



SECONDARY ANALYSIS OF DELAWARE'S CENSUS TRACTS WITH ELEVATED ALL-SITE CANCER INCIDENCE RATES IN 2011-2015 (July 2019)

In July 2019, the Delaware Department of Health and Social Services (DHSS), Division of Public Health (DPH) released its annual cancer incidence and mortality (I&M) report. In accordance with Delaware legislation, DPH calculated the 2011-2015 all-site cancer incidence rates for each of Delaware's 214 census tracts and these results are included in the *Cancer Incidence and Mortality in Delaware (I&M) Report, 2011-2015*. This report summarizes the secondary analyses for the 16 census tracts with a significantly elevated all-site cancer incidence rate for 2011-2015 (New Castle County: 29.00, 148.05, 149.03, 163.01, 166.04, 166.08, 168.04, 169.01; Kent County: 401.00, 402.03, 417.01, 418.01; and Sussex County: 504.08, 507.04, 508.02, 508.03).

In Delaware, all-site cancer incidence rates measure the total cancer burden for an area over a five-year period. Crude cancer incidence rates are calculated by dividing the total number of cancer cases in an area by the total number of people living in that area. Crude incidence rates are then age-adjusted to the 2000 U.S. standard population and expressed as the average annual number of new cases diagnosed per year per 100,000 people. The age distribution of a population is an important determinant of the burden of cancer. Because cancer incidence and mortality increase with age, crude rates cannot be used for comparisons of cancer statistics between sexes, racial or ethnic groups, or geographic entities across different time spans. U.S. Census Bureau data were used to estimate populations in each census tract.

The 2011-2015 all-site cancer incidence rate for each of Delaware's 214 census tracts were compared to the all-site cancer incidence rate for the entire state. DPH used standard statistical procedures to determine if the difference between each census tract's all-site cancer incidence rate and the state all-site cancer incidence rate reached the threshold of statistical significance. If a census tract's all-site cancer incidence rate is significantly higher than the state all-site cancer incidence rate, the difference between the rates is interpreted as "larger than would be expected by chance alone." If a census tract's all-site cancer incidence rate is significantly lower than the state all-site cancer incidence rate, the difference is interpreted as "smaller than would be expected by chance alone." If a census tract's all-site cancer incidence rate is not significantly different from the state all-site cancer incidence rate, the difference between the rates is interpreted as "not meaningfully different." Please refer to the 2011-2015 I&M Report for additional details pertaining to rate calculation methodology and testing for statistical significance.

There is an inherent instability in calculating cancer incidence rates at the census tract level. In a small group, such as a census tract, the snapshot changes considerably from year to year. If one case of cancer is diagnosed in a census tract one year, and three cases of cancer are diagnosed in the same census tract the next year, the cancer rate for that census tract will change dramatically from one year to the next. These large fluctuations do not typically occur in larger populations. If we compare the cancer rate for a census tract to the cancer rate for the whole state of Delaware for a given time period, it would not be unusual to find the comparison different (perhaps even reversed) in the following time period.

When cancer incidence data are assessed by census tract, the occurrence of cancer may differ across census tracts for a variety of reasons. For example, lifestyle behaviors may cluster in a homogeneous community. In addition, the presence or absence of exposure to an environmental or occupational carcinogen(s) is often limited to a defined geographic area. In addition, residents in certain geographic areas may be more impoverished than other residents, affecting access to health care, including cancer screening services. Population changes, such as residents moving into, or out of, a census tract, can also affect the cancer rates. Finally, chance or random variation can also influence whether a census tract's all-



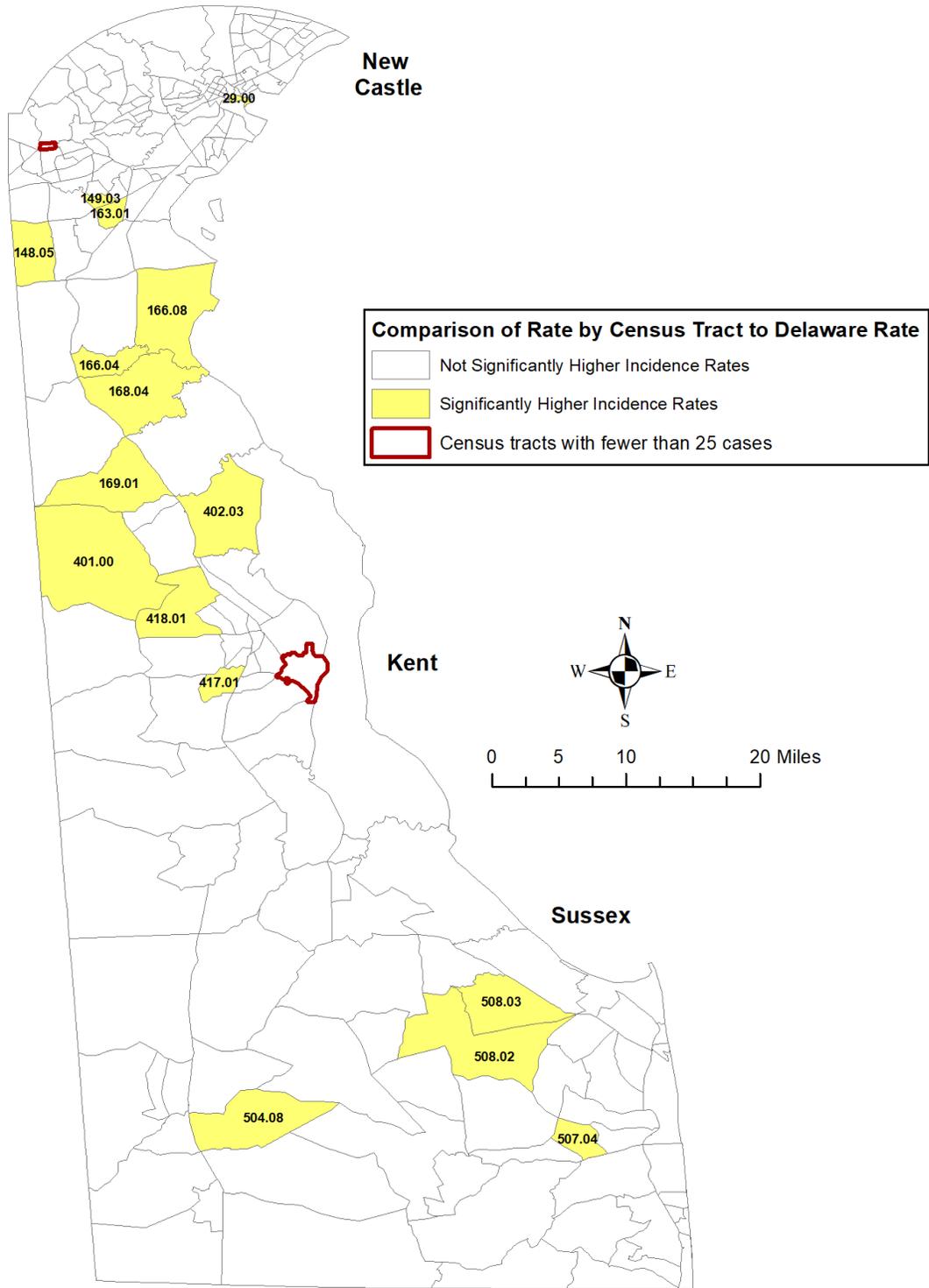
site cancer incidence rate is significantly different from the overall state all-site cancer incidence rate. Statistically speaking, 5% of all numerical comparisons are significantly different due to chance alone.

Results for 2011-2015 show that:

- In 16 of Delaware's 214 census tracts, the 2011-2015 all-site cancer incidence rates were statistically significantly higher than Delaware's 2011-2015 all-site cancer incidence rate (495.3 per 100,000).
- In 10 census tracts, the 2011-2015 all-site cancer incidence rates were significantly lower than Delaware's 2011-2015 all-site cancer incidence rate (495.3 per 100,000).



FIGURE 1: FIVE-YEAR AGE-ADJUSTED ELEVATED CANCER INCIDENCE RATES BY CENSUS TRACT, DELAWARE, 2011-2015



Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Cancer Registry, 2018.

Source: 2010 U.S. Census county and tract shapefiles: <https://www.census.gov/geographies/mapping-files/time-series/geo/carto-boundary-file.2010.html>



Secondary Analysis of Elevated Census Tracts for 2011-2015

DPH analyzed cancer data within each of the 16 elevated census tracts to determine unique patterns that could suggest an environmental, occupational, or other unusual cause. DPH conducted the following analyses on census tracts with an elevated overall cancer incidence rate:

- Sex distribution
- Age at diagnosis
- Types of cancers elevated within the elevated census tracts
- Cancer sites with substantiated environmental risk factors

Distribution of Cases for 2011-2015 by Sex

To determine if the all-site cancer incidence rate in a census tract affected males and females differently, age-adjusted all-site cancer incidence rates were calculated separately by sex for each of the 16 elevated census tracts. Male- and female-specific rates for each census tract were compared to those at the state level. The 16 census tracts fell into one of the following four categories compared to the state of Delaware:

- One census tract (6%) had significantly elevated all-site cancer incidence rates for males and for females.
- Four census tracts (25%) had a significantly elevated all-site cancer incidence rate for males only.
- Three census tracts (19%) had a significantly elevated all-site cancer incidence rate for females only.
- Eight census tracts (50%) did not have a significantly elevated all-site cancer incidence rate for either males or females. Rather, minor (i.e. not statistically significant) elevations in male and female all-site cancer incidence rates produced a significantly elevated all-site cancer incidence rate for both sexes combined.

Age at Diagnosis of Cases for 2011-2015

The median age at diagnosis for all cancer cases diagnosed during 2011-2015 in Delaware was 66. Therefore, half of all Delawareans diagnosed with cancer during this time period were younger than 66 years; the other half were older than 66 years. The median age at diagnosis for cancer cases in each census tract was compared to the median age at diagnosis for cancer cases at the state level for the same time period. A younger median age at diagnosis in the census tract could suggest a unique exposure, such as from the environment or an occupation, since older age is a risk factor for cancer. Of the 16 census tracts analyzed:

- Eight census tracts (50%) had a lower median age at diagnosis (range: 61-65 years) compared to the state's median age at diagnosis (66 years).
- Two census tracts (13%) had a median age at diagnosis identical to the state's median age at diagnosis (66 years).
- Six census tracts (38%) had a higher median age at diagnosis (67-71 years) compared to the state's median age at diagnosis (66 years).

Significantly Elevated Site-Specific Cancer Types for 2011-2015

Cancer is a generic term that describes a number of different diseases that vary by cancer site and histology. Sixteen of Delaware's 214 census tracts had a significantly elevated all-site cancer incidence rate for 2011-2015. It is important to note that these census tracts were not elevated for every individual cancer type. To investigate specific patterns of cancer diagnoses within the 16 census tracts with elevated all-site cancer incidence rates, DPH calculated site-specific incidence rates for the 24 most commonly



diagnosed cancers. These analyses helped to determine which cancers, if any, contributed to the higher-than-expected all-site cancer incidence rate. Results for the 16 census tracts are as follows:

- Two census tracts (13%) did not have any cancer type that was significantly elevated.
- Five census tracts (31%) had **one** cancer type that was significantly elevated.
- Five census tracts (31%) had **two** cancer types that were significantly elevated.
- Three census tracts (19%) had **three** cancer types that were significantly elevated.
- One census tract had (6%) **four** cancer types that were significantly elevated.

The higher-than-expected all-site cancer incidence rates among the 16 elevated census tracts were confined to 14 cancer types (Table 1). Note that the frequencies in Table 1 total 28 because nine of the 16 census tracts under review were significantly elevated for more than one cancer type.

TABLE 1: NUMBER OF OCCURRENCES OF SIGNIFICANTLY ELEVATED SITE-SPECIFIC CANCER TYPES WITHIN THE 16 CENSUS TRACTS WITH ELEVATED ALL-SITE CANCER INCIDENCE RATES, DELAWARE, 2011-2015

Site-Specific Cancer Type	Number of Occurrences of Significantly Elevated Site-Specific Cancer Type
Lung	5
Colorectal	2
Kidney and Renal Pelvis	2
Melanoma	4
Prostate	2
Bladder	1
Breast	3
Hodgkin Lymphoma	1
Larynx	1
Brain/CNS	1
Pancreas	2
Oral Cavity	2
Liver	1
Leukemia	1
TOTAL	28

Source: Delaware Cancer Registry, Delaware Department of Health and Social Services, Division of Public Health, 2018.

When a census tract has an elevated rate for a cancer type with many risk factors, it is difficult to pinpoint any single causal factor. In these instances, the elevated cancer rate is likely due to a mix of non-modifiable, modifiable, and/or unidentified risk factors. For example, of the 19 substantiated risk factors for breast cancer cited by the American Cancer Society, 12 are non-modifiable (e.g., age, family history), and the remaining seven are modifiable (e.g., lack of exercise, being overweight/obese). The impact of other potential breast cancer risk factors is still under scientific review. Adding to the complexity is that the interaction of several risk factors may increase a person’s cancer risk more than the sum of the individual risk factors acting separately. For example, research shows that while alcohol use and tobacco use are both individual risk factors for laryngeal cancer, their joint effect is greater than the sum of the two risk factors acting separately (i.e., when they occur together, the two risk factors exert a multiplicative, rather than additive, effect).¹

¹ Pelucchi, C., Gallus, S., Garavello, W., Bosettie, C., & La Vecchia, C. (2008). Alcohol and tobacco use, and cancer risk for upper aerodigestive tract and liver. *European Journal of Cancer Prevention*, 17(4), 340-4.



Site-Specific Cancer Types with Environmentally-Based Risk Factors

The Delaware Cancer Consortium has identified seven cancer types with substantiated environmental risk factors:

- a. Brain/Central Nervous System (CNS) cancer
- b. Hodgkin lymphoma
- c. Leukemia
- d. Liver cancer
- e. Non-Hodgkin lymphoma
- f. Thyroid cancer
- g. Urinary bladder cancer

It is important to note that while these seven malignancies are known to be associated with environmental risk factors, they may also be related to modifiable risk factors. For example, in addition to chemical exposures in the manufacturing of dyes, rubber, and leather, tobacco use is the primary risk factor for bladder cancer.

Among the 16 census tracts, results related to these seven cancer types are as follows:

- Eleven census tracts (69%) did not have a significantly elevated rate for any of the seven cancer types with substantiated environmental risk factors.
- Five census tracts (31%) had significantly elevated rates for **one** of the seven cancer types with substantiated environmental risk factors.

TABLE 2: CENSUS TRACTS WITH SIGNIFICANTLY ELEVATED INCIDENCE RATES FOR CANCERS WITH ENVIRONMENTALLY SUSPECTED CAUSES, BY SEX, DELAWARE, 2011-2015

Cancer Site	Male Only	Female Only	Male and Female
Brain/CNS	None	none	166.04
Hodgkin Lymphoma	none	none	29.00
Leukemia	401.00	None	none
Liver	None	163.01	none
Urinary Bladder	none	none	507.04

Source: Delaware Cancer Registry, Delaware Department of Health and Social Services, Division of Public Health, 2018.

While some of the elevated cancer types in these census tracts were those with environmental risk factors, some other cancer types without environmental risk factors were also significantly higher compared to the state average. These may simply be statistical aberrations resulting from the very small number of cancer cases in these communities, or, especially when combined with unusual sex and age distributions, there may be underlying occupational or environmental causes. Further investigation of these elevated cancer types cannot be conducted with data routinely collected by DPH.

Tables 3-5 summarize results of the secondary analyses for the 16 census tracts that were significantly elevated for all-site cancer in 2011-2015 for each of Delaware’s three counties. Table 6 summarizes substantiated risk factors for the 14 different site-specific cancers with significantly elevated cancer incidence rates among the 16 census tracts in this analysis. Table 7 displays census tracts that are consistently elevated over two or more of the nine five-year periods from 2001-2005 through 2011-2015.



TABLE 3: CHARACTERISTICS OF NEW CASTLE COUNTY, DELAWARE CENSUS TRACTS WITH STATISTICALLY SIGNIFICANTLY ELEVATED ALL-SITE CANCER INCIDENCE RATES, 2011-2015

Census Tract	Avg. Cases/year	Overall Age-Adjusted All-Site Cancer Incidence Rates per 100,000, 2011-2015**			Significantly Elevated Cancer Site(s) by Sex	Median Age at Diagnosis		Area(s) of Concern
		All	Male	Female		DE	CT	
DELAWARE	5,605	495.3	554.4	453.3				
29.00	23	666.7	780.1	623.6	<ul style="list-style-type: none"> • Kidney (overall, male) • Hodgkin Lymphoma • Pancreas (female) 	66	63	<ul style="list-style-type: none"> • Prevention • Sex distribution • Cancer type
148.05	48	619.5	730.9	529.5	<ul style="list-style-type: none"> • Melanoma (overall, male) 	66	61	<ul style="list-style-type: none"> • Prevention • Screening • Sex distribution • Cancer Type
149.03	27	624.7	675.5	572.2	<ul style="list-style-type: none"> • None 	66	62	<ul style="list-style-type: none"> • Prevention • Screening
163.01	34	605.8	711.4	547.9	<ul style="list-style-type: none"> • Liver (female) 	66	66	<ul style="list-style-type: none"> • Prevention • Screening • Sex distribution
166.04	55	618.9	699.7	561.2	<ul style="list-style-type: none"> • Colorectal (overall, female) • Brain/CNS (overall) 	66	63	<ul style="list-style-type: none"> • Prevention • Screening • Sex distribution • Cancer Type
166.08	28	620.6	718.7	581.7	<ul style="list-style-type: none"> • None 	66	65	<ul style="list-style-type: none"> • Prevention • Screening
168.04	35	600.2	596.6	574.6	<ul style="list-style-type: none"> • Pancreas (male) • Breast 	66	62	<ul style="list-style-type: none"> • Prevention • Screening • Sex distribution • Cancer Type
169.01	18	651.7	734.4	569.1	<ul style="list-style-type: none"> • Breast 	66	66	<ul style="list-style-type: none"> • Prevention • Screening • Sex distribution • Cancer Type

** Age-adjusted incidence rate in bold indicates that the census tract rate is significantly elevated compared to the state rate.

CT=Census Tract

Rates are per 100,000 and age-adjusted to 2000 U.S. standard population

Source: Delaware Cancer Registry, Delaware Department of Health and Social Services, Division of Public Health, 2018.



TABLE 4: CHARACTERISTICS OF KENT COUNTY, DELAWARE CENSUS TRACTS WITH STATISTICALLY SIGNIFICANTLY ELEVATED ALL-SITE CANCER INCIDENCE RATES, 2011-2015

Census Tract	Avg. Cases / year	Overall Age-Adjusted All-Site Cancer Incidence Rates per 100,000, 2011-2015**			Significantly Elevated Cancer Site(s) by Sex	Median Age at Diagnosis		Area(s) of Concern
		All	Male	Female		DE	CT	
DELAWARE	5,605	495.3	554.4	453.3				
401.00	49	655.5	813.7	506.0	<ul style="list-style-type: none"> • Kidney (overall) • Lung (male) • Leukemia (male) 	66	65	<ul style="list-style-type: none"> • Prevention • Screening • Sex distribution • Cancer Type
402.03	34	619.7	704	551.3	<ul style="list-style-type: none"> • Colorectal (overall) • Prostate 	66	67	<ul style="list-style-type: none"> • Prevention • Screening • Cancer type
417.01	48	577.7	644.2	530.6	<ul style="list-style-type: none"> • Prostate 	66	71	<ul style="list-style-type: none"> • Prevention • Screening • Cancer Type
418.01	65	576.3	660.3	505.3	<ul style="list-style-type: none"> • Larynx (overall, male) • Oral cavity (female) 	66	65	<ul style="list-style-type: none"> • Prevention • Screening • Sex distribution • Cancer Type

** Age-adjusted incidence rate in bold indicates that the census tract rate is significantly elevated compared to the state rate.

CT=Census Tract

Rates are per 100,000 and age-adjusted to 2000 U.S. standard population

Source: Delaware Cancer Registry, Delaware Department of Health and Social Services, Division of Public Health, 2018.



TABLE 5: CHARACTERISTICS OF SUSSEX COUNTY, DELAWARE CENSUS TRACTS WITH STATISTICALLY SIGNIFICANTLY ELEVATED ALL-SITE CANCER INCIDENCE RATES, 2011-2015

Census Tract	Avg. Cases / year	Overall Age-Adjusted All-Site Cancer Incidence Rates per 100,000, 2011-2015**			Significantly Elevated Cancer Site(s) by Sex	Median Age at Diagnosis		Area(s) of Concern
		All	Male	Female		DE	CT	
DELAWARE	5,605	495.3	554.4	453.3				
504.08	38	633.1	731.4	562.7	<ul style="list-style-type: none"> Lung (overall, male, female) 	66	68	<ul style="list-style-type: none"> Prevention Screening Sex distribution Cancer Type
507.04	50	629.7	750.5	515.7	<ul style="list-style-type: none"> Lung (overall, male) Melanoma (overall) Bladder (overall) Oral cavity (female) 	66	70	<ul style="list-style-type: none"> Prevention Screening Sex distribution Cancer Type
508.02	43	618.9	617.6	617.1	<ul style="list-style-type: none"> Melanoma (overall, male) Lung (male) Breast 	66	67	<ul style="list-style-type: none"> Prevention Screening Sex distribution Cancer Type
508.03	74	606.3	633.2	587.0	<ul style="list-style-type: none"> Melanoma (overall) Lung (female) 	66	69	<ul style="list-style-type: none"> Prevention Screening Sex distribution Cancer Type

** Age-adjusted incidence rate in bold indicates that the census tract rate is significantly elevated compared to the state rate.

CT=Census Tract

Rates are per 100,000 and age-adjusted to 2000 U.S. standard population

Source: Delaware Cancer Registry, Delaware Department of Health and Social Services, Division of Public Health, 2018.



TABLE 6: KNOWN RISK FACTORS OF ELEVATED CANCER TYPES AMONG THE 16 DELAWARE CENSUS TRACTS WITH SIGNIFICANTLY ELEVATED ALL-SITE CANCER INCIDENCE RATES, 2011-2015**

CANCER TYPE	KNOWN RISK FACTORS
BLADDER	Age (risk increases with age), arsenic in drinking water, bladder birth defects, chronic bladder irritation and infections, gender (more common in males), not drinking enough fluids, personal history of bladder or other urothelial cancer, prior chemotherapy, race and ethnicity, smoking
BRAIN/CNS	Family history (rare), genetic disorders (Neurofibromatosis type 1, Neurofibromatosis type 2), immune system disorders, radiation exposure
BREAST	Age (risk increases with age), alcohol abuse, benign breast conditions, birth to children (giving birth after age 30 or not at all increases risk), breastfeeding (not breastfeeding increases risk), dense breast tissue, exposure to diethylstilbestrol, family history, genes, hormone therapy after menopause, menopause after age 55, menstruation before age 12, overweight or obesity, personal history, physical inactivity, oral contraceptive use, race (African American), radiation to the chest, tobacco use
COLORECTAL	Age (50 and older), alcohol abuse, diabetes (type 2), family history, high-fat diet, history of bowel disease, overweight or obesity, physical inactivity, smoking (cigarettes, cigars, or pipes)
HODGKIN LYMPHOMA	Age (early adulthood and late adulthood at higher risk), gender (more common in males), family history, higher socioeconomic status, infection with Epstein-Barr, mononucleosis, or HIV
KIDNEY	Advanced kidney disease with long-term dialysis, cigar or cigarette smoking, family history, gender (male), hypertension, certain medications, overweight or obesity, workplace exposures
LARYNX	Alcohol abuse, diet, gastroesophageal reflux disease, gender (male), genetic syndromes, HPV, poor nutrition, secondhand smoke, smoking (cigarettes, cigars, or pipes), workplace exposure
LEUKEMIA	<p>Acute Lymphocytic Leukemia (ALL): chemical exposure (certain chemotherapy drugs, benzene), gender (male), identical twin with ALL, inherited syndromes (Down syndrome, Klinefelter syndrome, Fanconi anemia, Bloom syndrome, Ataxia-telangiectasia, Neurofibromatosis), radiation exposure, race (Caucasian), viral infections (human T-cell lymphoma/leukemia virus-1 (HTLV-1), Epstein-Barr virus (EBV))</p> <p>Acute Myeloid Leukemia (AML): age (older age), blood disorders, chemotherapy drugs, family history, gender (male), genetic syndromes (Fanconi anemia, Bloom syndrome, Ataxia-telangiectasia, Diamond-Blackfan anemia, Schwachman-Diamond syndrome, Li-Fraumeni syndrome, Neurofibromatosis type 1, Severe congenital neutropenia (also called Kostmann syndrome), Down syndrome, Trisomy 8, radiation exposure, tobacco use</p> <p>Chronic Lymphocytic Leukemia (CLL): chemical exposure (Agent Orange, pesticides), family history, gender (male), race/ethnicity (North America, Europe)</p> <p>Chronic Myeloid Leukemia (CML): age (older age), gender (male), radiation exposure</p> <p>Chronic Myelomonocytic Leukemia (CMML): age (60 and older), chemotherapy, gender (male)</p>

**Cancer-specific risk factors are listed in descending alphabetical order and do not necessarily represent descending order of relative risk factor strength.

Sources: American Cancer Society (www.cancer.org) and National Cancer Institute (www.cancer.gov).



TABLE 6: KNOWN RISK FACTORS OF ELEVATED CANCER TYPES AMONG THE 16 DELAWARE CENSUS TRACTS WITH SIGNIFICANTLY ELEVATED ALL-SITE CANCER INCIDENCE RATES, 2011-2015, CONTINUED**

CANCER TYPE	KNOWN RISK FACTORS
LIVER	Alcohol use, anabolic steroid use, diabetes (type 2) gender (male), hepatitis B or C (chronic infection), liver cirrhosis, obesity, previous exposure to certain chemicals (including arsenic and vinyl chloride), race (especially Asian Americans and Pacific Islanders), tobacco use
LUNG	Asbestos, diet low in fruits and vegetables, family history, radiation therapy, radon exposure, secondhand smoke, smoking (cigarettes, cigars, or pipes), tuberculosis, workplace exposures
MELANOMA	Age (risk increases with age), fair skin, freckling and light hair, family history of melanoma, gender (males are more at risk), moles on the skin, personal history of melanoma, UV exposure, weakened immune system, Xeroderma pigmentosum (rare inherited condition that affects skin cells' ability to repair damage to their DNA)
ORAL CAVITY AND PHARYNX	Age (55 and older), alcohol use, diet low in fruits and vegetables, gender (male), genetic syndromes (Fanconi anemia, Dyskeratosis congenital), Graft-vs-Host disease (GVHD), Lichen planus (disease that affects the skin mainly in middle-age people), weakened immune system, HPV infection, tobacco use, UV exposure
PANCREAS	Age (45 and older), chronic pancreatitis, diabetes, family history, gender (male), Helicobacter pylori infection, inherited genetic syndromes (hereditary breast and ovarian cancer syndrome, familial atypical multiple mole melanoma (FAMMM) syndrome, familial pancreatitis, Lynch syndrome, Peutz-Jeghers syndrome, Von Hippel-Lindau syndrome, Neurofibromatosis type 1, multiple endocrine neoplasia type I (MEN1)), liver cirrhosis, overweight and obesity, race (African American), tobacco use, workplace exposure to chemicals
PROSTATE	Age (50 and older), diet high in red meat and high-fat dairy, ethnicity (non-Hispanic), family history, gene mutations, inherited DNA changes, obesity, race (African American)

**Cancer-specific risk factors are listed in descending alphabetical order and do not necessarily represent descending order of relative risk factor strength.

Sources: American Cancer Society (www.cancer.org) and National Cancer Institute (www.cancer.gov).



TABLE 7: CONSISTENTLY ELEVATED ALL-SITE CANCER INCIDENCE RATES BY DELAWARE CENSUS TRACTS, BY COUNTY AND TIME PERIOD, DELAWARE: 2001-2005 TO 2011-2015**

COUNTY	CENSUS TRACT	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015
NEW CASTLE	6.02	X	X	X	X							
	29.00	X							X	X	X	X
	139.01	X	X	X	X							
	148.10							X	X	X		
	149.03								X	X	X	X
	149.06	X	X									
	156.00			X	X	X						
	159.00					X	X			X		
	160.00	X	X	X								
	163.01					X	X	X	X		X	X
	166.01									X	X	
	166.04									X	X	X
	166.08								X	X	X	X
	169.01	X	X	X								X
169.04	X	X	X									
KENT	401.00						X	X	X	X	X	X
	402.03									X	X	X
	417.01					X	X		X	X	X	X
	417.02							X	X	X		
	418.01							X	X	X	X	X
	421.00				X	X	X					
	422.02						X	X			X	
	428.00		X		X	X	X	X	X	X	X	
	430.00							X	X	X	X	
432.02							X	X	X			
SUSSEX	501.03						X	X	X	X		
	501.05			X	X	X						
	504.01						X	X	X			
	504.05								X	X		
	504.08										X	X
	506.02	X	X									
	507.04								X	X	X	X
	508.03										X	X
	513.02	X	X	X	X							
	513.05	X	X									
	517.01			X	X		X					
518.01						X	X					

**Two or more adjacent time periods with a significantly elevated overall cancer incidence rate. Source: Delaware Cancer Registry, Delaware Department of Health and Social Services, Division of Public Health, 2018.

For questions or comments related to any information found in this report, call the Delaware Comprehensive Cancer Control Program at 302-744-1020.

This report and the full *Cancer Incidence and Mortality in Delaware (I&M) Report, 2011-2015* can be found on the DPH website: <http://www.dhss.delaware.gov/dhss/dph/dpc/cancer.html>.