



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

State of Cervical Cancer in Colombia

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HPV Prevention and Control Board.
Bogotá, 15 November 2018.



Content



1. Background
2. Incidence
3. Morality
4. Survival



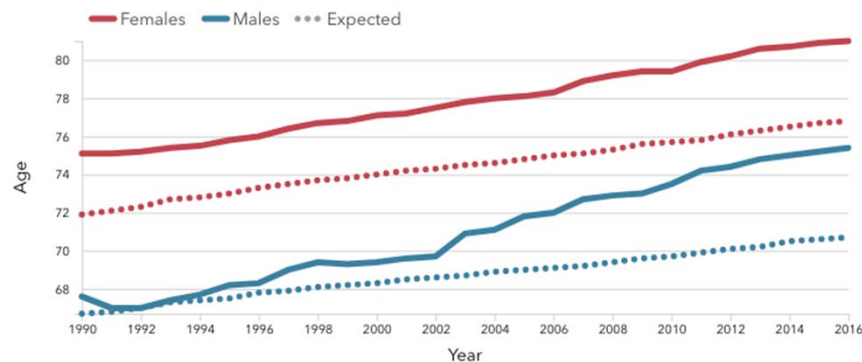
Background

Colombians are now living longer, with less children and mainly in urban areas

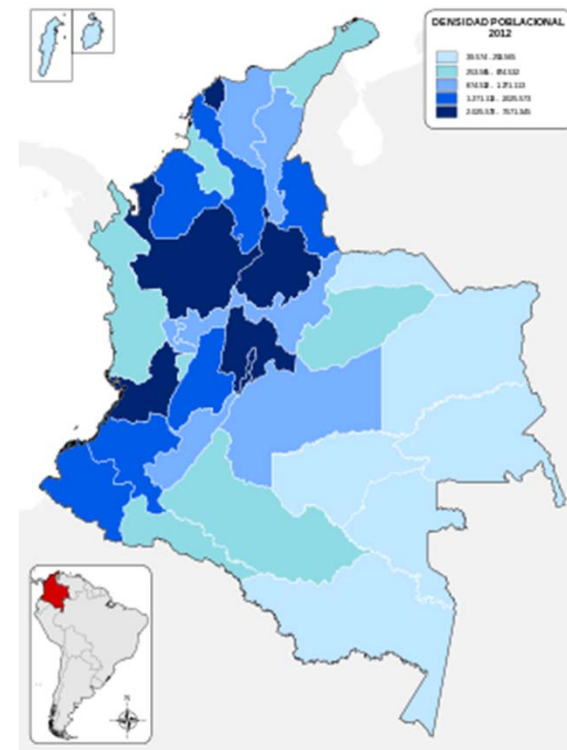


2016 population	2016 per capita GDP	2016 fertility rate	2016 educational attainment (years)
< 45 M	\$13,067	1.7	8.5

How long do people live?



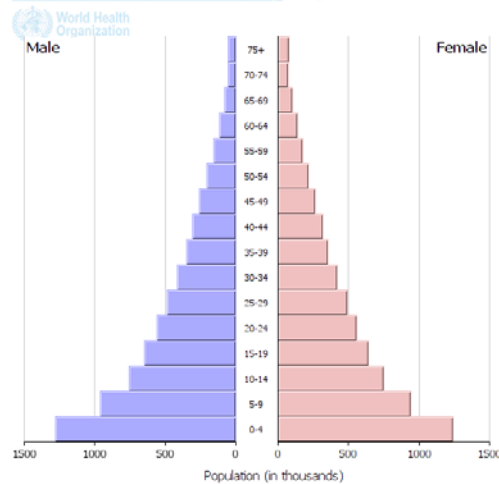
	Expected		Observed	
	1990	2016	1990	2016
Females	71.9	76.8	75.1	81.0
Males	66.7	70.7	67.6	75.4



Colombian Demographics has changed dramatically in the last 60 years

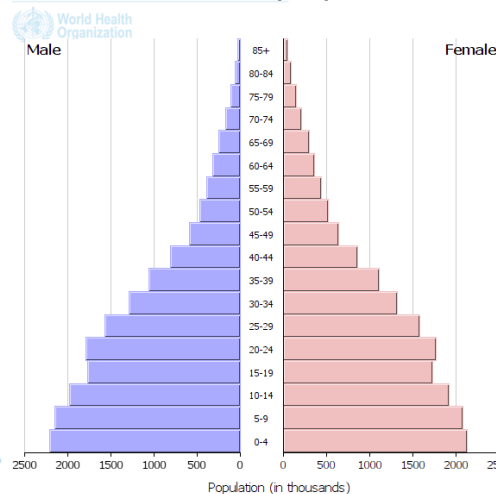


International Agency for Research and Development Colombia (1953)

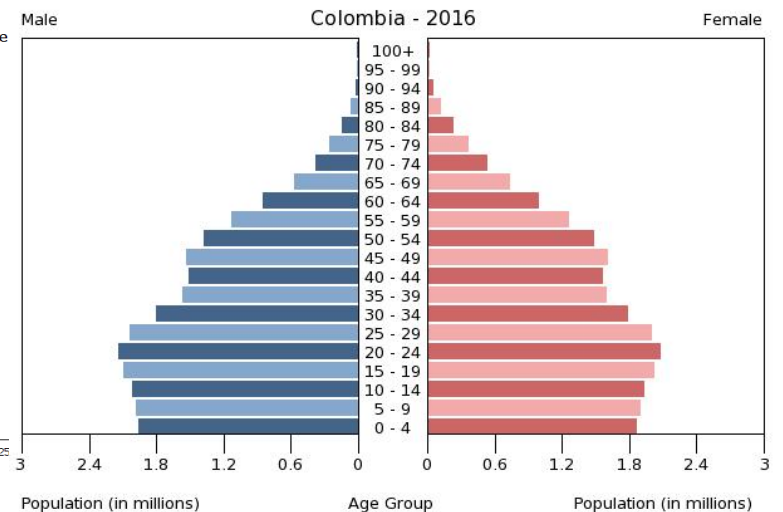


Data source: UN, World Population Prospects, the 2015 revision

International Agency for Research and Development Colombia (1990)



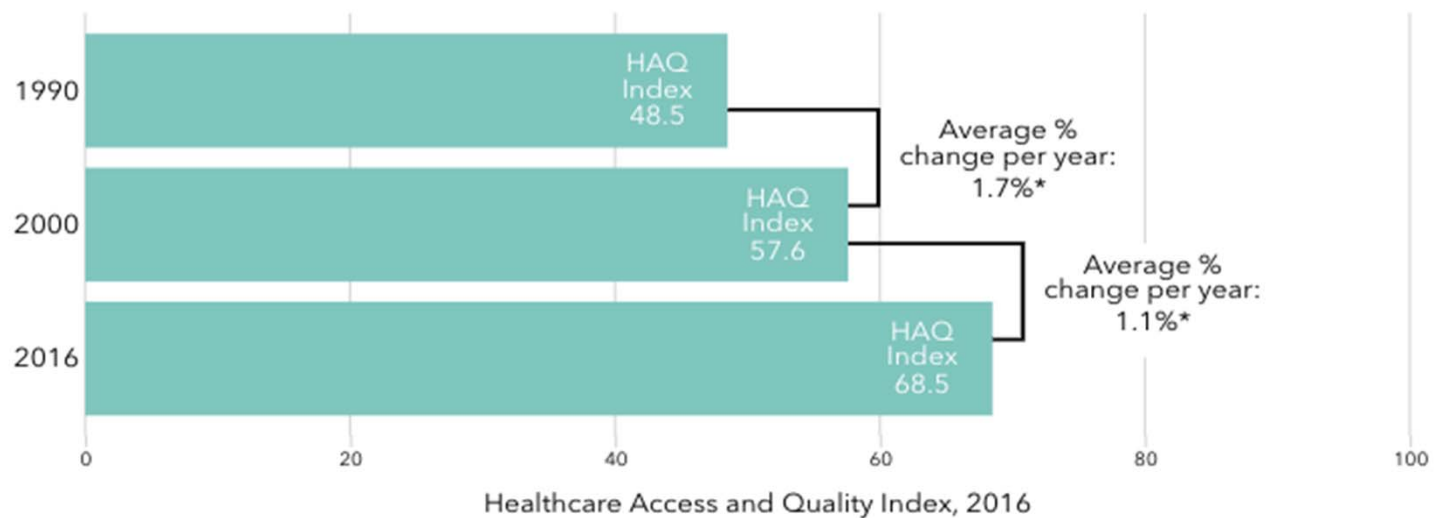
Data source: UN, World Population Prospects, the 2015 revision



Demographic and health changes in Colombia linked to improved healthcare



How does personal healthcare access and quality measure up?



Stars indicate the average rate of change was statistically significant for that time period.

Source: bit.ly/HAQ-GBD2016

The Healthcare Access and Quality (HAQ) Index provides a summary measure of healthcare access and quality for a given location. This measure is based on risk-standardized mortality rates or mortality-to-incidence ratios from causes that, in the presence of quality healthcare, should not result in death - also known as amenable mortality.



Cervical Cancer Burden



Risk Factors for Cervical Cancer

Factors with adequate evidence of an increased Risk of Cervical Cancer

1. **HPV HR persistent infection (Causal agent)**

Cofactors

1. High parity
2. Cigarette smoke exposure
3. Immunosuppression

Interventions with adequate evidence of a decreased Risk of Cervical Cancer

1. HPV vaccination
2. HPV Screening

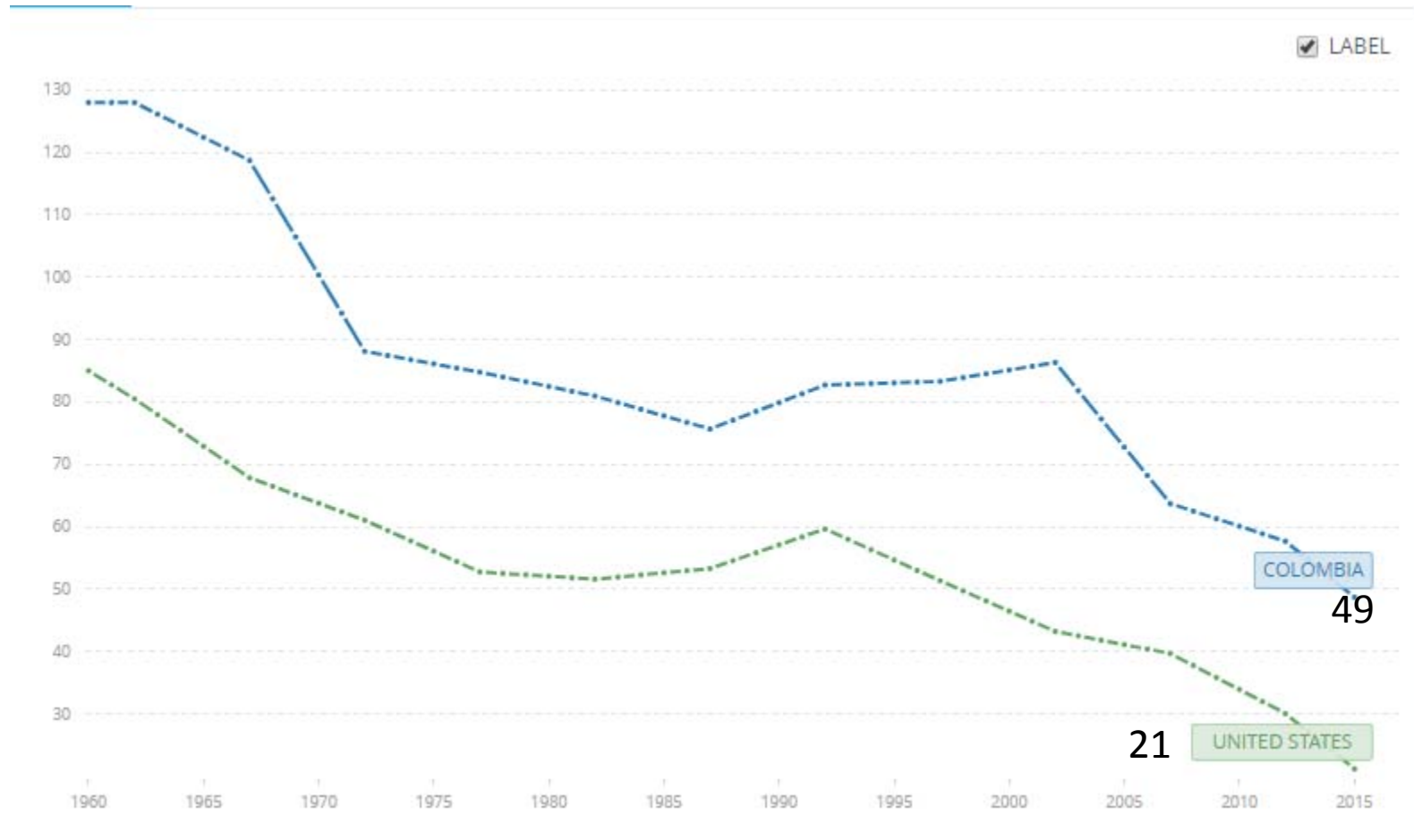
Prevalence of HPV Infection among women 18 -25 years old



HPV	Cervical samples (% positive)
	n=530
High Risk	58,61%
Low Risk	5,06%

Fuente. Combata A. HPV vaccination monitoring system, 2015 INC

Adolescent fertility rate (births per 1,000 women ages 15-19)

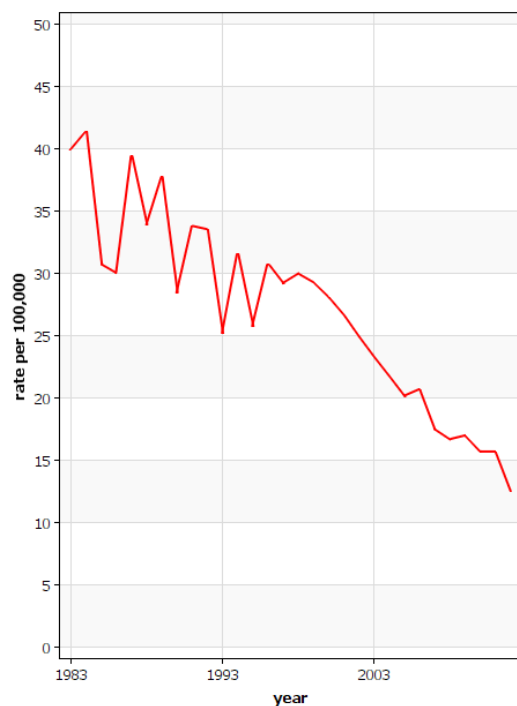




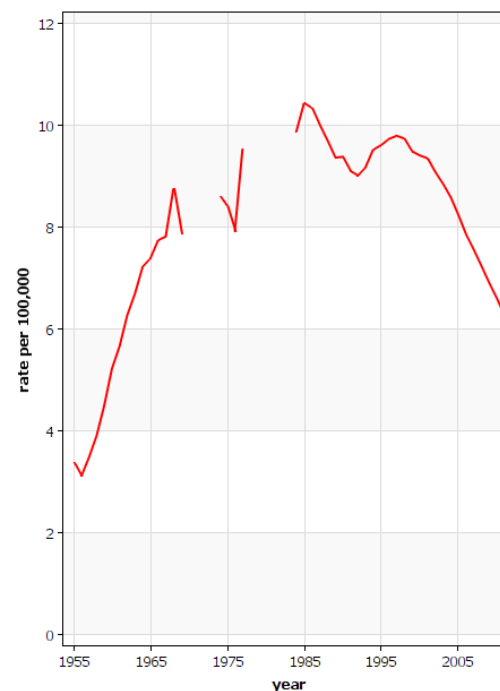
Cervical Cancer incidence and mortality trends in Colombia

Cervical Cancer has shown a decrease trend both in incidence and mortality for more than 30 years

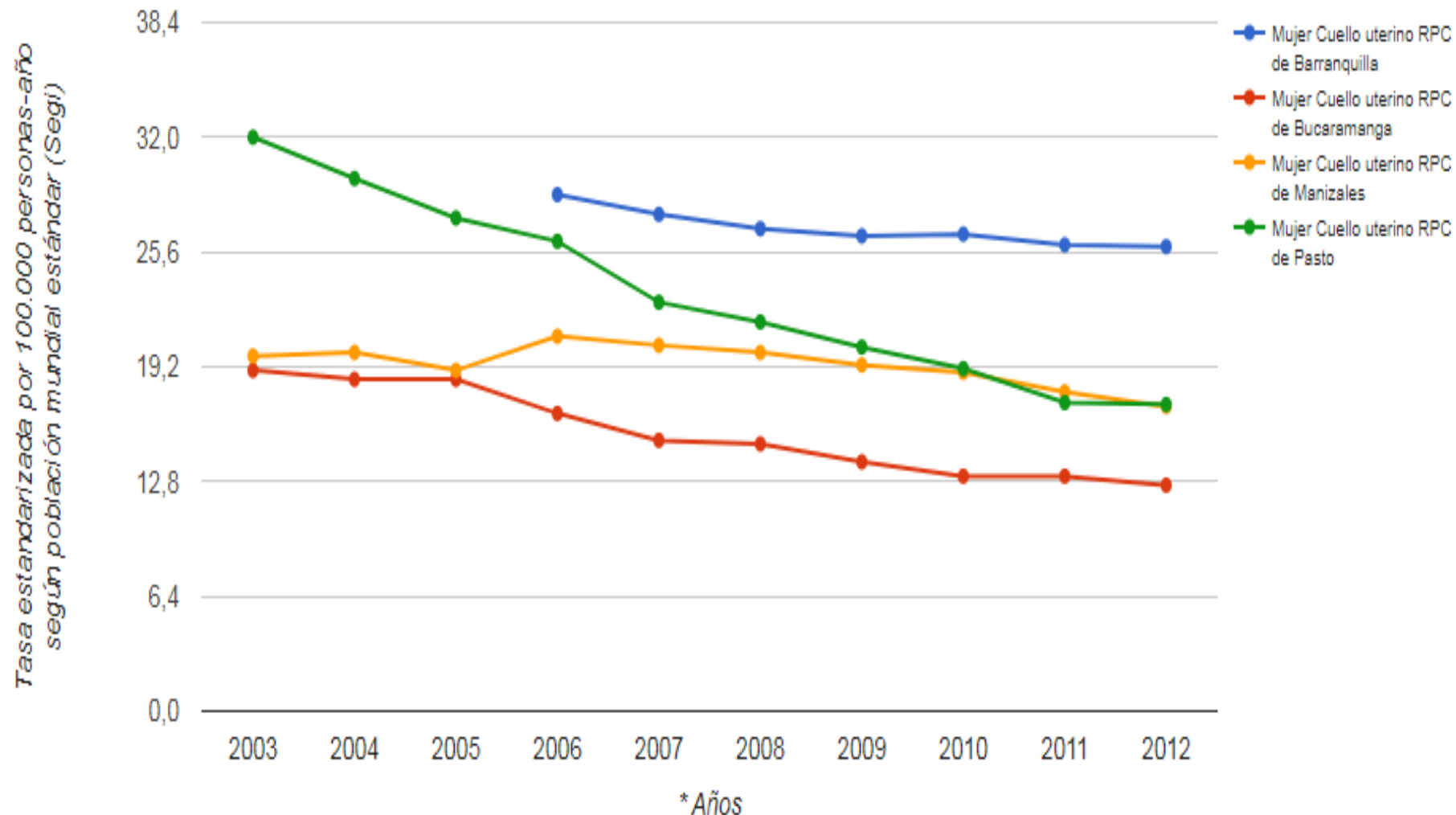
Cervix uteri
Colombia, Cali
Age Standardised Incidence Rate (World), age [0-85+]



Mortality from Cervical cancer
Colombia
Age-standardised rate (World), all ages



Incidence from additional Cancer Registries agreed with Cali PCR



Fuente de Información: Datos del SICC y RPC de Barranquilla, RPC de Bucaramanga, RPC de Manizales, RPC de Pasto



Average annual number of cervical cancer deaths and mortality rates (age - standardized world population) per 100 000 Colombia 1984-2014.

	1984 - 1988*		<u>Period</u> 2004 -2008*		2009 - 2014^	
	No.	ASR	No.	ASR	No.	ASR
Cervix	1516	13.2	1913	9.0	1798	7.1

*Piñeros, M., Gamboa, O., Hernández-Suárez, G., Pardo, C., & Bray, F. (2013). Patterns and trends in cancer mortality in Colombia 1984–2008. *Cancer epidemiology*, 37(3), 233-239.

^www.infocancer.co



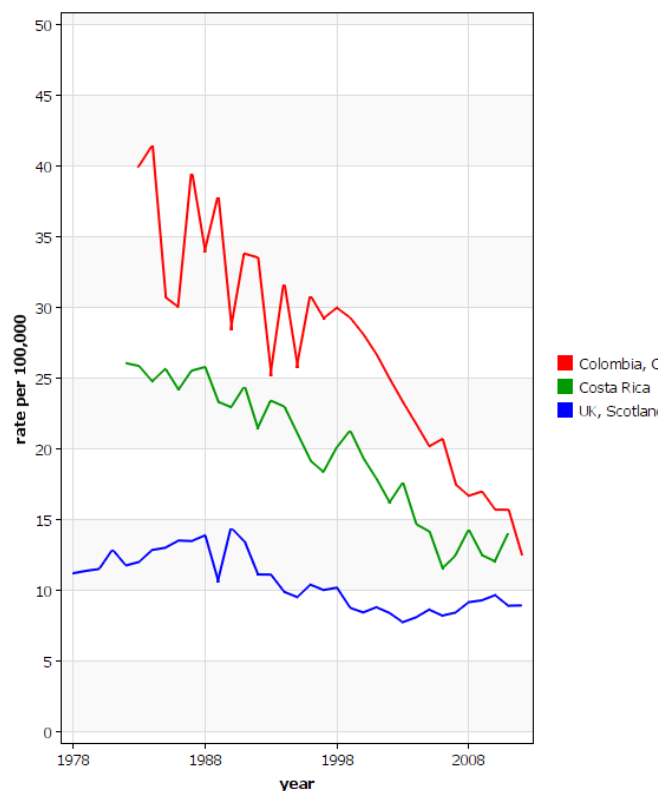
Problem solved?
No worries?

Did we really need the
Vaccine??????

Colombian women are much more at risk compared to other countries with universal healthcare coverage

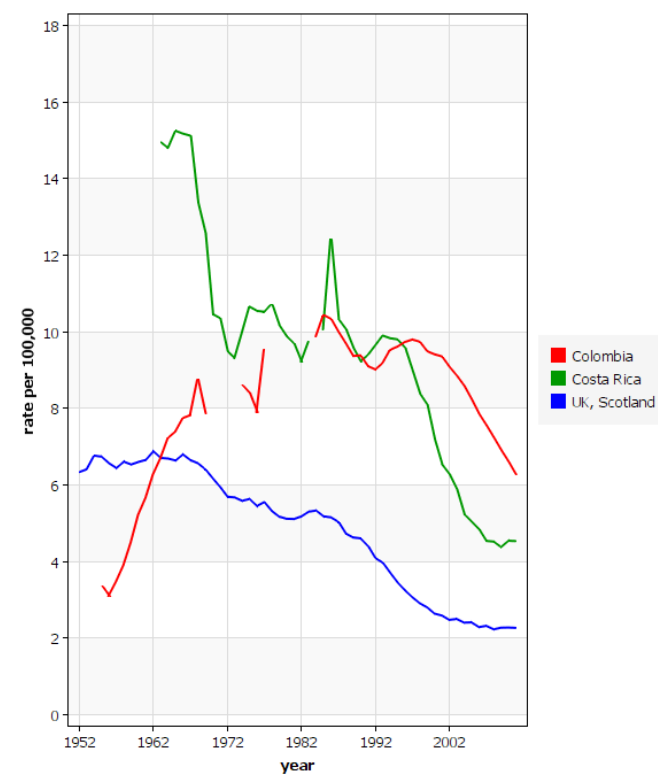
International Agency for Research on Cancer

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

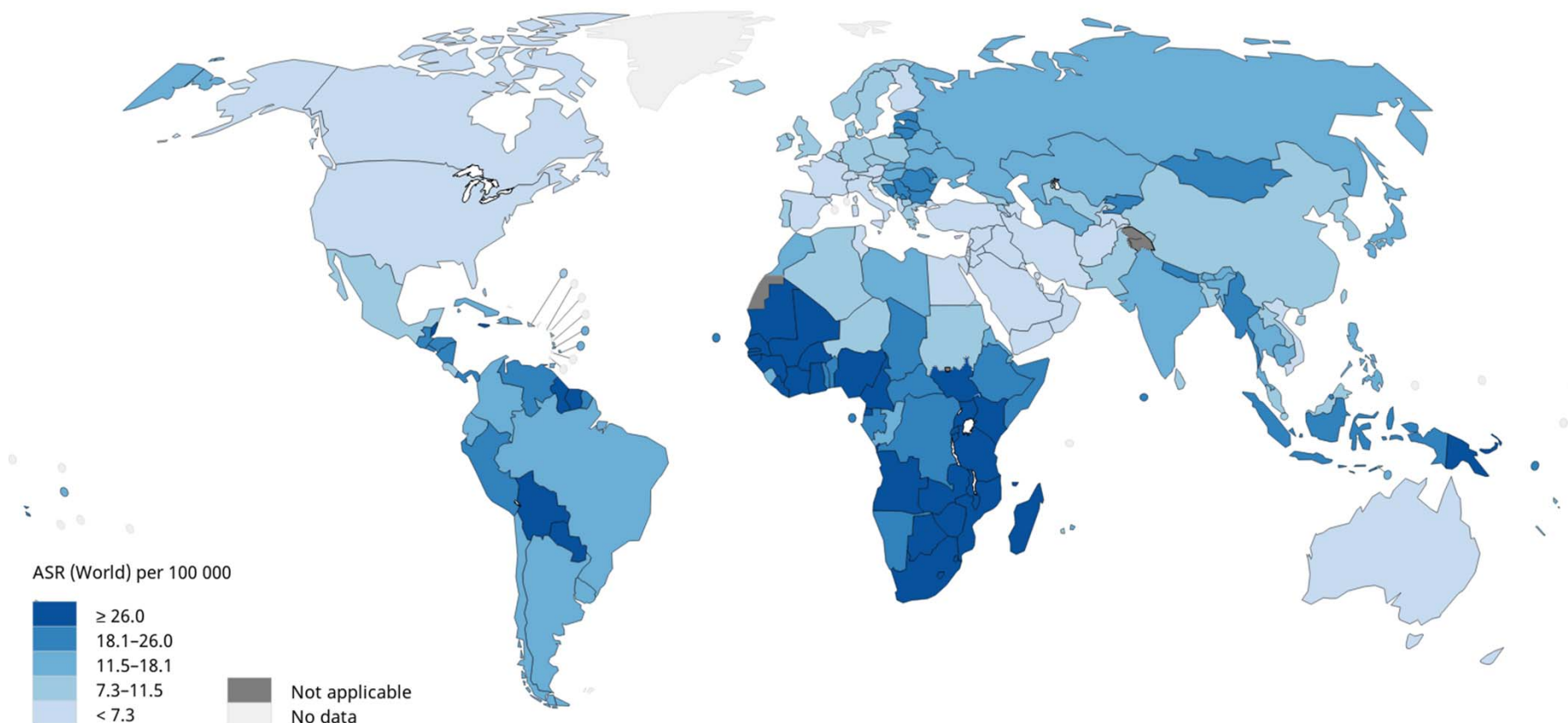


International Agency for Research on Cancer

Mortality from Cervical cancer
Age-standardised rate (World), all ages



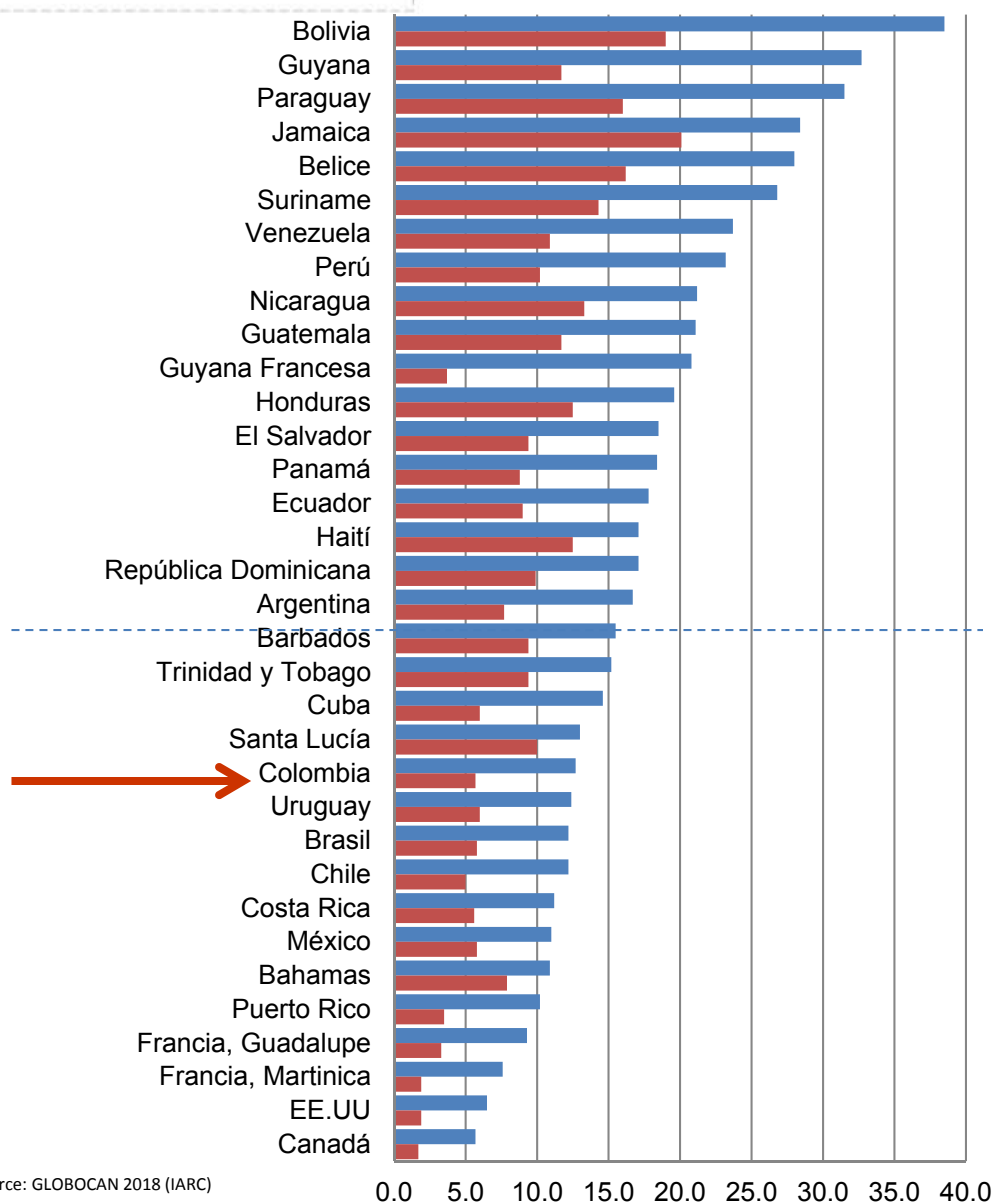
Estimated age-standardized cervical cancer incidence rates (world) 2018,



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Data source: GLOBOCAN 2018
Graph production: IARC
(<http://gco.iarc.fr/today>)
World Health Organization

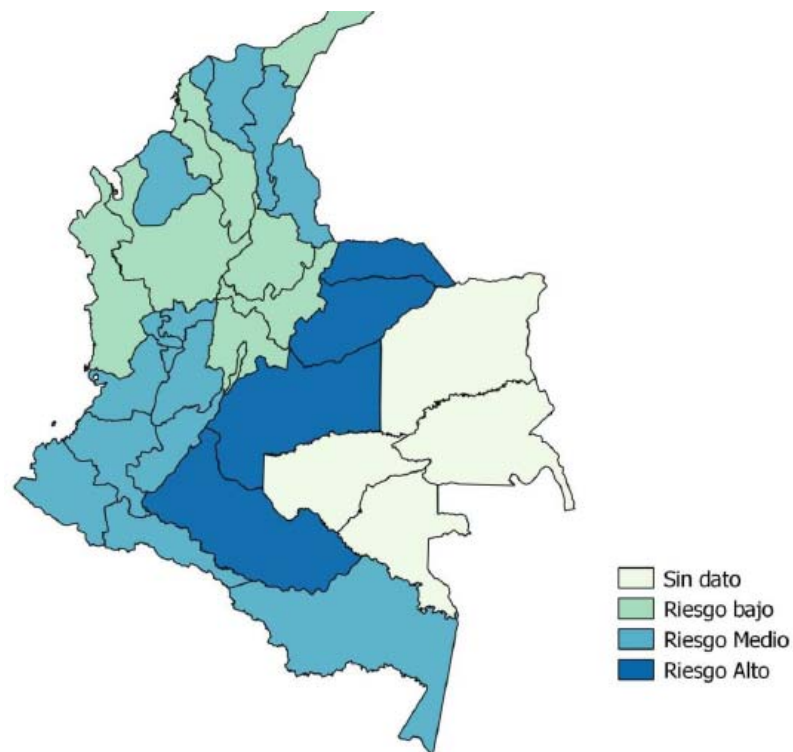
Cervical Cancer in Latin America



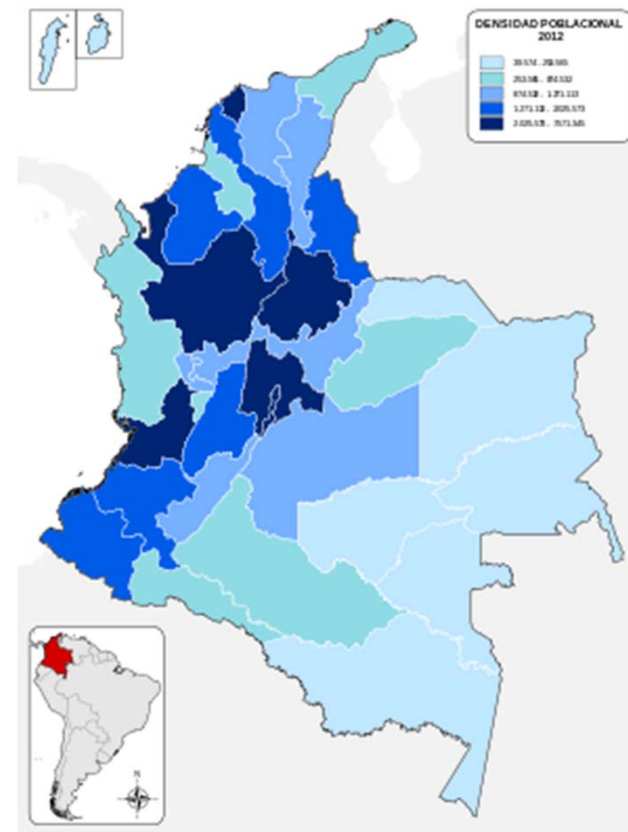
72.000 new cases per years

34.000 deaths per year

Cervix Cancer Incidence, Per Departement Colombia, 2007-2011



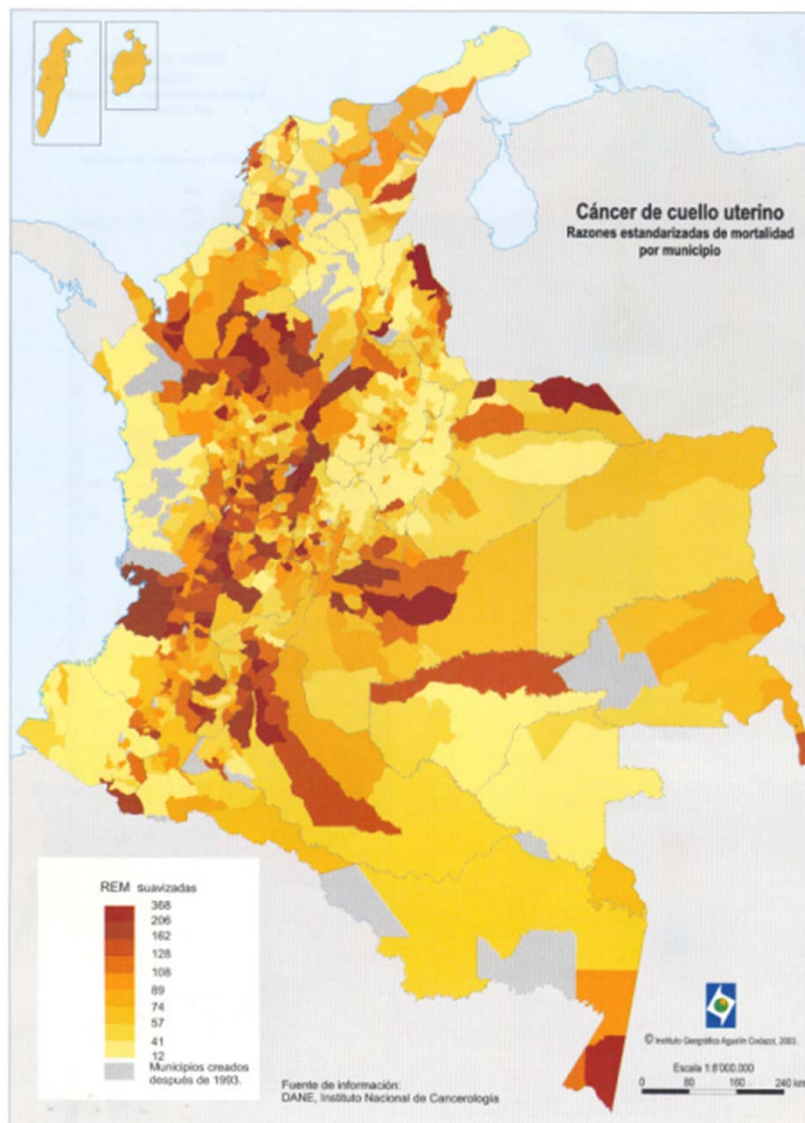
Population Density Colombia



Fuente: INC Pardo C. Incidencia, mortalidad y prevalencia de Cáncer en Colombia 2007-2011 - INC

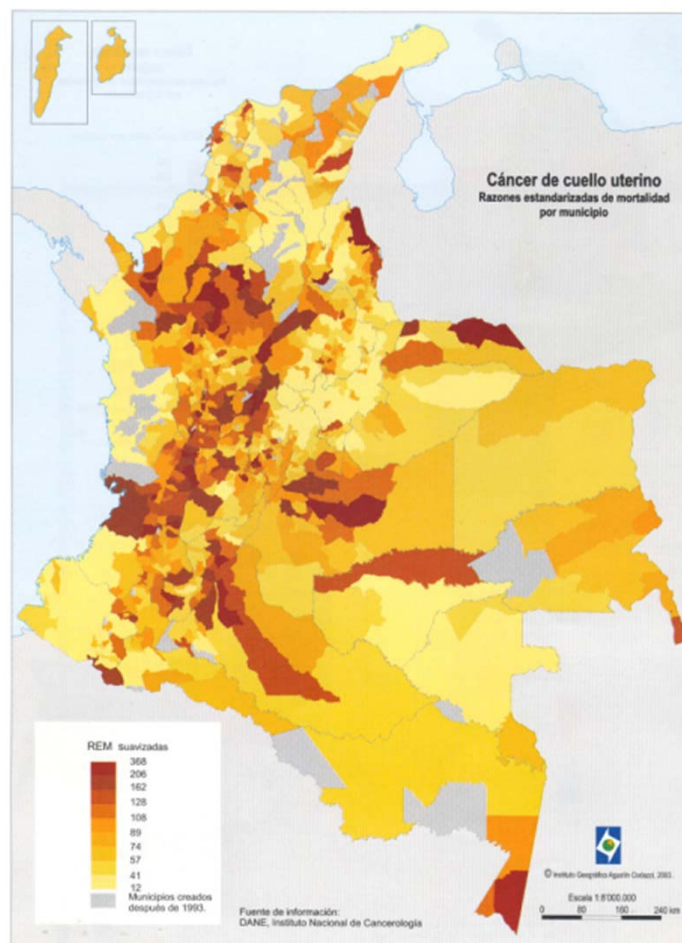


Cervical Cancer Mortality varies across country

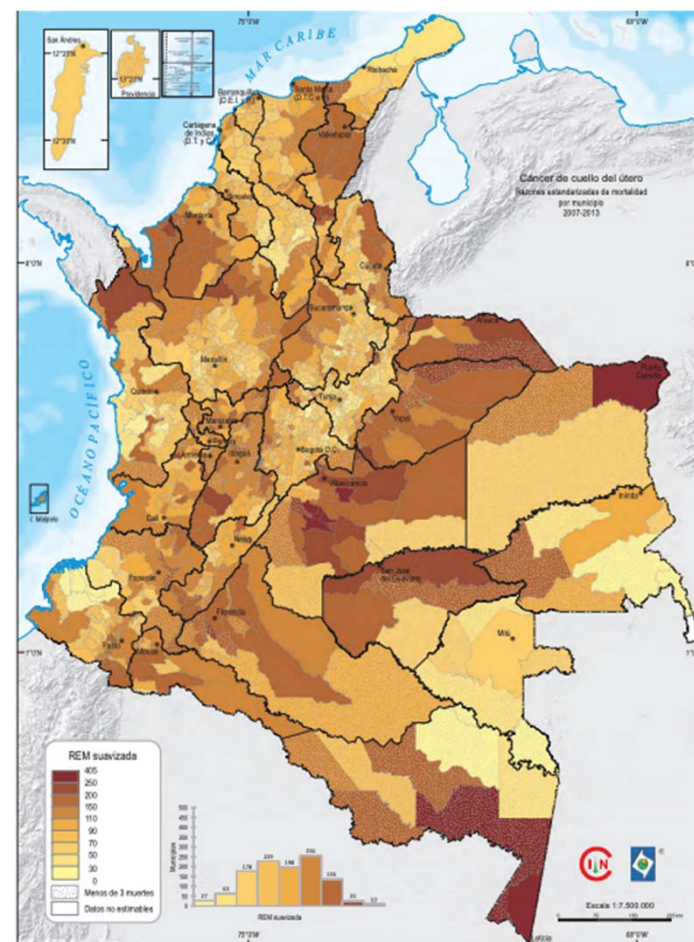


Piñeros Petersen, M., Hernández Suárez, G., & Murillo Moreno, R. (2003). Atlas de mortalidad por cáncer en Colombia. In *Atlas de mortalidad por cáncer en Colombia*.

Mortality geography Distribution 1993 vs 2010

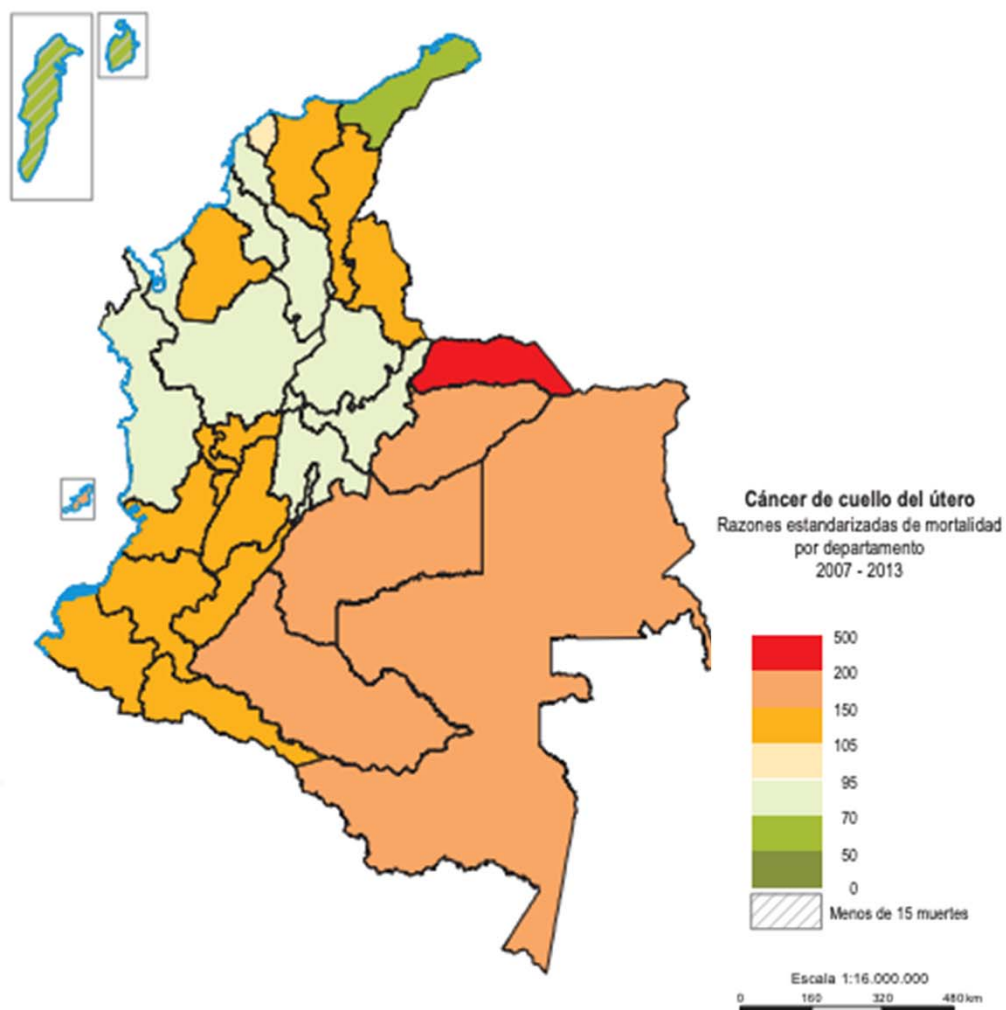
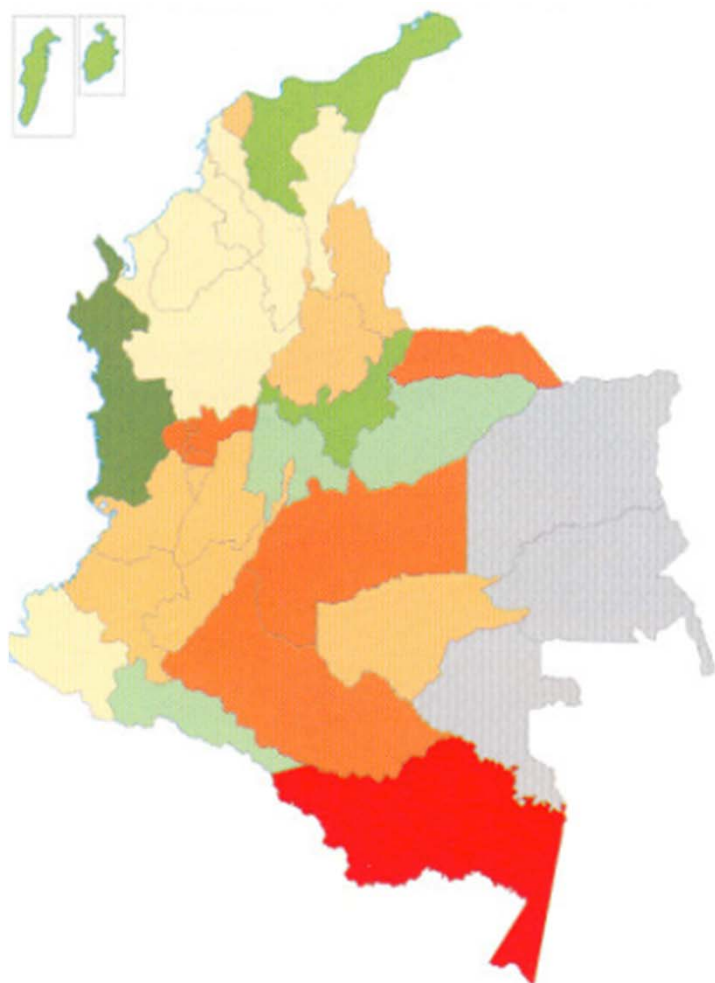


Mortality 90-96



Mortality 2007-2013

Mortality geography Distribution Per department: Mirroring country disparities



Stage at Diagnosis

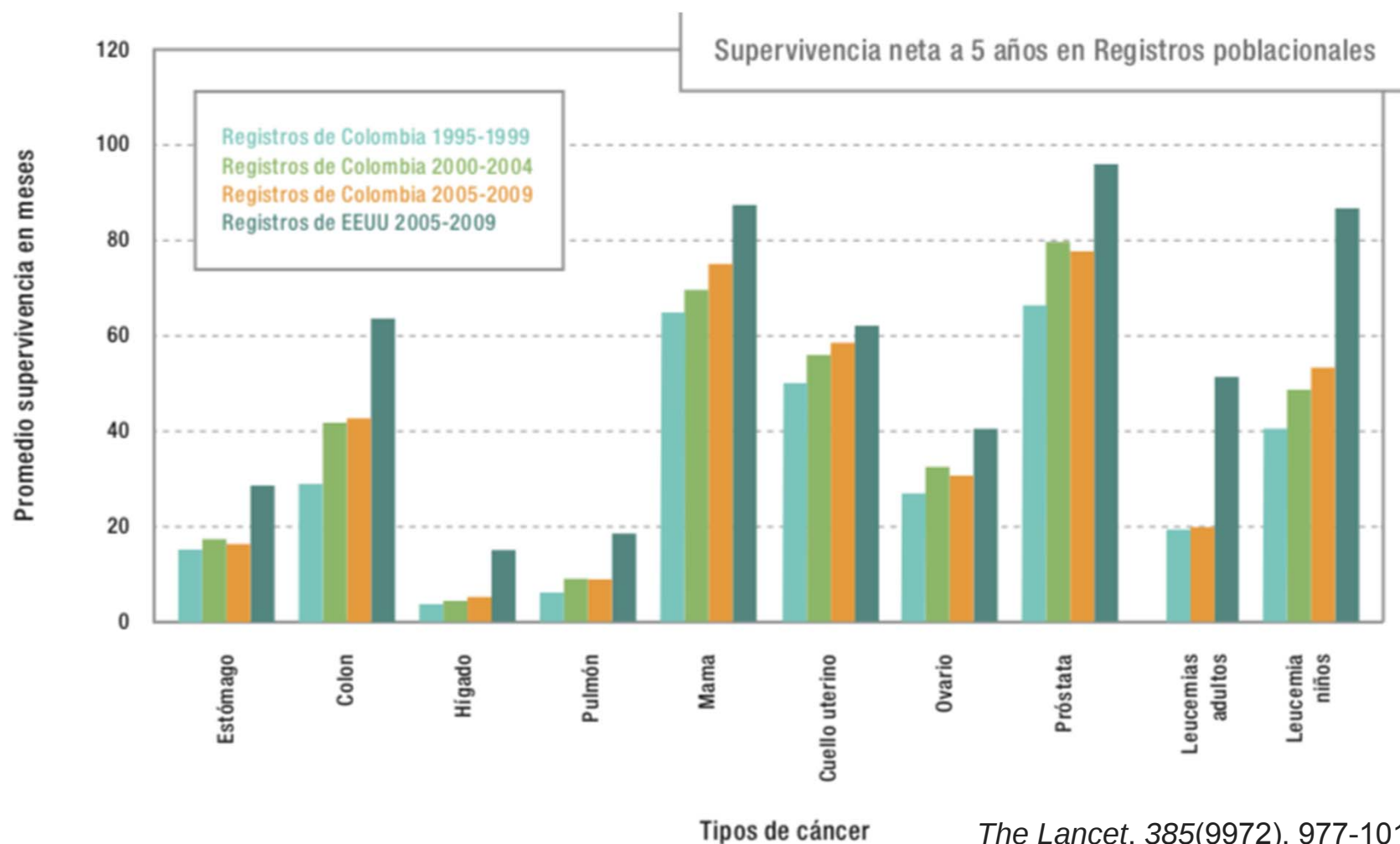
Cervical Cancer at INC 2015



Estado clínico*	Contributivo		Subsidiado	
	No.	%	No.	%
In situ	43	38,7	47	16,7
IA	8	7,2	11	3,9
IB	19	17,1	25	8,9
IIA	1	0,9	6	2,1
IIB	15	13,5	44	15,7
IIIA	1	0,9	2	0,7
IIIB	14	12,6	84	29,9
IVA	1	0,9	14	5,0
IVB	4	3,6	27	9,6
Sin dato	5	4,5	21	7,5
Total	111	100	281	100



Cervical cancer 5y-Survival estimates have shown improvements in the last decades



The Lancet, 385(9972), 977-1010.



Takeaway messages

- Cervical cancer incidence and mortality has decrease consistently in Colombia in the last 4 decades, thanks to decrease in parity and improvement in access to health care.
- Nevertheless Colombia ranks as a Medium risk country for Cervical cancer.
- High Heterogeneity in Risk across Colombian Territory, Reflects clear health care access disparities.

Takeaway messages



- Although Survival has improved gradually in the country it looks there is not much extra room for improvement
- Colombia Cervical cancer burden need jointly efforts to improve Vaccination and Screening across the country.



Thanks!