## 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 $3^{\text {rd }}$ 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 <br> Age Adjusted Rates^ <br> 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* |  | 34.8 |
| $\mathbf{0 - 3 9}$ Years | 13.7 | 64.4 |
| $\mathbf{4 0 - 6 4 ~ Y e a r s ~}$ | 246.1 | 116.9 |
| $\mathbf{6 5 - 7 4 ~ Y e a r s ~}$ | 472.6 | 188.6 |
| $\mathbf{7 5 - 8 4}$ Years | 491.8 |  |
| 85 Years and Older | 382.8 |  |

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


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


[^0]${ }^{\wedge}$ 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: MortalityAll 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 | $14^{\text {th }}$ | $16^{\text {th }}$ |
| 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


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

## NH - Non-Hispanic

${ }^{\wedge}$ 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)

## 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 $11^{\text {th }}$ 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

| National Rank <br> Age Adjusted Rates^ <br> Incidence | Mortality |  |
| ---: | :---: | :---: |
| US | $37.5(35.9,39.2)$ | $13.7(12.7,14.7)$ |
| 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 | $34.1(33.9,34.3)$ | $12.0(11.9,12.0)$ |
| Local |  |  |
| Regional | $40 \%$ | --- |
| Distant | $35 \%$ | --- |
| Unknown | $21 \%$ | --- |
| Stage of Diagnosis | $5 \%$ | --- |
| Age at Diagnosis* |  | 16.3 |
| 0-39 Years | 2.4 | 37.0 |
| $\mathbf{4 0 - 6 4 ~ Y e a r s ~}$ | 52.5 | 93.8 |
| $\mathbf{6 5 - 7 4}$ Years | 127.0 | 166.6 |
| $\mathbf{7 5 - 8 4}$ Years | 210.6 |  |
| 85 Years and Older | 259.3 |  |

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


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

^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)

[^1]
## 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 | $10^{\text {th }}$ | $14^{\text {th }}$ |
| 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)

## 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 | $5^{\text {th }}$ | $18^{\text {th }}$ |
| 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


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


[^2]${ }^{\wedge}$ 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: MortalityAll COD, released December 2019
Screening: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence \& Trends Data, 2015.

## 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


## 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)


## 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 | $3^{\text {rd }}$ | $46^{\text {th }}$ |
| 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 |

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


Five-Year Age-Adjusted Prostate 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)


[^0]:    NH - Non-Hispanic

[^1]:    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: MortalityAll COD, released December 2019

    Screening: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence \& Trends Data, 2015.

[^2]:    NH - Non-Hispanic

