

Colorectal Cancer Incidence Projections in Brazil (2030–2040)

Rejane Reis, Fernanda Lima, Darlan da Silva e Alfredo Scaff

Fundação do Câncer, Rio de Janeiro, Brazil



Where is Brazil?

BRAZIL

Territorial extension: 8,510,000 km²

Population: 203,080,756 inhabitants
(52% women and 48% men)

Life expectancy at birth: 74 years



- ✓ Brazilian population growth - 2% between 2030 and 2040.
- ✓ Growth will be more pronounced among people over 50 years old - an increase of 23%.

Source: INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. Projeção da população. 2024.

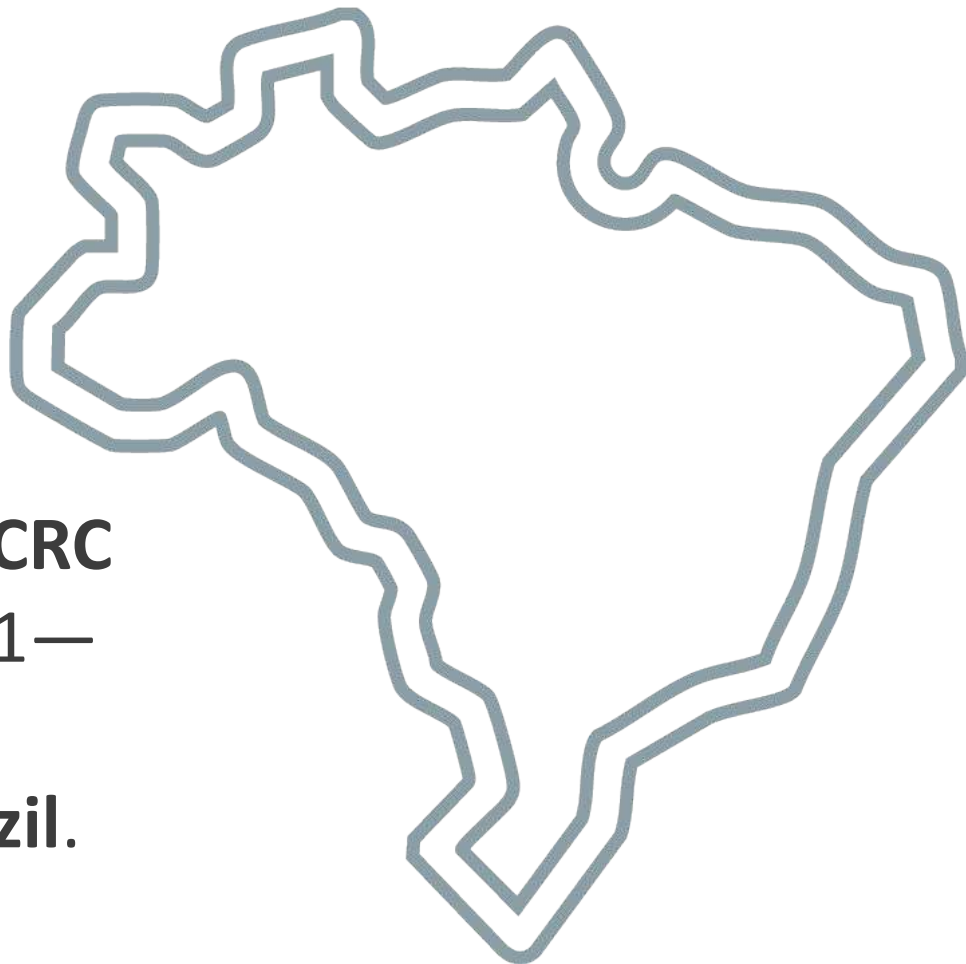
Background

- ✓ Colorectal cancer (CRC) - the most common malignant neoplasm of the gastrointestinal tract.
- ✓ Brazil - **third most common cancer**, with over **45,000 new cases expected in 2025**.
- ✓ More than 90% of cases affect people aged 50 or over.
- ✓ The lifetime risk of developing CRC - around 5% increasing with age.
- ✓ Diversity of the Brazilian Scenario - different epidemiological realities between regions and states.

Sources: HE, J.; EFRON, J. E., 2011. | FERLAY, J. et al. , 2025. | INSTITUTO NACIONAL DE CÂNCER (BRASIL), 2022.

Objective

Project the incidence of CRC
— classified as C18 to C21—
by **sex and age group**,
for **2030 and 2040 in Brazil**.



Methods

- ✓ We used a method similar by Globocan projections, combining mortality data and incidence-to-mortality ratios (I/M).
 - Incidence data: Brazilian PBCR (last five years)
 - Mortality data: SIM (National Information System of Mortality) - the same period of PBCR
- ✓ Crude mortality rates were estimated using **linear regression**, and multiplied by the I/M ratio to obtain incidence estimates.
- ✓ Projections were calculated for Brazil and its five macro-regions, by **sex** and **age groups: ≤ 49 , ≥ 50 and total.**

Source: FERLAY, J. et al. Estimating the global cancer incidence and mortality in 2018: GLOBOCAN sources and methods. International Journal of Cancer, New York, v. 144, n. 8, p. 1941-1953, Apr. 2019.

Methods

Brazilian PBCR and reference period

North region	Northeast region	Middle West region	Southeast region
Acre (2013-2017)	Aracaju (2012-2016)	Campo Grande (2008-2012)	Angra dos Reis (2017-2021)
Belém (2015-2019)	Fortaleza (2011-2015)	Cuiabá (2014-2018)	Barretos (2015-2019)
Manaus (2014-2018)	João Pessoa (2013-2017)	Distrito Federal (2015-2019)	Belo Horizonte (2016-2020)
Palmas (2013-2017)	Natal (2004-2008)	Goiânia (2009-2013)	Campinas (2015-2019)
Roraima (2013-2017)	Recife (2016-2020)	Mato Grosso-Interior (2014-2018)	Grande Vitória (2008-2012)
	Salvador (2001-2005)	South region	Jahu (2017-2021)
	Teresina (2002-2006)	Curitiba (2016-2020)	Poços de Caldas (2010-2014)
		Florianópolis (2012-2016)	São Paulo (2011-2015)
		Porto Alegre (2013-2017)	Santos (2012-2016)

Results - Brazil

↑ 31,1%

North			
Year	Men	Women	Total
2030	1,030	1,090	2,120
2040	1,330	1,450	2,780

Northeast

Year	Men	Women	Total
2030	4,550	5,220	9,770
2040	5,700	6,390	12,090

↑ 23,7%

Middle West

Year	Men	Women	Total
2030	2,490	2,310	4,800
2040	3,380	2,990	6,370

↑ 32,7%

↑ 20,8%

Brazil			
Year	Men	Women	Total
2030	28,550	30,280	58,830
2040	34,450	36,600	71,050

Southeast

Year	Men	Women	Total
2030	15,570	16,840	32,410
2040	18,100	20,110	38,210

↑ 17,9%

South

Year	Men	Women	Total
2030	4,910	4,820	9,730
2040	5,940	5,660	11,600

↑ 19,2%

A preventable cancer... growing in Brazil!

- ✓ Is it possible to change the course of the disease?
- ✓ Why can't we move forward yet?
- ✓ What are the ways to stop the spread of this cancer?

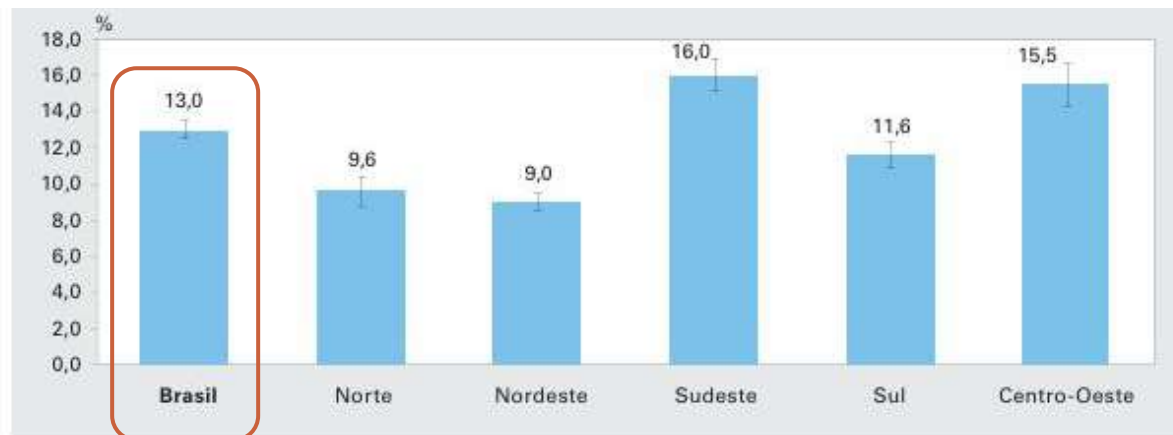
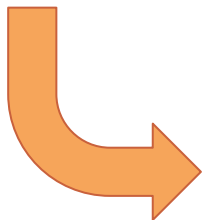
Is it possible to change the course of the disease?

- ✓ Healthy eating - more than 60% of the Brazilian population is overweight

Proportion of people who consume vegetables and fruits in their meals - at least 3 portions per day



Very low!



Sources: PNS, 2020

Is it possible to change the course of the disease?

✓ Physical activity



Only 30% of brazilian population practice recommended physical activity - at least 2h30 per week

Sources: PNS, 2020

Is it possible to change the course of the disease?

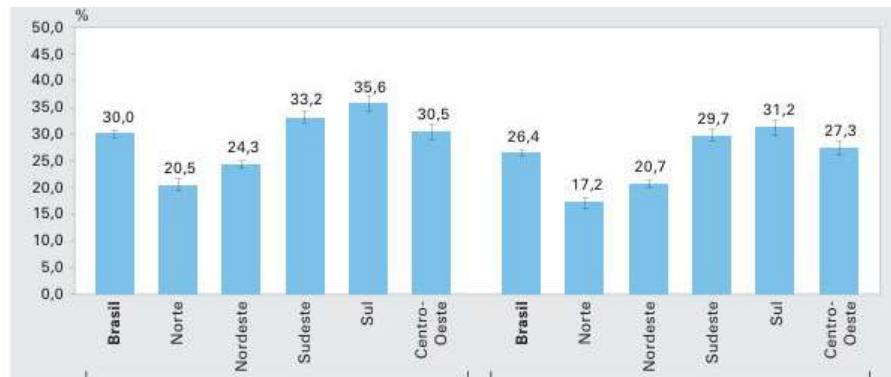
✓ Reduction of smoking and alcohol

Proportion of adult smokers, students who have smoked cigarettes in the last year and who have tried electronic cigarettes



Sources: PNS, 2020 Info.onCollect: volume 6, 2024

Proportion of people who consume alcoholic drinks



once or more a month

once or more a week

Why can't we move forward yet?

- ✓ Lack of access – colonoscopies
- ✓ Fear of diagnosis - lack of knowledge, regional cultural differences
- ✓ Low adherence - lack of information about the exam, difficulty in the exam
- ✓ Insufficient infrastructure - regional differences in access to prevention, diagnosis and treatment

What are the ways to stop the spread of this cancer?

- ✓ Structure screening: FOBT and colonoscopy - structural public health challenge
- ✓ Strengthen primary care
- ✓ Regionalize policies
- ✓ Ensure equitable access

Prevention means taking
care of the future.
And the future starts now.

Thank you

Rejane Reis

Contact: rejane.reis@cancer.org.br

GRELL & ENCR



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2025 Scientific Meeting Porto, Portugal