, Spain and United Kingdom.
[*] No data available. No more types than shown were tested or were positive.
Data Sources: See references in Section 9 References.

Figure 58: Comparison of the ten most frequent HPV types in PeIN 2/3 cases in Asia and the World



Data updated on 22 May 2023 (data as of 30 Jun 2015)

PeIN 2/3: Penile intraepithelial neoplasia of grade 2/3
[a] Includes cases from Australia, Bangladesh, India, South Korea, Lebanon, Philippines, Chile, Colombia, Ecuador, Guatemala, Honduras, Mexico, Paraguay, Venezuela, Mozambique, Nigeria, Senegal, Czech Republic, France, Greece, Poland, Portugal, Spain and United Kingdom.
Data Sources: See references in Section 9 References.

4.3 HPV burden in men

The information to date regarding anogenital HPV infection is primarily derived from cross-sectional studies of selected populations such as general population, university students, military recruits, and studies that examined husbands of control women, as well as from prospective studies. Special subgroups include mainly studies that examined STD (sexually transmitted diseases) clinic attendees, MSM (men who have sex with men), HIV positive men, and partners of women with HPV lesions, CIN (cervical intraepithelial neoplasia), cervical cancer or cervical carcinoma in situ. Globally, prevalence of external genital HPV infection in men is higher than cervical HPV infection in women, but persistence is less likely. As with genital HPV prevalence, high numbers of sexual partners increase the acquisition of oncogenic HPV infections (Vaccine 2012, Vol. 30, Suppl 5). In this section, the HPV burden among men in Asia is presented.

Methods

HPV burden in men was based on published systematic reviews and meta-analyses (Dunne EF, J Infect Dis 2006; 194: 1044, Smith JS, J Adolesc Health 2011; 48: 540, Olesen TB, Sex Transm Infect 2014; 90: 455, and Hebnes JB, J Sex Med 2014; 11: 2630) up to October 31, 2015. The search terms for the review were human papillomavirus, men, polymerase chain reaction (PCR), hybrid capture (HC), and viral DNA. References cited in selected articles were also investigated. Inclusion criteria were: HPV DNA detection by means of PCR or HC (ISH if data are not available for the country), and a detailed description of HPV DNA detection and genotyping techniques used. The number of cases tested and HPV positive cases were extracted for each study to estimate the anogenital prevalence of HPV DNA. Binomial 95% confidence intervals were calculated for each anogenital HPV prevalence.

Table 40: Studies on HPV prevalence among men in Asia

Country	Study	Anatomic sites samples	HPV detection method	Population	Age (years)	No. Tested	HPV Prevalence	
							%	(95% CI)[a]
China	Liu 2015	Coronal sulcus, shaft, glans, and scrotum	PCR-SPF1/GP6+	Population-based esophageal cancer cohort study	25-65	2228	16.9	(15.3-18.5)
India	Gupta 2006	Coronal sulcus, distal and intrameatal urethra and glans	PCR-L1 and TS 16,18	Partners of women with normal cytology	Mean 46.9	30	26.7	(12.3-45.9)
Japan	Takahashi 2003	Glans, corona, prepuce	HC2 HR, LR	University students	18-35	75	1.3	(0.0-7.2)
Philippines	Franceschi 2002	Glans, corona, urethra	PCR-GP5+/6+	Husbands of control women	19-71	106	4.7	(1.5-10.7)
Republic of Korea	Shin 2004	Glans, corona, scrotum, prepuce, urethra	PCR-SPF10	Male students	Median 22	381	8.7	(6.0-11.9)
Thailand	Franceschi 2002	Glans, corona, urethra	PCR-GP5+/6+	Husbands of control women	28-78	75	17.3	(9.6-27.8)

Data updated on 22 May 2023 (data as of 31 Oct 2015)

HC2: Hybrid Capture 2; ISH: In Situ Hybridization; PCR: Polymerase Chain Reaction; RT-PCR: Real Time Polymerase Chain Reaction; SPF: Short Primer Fragment; TS: Type Specific; MSM: Men who have sex with men; MSW:Men who have sex with women; STD: sexually transmitted diseases

[a] 95% Confidence Interval

Data Sources: See references in Section 9 References.

Table 41: Studies on HPV prevalence among men from special subgroups in Asia

Country	Study	Anatomic sites samples	HPV detection method	Population	Age (years)	No. Tested	HPV Prevalence	
							%	(95% CI)[a]
China	Zhang 2014	Anus	PCR-GenoArray	HIV+ MSM STD clinic attendees	IQR=25-34.8	28	71.4	(51.3-86.8)
	Zhang 2014	Anus	PCR-GenoArray	HIV- MSM, STD clinic attendees	IQR=25-34.8	380	33.7	(28.9-38.7)
	Yang 2012	Anus	PCR-TellgenplexTM HPV DNA Test	HIV+ MSM	>=18	91	70.3	(59.8-79.5)
	Tang 2006	Urethral meatus	PCR-MY09/11	STD clinic attendees	18-70	305	13.8	(10.1-18.2)
	Li 2015	Anus	PCR-GenoArray	HIV+ MSM	18-60	193	99.0	(96.3-99.9)
	Gao 2010	Anal canal	PCR-TellgenplexTM HPV DNA Test	HIV- MSM	>=18 (70% <30 years)	528	58.9	(54.6-63.1)
	Gao 2010	Anal canal	PCR-TellgenplexTM HPV DNA Test	HIV+ MSM	>=18 (70% <30 years)	50	96.0	(86.3-99.5)
India	Gupta 2006	Coronal sulcus, distal and intrameatal urethra and glans	PCR-L1 and TS 16,18	Partners of women with cervical cancer	Mean 46.4	30	66.7	(47.2-82.7)
Japan	Nagata 2015	Anus	PCR-Invader	HIV+ MSM	Median 44 (IQR=39-55)	361	75.9	(71.1-80.2)
	Nagata 2015	Anus	PCR-Invader	HIV+ heterosexual men	Median 44 (IQR=39-55)	34	20.6	(8.7-37.9)
	Takahashi 2005	Glans, corona, inner surface of prepuce	HC2 HR, LR	STD clinic attendees	18-35	204	5.9	(3.1-10.0)
	Takahashi 2003	Coronal sulcus, glans, prepuce	HC2 HR, LR	Patients with urethritis	17-49	130	18.5	(12.2-26.2)
	Shigehara 2010	Coronal sulcus, glans, prepuce, urethra, and urine	PCR-HPV GenoArray	Men with urethritis	Mean 35.2 (19-62)	142	47.9	(39.4-56.4)
Philippines	Franceschi 2002	Glans, corona, urethra	PCR-GP5+/6+	Husbands of women with invasive cervical cancer	22-77	149	6.0	(2.8-11.2)

Continued on next page

Table 41 – continued from previous page

Country	Study	Anatomic sites samples	HPV detection method	Population	Age (years)	No. Tested	HPV Prevalence	
							%	(95% CI)[a]
Thailand	Supindham 2015	Anus	PCR-Linear Array	MSM-Transgender women who are born as anatomical males (and who may or may not have undergone genital surgery), but who self-identify as women and prefer receptive anal sex with men	18-48	83	80.7	(70.6-88.6)
	Franceschi 2002	Glans, corona, urethra	PCR-GP5+/6+	Husbands of women with invasive cervical cancer	25-77	109	22.0	(14.6-31.0)
	Leaungwutiwong 2015	Anus	Nested-PCR and sequencing	HIV- MSM sex worker	Median 26	50	30.0	(17.9-44.6)
	Leaungwutiwong 2015	Anus	Nested-PCR and sequencing	HIV- MSM	Median 33	50	30.0	(17.9-44.6)
	Phanuphak 2013	Anus	PCR-Roche Linear Array HPV Genotyping test	HIV- MSM	>=18	123	58.5	(49.3-67.3)
	Phanuphak 2013	Anus	PCR-Roche Linear Array HPV Genotyping test	HIV+ MSM	>=18	123	85.4	(77.9-91.1)
	Supindham 2015	Anus	PCR-Linear Array	MSM-Gay men who self-identify as men and prefer insertive and/or receptive anal sex with other men	18-54	85	89.4	(80.8-95.0)
	Supindham 2015	Anus	PCR-Linear Array	MSM-Bisexual men who self-identify as men and engage in insertive and/or receptive anal sex with men and women	18-36	29	48.3	(29.4-67.5)

Data updated on 22 May 2023 (data as of 31 Oct 2015)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLH: Reverse Line Hybridisation; RT-PCR: Real Time Polymerase Chain Reaction; SPF: Short Primer Fragment; TS: Type Specific; MSM: Men who have sex with men; MSW:Men who have sex with women; STD: sexually transmitted diseases

[a] 95% Confidence Interval

Data Sources: See references in Section 9 References.

4.4 HPV burden in the head and neck

The last evaluation of the International Agency for Research in Cancer (IARC) on the carcinogenicity of HPV in humans concluded that (a) there is enough evidence for the carcinogenicity of HPV type 16 in the oral cavity, oropharynx (including tonsil cancer, base of tongue cancer and other oropharyngeal cancer sites), and (b) limited evidence for laryngeal cancer (IARC Monograph Vol 100B). There is increasing evidence that HPV-related oropharyngeal cancers constitute an epidemiological, molecular and clinical distinct form as compared to non HPV-related ones. Some studies indicate that the most likely explanation for the origin of this distinct form of head and neck cancers associated with HPV is a sexually acquired oral HPV infection that is not cleared, persists and evolves into a neoplastic lesion. Around 30% of oropharyngeal cancers (which mainly comprises the tonsils and base of tongue sites) are caused by HPV with HPV16 being the most frequent type (de Martel C et al. Int J Cancer 2017;141(4):664-670). Attributable fraction varies greatly worldwide, being highest in more developed countries (60% in Republic of Korea, 51% in North America, 50% in Eastern Europe, 46% in Japan, 42% in North-Western Europe, 41% in Australia/New Zealand, 24% in South Europe, 23% in China, 22% in India, and 13% in elsewhere) (de Martel C et al. Lancet Glob Health 2020;8(2):e180-e190). In this section, the HPV burden in the head and neck in Asia is presented.

4.4.1 Burden of oral HPV infection in healthy population

Table 42: Studies on oral HPV prevalence among healthy in Asia

Study	Specimen collection method / anatomic site	HPV detection method[a]	Population	% males	Age (years)[b]	No. tested[c]	HPV prevalence % (95% CI)	High-Risk HPV prevalence % (95% CI)	5 most frequent HPVs, HPV type (n)[d]
Herrero 2003	Brush/swab & oral rinse & gargle / Oral mucosa and throat	PCR-GP5+/6+	Age-matched controls	56.9	17-78	364	4.1 (2.5-6.7)	-	-
Kurose 2004	Brush/swab / Oral mucosa	PCR-MY09/11	Convenient samples from out-patients	42	3-85	662	0.3 (0.1-1.1)	0.2 (0.0-0.9)	HPV12 (1); 16 (1); 53 (1); 71 (1)
Koppikar 2005	Oral rinse / Oral mucosa	PCR-CP FAP	Age-matched controls	80	-	102	0 (0.0-3.6)	0 (0.0-3.6)	HPV20 (2); 12 (1); 48 (1); 23 (1)
Seifi 2013	Saliva / Oral mucosa	PCR-GP5+/6+ MY09/11	Convenient samples from out-patients	46	16-61	114	6.1 (3.0-12.1)	4.4 (1.9-9.9)	HPV18 (5); 6 (1); 66 (1)
Hang 2014	Brush/swab / Oral mucosa	PCR-SPF1 GP6+	General population	47	25-65	5351	0.7 (0.4-1.1)	0.6 (0.4-1.0)	HPV3 (223); 10 (23); 57 (25); 16 (23); 75 (6)
Saini 2011	Brush/swab / Oral mucosa	PCR-GP5+/6+ MY09/11	Convenient samples from out-patients	56.9	30-NS	72	23.6 (15.3-34.6)	5.6 (2.2-13.4)	-

Data updated on 19 Oct 2021 (data as of 19 May 2015)

(95% CI): 95% Confidence Interval
[a] TS: type-specific; RT-PCR: real-time PCR; qPCR: quantitative PCR
[b] NS: not specified
[c] number of cases tested for HPV DNA
[d] number of cases positive for the specific HPV-type
Data Sources:
Hang D, Cancer Epidemiol Biomarkers Prev 2014;23(10):2101-10 | Herrero R, J Natl Cancer Inst 2003;95(23):1772-83 | Koppikar P, Int J Cancer 2005;113(6):946-50 | Kurose K, Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2004;98(1):91-6 | Saini R, J Investig Clin Dent 2011;2(4):241-7 | Seifi S, Iran J Public Health 2013;42(1):79-85
Systematic review and meta-analysis was performed by ICO HPV Information Centre until May 19, 2015. Reference publication: Mena M et al. J Infect Dis 2019;219(10):1574-1585.

4.4.2 HPV burden in head and neck cancers

Table 43: Studies on HPV prevalence among cases of oral cavity cancer in Asia

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
MEN						
China	Zhang 2004	TS-PCR E6 for 16/18 Amplification with TS primers (16. 18)	48	81.3	(68.1-89.8)	-
India	Laprise 2016	PCR-PGMY09/11, LBA (HPV 6, 11, 16, 18, 26, 31, 33, 35, 39, 40, 42, 44, 51, 53, 54, 56, 58, 59, 61, 62, 66, 67, 68, 69, 70, 71, 72, 73, 81, 82, 83, 84, 89)	196	0	-	-
India	Herrero 2003	GP5+/GP6+ (L1) Hybridization with EIA oligonucleotide probes (2. 6. 11. 16. 18. 31. 33. 35. 39. 40. 42. 43. 44. 45. 51. 52. 56. 58. 59. 66. 68)	127	4.7	(2.2-9.9)	HPV 16 (3.9) HPV 18 (0.8) HPV 35 (0.8)
India	D'Costa 1998	MY09/MY11 (L1) SBH (6. 11. 16. 18. 33)	71	12.7	(6.8-22.4)	HPV 16 (12.7)
India	Chaudhary 2010	MY09/MY11 (L1) Amplification with TS primers (16)	146	33.6	(26.4-41.6)	HPV 16 (33.6)
India	Balaram 1995	MY09/MY11 (L1). GP5+/GP6+ (L1)/GP17+/GP18+ (L1). Y1/Y2 and TS-PCR for 6/11/16/18 Sequencing	50	74	(60.4-84.1)	-
Iran	Saghravanian 2011	GP5+/GP6+ (L1) Amplification with TS primers HPV E6/7 (16. 18. 31. 33)	8	0	-	-
Japan	Tsuhako 2000	TS-PCR E6/E7 for 16/18 and E6 for 6/11 Amplification with TS primers (6.11.16.18)	51	52.9	(39.5-65.9)	HPV 16 (33.3) HPV 18 (33.3) HPV 6 (11.8) HPV 11 (2.0)
Japan	Shimizu 2004	TS-PCR L1 for 16/18/31/33/35/39/45/51/52/56/58/59/68/73/75 Sequencing	76/8213	15.4	(4.3-42.2)	HPV 120 (7.7) HPV 58 (7.7)
Japan	Chiba 1996	TS-PCR E6/E7 for 6/11/16/18/31/33/52b/58 Restriction enzyme digestion (6. 11. 16. 18. 31. 33. 52b. 58)	22	27.3	(13.2-48.2)	HPV 16 (27.3)
Japan	Bhawal 2008	TS-PCR E6 for 16 Electrophoretic analysis using SiHa DNA as positive control for HPV-16	19	26.3	(11.8-48.8)	HPV 16 (26.3)
Republic of Korea	Shin 2002	TS-PCR E6 for 16/18/33 Amplification with TS primers (16. 18. 33)	76	9.2	(4.5-17.8)	HPV 18 (6.6) HPV 16 (1.3) HPV 33 (1.3)
WOMEN						
China	Zhang 2004	TS-PCR E6 for 16/18 Amplification with TS primers (16. 18)	25	60	(40.7-76.6)	-
India	Laprise 2016	PCR-PGMY09/11, LBA (HPV 6, 11, 16, 18, 26, 31, 33, 35, 39, 40, 42, 44, 51, 53, 54, 56, 58, 59, 61, 62, 66, 67, 68, 69, 70, 71, 72, 73, 81, 82, 83, 84, 89)	154	0	-	-
India	Herrero 2003	GP5+/GP6+ (L1) Hybridization with EIA oligonucleotide probes (2. 6. 11. 16. 18. 31. 33. 35. 39. 40. 42. 43. 44. 45. 51. 52. 56. 58. 59. 66. 68)	135	1.5	(0.4-5.2)	HPV 16 (1.5) HPV 18 (0.7)
India	D'Costa 1998	MY09/MY11 (L1) SBH (6. 11. 16. 18. 33)	5	20	(3.6-62.4)	-
India	Chaudhary 2010	MY09/MY11 (L1) Amplification with TS primers (16)	76	30.3	(21.1-41.3)	HPV 16 (30.3)
India	Balaram 1995	MY09/MY11 (L1). GP5+/GP6+ (L1)/GP17+/GP18+ (L1). Y1/Y2 and TS-PCR for 6/11/16/18 Sequencing	41	68.3	(53.0-80.4)	-
Iran	Saghravanian 2011	GP5+/GP6+ (L1) Amplification with TS primers HPV E6/7 (16. 18. 31. 33)	13	23.1	(8.2-50.3)	HPV 16 (23.1) HPV 18 (23.1)
Japan	Tsuhako 2000	TS-PCR E6/E7 for 16/18 and E6 for 6/11 Amplification with TS primers (6.11.16.18)	21	66.7	(45.4-82.8)	HPV 18 (52.4) HPV 16 (28.6) HPV 6 (19.0)
Japan	Shimizu 2004	TS-PCR L1 for 16/18/31/33/35/39/45/51/52/56/58/59/68/73/75 Sequencing	76/8211	18.2	(5.1-47.7)	HPV 75 (9.1) HPV 76 (9.1)
Japan	Chiba 1996	TS-PCR E6/E7 for 6/11/16/18/31/33/52b/58 Restriction enzyme digestion (6. 11. 16. 18. 31. 33. 52b. 58)	1	0	-	-
Japan	Bhawal 2008	TS-PCR E6 for 16 Electrophoretic analysis using SiHa DNA as positive control for HPV-16	9	55.6	(26.7-81.1)	HPV 16 (55.6)
Republic of Korea	Shin 2002	TS-PCR E6 for 16/18/33 Amplification with TS primers (16. 18. 33)	76	5.3	(2.1-12.8)	HPV 16 (3.9) HPV 18 (3.9) HPV 33 (1.3)
BOTH OR UNSPECIFIED						
China	Lee 2015	PCR-GP5+/6+, PCR-MY09/11, PCR L1-Consensus primer, (HPV 6, 11, 16, 18, 26, 31, 32, 33, 35, 39, 42, 43, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 62, 66, 67, 68, 69, 70, 71, 72, 74, 81, 82, 83, 84)	1002	19.4	(17.0-21.9)	-
China	Zhang 2004	TS-PCR E6 for 16/18 Amplification with TS primers (16. 18)	73	74	(62.9-82.7)	HPV 16 (58.9) HPV 18 (24.7)
China	Wen 1997	TS-PCR E6 for 16/18 Hybridization with TS probes (HPV16.18 E6)	45	31.1	(19.5-45.7)	HPV 18 (24.4) HPV 16 (20.0)
China	Tang 2003	TS-PCR E6 for 16/18/33 Sequencing	30	46.7	(30.2-63.9)	HPV 16 (36.7) HPV 18 (16.7)
China	Gan 2014	PCR-GP5+/6+, PCR L1-Consensus primer (HPV 6, 16, 18)	200	27.5	(21.8-34.1)	-
India	Bhattacharya 2009	MY09/MY11 (L1) Amplification with TS primers (16. 18)	193	62.2	(55.2-68.7)	HPV 16 (60.1) HPV 18 (5.2)
India	Sebastian 2014	PCR, LBA (HPV 6, 11, 16, 18, 26, 31, 33, 34, 35, 39, 40, 42, 44, 45, 51, 52, 53, 54, 56, 58, 59, 61, 62, 66, 67, 68, 69, 70, 71, 72, 73, 81, 82, 83, 84)	22	0	-	-
India	Mishra 2006	MY09/MY11 (L1) Amplification with TS primers (16. 18)	66	27.3	(18.0-39.0)	HPV 16 (27.3)

Continued on next page

Table 43 – continued from previous page

Country	Study	HPV detection method and targeted HPV types	No. Tested	%	(95% CI)[a]	Prevalence of 5 most frequent HPVs, HPV type (%)
India	Laprise 2016	PCR-PGMY09/11, LBA (HPV 6, 11, 16, 18, 26, 31, 33, 35, 39, 40, 42, 44, 51, 53, 54, 56, 58, 59, 61, 62, 66, 67, 68, 69, 70, 71, 72, 73, 81, 82, 83, 84, 89)	350	0	-	-
India	Herrero 2003	GP5+/GP6+ (L1) Hybridization with EIA oligonucleotide probes (2. 6. 11. 16. 18. 31. 33. 35. 39. 40. 42. 43. 44. 45. 51. 52. 56. 58. 59. 66. 68)	262	3.1	(1.6-5.9)	HPV 16 (2.7) HPV 18 (0.8) HPV 35 (0.4)
India	D'Costa 1998	MY09/MY11 (L1) SBH (6. 11. 16. 18. 33)	99	15.2	(9.4-23.5)	HPV 16 (15.2)
India	Chaudhary 2010	MY09/MY11 (L1) Amplification with TS primers (16)	222	32.4	(26.6-38.8)	HPV 16 (32.4)
India	Balaram 1995	MY09/MY11 (L1). GP5+/GP6+ (L1)/GP17+/GP18+ (L1). Y1/Y2 and TS-PCR for 6/11/16/18 Sequencing	91	73.6	(63.7-81.6)	HPV 18 (47.3) HPV 16 (41.8) HPV 11 (19.8) HPV 6 (14.3)
Iran	Saghravanian 2011	GP5+/GP6+ (L1) Amplification with TS primers HPV E6/7 (16. 18. 31. 33)	21	14.3	(5.0-34.6)	HPV 16 (14.3) HPV 18 (14.3)
Japan	Kojima 2002	TS-PCR L1 and E6 for 38 Sequencing	53	66	(52.6-77.3)	HPV 38 (66.0)
Japan	Tsuhako 2000	TS-PCR E6/E7 for 16/18 and E6 for 6/11 Amplification with TS primers (6.11.16.18)	72	56.9	(45.4-67.7)	HPV 18 (38.9) HPV 16 (31.9) HPV 6 (13.9) HPV 11 (1.4)
Japan	Tang 2003	TS-PCR E6 for 16/18/33 Sequencing	30	50	(33.2-66.8)	HPV 18 (33.3) HPV 16 (23.3)
Japan	Sugiyama 2003	TS-PCR E6/E7 for 16/18 Electrophoretic analysis using SiHa DNA and Hela DNA as positive controls for HPV-16 and HPV-18. respectively.	79	35.4	(25.8-46.4)	HPV 16 (32.9) HPV 18 (2.5)
Japan	Shimizu 2004	TS-PCR L1 for 16/18/31/33/35/39/45/51/52/56/58/59/68/73/75 Sequencing	76/82	24 16.7	(6.7-35.9)	HPV 120 (4.2) HPV 58 (4.2) HPV 75 (4.2) HPV 76 (4.2)
Japan	Shima 2000	TS-PCR E6/E7 for 6/11/16/18/31/33/52b/58 RFLP (16. 18)	46	73.9	(59.7-84.4)	HPV 18 (54.3) HPV 16 (19.6)
Japan	Higa 2003	TS-PCR E6/E7 for 16/18 Amplification with TS E6/E7 primers (6. 11. 16. 18)	46	80.4	(66.8-89.3)	HPV 16 (52.2) HPV 18 (52.2) HPV 6 (21.7) HPV 11 (2.2)
Japan	Deng 2013	PCR-GP5+/6+, PCR-MY09/11, TS, Sequencing (HPV 6, 11, 16, 18, 20, 21, 22, 23, 26, 30, 31, 32, 33, 34, 35, 38, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 66, 67, 68, 69, 70, 71, 72, 73, 74, 80, 81, 82, 83, 84, 85, 86, 87, 89, 90, 91)	31	32.3	(18.6-49.9)	-
Japan	Chiba 1996	TS-PCR E6/E7 for 6/11/16/18/31/33/52b/58 Restriction enzyme digestion (6. 11. 16. 18. 31. 33. 52b. 58)	32	18.8	(8.9-35.3)	HPV 16 (18.8)
Japan	Bhawal 2008	TS-PCR E6 for 16 Electrophoretic analysis using SiHa DNA as positive control for HPV-16	28	35.7	(20.7-54.2)	HPV 16 (35.7)
Malaysia	Lim 2007	GP5+/GP6+ (L1) Amplification with TS primers (16. 18)	20	85	(64.0-94.8)	HPV 18 (75.0) HPV 16 (30.0)
Republic of Korea	Shin 2002	TS-PCR E6 for 16/18/33 Amplification with TS primers (16. 18. 33)	76	14.5	(8.3-24.1)	HPV 18 (10.5) HPV 16 (5.3) HPV 33 (2.6)

Data updated on 22 May 2023 (data as of 31 Dec 2015)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific;
Only for European countries
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

Table 44: Studies on HPV prevalence among cases of oropharyngeal cancer in Asia

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
MEN						
China	Li 2007	GP5+/GP6+ (L1). CP65/70ct-CP66/69ct (L1). FAP59/6415 (L1). A5/A10-A6/A8 (L1) and TS-PCR E6 for 16 Sequencing	21	14.3	(5.0-34.6)	HPV 16 (14.3)
WOMEN						
China	Li 2007	GP5+/GP6+ (L1). CP65/70ct-CP66/69ct (L1). FAP59/6415 (L1). A5/A10-A6/A8 (L1) and TS-PCR E6 for 16 Sequencing	10	60.0	(31.3-83.2)	HPV 16 (60.0)
BOTH OR UNSPECIFIED						
China	Li 2007	GP5+/GP6+ (L1). CP65/70ct-CP66/69ct (L1). FAP59/6415 (L1). A5/A10-A6/A8 (L1) and TS-PCR E6 for 16 Sequencing	31	29.0	(16.1-46.6)	HPV 16 (29.0)
Republic of Korea	Oh 2004	MY09/MY11 (L1) and HMB01 (L1) Microarray hybridization (6. 11. 16. 18. 31. 33. 34. 35. 39. 40. 42. 43. 44. 45. 51. 52. 54. 56. 58. 59. 62. 66. 67. 68. 69. 70. 72)	39	64.1	(48.4-77.3)	HPV 16 (59.0) HPV 33 (2.6) HPV 58 (2.6) HPV 6 (2.6)
Republic of Korea	Kim 2007	RT-PCR E2/E6 for 16 Hybridization with HPV genotyping DNA chip arrayed by multiple oligonucleotide probes (6.11.16.18.31.33.34.35.39.40.42. 43.44.45.51.52.56.58.59.66.68.69)	52	73.1	(59.7-83.2)	HPV 16 (65.4) HPV 18 (1.9) HPV 33 (1.9) HPV 35 (1.9) HPV 58 (1.9)

Data updated on 22 May 2023 (data as of 31 Dec 2015)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific
Only for European countries
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

Table 45: Studies on HPV prevalence among cases of hypopharyngeal or laryngeal cancer in Asia

Country	Study	HPV detection method and targeted HPV types	No. Tested	HPV Prevalence		Prevalence of 5 most frequent HPVs, HPV type (%)
				%	(95% CI)[a]	
MEN						
China	Liu 2010	GP5+/GP6+ (L1) and TS-PCR E6/E7 for 16 and E6 for 18 Amplification with TS primers (16. 18)	61	37.7	(26.6-50.3)	-
Japan	Shidara 1994	L1C1/L1C2 RFLP (6. 11. 16. 18. 31. 33. 42. 52. 58)	40	20.0	(10.5-34.8)	HPV 16 (17.5) HPV 18 (2.5)
Japan	Anwar 1993	TS-PCR for 16/18/33 Hybridization with TS probes (4. 16. 18)	26	38.5	(22.4-57.5)	HPV 18 (34.6) HPV 16 (3.8) HPV 33 (3.8)
Turkey	Bozdayi 2009	MY09/MY11 (L1) Amplification with GP5+/6+ and TS primers for HPV16 positive; For HPV16 negative cases. sequencing was performed	62	43.5	(31.9-55.9)	-
Turkey	Dönmez 2000	MY09/MY11 (L1) RFLP (6. 11. 16. 18. 31. 33. 35. 39. 42. 51. 58)	55	12.7	(6.3-24.0)	HPV 11 (7.3) HPV 6 (5.5)
WOMEN						
China	Liu 2010	GP5+/GP6+ (L1) and TS-PCR E6/E7 for 16 and E6 for 18 Amplification with TS primers (16. 18)	23	34.8	(18.8-55.1)	-
Japan	Shidara 1994	L1C1/L1C2 RFLP (6. 11. 16. 18. 31. 33. 42. 52. 58)	5	60.0	(23.1-88.2)	HPV 16 (40.0) HPV 18 (20.0)
Japan	Anwar 1993	TS-PCR for 16/18/33 Hybridization with TS probes (4. 16. 18)	4	25.0	(4.6-69.9)	HPV 18 (25.0)
Turkey	Bozdayi 2009	MY09/MY11 (L1) Amplification with GP5+/6+ and TS primers for HPV16 positive; For HPV16 negative cases. sequencing was performed	3	0.0	-	-
BOTH OR UNSPECIFIED						
China	Liu 2010	GP5+/GP6+ (L1) and TS-PCR E6/E7 for 16 and E6 for 18 Amplification with TS primers (16. 18)	84	36.9	(27.4-47.6)	HPV 16 (34.5) HPV 18 (7.1)
China	Ma 1998	TS-PCR E6/E7 for 6/11/16/18/31/33/52b/58 SBH (6. 11. 16. 18. 31. 33. 52b. 58)	102	58.8	(49.1-67.9)	HPV 16 (29.4) HPV 6 (24.5) HPV 18 (21.6) HPV 11 (2.0) HPV 33 (1.0)
India	Jacob 2002	TS-PCR E1 for 6/11/18 and L1 for 16 SBH with TS probes (6. 11. 16. 18)	44	34.1	(21.9-48.9)	HPV 16 (34.1)
Japan	Mineta 1998	TS-PCR E7 for 16/18 Amplification with TS primers (16. 18)	42	31.0	(19.1-46.0)	HPV 16 (26.2) HPV 18 (4.8)
Japan	Shidara 1994	L1C1/L1C2 RFLP (6. 11. 16. 18. 31. 33. 42. 52. 58)	45	24.4	(14.2-38.7)	HPV 16 (20.0) HPV 18 (4.4)
Japan	Ogura 1991	TS-PCR E6 for 16/18 Hybridization with TS probes (16. 18)	28	10.7	(3.7-27.2)	HPV 16 (10.7) HPV 18 (3.6)
Japan	Deng 2013	PCR-GP5+/6+, PCR-MY09/11, TS, Sequencing (HPV 6, 11, 16, 18, 20, 21, 22, 23, 26, 30, 31, 32, 33, 34, 35, 38, 39, 40, 42, 43, 44, 45, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 66, 67, 68, 69, 70, 71, 72, 73, 74, 80, 81, 82, 83, 84, 85, 86, 87, 89, 90, 91)	26	15.4	(6.2-33.5)	HPV 16 (11.5) HPV 33 (3.8)
Japan	Anwar 1993	TS-PCR for 16/18/33 Hybridization with TS probes (4. 16. 18)	30	36.7	(21.9-54.5)	HPV 18 (33.3) HPV 16 (3.3) HPV 33 (3.3)
Turkey	Bozdayi 2009	MY09/MY11 (L1) Amplification with GP5+/6+ and TS primers for HPV16 positive; For HPV16 negative cases. sequencing was performed	65	41.5	(30.4-53.7)	HPV 16 (40.0) HPV 6 (1.5)
Turkey	Dönmez 2000	MY09/MY11 (L1) RFLP (6. 11. 16. 18. 31. 33. 35. 39. 42. 51. 58)	55	12.7	(6.3-24.0)	HPV 11 (7.3) HPV 6 (5.5)
Turkey	Gungor 2007	SP10296 (L1) Amplification with mPCR kit (6. 11. 16. 18. 31. 33. 52. 58)	95	7.4	(3.6-14.4)	HPV 11 (7.4) HPV 6 (2.1) HPV 16 (1.1)

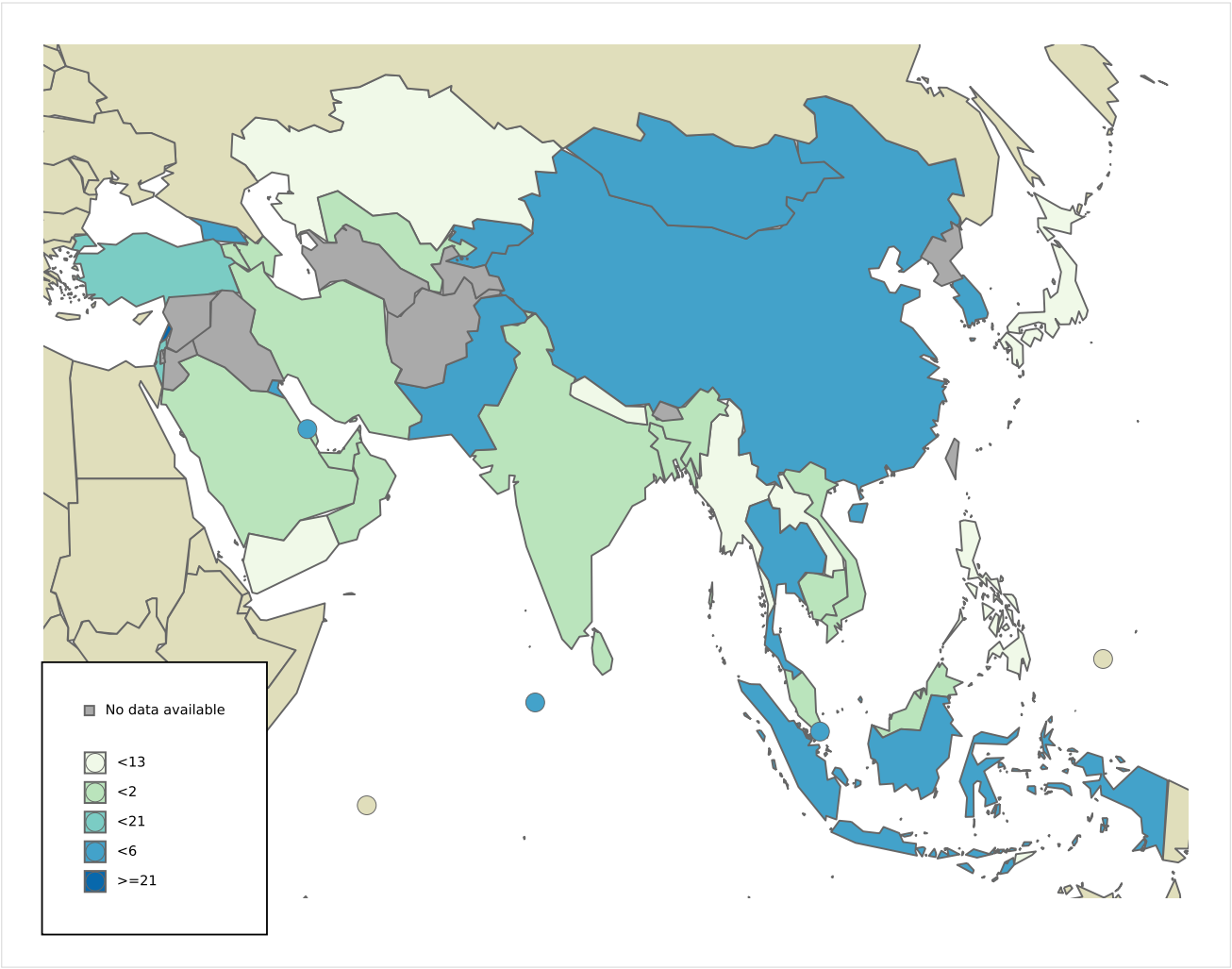
Data updated on 22 May 2023 (data as of 31 Dec 2015)

DBH: Dot Blot Hybridization; EIA: Enzyme ImmunoAssay; HC2: Hybrid Capture 2; ISH: In Situ Hybridization; LBA: Line-Blot Assay; LiPA: Line Probe Assay; PCR: Polymerase Chain Reaction; RFLP: Restriction Fragment Length Polymorphism; RLBH: Reverse Line Blot Hybridization; RT-PCR: Real Time Polymerase Chain Reaction; SBH: Southern Blot Hybridization; SPF: Short Primer Fragment; TS: Type Specific
Only for European countries
[a] 95% Confidence Interval
Data Sources: See references in Section 9 References.

5 Factors contributing to cervical cancer

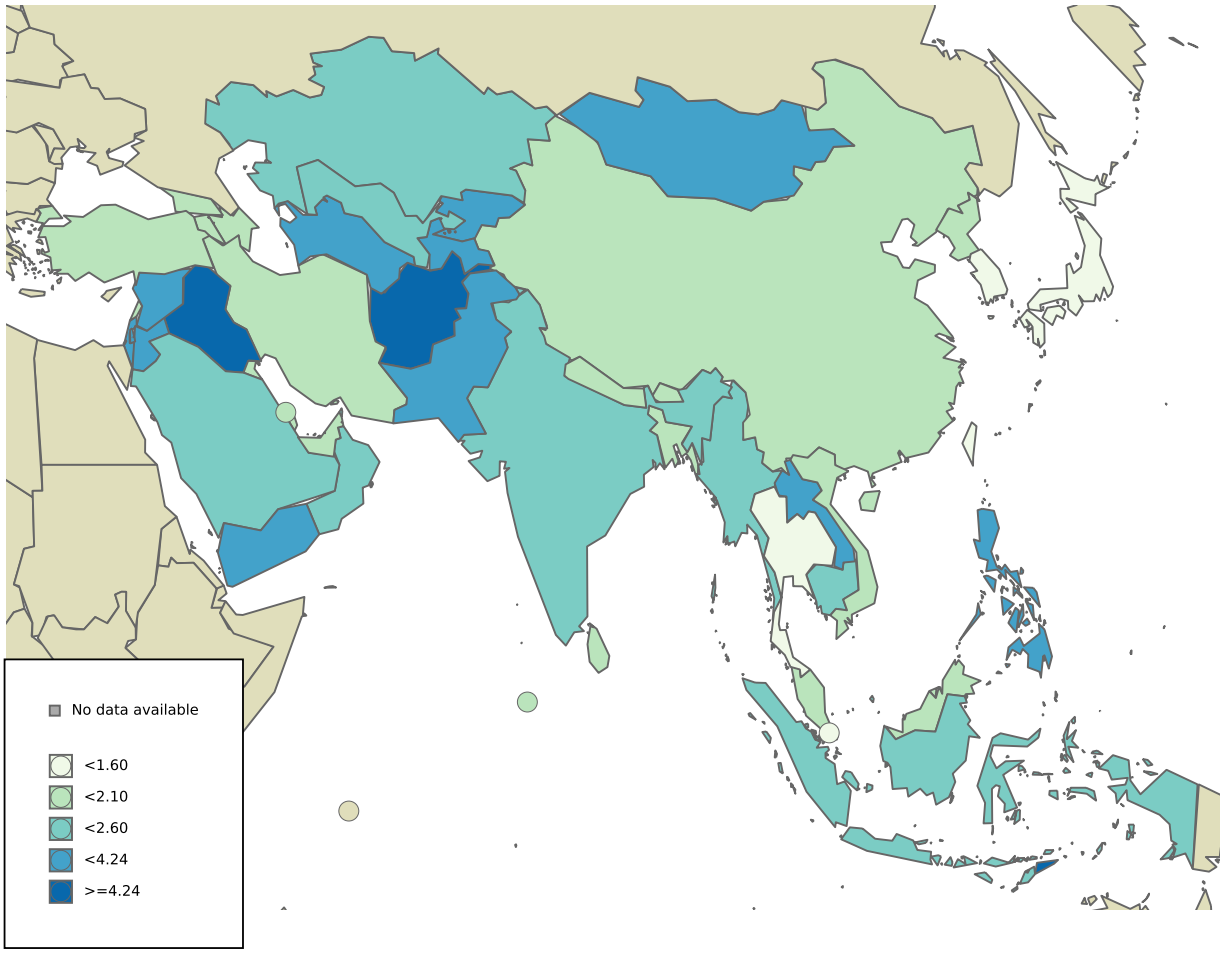
HPV is a necessary cause of cervical cancer, but it is not a sufficient cause. Other cofactors are necessary for progression from cervical HPV infection to cancer. Tobacco smoking, high parity, long-term hormonal contraceptive use, and co-infection with HIV have been identified as established cofactors. Co-infection with Chlamydia trachomatis and herpes simplex virus type-2, immunosuppression, and certain dietary deficiencies are other probable cofactors. Genetic and immunological host factors and viral factors other than type, such as variants of type, viral load and viral integration, are likely to be important but have not been clearly identified. (Muñoz N, Vaccine 2006; 24(S3): 1-10). In this section, the prevalence of smoking, parity (fertility), oral contraceptive use, and HIV in Asiaare presented.

Figure 59: Prevalence of female tobacco smoking in Asia



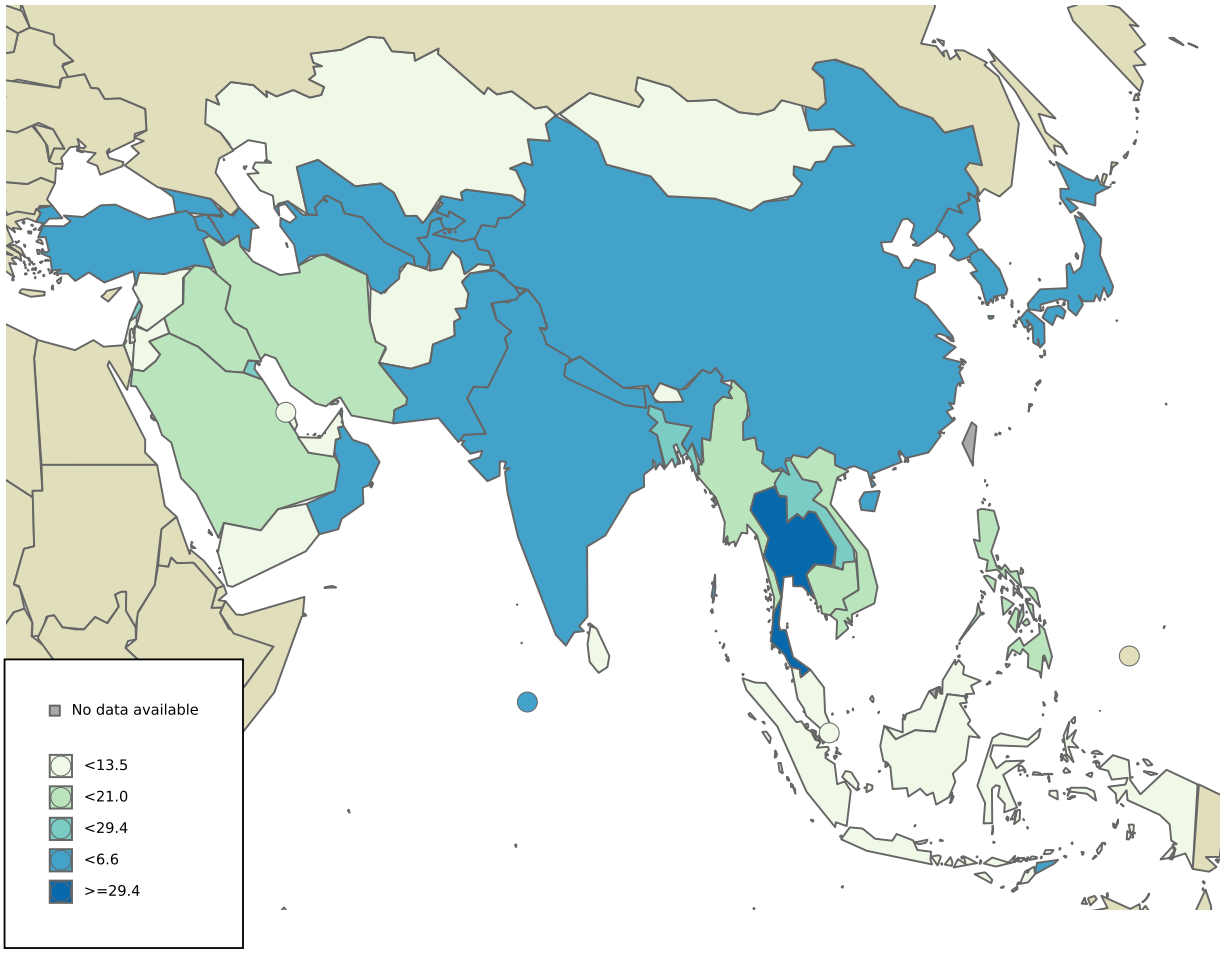
Data accessed on 12 Nov 2019
Crude adjusted prevalence (%) estimates of tabacco use among people aged >= 15 years by country, for the year 2016.
Data Sources:
WHO global report on trends in prevalence of tobacco use 2000–2025, third edition. Geneva: World Health Organization; 2019. Available at https://www.who.int/publications/i/item/who-global-report-on-trends-in-prevalence-of-tobacco-use-2000-2025-third-edition

Figure 60: Total fertility rates in Asia



Data accessed on 13 Nov 2019
Year of estimate: 2017

Figure 61: Oral contraceptive use (%) among women who are married or in union in Asia

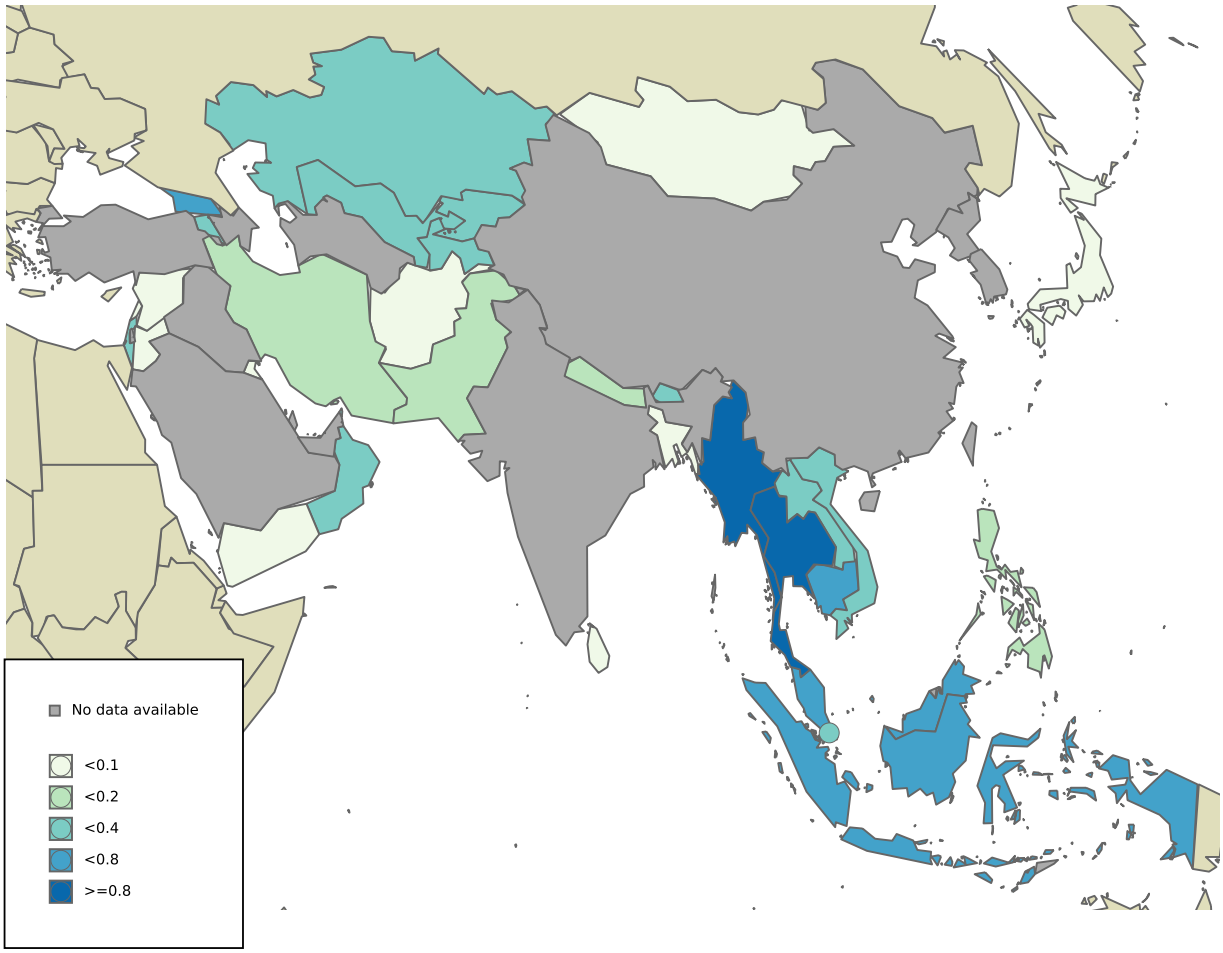


Data accessed on 18 Nov 2019

Data Sources:

United Nations, Department of Economic and Social Affairs, Population Division (2019). World Contraceptive Use 2019 (POP/DB/CP/Rev2019). https://www.un.org/en/development/desa/population/publications/dataset/contraception/wcu2019.asp. Available at: [Accessed on November 18, 2019].

Figure 62: Prevalence of HIV in Asia



Data accessed on 21 Nov 2019

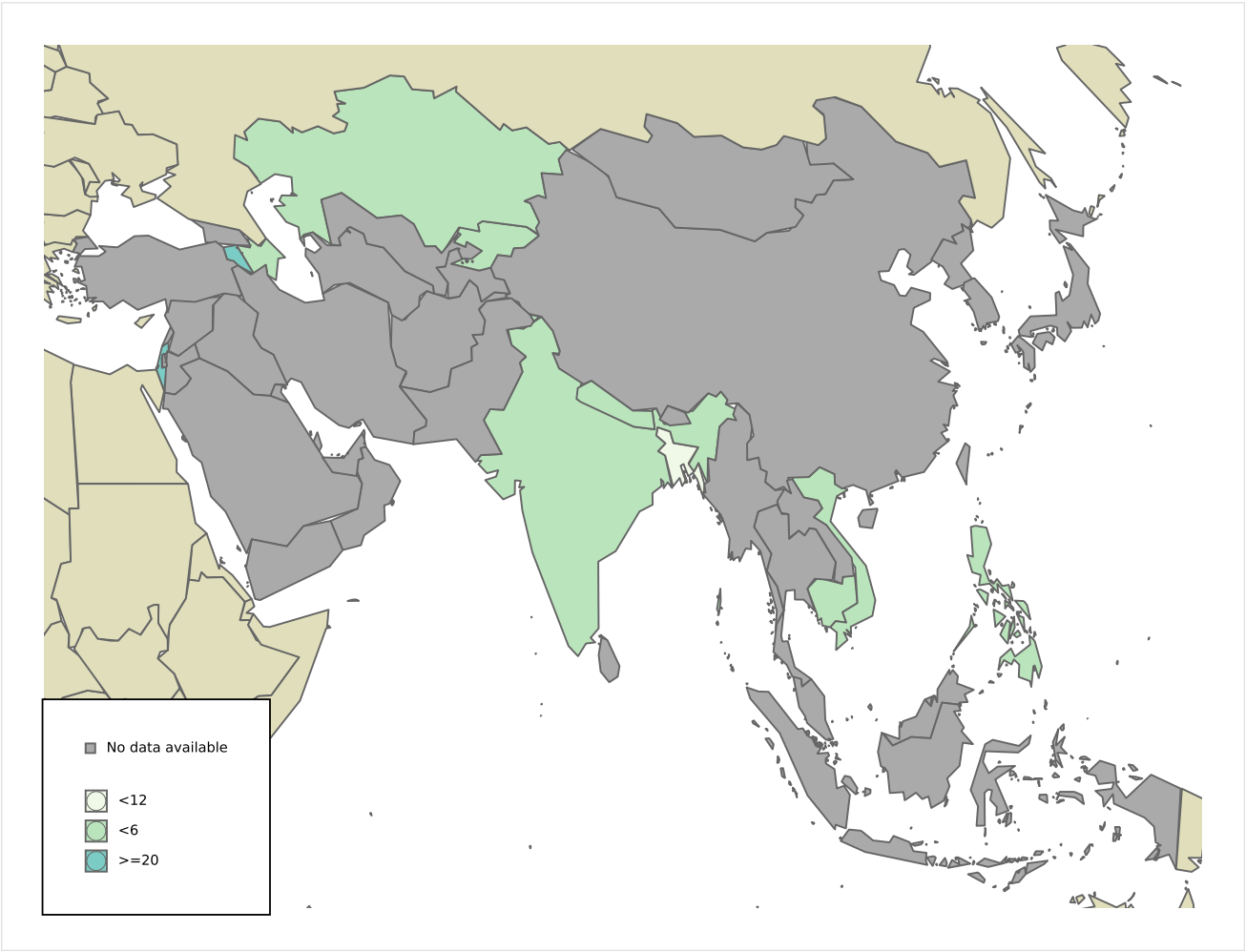
Data Sources:

UNAIDS database [internet]. Available at: http://aidsinfo.unaids.org/ [Accessed on November 21, 2019]

6 Sexual and reproductive health behaviour indicators

Sexual intercourse is the primary route of transmission of genital HPV infection. Information about sexual and reproductive health behaviours is essential to the design of effective preventive strategies against anogenital cancers. In this section, we describe sexual and reproductive health indicators that may be used as proxy measures of risk for HPV infection and anogenital cancers. Several studies have reported that earlier sexual debut is a risk factor for HPV infection, although the reason for this relationship is still unclear. In this section, information on sexual and reproductive health behaviour in Asiaare presented.

Figure 63: Percentage of 15-year-old girls who report sexual intercourse in Asia



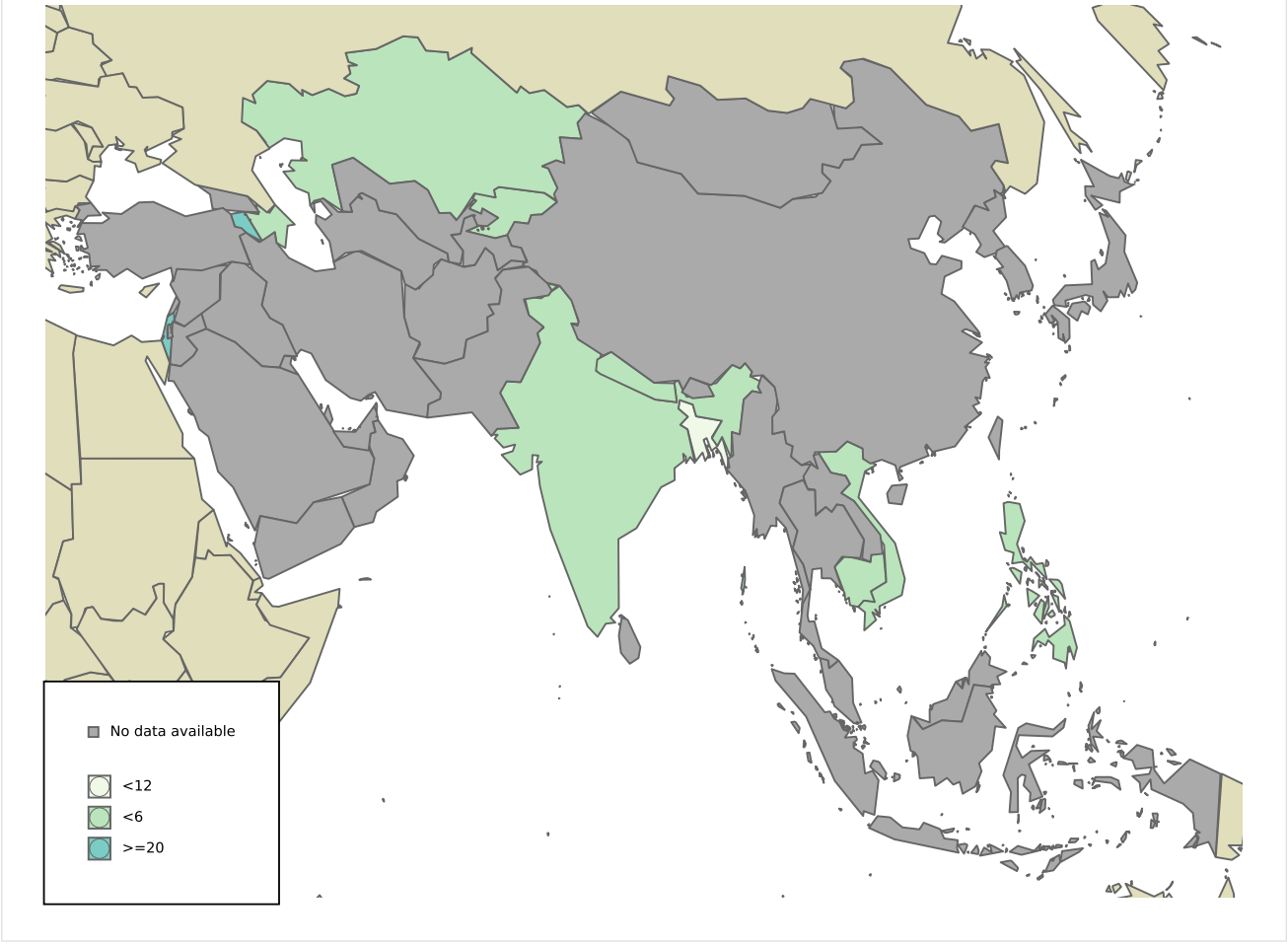
Data accessed on 16 Mar 2017
Please refer to original source for methods of estimation
Data Sources:

[1] Growing up unequal: gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-aged Children (HBSC) study: international report from the 2013/2014 survey. Inchley J, Currie D, Young T, et al. Copenhagen, WHO Regional Office for Europe, 2016 (Health Policy for Children and Adolescents, No. 7). Available at: http://www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1

[2] ICF International, 2015. The DHS (Demographic and Health Surveys) Program STATcompiler. Funded by USAID. http://www.statcompiler.com. Accessed on March 16 2017.

[3] Sexual behaviour in context: a global perspective. Wellings K, Collumbien M, Slaymaker E, et al. Lancet. 2006 Nov 11;368(9548):1706-28. Review. Erratum in: Lancet. 2007 Jan 27;369(9558):274. PMID:17098090.

Figure 64: Percentage of 15-year-old boys who report sexual intercourse in Asia



Data accessed on 16 Mar 2017
Please refer to original source for methods of estimation
Data Sources:
[1] Growing up unequal: gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-aged Children (HBSC) study: international report from the 2013/2014 survey. Inchley J, Currie D, Young T, et al. Copenhagen, WHO Regional Office for Europe, 2016 (Health Policy for Children and Adolescents, No. 7). Available at: http://www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1
[2] ICF International, 2015. The DHS (Demographic and Health Surveys) Program STATcompiler. Funded by USAID. http://www.statcompiler.com. Accessed on March 16 2017.
[3] Sexual behaviour in context: a global perspective. Wellings K, Collumbien M, Slaymaker E, et al. Lancet. 2006 Nov 11;368(9548):1706-28. Review. Erratum in: Lancet. 2007 Jan 27;369(9558):274. PMID:17098090.

Table 46: Median age at first sex in Asia

Country	Study	Year/period	Birth cohort	Male		Female		Total	
				N	Median age at first sex	N	Median age at first sex	N	Median age at first sex
Armenia	Armenia DHS 2010[1]	2010	1981-1985	20.4	258	22.7	677	-	-
	Armenia DHS 2010[1]	2010	1966-1970	20.3	164	20.5	700	-	-
	Armenia DHS 2010[1]	2010	1971-1975	18.8	162	20.3	588	-	-
	Armenia DHS 2010[1,a]	2010	1991-1995	-	47	-	72	-	-
	Armenia DHS 2010[1]	2010	1976-1980	20.5	226	21.2	701	-	-
	Armenia DHS 2010[1]	2010	1961-1965	20.2	216	20.7	821	-	-
	Armenia DHS 2010[1]	2010	1971-1985	20.2	1026	21.1	3489	-	-
	Armenia DHS 2010[1,a]	2010	1986-1995	-	265	-	532	-	-
	Armenia DHS 2010[1,a]	2010	1986-1990	19.7	218	-	460	-	-

Continued on next page

Table 46 – continued from previous page

Country	Study	Year/period	Birth cohort	Male		Female		Total	
				N	Median age at first sex	N	Median age at first sex	N	Median age at first sex
Azerbaijan	Azerbaijan DHS 2006 [2,b]	2006	-	-	-	-	-	-	-
Bangladesh	Bangladesh DHS 2011 [2,b]	2011	-	-	-	15.8	-	-	-
	Bangladesh DHS 2014 [2,b]	2014	-	-	-	16.2	-	-	-
Cambodia	Cambodia DHS 2000 [2,b]	2000	-	-	-	-	-	-	-
	Cambodia DHS 2005 [2,b]	2005	-	-	-	-	-	-	-
	Cambodia DHS 2010 [2,b]	2010	-	-	-	-	-	-	-
	Cambodia DHS 2014 [2,b]	2014	-	-	-	-	-	-	-
China	Fang-Hui Zhao 2009 [3,c,d]	2009	1985-1989	-	-	19.0	504	-	-
	Fang-Hui Zhao 2009 [3,d,c]	2009	1955-1959	-	-	21.0	528	-	-
	Fang-Hui Zhao 2009 [3,e,d]	2009	1970-1974	-	-	22.0	645	-	-
	Fang-Hui Zhao 2009 [3,d,c]	2009	1950-1994	-	-	20.0	5633	-	-
	Fang-Hui Zhao 2009 [3,c,d]	2009	1950-1954	-	-	20.0	369	-	-
	Fang-Hui Zhao 2009 [3,d,c]	2009	1975-1979	-	-	20.0	1054	-	-
	Fang-Hui Zhao 2009 [3,c,d]	2009	1980-1984	-	-	21.0	888	-	-
	Fang-Hui Zhao 2009 [3,e,d]	2009	1990-1994	-	-	17.0	64	-	-
	Fang-Hui Zhao 2009 [3,d,e]	2009	1950-1994	-	-	22.0	3756	-	-
	Fang-Hui Zhao 2009 [3,d,e]	2009	1980-1984	-	-	22.0	595	-	-
	Fang-Hui Zhao 2009 [3,e,d]	2009	1950-1954	-	-	23.0	247	-	-
	Fang-Hui Zhao 2009 [3,d,c]	2009	1965-1969	-	-	20.0	686	-	-
	Fang-Hui Zhao 2009 [3,e,d]	2009	1975-1979	-	-	22.0	666	-	-
	Fang-Hui Zhao 2009 [3,d,e]	2009	1985-1989	-	-	19.0	272	-	-
	Fang-Hui Zhao 2009 [3,d,e]	2009	1955-1959	-	-	23.0	352	-	-
	Fang-Hui Zhao 2009 [3,d,e]	2009	1965-1969	-	-	22.0	462	-	-

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Table 46 – continued from previous page

Country	Study	Year/period	Birth cohort	Male		Female		Total	
				N	Median age at first sex	N	Median age at first sex	N	Median age at first sex
	Fang-Hui Zhao 2009[3,c,d]	2009	1960-1964	-	-	21.0	676	-	-
	Fang-Hui Zhao 2009[3,d,c]	2009	1990-1994	-	-	17.0	42	-	-
	Fang-Hui Zhao 2009[3,e,d]	2009	1960-1964	-	-	22.0	447	-	-
	Fang-Hui Zhao 2009[3,d,c]	2009	1970-1974	-	-	21.0	889	-	-
Georgia	Georgia RHS 2005[4,c]	2011	1961-1990	-	-	20.5	-	-	-
	Georgia RHS 2005[4,a]	2006	1981-1985	-	-	-	520	-	-
	Georgia RHS 2005[4]	2009	1966-1970	-	-	21.0	924	-	-
	Georgia RHS 2005[4]	2008	1971-1975	-	-	20.6	941	-	-
	Georgia RHS 2005[4,a]	2005	1986-1990	-	-	-	127	-	-
	Georgia RHS 2005[4,e]	2010	1961-1990	-	-	22.1	-	-	-
	Georgia RHS 2005[4]	2007	1976-1980	-	-	21.0	833	-	-
	Georgia RHS 2005[4]	2011	1961-1990	-	-	21.3	4142	-	-
	Georgia RHS 2005[4]	2010	1961-1965	-	-	21.2	988	-	-
India	India DHS 2005-06 [2,b]	2006	-	-	-	17.8	-	-	-
Indonesia	Indonesia DHS 2012[5,f]	2012	1958-1987	23.8	8924	-	-	-	-
	Indonesia DHS 2012[5,f,c]	2012	1958-1987	23.1	-	-	-	-	-
	Indonesia DHS 2012[5,a,f]	2012	1963-1992	-	7978	-	34812	-	-
	Indonesia DHS 2012[5,a,f]	2012	1958-1992	-	9269	-	-	-	-
	Indonesia DHS 2012[5,f]	2012	1973-1977	24.4	1775	20.8	6669	-	-
	Indonesia DHS 2012[5,f]	2012	1978-1982	24.4	1671	21.0	6567	-	-
	Indonesia DHS 2012[5,f,a]	2012	1993-1997	-	28	-	956	-	-
	Indonesia DHS 2012[5,c]	2012	1963-1987	-	-	19.4	-	-	-
	Indonesia DHS 2012[5,a,f]	2012	1988-1997	-	372	-	4896	-	-
	Indonesia DHS 2012[5,a,e]	2012	1963-1992	-	-	-	-	-	-
	Indonesia DHS 2012[5,e]	2012	1963-1987	-	-	21.8	-	-	-
	Indonesia DHS 2012[5,f]	2012	1963-1987	23.9	7633	20.6	30886	-	-
	Indonesia DHS 2012[5,f]	2012	1958-1962	23.1	1292	-	-	-	-
	Indonesia DHS 2012[5,f,e]	2012	1958-1987	24.6	-	-	-	-	-

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Table 46 – continued from previous page

Country	Study	Year/period	Birth cohort	Male		Female		Total	
				N	Median age at first sex	N	Median age at first sex	N	Median age at first sex
	Indonesia DHS 2012[5,f]	2012	1968-1972	24.0	1693	20.2	6121	-	-
	Indonesia DHS 2012[5,f]	2012	1963-1967	23.5	1371	19.0	5304	-	-
	Indonesia DHS 2012[5,f]	2012	1983-1987	23.3	1122	21.3	6235	-	-
	Indonesia DHS 2012[5,a,f]	2012	1988-1992	-	344	-	3934	-	-
	Indonesia DHS 2012[5,c]	2012	1963-1992	-	-	19.5	-	-	-
Israel	Ben-Zur 2000[6,g]	1995-1996	1976-1982	-	-	-	-	15.0	231
Kazakhstan	Kazakstan DHS 1999[7,a]	1999	1975-1979	-	-	-	399	-	-
	Kazakstan DHS 1999[7]	1999	1955-1959	23.5	159	21.6	654	-	-
	Kazakstan DHS 1999[7,c]	1999	1950-1974	-	-	21.2	-	-	-
	Kazakstan DHS 1999[7]	1999	1965-1969	23.7	144	21.1	649	-	-
	Kazakstan DHS 1999[7]	1999	1960-1964	23.1	222	21.5	724	-	-
	Kazakstan DHS 1999[7]	1999	1950-1974	-	-	21.2	3116	-	-
	Kazakstan DHS 1999[7,e]	1999	1950-1974	-	-	21.3	-	-	-
	Kazakstan DHS 1999[7]	1999	1970-1974	23.7	132	20.7	596	-	-
	Kazakstan DHS 1999[7]	1999	1945-1949	23.2	103	-	-	-	-
	Kazakstan DHS 1999[7]	1999	1950-1954	22.9	117	21.2	491	-	-
	Kazakstan DHS 1999[7,c]	1999	1940-1974	23.6	-	-	-	-	-
	Kazakstan DHS 1999[7,a]	1999	1980-1984	-	-	-	71	-	-
	Kazakstan DHS 1999[7]	1999	1940-1944	24.5	65	-	-	-	-
	Kazakstan DHS 1999[7,e]	1999	1940-1974	23.4	-	-	-	-	-
	Kazakstan DHS 1999[7]	1999	1940-1974	23.5	943	-	-	-	-
Kyrgyzstan	Kyrgyz Republic DHS 1997 [2,b]	1997	-	-	-	-	-	-	-
	Kyrgyz Republic DHS 2012 [2,b]	2012	-	19.7	-	-	-	-	-
	Moldova DHS 2005 [2,b]	2005	-	19.0	-	20	-	-	-
Maldives	Maldives DHS 2009[8]	2009	1960-1984	-	-	19.6	5742	-	-
	Maldives DHS 2009[8,a]	2009	1985-1994	-	-	-	1386	-	-
	Maldives DHS 2009[8]	2009	1980-1984	-	-	21.8	1536	-	-
	Maldives DHS 2009[8,a]	2009	1985-1989	-	-	-	1266	-	-
	Maldives DHS 2009[8]	2009	1960-1964	-	-	17.0	721	-	-
	Maldives DHS 2009[8]	2009	1970-1974	-	-	18.7	1184	-	-
	Maldives DHS 2009[8]	2009	1975-1979	-	-	20.2	1286	-	-

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Table 46 – continued from previous page

Country	Study	Year/period	Birth cohort	Male		Female		Total	
				N	Median age at first sex	N	Median age at first sex	N	Median age at first sex
	Maldives DHS 2009[8]	2009	1965-1969	-	-	17.8	1013	-	-
	Maldives DHS 2009[8,c]	2009	1960-1984	-	-	18.9	-	-	-
	Maldives DHS 2009[8,e]	2009	1960-1984	-	-	20.9	-	-	-
	Maldives DHS 2009[8]	2009	1960-1989	-	-	20.5	7005	-	-
	Maldives DHS 2009[8,a]	2009	1990-1994	-	-	-	119	-	-
Nepal	Nepal DHS 1996 [2,b]	1996	-	-	-	16.5	-	-	-
	Nepal DHS 2001 [2,b]	2001	-	18.9	-	16.9	-	-	-
	Nepal DHS 2006 [2,b]	2006	-	19.7	-	17.2	-	-	-
	Nepal DHS 2011 [2,b]	2011	-	-	-	17.9	-	-	-
Philippines	Philippines DHS 1993 [2,b]	1993	-	-	-	-	-	-	-
	Philippines DHS 1998 [2,b]	1998	-	-	-	-	-	-	-
	Philippines DHS 2003 [2,b]	2003	-	-	-	-	-	-	-
	Philippines DHS 2008 [2,b]	2008	-	-	-	-	-	-	-
	Philippines DHS 2013 [2,b]	2013	-	-	-	-	-	-	-
Tajikistan	Tajikistan DHS 2012[9]	2012	1973-1977	-	-	19.4	1003	-	-
	Tajikistan DHS 2012[9,c]	2012	1963-1987	-	-	20.2	-	-	-
	Tajikistan DHS 2012[9]	2012	1968-1972	-	-	19.9	980	-	-
	Tajikistan DHS 2012[9]	2012	1963-1987	-	-	20.3	5363	-	-
	Tajikistan DHS 2012[9,a]	2012	1988-1992	-	-	-	1377	-	-
	Tajikistan DHS 2012[9,e]	2012	1963-1987	-	-	20.6	-	-	-
	Tajikistan DHS 2012[9]	2012	1978-1982	-	-	20.5	1107	-	-
	Tajikistan DHS 2012[9]	2012	1963-1967	-	-	20.1	871	-	-
	Tajikistan DHS 2012[9,a]	2012	1993-1997	-	-	-	270	-	-
	Tajikistan DHS 2012[9]	2012	1983-1987	-	-	21.3	1403	-	-
Timor-Leste	Timor Leste DHS 2009/2010[10,e]	2009-2010	1960-1979	22.5	-	-	-	-	-
	Timor Leste DHS 2009/2010[10,c]	2009-2010	1960-1979	23.7	-	-	-	-	-
	Timor Leste DHS 2009/2010[10]	2009-2010	1970-1974	23.2	531	20.9	1603	-	-
	Timor Leste DHS 2009/2010[10,c]	2009-2010	1960-1984	-	-	23.4	-	-	-
	Timor Leste DHS 2009/2010[10]	2009-2010	1960-1979	23.3	1791	-	-	-	-

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Table 46 – continued from previous page

Country	Study	Year/period	Birth cohort	Male		Female		Total	
				N	Median age at first sex	N	Median age at first sex	N	Median age at first sex
	Timor Leste DHS 2009/2010[10,a]	2009-2010	1985-1989	-	360	-	1157	-	-
	Timor Leste DHS 2009/2010[10]	2009-2010	1975-1979	22.6	413	20.5	1439	-	-
	Timor Leste DHS 2009/2010[10]	2009-2010	1960-1984	23.0	2291	20.9	7076	-	-
	Timor Leste DHS 2009/2010[10,e]	2009-2010	1960-1984	-	-	22.0	-	-	-
	Timor Leste DHS 2009/2010[10]	2009-2010	1965-1969	23.5	451	21.0	1334	-	-
	Timor Leste DHS 2009/2010[10,a]	2009-2010	1960-1989	-	2651	-	8234	-	-
	Timor Leste DHS 2009/2010[10]	2009-2010	1980-1984	22.2	499	20.7	1582	-	-
	Timor Leste DHS 2009/2010[10]	2009-2010	1960-1964	23.9	396	21.8	1114	-	-
	Timor Leste DHS 2009/2010[10,a]	2009-2010	1990-1994	-	100	-	270	-	-
Turkey	Turkey DHS 1998[11,h]	1998	1954-1958	19.0	335	-	-	-	-
	Turkey DHS 1998[11,h]	1998	1969-1973	19.2	342	-	-	-	-
	Turkey DHS 1998[11,h,e]	1998	1934-1973	19.0	-	-	-	-	-
	Turkey DHS 1998[11,h,c]	1998	1934-1973	19.8	-	-	-	-	-
	Turkey DHS 1998[11,h]	1998	1964-1968	18.9	364	-	-	-	-
	Turkey DHS 1998[11,h]	1998	1959-1963	18.8	352	-	-	-	-
	Turkey DHS 1998[11,h]	1998	1934-1948	20.9	226	-	-	-	-
	Turkey DHS 1998[11,h]	1998	1934-1973	19.2	1859	-	-	-	-
	Turkey DHS 1998[11,h]	1998	1949-1953	19.3	240	-	-	-	-
Turkmenistan	Turkmenistan DHS 2000[12]	2000	1971-1975	-	-	22.0	1065	-	-
	Turkmenistan DHS 2000[12]	2000	1951-1975	-	-	21.6	4535	-	-
	Turkmenistan DHS 2000[12,a]	2000	1976-1980	-	-	-	730	-	-
	Turkmenistan DHS 2000[12]	2000	1966-1970	-	-	22.2	1015	-	-
	Turkmenistan DHS 2000[12,a]	2000	1951-1980	-	-	-	5266	-	-
	Turkmenistan DHS 2000[12,e]	2000	1951-1975	-	-	21.4	-	-	-
	Turkmenistan DHS 2000[12,a]	2000	1981-1985	-	-	-	93	-	-
	Turkmenistan DHS 2000[12]	2000	1956-1960	-	-	20.8	838	-	-
	Turkmenistan DHS 2000[12,c]	2000	1951-1975	-	-	21.8	-	-	-

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Table 46 – continued from previous page

Country	Study	Year/period	Birth cohort	Male		Female		Total	
				N	Median age at first sex	N	Median age at first sex	N	Median age at first sex
	Turkmenistan DHS 2000[12]	2000	1951-1955	-	-	20.2	666	-	-
	Turkmenistan DHS 2000[12]	2000	1961-1965	-	-	22.1	950	-	-
Uzbekistan	Uzbekistan DHS 1996[13]	1996	1952-1956	-	-	19.7	420	-	-
	Uzbekistan DHS 1996[13,a]	1996	1977-1981	-	-	-	128	-	-
	Uzbekistan DHS 1996[13]	1996	1967-1971	-	-	20.0	673	-	-
	Uzbekistan DHS 1996[13,c]	1996	1947-1971	-	-	19.7	-	-	-
	Uzbekistan DHS 1996[13]	1996	1972-1976	-	-	19.7	623	-	-
	Uzbekistan DHS 1996[13]	1996	1957-1961	-	-	19.9	554	-	-
	Uzbekistan DHS 1996[13]	1996	1962-1966	-	-	20.5	612	-	-
	Uzbekistan DHS 1996[13]	1996	1947-1951	-	-	20.6	306	-	-
	Uzbekistan DHS 1996[13,e]	1996	1947-1971	-	-	20.8	-	-	-
	Uzbekistan DHS 1996[13]	1996	1947-1971	-	-	20.1	2568	-	-
Viet Nam	Viet Nam AIS 2005[14,a]	2005	1956-1985	-	4246	-	5011	-	-
	Viet Nam AIS 2005[14]	2005	1956-1980	23.5	3970	21.2	4471	-	-
	Viet Nam AIS 2005[14,a]	2005	1981-1985	-	277	-	536	-	-
	Viet Nam AIS 2005[14]	2005	1956-1965	23.5	1656	21.2	1811	-	-
	Viet Nam AIS 2005[14,a]	2005	1981-1990	-	325	-	623	-	-
	Viet Nam AIS 2005[14,a]	2005	1986-1990	-	47	-	88	-	-
	Viet Nam AIS 2005[14]	2005	1966-1975	23.1	1636	21.0	1861	-	-
	Viet Nam AIS 2005[14]	2005	1976-1980	24.2	676	21.5	800	-	-

Data accessed on 16 Mar 2017

Please refer to original source for methods of estimation

[a] Data omitted because less than 50 percent of respondents had intercourse for the first time before reaching the beginning of the age group.

[b] Median age at first sexual intercourse for women aged 20-49; Median age at first sexual intercourse for men aged 20-49(54,59).

[c] Rural.

[d] Data were collected anonimously using a short, nurse-administered questionnaire.

[e] Urban.

[f] Currently married men.

[g] Data pertain to Jewish adolescents.

[h] Data pertain to husbands.

Data Sources:

[1] National Statistical Service [Armenia], Ministry of Health [Armenia], and ICF International. 2012. Armenia Demographic and Health Survey 2010. Calverton, Maryland: National Statistical Service, Ministry of Health, and ICF International.

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Systems Inc. Columbia, Maryland USA
14 General Statistical Office (GSO), National Institute of Hygiene and Epidemiology (NIHE) [Vietnam] and ORC Macro. 2006. Vietnam Population and AIDS Indicator Survey 2005. Calverton, Maryland, USA: GSO, NIHE, and ORC Macro

Table 47: Average number of sexual partners in Asia

Country	Study	Period of estimate	Year/period	Birth cohort	Male Mean(N)	Female Mean(N)	Total Mean (N)
Israel	Ben-Zur 2000[1,a]	Lifetime	1995-1996	(1977-1982)	-	-	3.6
	Chemtob 2006[2,b]	Last 3 months	2000	(1976-1982)	-	-	1.6
	Chemtob 2006[2,b]	Last 3 months	2000	(1966-1975)	-	-	1.3
	Chemtob 2006[2,b]	Last 3 months	2000	(1955-1982)	1.9	1.5	1.3
	Chemtob 2006[2,b]	Last 3 months	2000	(1955-1965)	-	-	1.1

Data accessed on 8 Aug 2013
Please refer to original source for methods of estimation
[a] Data pertain to Jewish adolescents.
[b] Number of surveyed people (not all sexually active).
Data Sources:
1 Ben-Zur H, Breznitz S, Wardi N, Berzon Y. Denial of HIV/AIDS and preventive behaviour among Israeli adolescents. J Adolesc. 2000 Apr;23(2):157-74.
2 Chemtob D, Damelin B, Bessudo-Manor N, Hassman R, Amikam Y, Zenilman JM, Tamir D."Getting AIDS: not in my back yard." Results from a national knowledge, attitudes and practices survey. Isr Med Assoc J. 2006 Sep;8(9):610-4.

Table 48: Lifetime prevalence of anal intercourse among women in Asia

Country	Study	Year/period	Birth cohort	N surveyed	N sexual active	% among sexually active
-	-	-	-	-	-	-

Data accessed on 8 Aug 2013
Please refer to original source for methods of estimation

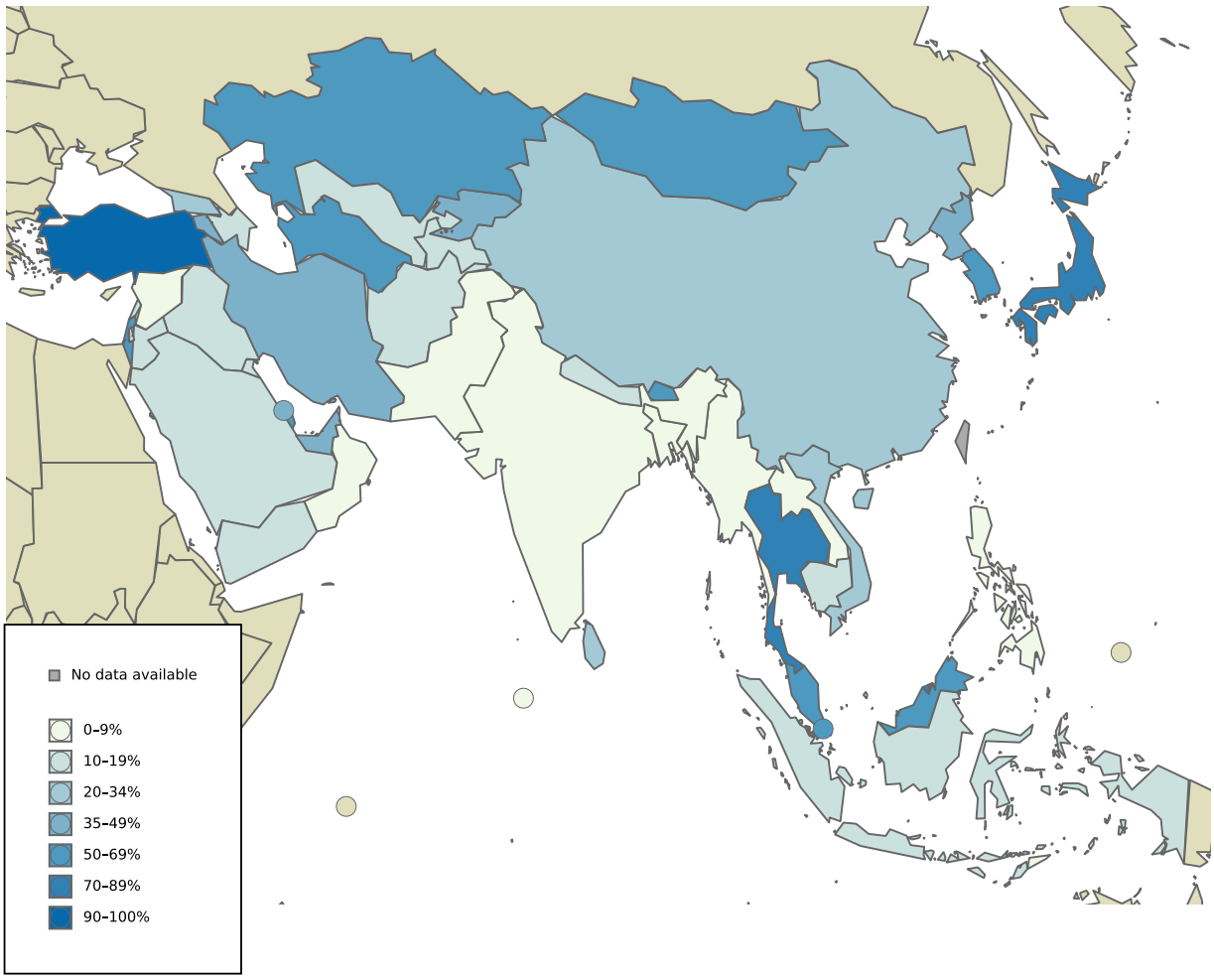
7 HPV preventive strategies

It is established that well-organised cervical screening programmes or widespread good quality cytology can reduce cervical cancer incidence and mortality. The introduction of HPV vaccination could also effectively reduce the burden of cervical cancer in the coming decades. This section presents indicators on basic characteristics and performance of cervical cancer screening, status of HPV vaccine licensure and introduction in Asia.

7.1 Cervical cancer screening practices

Screening strategies differ between countries. Some countries have population-based programmes, where in each round of screening women in the target population are individually identified and invited to attend screening. This type of programme can be implemented nationwide or only in specific regions of the country. In opportunistic screening, invitations depend on the individual's decision or on encounters with health-care providers. The most frequent method for cervical cancer screening is cytology, and there are alternative methods such as HPV DNA tests and visual inspection with acetic acid (VIA). VIA is an alternative to cytology-based screening in low-resource settings (the 'see and treat' approach). HPV DNA testing is being introduced into some countries as an adjunct to cytology screening ('co-testing') or as the primary screening test to be followed by a secondary, more specific test, such as cytology

Figure 65: Ever in lifetime cervical cancer screening coverage in women 25–65 years in 2019 by country in Asia

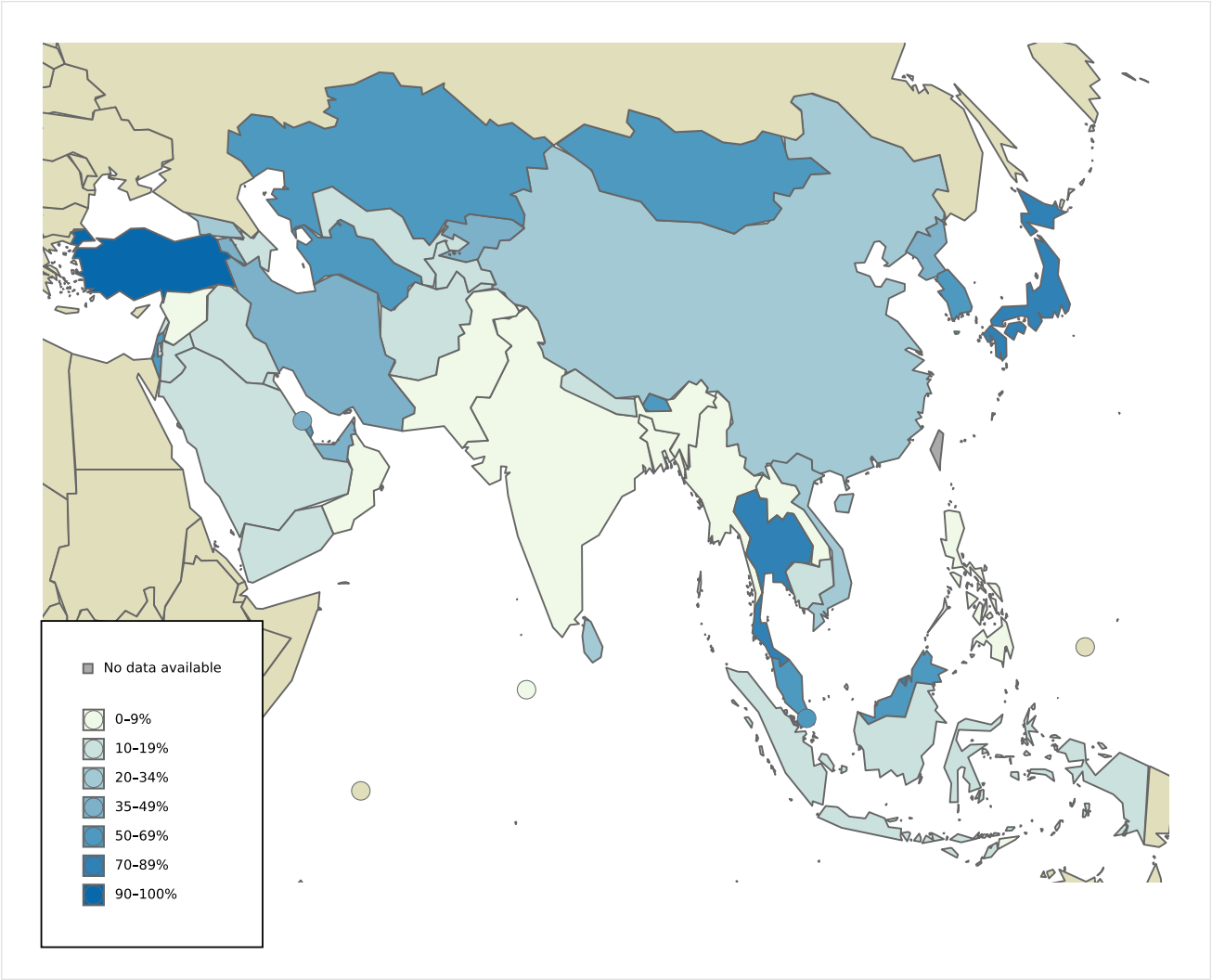


Data accessed on 31 Aug 2022

Data Sources:

Bruni L, Serrano B, Roura E, Alemany L, Cowan M, Herrero R, et al. Cervical cancer screening programmes and age-specific coverage estimates for 202 countries and territories worldwide: a review and synthetic analysis. Lancet Glob Health. 2022;10(8):e1115.

Figure 66: Ever in lifetime cervical cancer screening coverage in women 30-49 years in 2019 by country in Asia



Data accessed on 31 Aug 2022

Data Sources:

Bruni L, Serrano B, Roura E, Alemany L, Cowan M, Herrero R, et al. Cervical cancer screening programmes and age-specific coverage estimates for 202 countries and territories worldwide: a review and synthetic analysis. Lancet Glob Health. 2022;10(8):e1115.

Table 49: Main characteristics of cervical cancer screening in Asia

Country	Region	Existence of official national recommendations	Starting year of current recommendations	Active invitation to screening	Screening ages (years), primary screening test used, and screening interval or frequency of screenings
Afghanistan	Afghanistan	No	-	-	-
Armenia	Armenia	Yes	2007	No	30-60 (cytology, 3 years)
Azerbaijan	Azerbaijan	No	-	-	-
Bahrain	Bahrain	Yes	Unk	No	30-65 (cytology, 3 years)
Bangladesh	Bangladesh	Yes	2018	No	30-60 (VIA, 5 years)
Bhutan	Bhutan	Yes	2006	No	25-30 (cytology, 3 years); 46-65 (cytology, 3 years); 30-45 (cytology OR VIA, 3 years)
Brunei Darussalam	Brunei	Yes	2019	Yes	20-29 (cytology, 3 years); 30-65 (cytology, 3 years); 30-65 (HPV test, 5 years); 30-65 (cytology OR HPV test, 5 years)
Cambodia	Cambodia	Yes	2018	No	30-49 (VIA, 3 years)
China	China	Yes	2019	No	35-64 (cytology or HPV test and VIA, 3 years)

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Table 49 – continued from previous page

Country	Region	Existence of official national recommendations	Starting year of current recommendations	Active invitation to screening	Screening ages (years), primary screening test used, and screening interval or frequency of screenings
Democratic People's Republic of Korea	Korea, DPR	Yes	Unk	No	30-60 (cytology, 1 year)
Georgia	Georgia	Yes	2011	Yes	25-60 (cytology, 3 years)
India	India	Yes	2016	No	30-65 (VIA, 5 years)
Indonesia	Indonesia	Yes	2008	No	30-50 (VIA, 5 years)
Iran (Islamic Republic of)	Iran	Yes	2018	No	30-49 (HPV test, 10 years)
Iraq	Iraq	No	-	-	-
Israel	Israel	Yes	2019	No	30-54 (cytology, 3 years)
Japan	Japan	Yes	2008	Yes	>=20 (cytology, 2 years)
Jordan	Jordan	No	-	-	-
Kazakhstan	Kazakhstan	Yes	2018	Yes	30-70 (cytology, 4 years)
Kuwait	Kuwait	No	-	-	-
Kyrgyzstan	Kyrgyzstan	No	-	-	-
Lao People's Democratic Republic	Laos	No	-	-	-
Lebanon	Lebanon	No	-	-	-
Malaysia	Malaysia	Yes	2019	No	30-65 (cytology, 3 years); 30-65 (HPV test, 5 years)
Maldives	Maldives	Yes	2014	No	30-50 (VIA, 5 years)
Mongolia	Mongolia	Yes	2012	Yes	30-60 (cytology, 3 years)
Myanmar	Myanmar	Yes	2018	No	30-49 (HPV test, 5 years); 30-49 (VIA, 5 years)
Nepal	Nepal	Yes	2010	No	30-60 (VIA, 5 years)
Oman	Oman	No	-	-	-
Pakistan	Pakistan	No	-	-	-
Philippines	Philippines	Yes	2009	No	25-55 (VIA, 5 years)
Qatar	Qatar	Yes	2012	No	21-49 (cytology, 3 years); 50-65 (cytology, 5 years)
Republic of Korea	Korea, Republic of	Yes	2016	Yes	20-100 (cytology, 2 years)
Saudi Arabia	Saudi Arabia	No	-	-	-
Singapore	Singapore	Yes	2019	No	25-29 (cytology, 3 years); 30-69 (HPV test, 5 years)
Sri Lanka	Sri Lanka	Yes	2017	Yes	35-45 (cytology, Unk years)
Syrian Arab Republic	Syria	Yes	2019	No	30-49 (cytology, Unk years)
Tajikistan	Tajikistan	No	-	-	-
Thailand	Thailand	Yes	2020	No	30-60 (cytology, 5 years)
Timor-Leste	Timor-Leste	Yes	Unk	No	18-60 (VIA, Unk years)
Turkey	Turkey	Yes	2014	Yes	30-65 (cytology and HPV test, 5 years)
Turkmenistan	Turkmenistan	Yes	2018	No	21-69 (cytology, 3 years)
United Arab Emirates	Abu-Dabi	Yes	2003	No	25-29 (cytology, 3 years); 30-65 (cytology OR HPV test, 5 years)
Uzbekistan	Uzbekistan	No	-	-	-
Viet Nam	Viet Nam	Yes	2011	No	21-70 (cytology and VIA, 3 years)
Yemen	Yemen	No	-	-	-

Data accessed on 31 Aug 2022

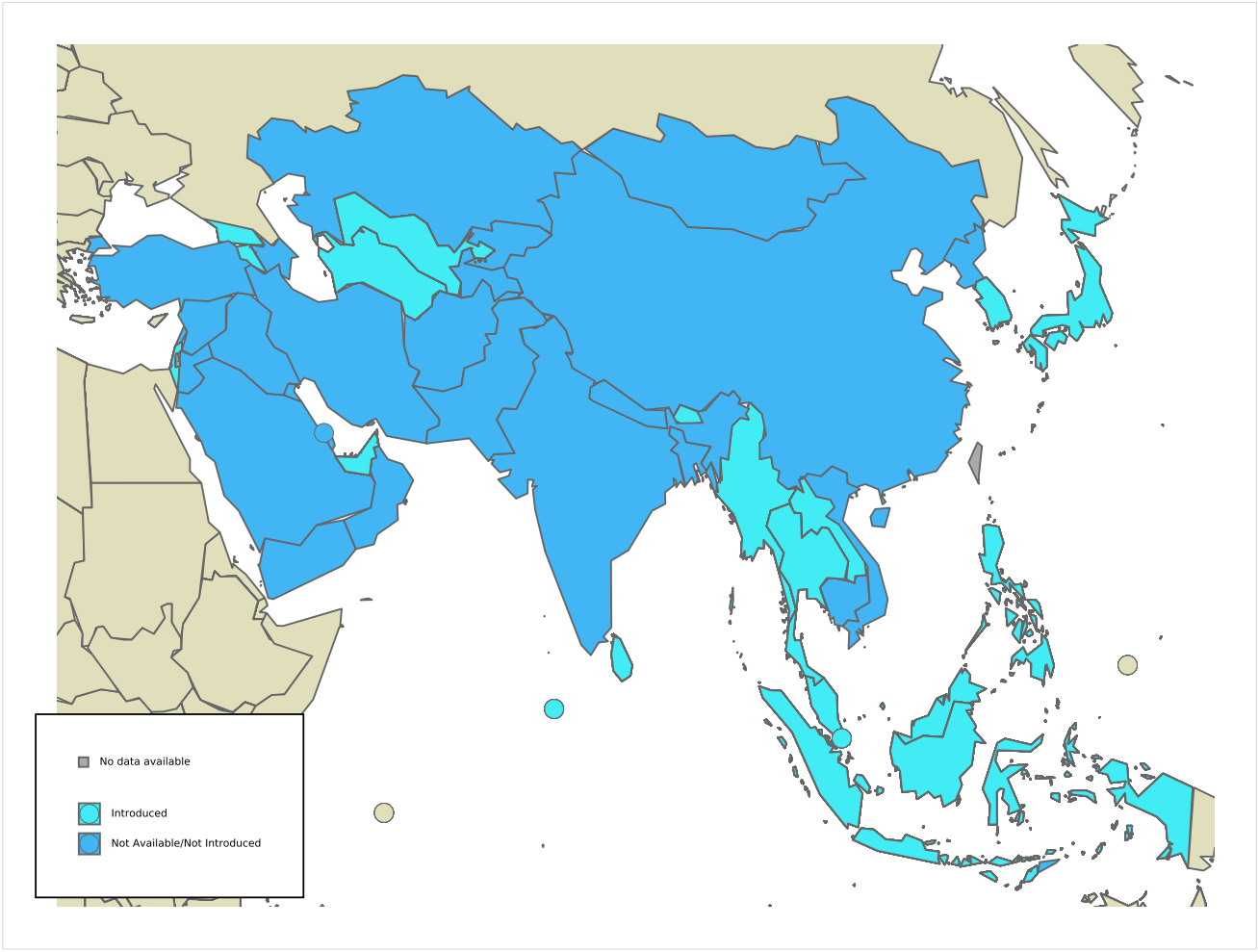
Data Sources:

Bruni L, Serrano B, Roura E, Alemany L, Cowan M, Herrero R, et al. Cervical cancer screening programmes and age-specific coverage estimates for 202 countries and territories worldwide: a review and synthetic analysis. Lancet Glob Health. 2022;10(8):e1115.

7.2 HPV vaccination

7.2.1 HPV vaccine licensure and introduction

Figure 67: Countries with HPV vaccine in the national immunization programme in Asia



Data accessed on 24 Oct 2022

Data Sources:

Human papillomavirus (HPV) vaccination coverage. World Health Organization. 2022. Available from: https://immunizationdata.who.int/pages/coverage/hpv.html, accessed [24 Oct 2022]

Bruni L, Saura-Lázaro A, Montoliu A, Brotons M, Alemany L, Diallo MS, et al. HPV vaccination introduction worldwide and WHO and UNICEF estimates of national HPV immunization coverage 2010-2019. Prev Med. 2021;144(106399):106399.

Table 50: HPV vaccination policies in Asia

Country	Sex	Programme	Introduction year	Year of estimation of HPV vaccination coverage	HPV coverage – first dose (%)	HPV coverage – last dose (%)
Armenia	Female	Introduced	2017	2021	8	9
Bhutan	Female	Introduced	2010	2021	88	89
Bhutan	Male	Introduced	2021	2021	89	90
Brunei Darussalam	Female	Introduced	2012	2021	89	97
Georgia	Female	Introduced	2018	2021	12	14
Indonesia	Female	Introduced	2017	2021	5	6
Israel	Female	Introduced	2013	2021	55	66
Israel	Male	Introduced	2015	2021	49	61
Japan	Female	Introduced	2011	2021	-	-
Lao People's Democratic Republic	Female	Introduced	2020	2021	42	37
Malaysia	Female	Introduced	2010	2021	14	15
Maldives	Female	Introduced	2019	2021	41	60
Myanmar	Female	Introduced	2020	2021	-	-
Philippines	Female	Introduced	2015	2021	0	4
Republic of Korea	Female	Introduced	2016	2021	-	-
Singapore	Female	Introduced	2010	2021	-	-
Sri Lanka	Female	Introduced	2017	2021	46	71
Thailand	Female	Introduced	2017	2021	-	-
Turkmenistan	Female	Introduced	2016	2021	99	99
Turkmenistan	Male	Introduced	2016	2021	99	99
United Arab Emirates	Female	Introduced	2008	2021	-	-
Uzbekistan	Female	Introduced	2019	2021	87	99

Data accessed on 24 Oct 2022

Data Sources:

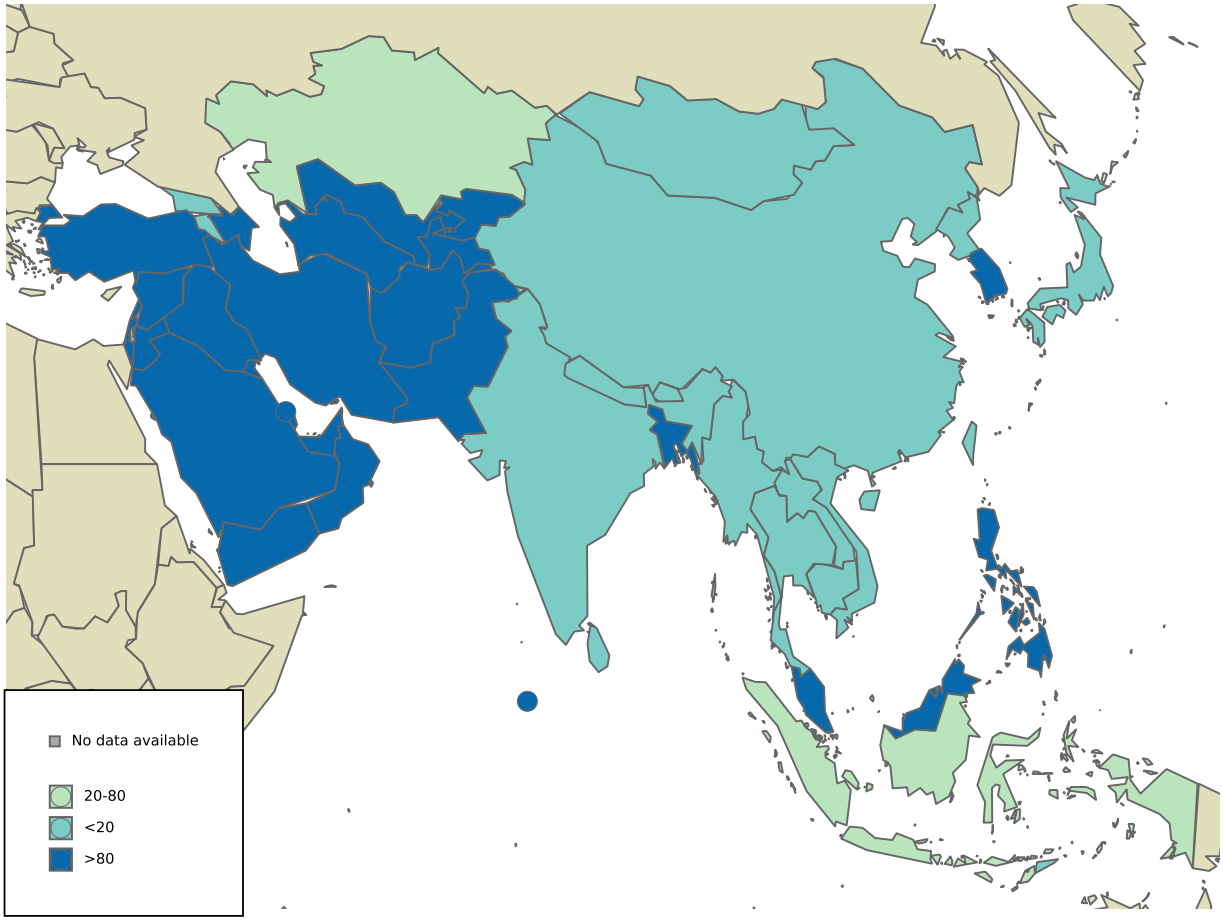
Human papillomavirus (HPV) vaccination coverage. World Health Organization. 2022. Available from: https://immunizationdata.who.int/pages/coverage/hpv.html, accessed [24 Oct 2022]

Bruni L, Saura-Lázaro A, Montoliu A, Brotons M, Alemany L, Diallo MS, et al. HPV vaccination introduction worldwide and WHO and UNICEF estimates of national HPV immunization coverage 2010-2019. Prev Med. 2021;144(106399):106399.

8 Protective factors for cervical cancer

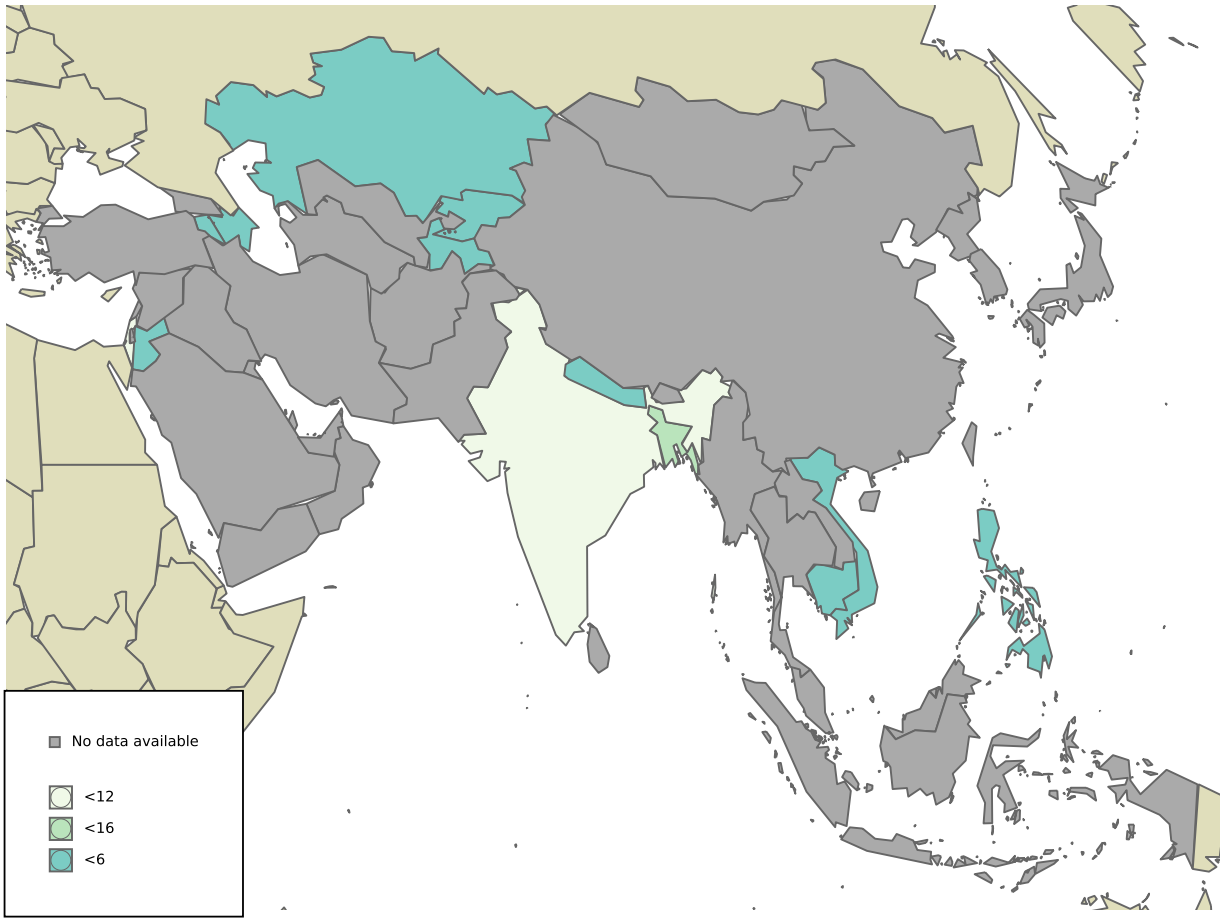
Male circumcision and the use of condoms have shown a significant protective effect against HPV transmission.

Figure 68: Prevalence of male circumcision in Asia



Data accessed on 31 Aug 2015
Please refer to country-specific reference(s) for full methodologies.
Data Sources:
Based on systematic reviews and meta-analysis performed by ICO. The ICO HPV Information Centre has updated data until August 2015. Reference publication: Albero G, Sex Transm Dis. 2012 Feb;39(2):104-13.

Figure 69: Prevalence of condom use in Asia



Data accessed on 16 Mar 2017

Please refer to original source for methods of estimation

Data Sources:

1 Growing up unequal: gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-aged Children (HBSC) study: international report from the 2013/2014 survey. Inchley J, Currie D, Young T, et al. Copenhagen, WHO Regional Office for Europe, 2016 (Health Policy for Children and Adolescents, No. 7). Available at: http://www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1

2 ICF International, 2015. The DHS (Demographic and Health Surveys) Program STATcompiler. Funded by USAID. http://www.statcompiler.com. Accessed on March 16 2017.

3 Sexual behaviour in context: a global perspective. Wellings K, Collumbien M, Slaymaker E, et al. Lancet. 2006 Nov 11;368(9548):1706-28. Review. Erratum in: Lancet. 2007 Jan 27;369(9558):274. PMID:17098090.

9 References

HPV-related statistics were gathered from specific databases created at the Institut Català d'Oncologia and the International Agency for Research on Cancer.
Systematic collection of published literature from peer-reviewed journals is stored in these databases. Data correspond to results from the following reference papers as well as updated results from continuous monitoring of the literature by the HPV Information Centre:

Table 51: References of studies included

Country	Study
HPV prevalence and HPV type distribution for cytologically normal women	
General sources	Based on systematic reviews and meta-analysis performed by ICO. The ICO HPV Information Centre has updated data until June 2014. Reference publications: 1) Bruni L, J Infect Dis 2010; 202: 1789. 2) De Sanjosé S, Lancet Infect Dis 2007; 7: 453
Bahrain	Hajjaj AA, Saudi Med J 2006; 27: 487
Bangladesh	Nahar Q, PLoS ONE 2014; 9: e107675
Bhutan	Tshomo U, BMC Infect Dis 2014; 14: 408
China	Belinson J, Gynecol Oncol 2001; 83: 439 | Belinson JL, Am J Clin Pathol 2011; 135: 790 | Belinson JL, Int J Gynecol Cancer 2003; 13: 819 | Bian ML, Exp Ther Med 2013; 6: 1332 | Chan PK, J Infect Dis 2002; 185: 28 | Chan PK, J Med Virol 2009; 81: 1635 | Chen Q, PLoS ONE 2012; 7: e32149 | Chen Z, Exp Ther Med 2013; 6: 85 | Chui SH, Public Health 2012; 126: 600 | Dai M, Br J Cancer 2006; 95: 96 | Ding X, J Med Virol 2014; 86: 1937 | DU H, Zhonghua Liu Xing Bing Xue Za Zhi 2012; 33: 799 | He X, Eur J Epidemiol 2008; 23: 403 | Hu SY, Chin J Cancer Res 2011; 23: 25 | Jin Q, Chin Med J 2010; 123: 2004 | Li C, Cancer Epidemiol Biomarkers Prev 2010; 19: 2655 | Li H, Eur J Obstet Gynecol Reprod Biol 2013; 170: 202 | Li LK, Br J Cancer 2006; 95: 1593 | Lin M, Aust N Z J Obstet Gynaecol 2008; 48: 189 | Mai RQ, Asian Pac J Cancer Prev 2014; 15: 4945 | Moy LM, Int J Cancer 2010; 127: 646 | Sui S, Asian Pac J Cancer Prev 2013; 14: 5861 | Sun LL, Virol J 2012; 9: 153 | Sun ZR, Int J Gynaecol Obstet 2010; 109: 105 | Wang S, BMC Cancer 2012; 12: 160 | Wang X, Int J Gynaecol Obstet 2013; 120: 37 | Wang YY, Asian Pac J Cancer Prev 2013; 14: 7483 | Wei H, Int J Gynaecol Obstet 2014; 126: 28 | Wu D, Eur J Obstet Gynecol Reprod Biol 2010; 151: 86 | Wu EQ, Cancer Causes Control 2013; 24: 795 | Wu R, Int J Gynecol Cancer 2010; 20: 1411 | Wu RF, Int J Cancer 2007; 121: 1306 | Ye J, Int J Gynecol Cancer 2010; 20: 1374 | Ye J, Virol J 2010; 7: 66 | Yeoh GP, Acta Cytol 2006; 50: 627 | Yip YC, J Med Virol 2010; 82: 1724 | Yu XW, J Low Genit Tract Dis 2013; 17: 17 | Yuan X, Arch Gynecol Obstet 2011; 283: 1385 | Zhang L, Arch Gynecol Obstet 2012; 286: 695 | Zhang R, J Clin Virol 2013; 58: 144 | Zhang WY, Chin Med J 2008; 121: 1578 | Zhao FH, Cancer Prev Res (Phila) 2013; 6: 938 | Zhao FH, Int J Cancer 2014; 135: 2604, Belinson J, Gynecol Oncol 2001; 83: 439 | Dai M, Br J Cancer 2006; 95: 96 | Li LK, Br J Cancer 2006; 95: 1593 | Wu RF, Int J Cancer 2007; 121: 1306, Bian ML, Exp Ther Med 2013; 6: 1332 | Dai M, Br J Cancer 2006; 95: 96 | Ding X, J Med Virol 2014; 86: 1937 | Jin Q, Chin Med J 2010; 123: 2004 | Li H, Eur J Obstet Gynecol Reprod Biol 2013; 170: 202 | Li LK, Br J Cancer 2006; 95: 1593 | Mai RQ, Asian Pac J Cancer Prev 2014; 15: 4945 | Sun ZR, Int J Gynaecol Obstet 2010; 109: 105 | Wei H, Int J Gynaecol Obstet 2014; 126: 28 | Wu D, Eur J Obstet Gynecol Reprod Biol 2010; 151: 86 | Wu EQ, Cancer Causes Control 2013; 24: 795 | Wu RF, Int J Cancer 2007; 121: 1306 | Yuan X, Arch Gynecol Obstet 2011; 283: 1385 | Zhao FH, Int J Cancer 2014; 135: 2604 | Zhao R, Br J Cancer 2009; 101: 1635, Belinson J, Gynecol Oncol 2001; 83: 439 | Belinson JL, Am J Clin Pathol 2011; 135: 790 | Belinson JL, Int J Gynecol Cancer 2003; 13: 819 | Bian ML, Exp Ther Med 2013; 6: 1332 | Chan PK, J Infect Dis 2002; 185: 28 | Dai M, Br J Cancer 2006; 95: 96 | Ding X, J Med Virol 2014; 86: 1937 | He X, Eur J Epidemiol 2008; 23: 403 | Hu SY, Chin J Cancer Res 2011; 23: 25 | Jin Q, Chin Med J 2010; 123: 2004 | Li C, Cancer Epidemiol Biomarkers Prev 2010; 19: 2655 | Li H, Eur J Obstet Gynecol Reprod Biol 2013; 170: 202 | Li LK, Br J Cancer 2006; 95: 1593 | Mai RQ, Asian Pac J Cancer Prev 2014; 15: 4945 | Moy LM, Int J Cancer 2010; 127: 646 | Sun ZR, Int J Gynaecol Obstet 2010; 109: 105 | Wei H, Int J Gynaecol Obstet 2014; 126: 28 | Wu D, Eur J Obstet Gynecol Reprod Biol 2010; 151: 86 | Wu EQ, Cancer Causes Control 2013; 24: 795 | Wu RF, Int J Cancer 2007; 121: 1306 | Ye J, Int J Gynecol Cancer 2010; 20: 1374 | Yeoh GP, Acta Cytol 2006; 50: 627 | Yuan X, Arch Gynecol Obstet 2011; 283: 1385 | Zhao FH, Cancer Prev Res (Phila) 2013; 6: 938 | Zhao FH, Int J Cancer 2014; 135: 2604
Georgia	Alibegashvili T, Cancer Epidemiol 2011; 35: 465

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Table 51 – continued from previous page

Country	Study
India	Aggarwal R, Indian J Cancer 2006; 43: 110 | Arora R, Eur J Obstet Gynecol Reprod Biol 2005; 121: 104 | Bhatla N, Int J Gynecol Pathol 2008; 27: 426 | Franceschi S, Br J Cancer 2005; 92: 601 | Gupta S, Cytopathology 2009; 20: 249 | Kerkar SC, Sex Reprod Healthc 2011; 2: 7 | Laikangbam P, Int J Gynecol Cancer 2007; 17: 107, Aggarwal R, Indian J Cancer 2006; 43: 110 | Arora R, Eur J Obstet Gynecol Reprod Biol 2005; 121: 104 | Bhatla N, Int J Gynecol Pathol 2008; 27: 426 | Dutta S, Int J Gynecol Pathol 2012; 31: 178 | Franceschi S, Br J Cancer 2005; 92: 601 | Gupta S, Cytopathology 2009; 20: 249 | Kerkar SC, Sex Reprod Healthc 2011; 2: 7 | Laikangbam P, Int J Gynecol Cancer 2007; 17: 107 | Singh A, Int J Gynecol Cancer 2009; 19: 1642 | Vinodhini K, Int J Gynaecol Obstet 2012; 119: 253, Aggarwal R, Indian J Cancer 2006; 43: 110 | Arora R, Eur J Obstet Gynecol Reprod Biol 2005; 121: 104 | Bhatla N, Int J Gynecol Pathol 2008; 27: 426 | Dutta S, Int J Gynecol Pathol 2012; 31: 178 | Franceschi S, Br J Cancer 2005; 92: 601 | Gupta S, Cytopathology 2009; 20: 249 | Jeronimo J, Int J Gynecol Cancer 2014; 24: 576 | Kashyap V, J Cytol 2013; 30: 190 | Kerkar SC, Sex Reprod Healthc 2011; 2: 7 | Laikangbam P, Int J Gynecol Cancer 2007; 17: 107 | Sankaranarayanan R, Int J Cancer 2004; 112: 341 | Singh A, Int J Gynecol Cancer 2009; 19: 1642 | Vinodhini K, Int J Gynaecol Obstet 2012; 119: 253, Aggarwal R, Indian J Cancer 2006; 43: 110 | Arora R, Eur J Obstet Gynecol Reprod Biol 2005; 121: 104 | Basu P, Int J Cancer 2013; 132: 1693 | Bhatla N, Int J Gynecol Pathol 2008; 27: 426 | Datta P, Cancer Epidemiol 2010; 34: 157 | Dutta S, Int J Gynecol Pathol 2012; 31: 178 | Franceschi S, Br J Cancer 2005; 92: 601 | Gravitt PE, PLoS ONE 2010; 5: e13711 | Gupta S, Cytopathology 2009; 20: 249 | Jeronimo J, Int J Gynecol Cancer 2014; 24: 576 | Kashyap V, J Cytol 2013; 30: 190 | Kerkar SC, Sex Reprod Healthc 2011; 2: 7 | Laikangbam P, Int J Gynecol Cancer 2007; 17: 107 | Mittal S, Int J Gynaecol Obstet 2014; 126: 227 | Pandey S, Asian Pac J Cancer Prev 2012; 13: 2643 | Sankaranarayanan R, Int J Cancer 2004; 112: 341 | Sankaranarayanan R, Int J Cancer 2005; 116: 617 | Sarkar K, BMC Infect Dis 2011; 11: 72 | Singh A, Int J Gynecol Cancer 2009; 19: 1642 | Srivastava S, J Biosci 2012; 37: 63 | Vinodhini K, Int J Gynaecol Obstet 2012; 119: 253
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Iran	Safaei A, Indian J Pathol Microbiol 2010; 53: 681, Khodakarami N, Int J Cancer 2012; 131: E156 | Moradi A, Iran J Cancer Prev 2011; 3: 135 | Safaei A, Indian J Pathol Microbiol 2010; 53: 681, Khodakarami N, Int J Cancer 2012; 131: E156 | Moradi A, Iran J Cancer Prev 2011; 3: 135 | Safaei A, Indian J Pathol Microbiol 2010; 53: 681 | Zavarei 2008: reported in Vaccarella S, Vaccine 2013; 31 Suppl 6: G32, Eghbali SS, Virol J 2012; 9: 194 | Khodakarami N, Int J Cancer 2012; 131: E156 | Moradi A, Iran J Cancer Prev 2011; 3: 135 | Safaei A, Indian J Pathol Microbiol 2010; 53: 681 | Shahramian I, Iran J Public Health 2011; 40: 113 | Zandi K, Virol J 2010; 7: 65 | Zavarei 2008: reported in Vaccarella S, Vaccine 2013; 31 Suppl 6: G32
Japan	Asato T, J Infect Dis 2004; 189: 1829 | Chen L, J Med Virol 2013; 85: 1229 | Inoue M, Int J Gynecol Cancer 2006; 16: 1007 | Ishi K, J Obstet Gynaecol Res 2004; 30: 380 | Konno R, Cancer Sci 2011; 102: 877 | Maehama T, Infect Dis Obstet Gynecol 2005; 13: 77 | Masumoto N, Gynecol Oncol 2004; 94: 509 | Nishiwaki M, J Clin Microbiol 2008; 46: 1161 | Onuki M, Cancer Sci 2009; 100: 1312 | Saito J, Int J Gynaecol Obstet 1995; 51: 43 | Sasagawa T, Cancer Epidemiol Biomarkers Prev 2001; 10: 45 | Sasagawa T, Jpn J Cancer Res 1997; 88: 376 | Sasagawa T, Sex Transm Infect 2005; 81: 280 | Satoh T, J Virol Methods 2013; 188: 83 | Takehara K, Patholog Res Int 2011; 2011: 246936 | Yoshikawa H, Br J Cancer 1999; 80: 621, Inoue M, Int J Gynecol Cancer 2006; 16: 1007 | Ishi K, J Obstet Gynaecol Res 2004; 30: 380 | Maehama T, Infect Dis Obstet Gynecol 2005; 13: 77 | Masumoto N, Gynecol Oncol 2004; 94: 509 | Onuki M, Cancer Sci 2009; 100: 1312 | Saito J, Int J Gynaecol Obstet 1995; 51: 43 | Sasagawa T, Jpn J Cancer Res 1997; 88: 376 | Sasagawa T, Sex Transm Infect 2005; 81: 280 | Takehara K, Patholog Res Int 2011; 2011: 246936, Asato T, J Infect Dis 2004; 189: 1829 | Inoue M, Int J Gynecol Cancer 2006; 16: 1007 | Konno R, Cancer Sci 2011; 102: 877 | Maehama T, Infect Dis Obstet Gynecol 2005; 13: 77 | Nishiwaki M, J Clin Microbiol 2008; 46: 1161 | Onuki M, Cancer Sci 2009; 100: 1312 | Sasagawa T, Cancer Epidemiol Biomarkers Prev 2001; 10: 45 | Sasagawa T, Jpn J Cancer Res 1997; 88: 376 | Takehara K, Patholog Res Int 2011; 2011: 246936 | Yoshikawa H, Br J Cancer 1999; 80: 621, Asato T, J Infect Dis 2004; 189: 1829 | Inoue M, Int J Gynecol Cancer 2006; 16: 1007 | Ishi K, J Obstet Gynaecol Res 2004; 30: 380 | Konno R, Cancer Sci 2011; 102: 877 | Maehama T, Infect Dis Obstet Gynecol 2005; 13: 77 | Masumoto N, Gynecol Oncol 2004; 94: 509 | Nishiwaki M, J Clin Microbiol 2008; 46: 1161 | Onuki M, Cancer Sci 2009; 100: 1312 | Saito J, Int J Gynaecol Obstet 1995; 51: 43 | Sasagawa T, Cancer Epidemiol Biomarkers Prev 2001; 10: 45 | Sasagawa T, Jpn J Cancer Res 1997; 88: 376 | Sasagawa T, Sex Transm Infect 2005; 81: 280 | Satoh T, J Virol Methods 2013; 188: 83 | Takehara K, Patholog Res Int 2011; 2011: 246936 | Yoshikawa H, Br J Cancer 1999; 80: 621
Kazakhstan	Buleshov 2011: reported in De Vuyst H, Vaccine 2013; 31 Suppl 5: F32
Kuwait	Al-Awadhi R, J Med Virol 2011; 83: 453
Laos	Phongsavan K, Int J Gynecol Cancer 2012; 22: 1398
Lebanon	Mroueh AM, Eur J Gynaecol Oncol 2002; 23: 429, Karam WG, Lebanese Medical Journal 2005; 53: 132 | Mroueh AM, Eur J Gynaecol Oncol 2002; 23: 429
Malaysia	Chong PP, Asian Pac J Cancer Prev 2010; 11: 1645 | Othman N, Asian Pac J Cancer Prev 2014; 15: 2245 | Tay SK, Aust N Z J Obstet Gynaecol 2009; 49: 323, Othman N, Asian Pac J Cancer Prev 2014; 15: 2245, Othman N, Asian Pac J Cancer Prev 2014; 15: 2245 | Tay SK, Aust N Z J Obstet Gynaecol 2009; 49: 323
Mongolia	Dondog B, Cancer Epidemiol Biomarkers Prev 2008; 17: 1731, Chimeddorj B, Asian Pac J Cancer Prev 2008; 9: 563 | Dondog B, Cancer Epidemiol Biomarkers Prev 2008; 17: 1731
Nepal	Johnson DC, PLoS ONE 2014; 9: e101255 | Sherpa AT, Cancer Causes Control 2010; 21: 323
Pakistan	Raza SA, Br J Cancer 2010; 102: 1657

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Table 51 – continued from previous page

Country	Study
Philippines	Ngelangel C, J Natl Cancer Inst 1998; 90: 43
Republic of Korea	An HJ, Cancer 2003; 97: 1672 | Bae J, Gynecol Oncol 2009; 115: 75 | Bae JH, J Microbiol Biotechnol 2009; 19: 1051 | Bae JM, Arch Virol 2014; 159: 1909 | Cho EJ, J Med Microbiol 2011; 60: 162 | Cho NH, Am J Obstet Gynecol 2003; 188: 56 | Hwang HS, Cancer Epidemiol Biomarkers Prev 2004; 13: 2153 | Hwang Y, Ann Lab Med 2012; 32: 201 | Kim J, Int J Gynecol Cancer 2012; 22: 1570 | Kim JH, Oncol Rep 2013; 29: 1645 | Kim JK, J Microbiol Biotechnol 2014; 24: 1143 | Kim K, Asian Pac J Cancer Prev 2012; 13: 269 | Kim MA, J Korean Med Sci 2012; 27: 922 | Kim MA, Obstet Gynecol 2010; 116: 932 | Kim MJ, Obstet Gynecol Sci 2013; 56: 110 | Kim TE, Korean J Pathol 2014; 48: 24 | Kim Y, J Infect Chemother 2014; 20: 74 | Kim YJ, J Microbiol 2013; 51: 665 | Lee EH, J Korean Med Sci 2012; 27: 1091 | Lee H, Epidemiol Infect 2014; 142: 1579 | Lee HP, J Med Virol 2011; 83: 471 | Lee SA, Cancer Lett 2003; 198: 187 | Lee SJ, Int J Med Sci 2012; 9: 103 | Oh JK, Eur J Cancer Prev 2009; 18: 56 | Oh YL, Cytopathology 2001; 12: 75 | Park EK, J Korean Med Sci 2014; 29: 32 | Shim HS, BMC Infect Dis 2010; 10: 284 | Shin HR, Int J Cancer 2003; 103: 413 | Shin HR, J Infect Dis 2004; 190: 468 | Um TH, Ann Clin Lab Sci 2011; 41: 48, Shin HR, Int J Cancer 2003; 103: 413, An HJ, Cancer 2003; 97: 1672 | Cho NH, Am J Obstet Gynecol 2003; 188: 56 | Hwang HS, Cancer Epidemiol Biomarkers Prev 2004; 13: 2153 | Kim J, Int J Gynecol Cancer 2012; 22: 1570 | Kim MJ, Obstet Gynecol Sci 2013; 56: 110 | Lee HP, J Med Virol 2011; 83: 471 | Lee SA, Cancer Lett 2003; 198: 187 | Oh YL, Cytopathology 2001; 12: 75 | Shin HR, Int J Cancer 2003; 103: 413, An HJ, Cancer 2003; 97: 1672 | Bae J, Gynecol Oncol 2009; 115: 75 | Bae JM, Arch Virol 2014; 159: 1909 | Cho NH, Am J Obstet Gynecol 2003; 188: 56 | Hwang HS, Cancer Epidemiol Biomarkers Prev 2004; 13: 2153 | Kim J, Int J Gynecol Cancer 2012; 22: 1570 | Kim JH, Oncol Rep 2013; 29: 1645 | Kim K, Asian Pac J Cancer Prev 2012; 13: 269 | Kim MJ, Obstet Gynecol Sci 2013; 56: 110 | Kim YJ, J Microbiol 2013; 51: 665 | Lee HP, J Med Virol 2011; 83: 471 | Lee SA, Cancer Lett 2003; 198: 187 | Lee SJ, Int J Med Sci 2012; 9: 103 | Oh JK, Eur J Cancer Prev 2009; 18: 56 | Oh YL, Cytopathology 2001; 12: 75 | Shim HS, BMC Infect Dis 2010; 10: 284 | Shin HR, Int J Cancer 2003; 103: 413 | Um TH, Ann Clin Lab Sci 2011; 41: 48
Saudi Arabia	Al-Ahdal MN, J Infect Dev Ctries 2014; 8: 320
Thailand	Chaiwongkot A, Asian Pac J Cancer Prev 2007; 8: 279 | Chandeying V, Sex Health 2006; 3: 11 | Chansaenroj J, Asian Pac J Cancer Prev 2010; 11: 117 | Chichareon S, J Natl Cancer Inst 1998; 90: 50 | Chopjitt P, Int J Infect Dis 2009; 13: 212 | Ekalaksananan T, J Obstet Gynaecol Res 2010; 36: 1037 | Laowahutanont P, Asian Pac J Cancer Prev 2014; 15: 5879 | Marks M, Int J Cancer 2011; 128: 2962 | Natphopsuk S, Asian Pac J Cancer Prev 2013; 14: 6961 | Paengchit K, Asian Pac J Cancer Prev 2014; 15: 6151 | Settheetham-Ishida W, Microbiol Immunol 2005; 49: 417 | Siriaunkgul S, Asian Pac J Cancer Prev 2014; 15: 6837 | Siritantikorn S, Southeast Asian J Trop Med Public Health 1997; 28: 707 | Sriamporn S, Int J Gynecol Cancer 2006; 16: 266 | Sukvirach S, J Infect Dis 2003; 187: 1246 | Suwannarurk K, Cancer Epidemiol 2009; 33: 56 | Swangvaree SS, Asian Pac J Cancer Prev 2010; 11: 1465 | Thomas DB, Am J Epidemiol 2001; 153: 723 | Wongworapat K, Sex Transm Dis 2008; 35: 172, Chichareon S, J Natl Cancer Inst 1998; 90: 50 | Siriaunkgul S, Asian Pac J Cancer Prev 2014; 15: 6837 | Sukvirach S, J Infect Dis 2003; 187: 1246, Chaiwongkot A, Asian Pac J Cancer Prev 2007; 8: 279 | Chichareon S, J Natl Cancer Inst 1998; 90: 50 | Chopjitt P, Int J Infect Dis 2009; 13: 212 | Laowahutanont P, Asian Pac J Cancer Prev 2014; 15: 5879 | Natphopsuk S, Asian Pac J Cancer Prev 2013; 14: 6961 | Settheetham-Ishida W, Microbiol Immunol 2005; 49: 417 | Siritantikorn S, Southeast Asian J Trop Med Public Health 1997; 28: 707 | Sriamporn S, Int J Gynecol Cancer 2006; 16: 266 | Sukvirach S, J Infect Dis 2003; 187: 1246 | Suwannarurk K, Cancer Epidemiol 2009; 33: 56, Chaiwongkot A, Asian Pac J Cancer Prev 2007; 8: 279 | Chansaenroj J, Asian Pac J Cancer Prev 2010; 11: 117 | Chichareon S, J Natl Cancer Inst 1998; 90: 50 | Chopjitt P, Int J Infect Dis 2009; 13: 212 | Ekalaksananan T, J Obstet Gynaecol Res 2010; 36: 1037 | Laowahutanont P, Asian Pac J Cancer Prev 2014; 15: 5879 | Natphopsuk S, Asian Pac J Cancer Prev 2013; 14: 6961 | Paengchit K, Asian Pac J Cancer Prev 2014; 15: 6151 | Settheetham-Ishida W, Microbiol Immunol 2005; 49: 417 | Siriaunkgul S, Asian Pac J Cancer Prev 2014; 15: 6837 | Siritantikorn S, Southeast Asian J Trop Med Public Health 1997; 28: 707 | Sriamporn S, Int J Gynecol Cancer 2006; 16: 266 | Sukvirach S, J Infect Dis 2003; 187: 1246 | Suwannarurk K, Cancer Epidemiol 2009; 33: 56 | Swangvaree SS, Asian Pac J Cancer Prev 2010; 11: 1465
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Uzbekistan	Inamova 2009: reported in De Vuyst H, Vaccine 2013; 31 Suppl 5: F32

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Table 51 – continued from previous page

Country	Study
HPV type distribution for invasive cervical cancer (ICC)	
General sources	Based on meta-analysis performed by IARC's Infections and Cancer Epidemiology Group up to November 2011, the ICO HPV Information Centre has updated data until June 2014. Reference publications: 1) Guan P, Int J Cancer 2012;131:2349 2) Li N, Int J Cancer 2011;128:927 3) Smith JS, Int J Cancer 2007;121:621 4) Clifford GM, Br J Cancer 2003;88:63 5) Clifford GM, Br J Cancer 2003;89:101.
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Jordan	Sughayer MA, Int J Gynaecol Obstet 2010; 108: 74, Contributing studies: Sughayer MA, Int J Gynaecol Obstet 2010; 108: 74
Malaysia	Cheah PL, Malays J Pathol 2008; 30: 37 | Hamzi Abdul Raub S, Asian Pac J Cancer Prev 2014; 15: 651 | Quek SC, Int J Gynecol Cancer 2013; 23: 148 | Sharifah NA, Asian Pac J Cancer Prev 2009; 10: 303 | Yadav M, Med J Malaysia 1995; 50: 64, Contributing studies: Cheah PL, Malays J Pathol 2008; 30: 37 | Hamzi Abdul Raub S, Asian Pac J Cancer Prev 2014; 15: 651 | Quek SC, Int J Gynecol Cancer 2013; 23: 148 | Sharifah NA, Asian Pac J Cancer Prev 2009; 10: 303 | Yadav M, Med J Malaysia 1995; 50: 64
Mongolia	Chimeddorj B, Asian Pac J Cancer Prev 2008; 9: 563, Contributing studies: Chimeddorj B, Asian Pac J Cancer Prev 2008; 9: 563
Nepal	Sherpa AT, Cancer Causes Control 2010; 21: 323, Contributing studies: Sherpa AT, Cancer Causes Control 2010; 21: 323
Pakistan	Khan S, Int J Infect Dis 2007; 11: 313 | Raza SA, Br J Cancer 2010; 102: 1657, Contributing studies: Khan S, Int J Infect Dis 2007; 11: 313 | Raza SA, Br J Cancer 2010; 102: 1657
Philippines	Contributing studies: Bosch FX, J Natl Cancer Inst 1995; 87: 796 | de Sanjose S, Lancet Oncol 2010; 11: 1048 | Ngelangel C, J Natl Cancer Inst 1998; 90: 43 | Quek SC, Int J Gynecol Cancer 2013; 23: 148
Republic of Korea	An HJ, Cancer 2003; 97: 1672 | An HJ, Mod Pathol 2005; 18: 528 | Cho NH, Am J Obstet Gynecol 2003; 188: 56 | Hwang T, J Korean Med Sci 1999; 14: 593 | Hwang TS, Gynecol Oncol 2003; 90: 51 | Kim JY, J Clin Oncol 2009; 27: 5088 | Kim KH, Yonsei Med J 1995; 36: 412 | Lee HS, Int J Gynecol Cancer 2007; 17: 497 | Oh JK, Asian Pac J Cancer Prev 2010; 11: 993 | Quek SC, Int J Gynecol Cancer 2013; 23: 148 | Song ES, J Korean Med Sci 2007; 22: 99 | Tong SY, Int J Gynecol Cancer 2007; 17: 1307, Contributing studies: An HJ, Cancer 2003; 97: 1672 | An HJ, Mod Pathol 2005; 18: 528 | Cho NH, Am J Obstet Gynecol 2003; 188: 56 | Hwang T, J Korean Med Sci 1999; 14: 593 | Hwang TS, Gynecol Oncol 2003; 90: 51 | Kim JY, J Clin Oncol 2009; 27: 5088 | Kim KH, Yonsei Med J 1995; 36: 412 | Lee HS, Int J Gynecol Cancer 2007; 17: 497 | Oh JK, Asian Pac J Cancer Prev 2010; 11: 993 | Quek SC, Int J Gynecol Cancer 2013; 23: 148 | Song ES, J Korean Med Sci 2007; 22: 99 | Tong SY, Int J Gynecol Cancer 2007; 17: 1307
Saudi Arabia	Alsbeih G, Gynecol Oncol 2011; 121: 522, Contributing studies: Alsbeih G, Gynecol Oncol 2011; 121: 522
Singapore	Quek SC, Int J Gynecol Cancer 2013; 23: 148, Contributing studies: Quek SC, Int J Gynecol Cancer 2013; 23: 148
Sri Lanka	Karunaratne K, BMC Cancer 2014; 14: 116 | Samarawickrema NA, Int J Gynaecol Obstet 2011; 115: 180, Contributing studies: Karunaratne K, BMC Cancer 2014; 14: 116 | Samarawickrema NA, Int J Gynaecol Obstet 2011; 115: 180
Syria	Darnel AD, Clin Microbiol Infect 2010; 16: 262, Contributing studies: Darnel AD, Clin Microbiol Infect 2010; 16: 262
Thailand	Bhattarakosol P, J Med Assoc Thai 1996; 79 Suppl 1: S56 | Bosch FX, J Natl Cancer Inst 1995; 87: 796 | Chansaenroj J, J Med Virol 2014; 86: 601 | Chichareon S, J Natl Cancer Inst 1998; 90: 50 | Chopjitt P, Int J Infect Dis 2009; 13: 212 | Natphopsuk S, Asian Pac J Cancer Prev 2013; 14: 6961 | Settheetham-Ishida W, Microbiol Immunol 2005; 49: 417 | Siriaunkgul S, Gynecol Oncol 2008; 108: 555 | Siritantikorn S, Southeast Asian J Trop Med Public Health 1997; 28: 707, Contributing studies: Bhattarakosol P, J Med Assoc Thai 1996; 79 Suppl 1: S56 | Bosch FX, J Natl Cancer Inst 1995; 87: 796 | Chansaenroj J, J Med Virol 2014; 86: 601 | Chichareon S, J Natl Cancer Inst 1998; 90: 50 | Chopjitt P, Int J Infect Dis 2009; 13: 212 | Natphopsuk S, Asian Pac J Cancer Prev 2013; 14: 6961 | Settheetham-Ishida W, Microbiol Immunol 2005; 49: 417 | Siriaunkgul S, Gynecol Oncol 2008; 108: 555 | Siritantikorn S, Southeast Asian J Trop Med Public Health 1997; 28: 707
Turkey	Ozgul N, J Obstet Gynaecol Res 2008; 34: 865 | Usubütün A, Int J Gynecol Pathol 2009; 28: 541, Contributing studies: Ozgul N, J Obstet Gynaecol Res 2008; 34: 865 | Usubütün A, Int J Gynecol Pathol 2009; 28: 541

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Table 51 – continued from previous page

Country	Study
HPV type distribution for cervical high grade squamous intraepithelial lesions	
General sources	Based on meta-analysis performed by IARC's Infections and Cancer Epidemiology Group up to November 2011, the ICO HPV Information Centre has updated data until June 2014. Reference publications: 1) Guan P, Int J Cancer 2012;131:2349 2) Li N, Int J Cancer 2011;128:927 3) Smith JS, Int J Cancer 2007;121:621 4) Clifford GM, Br J Cancer 2003;88:63 5) Clifford GM, Br J Cancer 2003;89:101.
Bangladesh	Banik U, Cytojournal 2013; 10: 14, Contributing studies: Banik U, Cytojournal 2013; 10: 14
China	Chan MK, Gynecol Oncol 1996; 60: 217 | Chan PK, Int J Cancer 2006; 118: 243 | Chan PK, Int J Cancer 2012; 131: 692 | Chan PK, J Med Virol 1999; 59: 232 | Ding X, J Med Virol 2014; 86: 1937 | Guo J, Scand J Infect Dis 2010; 42: 72 | Jin Q, Chin Med J 2010; 123: 2004 | Li H, Eur J Obstet Gynecol Reprod Biol 2013; 170: 202 | Li J, Int J Gynaecol Obstet 2011; 112: 131 | Li J, J Clin Microbiol 2012; 50: 1079 | Liu SS, Tumour Biol 2008; 29: 105 | Singh S, Int J Clin Exp Pathol 2015; 8: 11901 | Sun B, Arch Virol 2014; 159: 1027 | Tao PP, Zhonghua Fu Chan Ke Za Zhi 2006; 41: 43 | Wu CH, Sex Transm Dis 1994; 21: 309 | Wu EQ, Cancer Causes Control 2013; 24: 795 | Yuan X, Arch Gynecol Obstet 2011; 283: 1385 | Zhang R, Cancer Epidemiol 2013; 37: 939 | Zhao FH, Int J Cancer 2014; 135: 2604 | Zhao Y, Pathol Int 2008; 58: 643, Contributing studies: Chan MK, Gynecol Oncol 1996; 60: 217 | Chan PK, Int J Cancer 2006; 118: 243 | Chan PK, Int J Cancer 2012; 131: 692 | Chan PK, J Med Virol 1999; 59: 232 | Ding X, J Med Virol 2014; 86: 1937 | Guo J, Scand J Infect Dis 2010; 42: 72 | Jin Q, Chin Med J 2010; 123: 2004 | Li H, Eur J Obstet Gynecol Reprod Biol 2013; 170: 202 | Li J, Int J Gynaecol Obstet 2011; 112: 131 | Li J, J Clin Microbiol 2012; 50: 1079 | Liu SS, Tumour Biol 2008; 29: 105 | Singh S, Int J Clin Exp Pathol 2015; 8: 11901 | Sun B, Arch Virol 2014; 159: 1027 | Tao PP, Zhonghua Fu Chan Ke Za Zhi 2006; 41: 43 | Wu CH, Sex Transm Dis 1994; 21: 309 | Wu EQ, Cancer Causes Control 2013; 24: 795 | Yuan X, Arch Gynecol Obstet 2011; 283: 1385 | Zhang R, Cancer Epidemiol 2013; 37: 939 | Zhao FH, Int J Cancer 2014; 135: 2604 | Zhao Y, Pathol Int 2008; 58: 643
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Iran	Esmaeili M, Gynecol Obstet Invest 2008; 66: 68 | Ghaffari SR, Asian Pac J Cancer Prev 2006; 7: 529 | Khodakarami N, Int J Cancer 2012; 131: E156, Contributing studies: Esmaeili M, Gynecol Obstet Invest 2008; 66: 68 | Ghaffari SR, Asian Pac J Cancer Prev 2006; 7: 529 | Khodakarami N, Int J Cancer 2012; 131: E156
Israel	Bassal R, J Low Genit Tract Dis 2015; 19: 161 | Laskov I, Int J Gynecol Cancer 2013; 23: 730, Contributing studies: Bassal R, J Low Genit Tract Dis 2015; 19: 161 | Laskov I, Int J Gynecol Cancer 2013; 23: 730
Japan	Azuma Y, Jpn J Clin Oncol 2014 | Ichimura H, Int J Clin Oncol 2003; 8: 322 | Inoue M, Int J Gynecol Cancer 2006; 16: 1007 | Konno R, Cancer Sci 2011; 102: 877 | Matsumoto K, Int J Cancer 2011; 128: 2898 | Nagai Y, Gynecol Oncol 2000; 79: 294 | Nakamura Y, Int J Clin Oncol 2015; 20: 974 | Nishiwaki M, J Clin Microbiol 2008; 46: 1161 | Niwa K, Oncol Rep 2003; 10: 1437 | Okadome M, J Obstet Gynaecol Res 2014; 40: 561 | Onuki M, Cancer Sci 2009; 100: 1312 | Sasagawa T, Cancer Epidemiol Biomarkers Prev 2001; 10: 45 | Takehara K, Patholog Res Int 2011; 2011: 246936 | Tsuda H, Gynecol Oncol 2003; 91: 476 | Yamasaki K, J Obstet Gynaecol Res 2011; 37: 1666 | Yoshida T, Cancer 2004; 102: 100, Contributing studies: Azuma Y, Jpn J Clin Oncol 2014 | Ichimura H, Int J Clin Oncol 2003; 8: 322 | Inoue M, Int J Gynecol Cancer 2006; 16: 1007 | Konno R, Cancer Sci 2011; 102: 877 | Matsumoto K, Int J Cancer 2011; 128: 2898 | Nagai Y, Gynecol Oncol 2000; 79: 294 | Nakamura Y, Int J Clin Oncol 2015; 20: 974 | Nishiwaki M, J Clin Microbiol 2008; 46: 1161 | Niwa K, Oncol Rep 2003; 10: 1437 | Okadome M, J Obstet Gynaecol Res 2014; 40: 561 | Onuki M, Cancer Sci 2009; 100: 1312 | Sasagawa T, Cancer Epidemiol Biomarkers Prev 2001; 10: 45 | Takehara K, Patholog Res Int 2011; 2011: 246936 | Tsuda H, Gynecol Oncol 2003; 91: 476 | Yamasaki K, J Obstet Gynaecol Res 2011; 37: 1666 | Yoshida T, Cancer 2004; 102: 100
Kuwait	Al-Awadhi R, Diagn Cytopathol 2013; 41: 107 | Al-Awadhi R, J Med Virol 2011; 83: 453, Contributing studies: Al-Awadhi R, Diagn Cytopathol 2013; 41: 107 | Al-Awadhi R, J Med Virol 2011; 83: 453
Malaysia	Quek SC, Int J Gynecol Cancer 2013; 23: 148, Contributing studies: Quek SC, Int J Gynecol Cancer 2013; 23: 148
Myanmar	Mu-Mu-Shwe, Acta Med Okayama 2014; 68: 79, Contributing studies: Mu-Mu-Shwe, Acta Med Okayama 2014; 68: 79
Pakistan	Raza SA, Br J Cancer 2010; 102: 1657, Contributing studies: Raza SA, Br J Cancer 2010; 102: 1657
Philippines	Quek SC, Int J Gynecol Cancer 2013; 23: 148, Contributing studies: Quek SC, Int J Gynecol Cancer 2013; 23: 148
Republic of Korea	Cho NH, Am J Obstet Gynecol 2003; 188: 56 | Hwang TS, Gynecol Oncol 2003; 90: 51 | Kahng J, Ann Lab Med 2014; 34: 127 | Kang WD, Int J Gynecol Cancer 2009; 19: 924 | Oh YL, Cytopathology 2001; 12: 75 | Quek SC, Int J Gynecol Cancer 2013; 23: 148, Contributing studies: Cho NH, Am J Obstet Gynecol 2003; 188: 56 | Hwang TS, Gynecol Oncol 2003; 90: 51 | Kahng J, Ann Lab Med 2014; 34: 127 | Kang WD, Int J Gynecol Cancer 2009; 19: 924 | Oh YL, Cytopathology 2001; 12: 75 | Quek SC, Int J Gynecol Cancer 2013; 23: 148
Singapore	Quek SC, Int J Gynecol Cancer 2013; 23: 148, Contributing studies: Quek SC, Int J Gynecol Cancer 2013; 23: 148
Sri Lanka	Karunaratne K, BMC Cancer 2014; 14: 116, Contributing studies: Karunaratne K, BMC Cancer 2014; 14: 116

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Country	Study
Thailand	Chansaenroj J, Asian Pac J Cancer Prev 2010; 11: 117 | Chansaenroj J, J Med Virol 2014; 86: 601 | Limpaiboon T, Southeast Asian J Trop Med Public Health 2000; 31: 66 | Sukasem C, J Med Virol 2011; 83: 119 | Suwannarurk K, Cancer Epidemiol 2009; 33: 56 | Swangvaree SS, Asian Pac J Cancer Prev 2013; 14: 1023, Contributing studies: Chansaenroj J, Asian Pac J Cancer Prev 2010; 11: 117 | Chansaenroj J, J Med Virol 2014; 86: 601 | Limpaiboon T, Southeast Asian J Trop Med Public Health 2000; 31: 66 | Sukasem C, J Med Virol 2011; 83: 119 | Suwannarurk K, Cancer Epidemiol 2009; 33: 56 | Swangvaree SS, Asian Pac J Cancer Prev 2013; 14: 1023
Turkey	Baser E, Int J Gynaecol Obstet 2014; 125: 275 | Sahiner F, Mikrobiyol Bul 2012; 46: 624 | Tezcan S, Asian Pac J Cancer Prev 2014; 15: 3997 | Yuce K, Arch Gynecol Obstet 2012; 286: 203, Contributing studies: Baser E, Int J Gynaecol Obstet 2014; 125: 275 | Sahiner F, Mikrobiyol Bul 2012; 46: 624 | Tezcan S, Asian Pac J Cancer Prev 2014; 15: 3997 | Yuce K, Arch Gynecol Obstet 2012; 286: 203
HPV type distribution for cervical low grade squamous intraepithelial lesions	
General sources	Based on meta-analysis performed by IARC's Infections and Cancer Epidemiology Group up to November 2011, the ICO HPV Information Centre has updated data until June 2015. Reference publications: 1) Guan P, Int J Cancer 2012;131:2349 2) Clifford GM, Cancer Epidemiol Biomarkers Prev 2005;14:1157
Bangladesh	Banik U, Cytojournal 2013; 10: 14, Contributing studies: Banik U, Cytojournal 2013; 10: 14
China	Chan PK, Int J Cancer 2006; 118: 243 | Chan PK, Int J Cancer 2012; 131: 692 | Chan PK, J Med Virol 1999; 59: 232 | Ding X, J Med Virol 2014; 86: 1937 | Guo J, Scand J Infect Dis 2010; 42: 72 | Hong D, Int J Gynecol Cancer 2008; 18: 104 | Jin Q, Chin Med J 2010; 123: 2004 | Li H, Eur J Obstet Gynecol Reprod Biol 2013; 170: 202 | Li J, J Clin Microbiol 2012; 50: 1079 | Liu SS, Tumour Biol 2008; 29: 105 | Liu X, Int J Gynecol Cancer 2010; 20: 147 | Sun B, Arch Virol 2014; 159: 1027 | Tao PP, Zhonghua Fu Chan Ke Za Zhi 2006; 41: 43 | Wu D, Eur J Obstet Gynecol Reprod Biol 2010; 151: 86 | Wu EQ, Cancer Causes Control 2013; 24: 795 | Yuan X, Arch Gynecol Obstet 2011; 283: 1385 | Zhang R, Cancer Epidemiol 2013; 37: 939 | Zhao FH, Int J Cancer 2014; 135: 2604 | Zhao Y, Pathol Int 2008; 58: 643, Contributing studies: Chan PK, Int J Cancer 2006; 118: 243 | Chan PK, Int J Cancer 2012; 131: 692 | Chan PK, J Med Virol 1999; 59: 232 | Ding X, J Med Virol 2014; 86: 1937 | Guo J, Scand J Infect Dis 2010; 42: 72 | Hong D, Int J Gynecol Cancer 2008; 18: 104 | Jin Q, Chin Med J 2010; 123: 2004 | Li H, Eur J Obstet Gynecol Reprod Biol 2013; 170: 202 | Li J, J Clin Microbiol 2012; 50: 1079 | Liu SS, Tumour Biol 2008; 29: 105 | Liu X, Int J Gynecol Cancer 2010; 20: 147 | Sun B, Arch Virol 2014; 159: 1027 | Tao PP, Zhonghua Fu Chan Ke Za Zhi 2006; 41: 43 | Wu D, Eur J Obstet Gynecol Reprod Biol 2010; 151: 86 | Wu EQ, Cancer Causes Control 2013; 24: 795 | Yuan X, Arch Gynecol Obstet 2011; 283: 1385 | Zhang R, Cancer Epidemiol 2013; 37: 939 | Zhao FH, Int J Cancer 2014; 135: 2604 | Zhao Y, Pathol Int 2008; 58: 643
India	Berlin Grace VM, Indian J Cancer 2009; 46: 203 | Franceschi S, Br J Cancer 2005; 92: 601 | Nagpal JK, Eur J Clin Invest 2002; 32: 943 | Nair P, Pathol Oncol Res 1999; 5: 95 | Singh M, Tumour Biol 2009; 30: 276, Contributing studies: Berlin Grace VM, Indian J Cancer 2009; 46: 203 | Franceschi S, Br J Cancer 2005; 92: 601 | Nagpal JK, Eur J Clin Invest 2002; 32: 943 | Nair P, Pathol Oncol Res 1999; 5: 95 | Singh M, Tumour Biol 2009; 30: 276
Iran	Esmaeili M, Gynecol Obstet Invest 2008; 66: 68 | Ghaffari SR, Asian Pac J Cancer Prev 2006; 7: 529 | Khodakarami N, Int J Cancer 2012; 131: E156, Contributing studies: Esmaeili M, Gynecol Obstet Invest 2008; 66: 68 | Ghaffari SR, Asian Pac J Cancer Prev 2006; 7: 529 | Khodakarami N, Int J Cancer 2012; 131: E156
Japan	Inoue M, Int J Gynecol Cancer 2006; 16: 1007 | Konno R, Cancer Sci 2011; 102: 877 | Matsumoto K, Int J Cancer 2011; 128: 2898 | Nishiwaki M, J Clin Microbiol 2008; 46: 1161 | Onuki M, Cancer Sci 2009; 100: 1312 | Saito J, Jap J Obstet Gynecol Pract 2001; 50: 871 | Sasagawa T, Cancer Epidemiol Biomarkers Prev 2001; 10: 45 | Takehara K, Patholog Res Int 2011; 2011: 246936 | Tsuda H, Gynecol Oncol 2003; 91: 476 | Yamasaki K, J Obstet Gynaecol Res 2011; 37: 1666 | Yoshida T, Cancer 2004; 102: 100, Contributing studies: Inoue M, Int J Gynecol Cancer 2006; 16: 1007 | Konno R, Cancer Sci 2011; 102: 877 | Matsumoto K, Int J Cancer 2011; 128: 2898 | Nishiwaki M, J Clin Microbiol 2008; 46: 1161 | Onuki M, Cancer Sci 2009; 100: 1312 | Saito J, Jap J Obstet Gynecol Pract 2001; 50: 871 | Sasagawa T, Cancer Epidemiol Biomarkers Prev 2001; 10: 45 | Takehara K, Patholog Res Int 2011; 2011: 246936 | Tsuda H, Gynecol Oncol 2003; 91: 476 | Yamasaki K, J Obstet Gynaecol Res 2011; 37: 1666 | Yoshida T, Cancer 2004; 102: 100
Kuwait	Al-Awadhi R, Diagn Cytopathol 2013; 41: 107 | Al-Awadhi R, J Med Virol 2011; 83: 453, Contributing studies: Al-Awadhi R, Diagn Cytopathol 2013; 41: 107 | Al-Awadhi R, J Med Virol 2011; 83: 453
Malaysia	Sharifah NA, Asian Pac J Cancer Prev 2009; 10: 303, Contributing studies: Sharifah NA, Asian Pac J Cancer Prev 2009; 10: 303
Myanmar	Mu-Mu-Shwe, Acta Med Okayama 2014; 68: 79, Contributing studies: Mu-Mu-Shwe, Acta Med Okayama 2014; 68: 79
Pakistan	Raza SA, Br J Cancer 2010; 102: 1657, Contributing studies: Raza SA, Br J Cancer 2010; 102: 1657
Republic of Korea	An HJ, Cancer 2003; 97: 1672 | Cho NH, Am J Obstet Gynecol 2003; 188: 56 | Hwang TS, Gynecol Oncol 2003; 90: 51 | Kang WD, Int J Gynecol Cancer 2009; 19: 924 | Lee HS, Int J Gynecol Cancer 2007; 17: 497 | Oh YL, Cytopathology 2001; 12: 75, Contributing studies: An HJ, Cancer 2003; 97: 1672 | Cho NH, Am J Obstet Gynecol 2003; 188: 56 | Hwang TS, Gynecol Oncol 2003; 90: 51 | Kang WD, Int J Gynecol Cancer 2009; 19: 924 | Lee HS, Int J Gynecol Cancer 2007; 17: 497 | Oh YL, Cytopathology 2001; 12: 75

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Thailand	Bhattarakosol P, J Med Assoc Thai 2002; 85 Suppl 1: S360 | Chaiwongkot A, Asian Pac J Cancer Prev 2007; 8: 279 | Chansaenroj J, Asian Pac J Cancer Prev 2010; 11: 117 | Chansaenroj J, J Med Virol 2014; 86: 601 | Ekalaksananan T, J Obstet Gynaecol Res 2001; 27: 117 | Suwannarurk K, Cancer Epidemiol 2009; 33: 56, Contributing studies: Bhattarakosol P, J Med Assoc Thai 2002; 85 Suppl 1: S360 | Chaiwongkot A, Asian Pac J Cancer Prev 2007; 8: 279 | Chansaenroj J, Asian Pac J Cancer Prev 2010; 11: 117 | Chansaenroj J, J Med Virol 2014; 86: 601 | Ekalaksananan T, J Obstet Gynaecol Res 2001; 27: 117 | Suwannarurk K, Cancer Epidemiol 2009; 33: 56
HPV type distribution for invasive anal cancer	
General sources	Based on systematic reviews (up to 2008) performed by ICO for the IARC Monograph on the Evaluation of Carcinogenic Risks to Humans volume 100B and IARC's Infections and Cancer Epidemiology Group. The ICO HPV Information Centre has updated data until June 2015. Reference publications: 1) Bouvard V, Lancet Oncol 2009;10:321 2) De Vuyst H, Int J Cancer 2009;124:1626
Bangladesh	Alemany L, Int J Cancer 2015; 136: 98
India	Alemany L, Int J Cancer 2015; 136: 98
HPV type distribution for anal intraepithelial neoplasia (AIN)	
General sources	Based on systematic reviews (up to 2008) performed by ICO for the IARC Monograph on the Evaluation of Carcinogenic Risks to Humans volume 100B and IARC's Infections and Cancer Epidemiology Group. The ICO HPV Information Centre has updated data until June 2015. Reference publications: 1) Bouvard V, Lancet Oncol 2009;10:321 2) De Vuyst H, Int J Cancer 2009;124:1626
HPV type distribution for invasive vulvar cancer	
General sources	Based on systematic reviews (up to 2008) performed by ICO for the IARC Monograph on the Evaluation of Carcinogenic Risks to Humans volume 100B and IARC's Infections and Cancer Epidemiology Group. The ICO HPV Information Centre has updated data until June 2015. Reference publications: 1) Bouvard V, Lancet Oncol 2009;10:321 2) De Vuyst H, Int J Cancer 2009;124:1626
Bangladesh	de Sanjosé S, Eur J Cancer 2013; 49: 3450
India	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Israel	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Japan	Nagano H, J Obstet Gynaecol Res 1996; 22: 1 | Osakabe M, Pathol Int 2007; 57: 322
Kuwait	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Lebanon	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Philippines	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Republic of Korea	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Thailand	Ngamkham J, Asian Pac J Cancer Prev 2013; 14: 2355
HPV type distribution for vulvar intraepithelial neoplasia (VIN)	
General sources	Based on systematic reviews (up to 2008) performed by ICO for the IARC Monograph on the Evaluation of Carcinogenic Risks to Humans volume 100B and IARC's Infections and Cancer Epidemiology Group. The ICO HPV Information Centre has updated data until June 2015. Reference publications: 1) Bouvard V, Lancet Oncol 2009;10:321 2) De Vuyst H, Int J Cancer 2009;124:1626
Bangladesh	de Sanjosé S, Eur J Cancer 2013; 49: 3450
India	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Israel	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Kuwait	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Lebanon	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Philippines	de Sanjosé S, Eur J Cancer 2013; 49: 3450
Republic of Korea	de Sanjosé S, Eur J Cancer 2013; 49: 3450
HPV type distribution for invasive vaginal cancer	
General sources	Based on systematic reviews (up to 2008) performed by ICO for the IARC Monograph on the Evaluation of Carcinogenic Risks to Humans volume 100B and IARC's Infections and Cancer Epidemiology Group. The ICO HPV Information Centre has updated data until June 2015. Reference publications: 1) Bouvard V, Lancet Oncol 2009;10:321 2) De Vuyst H, Int J Cancer 2009;124:1626
Bangladesh	Alemany L, Eur J Cancer 2014; 50: 2846
India	Alemany L, Eur J Cancer 2014; 50: 2846
Israel	Alemany L, Eur J Cancer 2014; 50: 2846
Kuwait	Alemany L, Eur J Cancer 2014; 50: 2846
Lebanon	Alemany L, Eur J Cancer 2014; 50: 2846
Philippines	Alemany L, Eur J Cancer 2014; 50: 2846
Republic of Korea	Alemany L, Eur J Cancer 2014; 50: 2846
HPV type distribution for vaginal intraepithelial neoplasia (VAIN)	
General sources	Based on systematic reviews (up to 2008) performed by ICO for the IARC Monograph on the Evaluation of Carcinogenic Risks to Humans volume 100B and IARC's Infections and Cancer Epidemiology Group. The ICO HPV Information Centre has updated data until June 2015. Reference publications: 1) Bouvard V, Lancet Oncol 2009;10:321 2) De Vuyst H, Int J Cancer 2009;124:1626
Bangladesh	Alemany L, Eur J Cancer 2014; 50: 2846
India	Alemany L, Eur J Cancer 2014; 50: 2846
Israel	Alemany L, Eur J Cancer 2014; 50: 2846
Japan	Sugase M, Int J Cancer 1997; 72: 412
Kuwait	Alemany L, Eur J Cancer 2014; 50: 2846
Lebanon	Alemany L, Eur J Cancer 2014; 50: 2846

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Country	Study
Philippines	Alemany L, Eur J Cancer 2014; 50: 2846
Republic of Korea	Alemany L, Eur J Cancer 2014; 50: 2846
HPV type distribution for invasive penile cancer	
General sources	The ICO HPV Information Centre has updated data until June 2015. Reference publications (up to 2008): 1) Bouvard V, Lancet Oncol 2009;10:321 2) Miralles-Guri C,J Clin Pathol 2009;62:870
China	Chan KW, J Clin Pathol 1994; 47: 823
Japan	Iwasawa A, J Urol 1993; 149: 59 | Suzuki H, Jpn J Clin Oncol 1994; 24: 1 | Yanagawa N, Pathol Int 2008; 58: 477
Thailand	Senba M, J Med Virol 2006; 78: 1341
HPV type distribution for penile intraepithelial neoplasia (PEIN)	
General sources	The ICO HPV Information Centre has updated data until June 2014. Reference publication (up to 2008): Bouvard V, Lancet Oncol 2009;10:321
China	Gan LL, Asian Pac J Cancer Prev 2014; 15: 5861 | Lee LA, Medicine (Baltimore) 2015; 94: e2069 | Tang X, J Oral Pathol Med 2003; 32: 393 | Wen S, Anticancer Res 1997; 17: 307 | Zhang ZY, Int J Oral Maxillofac Surg 2004; 33: 71
India	Balaram P, Int J Cancer 1995; 61: 450 | Bhattacharya N, J Oral Pathol Med 2009; 38: 759 | Chaudhary AK, Virol J 2010; 7: 253 | D'Costa J, Oral Oncol 1998; 34: 413 | Herrero R, J Natl Cancer Inst 2003; 95: 1772 | Laprise C, Int J Cancer 2016; 138: 912 | Mishra A, Int J Cancer 2006; 119: 2840 | Sebastian P, J Oral Pathol Med 2014; 43: 593
Iran	Saghravanian N, Acta Odontol Scand 2011; 69: 406
Japan	Bhawal UK, Arch Otolaryngol Head Neck Surg 2008; 134: 1055 | Chiba I, Oncogene 1996; 12: 1663 | Deng Z, Head Neck 2013; 35: 800 | Higa M, Oral Oncol 2003; 39: 405 | Kojima A, Oral Oncol 2002; 38: 591 | Shima K, Br J Oral Maxillofac Surg 2000; 38: 445 | Shimizu M, J Dermatol Sci 2004; 36: 33 | Sugiyama M, Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2003; 95: 594 | Tang X, J Oral Pathol Med 2003; 32: 393 | Tsuhako K, J Oral Pathol Med 2000; 29: 70
Malaysia	Lim KP, Oncol Rep 2007; 17: 1321
The anogenital prevalence of HPV-DNA in men: HPV in men	
General sources	Based on published systematic reviews, the ICO HPV Information Centre has updated data until October 2015. Reference publications: 1) Dunne EF, J Infect Dis 2006; 194: 1044 2) Smith JS, J Adolesc Health 2011; 48: 540 3) Olesen TB, Sex Transm Infect 2014; 90: 455 4) Hebnes JB, J Sex Med 2014; 11: 2630.
China	Liu F, Sci Rep 2015; 5: 27
India	Gupta A, J Clin Virol 2006; 37: 190
Japan	Takahashi S, Sex Transm Dis 2003; 30: 629
Philippines	Franceschi S, Br J Cancer 2002; 86: 705
Republic of Korea	Shin HR, J Infect Dis 2004; 190: 468
The anogenital prevalence of HPV-DNA in men: HPV in special subgroups (HIV, MSM, etc)	
General sources	Based on published systematic reviews, the ICO HPV Information Centre has updated data until October 2015. Reference publications: 1) Dunne EF, J Infect Dis 2006; 194: 1044 2) Smith JS, J Adolesc Health 2011; 48: 540 3) Olesen TB, Sex Transm Infect 2014; 90: 455 4) Hebnes JB, J Sex Med 2014; 11: 2630.
China	Gao L, PLoS ONE 2010; 5: 125 | Li Z, PLoS One 2015; 10: 122 | Tang X, Biomed Environ Sci 2006; 19: 153 | Yang Y, PLoS ONE 2012; 7: 126 | Zhang DY, PLoS ONE 2014; 9: 134
India	Gupta A, J Clin Virol 2006; 37: 190
Japan	Nagata N, PLoS One 2015; 10: 123 | Shigehara K, Int J Urol 2010; 17: 563 | Takahashi S, Sex Transm Dis 2003; 30: 629 | Takahashi S, J Infect Chemother 2005; 11: 270
Philippines	Franceschi S, Br J Cancer 2002; 86: 705
HPV prevalence and type distribution in oral specimens collected from healthy population	
General sources	Systematic review and meta-analysis was performed by ICO HPV Information Centre until July 2012. Pubmed was searched using the keywords oral and papillomavirus. Inclusion criteria: studies reporting oral HPV prevalence in healthy population in Europe; n > 50. Exclusion criteria: focused only in children or immunosuppressed population; not written in English; case-control studies; commentaries and systematic reviews and studies that did not use HPV DNA detection methods.
China	Hang D, Cancer Epidemiol Biomarkers Prev 2014;23(10):2101-10
India	Herrero R, J Natl Cancer Inst 2003;95(23):1772-83 | Koppikar P, Int J Cancer 2005;113(6):946-50
Iran	Seifi S, Iran J Public Health 2013;42(1):79-85
Japan	Kurose K, Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2004;98(1):91-6
HPV prevalence and type distribution in invasive oral cavity squamous cell carcinoma	
General sources	Based on systematic reviews and meta-analysis performed by ICO. Reference publications: 1) Ndiaye C, Lancet Oncol 2014; 15: 1319 2) Kreimer AR, Cancer Epidemiol Biomarkers Prev 2005; 14: 467
China	Gan LL, Asian Pac J Cancer Prev 2014; 15: 5861 | Lee LA, Medicine (Baltimore) 2015; 94: e2069 | Tang X, J Oral Pathol Med 2003; 32: 393 | Wen S, Anticancer Res 1997; 17: 307 | Zhang ZY, Int J Oral Maxillofac Surg 2004; 33: 71
India	Balaram P, Int J Cancer 1995; 61: 450 | Bhattacharya N, J Oral Pathol Med 2009; 38: 759 | Chaudhary AK, Virol J 2010; 7: 253 | D'Costa J, Oral Oncol 1998; 34: 413 | Herrero R, J Natl Cancer Inst 2003; 95: 1772 | Laprise C, Int J Cancer 2016; 138: 912 | Mishra A, Int J Cancer 2006; 119: 2840 | Sebastian P, J Oral Pathol Med 2014; 43: 593
Iran	Saghravanian N, Acta Odontol Scand 2011; 69: 406

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Country	Study
Japan	Bhawal UK, Arch Otolaryngol Head Neck Surg 2008; 134: 1055 ǀ Chiba I, Oncogene 1996; 12: 1663 ǀ Deng Z, Head Neck 2013; 35: 800 ǀ Higa M, Oral Oncol 2003; 39: 405 ǀ Kojima A, Oral Oncol 2002; 38: 591 ǀ Shima K, Br J Oral Maxillofac Surg 2000; 38: 445 ǀ Shimizu M, J Dermatol Sci 2004; 36: 33 ǀ Sugiyama M, Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2003; 95: 594 ǀ Tang X, J Oral Pathol Med 2003; 32: 393 ǀ Tsuhako K, J Oral Pathol Med 2000; 29: 70
Malaysia	Lim KP, Oncol Rep 2007; 17: 1321
HPV prevalence and type distribution in invasive oropharyngeal squamous cell carcinoma	
General sources	Based on systematic reviews and meta-analysis performed by ICO. Reference publications: 1) Ndiaye C, Lancet Oncol 2014; 15: 1319 2) Kreimer AR, Cancer Epidemiol Biomarkers Prev 2005; 14: 467
China	Li W, Pathology 2007; 39: 217
India	Bahl A, Head Neck 2014; 36: 505
Japan	Deng Z, Head Neck 2013; 35: 800 ǀ Hama T, Oncology 2014; 87: 173 ǀ Hatakeyama H, Oncol Rep 2014; 32: 2673
Republic of Korea	Kim SH, Int J Cancer 2007; 120: 1418 ǀ Oh TJ, J Clin Microbiol 2004; 42: 3272
HPV prevalence and type distribution in invasive hypopharyngeal squamous cell carcinoma	
General sources	Based on systematic reviews and meta-analysis performed by ICO. Reference publications: 1) Ndiaye C, Lancet Oncol 2014; 15: 1319 2) Kreimer AR, Cancer Epidemiol Biomarkers Prev 2005; 14: 467
China	Liu B, Neoplasma 2010; 57: 594 ǀ Ma XL, J Med Virol 1998; 54: 186
India	Jacob SE, J Surg Oncol 2002; 79: 142
Japan	Anwar K, Int J Cancer 1993; 53: 22 ǀ Deng Z, Head Neck 2013; 35: 800 ǀ Mineta H, Anticancer Res 1998; 18: 4765 ǀ Ogura H, Jpn J Cancer Res 1991; 82: 1184 ǀ Shidara K, Laryngoscope 1994; 104: 1008

10 Glossary

Table 52: Glossary

Term	Definition
Incidence	Incidence is the number of new cases arising in a given period in a specified population. This information is collected routinely by cancer registries. It can be expressed as an absolute number of cases per year or as a rate per 100,000 persons per year (see Crude rate and ASR below). The rate provides an approximation of the average risk of developing a cancer.
Mortality	Mortality is the number of deaths occurring in a given period in a specified population. It can be expressed as an absolute number of deaths per year or as a rate per 100,000 persons per year.
Prevalence	The prevalence of a particular cancer can be defined as the number of persons in a defined population who have been diagnosed with that type of cancer, and who are still alive at the end of a given year, the survivors. Complete prevalence represents the number of persons alive at certain point in time who previously had a diagnosis of the disease, regardless of how long ago the diagnosis was, or if the patient is still under treatment or is considered cured. Partial prevalence , which limits the number of patients to those diagnosed during a fixed time in the past, is a particularly useful measure of cancer burden. Prevalence of cancers based on cases diagnosed within one, three and five are presented as they are likely to be of relevance to the different stages of cancer therapy, namely, initial treatment (one year), clinical follow-up (three years) and cure (five years). Patients who are still alive five years after diagnosis are usually considered cured since the death rates of such patients are similar to those in the general population. There are exceptions, particularly breast cancer. Prevalence is presented for the adult population only (ages 15 and over), and is available both as numbers and as proportions per 100,000 persons.
Crude rate	Data on incidence or mortality are often presented as rates. For a specific tumour and population, a crude rate is calculated simply by dividing the number of new cancers or cancer deaths observed during a given time period by the corresponding number of person years in the population at risk. For cancer, the result is usually expressed as an annual rate per 100,000 persons at risk.
ASR (age-standardised rate)	An age-standardised rate (ASR) is a summary measure of the rate that a population would have if it had a standard age structure. Standardization is necessary when comparing several populations that differ with respect to age because age has a powerful influence on the risk of cancer. The ASR is a weighted mean of the age-specific rates; the weights are taken from population distribution of the standard population. The most frequently used standard population is the World Standard Population. The calculated incidence or mortality rate is then called age-standardised incidence or mortality rate (world). It is also expressed per 100,000. The world standard population used in GLOBOCAN is as proposed by Segi [1] and modified by Doll and al. [2]. The age-standardised rate is calculated using 10 age-groups. The result may be slightly different from that computed using the same data categorised using the traditional 5 year age bands.
Cumulative risk	Cumulative incidence/mortality is the probability or risk of individuals getting/dying from the disease during a specified period. For cancer, it is expressed as the number of new born children (out of 100, or 1000) who would be expected to develop/die from a particular cancer before the age of 75 if they had the rates of cancer observed in the period in the absence of competing causes.
Cytologically normal women	No abnormal cells are observed on the surface of their cervix upon cytology.
Cervical Intraepithelial Neoplasia (CIN) / Squamous Intraepithelial Lesions (SIL)	SIL and CIN are two commonly used terms to describe precancerous lesions or the abnormal growth of squamous cells observed in the cervix. SIL is an abnormal result derived from cervical cytological screening or Pap smear testing. CIN is a histological diagnosis made upon analysis of cervical tissue obtained by biopsy or surgical excision. The condition is graded as CIN 1, 2 or 3, according to the thickness of the abnormal epithelium (1/3, 2/3 or the entire thickness).
Low-grade cervical lesions (LSIL/CIN-1)	Low-grade cervical lesions are defined by early changes in size, shape, and number of ab-normal cells formed on the surface of the cervix and may be referred to as mild dysplasia, LSIL, or CIN-1.
High-grade cervical lesions (HSIL / CIN-2 / CIN-3 / CIS)	High-grade cervical lesions are defined by a large number of precancerous cells on the sur-face of the cervix that are distinctly different from normal cells. They have the potential to become cancerous cells and invade deeper tissues of the cervix. These lesions may be referred to as moderate or severe dysplasia, HSIL, CIN-2, CIN-3 or cervical carcinoma in situ (CIS).
Carcinoma in situ (CIS)	Preinvasive malignancy limited to the epithelium without invasion of the basement membrane. CIN 3 encompasses the squamous carcinoma in situ.
Invasive cervical cancer (ICC) / Cervical cancer	If the high-grade precancerous cells invade the basement membrane is called ICC. ICC stages range from stage I (cancer is in the cervix or uterus only) to stage IV (the cancer has spread to distant organs, such as the liver).
Adenocarcinoma	Invasive tumour with glandular and squamous elements intermingled
Central Asia	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
Eastern Asia	China, DPR Korea, Japan, Mongolia, Republic of Korea, Taiwan
South-Eastern Asia	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Viet Nam
Southern Asia	Afghanistan, Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan, Sri Lanka
Western Asia	Armenia, Azerbaijan, Bahrain, Georgia, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, Yemen

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Note to the reader

Anyone who is aware of relevant published data that may not have been included in the present report is encouraged to contact the HPV Information Centre for potential contributions.
Although efforts have been made by the HPV Information Centre to prepare and include as accurately as possible the data presented, mistakes may occur. Readers are requested to communicate any errors to the HPV Information Centre, so that corrections can be made in future volumes.

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