

GLOBAL DISTRIBUTION OF HPV-RELATED DISEASE

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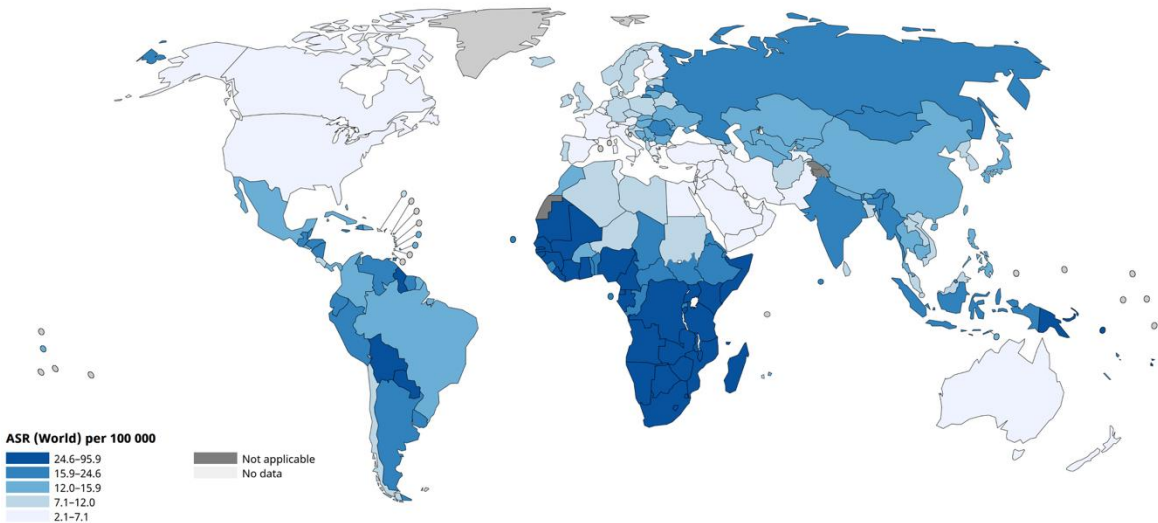
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ICO/IARC Information Centre on HPV and Cancer: www.hpvcentre.net

CERVICAL CANCER

Incidence: 662 301 new cases in 2022

Age-Standardized Rate (World) per 100 000, Incidence, Females, in 2022
Cervix uteri

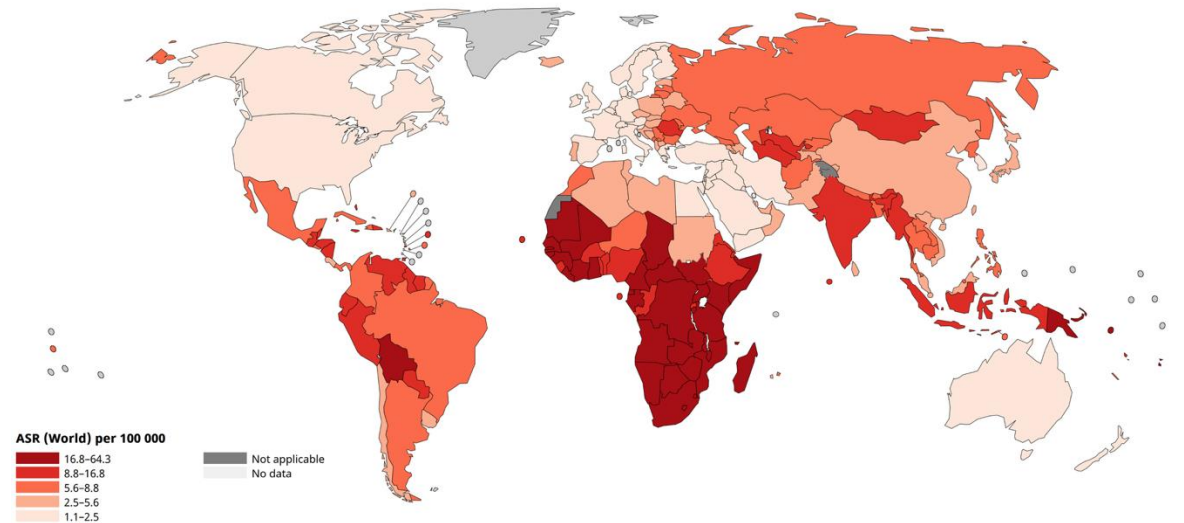


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Cancer TODAY | IARC
<https://gco.iarc.who.int/today>
Data version: Globocan 2022 (version 1.1) - 08.02.2024
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Mortality: 348 874 deaths in 2022

Age-Standardized Rate (World) per 100 000, Mortality, Females, in 2022
Cervix uteri



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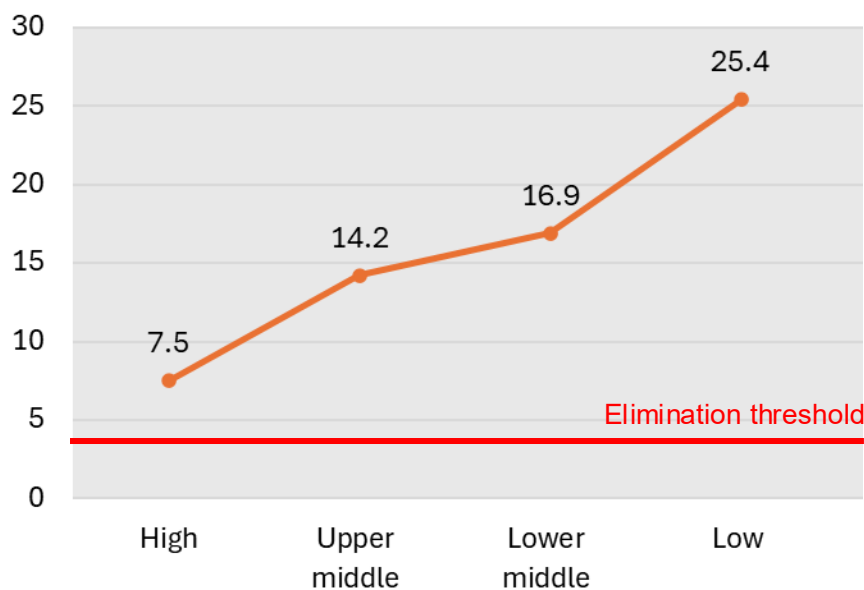
In women aged 15-44, cervical cancer is the third most common cancer after breast and thyroid. And second only to breast cancer in terms of mortality

CERVICAL CANCER BURDEN BY COUNTRY INCOME IN 2022

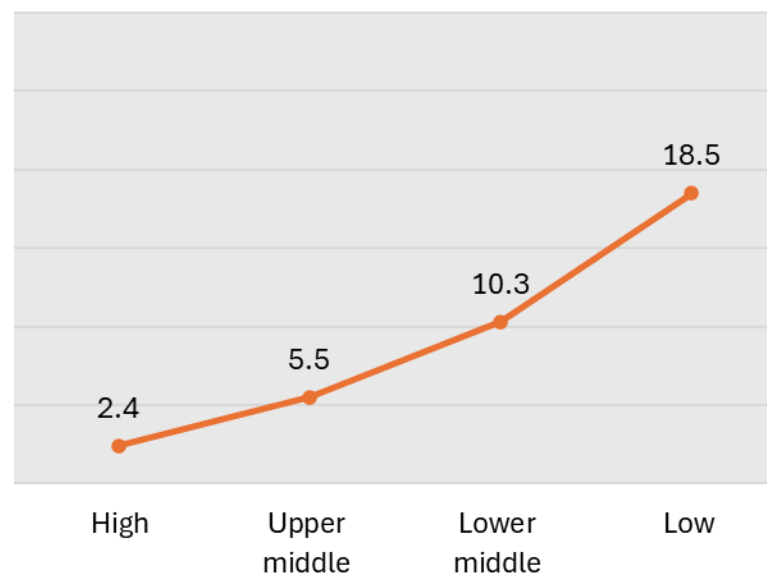
SOCIAL INEQUALITIES

ASR (World)

INCIDENCE

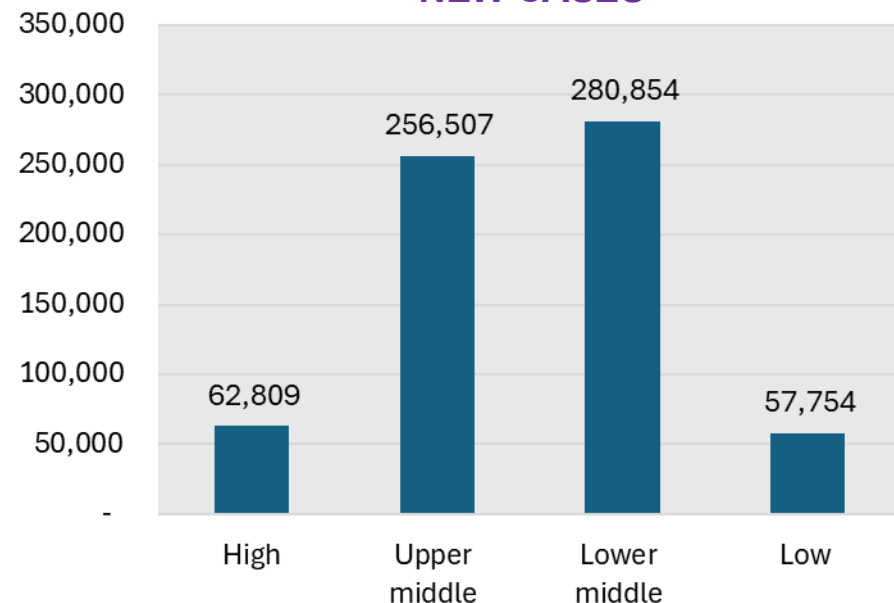


MORTALITY

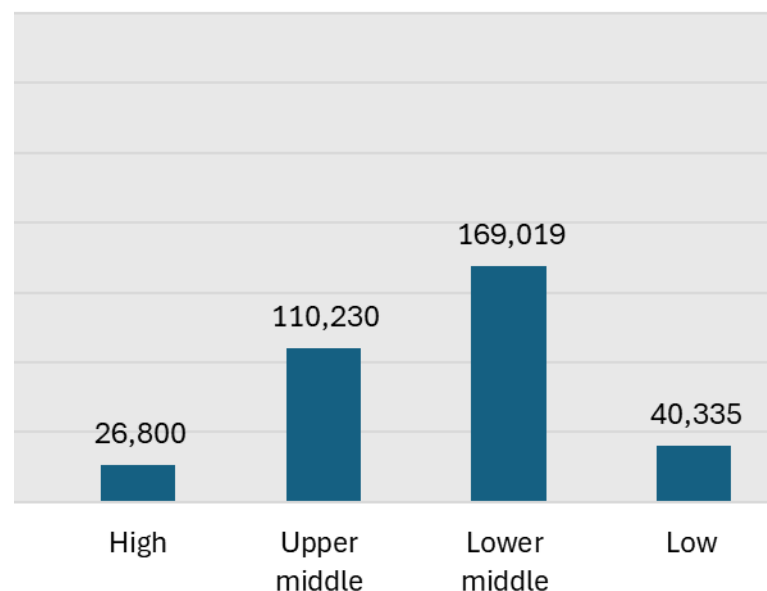


Number

NEW CASES

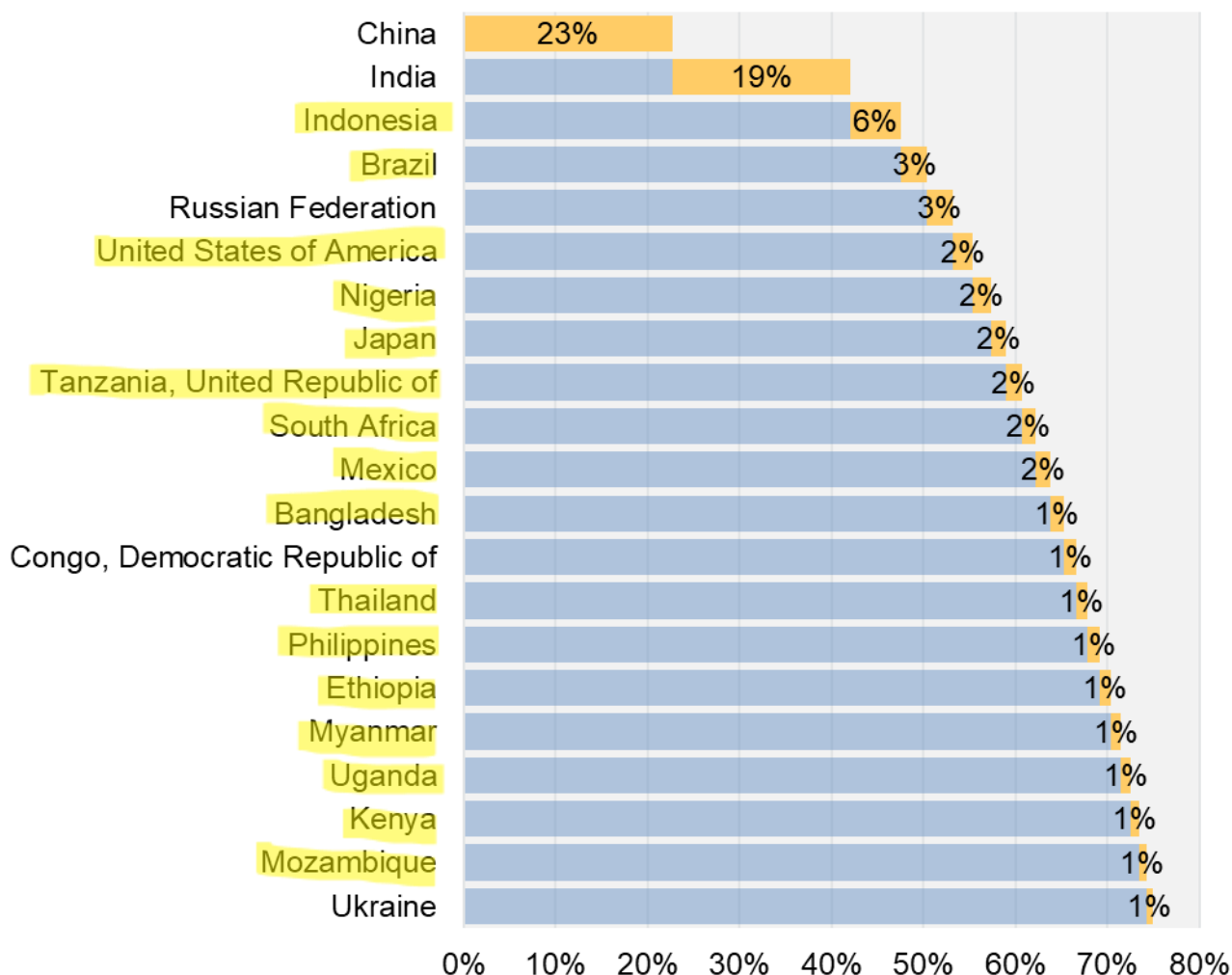


DEATHS



Data from: IARC 2024, Global Cancer
Observatory: Cancer Today,
<https://gco.iarc.who.int/today>

CONTRIBUTION OF EACH COUNTRY TO THE GLOBAL NUMBER OF CERVICAL CANCER CASES



4 countries contribute to 50% of the global burden of CC, with China and India accounting for 41%

20 countries contribute to 75% of CC

*In yellow: the countries that have introduced HPV vaccination (up to September 2024)

- Cumulative contribution to global number of cervical cancer cases
- Country contribution to global number of cervical cancer cases

Data from: IARC 2024, Global Cancer Observatory: Cancer Today,
<https://gco.iarc.who.int/today>

CERVICAL CANCER INCIDENCE TRENDS

Although **the incidence of cervical cancer has declined in many regions of the world over the past three decades**, particularly in Latin America, Asia, Western Europe and North America, the rates and burden of the disease remain high worldwide.

However, **there are countries with markedly increasing trends, especially in sub-Saharan Africa and Eastern Europe**.

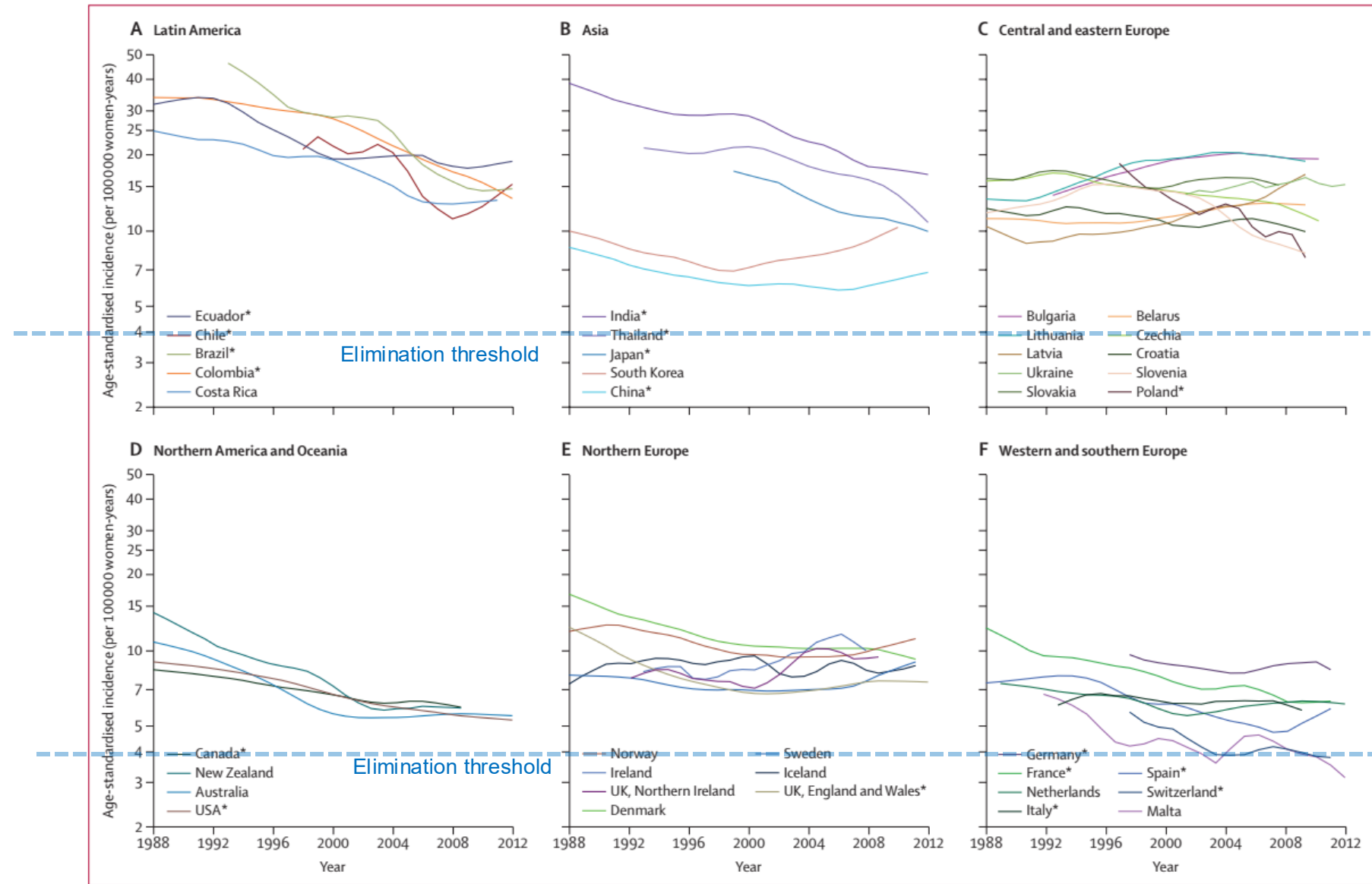
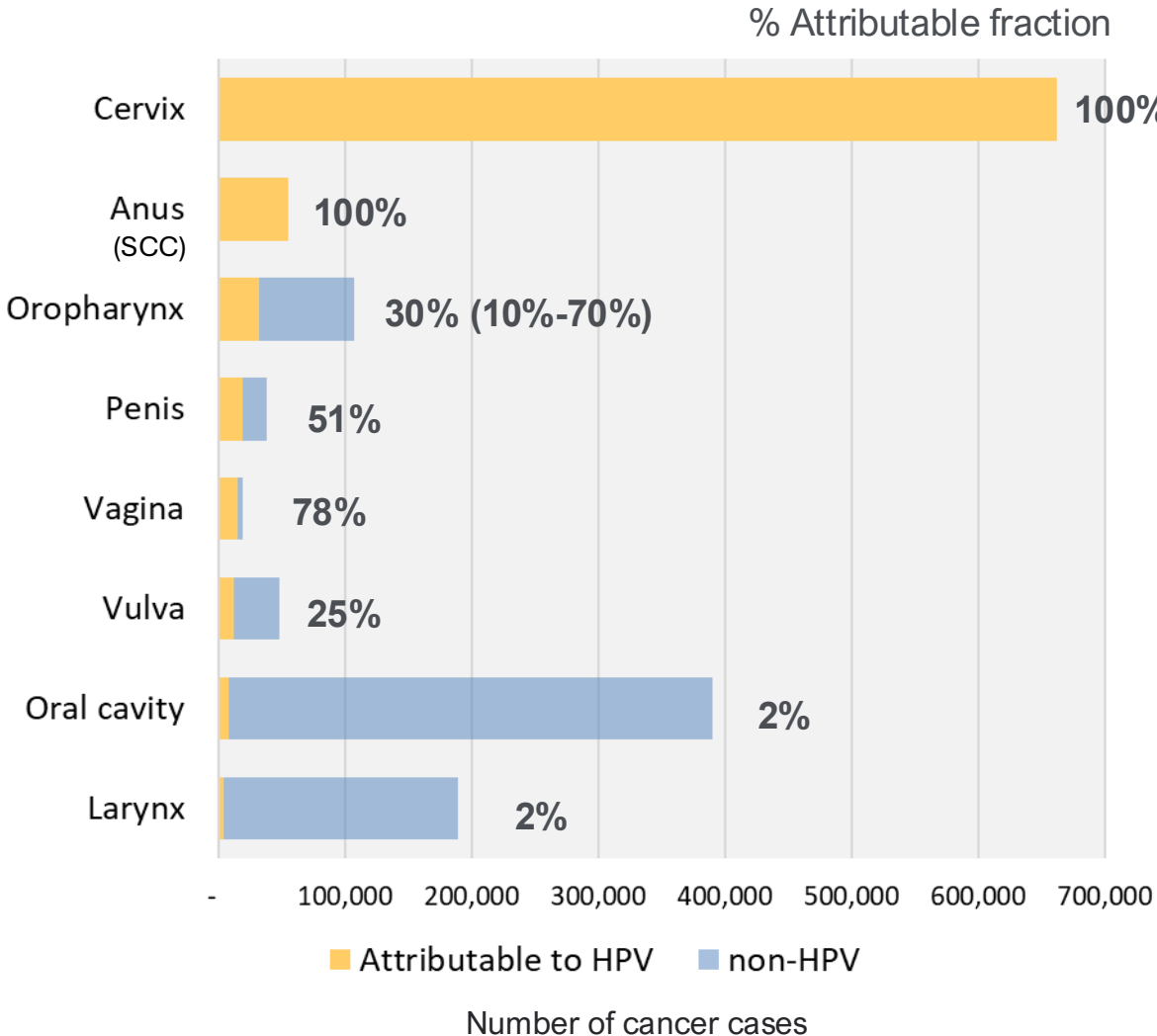


Figure 4: Age-standardised incidence of cervical cancer by world region, by age (1988–2017)

Data are from the GLOBOCAN database, collated by the International Agency for Research on Cancer and hosted by the Global Cancer Observatory. Only countries with population-based incidence data available in the Cancer Incidence in Five Continents plus database were included. Lines were smoothed by the LOESS regression algorithm (bandwidth 0.3) and the rates are shown in semi-log scale.

*Subnational data.

BURDEN OF HPV-RELATED CANCER AND ATTRIBUTABLE FRACTIONS



- **HPV-related cancers** accounts for **4.5%** of all new cancer cases worldwide
- **8.6%** of cancers in **women** and **0.8%** in **men**

RELATIVE CONTRIBUTION OF HPV TYPES IN HPV-RELATED CANCERS

CERVICAL CANCER

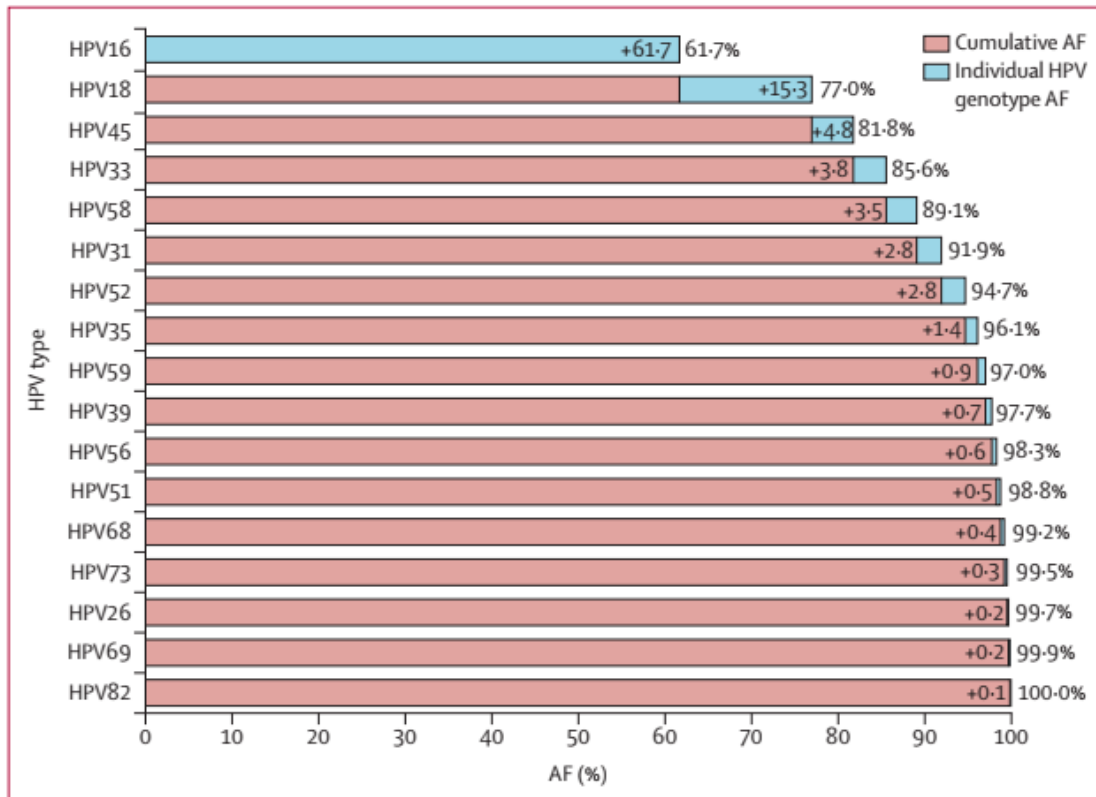
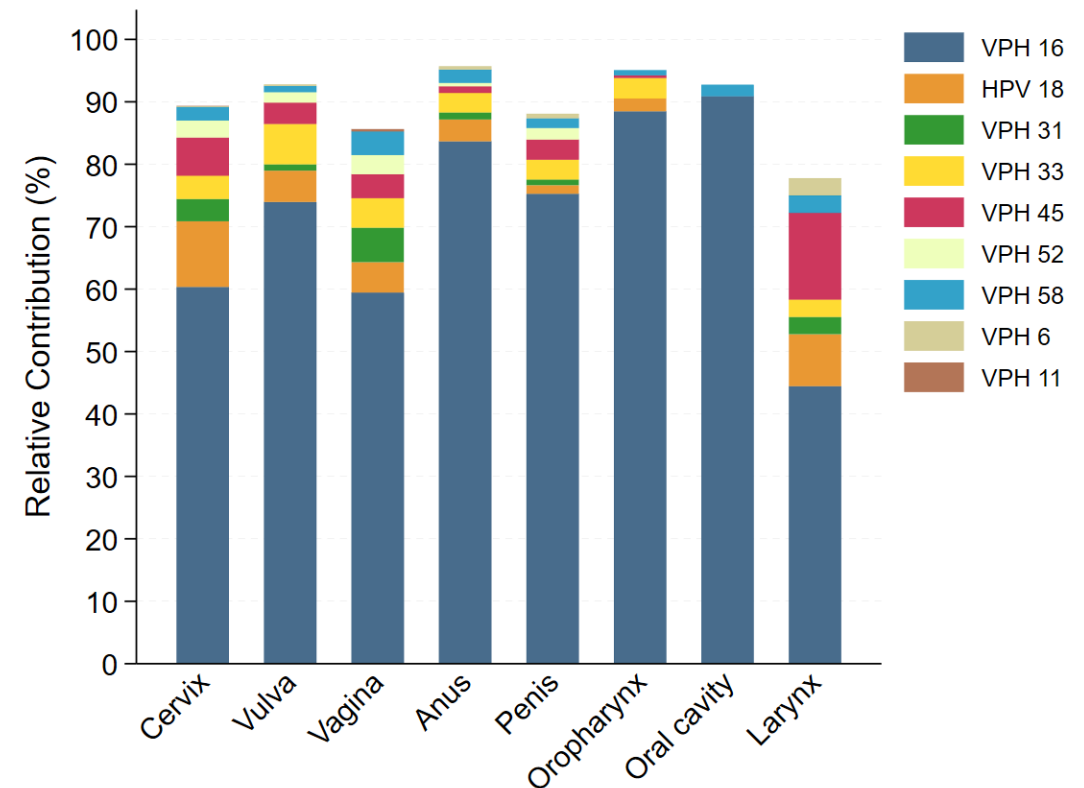


Figure 1: Individual and cumulative HPV genotype-specific AF in invasive cervical cancer at the global level
The number outside each bar shows the cumulative AF. AF=population attributable fraction. HPV=human papillomavirus.

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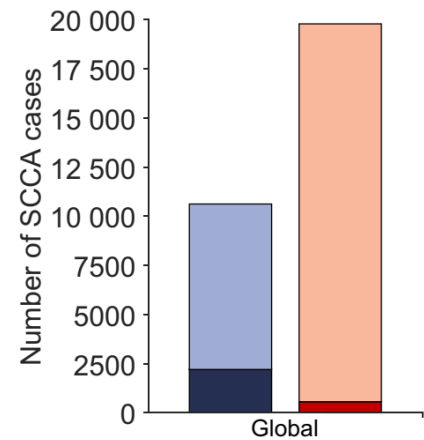
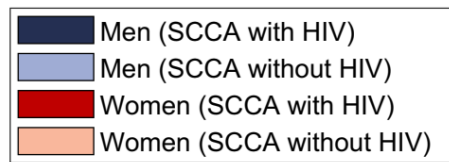
ALL HPV-RELATED CANCERS Contribution of HPV vaccine types



Adapted from de Sanjosé S. et al., JNCI Cancer Spectrum 2019

ANAL CANCER

Women contributed two-thirds of the global SCCA burden, and the majority of SCCA cases, in both men and women, occurred in highest-resource countries.



SCCA with HIV	2203	561
SCCA without HIV	8421	19 231
HIV proportion	20.7	2.8

TABLE 1 Squamous cell carcinoma in men and women in 2020 worldwide, by UN (sub)region and by HDI level

	Male				Female			
	Total male population (millions)	Number of SCCA cases	Proportion of global SCCA cases (%)	ASIR (per 100 000) men	Total female population (millions)	Number of SCCA cases	Proportion of global SCCA cases (%)	ASIR (per 100 000) women
Global	2895	10 624	100	0.35	2893	19 792	100	0.57
HDI Level								
Very high	563	5605	52.8	0.71	586	12 926	65.3	1.40
High	1007	1622	15.3	0.14	1007	3448	17.4	0.26
Medium	1023	2431	22.9	0.28	992	2164	10.9	0.24
Low	303	966	9.1	0.54	308	1254	6.3	0.60

Abbreviations: ASIR, age-standardized incidence rate; HDI, human development index; SCCA, squamous cell carcinoma of the anus.

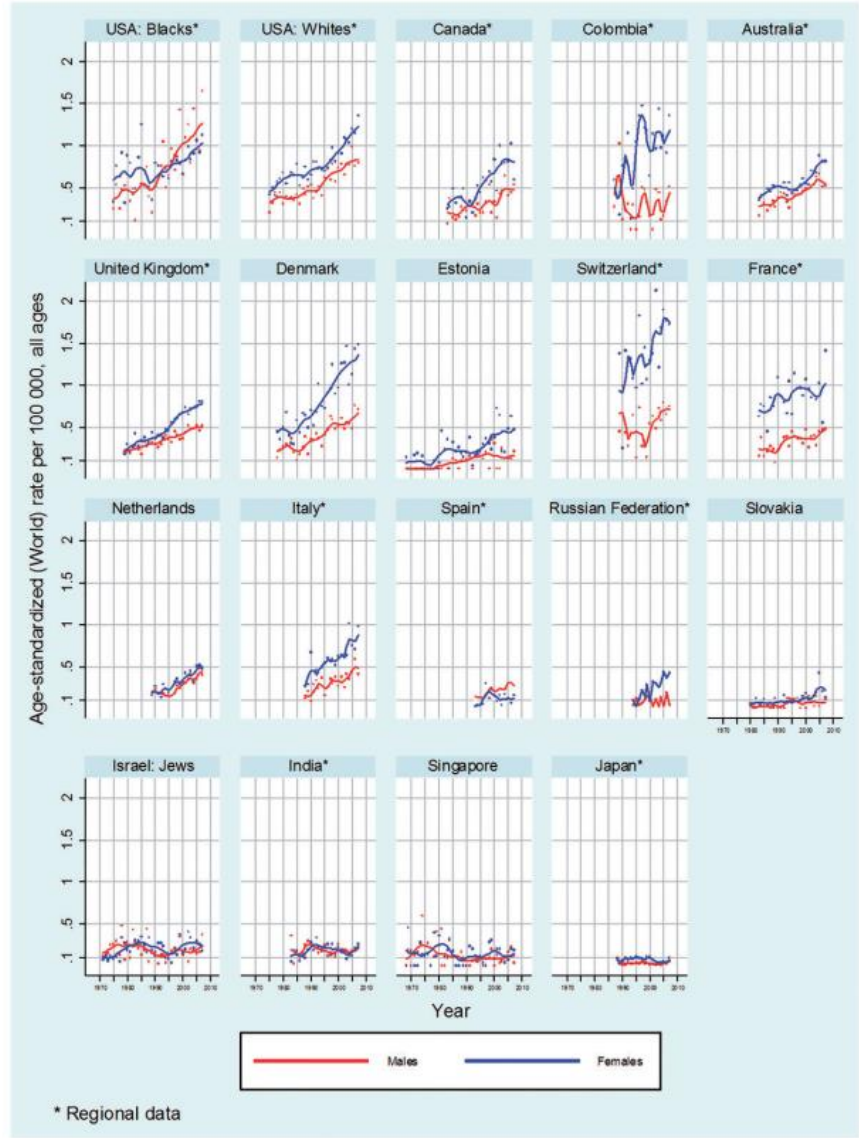
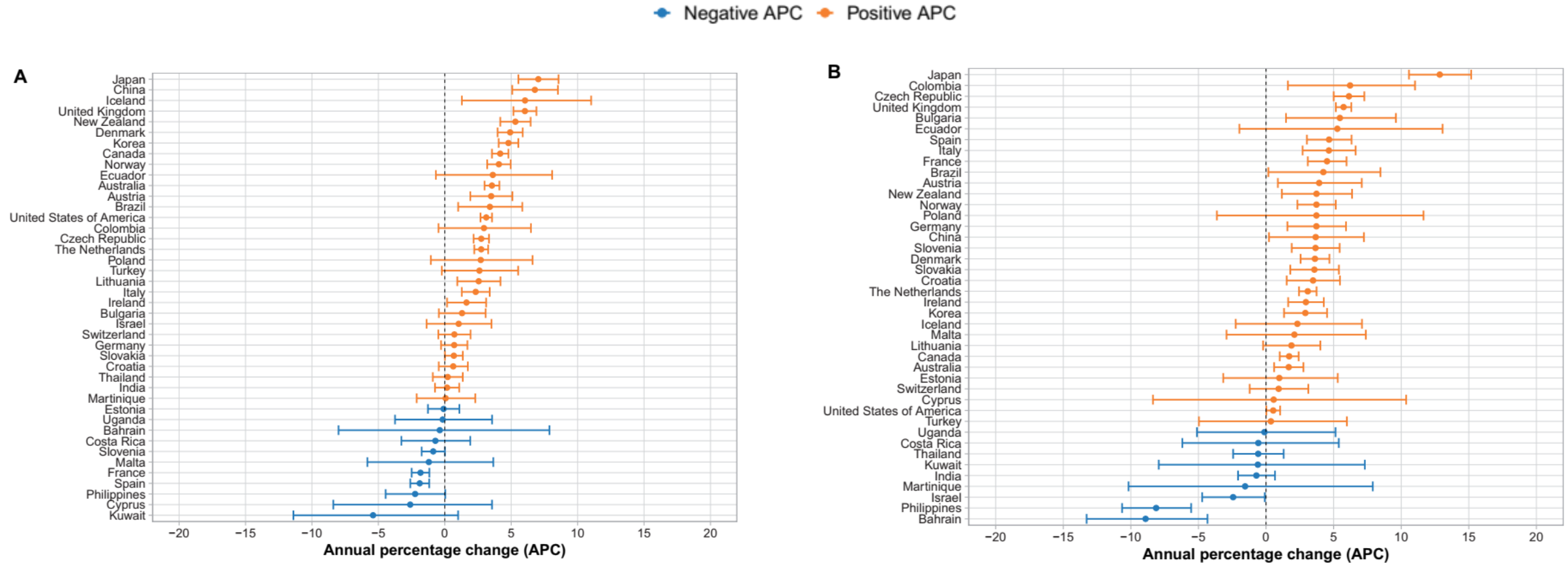


Figure 2. Age-standardized incidence rates of anal squamous cell carcinoma by sex.

A GROWING NUMBER OF COUNTRIES ARE SEEING AN INCREASE IN THE INCIDENCE OF OROPHARYNGEAL CANCER.



Annual percentage change in incidence of oropharyngeal cancers in men and women from 1993 to 2012.

ANOGENITAL WARTS

Anogenital warts, which are mainly caused by HPV6 and HPV11, are **the most frequent manifestation** of HPV infection. Since anogenital warts are not a notifiable disease in most countries, **the available data on the burden of these lesions among the general population are limited** [Patel et al. 2013].

A systematic review updated up to 2016 reported the following:

- The **annual incidence of genital warts** was 85–205 cases per 100,000 people and was **similar for both sexes**.
- The **highest incidence** was among the **under 30s** (230–790 cases per 100,000 people) [Buckley et al. 2016].

The age-specific **incidence curve for anogenital warts** is very **similar to the HPV prevalence curve**: incidence rises sharply shortly after sexual debut, peaks at approximately 30 years old and gradually drops off thereafter.

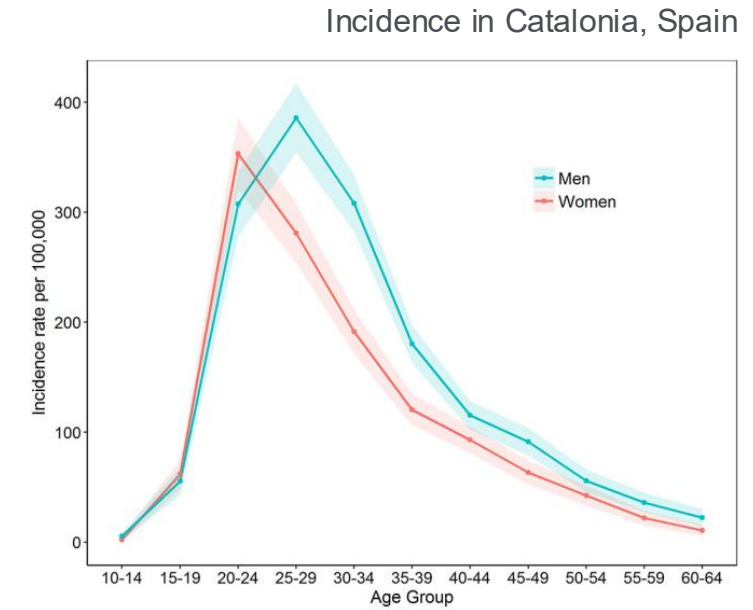


Fig. 1. Age-specific incidence rates of anogenital warts by sex in 2016. Shaded areas indicate 95% confidence intervals of the incidence rates.

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