

Cancer Epidemiology in Puerto Rico 2015-2019

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SAN JUAN, PUERTO RICO

DEPARTAMENTO DE
SALUD



Presentation Objectives

1. Present cancer incidence rates in Puerto Rico for the 2015-2019 period.
2. Present cancer mortality rates in Puerto Rico for the 2015-2019 period.



Cancer Incidence

Puerto Rico 2019



- **16,628** new cases of cancer were reported during **2019**
- For every 100,000 people, a total of **368 cancer cases were reported.**
- **8,780 (52.8%)** were men and **7,848 (47.1%)** were women.

Top ten cancer sites (incidence) by sex Puerto Rico, 2015-2019 and APC[‡] 2000-2019

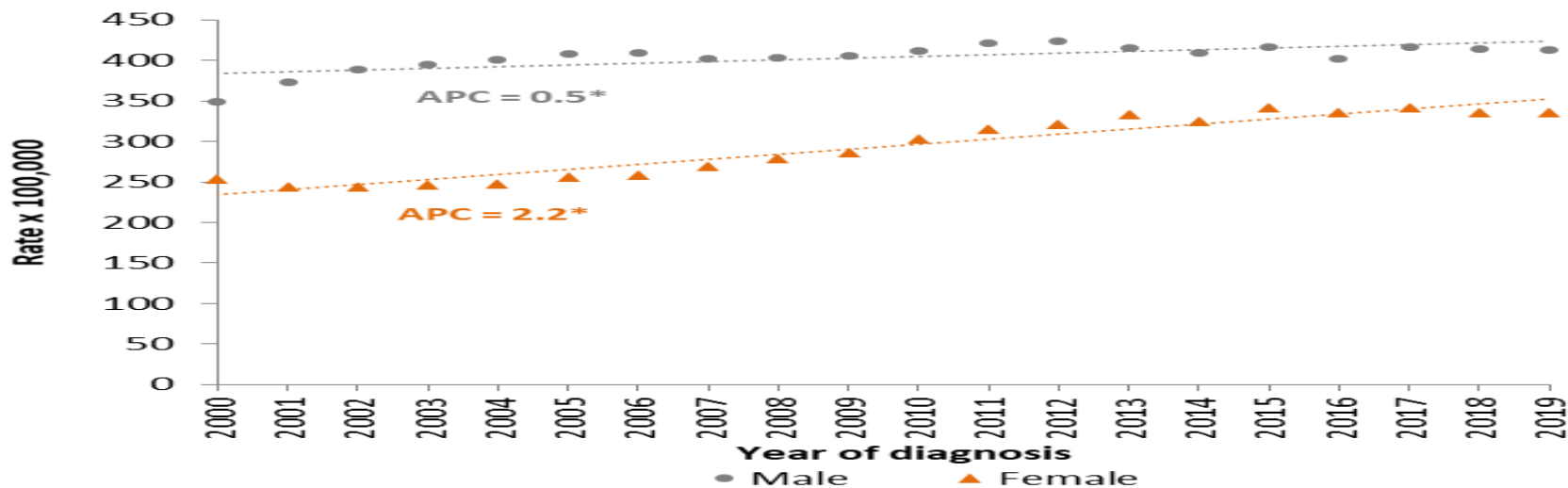
♂ Male (N = 38,750)	%	APC ²⁰⁰⁰⁻²⁰¹⁹	♀ Female (N = 35,288)	%	APC ²⁰⁰⁰⁻²⁰¹⁹
Prostate	38.3	-0.1	Breast	29.7	↑ 1.6*
Colon and rectum	11.7	0.0	Colon and rectum	10.8	-0.2
Lung and bronchus	5.4	↓ -1.0*	Thyroid	10.5	↑ 9.0*
Urinary bladder	4.2	0.1	Corpus and uterus, NOS	9.2	↑ 4.6*
Non-Hodgkin Lymphoma	3.9	↑ 2.2*	Lung and bronchus	3.9	0.4
Oral cavity and pharynx	3.6	↓ -0.7*	Non-Hodgkin Lymphoma	3.9	↑ 2.2*
Liver and bile duct	3.4	↑ 1.7*	Cervix uteri	2.9	↑ 1.6*
Kidney and renal pelvis	3.1	↑ 4.2*	Pancreas	2.5	↑ 3.0*
Leukemia	2.8	↑ 2.1*	Leukemia	2.5	↑ 2.7*
Pancreas	2.4	↑ 3.4*	Ovary	2.3	↑ 0.8*
Other sites	21.2		Other sites	21.9	

Data Source: Puerto Rico Central Cancer Registry Incidence Case File (Feb. 2, 2022). Incidence cases file population of 2017 are restricted to the first 6 months of the year (January to June). Cases from July to December were excluded due to the population change after hurricanes Irma and María.

‡APC= Annual Percent Change

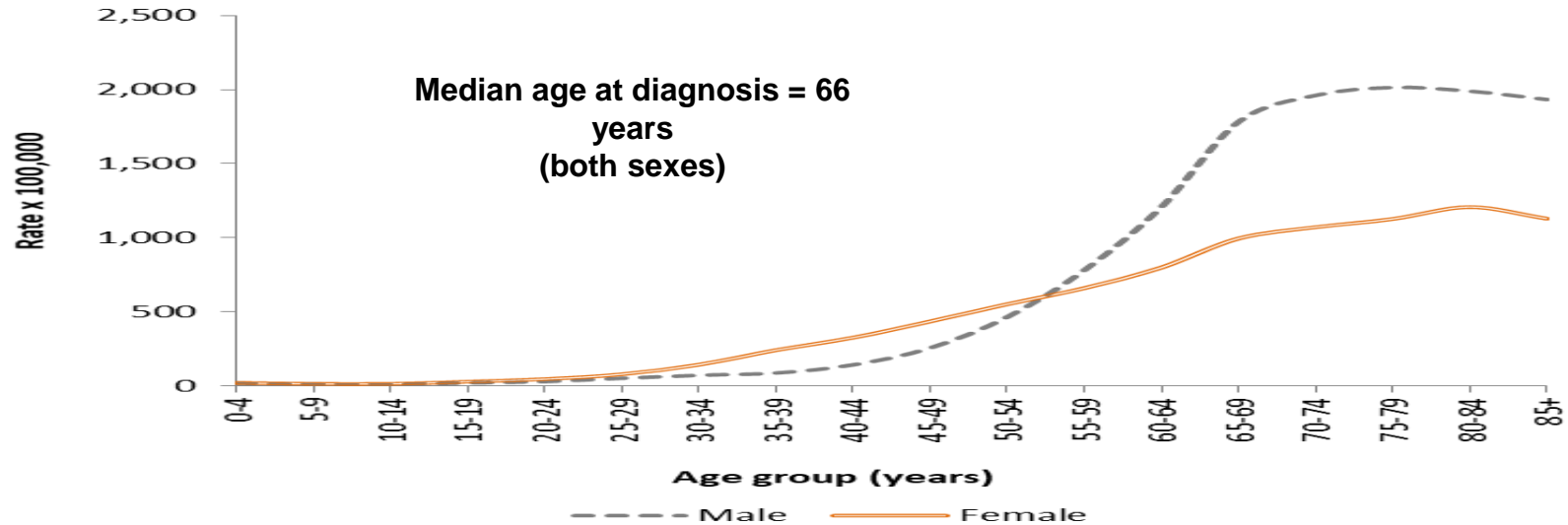
*p<0.05

Age-adjusted incidence rates for all cancer sites by sex Puerto Rico, 2000 - 2019



Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups – Census P25-1130) standard.
Data Source: Incidence Case File of Puerto Rico from the Puerto Rico Central Cancer Registry (February 2, 2022).
Population Source: Vintage 2020 estimates series from the Population Division of the United States Census Bureau.
Incidence cases file population of 2017 are restricted to the first 6 months of the year (January to June).
Cases from July to December were excluded due to the population change after hurricanes Irma and María.

Age-specific incidence rates for all cancer sites by sex Puerto Rico, 2015 – 2019



Rates are per 100,000.

Data Source: Incidence Case File of Puerto Rico from the Puerto Rico Central Cancer Registry (February 2, 2022).

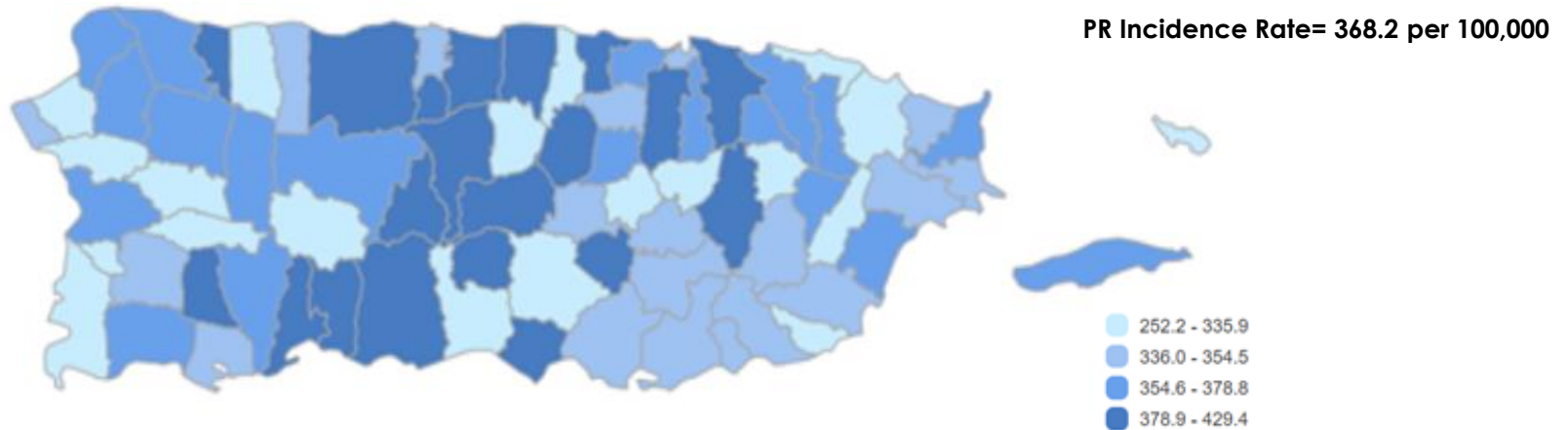
Population Source: Vintage 2020 estimates series from the Population Division of the United States Census Bureau.

Incidence cases file population of 2017 are restricted to the first 6 months of the year (January to June).

Cases from July to December were excluded due to the population change after hurricanes Irma and María.

Age-adjusted incidence rates for all cancer sites by municipality

Puerto Rico, 2015-2019

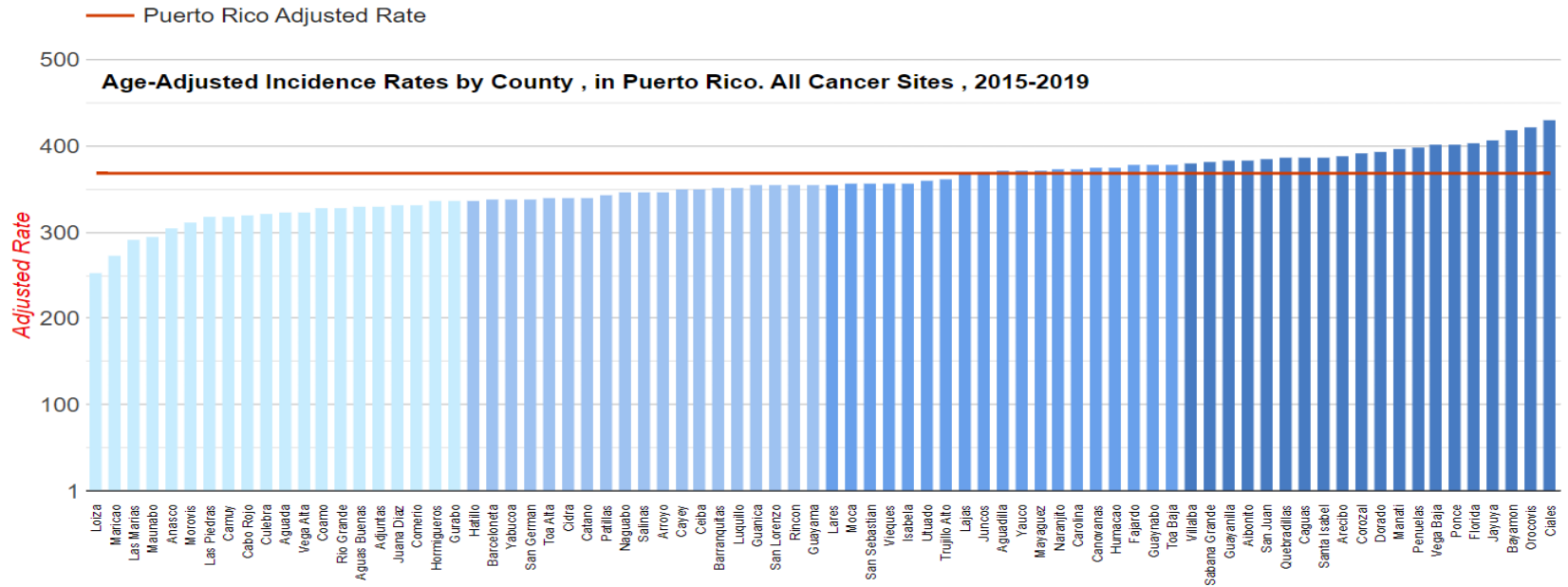


Rates are per 100,000.

Data Source: Incidence Case File of Puerto Rico from the Puerto Rico Central Cancer Registry (February 2, 2022).
Population Source: Vintage 2020 estimates series from the Population Division of the United States Census Bureau.
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Age-adjusted incidence rates for all cancer sites by municipality

Puerto Rico, 2015-2019



Rates are per 100,000.

Data Source: Incidence Case File of Puerto Rico from the Puerto Rico Central Cancer Registry (February 2, 2022).

Population Source: Vintage 2020 estimates series from the Population Division of the United States Census Bureau.

Cancer Mortality

Puerto Rico 2019



- **5,095** people died of cancer.
- For every 100,000 people, a total of **104** died of cancer.
- **2,713 (53.2%)** were men and **2,382 (46.7%)** were women.

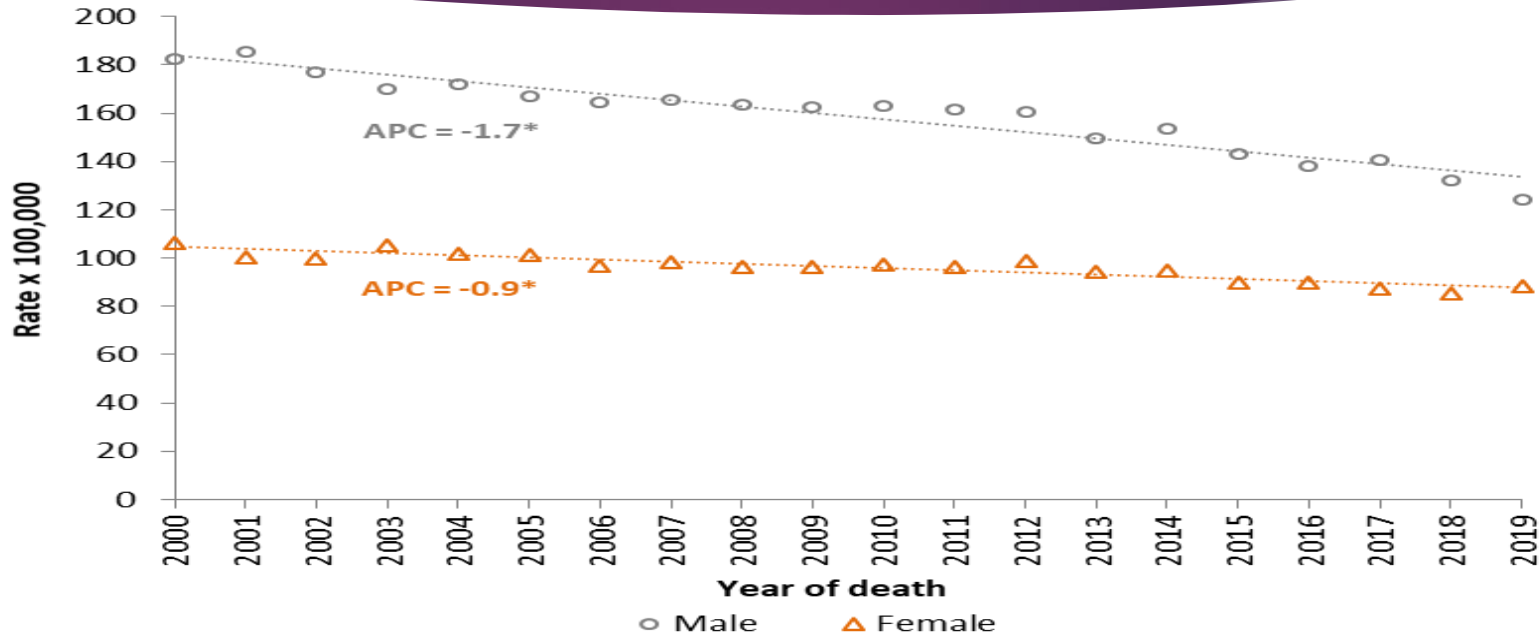
Top ten cancer sites (mortality) by sex Puerto Rico, 2015-2019 and APC[‡]

♂ Male (N = 14,175)	%	APC ²⁰⁰⁰⁻²⁰¹⁹	♀ Female (N = 11,526)	%	APC ²⁰⁰⁰⁻²⁰¹⁹
Prostate	16.4	↓ -3.4*	Breast	18.7	↓ -0.4*
Colon and rectum	13.1	↓ -0.9*	Colon and rectum	13.0	↓ -1.3*
Lung and bronchus	11.7	↓ -2.6*	Lung and bronchus	8.9	↓ -1.7*
Liver and bile duct	8.0	0.2	Pancreas	6.4	↑ 1.0*
Pancreas	6.0	↑ 1.4*	Corpus and uterus, NOS	5.5	0.9
Leukemia	3.7	↓ -1.3*	Liver and bile duct	4.7	↓ -1.7*
Stomach	3.7	↓ -4.9*	Ovary	4.4	-0.4
Oral cavity and pharynx	3.5	↓ -2.9*	Leukemia	3.9	↓ -1.1*
Non-Hodgkin Lymphoma	3.2	↓ -1.3*	Stomach	3.3	↓ -4.2*
Esophagus	3.0	↓ -4.3*	Non-Hodgkin Lymphoma	3.0	↓ -1.9*
Other sites	27.7		Other sites	28.3	

Data Source: Mortality File provided by the Demographic Registry of Puerto Rico (Oct, 2021).

*p<0.05 ‡ APC= Annual Percent Change

Age-adjusted mortality rates for all cancer sites by sex Puerto Rico, 2000 – 2019

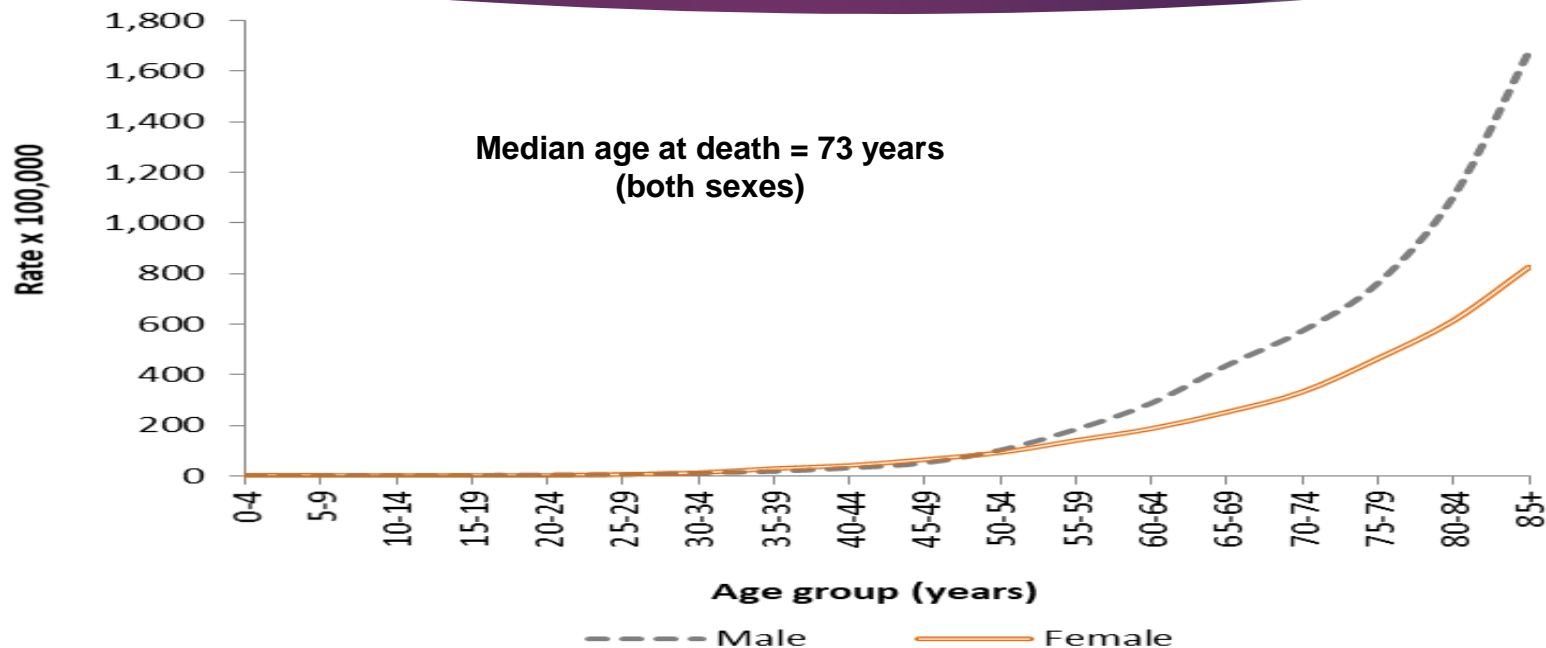


Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups – Census P25-1130) standard.

Data Source: Mortality Case File provided by the Demographic Registry of Puerto Rico (Oct, 2021).

Population Source: Vintage 2020 estimates series from the Population Division of the United States Census Bureau.

Age-specific mortality rates for all cancer sites by sex, Puerto Rico, 2015 – 2019

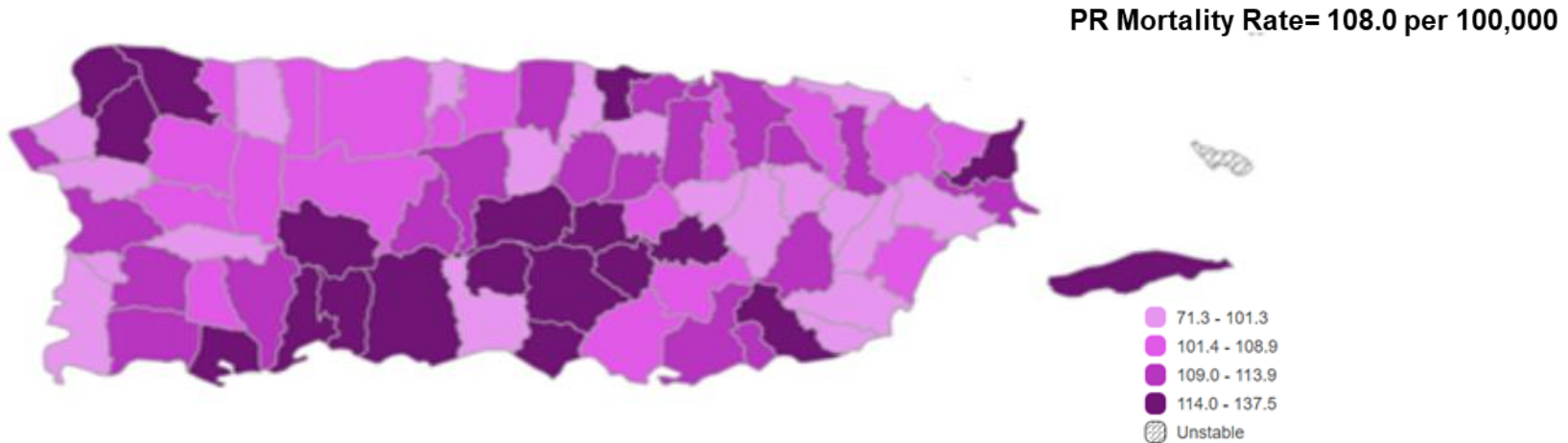


Rates are per 100,000.

Data Source: Mortality Case File provided by the Demographic Registry of Puerto Rico (Oct, 2021).

Population Source: Vintage 2020 estimates series from the Population Division of the United States Census Bureau.

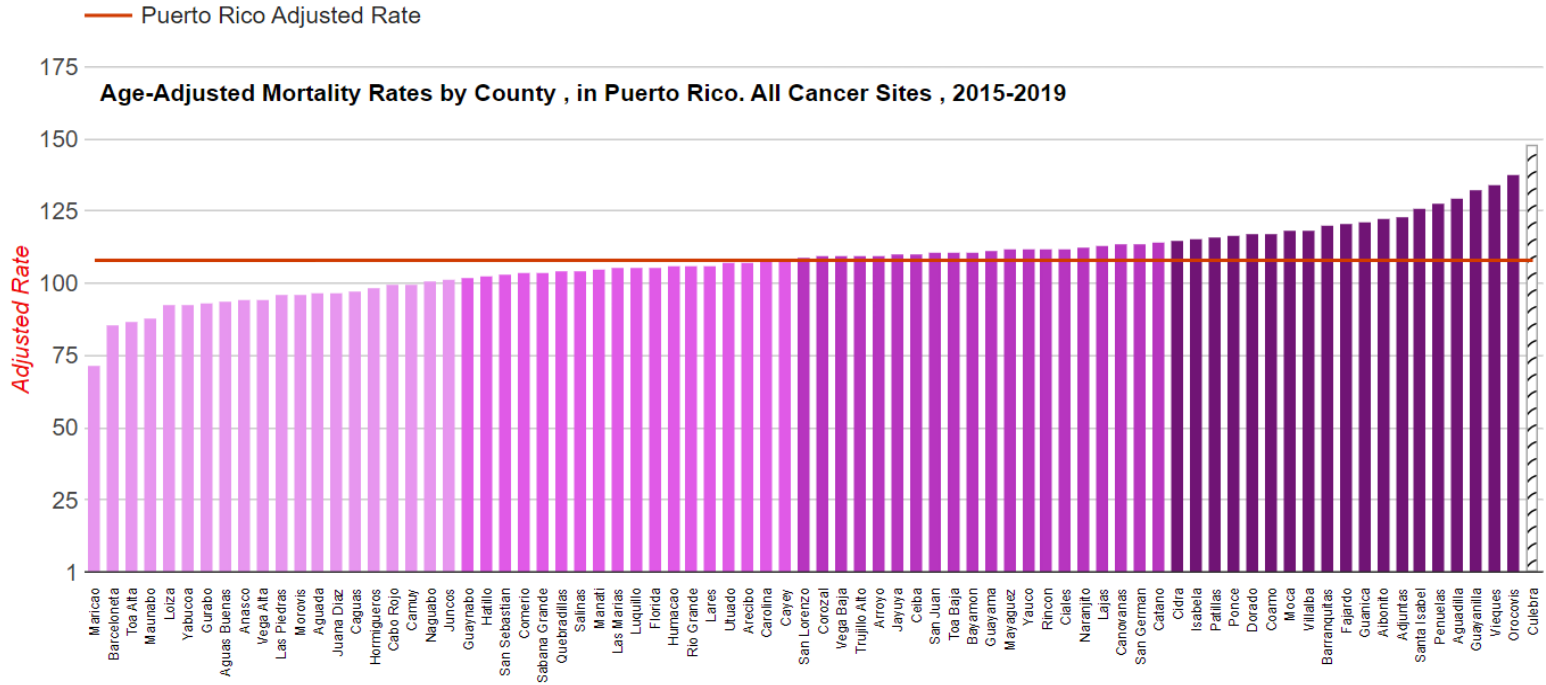
Age-adjusted mortality rates for all cancer sites by municipality Puerto Rico, 2015-2019



Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups – Census P25-1130) standard.
Data Source: Mortality Case File provided by the Demographic Registry of Puerto Rico (Oct, 2021).
Population Source: Vintage 2020 estimates series from the Population Division of the United States Census Bureau.

Age-adjusted mortality rates for all cancer sites by municipality

Puerto Rico, 2015-2019



Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups – Census P25-1130) standard.

Data Source: Mortality Case File provided by the Demographic Registry of Puerto Rico (Oct, 2021).

Population Source: Vintage 2020 estimates series from the Population Division of the United States Census Bureau.

Lifetime risk of developing cancer in Puerto Rico

Based on data for the period 2015-2019 in Puerto Rico:

- The risk of a person developing cancer over their lifetime in Puerto Rico was

1 in 2 or 41.4%.



**Thank you for your
attention!**

Data Sources

- Incidence: Incidence file of the Central Cancer Registry of Puerto Rico (February 2, 2022)
- Mortality: Mortality file provided by the Puerto Rico Demographic Registry (October 2021)
- Population: 'Vintage 2020' estimates from the United States Census Bureau Population Division