



Instituto Nacional
de Cancerología-ESE
Colombia
Por el control del cáncer

HPV Associated Cancers Burden in Colombia

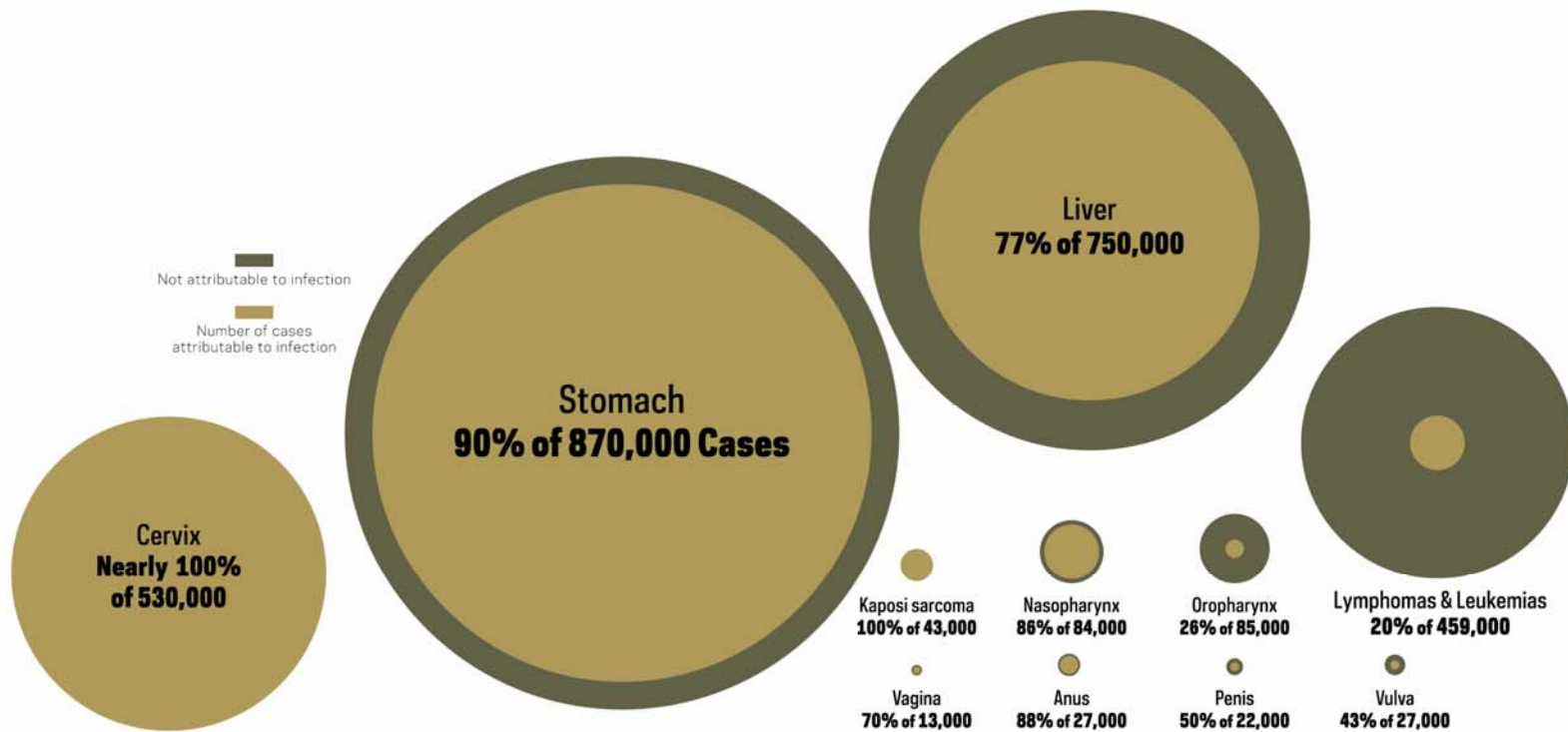
Gustavo Hernandez-Suarez MD MSc

outline

- Background
- Other than-Cervical Cancer incidence and mortality trends
- Attributable fraction to HPV infection in Colombia
- Final Remarks

Many of the most common cancers are at least partly attributable to infection.

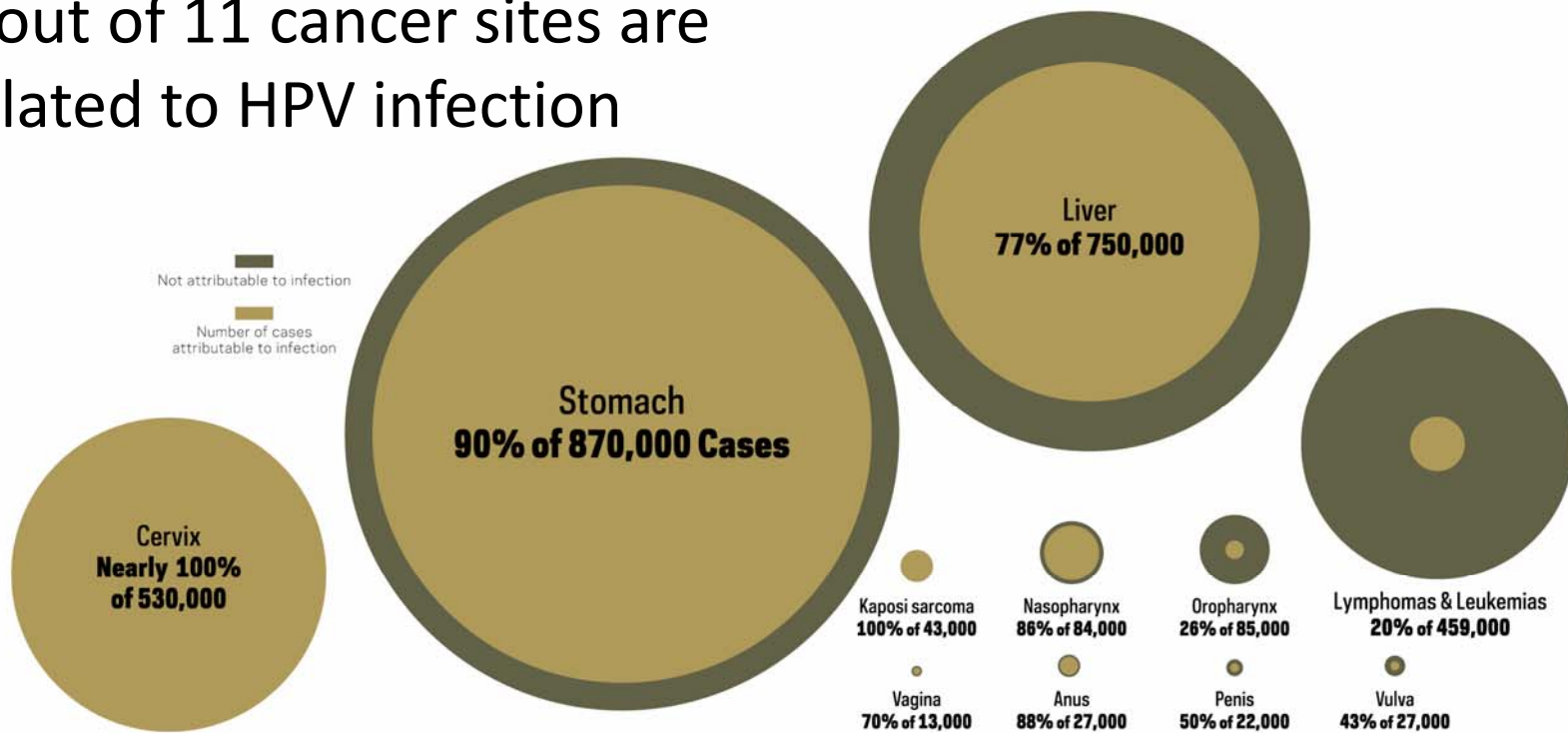
Percentage of new cancer cases caused by infection and total number of new cases



Many of the most common cancers are at least partly attributable to infection.

Percentage of new cancer cases caused by infection and total number of new cases

6 out of 11 cancer sites are related to HPV infection

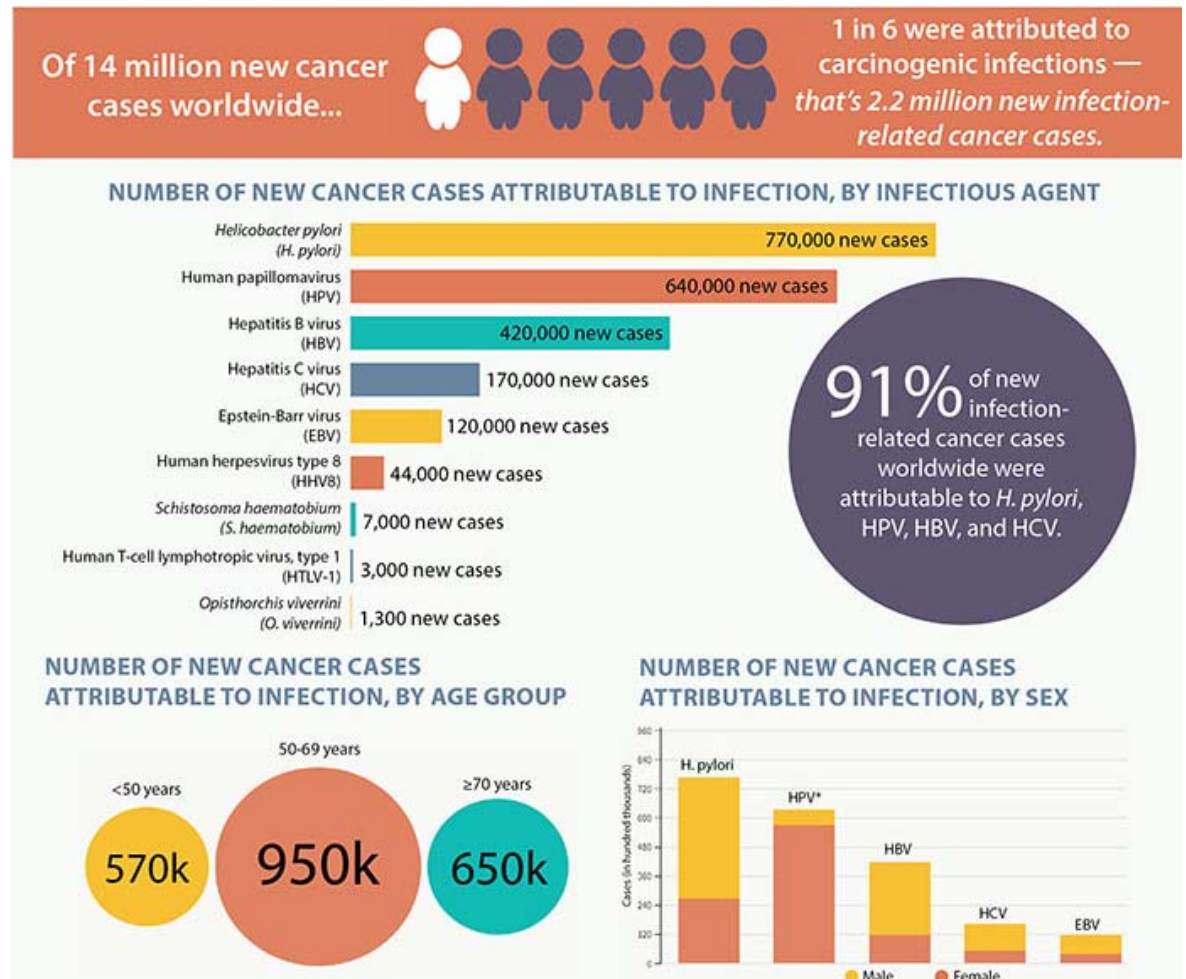


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HPV burden worldwide:

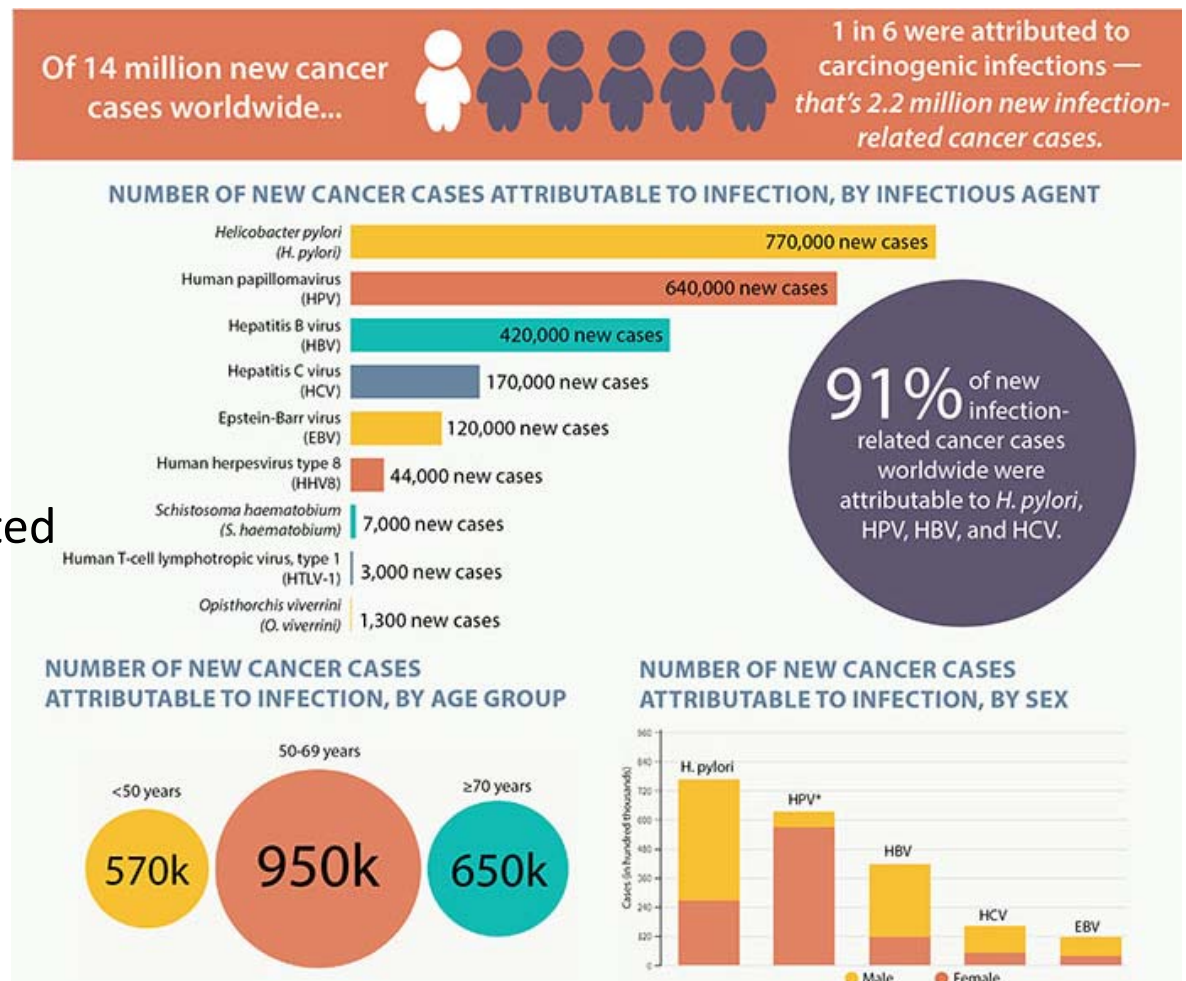
- Source:NIH website



HPV burden worldwide:

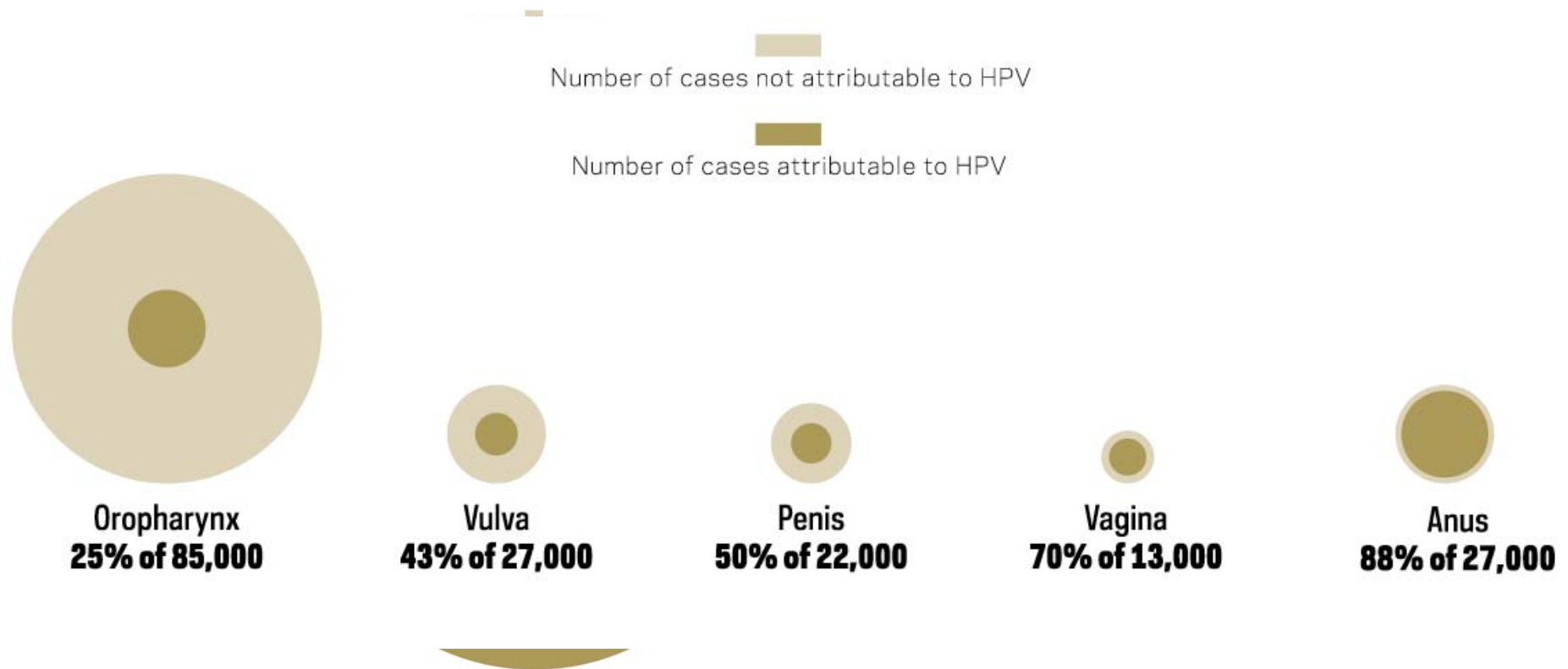
- 27% of cancers attributed to infection are HPV related
- 5% of all cancer burden is attributed to HPV infection

• Source:NIH website



HPV accounts for an important proportion of cases for some cancer sites; for cervical cancer, virtually all cases are attributable to HPV infection.

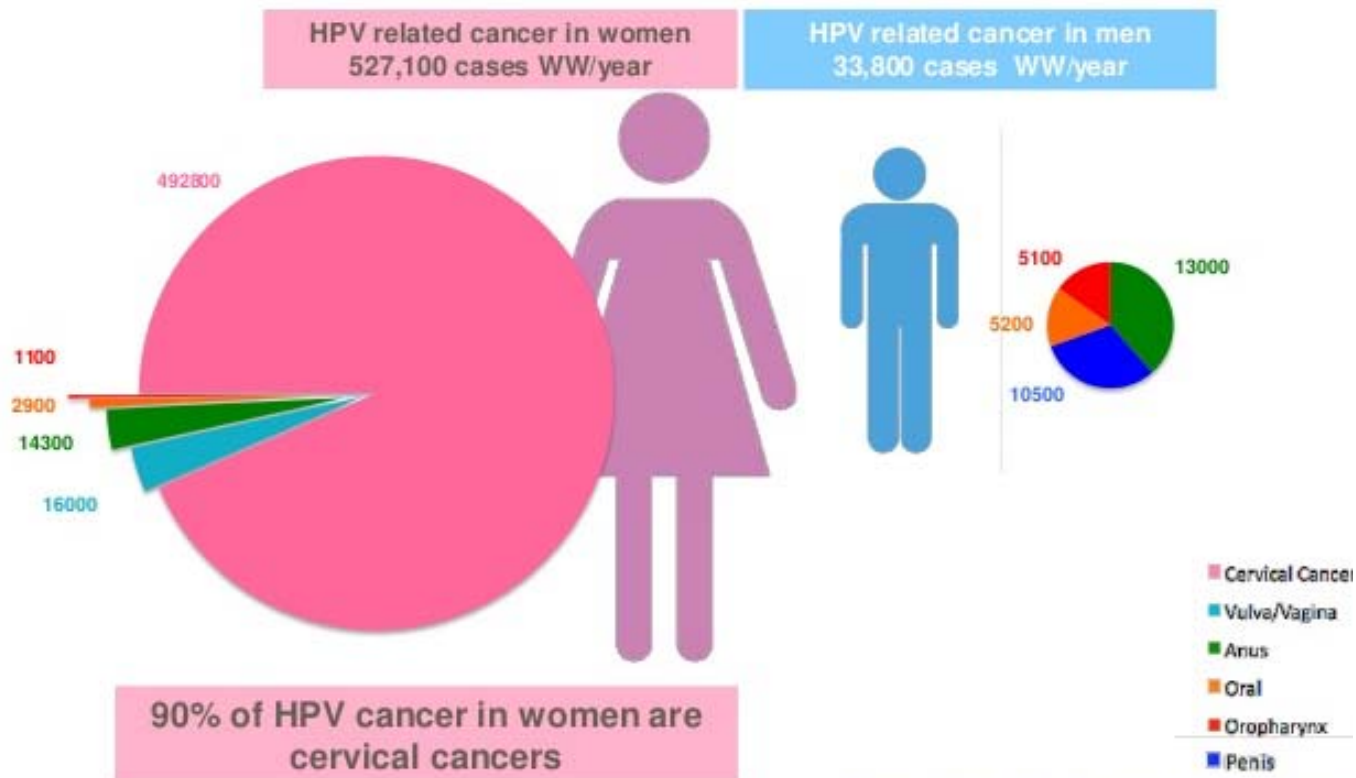
Percentage of cancer cases attributable to HPV infection worldwide and total number of new cases, 2008



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HPV burden higher among women



Adapted from Parkin DM, Bray F. Vaccine. 2006;24 Suppl 3:S11.

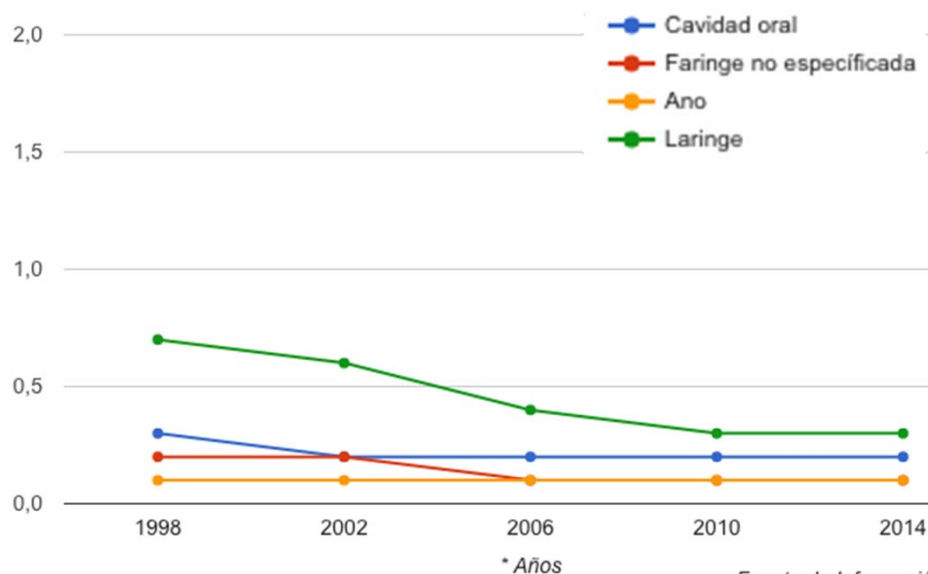
HPV related cancer burden is overruled by Cervical cancer in Colombia

Burden of cervical cancer and other HPV-related cancers			
Annual number of cervical cancer cases			4,661
Annual number of cervical cancer deaths			1,986
Crude incidence rates per 100,000 and year:		Male	Female
	Cervical cancer	-	19.3
	Anal cancer ‡	0.2-1.3	0.8-1.9
	Vulvar cancer ‡	-	0.5-1.0
	Vaginal cancer ‡	-	0.0-0.7
	Penile cancer ‡	1.1-2.2	-
	Pharynx cancer (excluding nasopharynx)	0.8	0.3

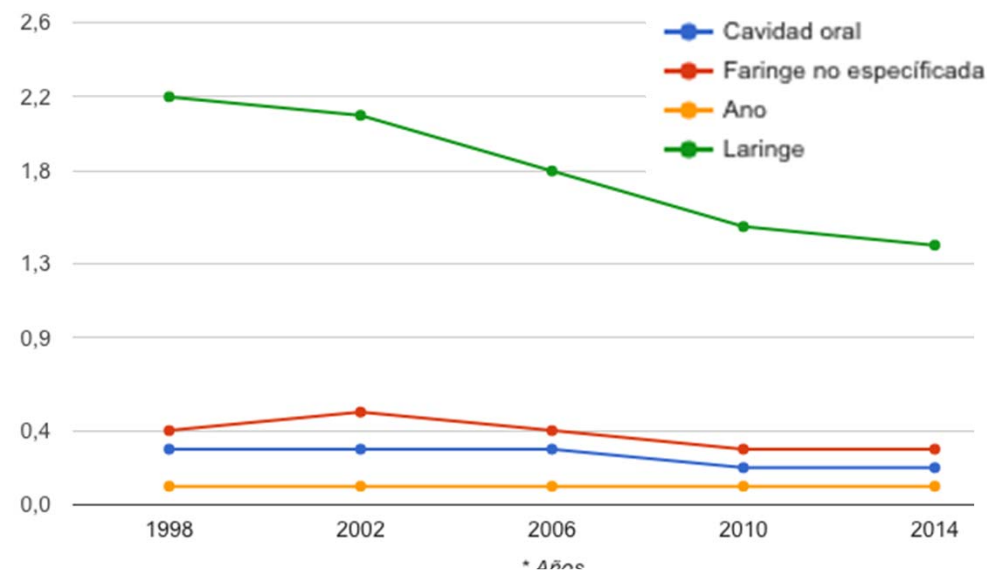
Other than Cervical Cancer incidence and
mortality trends in Colombia

Mortality of other HPV related cancers 10 fold less risk than Cervix Cancer, Worth seeing cases figures instead of rates

Women Deaths
Colombia 1998-2014



Men Deaths
Colombia 1998-2014

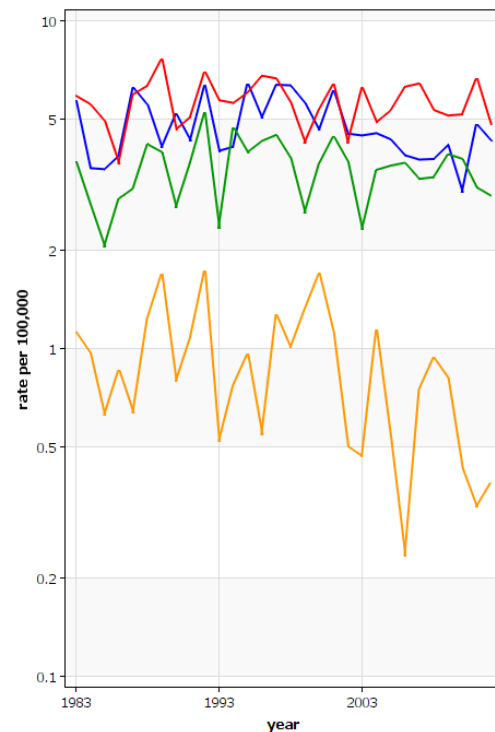


Fuente de Información: Datos del SICC y Departamento Administrativo Nacional de Estadística (DANE)

Incidence Risk of Oral cavity cancer subsites, as a whole, similar to Larynx in men but higher in women

Colombia, Cali

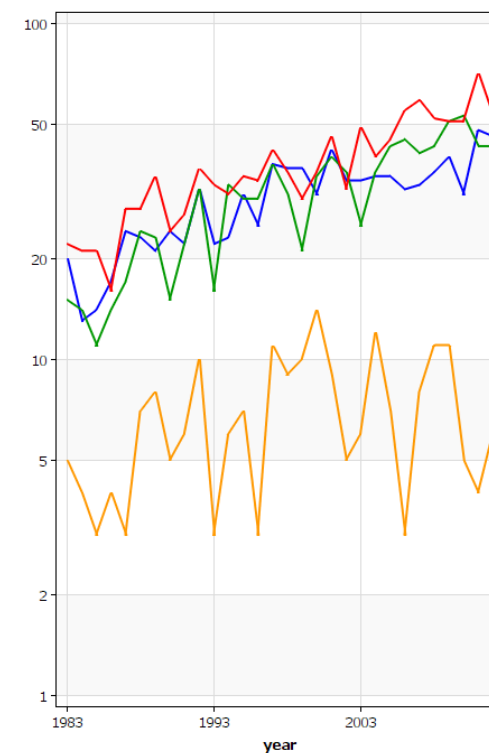
Age Standardised Incidence Rate (World), age [0-85+]



International Agency for Research on Cancer (IARC) - 15.11.2018

Colombia, Cali

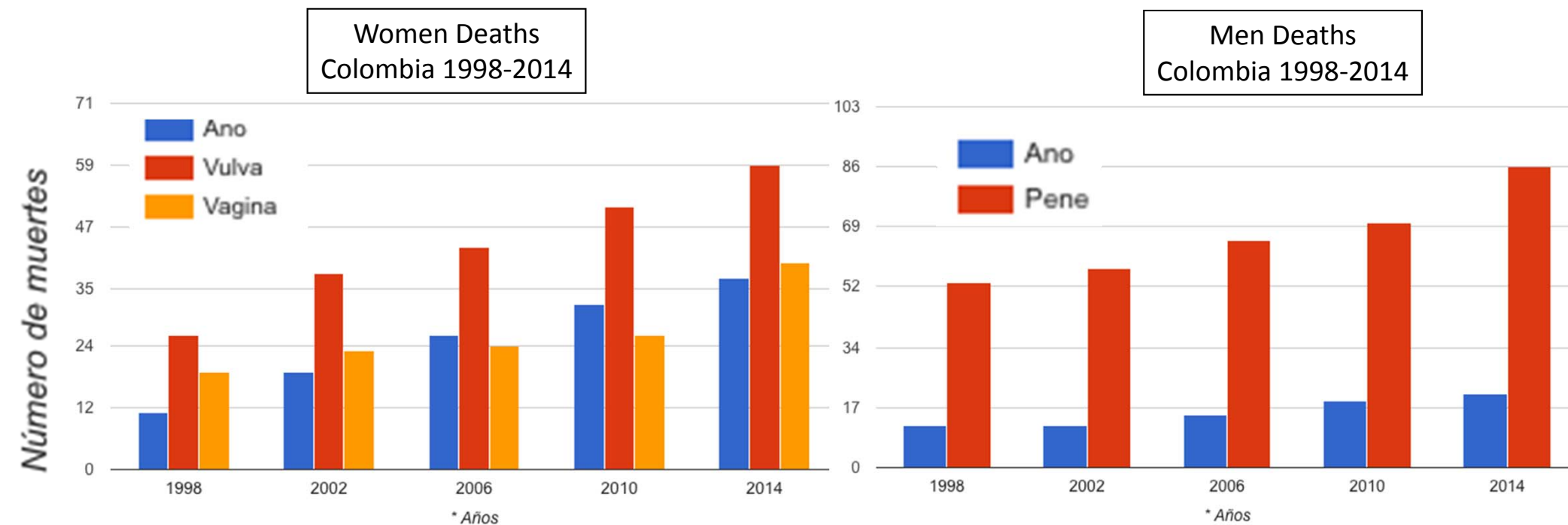
Number of cases, age [0-85+]



International Agency for Research on Cancer (IARC) - 15.11.2018

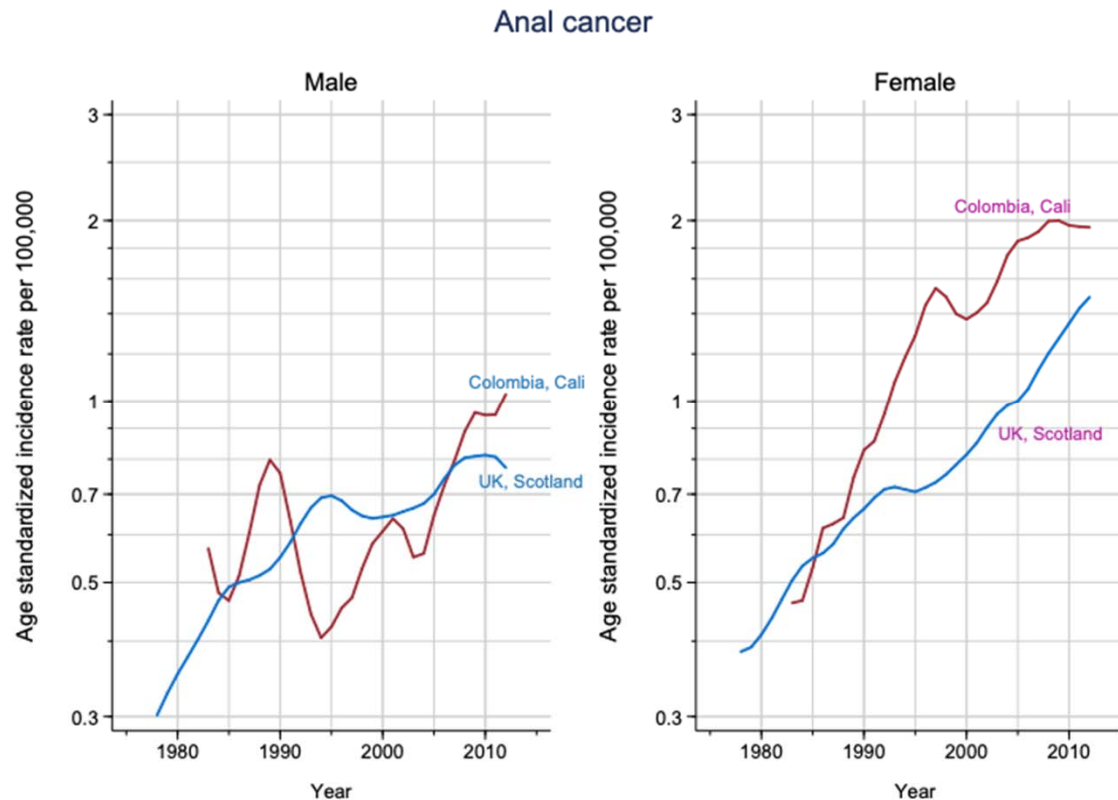
- Lip oral cavity and pharynx: Male
- Lip oral cavity and pharynx: Female
- Larynx: Male
- Larynx: Female

Increasing figures of non-cervical cancers in the genital area, specially in Women



Fuente de Información: Datos del SICC y Departamento Administrativo Nacional de Estadística (DANE)

Anal cancer with steeper increase in incidence rates in Colombian women compared to men



“Courtesy of Jerome Vignat, CSU, IARC” with data of CI5Plus.

Attributable fraction to HPV infection in
Colombia

Colombian Cases in ICO HPV cross-sectional Multinational Study

Site	No.	HPV +
ANUS	39	94.9%
CERVIX	841	78.4%
VAGINA	29	72.4%
VULVA	48	60.4%
PENIS	54	50.0%
H&N	192	26.0%
Total	1203	

Hernandez-Suarez G, Muñoz, N et al. Unpublished results from ICO HPV consortia (**HPV VVAP study group.**)

Final Remarks

- Cervical Cancer is still the most relevant HPV related cancer in Colombia and HPV vaccination will allow to cut down the incidence and mortality risk of Colombian women in the upcoming decades.
- H&N cancers are the second most frequent type of cancer related to HPV infection among Colombians.

Final Remarks

- Given the decrease in cervical cancer rates other HPV related cancers will gain relative relevance
- Monitoring Anal cancer trends will be of special interest given its large HPV Attributable fraction
- HPV 16 is the only Genotype detected in all HPV-Related Cancers and can be attributed roughly $\frac{3}{4}$ of overall HPV attributable risk.