

Delaware County, PA Female Breast Cancer Update March 2024

Sources

[National Program of Cancer Registries](#) and [Surveillance, Epidemiology, and End Results](#) SEER*Stat Database - United States Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute. Based on the 2022 submission.

<https://statecancerprofiles.cancer.gov/map/map.withimage.php?42&county&001&055&00&2&01&0&1&5&0#results>

Pennsylvania Death Certificate Dataset

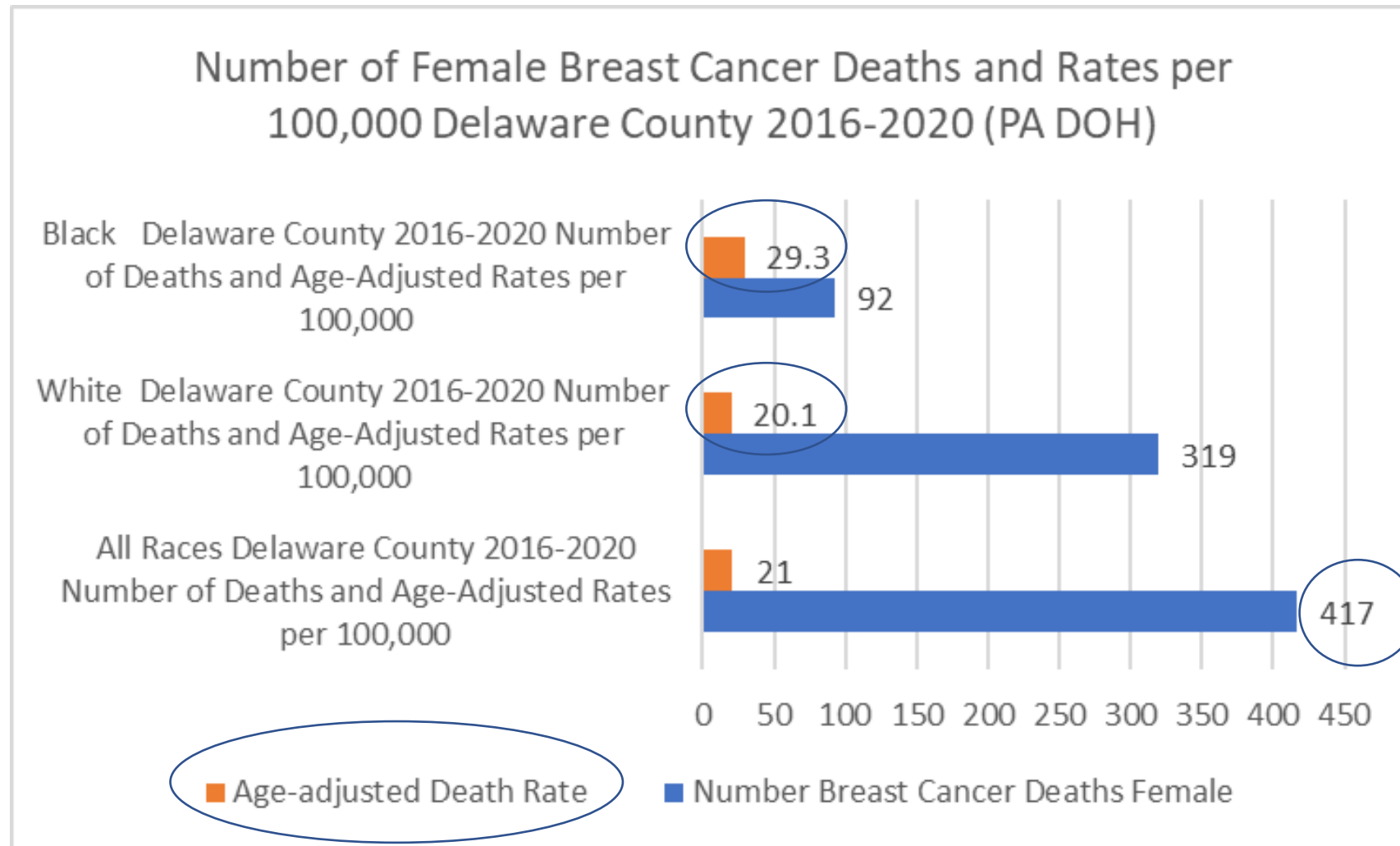
<https://www.health.pa.gov/topics/HealthStatistics/Statistical-Resources/UnderstandingHealthStats/Pages/Age-Adjusted-Rates.aspx>

<https://www.phaim1.health.pa.gov/EDD/WebForms/DeathCntySt.aspx>

Topics

- Incidence Age-Adjusted (or new cases)
- Mortality Age-Adjusted (female breast cancer deaths)
- Disparities White & Black
- Resources / Free Services

Female Breast Cancer Deaths Number and Age-Adjusted Death Rates per 100,000 Delaware County 2016-2020 (PA DOH)

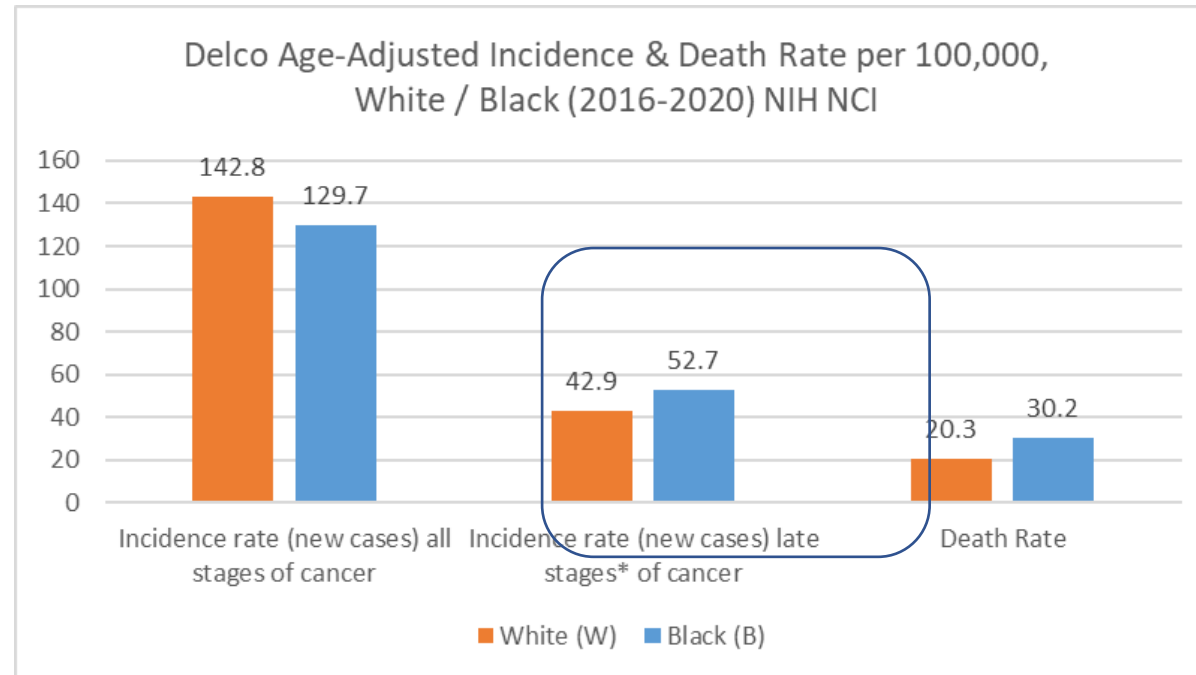


Age-adjusted death rates **eliminate the bias of age*** in populations being compared, thereby providing a much more reliable rate for comparison purposes.

*age is a main factor in mortality, especially with chronic diseases

White & Black Differences in Breast Cancer Incidence

- 2016-2020 data from the NIH NCI indicate Delaware County breast cancer (all stages), age-adjusted incidence (new cases) rate was higher among White women 142.8 per 100,000 compared to Black women 129.7 per 100,000.
- However, when breast cancer in late stages is considered, Black women had a higher incidence 52.7 per 100,000 and mortality rate 30.2 per 100,000 compared to White late stages incidence rate 42.9 and mortality rate of 20.3 per 100,000. This emphasizes critical social determinants of health factors impacting Black women's access to care/diagnosis and treatment.

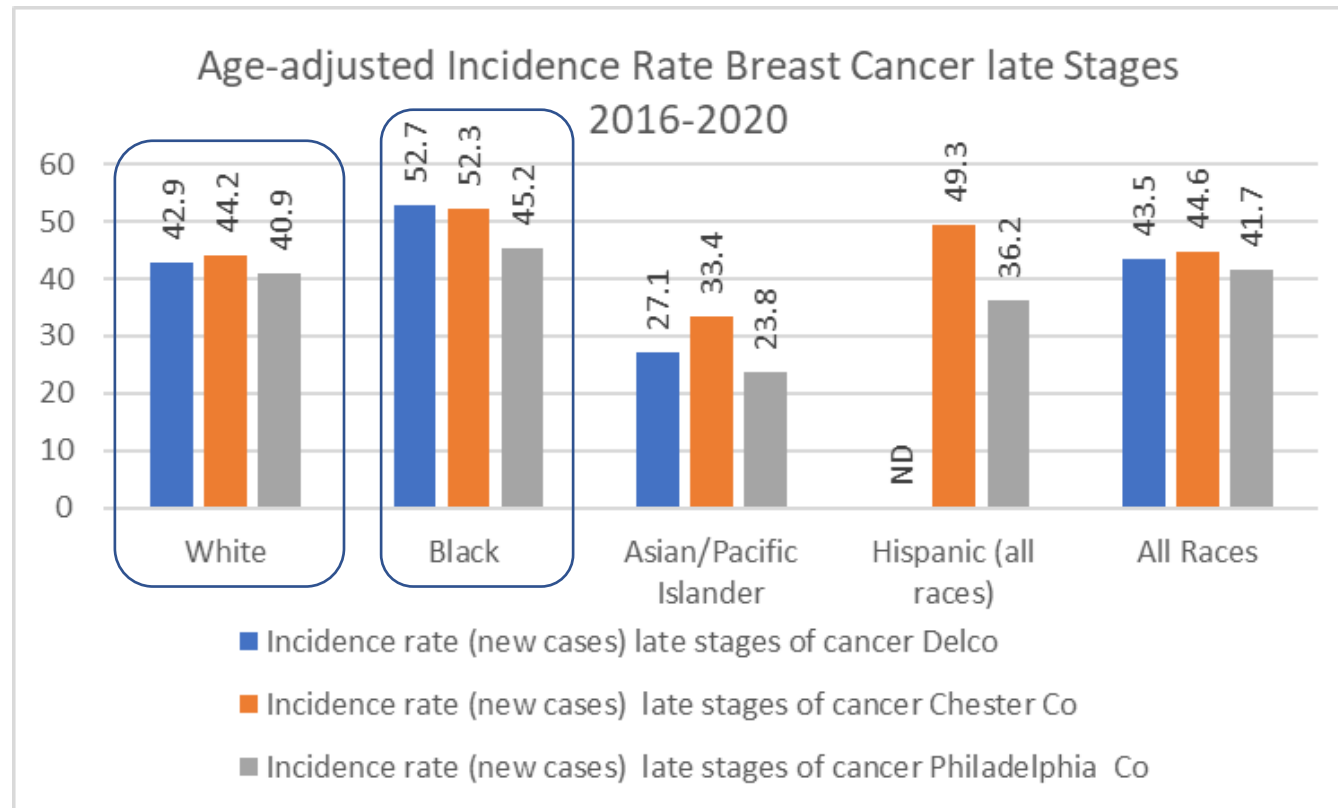


Source: NIH, NCI

<https://statecancerprofiles.cancer.gov/map/map.withimage.php?42&county&001&055&00&2&01&0&1&5&0#results>

Higher Risk of New Cases of Breast Cancer in LATE Stages in Black Women living in Delaware, Chester, and Philadelphia Counties

- When breast cancer in late stages is considered, Black women had a higher incidence rate 52.7 per 100,000 compared to White late stages incidence rate 42.9 per 100,000
- This inverse pattern is observed in Delaware, Chester and Philadelphia counties



Rankings Comparison Delaware, Chester, Philadelphia Counties Age-Adjusted Incidence Rate per 100,000 Female Breast Cancer All Stages, Late Stages

Rankings #1 Highest Delaware, Chester, Philadelphia Counties 2016-2020 Female Breast Cancer

Source: NIH, NCI <https://statecancerprofiles.cancer.gov/map/map.withimage.php?42&county&001&055&00&2&01&0&1&5&0#results>

*** Delaware County Ranks #2 in All Races, White, and Asian/Pacific Islander and #1 in Black women for All and Late stages of breast cancer**

Age-adjusted incidence rate per 100,000 breast cancer (ALL stages)

	All Races	Rate	White	Rate	Black	Rate	Asian/Pacific Islander	Rate
# 1	Chester Co	143.2	Chester Co	145.8	Delaware Co	129.7	Chester Co	93.4
# 2	Delaware Co	137.3	Delaware Co	142.8	Philadelphia Co	122.4	Delaware Co	75.8
# 3	Philadelphia Co	119.8	Philadelphia Co	128	Chester Co	119.4	Philadelphia Co	74.3

Age-adjusted incidence rate per 100,000 breast cancer (LATE stages)

	All Races	Rate	White	Rate	Black	Rate	Asian/Pacific Islander	Rate
# 1	Chester Co	44.6	Chester Co	44.2	Delaware Co	52.7	Chester Co	33.4
# 2	Delaware Co	43.5	Delaware Co	42.9	Chester Co	52.3	Delaware Co	27.1
# 3	Philadelphia Co	41.7	Philadelphia Co	40.9	Philadelphia Co	45.2	Philadelphia Co	23.8

Standardized Mortality Ratio (SMR) Female Breast Cancer (2016-2020) Delaware County, PA

- SMR also measures excess deaths (another way to adjust for the effects of older age on death)
- Black women with the highest SMR 104.5

Year	Sex	Race/ Ethn	Age	Count	SMR
2016-2020	Female	All Races	All Ages	417	1.01
2016-2020	Female	White	All Ages	319	1.001
2016-2020	Female	Black	All Ages	92	1.045
2016-2020	Female	Asian/Paci	All Ages	1	ND
2016-2020	Female	Multi-Race	All Ages	0	ND
2016-2020	Female	Hispanic	All Ages	4	ND

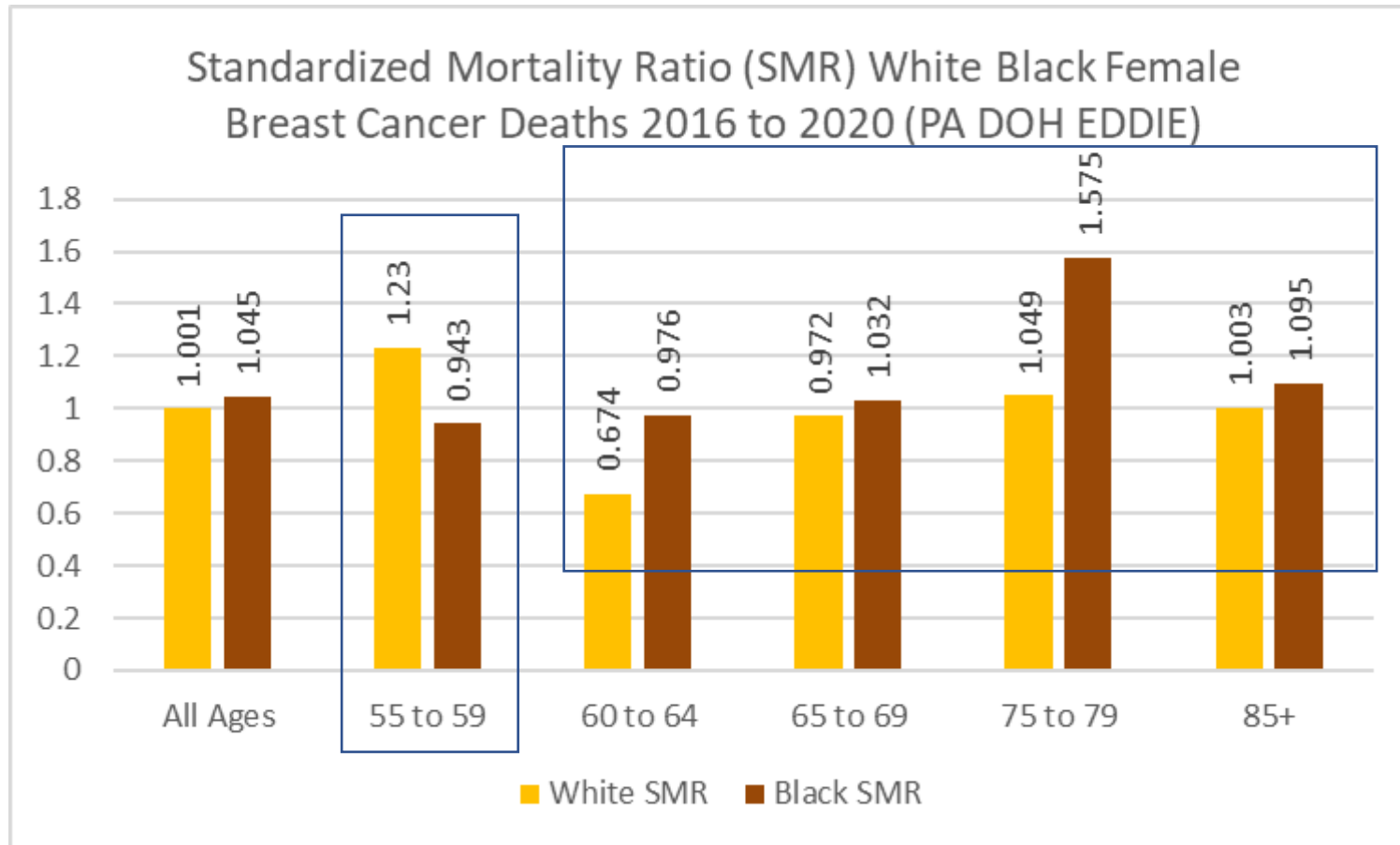


A ratio greater than 1.0 indicates that more mortality has occurred than would have been expected, a ratio less than 1.0 indicates that less mortality has occurred.

Source: PA DOH <https://www.phaim1.health.pa.gov/EDD/WebForms/DeathCntySt.aspx>
<https://www.health.pa.gov/topics/HealthStatistics/Statistical-Resources/UnderstandingHealthStats/Pages/Standardized-Mortality-Ratio.aspx>

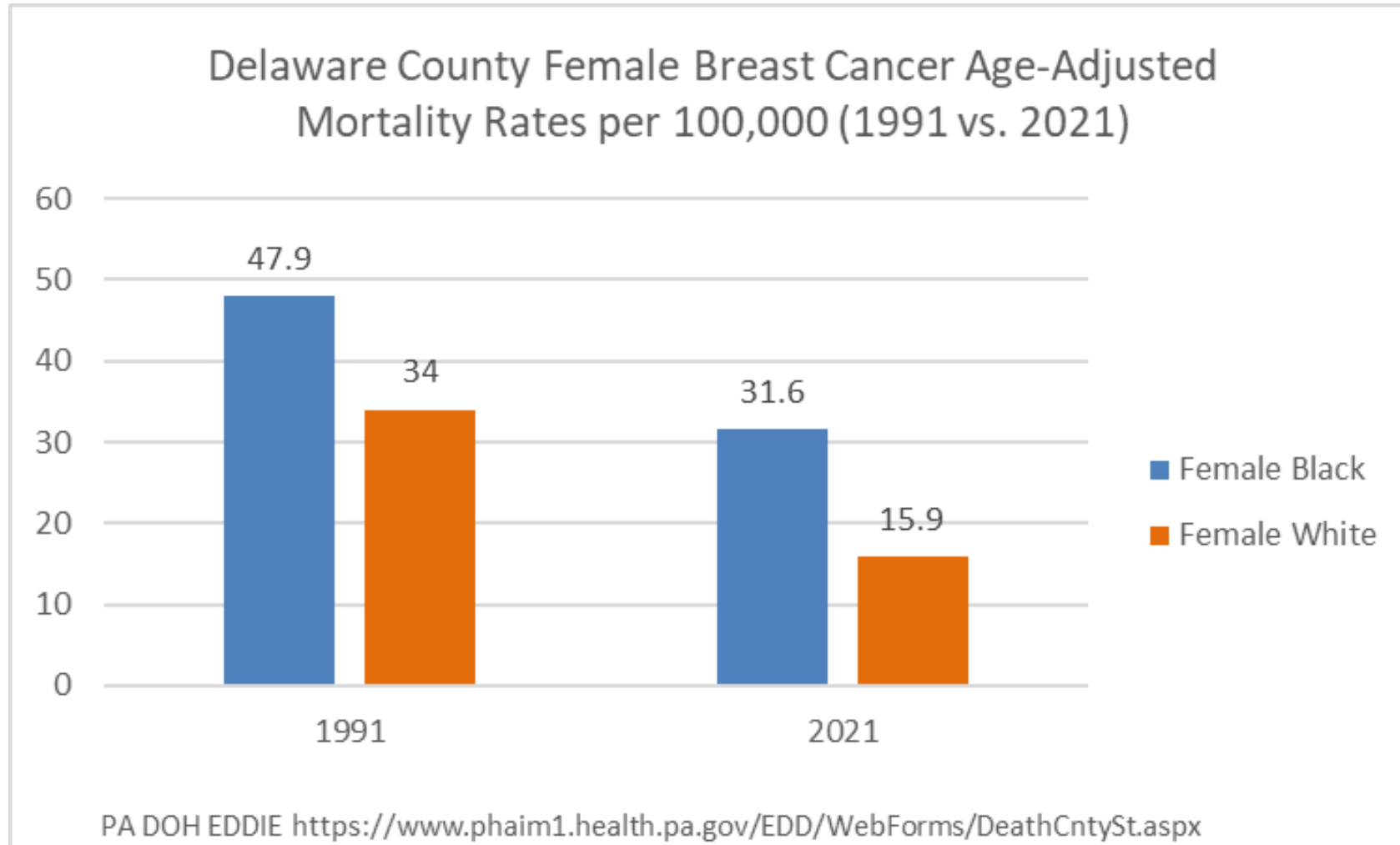
SMR Excess Female Breast Cancer Mortality 2016-2020 Delaware County, PA

- White women ages 55 to 59 with higher SMR 1.23 than Black women 0.943 (less mortality)
- Black women with higher SMR than White in all other age groups



A ratio greater than 1.0 indicates that more mortality has occurred than would have been expected, while a ratio less than 1.0 indicates that less mortality has occurred.

Female White & Black Breast Cancer Mortality 1991 vs 2021



Highest Mortality Rate (1990 to 2021)		
Black	1996	60.3
White	1990	41

Possible Reasons for Breast Cancer Disparities

Compared to women in other racial and ethnic groups, non-Hispanic Black women had the highest breast cancer death rates, and non-Hispanic Asian or Pacific Islander women had the lowest.

Source: Ellington TD, Henley SJ, Wilson RJ, Miller JW, Wu M, Richardson LC. [Trends in breast cancer mortality by race/ethnicity, age, and U.S. Census region, United States—1999–2020](https://www.cdc.gov/cancer/dcpc/research/articles/disparities-breast-cancer-deaths.htm). Cancer 2022. <https://www.cdc.gov/cancer/dcpc/research/articles/disparities-breast-cancer-deaths.htm>

- Basal-like breast cancer a.k.a. as triple negative tumors are high-grade tumors and the most aggressive subtype .
 - The incidence in Black women especially, younger ones is 2 times the incidence observed in White women.
- Pregnancy and higher parity increase the risk of basal-like breast cancer and breastfeeding was found to eliminate that increased risk of triple-negative cancer.
 - Black women have more children especially at a younger age and lower rate of breastfeeding than White women.
- Differences in biological properties between Black women and White women have the potential to influence breast cancer screening and treatment outcomes
- Due to systemic inequities, Black women are less likely to obtain adequate treatment compared with White women.

Source: Yedjou CG, et al. Health and Racial Disparity in Breast Cancer. Adv Exp Med Biol. 2019;1152:31-49
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6941147/#R27>

Modifiable Risk Factors for Breast Cancer

- **Not being physically active.** Women who are not physically active have a higher risk of getting breast cancer. *[150 minutes of moderate or 75 minutes of vigorous intensity activity each week].*
- **Being overweight or having obesity after menopause.** Older women who are overweight or have obesity have a higher risk of getting breast cancer than those at a healthy weight. *[BMI 25.0 to <30 = overweight range. BMI is 30.0 or higher=obesity range]*
- **Taking hormones.** Some forms of hormone replacement therapy (those that include both estrogen and progesterone) taken during menopause can raise risk for breast cancer when taken for more than five years. Certain oral contraceptives (birth control pills) also have been found to raise breast cancer risk.
- **Reproductive history.** Having the first pregnancy after age 30, not breastfeeding, and never having a full-term pregnancy can raise breast cancer risk.
- **Drinking alcohol.** Studies show that a woman's risk for breast cancer increases with the more alcohol she drinks.
- **Tobacco use.** Smoking, being exposed to chemicals that can cause cancer.
- **Sleep disturbance.** Changes in other hormones due to night shift working also may increase breast cancer risk

What Can Be Done to Reduce Disparities in Breast Cancer?

- More breast cancer research for Black / African Americans
- Culturally appropriate strategies are needed to promote breast cancer prevention, improve survival rates, reduce breast cancer mortality, and ultimately improve the health of racial/ethnic minorities

BCRF:

<https://www.bcrf.org/blog/black-women-and-breast-cancer-why-disparities-persist-and-how-end-them/>

Pennsylvania Breast and Cervical Cancer Prevention and Treatment (PA-BCCPT)

for breast or cervical cancer, or a pre-cancerous condition of the breast or cervix.

- PA-BCCEDP for women ages 40 to 64 for breast services and 21 to 64 for cervical services.
- Screened /diagnosed with cancer through a Pennsylvania Breast & Cervical Cancer Early Detection Program (PA-BCCEDP) provider. Call 1-800-215-7494

Free

- Mammograms
- Clinical breast and pelvic exams
- Pap tests
- Follow-up diagnostic tests for an abnormal screening result

PA DOH:

<https://www.dhs.pa.gov/Services/Assistance/Pages/Breast-and-Cervical-Cancer-Prevention-and-Treatment.aspx>

The Root Causes of Health Inequity

- *Health inequities* are systematic differences in the opportunities groups have to achieve optimal health, leading to unfair and avoidable differences in health outcomes ([Braveman, 2006](#); [WHO, 2011](#)).
- Health inequity, arises from social, economic, environmental, and structural disparities that contribute to intergroup differences in health outcomes both within and between societies
- *Structural inequities* are the personal, interpersonal, institutional, and systemic drivers—such as, racism, sexism, classism, able-ism, xenophobia, and homophobia—that make those identities salient to the fair distribution of health opportunities and outcomes.
- Two main clusters of root causes of health inequity
 - intrapersonal, interpersonal, institutional, and systemic mechanisms that organize the distribution of power and resources differentially across lines of race, gender, class, sexual orientation, gender expression, and other dimensions of individual and group identity
 - unequal allocation of power and resources—including goods, services, and societal attention—which manifest in unequal social, economic, and environmental conditions, also called the social determinants of health
- The factors that make up the root causes of health inequity are diverse, complex, evolving, and interdependent in nature.
- It is important to understand the underlying causes and conditions of health inequities to inform equally complex and effective interventions to promote health equity.

National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice; Committee on Community-Based Solutions to Promote Health Equity in the United States; Baciu A, Negussie Y, Geller A, et al., editors. Communities in Action: Pathways to Health Equity. Washington (DC): National Academies Press (US); 2017 Jan 11. 3, The Root Causes of Health Inequity. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK425845/>

Thank you!

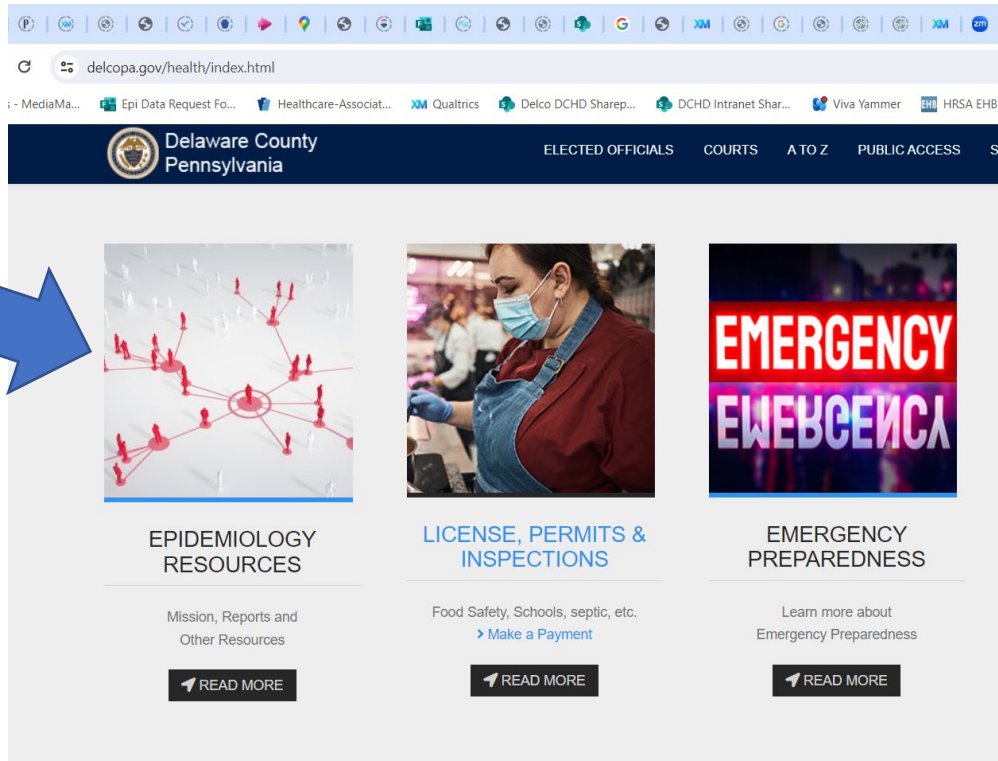
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Annual Infectious Disease Report 2023

The data provided below are used to monitor cases of reportable infectious disease in Delaware County. Data includes confirmed and probable cases as defined by CDC case definition and event codes. For more information on CDC case definitions, please visit the [CDC website](#).

- These are all cases investigated by DCHD DIS team in 2023
- Organized by disease type:
 - Invasive
 - Enteric
 - Hepatitis
 - Respiratory
 - Sexually Transmitted Infections
 - Vaccine Preventable
 - Vector borne

DCHD Epidemiology Webpage



delcopa.gov/health/index.html

Delaware County Pennsylvania

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EPIDEMIOLOGY RESOURCES

Mission, Reports and Other Resources

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Food Safety, Schools, septic, etc.

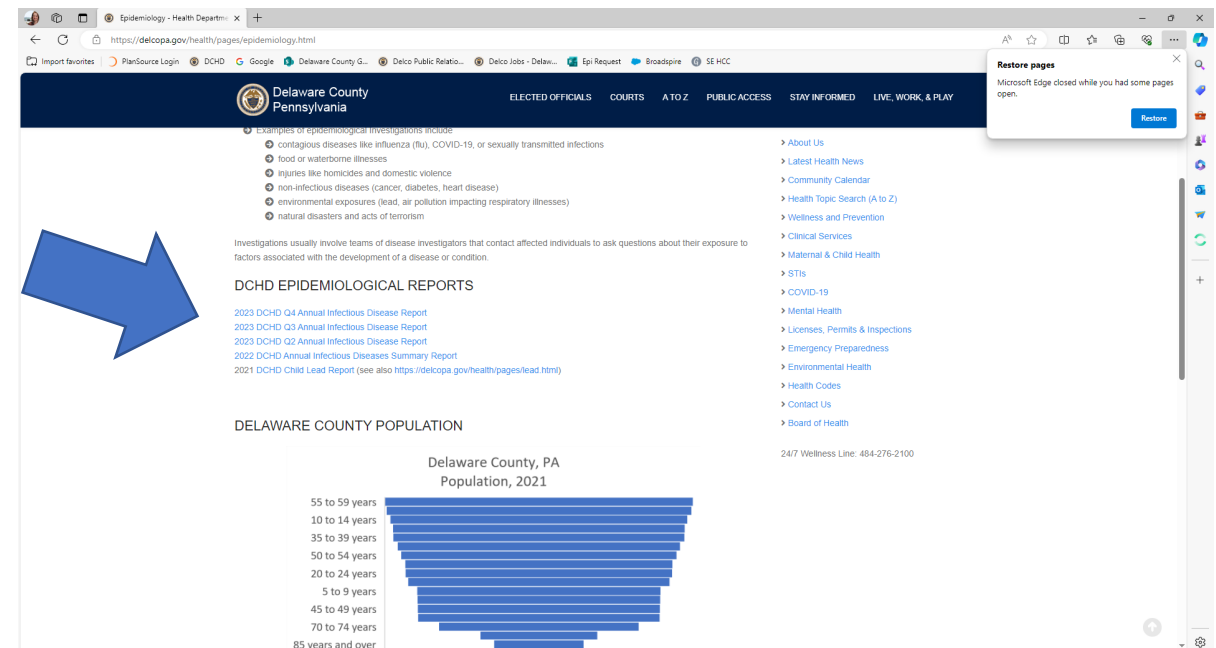
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Learn more about Emergency Preparedness

[READ MORE](#)



delcopa.gov/health/pages/epidemiology.html

Delaware County Pennsylvania

ELECTED OFFICIALS COURTS A TO Z PUBLIC ACCESS STAY INFORMED LIVE, WORK, & PLAY

Examples of epidemiological investigations include:

- contagious diseases like influenza (flu), COVID-19, or sexually transmitted infections
- food or waterborne illnesses
- injuries like homicides and domestic violence
- non-infectious diseases (cancer, diabetes, heart disease)
- environmental exposures (lead, air pollution impacting respiratory illnesses)
- natural disasters and acts of terrorism

Investigations usually involve teams of disease investigators that contact affected individuals to ask questions about their exposure to factors associated with the development of a disease or condition.

DCHD EPIDEMIOLOGICAL REPORTS

- 2023 DCHD Q4 Annual Infectious Disease Report
- 2023 DCHD Q3 Annual Infectious Disease Report
- 2023 DCHD Q2 Annual Infectious Disease Report
- 2022 DCHD Annual Infectious Diseases Summary Report
- 2021 DCHD Child Lead Report (see also <https://delcopa.gov/health/pages/lead.html>)

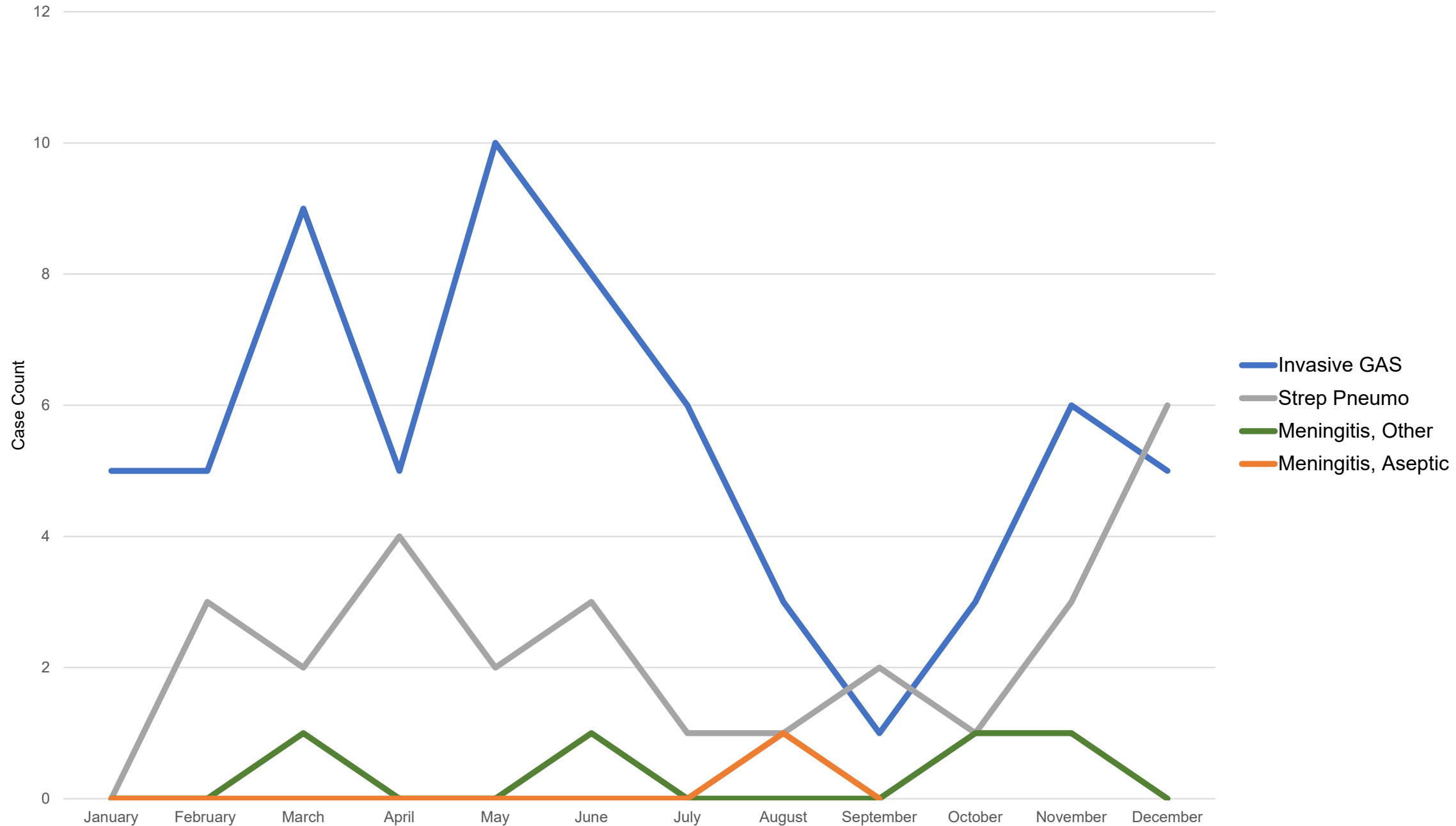
DELAWARE COUNTY POPULATION

Delaware County, PA Population, 2021

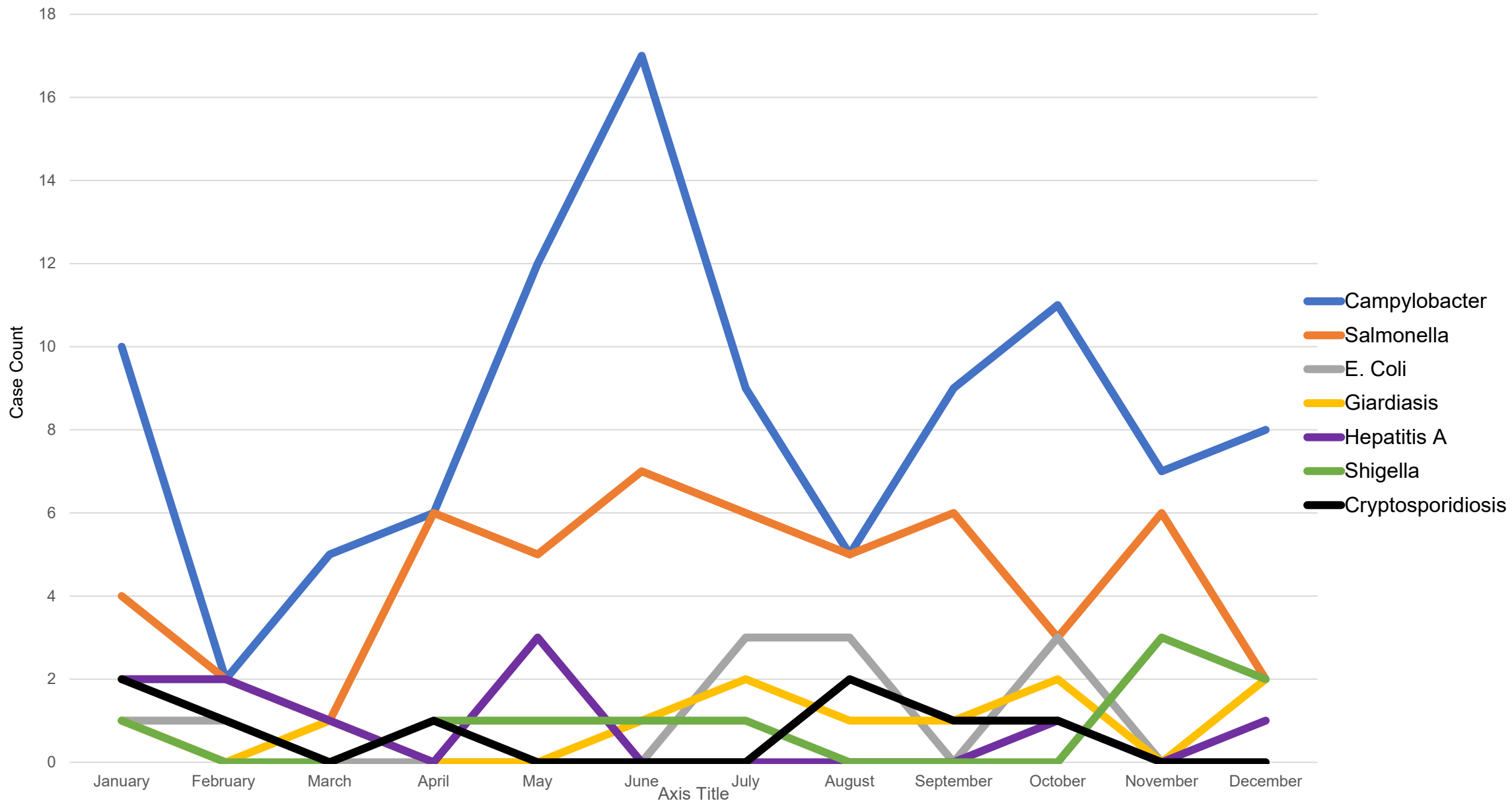
Age Group	Population
55 to 59 years	~10,000
10 to 14 years	~10,000
35 to 39 years	~10,000
50 to 54 years	~10,000
20 to 24 years	~10,000
5 to 9 years	~10,000
45 to 49 years	~10,000
70 to 74 years	~10,000
85 years and over	~10,000

24/7 Wellness Line: 484-276-2100

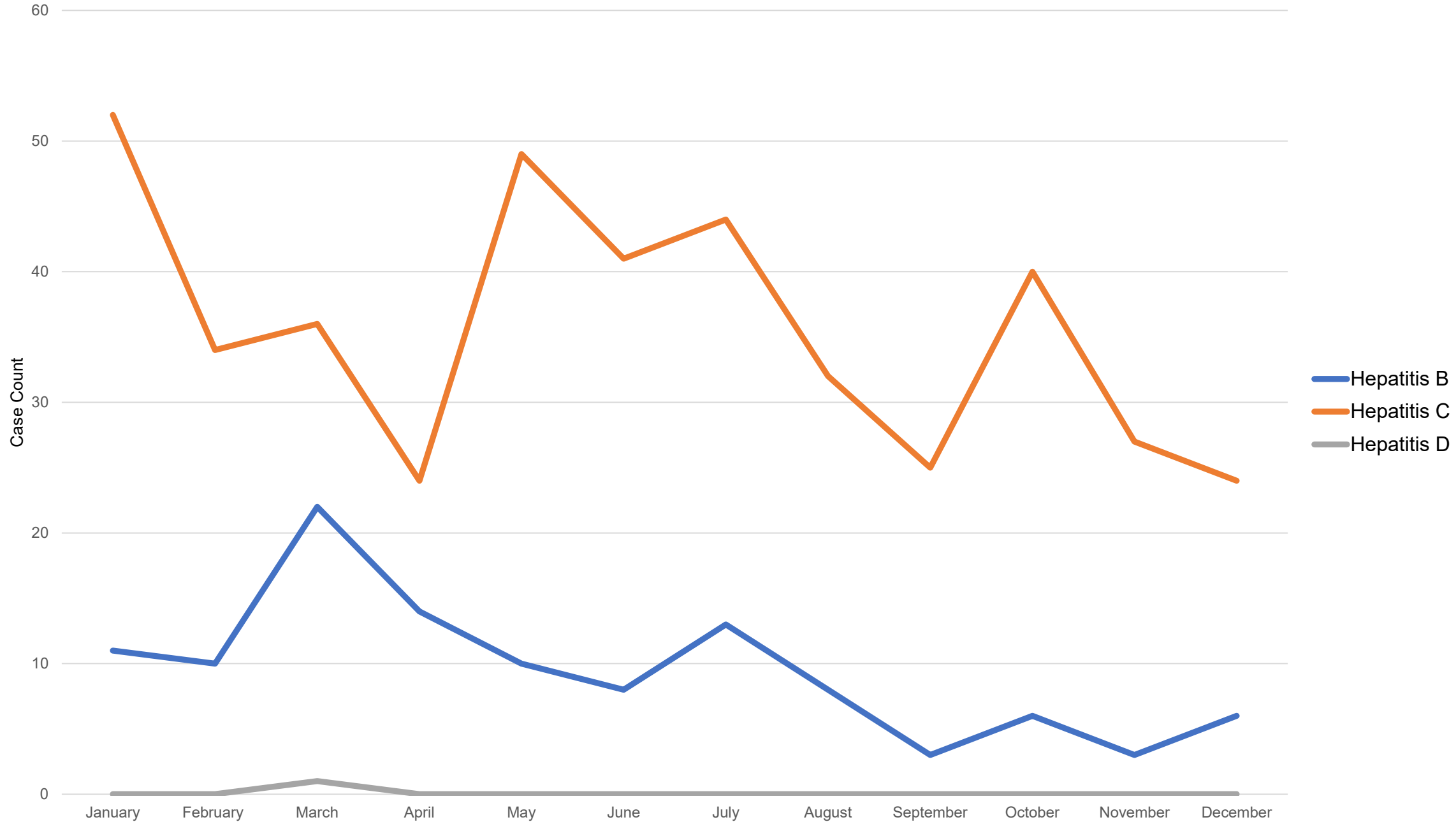
2023 Delaware County Invasive Diseases



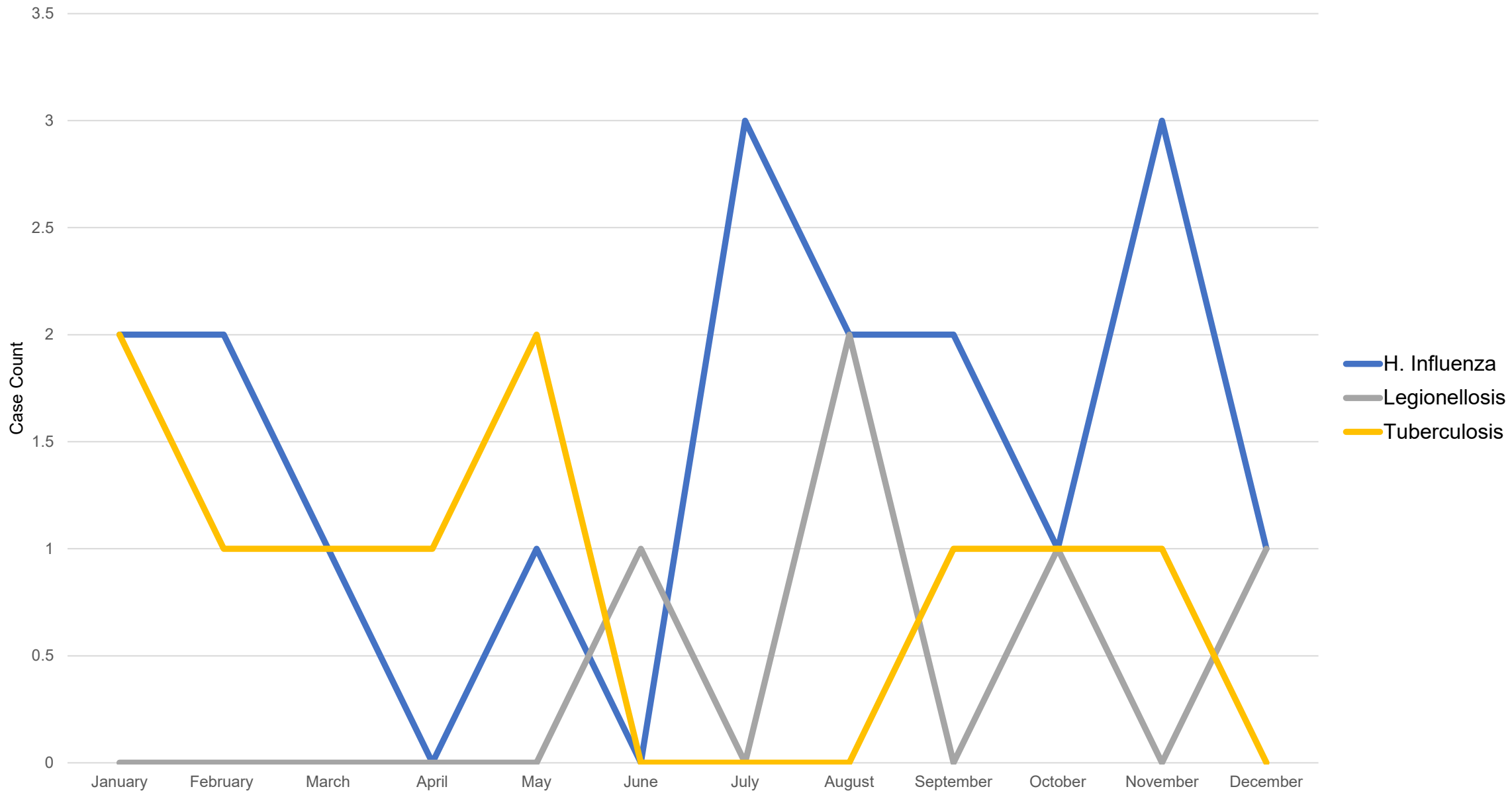
2023 Delaware County Enteric Diseases (Greater than 5 Cases)



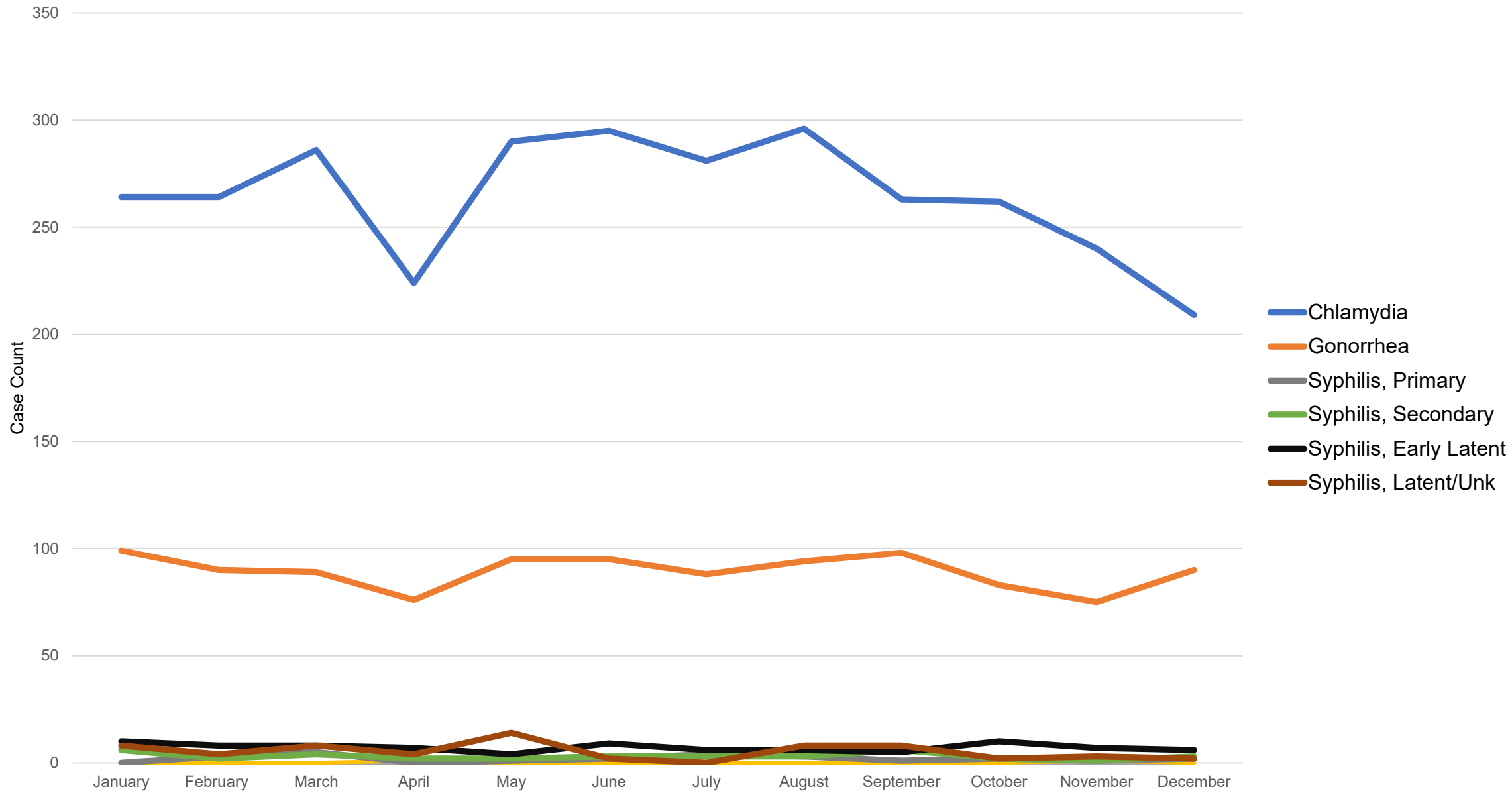
2023 Delaware County Hepatitis Infections



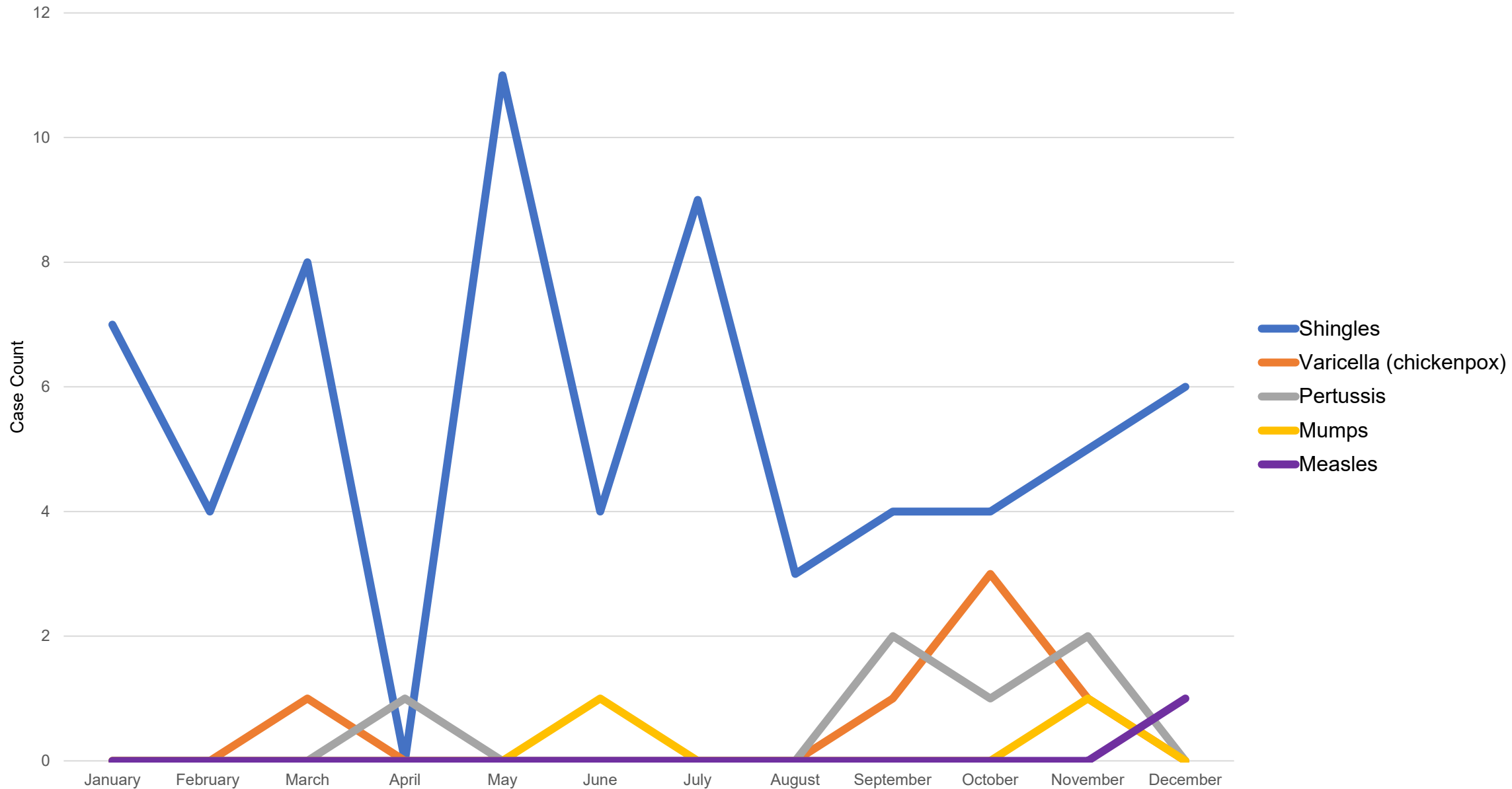
2023 Delaware County Respiratory Infections, Other



2023 Delaware County Sexually Transmitted Infections



2023 Delaware County Vaccine Preventable Illnesses



2023 Delaware County Vector Borne Diseases

