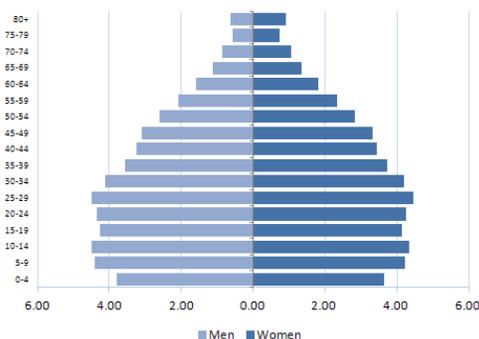


BRAZIL

SOCIODEMOGRAPHIC INDICATORS¹



- **Total population:** 196,655,000
- **Average annual deaths:** 1,261,100
- **Life expectancy at birth (years):**
Total: 74 Male: 70 Female: 77
- **Adult literacy rate:** 90%
- **Gross national income US\$ per capita:** 8,070

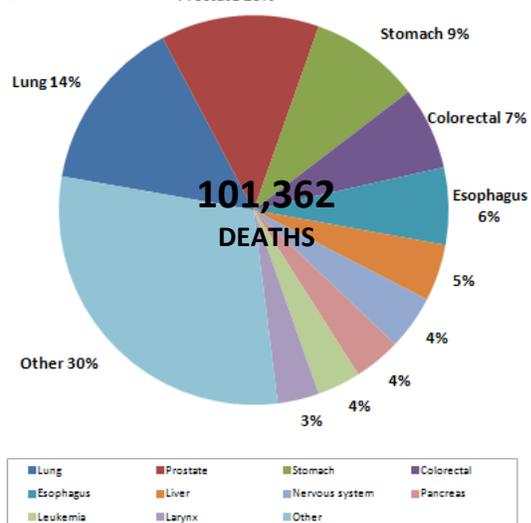
RISK FACTORS

Prevalence of:	Total (%)	Male (%)	Female (%)
Current tobacco smokers among adults ²	17.4	16.5	18.2
Current use of any tobacco product among youth ^{3,a}	7.6	7.9	7.3
Fruit and vegetable intake in adults ^{2,b}	34.0	26.9	40.1
Alcohol: heavy episodic drinking, past 30 days ²	18.4	27.9	10.3
Physical inactivity ^{2,c}	14.9	15.2	14.6
Obesity among adults (BMI ≥30) ¹	17.4	16.5	18.2
HPV prevalence ⁴	40.4 (pregnant women)

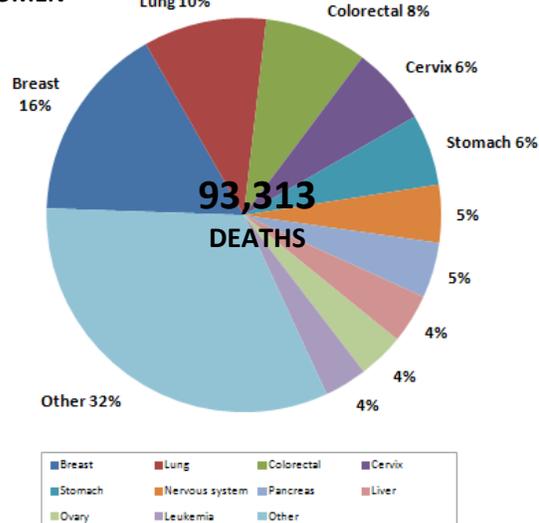
Notes: a: National School Health Survey includes 9th grade (PeNSE 2012); b: % who eat 5 or more servings of fruit and vegetables per day; c: % who have not practiced any physical activity in the last 3 months, who do not exert intense physical efforts in their work, who do not go to work or school by foot or bicycle, for a minimum of 10 minutes, and who do not participate in heavy cleaning in their household ; BMI: Body Mass Index; HPV: Human Papillomavirus.

CANCER MORTALITY PROFILE (2010)⁵

MEN

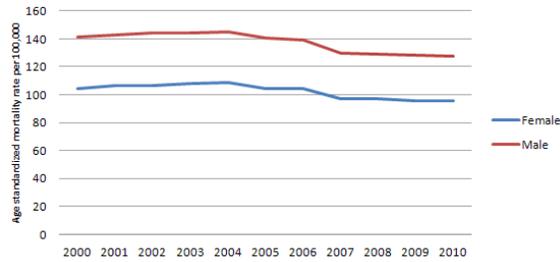


WOMEN

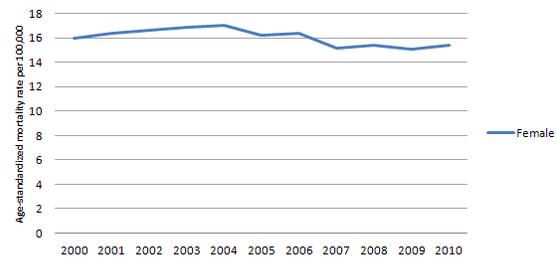


AGE-STANDARDIZED CANCER MORTALITY TRENDS (2000-2010)⁵

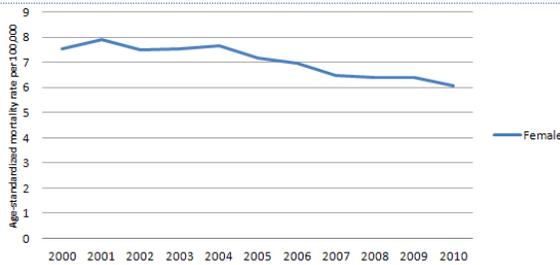
All cancer types except skin non-melanoma



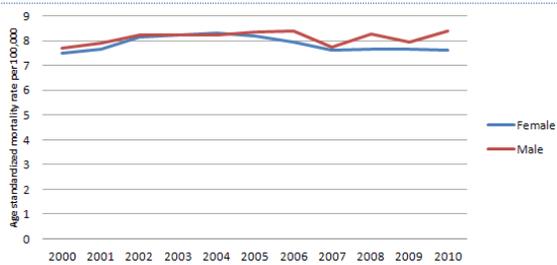
Breast cancer



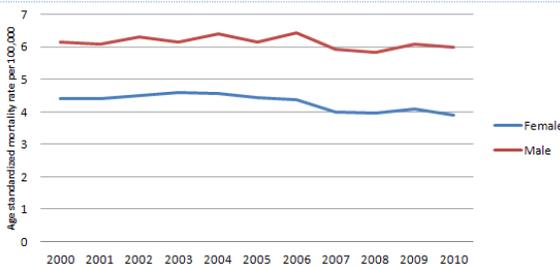
Cervical cancer



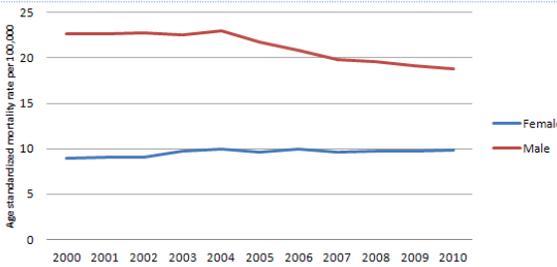
Colorectal cancer



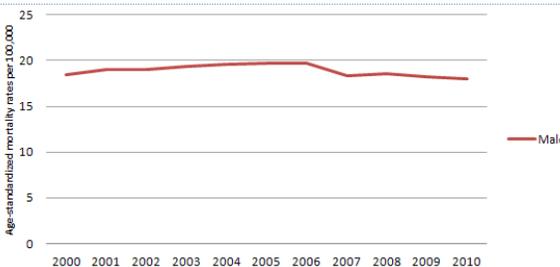
Liver cancer



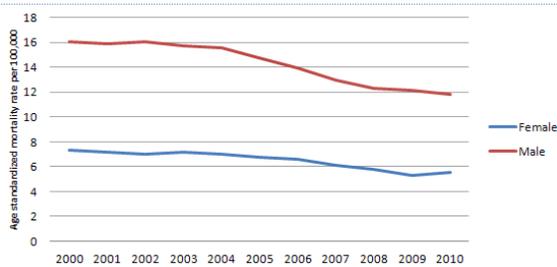
Lung cancer



Prostate cancer



Stomach cancer



Average annual percent change (AAPC) of age-standardized mortality rates, by cancer type (2000-2010)⁵

Cancer type	Sex	Number of deaths (2010)	ASMR (2010)	AAPC
All cancer types	Male	101,362	127.71	-1.5*
	Female	93,313	95.74	-1.3*
Breast cancer		15,087	15.39	-1.0
Cervical cancer		6,006	6.08	-2.53*
Colorectal cancer	Male	6,963	8.81	0.31
	Female	7,860	8.03	-0.3
Liver cancer	Male	4,786	6.00	-0.37
	Female	3,786	3.91	-1.5*
Lung cancer	Male	14,664	18.85	-2.0*
	Female	9,418	9.80	0.7
Prostate cancer		13,369	17.98	-0.6
Stomach cancer	Male	9,321	11.81	-3.2*
	Female	5,447	5.57	-3.3*

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 REGISTRATION⁶

National integrated NCD policy, strategy or action plan	
Is there a national integrated NCD policy, strategy or action plan?	Yes
Is cancer included in the overall NCD plan?	Yes
First year of implementation	2011
Cancer policy, strategy or action plan	
Is there a cancer policy, strategy or action plan?	Yes
First year of implementation	2005
Cancer registry	
Is there a cancer registry?	Yes
Scope (national vs. subnational)?	Subnational
Type of registry (population vs. hospital based)?	Population based and hospital based
Last year with available data	2009

CANCER PRIMARY PREVENTION POLICIES

Tobacco control³	
Smoke free environments?	All public spaces are completely smoke free (pending regulation and/or implementation)
Raised taxes on tobacco?	Taxes are 63% of final price
Health warning labels about the dangers of tobacco?	Large warning with all appropriate feature
Bans on tobacco advertising, promotion and sponsorship?	Ban on all forms of direct and indirect advertising
Overweight and obesity prevention and control⁷	
Is there a policy, strategy or action plan for reducing overweight/obesity? (First year of implementation)	Yes
Harmful use of alcohol prevention and control⁷	
Is there a policy, strategy or action plan for reducing harmful use of alcohol? (First year of implementation)	Yes
HPV vaccination in national immunization program?⁸	
Year of introduction/target age group/delivery strategy	2014/girls aged 10-11 years/Mixed
Estimated 3-dose coverage (calendar year)	...
HBV vaccination in national immunization program?⁹	
Year of introduction/target age group	1998/newborn-1m-6m
Estimated 3-dose coverage (2012)	97%

CANCER SCREENING

Cervical cancer	
Guidelines¹⁰	
Are there cervical cancer screening guidelines available?	Yes
Guideline recommendations (tests/age groups/frequency)	Pap test/25-64 years of age/every 3 years, following 2 consecutive normal Pap tests done annually
Availability and coverage of screening services	
Cervical cytology⁶	Generally available in the public and the private sectors
Visual inspection with acetic acid⁶	Generally not available in the public and the private sectors
Screening coverage¹¹	79.3% of target population (2008)

CANCER SCREENING	
Breast cancer	
Guidelines¹²	
Are there breast cancer screening guidelines available?	Yes
Guideline recommendations (tests/age groups/frequency)	Breast clinical examination/40-69 years of age/annual Mammography screening/50-69 years of age/every 2 years In women with family history of breast cancer (high risk women), mammography screening every year starting at aged 35 years of age
Availability and coverage of screening services	
Clinical breast examination⁶	Generally available in the public and the private sectors
Mammography⁶	Generally available in the public and the private sectors
Screening coverage¹³	Unknown, but nationally 50% of women older than 50 years have had at least one mammogram.
Colorectal cancer	
Guidelines¹⁴	
Are there colorectal cancer screening guidelines available?	...
Guideline recommendations (tests/age groups/frequency)	Fecal occult blood test/50 years of age or older/annual
Availability and coverage of screening services	
Fecal occult blood test or fecal immunological test⁶	Generally available in the public and the private sectors
Exam or colonoscopy⁶	Generally available in the public and the private sectors
Screening coverage	...

CANCER TREATMENT AND PALLIATIVE CARE			
Radiotherapy¹⁵		Oral morphine⁶	
Availability of services in the public health sector? ⁶	Generally available	Availability in the public health sector?	Generally available
Total energy teletherapy units/million inhabitants	1.8	Covered by health insurance or publically funded?	Yes
Total radiotherapy centers	222	Appears in the national list of essential medicines?	Yes
Radiation oncologists	391	Opioid consumption¹⁶	
Medical physicists	256	Total morphine equivalence, per capita	11.72
Chemotherapy⁶		Community/home care⁶	
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 available

Notes: Information not available; N/A: Not applicable; m: months.

Sources:

- (1) PAHO. Non communicable Diseases in the Americas: Basic Health Indicators 2011. Washington D.C, USA, 2011.
- (2) Brazil Ministry of Health, Secretary of Health Surveillance. Vigitel Brasil 2012: Chronic disease risk factor surveillance via telephone survey.
- (3) PAHO. Tobacco Control Report for the Region of the Americas, 2013. Washington D.C, USA, 2013
- (4) Brazil. Ministry of Health. Secretary of Health Surveillance. National Program on STI and AIDS. Prevalence and relative frequency of sexually transmitted infections in populations selected in 6 Brazilian capital cities, 2005. Brasilia: Ministry of Health, 2008.
- (5) PAHO/WHO Mortality Database, 2012.
- (6) PAHO/WHO Survey on National Capacity for the Prevention and Control of Non-communicable Diseases, 2013.
- (7) Brazil. Ministry of Health. Health Portal, 2013.
- (8) Network of National Cancer Institutes of the South American Union (RINC/UNASUR). Newsletter, retrieved August 28,2013 from <http://bit.ly/155SWoO>
- (9) PAHO/WHO Comprehensive Family Immunization Unit. Year of introduction-- Country Reports to PAHO/WHO; Schedules--PAHO/WHO Immunization Country Profiles, retrieved August 28, 2013, from <http://bit.ly/1dn4Td3>; Coverage--PAHO/WHO Immunization Reported Coverage in the Americas, by vaccine, retrieved August 28, 2013 from <http://bit.ly/1dn59ZK>.
- (10) Ministry of Health of Brazil, National Cancer Institute. Diretrizes brasileiras para o rastreamento do cancer do colo do útero. Ministério de Saude. Instituto Nacional de Cancer. 2011, retrieved August 28,2013 from <http://bit.ly/pdUK4N>.
- (11) Network of National Cancer Institutes of the South American Union (RINC/UNASUR). Informe preliminar reducido sobre la situación del control del cáncer de cuello uterino en 8 países de Latinoamérica. 2012.
- (12) Ministry of Health of Brazil. Deteccao precoce do cancer de mama, 2012, retrieved August 28,2013 from <http://bit.ly/14vB6as>.
- (13) Lee BL, et al.Breast cancer in Brazil: present status and future goals. Lancet Oncol. 2012 Mar;13(3):e95-102.
- (14) Ministry of Health of Brazil. Deteccao precoce cancer colorretal, retrieved August 28,2013 from: <http://bit.ly/19vyluV>.
- (15) WHO/IAEA Directory of Radiotherapy Centers (DIRAC) Database, retrieved August 28, 2013 from <http://www-naweb.iaea.org/nahu/dirac/>.
- (16) 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>.