FEMALE BREAST CANCER - Delaware 2012-2016

Risk Factors

- Alcohol use, high fat diet
- Obesity or overweight status
- Reproductive history (higher risk for women who never had children)
- Smoking and secondhand smoke
- Birth control use within then previous 10 years
- Age (2/3 of breast cancers occur in women 55 and older)
- Family or personal history of breast cancer
- Gene defects or mutations
- Race (higher risk for Caucasian women 45 and older)
- Dense breast tissue

Early Detection

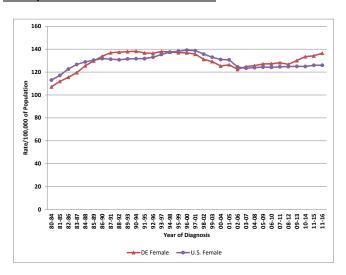
- Women aged 40 and older should get a screening mammogram every year
- Women should know how their breasts normally look and feel and report any breast changes to their physician
- Clinical breast exam is recommended every year for women starting at age 18
- Women at higher risk should discuss beginning mammograms at a younger age with their physician

Delaware Female Breast Cancer Facts

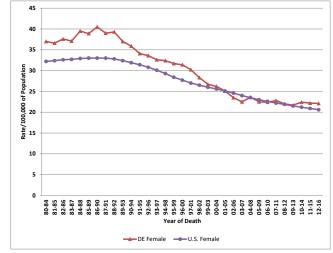
- In 2018, women in Delaware ranked 3rd nationally in mammogram screening
- It is the most common cancer diagnosed in women and the second leading cause of cancer death in women
- 30% of new cancer cases in women, 14% of all cancer deaths in women
- 76% of new cases are in non-Hispanic Caucasian women,
 77% of deaths are in non-Hispanic Caucasian women

	Incidence	Mortality
National Rank	6 th	20 th
Age Adjusted Rates^		
DE	136.5 (132.2, 140.8)	22.1 (20.4, 23.8)
US	126.0 (125.5, 126.4)	20.6 (20.5, 20.7)
DE – NH Caucasian	139.3 (134.1, 144.6)	21.3 (19.4, 23.3)
US – NH Caucasian	134.9 (134.3, 135.5)	20.6 (20.5, 20.7)
DE – NH African American	136.4 (126.7, 146.7)	24.9 (20.9, 29.6)
US – NH African American	130.5 (129.1, 131.8)	28.9 (28.6, 29.3)
DE – Hispanic	101.9 (82.3, 124.4)	
US – Hispanic	95.6 (94.6, 96.6)	14.3 (14.0, 14.5)
DE – Male	N/A	N/A
US – Male	N/A	N/A
DE – Female	N/A	N/A
US – Female	N/A	N/A
Stage of Diagnosis		
Local	68%	
Regional	25%	
Distant	6%	
Unknown	2%	
Age at Diagnosis*		
0-39 Years	13.7	
40-64 Years	246.1	34.8
65-74 Years	472.6	64.4
75-84 Years	491.8	116.9
85 Years and Older	382.8	188.6

<u>Five-Year Age-Adjusted Female Breast Cancer Incidence</u> Rates, US and Delaware 1980-2016



<u>Five-Year Age-Adjusted Female Breast Cancer Mortality</u> Rates, US and Delaware 1980-2016



NH - Non-Hispanic

^Age-Adjusted Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown) *Age-Specific Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown)

Data Sources

Delaware (Incidence): Department of Health and Social Services, Division of Public Health, Delaware Cancer Registry, 2019; (Mortality): Delaware Health Statistics Center, 2019

US (Incidence): Surveillance, Epidemiology and End Results Program (SEER 18), National Cancer Institute, 2018 sub; (Mortality): National Center for Health Statistics; SEER*Stat Database: Mortality-All COD, released December 2019

CERVICAL CANCER – Delaware 2012-2016

Risk Factors

- Infection from the human papilloma virus (HPV) 2/3 of all cervical cancers are caused by HPV 16 and 18
- Obesity and overweight
- Cigarette smoking (doubles the risk)
- Diet low in fruits and vegetables
- Infection with HIV or Chlamydia
- Long term use of oral contraceptives (5 or more years)
- Three or more full term pregnancies; having a full term pregnancy before age 17 doubles the risk compared to a woman who has a first pregnancy at age 25 or later

Early Detection

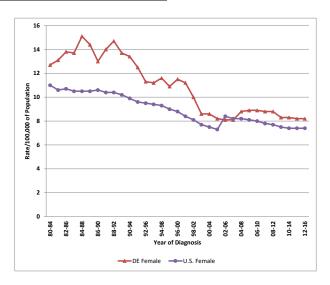
- Women 21 and older should have a pelvic exam annually
- Women 21 to 29 should have a Pap Test every 3 years
- Women 30 to 65 should have a Pap Test every 3 years or every 5 years with HPV co-testing
- Women who have been vaccinated against HPV should continue following the guidelines for their age group

Delaware Cervical Cancer Facts

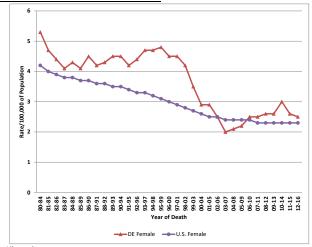
- In 2018, 83% of women 21-65 years of age in Delaware had a pap test within the last 3 years (compared to a national median of 80%)
- 1% of new cancer cases in women, 2% of all cancer deaths in women
- 69% of new cases are in non-Hispanic Caucasian women,
 73% of deaths are in non-Hispanic Caucasian women

	Incidence	Mortality
National Rank	14 th	16 th
Age Adjusted Rates^		
DE	8.2 (7.0, 9.4)	2.5 (1.9, 3.2)
US	7.4 (7.3, 7.5)	2.3 (2.2, 2.3)
DE – NH Caucasian	8.6 (7.1, 10.3)	2.5 (1.8, 3.3)
US – NH Caucasian	6.9 (6.8, 7.1)	2.1 (2.0, 2.1)
DE – NH African American	9.7 (7.2, 12.8)	
US – NH African American	8.6 (8.2, 8.9)	3.6 (3.5, 3.7)
DE – Hispanic		
US – Hispanic	9.2 (8.9, 9.5)	2.6 (2.5, 2.7)
DE – Male	N/A	N/A
US – Male	N/A	N/A
DE – Female	N/A	N/A
US – Female	N/A	N/A
Stage of Diagnosis		
Local	50%	
Regional	29%	
Distant		
Unknown		
Age at Diagnosis*		
0-39 Years	4.7	
40-64 Years	11.7	4.5
65-74 Years	15.6	
75-84 Years		
85 Years and Older		

Five-Year Age-Adjusted Cervical Cancer Incidence Rates, US and Delaware 1980-2016



<u>Five-Year Age-Adjusted Cervical Cancer Mortality Rates,</u> US and Delaware 1980-2016



NH – Non-Hispanic

^Age-Adjusted Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown) *Age-Specific Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown)

Data Source

Delaware (Incidence): Department of Health and Social Services, Division of Public Health, Delaware Cancer Registry, 2019; (Mortality): Delaware Health Statistics Center, 2019

US (Incidence): Surveillance, Epidemiology and End Results Program (SEER 18), National Cancer Institute, 2018 sub; (Mortality): National Center for Health Statistics; SEER*Stat Database: Mortality-All COD, released December 2019

COLORECTAL CANCER - Delaware 2012-2016

Risk Factors

- Diet high in red/processed meat
- Obesity
- Long term tobacco use
- Heavy alcohol use
- Type 2 diabetes
- Age 50 or older
- Increased risk in African Americans
- Personal history of colorectal adenomatous polyps
- Previous history of colorectal cancer
- History of Inflammatory Bowel Disease, Ulcerative Colitis or Crohn's Disease

Early Detection

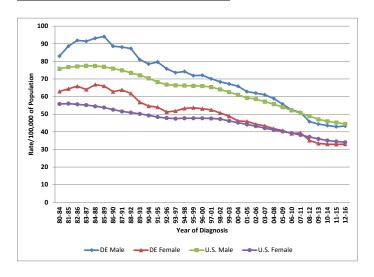
- Men and women 50 and older are recommended for screening
- Screening is through a FIT test annually or colonoscopy every 10 years
- In 2018 Delaware ranked 11th in the US of adults aged 50-74 who had been screened

Delaware Colorectal Cancer Facts

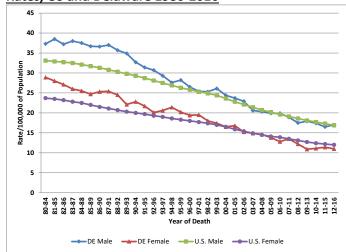
- Third most commonly diagnosed cancer in males and females and third most common cause of cancer death
- 8% of new cancer cases diagnosed, 8% of all cancer deaths
- 53% of new cases are in males, 55% of deaths are in males

	Incidence	Mortality
National Rank	31 st	35 th
Age Adjusted Rates^		
DE	37.5 (35.9, 39.2)	13.7 (12.7, 14.7)
US	38.8 (38.7, 39.0)	14.2 (14.1, 14.2)
DE – NH Caucasian	37.0 (35.2, 39.0)	13.2 (12.2, 14.4)
US – NH Caucasian	39.2 (38.9, 39.4)	14.1 (14.0, 14.1)
DE – NH African American	43.6 (39.3, 48.2)	15.6 (13.0, 18.5)
US – NH African American	47.7 (47.0, 48.3)	19.4 (19.2, 19.6)
DE – Hispanic	39.6 (30.4, 50.4)	
US – Hispanic	33.4 (32.9, 33.9)	11.3 (11.1, 11.4)
DE – Male	43.3 (40.7, 45.9)	17.0 (15.4, 18.7)
US – Male	44.5 (44.2, 44.7)	16.9 (16.9, 17.0)
DE – Female	33.0 (30.9, 35.1)	11.0 (9.9, 12.3)
US – Female	34.1 (33.9, 34.3)	12.0 (11.9, 12.0)
Stage of Diagnosis		
Local	40%	
Regional	35%	
Distant	21%	
Unknown	5%	
Age at Diagnosis*		
0-39 Years	2.4	
40-64 Years	52.5	16.3
65-74 Years	127.0	37.0
75-84 Years	210.6	93.8
85 Years and Older	259.3	166.6

Five-Year Age-Adjusted Colorectal Cancer Incidence Rates, US and Delaware 1980-2016



<u>Five-Year Age-Adjusted Colorectal Cancer Mortality</u> Rates, US and Delaware 1980-2016



NH - Non-Hispanic

^Age-Adjusted Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown) *Age-Specific Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown)

Data Sources

Delaware (Incidence): Department of Health and Social Services, Division of Public Health, Delaware Cancer Registry, 2019; (Mortality): Delaware Health Statistics Center, 2019

US (Incidence): Surveillance, Epidemiology and End Results Program (SEER 18), National Cancer Institute, 2018 sub; (Mortality): National Center for Health Statistics; SEER*Stat Database: Mortality-All COD, released December 2019

LUNG CANCER - Delaware 2012-2016

Risk Factors

- Tobacco use (according to the US Department of Health and Human Services 85%-90% are caused by tobacco use)
- Exposure to secondhand smoke
- Heave alcohol use
- Diet low in fruits and vegetables/high in cholesterol
- Occupational exposure to asbestos, paint, mustard gas and other chemicals
- Environmental exposure to radon gas, air pollution
- Family history of lung cancer
- Personal history of tuberculosis

Early Detection

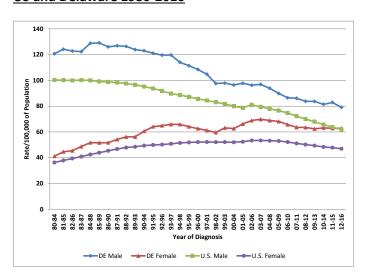
- Screening is recommended for men and women 55-80 who:
 - Smoke or have smoked a pack a day for 30 or more years, or 2 packs a day for 15 or more years
 - Currently smoke or quit smoking within the past 15 years
- Screening is performed using a CT scan
- Talk with provider to determine if lung cancer screening is needed

Delaware Lung Cancer Facts

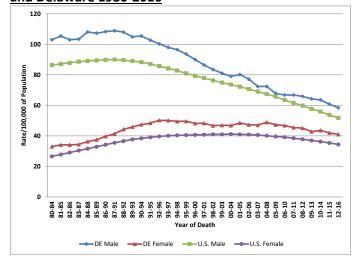
- Most frequently diagnosed cancer
- 15% of new cancer cases diagnosed, 28% of all cancer deaths
- 50% of cases are in males, 53% of deaths are in males
- In 2018, the smoking prevalence among adults in Delaware was 17%

	Incidence	Mortality
National Rank	10 th	14 th
Age Adjusted Rates^		
DE	69.7 (67.5, 71.9)	48.4 (46.6, 50.3)
US	53.4 (53.2, 53.7)	41.9 (41.8, 42.0)
DE – NH Caucasian	72.5 (70.0, 75.0)	49.1 (47.0, 51.1)
US – NH Caucasian	59.5 (59.3, 59.8)	45.0 (44.9, 45.2)
DE – NH African American	69.2 (63.7, 75.0)	46.5 (42.0, 51.4)
US – NH African American	61.5 (60.8, 62.3)	45.6 (45.3, 46.0)
DE – Hispanic	30.8 (22.4, 40.8)	24.8 (17.2, 34.1)
US – Hispanic	27.5 (27.1, 28.0)	18.3 (18.1, 18.5)
DE – Male	79.1 (75.7, 82.6)	58.4 (55.4, 61.5)
US – Male	61.9 (61.6, 62.3)	51.7 (51.5, 51.8)
DE – Female	62.9 (60.1, 65.7)	41.0 (38.8, 43.3)
US – Female	47.0 (46.8, 47.3)	34.4 (34.3, 34.5)
Stage of Diagnosis		
Local	24%	
Regional	22%	
Distant	50%	
Unknown	5%	
Age at Diagnosis*		
0-39 Years		
40-64 Years	78.3	49.5
65-74 Years	330.0	205.6
75-84 Years	484.1	361.3
85 Years and Older	383.3	389.8

Five-Year Age-Adjusted Lung Cancer Incidence Rates, US and Delaware 1980-2016



Five-Year Age-Adjusted Lung Cancer Mortality Rates, US and Delaware 1980-2016



NH - Non-Hispanic

^Age-Adjusted Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown) *Age-Specific Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown)

Data Sources

Delaware (Incidence): Department of Health and Social Services, Division of Public Health, Delaware Cancer Registry, 2019; (Mortality): Delaware Health Statistics Center, 2019

US (Incidence): Surveillance, Epidemiology and End Results Program (SEER 18), National Cancer Institute, 2018 sub; (Mortality): National Center for Health Statistics; SEER*Stat Database: Mortality-All COD, released December 2019

MELANOMA - Delaware 2012-2016

Risk Factors

- Excessive ultraviolet (UV) light from the sun, tanning lamps or tanning beds
- History of frequent sunburns (especially before age 20)
- Having many moles (particularly abnormal moles)
- Light colored skin, freckles, light hair and/or blue/green eyes
- Caucasians are 10 times more likely to have melanoma than African Americans
- Family or personal history of malignant melanoma
- Increasing age
- Women are at higher risk before age 40; men after age 40
- Xeroderma pigmentosum (rare inherited condition)

Early Detection

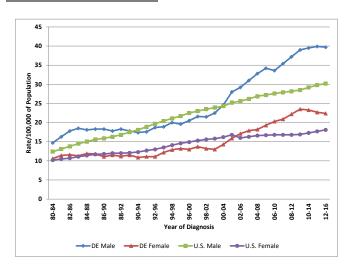
- Self-examination of the skin monthly
- For high-risk individuals, thorough examination of the skin by a healthcare professional

Delaware Melanoma Facts

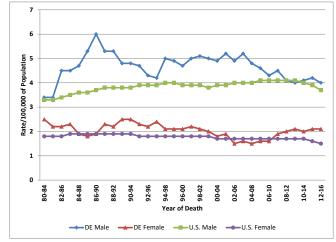
- 6% of new cancer cases diagnosed, 2% of all cancer deaths
- 61% of new cases are in males, 63% of deaths are in males

	Incidence	Mortality
National Rank	5 th	18 th
Age Adjusted Rates^		
DE	29.9 (28.4, 31.4)	2.9 (2.5, 3.4)
US	23.2 (23.1, 23.4)	2.5 (2.5, 2.5)
DE – NH Caucasian	39.0 (37.1, 41.1)	3.5 (2.9, 4.1)
US – NH Caucasian	33.3 (33.1, 33.5)	3.2 (3.1, 3.2)
DE – NH African American		
US – NH African American	1.0 (1.0, 1.1)	0.4 (0.3, 0.4)
DE – Hispanic		
US – Hispanic	5.0 (4.8, 5.2)	0.7 (0.7, 0.8)
DE – Male	39.7 (37.3, 42.3)	4.0 (3.3, 4.9)
US – Male	30.2 (30.0, 30.5)	3.7 (3.7, 3.8)
DE – Female	22.4 (20.6, 24.2)	2.1 (1.6, 2.7)
US – Female	18.1 (17.9, 18.2)	1.5 (1.5, 1.6)
Stage of Diagnosis		
Local	76%	
Regional	6%	
Distant	6%	
Unknown	12%	
Age at Diagnosis*		
0-39 Years	4.9	
40-64 Years	40.5	3.0
65-74 Years	111.0	10.8
75-84 Years	148.1	17.2
85 Years and Older	141.9	29.5

Five-Year Age-Adjusted Melanoma Incidence Rates, US and Delaware 1980-2016



<u>Five-Year Age-Adjusted Melanoma Mortality Rates, US and Delaware 1980-2016</u>



NH - Non-Hispanic

^Age-Adjusted Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown)

Data Sources

Delaware (Incidence): Department of Health and Social Services, Division of Public Health, Delaware Cancer Registry, 2019; (Mortality): Delaware Health Statistics Center, 2019

US (Incidence): Surveillance, Epidemiology and End Results Program (SEER 18), National Cancer Institute, 2018 sub; (Mortality): National Center for Health Statistics; SEER*Stat Database: Mortality-All COD. released December 2019

^{*}Age-Specific Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown)

PROSTATE CANCER - Delaware 2012-2016

Risk Factors

- · Diet high in red meat, high fat dairy
- Obesity
- Tobacco and heavy alcohol use
- Age (risk increases sharply after age 50)
- Race/ethnicity (African Americans- higher risk; Hispanics lower risk)
- Nationality (higher risk for North American/Northwestern European)
- Family history, inherited DNA changes, gene mutations
- Higher levels of testosterone
- Infection and inflammation of prostate gland

Delaware Prostate Cancer Facts

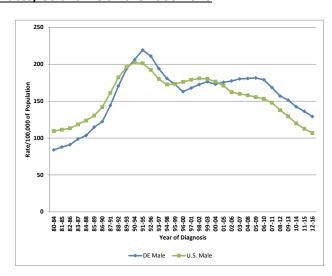
- In 2018, 38% of Delaware males 40 and older had a PSA in the past 2 years compared to 33% nationally
- It is the most common cancer diagnosed in men
- 26% of new cancer cases in men, 8% of all cancer deaths in men
- 69% of new cases are in non-Hispanic Caucasian men,
 71% of deaths are in non-Hispanic Caucasian men

	Incidence	Mortality
National Rank	3 rd	46 th
Age Adjusted Rates^		
DE	129.1 (124.9, 133.4)	17.8 (16.1, 19.7)
US	106.8 (106.4, 107.3)	19.3 (19.2, 19.4)
DE – NH Caucasian	113.2 (108.8, 117.8)	15.3 (13.6, 17.2)
US – NH Caucasian	103.0 (102.5, 103.5)	18.1 (18.0, 18.2)
DE – NH African American	214.4 (200.5, 228.9)	33.8 (27.3, 41.3)
US – NH African American	175.3 (173.4, 177.1)	39.8 (39.3, 40.3)
DE – Hispanic	120.9 (97.1, 148.1)	
US – Hispanic	86.6 (85.4, 87.7)	15.9 (15.6, 16.3)
DE – Male	N/A	N/A
US – Male	N/A	N/A
DE – Female	N/A	N/A
US – Female	N/A	N/A
Stage of Diagnosis		
Local	76%	
Regional	9%	
Distant	7%	
Unknown	8%	
Age at Diagnosis*		
0-39 Years		
40-64 Years	210.4	6.9
65-74 Years	717.2	48.7
75-84 Years	563.5	146.8
85 Years and Older	387.5	409.6

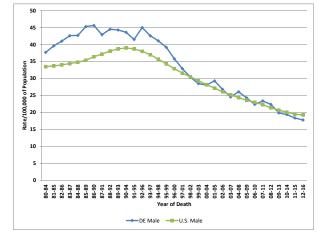
Early Detection

- An informed decision from physician whether to get screened as there are no mass screening efforts in Delaware
- High risk (African-American men) individuals should be screened at 40 and older
- Average risk individuals may be screened starting at age 50 (using informed decision making process with physician)
- Screening via prostate specific antigen (PSA) test with or without a digital rectal exam (DRE)

Five-Year Age-Adjusted Prostate Cancer Incidence Rates, US and Delaware 1980-2016



<u>Five-Year Age-Adjusted Prostate Cancer Mortality</u> <u>Rates, US and Delaware 1980-2016</u>



NH – Non-Hispanic

^Age-Adjusted Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown) *Age-Specific Rates/100,000 of Population (rates based on < 25 cases or deaths are not shown)

Data Source:

Delaware (Incidence): Department of Health and Social Services, Division of Public Health, Delaware Cancer Registry, 2019; (Mortality): Delaware Health Statistics Center, 2019

US (Incidence): Surveillance, Epidemiology and End Results Program (SEER 18), National Cancer Institute, 2018 sub; (Mortality): National Center for Health Statistics; SEER*Stat Database: Mortality-All COD, released December 2019