

Maternal and Child Health

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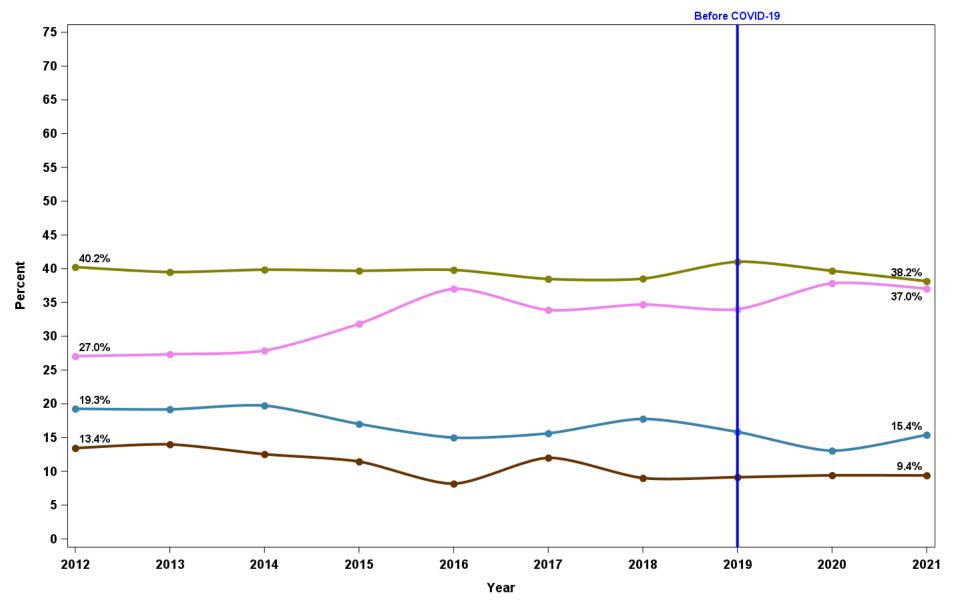
Section Chief, Family Health Systems

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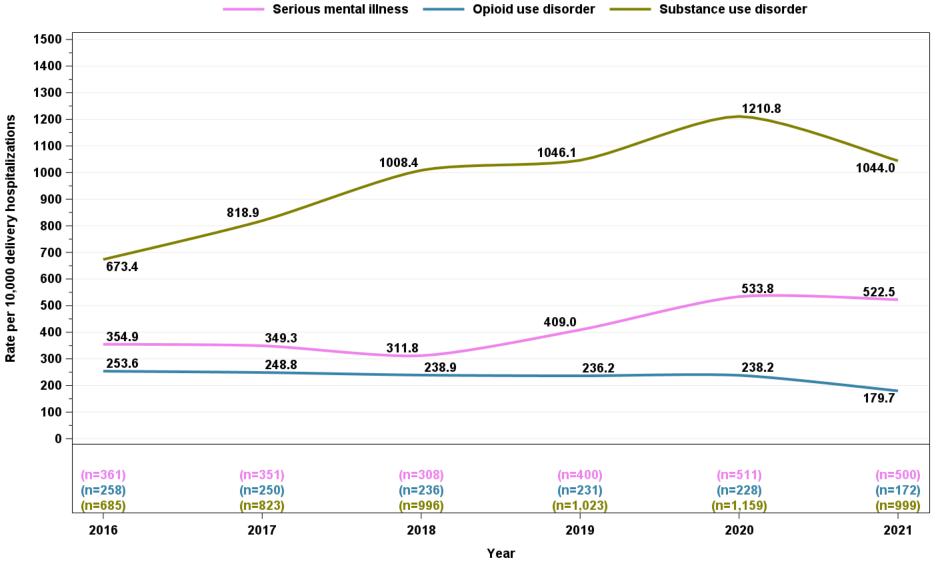


Source: Delaware Department of Health and Social Services, Division of Public Health, Pregnancy Risk Assessment Monitoring System (PRAMS) 2012-2021 data.

Increased Risk:

Women of color are 3-4 times more likely than white women to experience COMPLICATIONS during pregnancy and childbirth and DIE from these complications

Severe mental illness (SMI), opioid use disorder (OUD)*, and substance use disorder (SUD)** among women with a delivery hospitalization in Delaware, 2010-2021



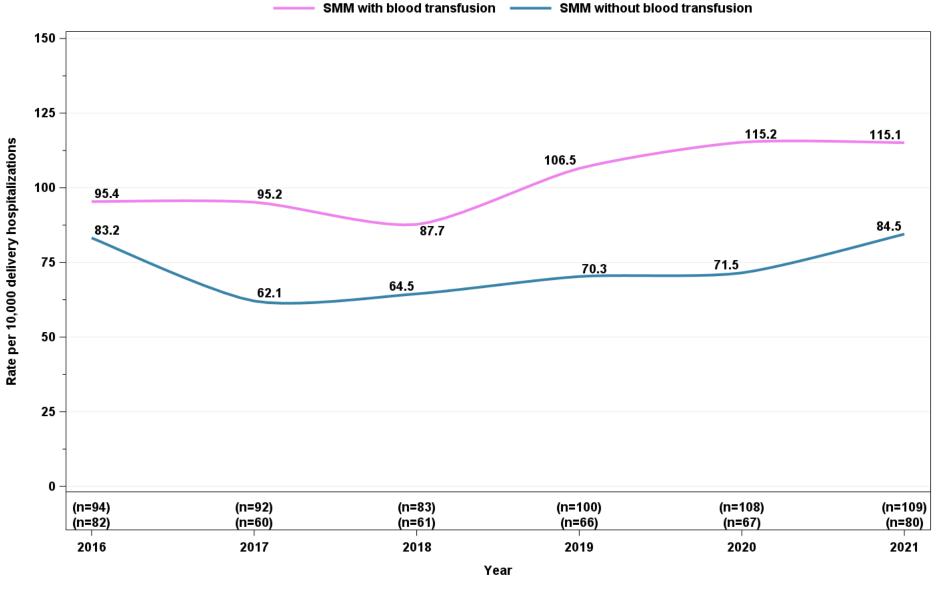
Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center, 2010-2021

Note: Serious mental illness (SMI) is based on Substance Abuse and Mental Health Services Administration (SAMHSA) definition as a mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities

^{*}Based on Hirai et al. JAMA article. See: Hirai AH, Ko JY, Owens PL, Stocks C, Patrick SW. Neonatal Abstinence Syndrome and Maternal Opioid-Related Diagnoses in the US, 2010-2017. JAMA. 2021;325(2):146–155. doi:10.1001/jama.2020.24991

^{**}Based on DSM-V criteria. Includes alcohol use, cannabis use, amphetamine use, cocaine, hallucinogens, sedatives, other drugs, tobacco use, and opioid use disorder

Severe maternal morbidity (SMM)* rates per 10,000 delivery hospitalizations in Delaware, 2016-2021

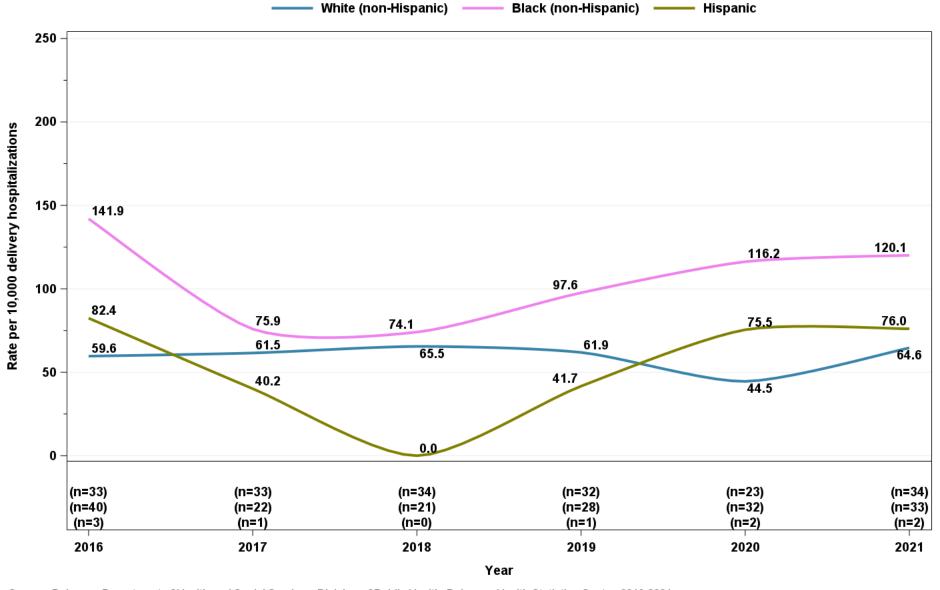


Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center, 2010-2021

^{*}Severe maternal morbidity (SMM) CDC criteria and ICD-10CM codes based on Alliance for Innovation on Maternal Health (AIM).

^{*}SMM includes acute myocardial infarction, aneurysm, acute renal failure, adult respiratory distress syndrome amniotic fluid embolism, cardiac arrest/ventricular fibrillation, conversion of cardiac rhythm, disseminated intravascular coagulation, eclampsia, heart failure/arrest during surgery procedure, puerperal cerebovascular disorders, pulmonary edema/acute heart failure, sepsis, severe anethesia complications, shock, sickle cell disease with crisis, air and thrombotic embolism, blood products transfusion, hysterectomy, temporary tracheostomy, and ventillation.

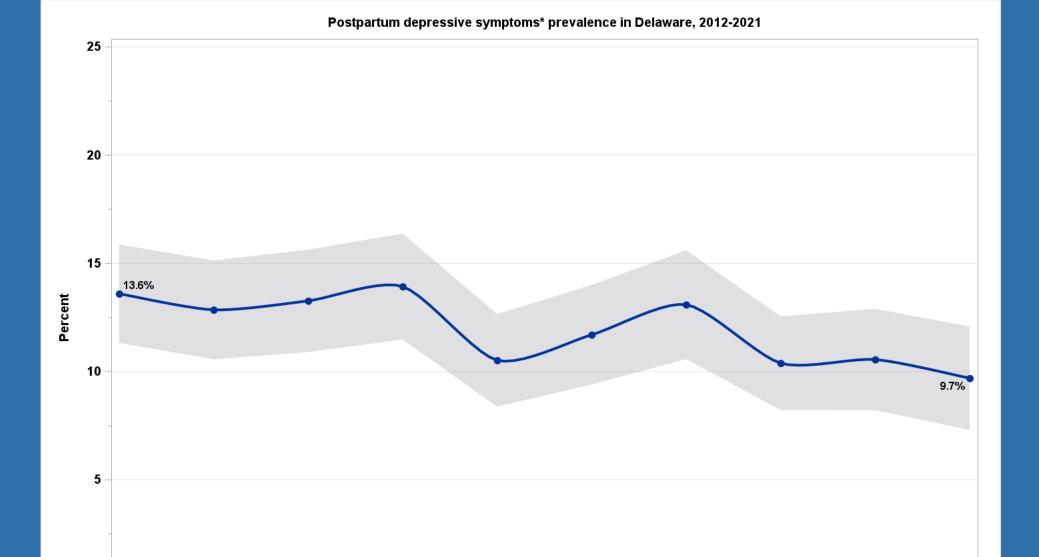
Severe maternal morbidity (SMM)* rates per 10,000 delivery hospitalizations in Delaware, 2016-2021



Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center, 2010-2021

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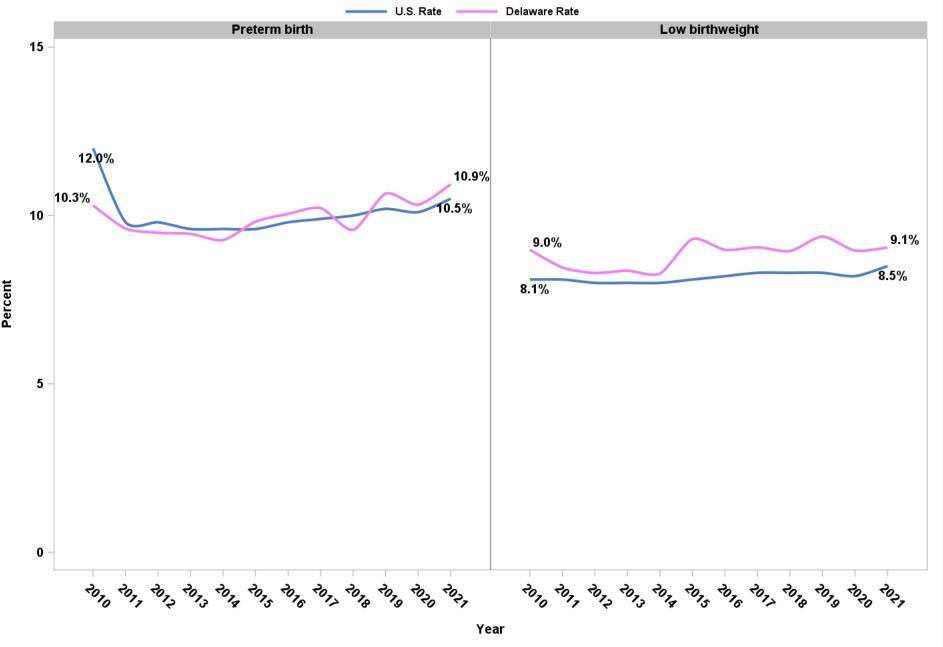


Source: Delaware Department of Health and Social Services, Division of Public Health, PRAMS 2012-2020 Notes: 95% confidence interval (CI) bands.

Year

^{*}Since your new baby was born, how often have you felt down, depressed, or hopeless? response options: a) always; b) often; c) sometimes; d) rarely; and never.
*Since your new baby was born, how often have you had little interest or little pleasure in doing things? response options: a) always; b) often; c) sometimes; d) rarely; and never.

Preterm* and low birthweight** births in the U.S. and in Delaware 2010-2021

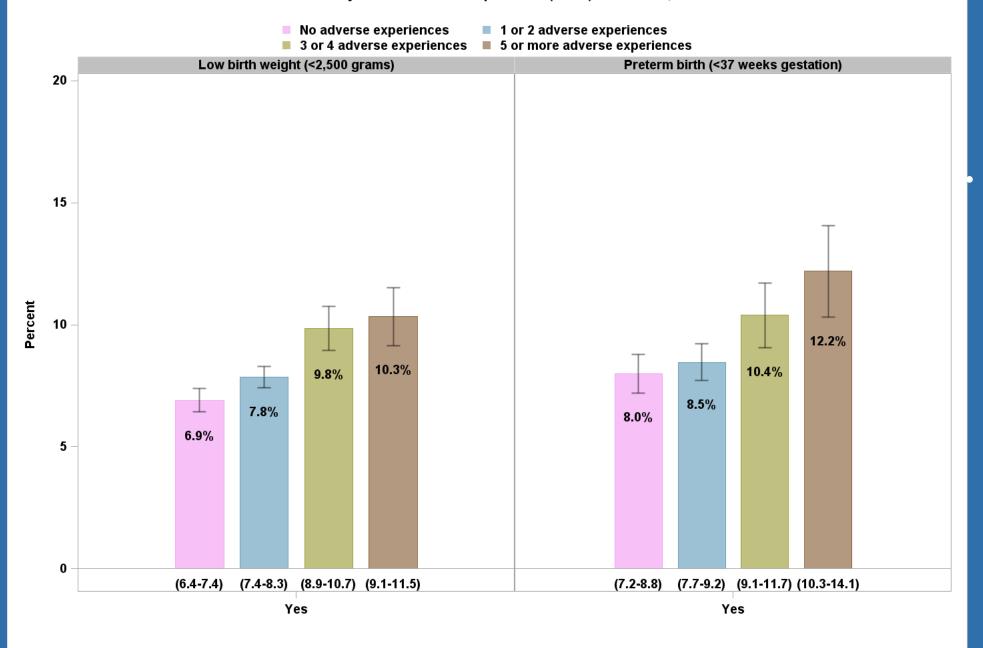


Delaware's preterm births (<37 weeks gestation) and low birth weight (<2,500 grams or 5lbs 8oz.) rates is higher than the U.S. rates.

^{*}Preterm is defined as infants born <37 weeks of gestation

^{**}Lowbirth weight is defined as infants born <2,500 grams or 5lbs 8oz.

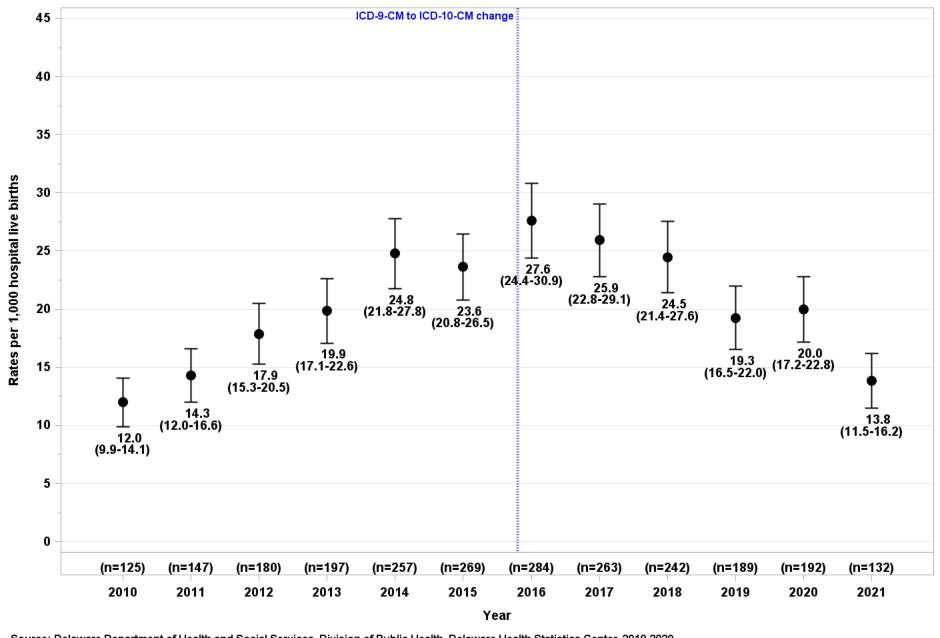
Infant outcomes by adverse maternal experiences (AMEs) in Delaware, 2012-2021



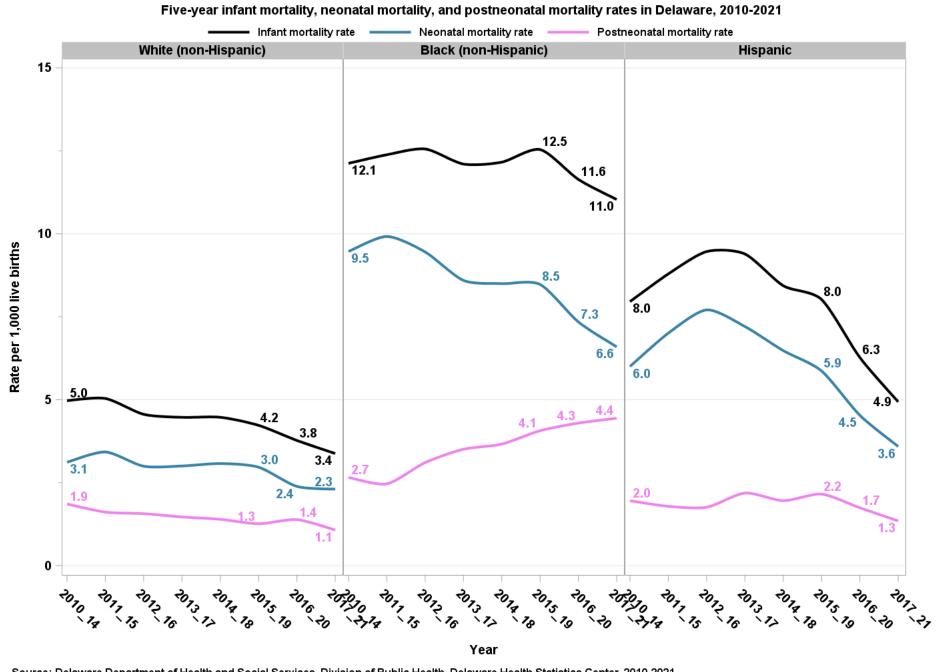
Prevalence of poor birth outcomes increased with more adverse maternal experiences.

Source: Delaware Department of Health and Social Services, Division of Public Health, PRAMS 2012-2021 Notes: 95% confidence interval (CI) bands.

Neonatal Abstinence Syndrome (NAS)* in Delaware, 2010-2021



Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center, 2010-2020 *NAS case definitions based on Council for State and Territorial Epidemiologists (CSTE) Tier 2 definition of a confirmed case Number of cases (n), rates and 95% confidence intervals (CI)



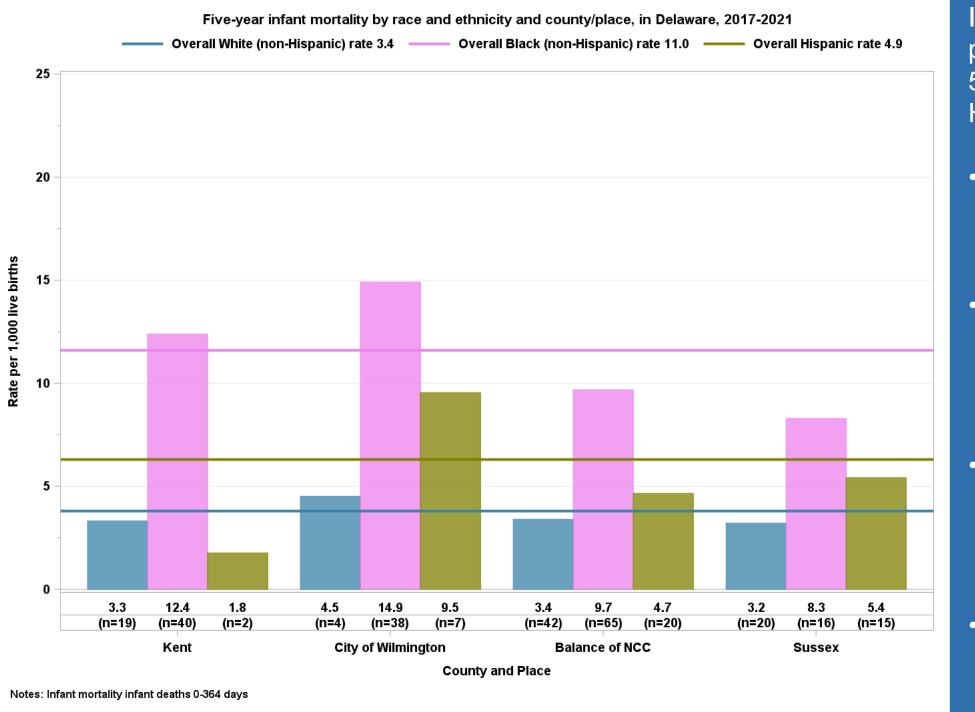
Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center, 2010-2021.

Notes: Infant mortality infant deaths 0-364 days, neonatal mortality infant deaths 0-27 days, postneonatal mortality infant deaths 28-364 days.

5-year IMR for Black (non-Hispanic) decreased by 10%; Hispanics saw a 39% decline; and White (non-Hispanics) saw a 29% decline during same time-period!

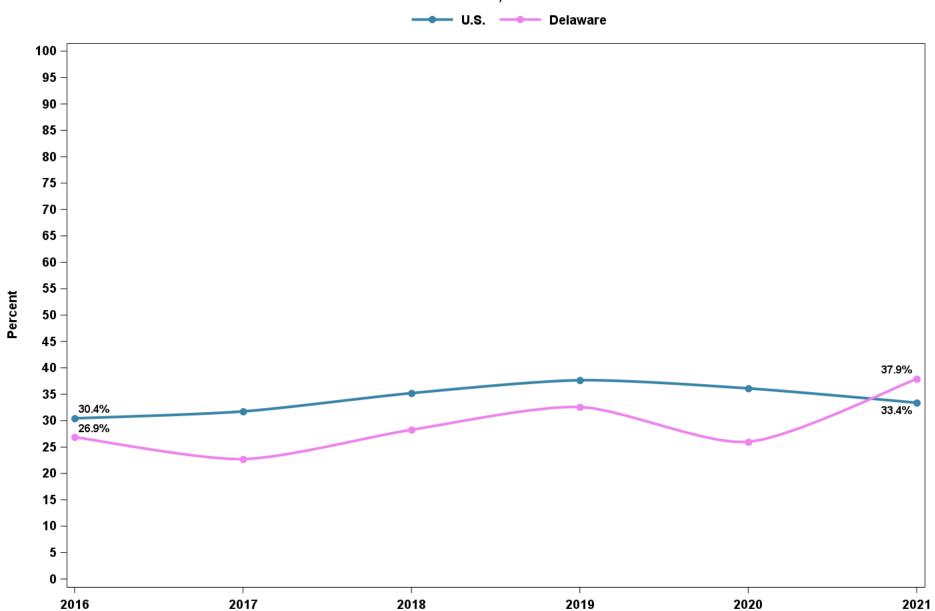
5-year neonatal mortality rate for Black (non-Hispanic) decreased by 30%; Hispanics saw a 40% decline; and White (non-Hispanics) saw a 26% decline during same time-period!

5-year postneonatal mortality rate for Black (non-Hispanic) increased by **63**%!

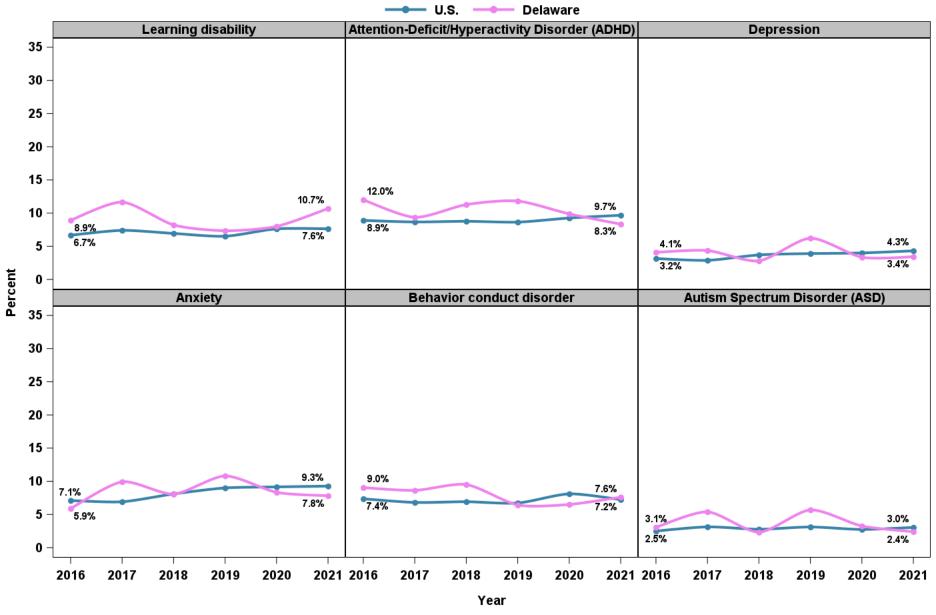


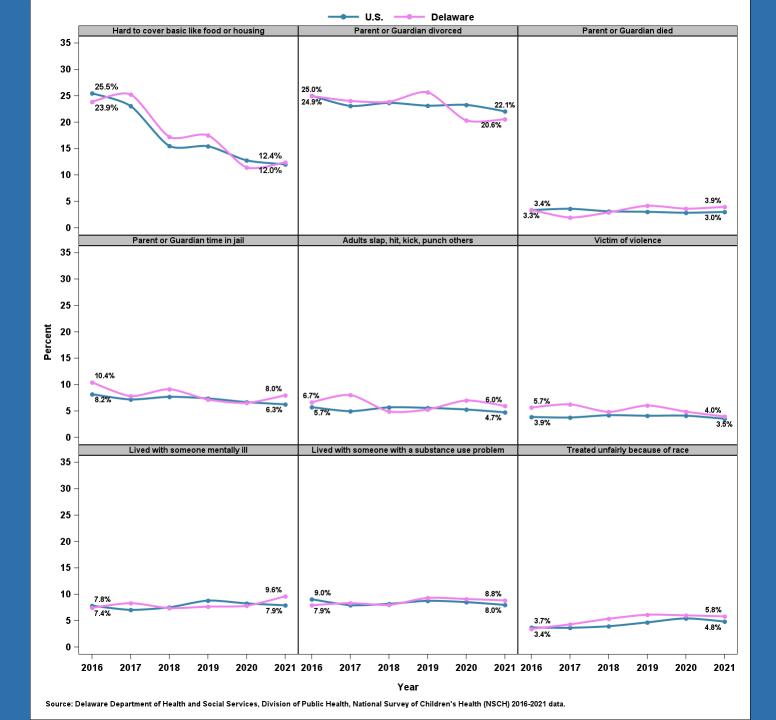
Irrespective of the place of residence, the 5-year Black (non-Hispanic) IMR was:

- 3.8 times of White (non-Hispanic) rate in Kent County;
- 3.3 times of White (non-Hispanic) rate in City of Wilmington;
- 2.9 times of White (non-Hispanic) rate in Balance of New Castle County; and
- 2.6 times of White (non-Hispanic) in Sussex County



Percent of children (3-17 years) who currently have learning disability, attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD), depression, anxiety, behavior conduct disorder, autism spectrum disorder (ASD) as reported by a parent/guardian in the U.S. and in Delaware, 2016-2021

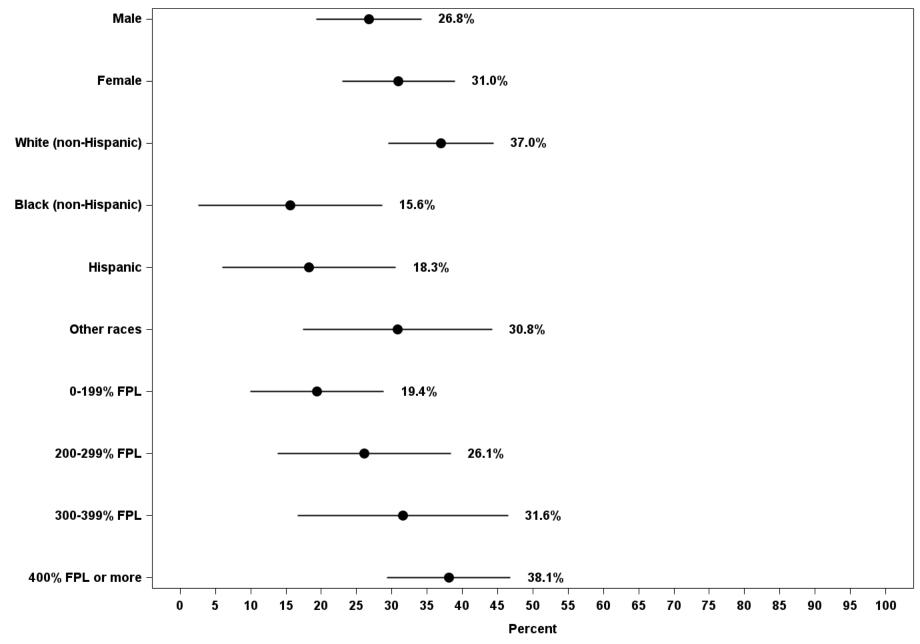




In 2021, the percentage of children with following individual adverse childhood experiences (ACEs) was higher as compared to the U.S.

- Parent/Guardian died
- Parent/Guardian in jail
- Witnessed adults slap, hit, punch others
- Victim of violence
- Lived with someone with mental illness
- Lived with someone with a substance use problem
- Treated unfairly because of race

Percent of children (9-35 months) who received a developmental screening using a parent-completed screening tool by key demographics in Delaware, 2016-2021



Source: Delaware Department of Health and Social Services, Division of Public Health, National Survey of Children's Health (NSCH) 2016-2021 data.

Adverse childhood experiences (ACEs) composite measure as reported by a parent/guardian by key demographics in Delaware, 2016-2021

	Unexposed	One ACE	Two or more ACEs
Age 0-5 years –	→ 72.1%	→ 17.3%	◆ 10.6%
Age 6-11 years –	- 56.4%	→ 23.0%	→ 20.6%
Age 12-17 years –	→ 43.8%	→ 28.1%	→ 28.2%
Male –	◆ 56.5%	◆ 23.6 %	◆ 20.0 %
Female –	◆ 57.9%	◆ 22.2 %	◆ 19.9%
White (non-Hispanic) –	◆ 64.5%	• 20.4%	• 15.1%
Black (non-Hispanic) –	-● 45.4%	-← 26.0 %	-← 28.6%
Hispanic –	-← 53.5%	-← 26.2%	- ●− 20.3%
Other races –	- ← 56.0%	- ●- 22.5%	- ●- 21.6%
0-199% FPL –	-← 42.1 %	→ 26.0%	- 31.9%
200-299% FPL –	- ← 54.1%	-← 24.2%	- 21.7%
300-399% FPL –	-● - 61.4%	-← 23.9%	- ●- 14.6%
400% FPL or more –	→ 75.6%	◆ 17.9%	• 6.5%
	0 15 30 45 60 75 90	0 15 30 45 60 75 90	0 15 30 45 60 75 90
	Percent		

- Prevalence of two or more ACEs increased by age.
- Prevalence of
 ACEs was
 significantly
 higher for Black
 (non-Hispanic) as
 compared to White
 (non-Hispanic).
- Prevalence of
 ACEs decreased
 with increases in
 federal income
 poverty. ACEs
 highest among
 children with
 <200% FPL.

Source: Delaware Department of Health and Social Services, Division of Public Health, National Survey of Children's Health (NSCH) 2016-2021 data.