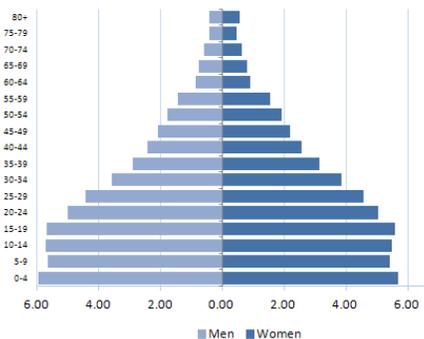


# NICARAGUA

## SOCIODEMOGRAPHIC INDICATORS<sup>1</sup>



- **Total population:** 5,869,900
- **Average annual deaths:** 27,500
- **Life expectancy at birth (years):**  
Total: 74 Male: 71 Female: 77
- **Adult literacy rate:** 93.6%
- **Gross national income US\$ per capita:** 1,000

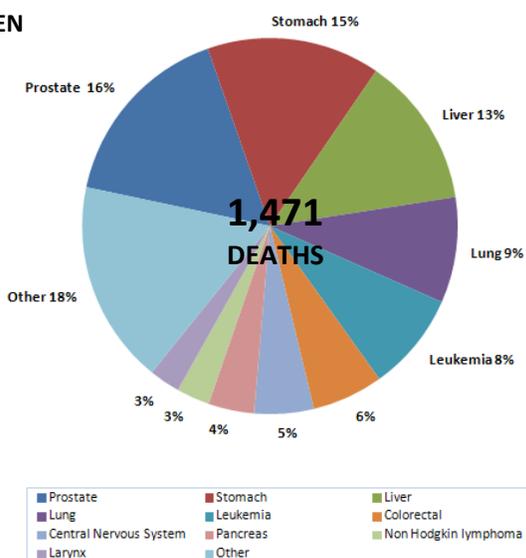
## RISK FACTORS

Prevalence of:	Total (%)	Male (%)	Female (%)
Current tobacco smokers among adults <sup>2</sup>	...	...	...
Current use of any tobacco product among youth <sup>2,a</sup>	25.1	30.4	20.5
Fruit and vegetable intake in adults <sup>1,b</sup>	...	...	...
Alcohol consumers, past 12 months <sup>3</sup>	26.2	43.3	9.6
Low physical activity in adults <sup>1,c</sup>	...	...	...
Obesity among adults (BMI $\geq 30$ ) <sup>1</sup>	29.1	23.8	34.2
HPV prevalence (women with normal cytology) <sup>4</sup>	...	...	...

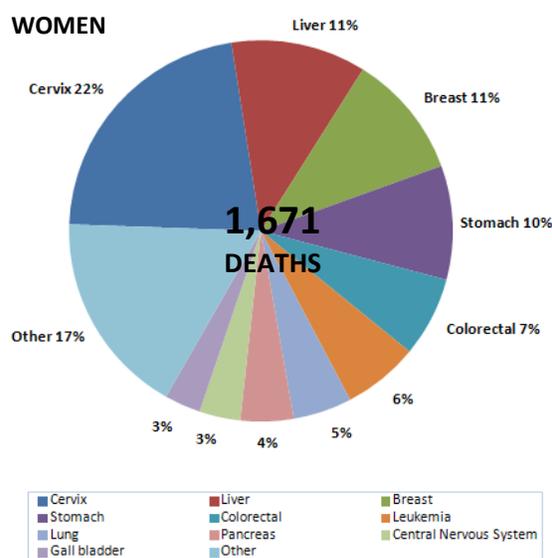
Notes: a: Subnational data from Global Youth Tobacco Survey, Centro Managua, 2003; b: % who eat 5 or more servings of fruit and vegetables per day; c: % who are physically active for <600 met minutes; BMI: Body Mass Index; HPV: Human Papillomavirus.

## CANCER MORTALITY PROFILE (2011)<sup>5</sup>

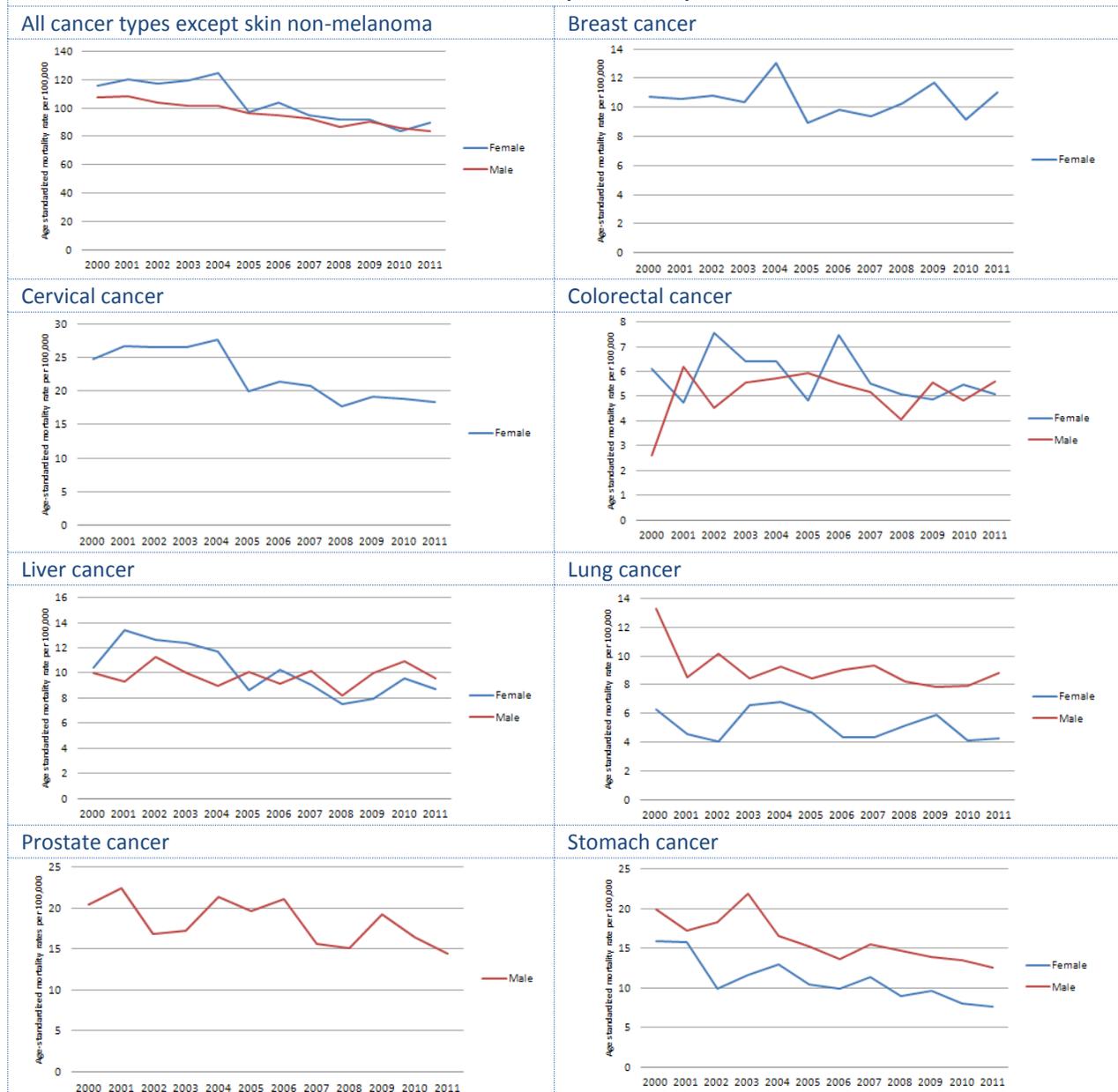
### MEN



### WOMEN



## AGE-STANDARDIZED CANCER MORTALITY TRENDS (2000-2011)<sup>5</sup>



Average annual percent change (AAPC) of age-standardized mortality rates, by cancer type (2000-2011) <sup>5</sup>				
Cancer type	Sex	Number of deaths (2011)	ASMR (2011)	AAPC
All cancer types	Male	1,469	83.72	-2.38*
	Female	1,846	89.77	-3.42*
Breast cancer		219	11.03	-0.50
Cervical cancer		374	18.43	-3.91*
Colorectal cancer	Male	102	6.01	1.80
	Female	112	5.47	-1.63
Liver cancer	Male	161	9.96	-0.20
	Female	179	9.10	-3.73*
Lung cancer	Male	153	9.22	-2.31*
	Female	90	4.66	-1.73
Prostate cancer		221	14.44	-2.50*
Stomach cancer	Male	216	12.94	-3.85*
	Female	163	8.03	-4.1*

Notes: ASMR: Age-standardized mortality rate; AAPC: Average annual percent change; \*: The AAPC is significantly different from zero at p=0.05.

## CANCER PLANS AND CANCER REGISTRATION<sup>6</sup>

<b>National integrated NCD policy, strategy or action plan</b>	
Is there a national integrated NCD policy, strategy or action plan?	Under development
Is cancer included in the overall NCD plan?	Yes
First year of implementation	N/A
<b>Cancer policy, strategy or action plan</b>	
Is there a cancer policy, strategy or action plan?	Under development
First year of implementation	N/A
<b>Cancer registry</b>	
Is there a cancer registry?	Yes
Scope (national vs. subnational)?	National
Type of registry (population vs. hospital based)?	Hospital based
Last year with available data	2012

## CANCER PRIMARY PREVENTION POLICIES

<b>Tobacco control<sup>2</sup></b>	
Smoke free environments?	Six to seven types of public places completely smoke-free
Raised taxes on tobacco?	Taxes are 29% of the final price
Health warning labels about the dangers of tobacco?	Medium size warnings with all appropriate features or large warning lacking one or more appropriate features (regulation or implementation pending)
Bans on tobacco advertising, promotion and sponsorship?	Complete lack of ban, or ban does not cover national television, radio and print media
<b>Overweight and obesity prevention and control<sup>6</sup></b>	
Is there a policy, strategy or action plan for reducing overweight/obesity? (First year of implementation)	Under development
<b>Harmful use of alcohol prevention and control<sup>6</sup></b>	
Is there a policy, strategy or action plan for reducing harmful use of alcohol? (First year of implementation)	No
<b>HPV vaccination in national immunization program?<sup>7</sup></b>	
Year of introduction/target age group/delivery strategy	N/A
Estimated 3-dose coverage (calendar year)	N/A
<b>HBV vaccination in national immunization program?<sup>7</sup></b>	
Year of introduction/target age group	1999/2m-4m-6m; health workers
Estimated 3-dose coverage (calendar year)	100%*

Note: \*: reported coverage >100%.

## CANCER SCREENING

<b>Cervical cancer</b>	
<b>Guidelines</b>	
Are there cervical cancer screening guidelines available? <sup>8</sup>	Yes
Guideline recommendations (tests/age groups/frequency) <sup>8,9</sup>	Pap test/25-64 years of age/every 3 years following 3 consecutive normal annual Pap tests VIA/30-50 years of age/every 3 years
<b>Availability and coverage of screening services</b>	
<b>Cervical cytology<sup>6</sup></b>	Generally available in the public and the private sectors
<b>Visual inspection with acetic acid<sup>6</sup></b>	Generally available in the public and the private sectors
<b>Screening coverage<sup>9</sup></b>	10% for Pap test

CANCER SCREENING	
<b>Breast cancer</b>	
<b>Guidelines</b>	
Are there breast cancer screening guidelines available?	...
Guideline recommendations (tests/age groups/frequency)	...
<b>Availability and coverage of screening services</b>	
<b>Clinical breast examination<sup>6</sup></b>	Generally available in the public and the private sectors
<b>Mammography<sup>6</sup></b>	Generally available in the public and the private sectors
<b>Screening coverage</b>	...
<b>Colorectal cancer</b>	
<b>Guidelines</b>	
Are there colorectal cancer screening guidelines available?	...
Guideline recommendations (tests/age groups/frequency)	...
<b>Availability and coverage of screening services</b>	
<b>Fecal occult blood test or fecal immunological test<sup>6</sup></b>	Generally available in the public and the private sectors
<b>Exam or colonoscopy<sup>6</sup></b>	Generally available in the public and the private sectors
<b>Screening coverage</b>	...

CANCER TREATMENT AND PALLIATIVE CARE			
<b>Radiotherapy<sup>10</sup></b>		<b>Oral morphine<sup>6</sup></b>	
Availability of services in the public health sector?	Generally available	Availability in the public health sector?	Generally <b>not</b> available
Total energy teletherapy units/million inhabitants	0.3	Covered by health insurance or publically funded?	No
Total radiotherapy centers	1	Appears in the national list of essential medicines?	No
Radiation oncologists	3	<b>Opioid consumption<sup>11</sup></b>	
Medical physicists	1	Total morphine equivalence, per capita	1.18
<b>Chemotherapy<sup>6</sup></b>		<b>Community/home care<sup>6</sup></b>	
Availability of services in the public health sector?	Generally available	Are community/home care services available in the public sector for people with advanced stages of NCDs?	Generally <b>not</b> available

Notes: ...: Information not available; N/A: Not applicable; m: months; VIA: Visual inspection with acetic acid.

Sources:

- (1) PAHO/WHO. Non communicable Diseases in the Americas: Basic Health Indicators 2011. Washington D.C, USA, 2011.
- (2) PAHO/WHO. Tobacco Control Report for the Region of the Americas, 2013. Washington D.C, USA, 2013.
- (3) WHO. Global Information System on Alcohol and Health, retrieved August 28, 2013, from <http://bit.ly/17zhuqZ>.
- (4) ICO. Information Center on HPV and Cancer, retrieved August 28, 2013, from <http://www.hpvcentre.net/>.
- (5) PAHO/WHO Mortality Database, 2012.
- (6) PAHO/WHO Survey on National Capacity for the Prevention and Control of Non-communicable Diseases, 2013.
- (7) PAHO/WHO Comprehensive Family Immunization Unit. Immunization Country Profiles, retrieved August 28, 2013, from <http://bit.ly/1dn4Td3>; Immunization Reported Coverage in the Americas, by vaccine, retrieved August 28, 2013 from <http://bit.ly/1dn59ZK>.
- (8) Ministry of Health of Nicaragua. Protocolo de prevención del cáncer cérvico uterino a Través del tamizaje con inspección visual con ácido acético (IVAA) y tratamiento con crioterapia, retrieved August 28, 2013 from: <http://bit.ly/1d2XF0b>.
- (9) PAHO/WHO. Cervical cancer prevention and control programs: A rapid assessment in 12 countries of Latin America. Washington D.C.: PAHO, 2010.
- (10) WHO/IAEA Directory of Radiotherapy Centers (DIRAC) Database, retrieved August 28, 2013 from <http://www.naweb.iaea.org/nahu/dirac/>.
- (11) University of Wisconsin. WHO Collaborating Centre for Pain Policy and Palliative Care, Opioid Consumption Database 2010, retrieved August 28, 2013, from <http://www.painpolicy.wisc.edu/countryprofiles/amro>.