### CANCER INCIDENCE AND MORTALITY DELAWARE, 2011-2015

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#### Overview

- All-site cancer rates
- Eight site-specific cancers
- Special section on lung cancer
- Census tract analyses
  - All-site cancer incidence rates for Delaware's 214 census tracts
  - 16 census tracts with all-site cancer incidence rates that were statistically significantly higher than the statewide all-site cancer incidence rates
  - Analysis and findings published in a separate report (available on the DPH website)

# ALL-SITE CANCER INCIDENCE

#### 2011-2015 Incidence Facts

- Total of 28,027 cases (average of 5,605 per year)
- By sex
  - o Male 52%
  - Female 48%
- By race/ethnicity
  - Non-Hispanic Caucasian 79%
  - Non-Hispanic African American 17%
  - Hispanic 3%
- By county
  - New Castle County 53%
  - Kent County 18%
  - Sussex County 29%



### All-Site Cancer Incidence; Delaware vs. U.S., 2011-2015

 Delaware remained ranked 2<sup>nd</sup> highest nationally for cancer incidence (statistically significantly higher than the U.S. incidence rate)

o Delaware: 495.3 per 100,000

o U.S.: 439.2 per 100,000

 Delaware males ranked 3<sup>rd</sup> highest for cancer incidence (statistically significantly higher than the male U.S. incidence rate)

Delaware males: 554.4 per 100,000

U.S. males: 483.0 per 100,000

 Delaware females ranked 5<sup>th</sup> highest for cancer incidence (statistically significantly higher than the female U.S. incidence rate)

O Delaware females: 453.3 per 100,000

U.S. females: 409.9 per 100,000

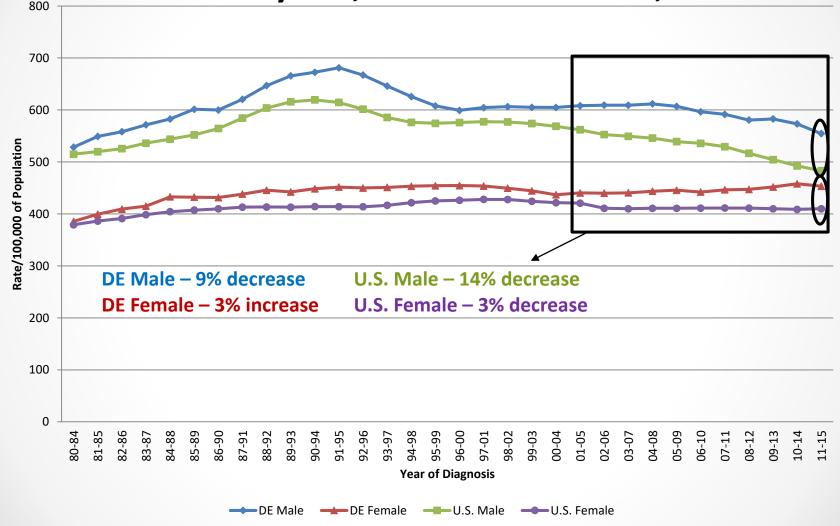


## Most Commonly Diagnosed Cancers in Delaware, 2011-2015

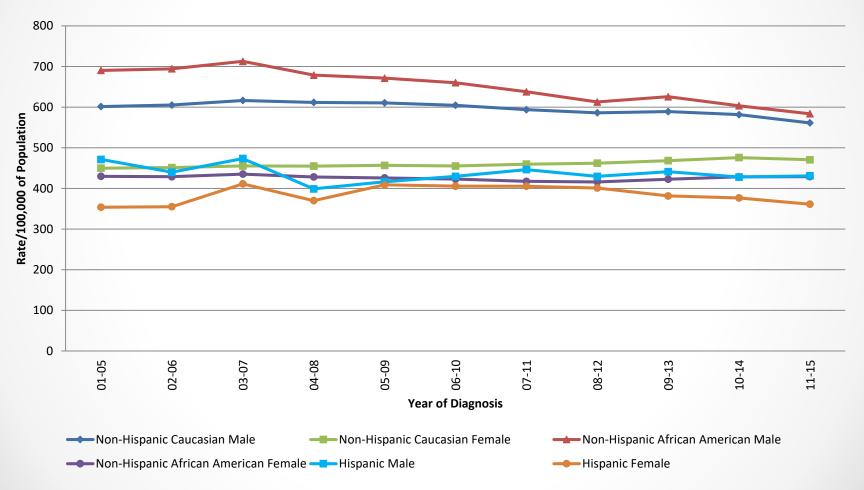
MALES		
1. Prostate	3,817	26%
2. Lung	2,134	15%
3. Colorectal	1,084	7%
4. Urinary bladder	1,082	7%
5. Melanoma	1,010	7%
6. NHL	627	4%
7. Kidney	625	4%
8. Oral	520	4%
9. Leukemia	474	3%
10. Pancreas	437	3%

FEMALES		
1. Breast	4,008	30%
2. Lung	1,982	15%
3. Colorectal	997	7%
4. Uterine	955	7%
5. Melanoma	658	5%
6. Thyroid	602	4%
7. NHL	537	4%
8. Pancreas	398	3%
9. Ovary	343	3%
10. Kidney	337	2%

### Five-Year Average Age-Adjusted All-Site Cancer Incidence Rates by Sex; U.S. and Delaware, 1980-2015



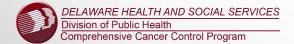
# Five-Year Average Age-Adjusted All-Site Cancer Incidence Rates by Sex and Race/Ethnicity; Delaware, 2001-2015



# ALL-SITE CANCER MORTALITY

#### 2011-2015 Mortality Facts

- Total of 9,718 deaths from cancer (average of 1,944 per year)
- By sex
  - o Male 51%
  - Female 49%
- By race/ethnicity
  - Non-Hispanic Caucasian 80%
  - Non-Hispanic African American 17%
  - Hispanic 2%
- By county
  - New Castle County 53%
  - Kent County 19%
  - Sussex County 28%



### All-Site Cancer Mortality; Delaware vs. U.S., 2011-2015

 DE ranked 18<sup>th</sup> highest nationally for cancer mortality (statistically significantly higher than the U.S. mortality rate)

Delaware: 175.1 per 100,000

U.S.: 163.5 per 100,000

• DE males ranked 22<sup>nd</sup> highest for cancer mortality (statistically significantly higher than the male U.S. mortality rate)

Delaware males: 206.1 per 100,000

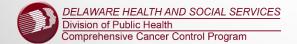
U.S. males: 196.8 per 100,000

 DE females ranked 14<sup>th</sup> highest for cancer mortality (statistically significantly higher than the female U.S. mortality rate)

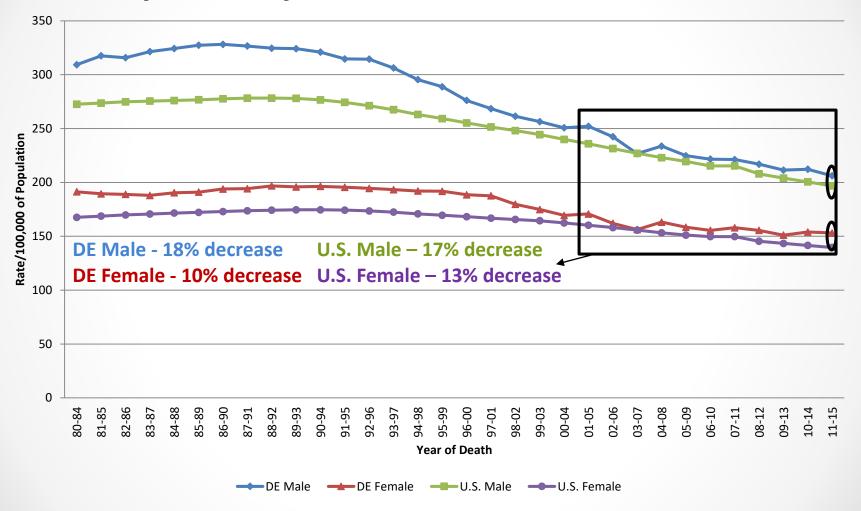
Delaware females: 153.0 per 100,000

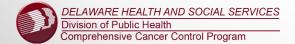
U.S. females: 139.6 per 100,000

 Non-Hispanic Caucasians in DE had a <u>statistically significantly higher</u> mortality rate than non-Hispanic Caucasians in the U.S.

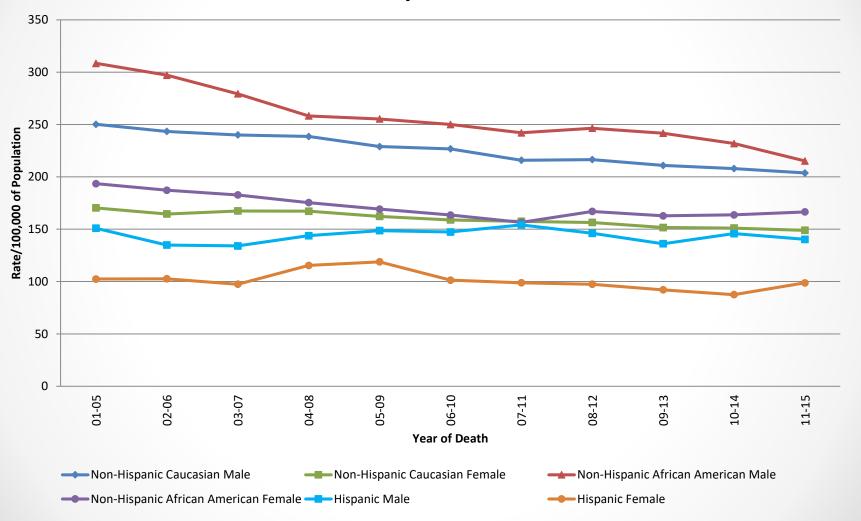


### Five-Year Average Age-Adjusted All-Site Cancer Mortality Rates by Sex; U.S. and Delaware, 1980-2015





#### Five-Year Average Age-Adjusted All-Site Cancer Mortality Rates by Sex and Race/Ethnicity; Delaware, 2001-2015





# NOTABLE SITE-SPECIFIC CANCER DETAILS

### Cancers Sites with Statistically Significant Differences from the U.S.

Delaware Incidence Rate
Statistically Significantly
Higher than U.S.

All-site
Breast
Lung
Pancreas

**Prostate** 

Urinary bladder

Delaware Incidence
Rate Statistically
Significantly Lower
than U.S.

Colorectal

### Cancer Sites with Dramatic Increases in Incidence from 2001-2005 to 2011-2015

Cancer Site	Delaware Percent change 2001-2005 to 2011-2015	U.S. Percent change 2001-2005 to 2011-2015
Liver	+75%	+57%

### Cancer Sites with Dramatic Decreases in Incidence from 2001-2005 to 2011-2015

Cancer Site	Delaware Percent change 2001-2005 to 2011-2015	U.S. Percent change 2001-2005 to 2011-2015
Colorectal	-30%	-22%
Prostate	-22%	-34%



## Cancer Sites with Dramatic Increases in Mortality from 2001-2005 to 2011-2015

Cancer Site	Delaware Percent change 2001-2005 to 2011-2015	U.S. Percent change 2001-2005 to 2011-2015
Liver	+44%	+28%

## Cancer Sites with Dramatic Decreases in Mortality from 2001-2005 to 2011-2015

Cancer Site	Delaware Percent change 2001-2005 to 2011-2015	U.S. Percent change 2001-2005 to 2011-2015
Colorectal	-31%	-23%
Lung	-19%	-20%
Prostate	-37%	-28%
Stomach	-16%	-22%

#### **Lung Cancer in Delaware**

- The most frequently diagnosed cancer in Delaware in 2011-2015 – 15% of all new cancer cases
- Most lung cancers are diagnosed at distant stage (52%)
  - This is an increase from 45% in 1980-1984
- The most common cause of cancer death in Delaware in 2011-2015 – 29% of cancer deaths
- Data from the Delaware Cancer Treatment Program (DCTP) for 2002-2017 show that lung cancer was the most common cancer treated through the program
  - Second to breast cancer for number of claims and amount of claims paid
- Early detection and screening are pivotal in reducing the burden from lung cancer in Delaware

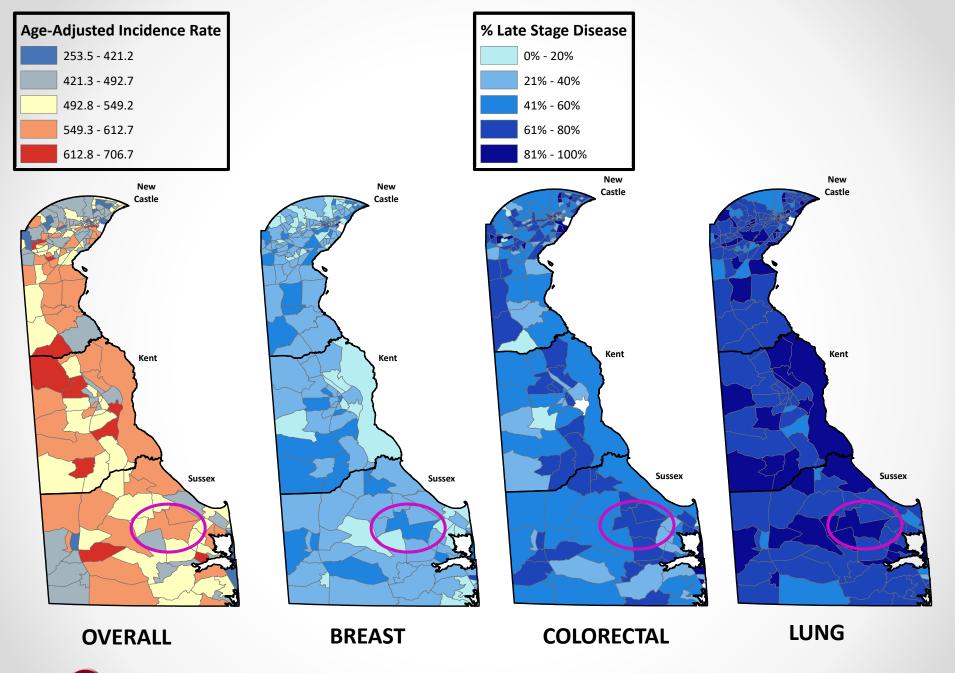


#### **Cancer Screening**

- The Behavioral Risk Factor Survey (BRFS) collects information on cancer screening
- Breast cancer Delaware ranks 3<sup>rd</sup> nationally for mammography
  - 78% of Delaware females 40 and older were screened for breast cancer in the previous 2 years compared to 72% nationally
- Colorectal cancer Delaware ranks 12<sup>th</sup> nationally for meeting USPSTF colorectal cancer screening
  - 77% of Delawareans met the USPSTF recommendations compared to 68% nationally
- Prostate cancer Delaware ranks 6<sup>th</sup> for PSA tests
  - 45% of Delaware males 40 and older had a PSA test in the past 2 years compared to 39% nationally

#### **Cancer Prevention**

- Tobacco use is the leading risk factor
  - In 2017, 17% of Delawareans were current smokers, the same as nationally
  - Contributes to many cancers including lung, esophagus, kidney, urinary bladder, stomach, and pancreas
- Lack of physical activity and unhealthy eating are associated with increased risk of multiple cancers
- Alcohol abuse is a risk factor for many cancers
  - Particularly liver cancer which saw the highest increase in incidence for 2001-2005 to 2011-2015
- Excessive sun exposure is a risk factor for melanoma





#### Summary

- Delaware continues to have the second highest cancer incidence in the nation even though incidence rates are declining.
- Delaware mortality rates are decreasing even though Delaware ranks 18<sup>th</sup> nationally for cancer mortality.
- Cancer screening rates continue to be high in Delaware with an increasing number of cancers being diagnosed at earlier, more treatable stages.
- Lung cancer is the most commonly diagnosed cancer in Delaware and the number one site for cancer death.
- There need to be continued efforts to improve and enhance not only cancer screening, but also cancer prevention in Delaware by addressing behavioral risk factors and social determinants of health.

# The full report can be found at

http://dhss.delaware.gov/dph/dpc/cancer.html

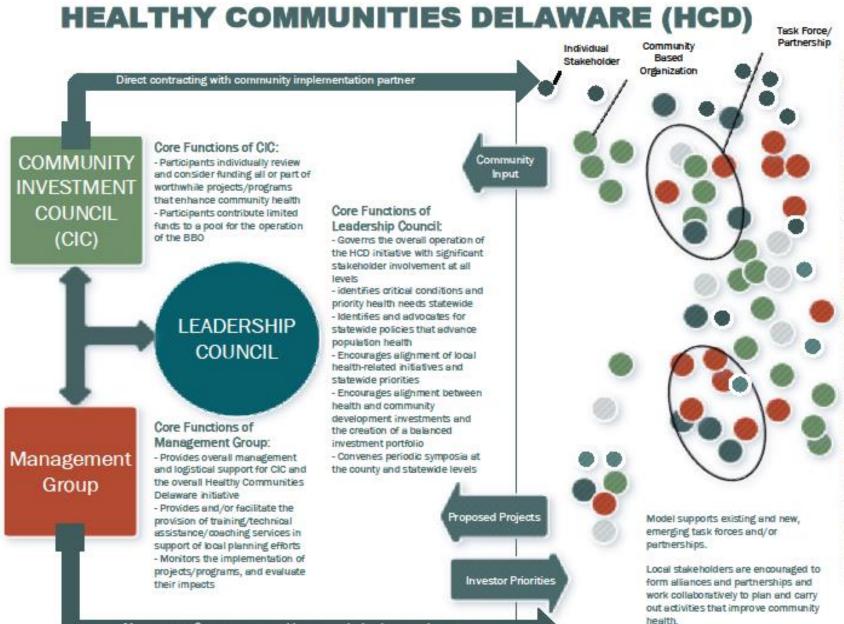
#### Discussion/Wrap Up

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#### Population-based Prevention Initiatives

- Governor's Action Plan
- Lt. Governor's Challenge 2.0
- Social Marketing
- Healthy Communities Delaware



Management Group contracts with community implementation partner

HCD INFRASTRUCTURE

- → School-Based Programs to Increase Physical Activity
- → School-Based Violence Prevention
- → Safe Routes to School
- → Motorcycle Injury Prevention
- → Tobacco Control Interventions
- → Access to Clean Syringes
- → Pricing Strategies for Alcohol Products
- → Multi-Component Worksite Obesity Prevention

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Counseling and Education

**Clinical Interventions** 

Long Lasting
Protective Interventions

**Changing the Context** 

Making the healthy choice the easy choice

- → Early Childhood Education
- → Clean Diesel Bus Fleets
- → Public Transportation System
- → Home Improvement Loans and Grants
- → Earned Income Tax Credits
- → Water Fluoridation

**Social Determinants of Health** 

HEALTH IMPACT IN 5 YEARS

#### My Health Community landing page

https://myhealthycommunity.dhss.delaware.gov



You can search for:

- Street address
- Zip code
- Census tract block group
- Neighborhood
- Town/City
- County
- Also provides state-level reports
- Note regarding HIPAA
  - Not all data can be made available at the small spatial resolutions to ensure HIPAA compliance.

- <u>1st approach:</u> smaller geography when suppression rules met, if not aggregates multiple years
- 2<sup>nd</sup> approach: next higher geography with annual or multiple years if necessary

