

Cervical cancer in low income countries

Nm Vink

Meeting ISMRH

16 march 2016

Content

- Incidence/ mortality rate
- HPV
- Screening
- Therapy
- Palliative care

Facts

- Incidence 529.000/ yr. Age-standardised incidence rate of 15.4/100.000
- World wide 275.000 deaths/ yr. Age standardized mortality ratio of 7.8/ 100.000
- This will double in 2030
- 87 % of incidence and deaths are in low income countries

Website Globocan

← → ↻ globocan.iarc.fr/Default.aspx

International Agency for Research on Cancer
World Health Organization

GLOBOCAN 2012: Estimated Cancer Incidence, Mortality and Prevalence Worldwide in 2012

in RSS

ABOUT DATA SOURCES AND METHODS FACT SHEETS ONLINE ANALYSIS HELP

QUICK LINKS

- » Population Fact Sheets
- » Cancer Fact Sheets
- » Simple Maps
- » Predictions
- » FAQ

GLOBOCAN 2012
ESTIMATED CANCER INCIDENCE, MORTALITY AND PREVALENCE WORLDWIDE IN 2012

You are here: **Home**

THE GLOBOCAN PROJECT

Welcome to the **GLOBOCAN** project. The aim of the project is to provide contemporary estimates of the **incidence** of, **mortality** and **prevalence** from major types of cancer, at national level, for 184 countries of the world. The GLOBOCAN estimates are presented for **2012**, separately for each sex. 1-, 3- and 5-year prevalence data are available for the adult population only (ages 15 and over). Please note that:

1. These estimates are based on the most recent data available at IARC and on information publicly available on the Internet, but more recent figures may be available directly from local sources.
2. Because the sources of data are continuously improving in quality and extent, estimates may not be truly comparable overtime and **care should be taken when comparing these estimates with those published earlier**. The observed differences may be the result of a change in the

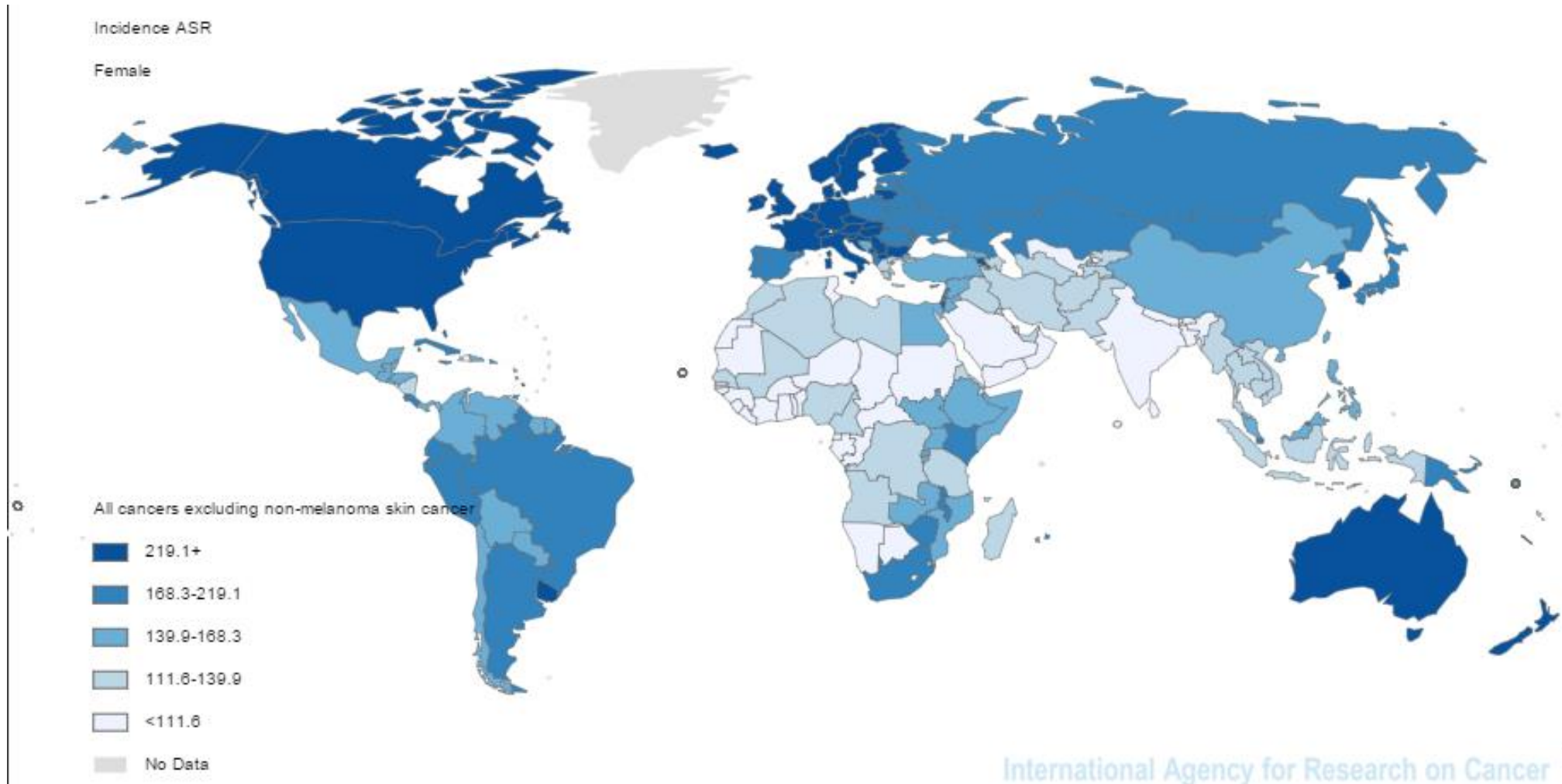
globocan.iarc.fr/Pages/DataSources_and_methods.aspx

GLOBOCAN, CI5, WHO, SurvCan, IICC...
Cancer Mondial

Cancer Incidence in Five Continents Vol. IX
CI5

IACR

Incidence of all cancers (exl melanoma) in female

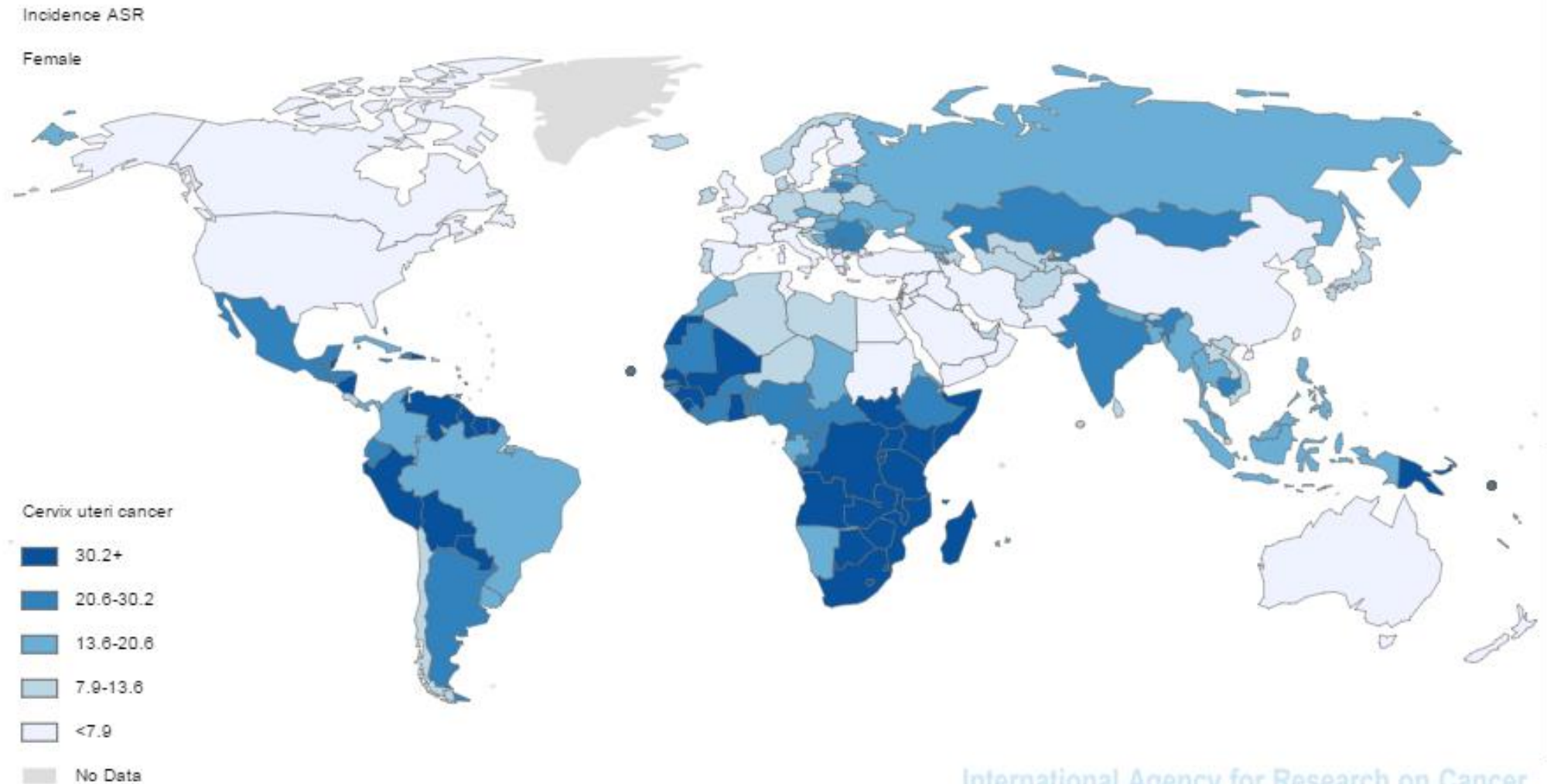


Source: GLOBOCAN 2012 (IARC)

International Agency for Research on Cancer

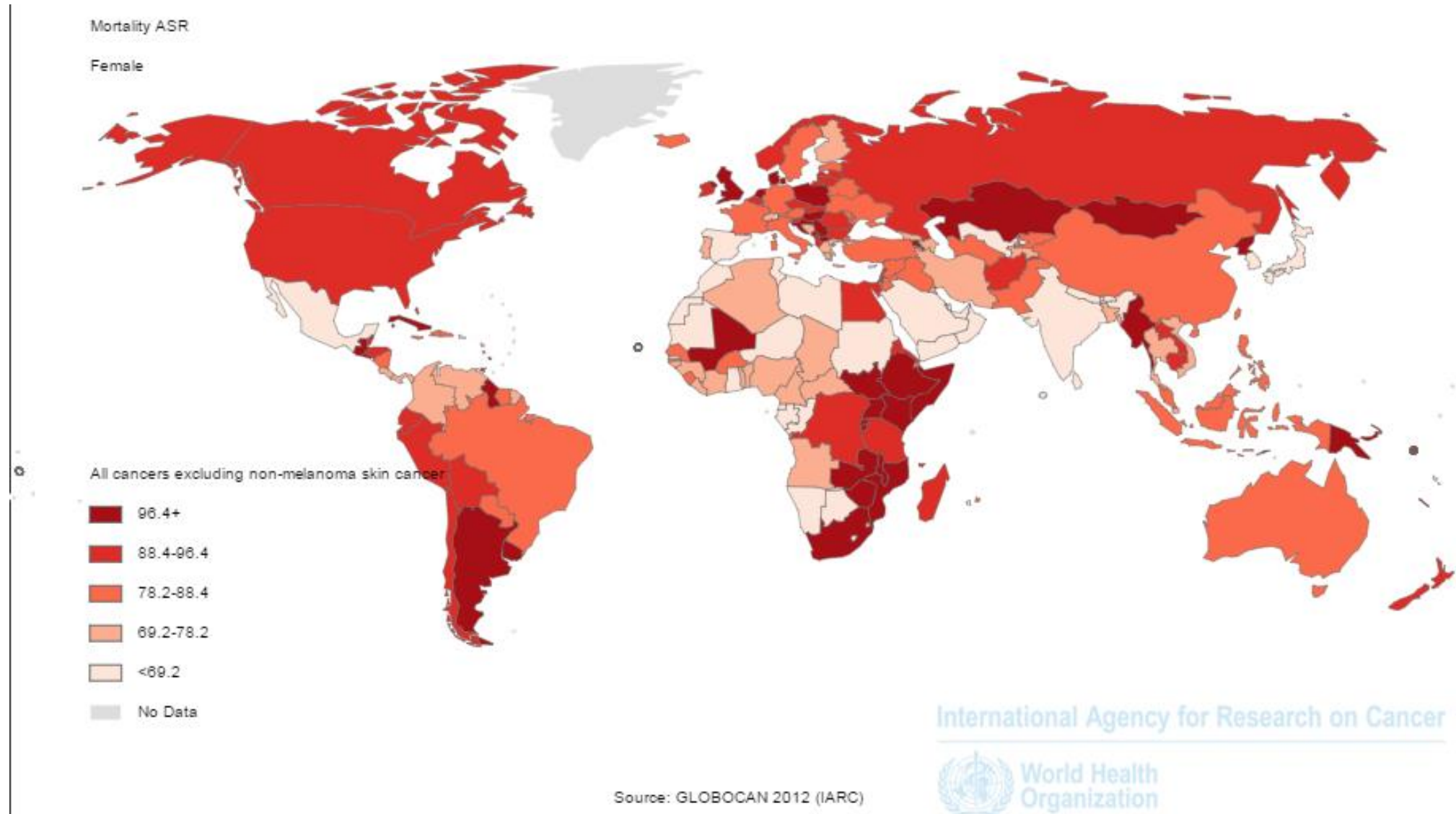


Incidence of cervical cancer



Source: GLOBOCAN 2012 (IARC)

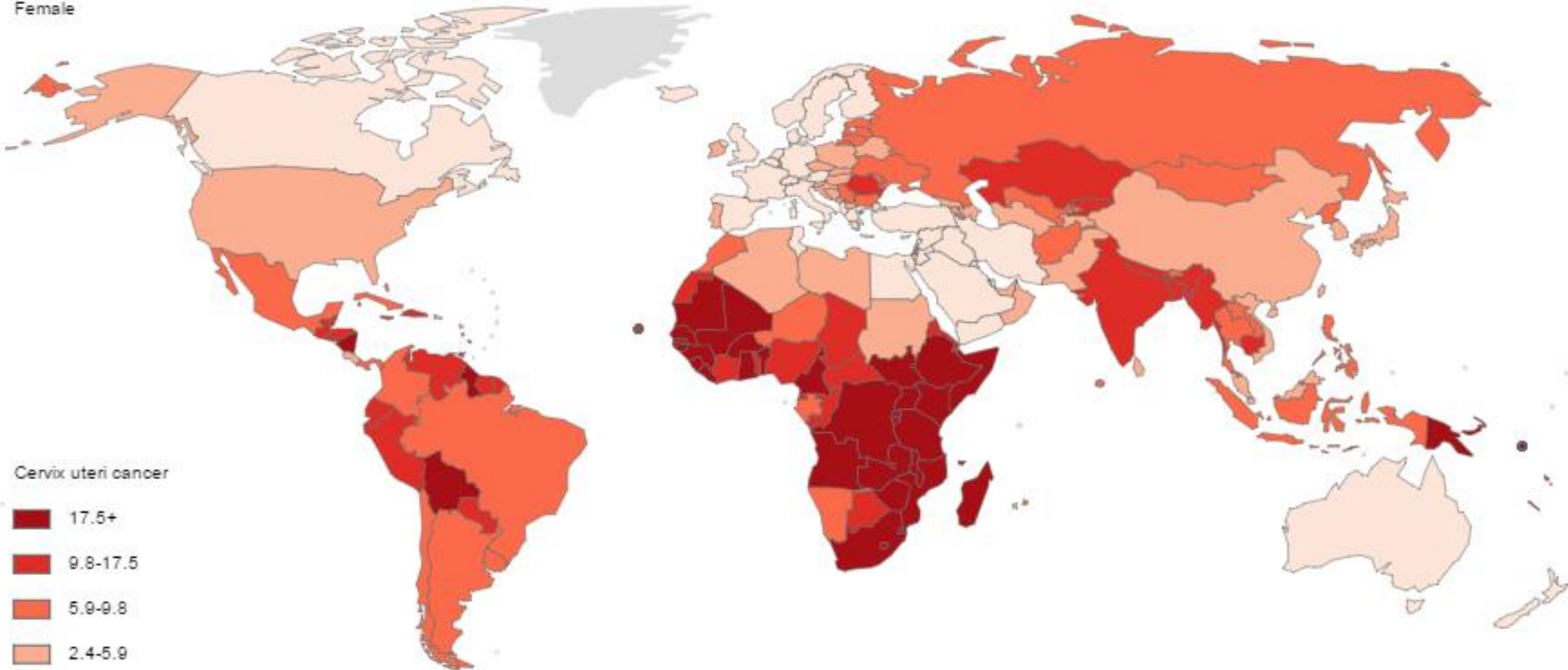
Mortality all cancers worldwide in female



Mortality cervical cancer

Mortality ASR

Female



Cervix uteri cancer

17.5+

9.8-17.5

5.9-9.8

2.4-5.9

<2.4

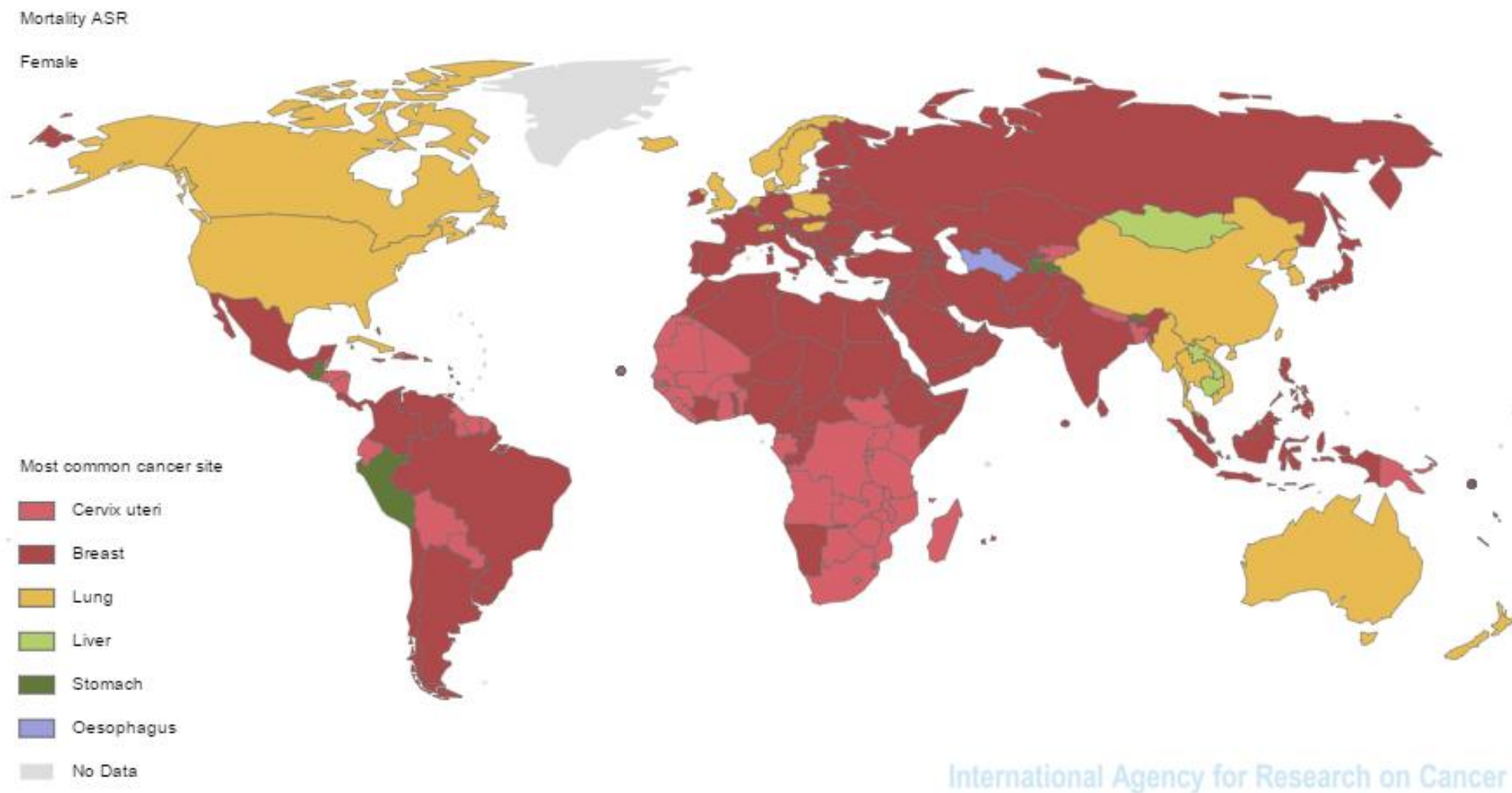
No Data

International Agency for Research on Cancer



Source: GLOBOCAN 2012 (IARC)

Mortality 'most common site' in female



Source: GLOBOCAN 2012 (IARC)

Most important risk factor: HPV

- Extremely common worldwide.
- Two HPV types (16 and 18) cause 70% of cervical cancers and precancerous cervical lesions.
- Other riskfactors for cervical changes: Chronic Co-Infection with Chlamydia trachomatis, unsafe sex, smoking, immunosuppression
- Male circumcision decreases incidence of HPV

www.hpvcentre.net

← → ↻ www.hpvcentre.net/dataquery.php



18 Feb 2016: Minor changes in the fact sheets
01 Feb 2016: Corrections for South Africa, Yemen, Zambia and Zimbabwe
23 Dec 2015: General update of all reports



Data and statistics

Publications

Updates

Disclaimer

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About us

HPV Information Centre

Statistics

• Data query

• Summary report

HPV publications

Information resources

Education resources

Data Query

Please make your selection



Step 1 Choose a module

- ☒ M1. HPV prevalence estimates
- ☐ M2. Disease burden estimates
- ☐ M3. Risk factors and co-factors
- ☐ M4. Preventative strategies
- ☐ M5. Socio-demographics



Step 2 Choose a topic

Invasive cervical cancer ▼



Step 3 Choose an indicator

HPV type distribution (Country/Re ▼



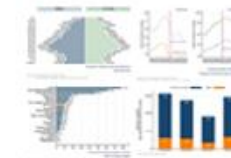
Step 4 Choose a country (!)

World
Developing regions
Developed regions
Africa Continent
East Africa
Middle Africa
Northern Africa
Southern Africa
Western Africa
Americas Continent
Latin America and Caribbean
Caribbean
Central America
South America
Northern America
Asia Continent
Central Asia
Eastern Asia
Southern Asia
South-Eastern Asia
Western Asia



Things you can do:

Download country/regional reports

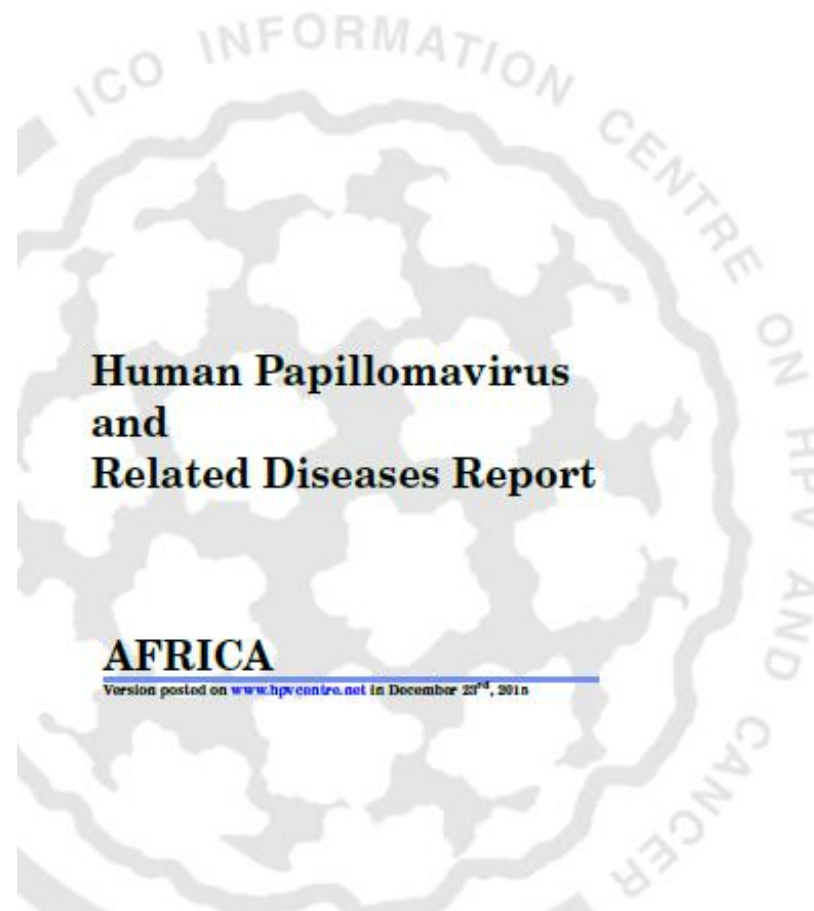


Browse data on HPV and cancer



Access ICO Monograph series

www.hvpcentre.net → summary report

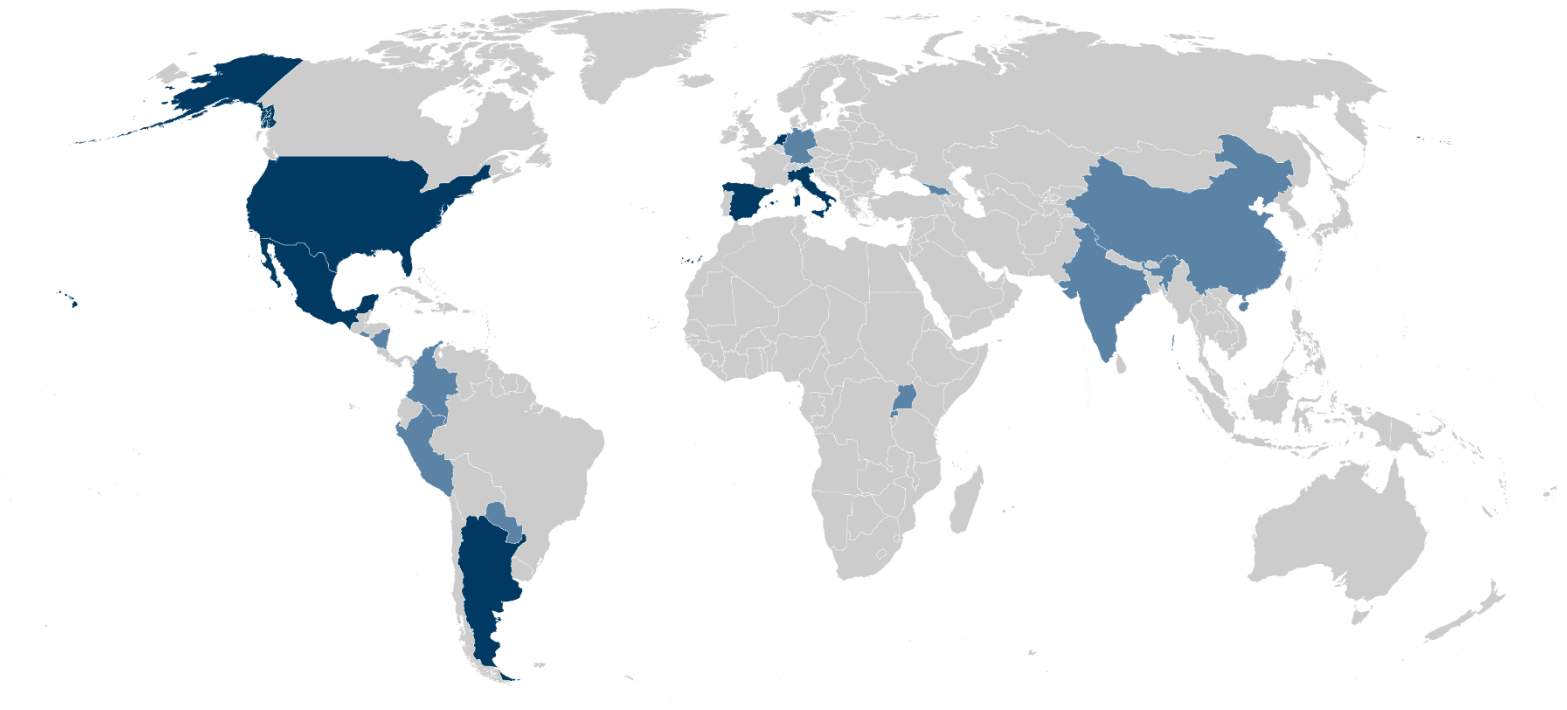


Screening Cervical Cancer

1. Cytology
2. HPV screening
3. VIA

Table 31: Cervical cancer screening policy in Africa

Country	Availability of cervical cancer screening programme ^a	Quality assurance structure and mandate to supervise and to monitor the screening process ^b	Active invitation to screening ^c	Main screening test used for primary screening	Demonstration projects	Screening ages (years)	Screening interval or frequency of screenings
Algeria	Yes	Yes	No	Cytology		25/30-60/65	3 Years
Angola	No	-	-	-	VIA	-	-
Benin	Yes	No	No	Cytology	VIA	-	-
Botswana	Yes	No	No	VIA		30-49	5 years
Burkina Faso	Yes	No	No	Cytology	VIA	-	-
Burundi	No	-	-	-		-	-
Cameroon	Yes	No	No	Cytology/VIA		-	-
Cape Verde	Yes	No	No	Cytology/VIA		20-49	-
CAR	No	-	-	-		-	-
Chad	No	-	-	-		-	-
Comoros	No	-	-	-		-	-
Congo	No	-	-	-	VIA	-	-
Congo, DR	No	-	-	-		-	-
Côte d'Ivoire	Yes	No	No	Cytology/VIA		30-50 (VIA), unknown (cytology)	-
Djibouti	No	-	-	-		-	-
Egypt	Yes	No	No	Cytology		20-50	-
Eq. Guinea	No	-	-	-		-	-
Eritrea	No	-	-	-		-	-
Ethiopia	No	-	-	-	VIA	-	-
Gabon	Yes	Yes	No	VIA		Above 25	3 years
Gambia	Yes	No	No	-	VIA	-	-



National programs

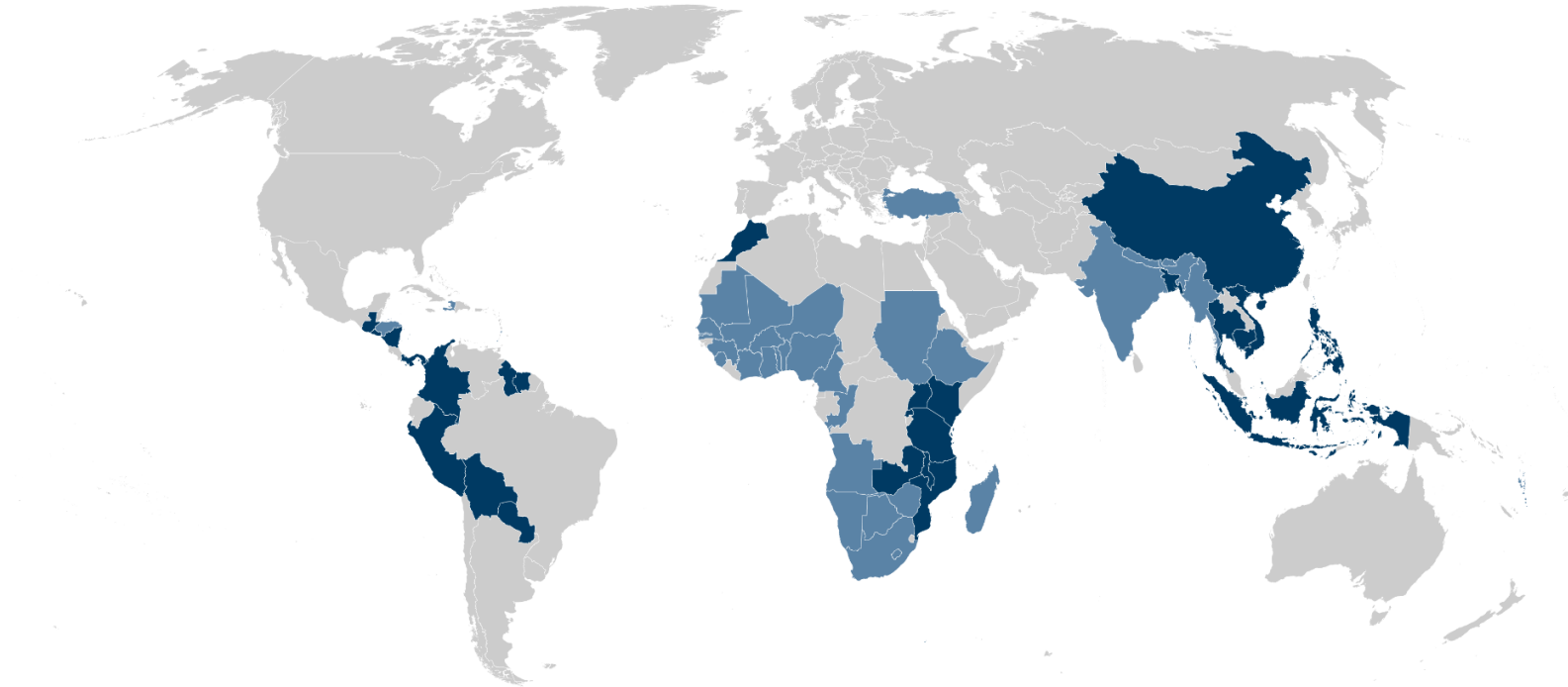
Argentina
Italy
Mexico
Netherlands
Spain
United States

Pilot programs

China
Colombia
El Salvador
Germany
India
Nicaragua
Paraguay
Peru
Republic of Georgia
Rwanda
Uganda

Global Progress in Visual Inspection (VIA) for Cervical Cancer Screening

August 2015



National programs

Bangladesh
 Bolivia
 Cambodia
 China
 Colombia
 El Salvador
 Guatemala
 Guyana
 Indonesia
 Kenya
 Kiribati
 Malawi
 Morocco

Pilot programs

Angola
Benin
Bhutan
Botswana
Burkina Faso
Cameroon
Côte d'Ivoire
Ethiopia
Gambia
Ghana
Grenada
Guinea
Haiti
Honduras

India
Lesotho
Madagascar
Maldives
Mali
Mauritania
Myanmar
Namibia
Nepal
Niger
Nigeria
Republic of
Congo
Senegal

Sierra Leone
South Africa
St. Lucia
Sudan (North)
Togo
Turkey
Vanuatu
Zimbabwe

Het middel tegen baarmoederhalskanker
staat gewoon in het keukenkastje.



Visual Inspection with acetic acid

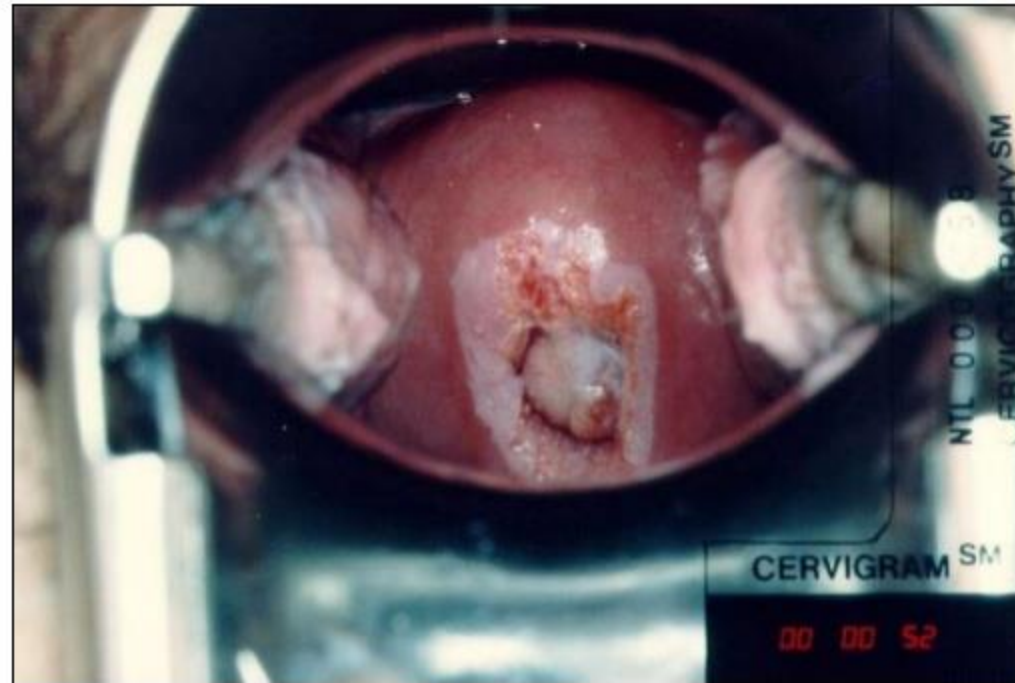
- Naked-eye visual inspection of cervix after 5% acetic acid (VIA) and/or Lugol's iodine (VILI)
- Results immediately available, no lab needed.
- Sensitivity VIA 73 % (PAP 63%), VILI 88%
- Specificity VIA 87 % (PAP 94%), VILI 86 %
- Cost effective method as only suspicious cases are referred for specialist's colposcopy/biopsy

Visual inspection with Acetic Acid (VIA)

Classification:

- Positive
- Negative
- Cancerous

VIA Positive



Classification of Findings Classification

- Colour
- Demarcation
- Surface, erosion
- Location
- Duration of effect
- Vascular features
- Iodine uptake

Cryotherapy after VIA (double freeze technique)

- Cheap
- Less haemorrhage
- No histological diagnosis
- See and treat!



- Sept 2005- may 2009: 19 579 clients screened
- 10 % VIA positive
- 1.7 % suspicion of cancer
- 87% of positive clientst were eligible for cryotherapy
- 64& received cryo < 1 wk
- Single visit approach enabled 39% of clients to be screened

Prevention of cervical cancer
through screening using visual
inspection with acetic acid (VIA)
and treatment with cryotherapy

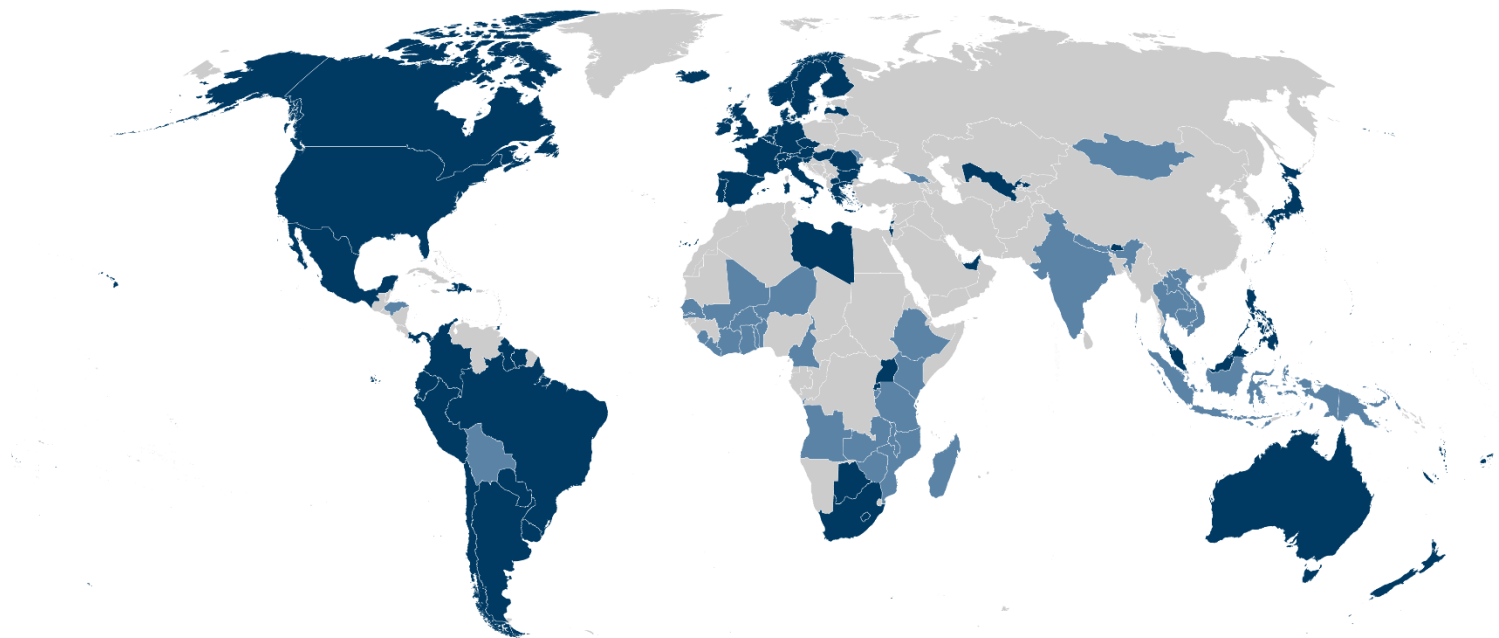
A demonstration project in six African countries:
Malawi, Madagascar, Nigeria, Uganda,
the United Republic of Tanzania, and Zambia



**Prevention Is Better Than Cure.
Especially When Something Has**

No Cure.

~ The Fresh Quotes ~



National programs

American Samoa	Curacao	Lesotho	Portugal
Andorra	Czech Republic	Libya	Romania
Argentina	Denmark	Luxembourg	Rwanda
Aruba	Dominican Republic	Macedonia	San Marino
Australia	Ecuador	Malaysia	Seychelles
Austria	Fiji	Malta	Singapore
Bahamas	Finland	Marshall Islands	Slovenia
Barbados	France	Mexico	South Africa
Belgium	French Polynesia	Micronesia	Spain
Belize	Germany	Monaco	St. Eustatius
Bermuda	Greece	Netherlands	Suriname
Bhutan	Guam	New Caledonia	Sweden
Botswana	Guyana	New Zealand	Switzerland
Brazil	Hungary	Niue	Trinidad and Tobago
Brunei	Iceland	Northern Marianas	Uganda
Bulgaria	Ireland	Norway	United Arab Emirates
Canada	Israel	Palau	United Kingdom
Cayman Islands	Italy	Panama	United States
Chile	Japan	Paraguay	Uruguay
Colombia	Kiribati	Peru	Uzbekistan
Cook Islands	Latvia	Philippines	Vanuatu

Pilot programs

Angola	Mali
Benin	Moldova
Bolivia	Mongolia
Burkina Faso	Mozambique
Burundi	Nepal
Cambodia	Niger
Cameroon	Papua New Guinea
Cote d'Ivoire	Sao Tome
Ethiopia	Senegal
Gambia	Sierra Leone
Georgia	Solomon Islands
Ghana	Tanzania
Haiti	Thailand
Honduras	Togo
India	Vietnam
Indonesia	Zambia
Kenya	Zimbabwe
Lao PDR	
Liberia	
Madagascar	
Malawi	

Gavi: the vaccine Alliance

- Gavi made the cost for HPV vaccinatie 4.50 dollar
- Since 2013, Gavi has helped countries vaccinate 500,000 girls with HPV vaccine, and plans to reach 1 million by the end of 2015
- 60–90% coverage rates
- By 2020, more than 30 million girls will be immunised



The screenshot shows the Gavi website interface. At the top, the Gavi logo (a blue and green globe with the text 'Gavi The Vaccine Alliance') is centered. To the right of the logo is a search bar with the placeholder text 'Enter keyword here...' and a 'Search' button. Below the logo is a green navigation bar with links: HOME, ABOUT GAVI, SUPPORT, COUNTRY HUB, FUNDING & FINANCE, RESULTS & EVIDENCE, and LIBRARY & NEWS. Below the navigation bar is a breadcrumb trail: 'You are here: Library > News > Press releases >'. The main headline reads: 'Millions of girls in developing countries to be protected against cervical cancer thanks to new HPV vaccine deals'. Below the headline is a sub-headline: 'Historic agreements show power of innovative public-private partnership'. The main text begins with 'Cape Town / Geneva, 9 May 2013 – A new record low price for human papillomavirus (HPV) vaccines will help ensure millions of girls in developing countries can be protected against cervical cancer. Thanks to the GAVI Alliance, the poorest countries will now have access to a sustainable supply of HPV vaccines for as low as US\$ 4.50 per dose. The same'. To the right of the main text is a sidebar titled 'LATEST PRESS RELEASES' with four items: 'Positive impact of Advance Market Commitment highlighted in report', 'African football and political leaders partner with Gavi to prevent childhood deaths', 'Gavi launches 'INFUSE' initiative to overcome barriers to immunisation', and 'Ebola vaccine purchasing commitment from Gavi to prepare for future outbreaks'. At the bottom of the main text area is a map of the world with a legend: 'GAVI ALLIANCE TACKLES CERVICAL CANCER', 'EVERY YEAR, 275,000 WOMEN DIE OF CERVICAL CANCER, OVER 85% OF THOSE DEATHS ARE IN DEVELOPING COUNTRIES', 'CERVICAL CANCER DEATHS PER 100,000', 'COUNTRIES WITH NATIONAL HPV VACCINE PROGRAMMES', and 'COUNTRIES WITH NATIONAL HPV VACCINE PROGRAMMES'.

www.gavi.org/library/news/press-releases/2013/hpv-price-announcement/

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Enter keyword here... Search

f t in y p

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You are here: Library > News > Press releases >

Millions of girls in developing countries to be protected against cervical cancer thanks to new HPV vaccine deals

Millions of girls in developing countries to be protected against cervical cancer thanks to new HPV vaccine deals

[French]

Historic agreements show power of innovative public-private partnership

Cape Town / Geneva, 9 May 2013 – A new record low price for human papillomavirus (HPV) vaccines will help ensure millions of girls in developing countries can be protected against cervical cancer.

Thanks to the GAVI Alliance, the poorest countries will now have access to a sustainable supply of HPV vaccines for as low as US\$ 4.50 per dose. The same

GAVI ALLIANCE TACKLES CERVICAL CANCER
EVERY YEAR, 275,000 WOMEN DIE OF CERVICAL CANCER, OVER 85% OF THOSE DEATHS ARE IN DEVELOPING COUNTRIES
CERVICAL CANCER DEATHS PER 100,000
COUNTRIES WITH NATIONAL HPV VACCINE PROGRAMMES

LATEST PRESS RELEASES

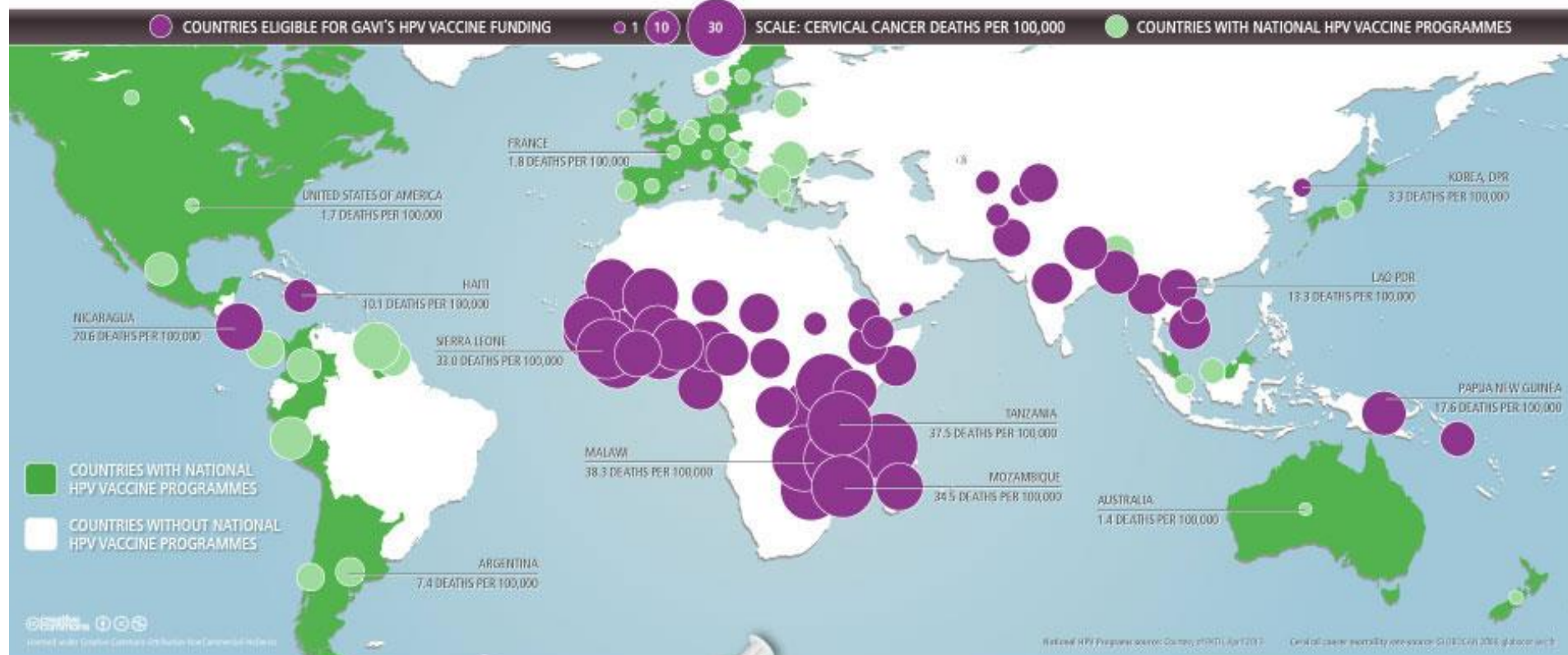
- Positive impact of Advance Market Commitment highlighted in report
- African football and political leaders partner with Gavi to prevent childhood deaths
- Gavi launches 'INFUSE' initiative to overcome barriers to immunisation
- Ebola vaccine purchasing commitment from Gavi to prepare for future outbreaks



SAVING LIVES AND PROTECTING
HEALTH THROUGH IMMUNISATION
IN DEVELOPING COUNTRIES

GAVI ALLIANCE TACKLES CERVICAL CANCER

EVERY YEAR, 266,000 WOMEN DIE OF CERVICAL CANCER. OVER 85% OF THOSE DEATHS ARE IN DEVELOPING COUNTRIES



CHANGING THE BALANCE



GAVI's support for HPV vaccines will help redress the inequity, delivering vaccines to countries with the highest burden.

ABOUT HPV VACCINE



Safe and effective, human papillomavirus (HPV) vaccines protect against 70% of cervical cancer.

LOWERING THE PRICE



The new low price of US \$4.50 per dose marks a two-thirds reduction on the current lowest public sector price.

DRAMATIC ACCELERATION

By 2020, over **30 million girls** in more than **40 countries** will be vaccinated against HPV

Since 2013, over 20 countries have been approved to introduce HPV vaccines with GAVI support

Therapy

- Wertheim operation
- Radiotherapy

→ In whole of Africa: 130 medical schools located in 41 countries.
Training in cancer diagnosis and management: mainly in North and South Africa (with limited facilities in Nigeria, Libya, Zimbabwe).

Radiotherapy

- 55% of new diagnosed cervical cancer had indication for radiotherapy
- There is no RT facilities at all-in 15 African countries
- If it exist: often only 1 machine (per several million people)
(f.e. Nigeria: 5 machines for 150 million persons)
cobalt machines iso linear accelerators

Palliative therapy

- Home based care
- Morphine is only available in 11 African countries.

References

- www.iarc.fr (international agency for research on cancer)
- www.globan.iarc.fr
- www.gavi.org
- www.path.org/cervical-cancer
- <http://cervicalcanceraction.org/>
- <http://www.rho.org/>
- <http://www.rho.org/about-cervical-cancer.htm>

