



Westchester County Department of Health

2016.03



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Community Health Assessment Data Update

KEEP
HEALTHY
AND
GET
THE STATS

Cancer Report, 2008-2012

In this issue:

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- Mortality by Sex, and Race/Ethnicity (Tables)
- Data Sources

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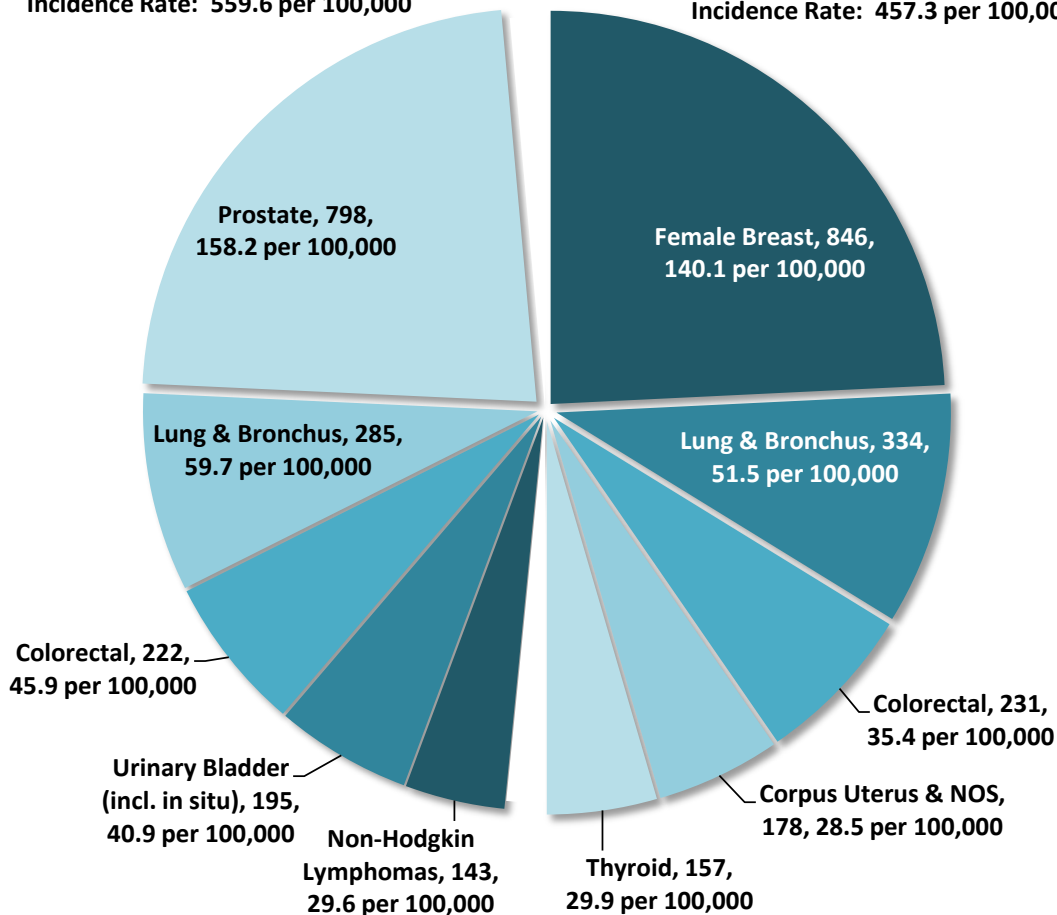
Project Staff:

Milagros Venuti, MPA, Assistant Statistician

Average Annual Incidence by Sex and Top Five Cancer Sites

Average Annual Male Cases: 2,734
Incidence Rate: 559.6 per 100,000

Average Annual Female Cases: 2,852
Incidence Rate: 457.3 per 100,000



New York State Incidence Rate:

Males: 568.8 per 100,000
Females: 451.1 per 100,000

USA Incidence Rate:

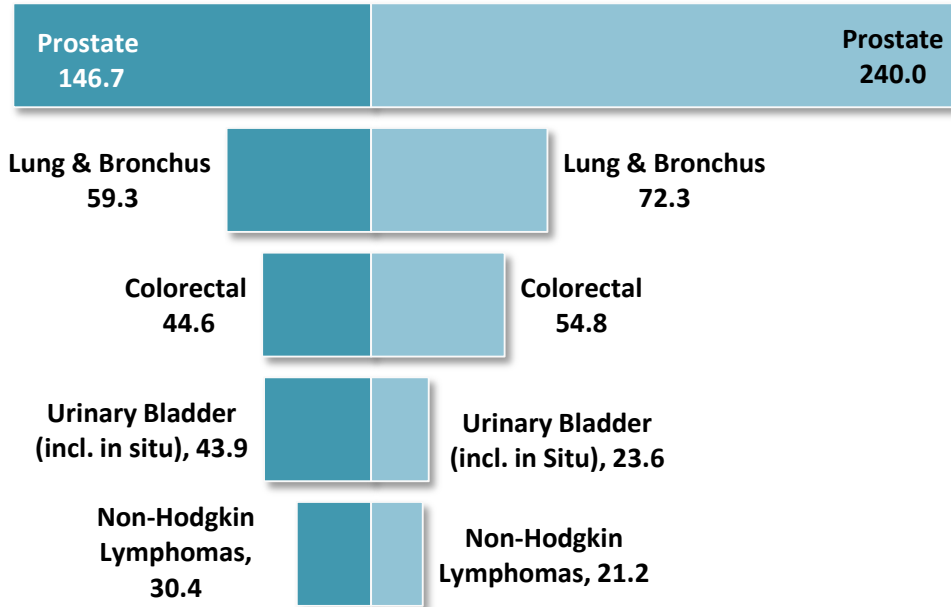
Males: 516.6 per 100,000
Females: 411.2 per 100,000

Average Annual Incidence Rates by Race/Ethnicity, 2008-2012

Males

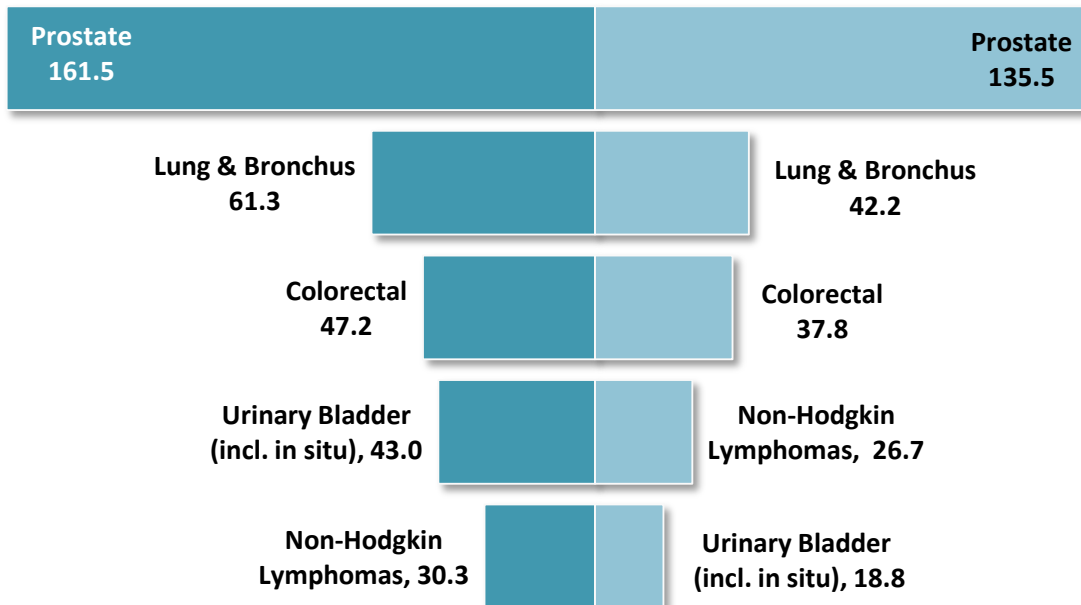
White
All Invasive Malignant Tumors: 555.9 per 100,000

Black
All Invasive Malignant Tumors: 605.2 per 100,000



Non-Hispanic
All Invasive Malignant Tumors: 578.5 per 100,000

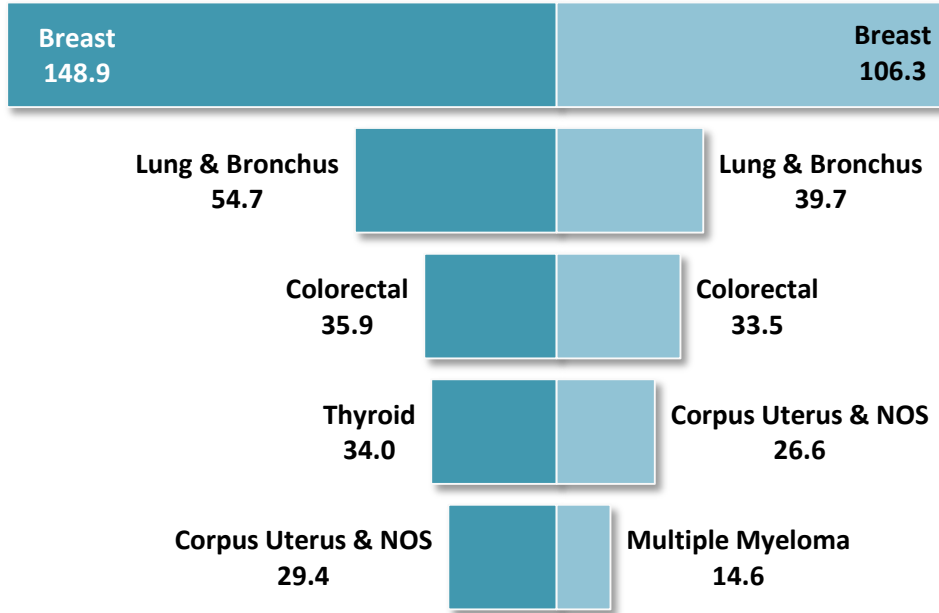
Hispanic
All Invasive Malignant Tumors: 425.6 per 100,000



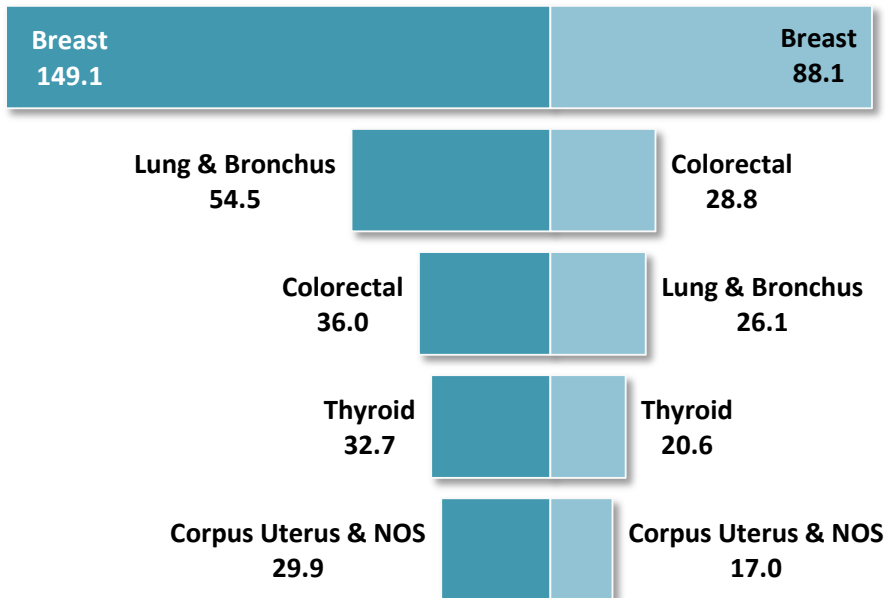
Average Annual Incidence Rates by Race/Ethnicity, 2008-2012

Females

White All Invasive Malignant Tumors: 479.4 per 100,000 **Black** All Invasive Malignant Tumors: 364.0 per 100,000

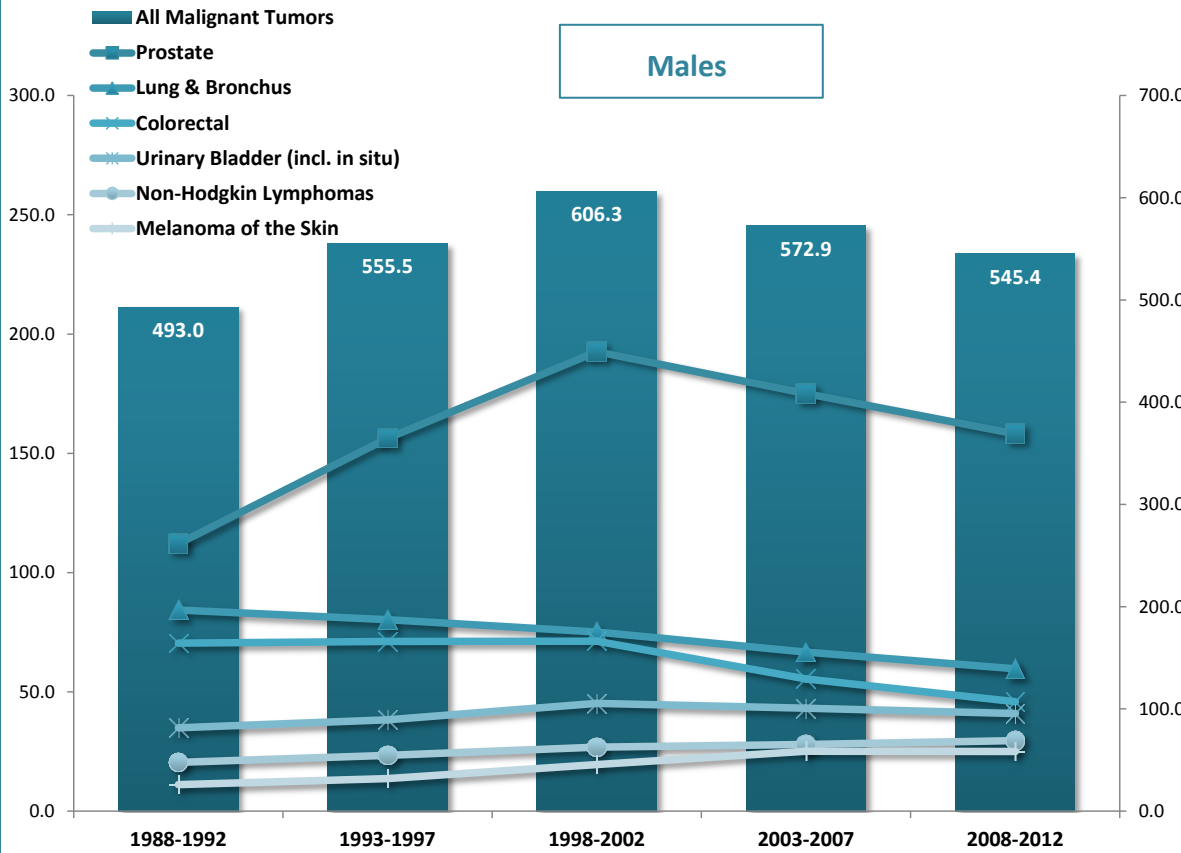


Non-Hispanic All Invasive Malignant Tumors: 480.7 per 100,000 **Hispanic** All Invasive Malignant Tumors: 310.9 per 100,000



Trends in Cancer Incidence Rates, 1988-2012

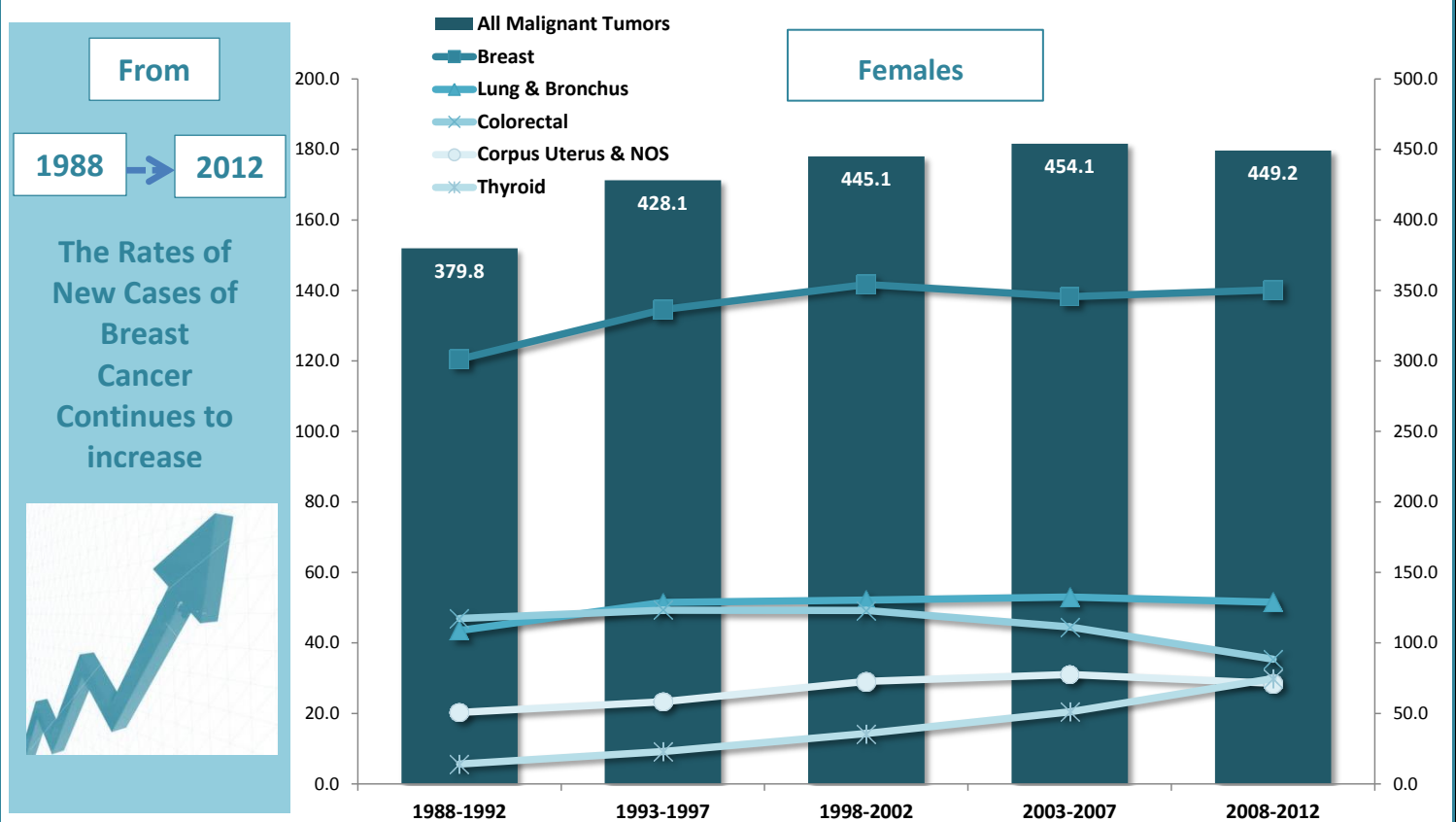
Males



From 1998 → 2012

The Rates of New Cases of Prostate Cancer Continues to decrease

Females



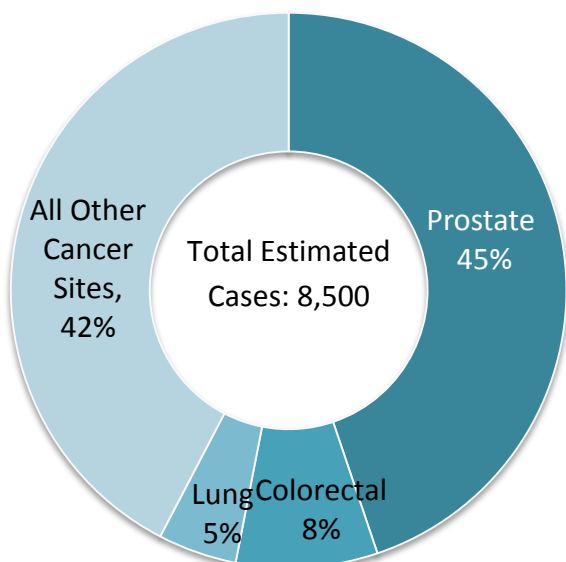
From 1988 → 2012

The Rates of New Cases of Breast Cancer Continues to increase

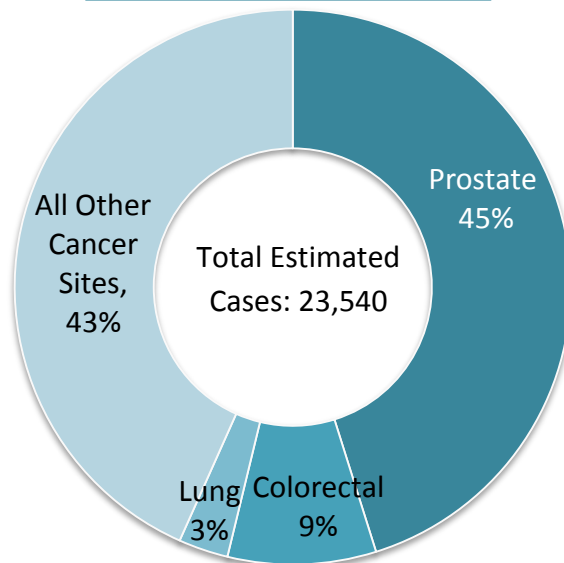
Estimated Cancer Prevalence* for Selected Cancer Sites by Sex

Males

Diagnosed in Last 5 Years

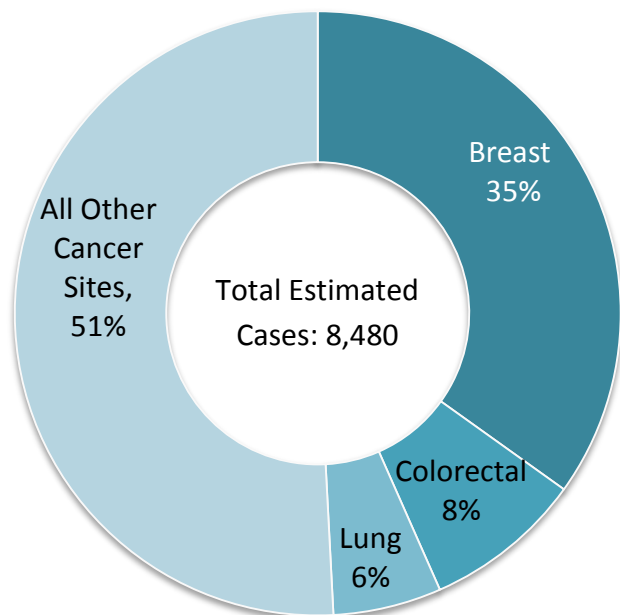


Ever Diagnosed

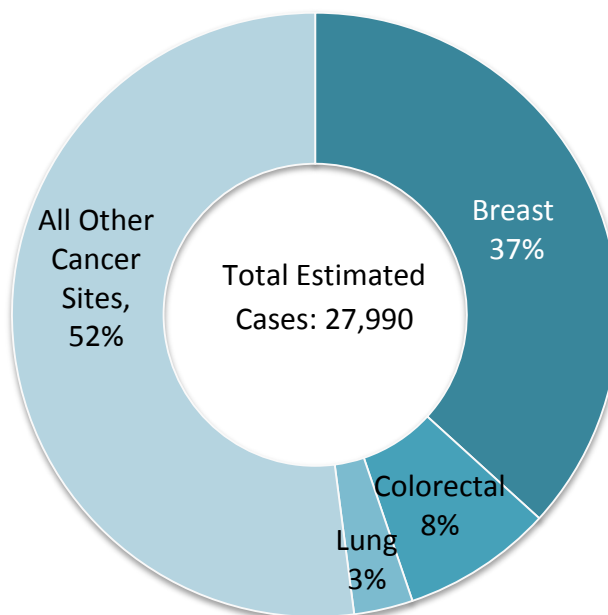


Females

Diagnosed in Last 5 Years



Ever Diagnosed



*Estimated number of residents alive as of January 1, 2012, diagnosed with cancer within the last 5 years or anytime in the past, respectively.

Average Annual Incidence Rates Among White and Black Males

	Males			
	White		Black	
	Average Annual Cases	Rate	Average Annual Cases	Rate
All invasive Malignant Tumors	2,252.4	555.9	358.4	605.2
Oral Cavity and Pharynx	64.0	15.1	7.2	11.4
Esophagus	25.4	6.1	5.4	9.4
Stomach	39.0	9.6	7.4	15.4
Colorectal	179.4	44.6	30.8	54.8
Liver/Intrahepatic Bile Duct	44.4	10.1	10.6	16.4
Pancreas	65.8	16.2	10.4	17.8
Larynx	21.2	5.2	4.4	7.5
Lung and Bronchus	238.0	59.3	40.0	72.3
Melanoma of the Skin	116.2	28.8	1.2	1.7
Prostate	611.4	146.7	147.6	240.0
Testis	26.8	8.1	0.8	1.0
Urinary Bladder (incl. in situ)	177.4	43.9	12.2	23.6
Kidney and Renal Pelvis	87.4	21.7	12.4	20.7
Brain and Other Nervous System	34.2	8.9	3.6	5.4
Thyroid	49.0	12.6	2.8	4.5
Hodgkin Lymphoma	13.4	4.0	2.6	3.5
Non-Hodgkin Lymphomas	121.2	30.4	13.6	21.2
Multiple Myeloma	41.4	10.1	8.6	15.2
Leukemias	94.4	23.9	10.2	17.0

Average Annual Incidence Rates Among Hispanic and Non-Hispanic Males

	Males			
	Non-Hispanic		Hispanic	
	Average Annual Cases	Rate	Average Annual Cases	Rate
All invasive Malignant Tumors	2,508.4	578.5	225.4	425.6
Oral Cavity and Pharynx	67.8	15.0	6.6	9.8
Esophagus	30.2	6.8	2.8	5.2
Stomach	42.6	9.8	6.8	12.5
Colorectal	202.8	47.2	18.8	37.8
Liver/Intrahepatic Bile Duct	48.0	10.4	10.8	16.7
Pancreas	72.6	16.5	5.8	12.6
Larynx	24.6	5.5	1.8	3.2
Lung and Bronchus	265.6	61.3	19.2	42.2
Melanoma of the Skin	119.4	27.9	1.4	2.4
Prostate	731.0	161.5	66.6	135.5
Testis	23.0	7.2	6.0	4.6
Urinary Bladder (incl. in situ)	186.2	43.0	8.6	18.8
Kidney and Renal Pelvis	96.4	22.5	9.2	17.5
Brain and Other Nervous System	35.2	8.9	4.4	5.8
Thyroid	50.8	12.9	5.6	6.8
Hodgkin Lymphoma	13.6	4.1	3.0	3.3
Non-Hodgkin Lymphomas	128.2	30.3	14.6	26.7
Multiple Myeloma	47.4	10.8	5.0	9.6
Leukemias	102.0	24.4	9.2	15.0

Average Annual Incidence Rates Among White and Black Females

	Females			
	White		Black	
	Average Annual Cases	Rate	Average Annual Cases	Rate
All invasive Malignant Tumors	2,374.0	479.4	325.6	364.0
Oral Cavity and Pharynx	30.4	6.1	4.2	4.5
Esophagus	12.6	2.3	1.0	1.1
Stomach	28.0	5.1	9.6	11.0
Colorectal	191.8	35.9	29.8	33.5
Liver/Intrahepatic Bile Duct	17.0	3.1	3.4	3.7
Pancreas	74.4	13.4	10.0	11.0
Larynx	6.2	1.2	0.8	0.9
Lung and Bronchus	291.0	54.7	35.0	39.7
Melanoma of the Skin	84.4	18.1	0.8	0.9
Female Breast	712.0	148.9	95.8	106.3
Cervix Uteri	25.6	6.4	9.2	10.9
Corpus Uterus and NOS	146.4	29.4	24.2	26.6
Ovary	65.0	13.4	10.0	11.1
Urinary Bladder (incl. in situ)	61.2	11.1	6.8	7.9
Kidney and Renal Pelvis	51.2	9.9	8.0	9.1
Brain and Other Nervous System	27.8	5.9	2.2	2.4
Thyroid	135.2	34.0	11.0	12.2
Hodgkin Lymphoma	12.0	3.4	1.6	1.9
Non-Hodgkin Lymphomas	102.6	20.1	10.4	11.4
Multiple Myeloma	27.8	5.1	13.0	14.6
Leukemias	77.4	15.1	6.0	6.5

Average Annual Incidence Rates Among Hispanic and Non-Hispanic Females

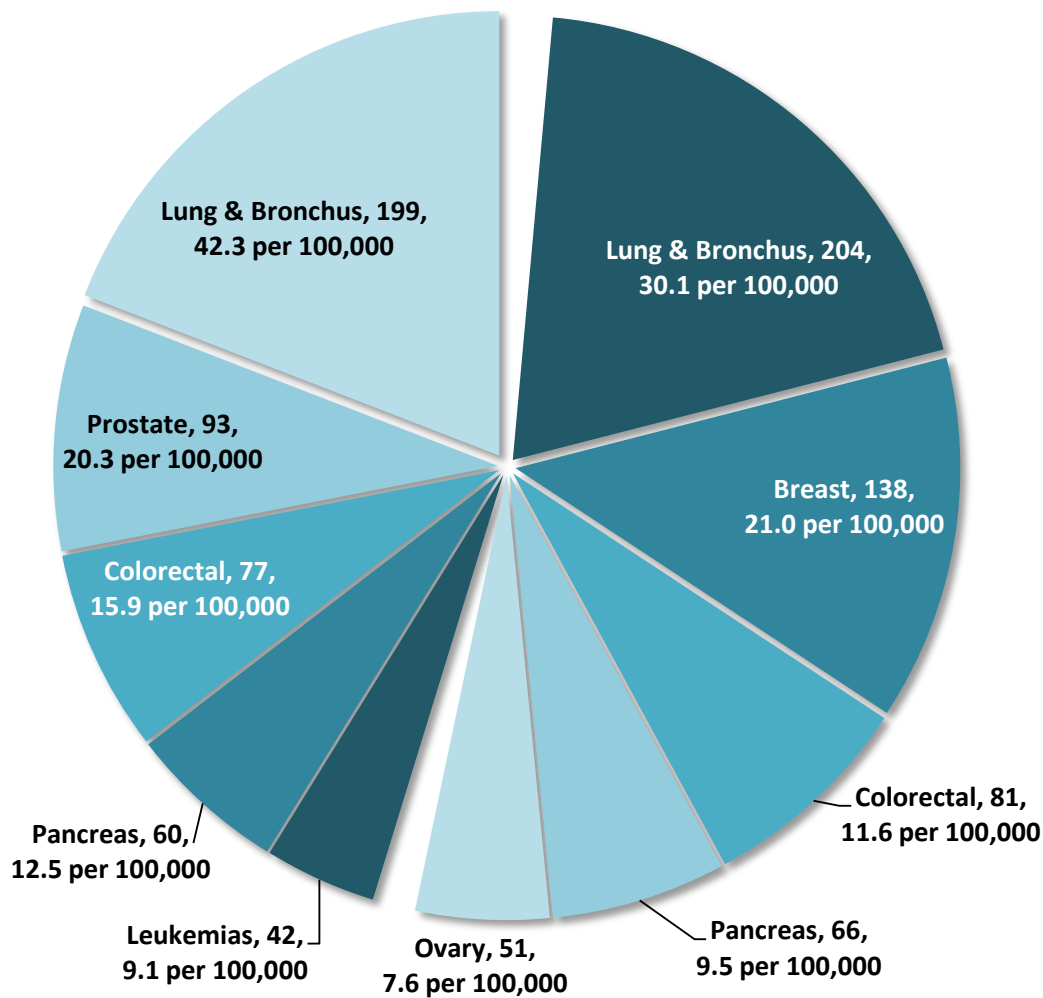
	Females			
	Non-Hispanic		Hispanic	
	Average Annual Cases	Rate	Average Annual Cases	Rate
All invasive Malignant Tumors	2,596.8	480.7	228.4	310.9
Oral Cavity and Pharynx	33.8	6.2	2.4	3.5
Esophagus	13.4	2.2	0.8	1.5
Stomach	35.4	5.8	5.6	8.4
Colorectal	210.6	36.0	20.2	28.8
Liver/Intrahepatic Bile Duct	18.4	3.1	3.6	6.0
Pancreas	80.4	13.2	6.6	10.5
Larynx	7.2	1.2	0.0	0.0
Lung and Bronchus	319.2	54.5	15.0	26.1
Melanoma of the Skin	86.6	17.2	2.4	3.0
Female Breast	777.8	149.1	68.6	88.1
Cervix Uteri	27.8	6.3	9.4	10.3
Corpus Uterus and NOS	164.8	29.9	13.0	17.0
Ovary	72.4	13.8	6.6	8.4
Urinary Bladder (incl. in situ)	65.8	10.8	3.2	5.0
Kidney and Renal Pelvis	56.6	10.0	5.2	7.8
Brain and Other Nervous System	27.2	5.3	4.2	5.3
Thyroid	138.4	32.7	19.0	20.6
Hodgkin Lymphoma	11.8	3.2	2.2	2.4
Non-Hodgkin Lymphomas	108.8	19.6	11.4	16.2
Multiple Myeloma	38.8	6.6	3.0	4.3
Leukemias	82.8	14.9	7.2	10.1

Average Annual Mortality by Sex

Average Annual Mortality By Sex and Top Five Cancer Sites, 2008-2012

Average Annual Male Deaths: 813
Mortality Rate: 171.1 per 100,000

Average Annual Female Deaths: 886
Mortality Rate: 130.6 per 100,000



New York State Incidence Rate:

Males: 192.1 per 100,000
 Females: 140.1 per 100,000

USA Incidence Rate:

Males: 207.9 per 100,000
 Females: 145.4 per 100,000

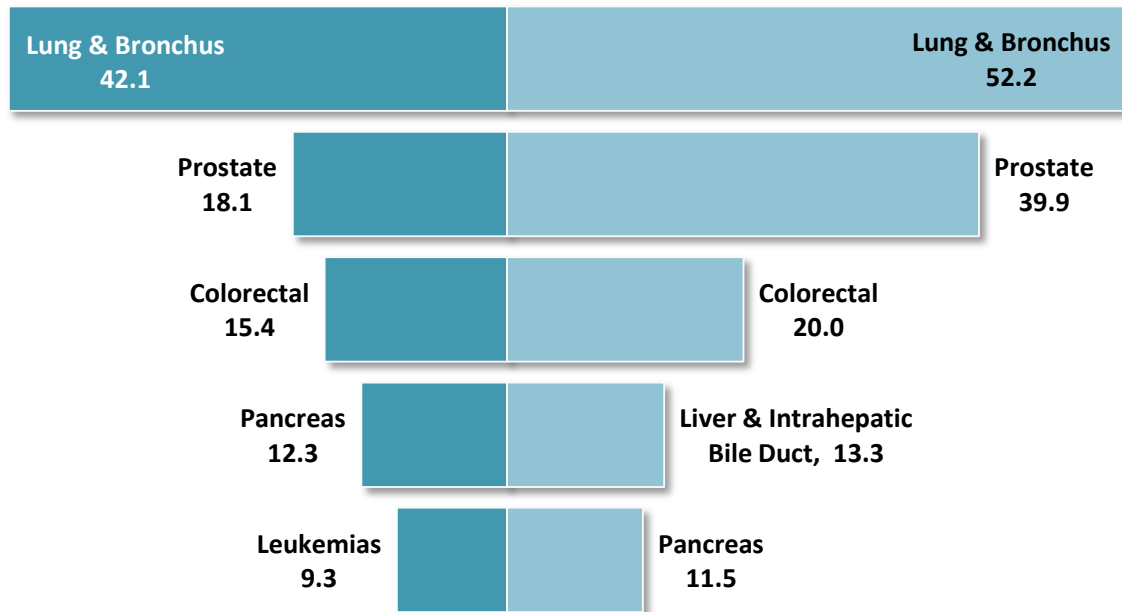
Rates are per 100,000 persons and age-adjusted to the 2000 US standard population.

Average Annual Mortality Rates by Race/Ethnicity, 2008-2012

Males

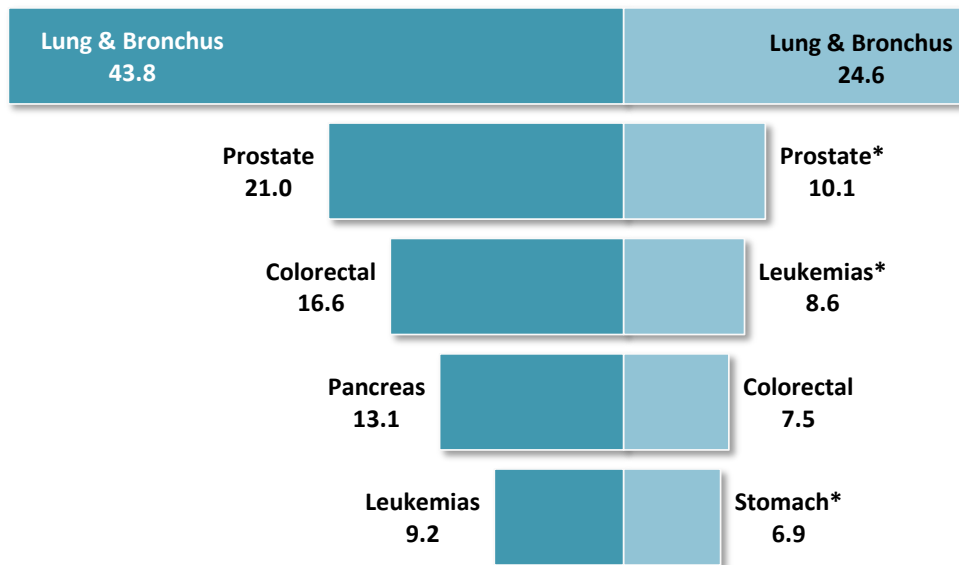
White
All Invasive Malignant Tumors: 167.4 per 100,000

Black
All Invasive Malignant Tumors: 214.1 per 100,000



Non-Hispanic
All Invasive Malignant Tumors: 176.3 per 100,000

Hispanic
All Invasive Malignant Tumors: 108.2 per 100,000



Rates are per 100,000 persons and age-adjusted to the 2000 US standard population.

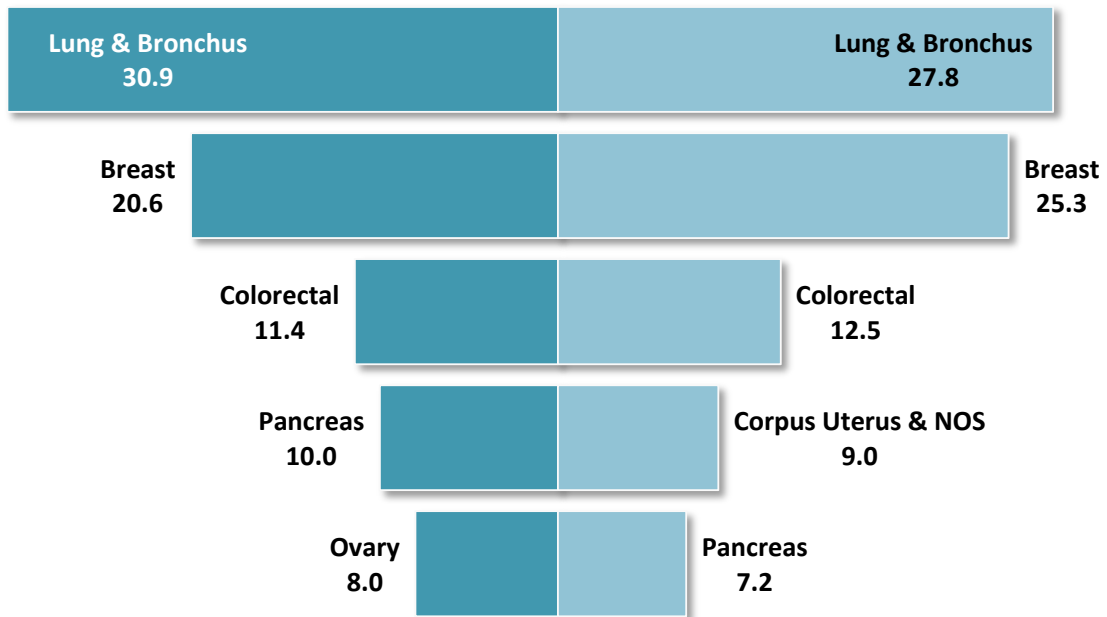
*Rates are based on fewer than four cases per year. Therefore these rates are unstable and should be used with caution.

Average Annual Mortality Rates by Race/Ethnicity, 2008-2012

Females

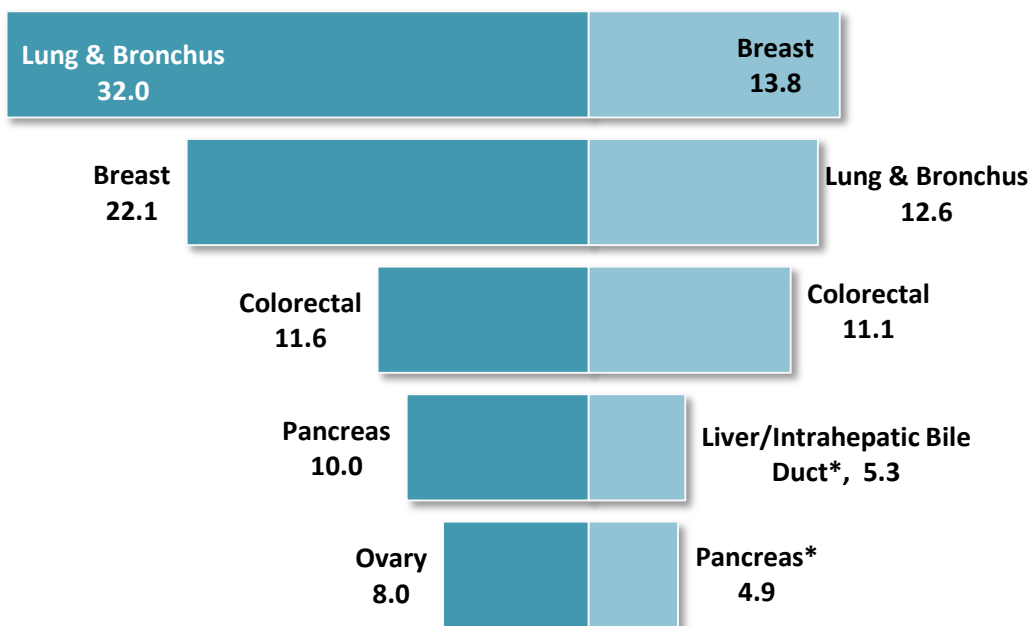
White
All Invasive Malignant Tumors: 130.7 per 100,000

Black
All Invasive Malignant Tumors: 148.3 per 100,000



Non-Hispanic
All Invasive Malignant Tumors: 135.0 per 100,000

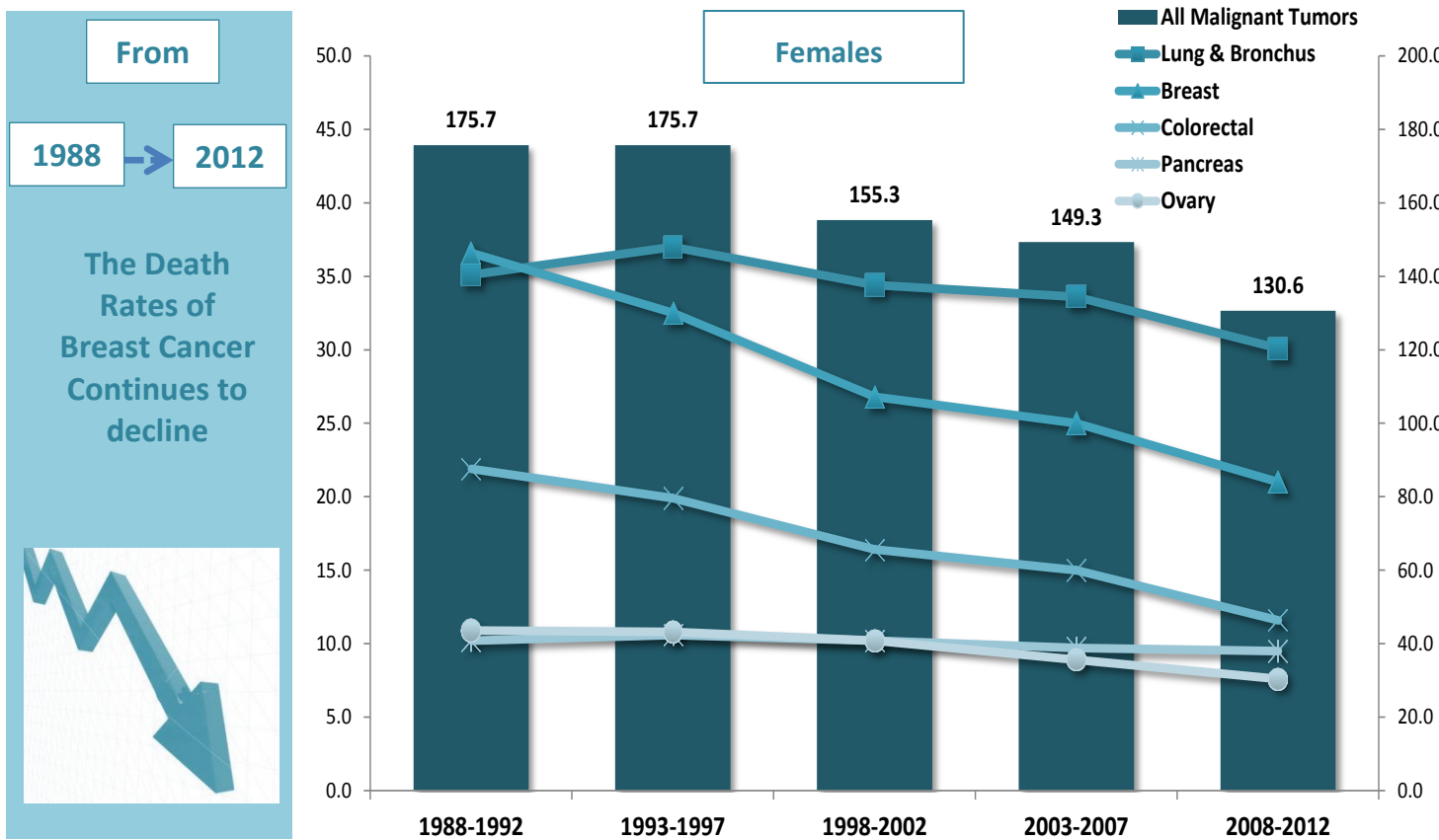
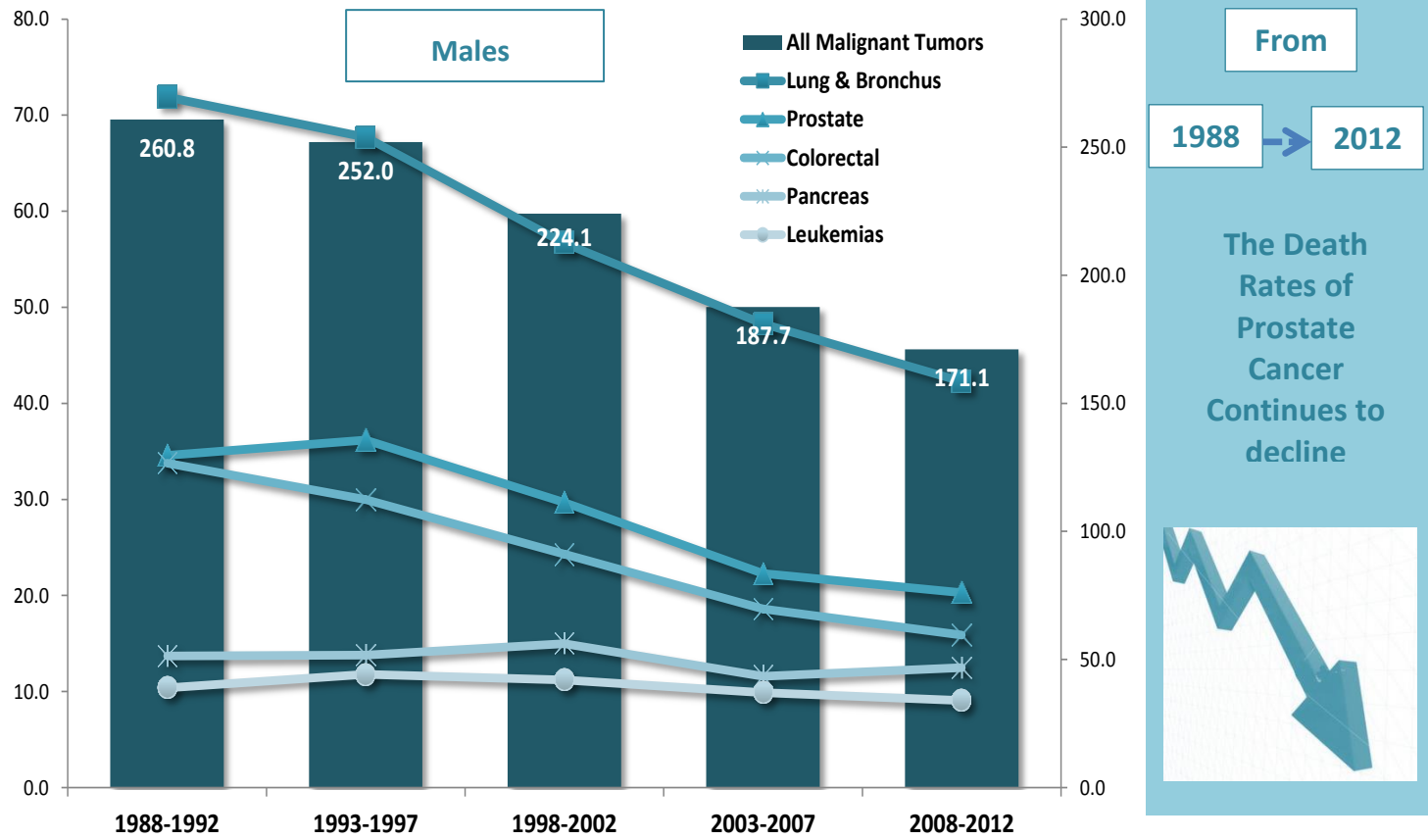
Hispanic
All Invasive Malignant Tumors: 90.9 per 100,000



Rates are per 100,000 persons and age-adjusted to the 2000 US standard population.

*Rates are based on fewer than four cases per year. Therefore these rates are unstable and should be used with caution.

Trends in Cancer Mortality Rates, 1988-2012



Average Annual Mortality Rates Among White and Black Males

	Males			
	White		Black	
	Average Annual Cases	Rate	Average Annual Cases	Rate
All invasive Malignant Tumors	675.8	167.4	111.6	214.1
Oral Cavity and Pharynx	9.8	2.4	2.2	4.0
Esophagus	24.4	5.9	4.2	3.8
Stomach	19.8	4.9	4.6	10.4
Colorectal	63.0	15.4	10.4	20.0
Liver/Intrahepatic Bile Duct	27.0	6.5	8.0	13.3
Pancreas	50.4	12.3	7.2	11.5
Larynx	5.2	1.3	0.2	0.3
Lung and Bronchus	168.4	42.1	26.6	52.2
Melanoma of the Skin	15.4	3.8	0.2	0.3
Prostate	72.8	18.1	17.4	39.9
Testis	0.4	0.1	0.2	0.3
Urinary Bladder (incl. in situ)	29.6	7.3	3.2	5.8
Kidney and Renal Pelvis	14.0	3.4	2.2	4.0
Brain and Other Nervous System	21.0	5.3	1.2	1.9
Thyroid	2.8	0.7	0.6	0.7
Hodgkin Lymphoma	0.8	0.2	0.6	0.8
Non-Hodgkin Lymphomas	29.2	7.4	3.6	7.1
Multiple Myeloma	14.0	3.3	2.8	5.6
Leukemias	37.0	9.3	4.2	8.0

Average Annual Mortality Rates Among Non-Hispanic and Hispanic Males

	Males			
	Non-Hispanic		Hispanic	
	Average Annual Cases	Rate	Average Annual Cases	Rate
All invasive Malignant Tumors	763.2	176.3	50.2	108.2
Oral Cavity and Pharynx	10.6	2.4	1.8	4.4
Esophagus	27.2	6.1	1.8	6.9
Stomach	22.6	5.1	3.4	6.9
Colorectal	72.4	16.6	4.2	7.5
Liver/Intrahepatic Bile Duct	34.0	7.7	3.6	5.5
Pancreas	57.4	13.1	2.6	6.8
Larynx	5.2	1.1	0.4	1.1
Lung and Bronchus	188.4	43.8	10.8	24.6
Melanoma of the Skin	15.4	3.6	0.6	1.0
Prostate	90.2	21.0	3.2	10.1
Testis	0.4	0.1	0.2	0.1
Urinary Bladder (incl. in situ)	32.8	7.6	0.4	1.1
Kidney and Renal Pelvis	15.6	3.5	1.4	3.6
Brain and Other Nervous System	20.4	4.9	2.0	3.1
Thyroid	3.4	0.8	0.2	0.7
Hodgkin Lymphoma	1.6	0.3	0.0	0.0
Non-Hodgkin Lymphomas	31.2	7.3	3.0	6.7
Multiple Myeloma	16.4	3.7	1.4	2.6
Leukemias	38.6	9.2	3.8	8.6

Average Annual Mortality Rates Among White and Black Females

	Females			
	White		Black	
	Average Annual Cases	Rate	Average Annual Cases	Rate
All invasive Malignant Tumors	739.4	130.7	122.6	138.4
Oral Cavity and Pharynx	5.0	0.8	1.6	1.7
Esophagus	10.8	1.9	2.2	2.5
Stomach	12.8	2.2	4.2	4.7
Colorectal	67.6	11.4	11.2	12.5
Liver/Intrahepatic Bile Duct	18.2	3.1	3.4	3.8
Pancreas	58.0	10.0	6.6	7.2
Larynx	1.4	0.2	0.2	0.2
Lung and Bronchus	174.0	30.9	24.4	27.8
Melanoma of the Skin	13.4	2.4	0.4	0.5
Female Breast	112.4	20.6	22.6	25.3
Cervix Uteri	5.6	1.3	5.0	5.6
Corpus Uterus and NOS	28.4	5.2	7.8	9.0
Ovary	43.6	8.0	5.4	6.0
Urinary Bladder (incl. in situ)	10.4	1.5	2.4	2.9
Kidney and Renal Pelvis	10.0	1.7	2.0	2.2
Brain and Other Nervous System	16.2	3.2	1.0	1.2
Thyroid	2.0	0.3	1.0	1.0
Hodgkin Lymphoma	1.6	0.4	0.0	0.0
Non-Hodgkin Lymphomas	29.8	5.0	2.6	2.9
Multiple Myeloma	13.8	2.3	4.8	5.7
Leukemias	30.2	5.4	2.4	2.6

Average Annual Mortality Rates Among Non-Hispanic and Hispanic Females

	Females			
	Non-Hispanic		Hispanic	
	Average Annual Cases	Rate	Average Annual Cases	Rate
All invasive Malignant Tumors	830.2	135.0	55.8	90.9
Oral Cavity and Pharynx	5.4	0.8	1.4	2.8
Esophagus	12.2	1.9	0.8	1.6
Stomach	15.8	2.4	2.2	2.9
Colorectal	74.4	11.6	7.0	11.1
Liver/Intrahepatic Bile Duct	19.6	3.1	2.8	5.3
Pancreas	63.4	10.0	2.8	4.9
Larynx	1.4	0.2	0.2	0.5
Lung and Bronchus	196.8	32.0	7.0	12.6
Melanoma of the Skin	13.4	2.2	0.4	0.6
Female Breast	129.6	22.1	8.8	13.8
Cervix Uteri	9.2	1.9	2.0	2.8
Corpus Uterus and NOS	34.6	5.8	2.4	3.3
Ovary	48.2	8.0	2.4	4.0
Urinary Bladder (incl. in situ)	12.4	1.8	0.4	0.6
Kidney and Renal Pelvis	11.6	1.8	0.6	1.0
Brain and Other Nervous System	16.8	3.0	0.8	1.0
Thyroid	3.2	0.5	0.0	0.0
Hodgkin Lymphoma	1.4	0.3	0.2	0.2
Non-Hodgkin Lymphomas	30.8	4.7	2.8	4.4
Multiple Myeloma	17.8	2.7	1.0	1.4
Leukemias	31.8	5.2	2.0	2.6

Data in this document are from New York State Department of Health (NYSDOH) Cancer Registry and Cancer Statistics.

The New York State Cancer Registry is one of the oldest cancer registries in the country and had been collecting information on patients with cancer for more than 50 years. According to New York Public Health Law Section 2401, all physicians, dentists, laboratories, and other health care providers are required to notify NYSDOH of every case of cancer or other malignant disease. Through the State Cancer Registry, the NYSDOH collects, processes, and reports information about New Yorkers diagnosed with cancer.

The Cancer Registry includes reports of all malignant cancers, except selected skin cancers. Basal cell and squamous cell cancers of the skin are exempt from reporting. Malignant cancers include those with both in situ and invasive behavior. In situ cancers are very early cancers, while invasive cancers have more potential to spread. The Cancer Registry also collects data on brain and nervous system tumors classified as benign or which have uncertain behavior.

Comparisons of incidence statistics for total cancers or categories that include tumors with revised behavior must be made with caution, especially when looking at statistics over time. In this report, data presented for the most recent five years, 2008-2012, include cancers classified as malignant based on The International Classification of Diseases for Oncology (ICD-O-3), which is the current standard. However, for any time trends where incidence rates are displayed by year from 1976 to 2012, the practice followed by the National Cancer Institute is used, omitting most newly-reportable cancers as well as the tumors that are no longer classified as malignant, for consistency purposes.

Cancer death rates shown here might differ slightly from those in the official reports released by the Vital Records Offices due to differences in population estimates. For this report, death rates were calculated using the Vintage 2012 annual population estimates, which incorporate adjustments of previous population estimates based on the actual 2010 census results. Annual cancer death rates reported by the Vital Records Offices are, instead, based on population estimates available at the time when each annual report is produced, and the rates for earlier death years that have already been posted are not re-calculated using revised population estimates.