GNR PUBLIC HEALTH

Annual Report

Epidemiology

2023

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GWINNETT, NEWTON, AND ROCKDALE COUNTIES EPIDEMIOLOGY 2023 ANNUAL REPORT

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GWINNETT, NEWTON, AND ROCKDALE COUNTIES EPIDEMIOLOGY 2023 ANNUAL REPORT

Executive Summary

The GNR Public Health, Division of Epidemiology and Infectious Disease serves the population of Gwinnett, Newton, and Rockdale Counties in metropolitan Atlanta, Georgia. The division is responsible for disease investigation and control for over one million residents. The division also participates in emergency-preparedness activities. Funding for all activities is secured through county, state, and federal grant-in-aid. The division consists of four distinct programs: Epidemiology, STI, HIV, and Tuberculosis. These programs operate as a team to meet local, state, and federal goals and deliverables. This report will summarize general notifiable diseases and conditions reported to epidemiology, case and outbreak investigations performed by epidemiology, and other related activities within the Epidemiology program in 2023.

In 2023, a total of **4,757** notifiable conditions, including **3,417** general notifiable disease cases and **1,340** animal bites, were reported in the three-county health district at the time of publishing this report. Of all non-STD, non-TB notifiable diseases that require an investigation by epidemiology or a public health intervention, 79.3% were investigated.

This report encompasses data that is collected at the local and state level. All data is verified at the state level before confirmation. As such, a time delay exists allowing for verification of cases according to the Council of State and Territorial Epidemiologists (CSTE) and the Centers for Disease Control and Prevention (CDC) case definitions and reporting requirements. The publication of this report encompasses all confirmed 2023 Notifiable Disease data as of February 9, 2024.

A total of 2,434 (79.3%) of all general notifiable diseases were investigated per district protocols, and this is due to several factors. 584 (12.3%) of non-STD, non-TB diseases that were reported in 2023 did not require an investigation based on statewide disease protocols, and an additional 821 (17.3%) diseases did not require an investigation based on district protocols. Some investigations were not investigated due to patient noncompliance with the investigation. Hepatitis C and elevated Lead Blood Level make up the largest proportion of uninvestigated cases due to how the data is processed and reported at the state level. Though all lead blood level test results are reportable to public health, per protocol, Epidemiology only investigates cases in children who meet the threshold for public health intervention (3.5 µg/dL or higher). In 2023, program staff investigated 133 foodborne illness complaints, 7 waterborne illness complaints, 5 tourist illness complaints, <5 body art illness complaints, and 67 outbreaks of illness (excluding COVID-19). Epidemiology staff also investigated 164 COVID-19 outbreaks. 100% of all outbreaks were investigated

Epidemiology Program Description

The GNR Public Health Department serves over 1.1 million residents of Gwinnett (N=983,526), Newton (N=120,135) and Rockdale (N=95,987) counties in metropolitan Atlanta, GA. Funding for the Epidemiology program is secured through county, state and federal grant-in-aid. The program is directed by the Chief Clinical Officer, and is supported by an Administrative Operations staff member.

Program Responsibilities:

The Epidemiology program staff is responsible for investigation of cases, clusters, outbreaks and suspected cases of reported diseases including those which may not be captured in traditional surveillance systems such as syndromic surveillance triggers. Staff is also responsible for tracking and reporting nearly 70 notifiable diseases to the Georgia Division of Public Health Epidemiology Branch and implementing control measures to limit the spread of disease in the community. The Epidemiology program staff completes data requests and provides health guidance and education to other public health staff, hospital staff, physicians and other health care providers, school and child care center staff, and other members of the community. Additionally, epidemiology provides trainings and outreach to community members and partners. The Epidemiology team is often responsible for publishing internal and external reports and participates in other district public health programs as needed.

Viral Respiratory Illnesses

Local, state and federal public health agencies conduct surveillance for viral respiratory diseases that usually spread in the fall and winter, including COVID-19, influenza (flu), and respiratory syncytial virus (RSV). Anyone can get a respiratory virus infection, but some people are at higher risk for serious illness. Data collected help us track the trends of each disease and the combined impact overall.

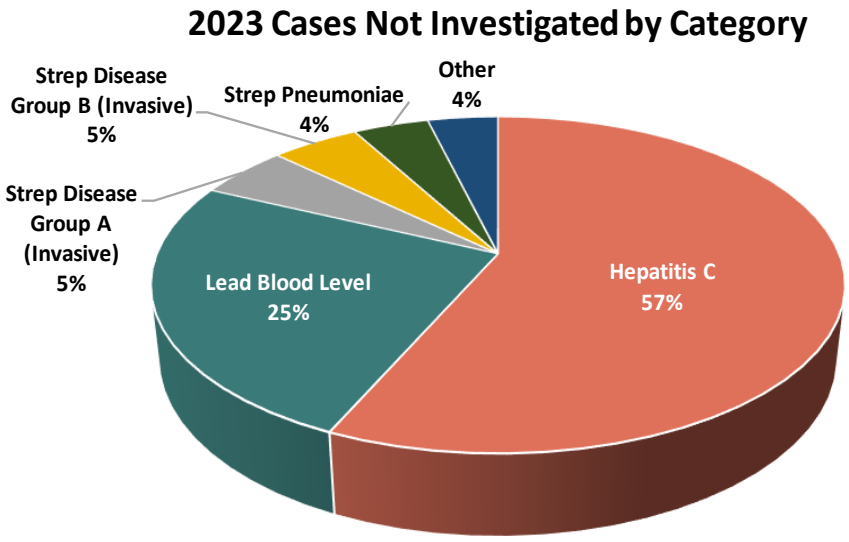
All Georgia physicians, laboratories, and other health care providers are required by law to report notifiable diseases. Instructions, including notifiable conditions and the timeframe in which they are reportable can be found at https://dph.georgia.gov/epidemiology/disease-reporting. Georgia tracks the listed conditions statewide using multiple overlapping surveillance systems, especially in the case of viral respiratory diseases as some are not reportable at the individual case level. More details about these various systems can be found at individual pages on the COVID-19, Flu, and RSV epidemiology DPH pages. GNR and DPH also monitor for more rare or uncommon viral respiratory disease events like travel-related illnesses (MERS, SARS, etc.) and novel or variant flu.

Additional Resources

Centers for Disease Control and Prevention (CDC):

Protect yourself from COVID-19, Flu, and RSV
Weekly Viral Respiratory Illness Snapshot
CDC Respiratory Virus Updates
COVID-19 Variant Surveillance

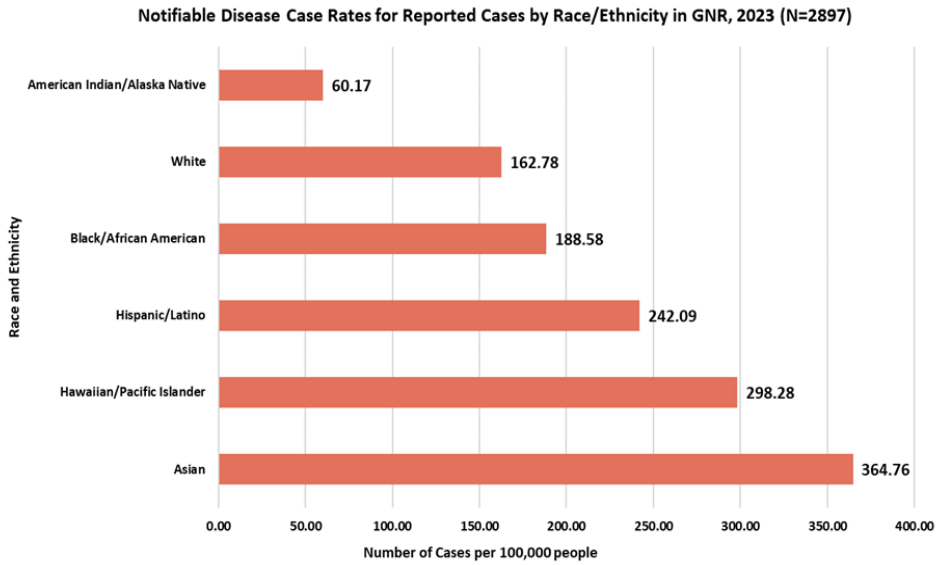
2023 Cases Not Investigated		
Reportable Disease	**Number of Cases**	**Percentage of Cases**
Campylobacteriosis	4	0.28%
CRE	1	0.07%
Cryptosporidiosis	1	0.07%
Giardiasis	1	0.07%
Hepatitis C	797	56.73%
Salmonellosis	7	0.50%
STEC	5	0.36%
Shigellosis	3	0.21%
Yersinia	1	0.07%
Haemophilus Influenzae (Invasive)	20	1.42%
Lead Blood Level	354	25.20%
Streptococcal Disease, Group A (Invasive)	71	5.05%
Streptococcal Disease, Group B (Invasive)	69	4.91%
Streptococcal Toxic Shock Syndrome	11	0.78%
Streptococcus Pneumoniae (Invasive)	59	4.20%
Typhoid	1	0.07%
Total	**1405**	**100%**



Health Equity

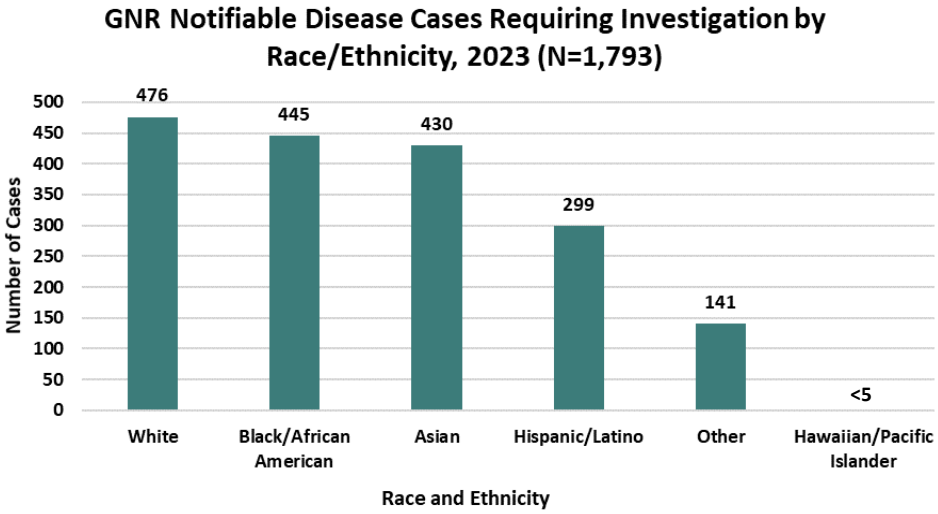
According to the CDC, "health equity is the state in which everyone has a fair and just opportunity to attain their highest level of health."[1] To achieve health equity within a community is an ongoing endeavor that requires societal efforts to address historical injustices, boundaries in accessible and adequate health care, and eliminate preventable health disparities. Health disparities are the hindrances of disadvantaged populations by social, economic, geographic, and environment to achieve their optimal health. For example, throughout the U.S., some racial and ethnic minority groups experience higher rates of poor health outcomes and diseases than other groups. Chronic health conditions that affect certain groups more than others include diabetes, obesity, asthma, etc. Infectious diseases like COVID-19 have impacted certain racial and ethnic groups more than others, which was discussed at length during the COVID-19 pandemic. Social determinants of health (SDOH) can be an indicator that affects the burden of disease within communities. SDOH are conditions where people live, learn, work, play, and worship that impact their health risks and outcomes.[2] Any inequities within these key areas of the SDOH can increase various risks to poor health outcomes.

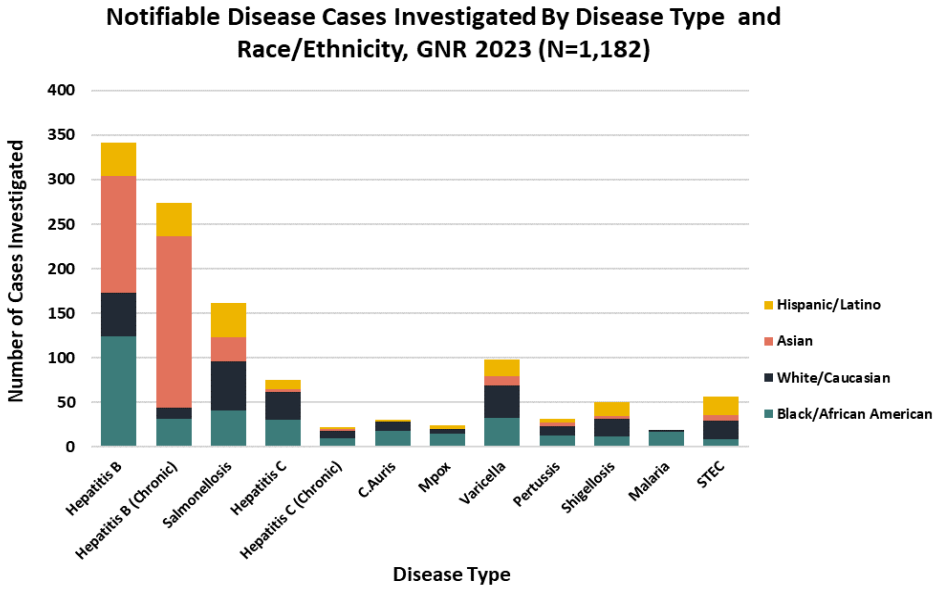
The graph below displays the notifiable disease cases rates for reported cases by race and ethnicity in GNR during 2023. Tables with the race/ethnicity of GNR's population and the disease counts for each race/ethnicity are also provided. The case rates determine the impact that a disease has on a specific community. These case rates are determined by the amount of people infected by a disease and the population of the people at risk of getting the disease. According to the data, in 2023, Asians had the highest case rates of non-STI notifiable diseases compared to other races and ethnicities within GNR. The case rate is disproportionately higher than both the Black/African American (AA) and White population, who have the highest population counts in the district. Unknown races/ethnicities were excluded from this data. Hispanic/Latino populations not stratified.



Race/Ethnicity in	Population as	Percentage of
White	578,689	48.2%
Black/African American	431,648	35.9%
Asian	142,013	11.8%
American Indian/ Alaska Native	9,972	.8%
Hawaiian/Pacific Islander	1,341	.1%
Hispanic/Latino	253,214	21.1%

Race/Ethnicity in GNR	Disease Counts	Percentage of Reported Disease
White	942	32.5%
Black/African American	814	28.1%
Asian	518	17.9%
American Indian/ Alaska Native	6	.2%
Hawaiian/Pacific Islander	<5	.1%
Hispanic/Latino	613	21.1%





White/Caucasian, Black/African American and Asian races had the highest prevalence of a notifiable disease infection. In the graph directly above, the burden of disease for Hepatitis B and Hepatitis B (chronic) was largely disproportionate among the Asian community compared with all races and ethnicities. Asians had a case rate of 92.25 cases per 100,000 people for Hepatitis B compared the Black/AA (28.73) and White/Caucasians (8.47), and also, they had a case rate of 135.20 cases per 100,000 people for Hepatitis B (Chronic).

Foodborne illness affected the Hispanic/Latino and Asian communities disproportionately when compared with other races and ethnicities. Hispanic/Latino people had a Shiga Toxin-Producing *E. coli* (STEC) case rate of 7.9 cases per 100,000 people compared to the White/Caucasian (3.63) and Asian (4.93) community. Another food-borne illness, Shigellosis, affected the Hispanic/Latino community with 6.31 cases per 100,000 people compared to cases rates of Black/AA (4.17) and White/Caucasian (3.28) people. Both the Asian and Hispanic/Latino community were affect by Salmonellosis disproportionately than other races. The Asian community had a 19.01 case rate per 100,000 people and the Hispanic/Latino community had a 15.01 case rate per 100,000 people compared to the White/Caucasian (9.5) and Black/AA (9.5) communities.

C. Auris, Mpox and Malaria affected the Black/AA community disproportionately when compared with other races and ethnicities. The Black/AA had a *C. auris* case rate of 2.78 cases per 100,000 people compared to White/ Caucasians (1.73/ 100,000). For Mpox, there was a 3.01 case rate, while White/Caucasians had a 0.86 case rate. Malaria cases affected Black/AAs with a case rate of 3.94 cases per 100,000 people compared to White/ Caucasians (0.35). The following page displays charts with disease case rates based on race and ethnicity.

Hepatitis B	Case Rate per 100,000 people
Black/African American	28.72
White/Caucasian	8.47
Asian	92.25
Hispanic/Latino	15.01

Mpox	Case Rate per 100,000 people
Black/African American	3.01
White/Caucasian	0.86
Asian	0.00
Hispanic/Latino	1.58

Hepatitis B (Chronic)	Case Rate per 100,000 people
Black/African American	7.18
White/Caucasian	2.25
Asian	135.20
Hispanic/Latino	15.01

C. Auris	Case Rate per 100,000 people
Black/African American	2.78
White/Caucasian	1.73
Asian	0
Hispanic/Latino	0.79

Hepatitis C	Case Rate per 100,000 people
Black/African American	6.95
White/Caucasian	5.53
Asian	2.11
Hispanic/Latino	3.95

Varicella	Case Rate per 100,000 people
Black/African American	7.41
White/Caucasian	6.39
Asian	7.04
Hispanic/Latino	7.50

Hepatitis C (Chronic)	Case Rate per 100,000 people
Black/African American	2.09
White/Caucasian	1.56
Asian	1.41
Hispanic/Latino	0.79

Shigellosis	Case Rate per 100,000 people
Black/African American	4.17
White/Caucasian	3.28
Asian	2.11
Hispanic/Latino	6.32

STEC	Case Rate per 100,000 people
Black/African American	1.85
White/Caucasian	3.63
Asian	4.93
Hispanic/Latino	7.90

Malaria	Case Rate per 100,000 people
Black/African American	3.94
White/Caucasian	0.35
Asian	0
Hispanic/Latino	0

Salmonellosis	Case Rate per 100,000 people
Black/African American	9.50
White/Caucasian	9.50
Asian	19.01
Hispanic/Latino	15.01

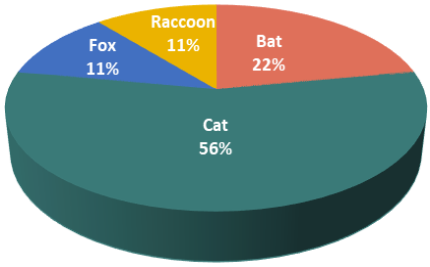
Pertussis	Case Rate per 100,000 people
Black/African American	3.48
White/Caucasian	1.73
Asian	2.82
Hispanic/Latino	1.58

Animal Bites

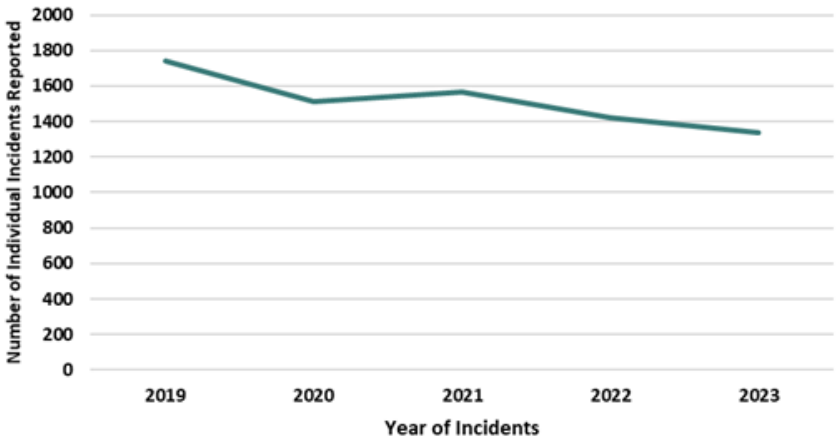
Rabies is a fatal viral infection transmitted through the saliva of infected mammals. Although all mammals are susceptible to rabies, only certain species act as reservoirs for rabies disease in the community. These species include raccoons, skunks, foxes, bats, and coyotes as well as domestic dogs, cats, and ferrets. Rabies in humans can be prevented by preventing exposures to rabid animals, by providing appropriate post-exposure prophylaxis, and by offering pre-exposure vaccinations to high-risk populations who might encounter rabid animals in their daily lives (veterinarians, animal control personnel, etc.).[3]

Animal bites/exposures are a notifiable condition and are reported to Epidemiology by animal control, medical facilities, and private citizens. All reports are investigated to determine the risk for rabies transmission and to make recommendations regarding the need for rabies prophylaxis.

GNR 2023 Rabies Positive Animals by Type (N=9)
Human Exposure Only

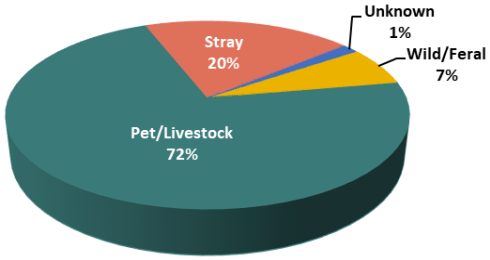


GNR Total Bite Incidents Reported, 2019-2023



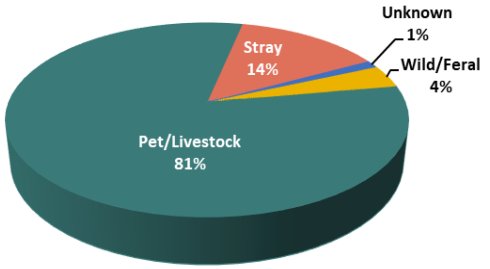
In 2023, of the 1,340 de-duplicated individual reports of animal bites involving residents in Gwinnett (N=1,073) Newton (N=158), and Rockdale (N=109) counties, post-exposure prophylaxis (PEP) was recommended to 215 human victims following an animal exposure/bite. Of those, 105 (48.8%) of human victims recommended PEP completed the full course of treatment, 82 victims (38.1%) did not complete the full treatment, and 28 (13.0%) were lost to follow-up. In 2023, seven animals in Gwinnett County tested positive for rabies, four cats, two bats, and one raccoon. Two animals in Rockdale County tested positive for rabies, one cat and one fox.

Gwinnett Animals Assessed* in 2023 by Classification (N=1,027)



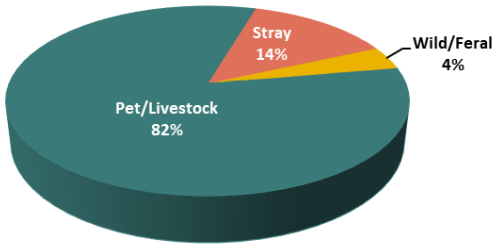
Gwinnett 2023	Animal Bites Reported	Animals Assessed*
Pet/Livestock	722	738
Wild/Feral	121	69
Stray	213	204
Unknown	16	16
Total	**1,073**	**1,027**

Newton Animals Assessed* in 2023 by Classification (N=159)



Newton 2023	Animal Bites Reported	Animals Assessed*
Pet/Livestock	127	129
Wild/Feral	6	6
Stray	23	22
Unknown	<5	<5
Total	**158**	**159**

Rockdale Animals Assessed* in 2023 by Classification (N=102)



Rockdale 2023	Animal Bites Reported	Animals Assessed*
Pet/Livestock	91	84
Wild/Feral	<5	<5
Stray	14	14
Total	**109**	**102**

*Animals assessed are the number of animals that actually bit or scratched a human. Animal bites reported are based on the number of humans bitten, which means the animals assessed could be higher than the animal bites reported due to multiple animals biting or scratching one human.

*The total number of animals assessed include attacking animals reported to GNR Public Health, Animal Control, Georgia Poison Control, and hospitals.

Nationally, wild animals represent the majority (>90%) of all animal rabies cases.[2] Bats, raccoons, skunks, and foxes were the most commonly reported rabies-positive animals.[4] Although the common reservoir of rabies in Georgia is the raccoon, more than half (58) of rabies virus in 2022 were associated with bats.[5] Human rabies cases remain rare; there were 0 confirmed human rabies cases in Georgia in 2023. During September 2019 - November 2021, the Advisory Committee on Immunization Practices Rabies Work Group considered updates to their 2008 human rabies prevention recommendations such as redefining risk categories and modifying vaccine dosing schedule.[5]

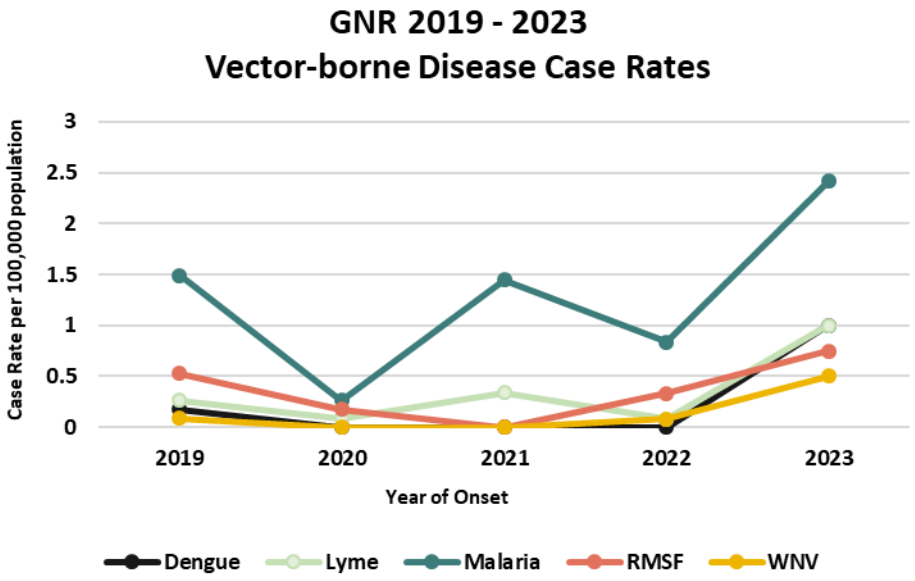
Vector-borne and Zoonotic Diseases

A zoonotic disease is an illness that can be passed from animals such as livestock, pets, and wild animals to humans. Brucellosis, Q fever, and tularemia are examples of zoonoses and must be reported immediately because they are classified as potential bioterrorism agents. Zoonotic diseases that require reporting within 7 days include leptospirosis, Hansen's disease (Leprosy), psittacosis, and toxoplasmosis.

Vector-borne diseases are illnesses that are transmitted to humans or other animals by an insect or other arthropod such as mosquitoes and ticks. Many individuals infected with vector-borne diseases have no symptoms; however, a small percentage of people may develop serious illness such as encephalitis and meningitis that can result in irreversible neurological damage, paralysis, coma, or death. A combination of factors continues to define vector-borne disease epidemiology in the United States. These factors include the importation of pathogens and disease vectors from other countries, the evolution of pathogens currently impacting the U.S., and identification of novel pathogens already endemic to the U.S. but as yet uncharacterized.[6] In 2020, the decrease of vector-borne disease case rates were likely due to isolation and travel restrictions during the COVID-19 pandemic.

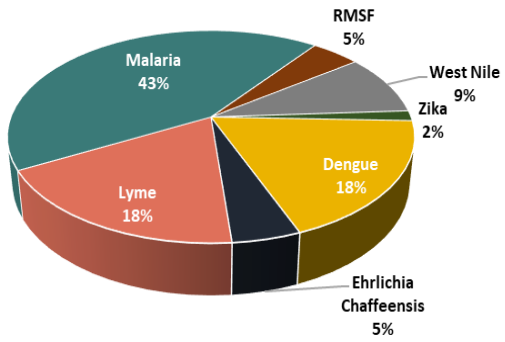
In 2023, a total of 71 vector-borne illnesses were reported to GNR. These illnesses consisted of Dengue, Malaria, Ehrlichia Chaffeensis, Rocky Mountain Spotted Fever (RMSF), Lyme Disease, Zika, and West Nile Virus. Malaria represented 39.4% of all vector-borne and zoonotic illness reported in 2023. One Brucellosis case was reported and investigated. This case reported travel to Mexico and consumption of queso fresco while there. Cases reported and investigated cases can be different due to the case definitions of specific vector-borne diseases.

Epidemiology program staff attempted to investigate all cases of vector-borne disease; however, the interview process is complicated by language barriers, refusal to participate, and loss-to-follow-up. Confirmation of disease also requires extensive laboratory testing. As a result many likely cases are not confirmed due to refusal to follow up with requested laboratory testing.



The Georgia Department of Public Health (GDPH) requires immediate reporting of all acute arboviral (arthropod-borne virus) infections. Vector-borne diseases that require reporting within 7 days include Malaria, Rocky Mountain Spotted Fever (RMSF), Ehrlichiosis, Anaplasmosis , and Lyme disease. The most common arboviral infections reported in Georgia include: Eastern Equine Encephalitis (EEE), LaCrosse Encephalitis, and West Nile Encephalitis (WNV). St. Louis Encephalitis (SLE) is less common but has also been reported in Georgia.

Gwinnett 2023 Vector-borne Reported Cases (N=64)

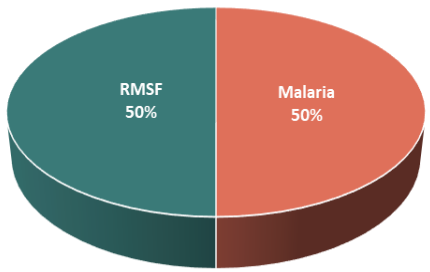


Gwinnett 2023	Reported Cases	Investigated Cases	Confirmed/ Probable Cases
Dengue	12	12	9
Ehrlichia Chaffeensis	<5	<5	<5
Lyme	12	12	0
Malaria	28	27	24
RMSF	<5	<5	0
West Nile Virus (WNV)	6	6	0
Zika	<5	<5	0
Total	**64**	**63**	**34**

Newton 2023 Vector-borne Reported Cases (N=5)

Newton 2023	Reported Cases	Investigated Cases	Confirmed/ Probable Cases
RMSF	<5	<5	<5
Total	**<5**	**<5**	**<5**

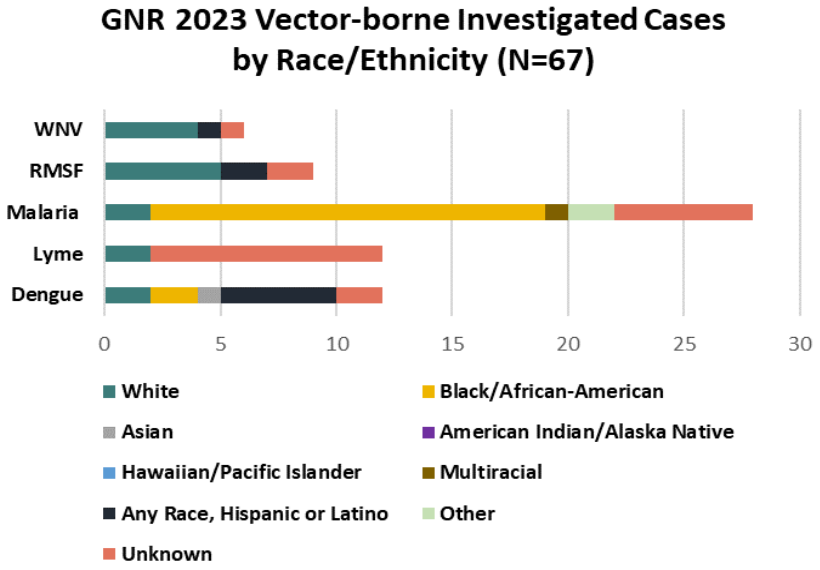
Rockdale 2023 Vector-borne Reported Cases (N=<5)

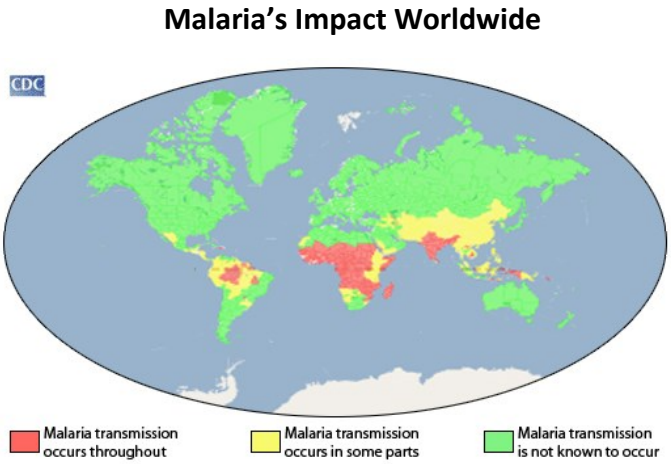


Rockdale 2023	Reported Cases	Investigated Cases	Confirmed/ Probable Cases
Malaria	<5	<5	<5
RMSF	<5	<5	<5
Total	**<5**	**<5**	**<5**

A 86.7% increase in investigated Malaria cases was observed between 2022 and 2023. 60.7% of investigated Malaria cases in 2023 were Black or African-American and all cases (100%) were travel-related. GNR Malaria patients most commonly reported recent travel to Africa where Malaria is endemic.

There was an increase in WNV cases and a 61% decrease in RMSF cases between 2022 and 2023. The majority of WNV and RMSF investigated cases were amongst White, Non-Hispanic populations.





Malaria occurs mostly in poor, tropical and subtropical areas of the world. Africa is the most affected due to a combination of factors like presence of the species of mosquitos responsible for high malaria transmission, local weather conditions, and lack of resources and economic stability hindering control efforts.

Countries Visited by 2023 GNR Malaria Cases		
Ivory Coast	Ghana	Togo
Monrovia	Kenya	Abidjan
Gabon	Benin	Guinea
Pakistan	Congo	Nigeria

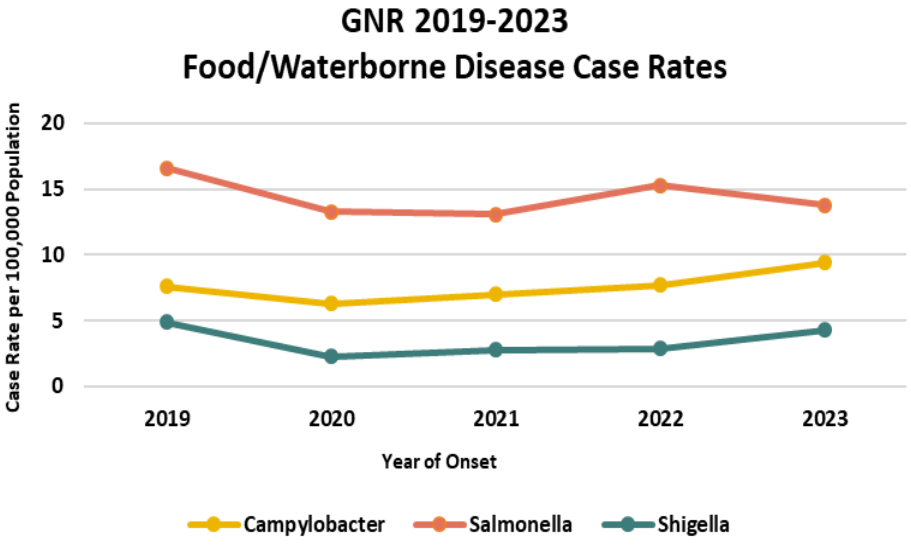
Food and Waterborne Diseases

Enteric Diseases are most commonly caused by bacteria, viruses, or parasites, which are transmitted through the fecal-oral route or, frequently, through contaminated food and water, and enter the body through the gastrointestinal system. These microbes can also be spread through animal or person-to-person contact. There are over 250 identified foodborne diseases. The most common are caused by *Campylobacter*, *Salmonella*, *Shigella*, and *Escherichia coli* O157:H7 or shiga toxin-producing *E. coli* (STEC), and the calicivirus group of viruses known as Norwalk or Norwalk-like viruses. Other less common culprits include Hepatitis A, *Giardia lamblia*, *Yersinia*, *Listeria monocytogenes*, and *Cryptosporidium*. The incubation period varies widely from hours up to one month depending on the pathogen causing the illness.

The Epidemiology program partners with Environmental Health to investigate potential and reported outbreaks and prevent enteric diseases caused by contaminated food or water, as well as those spread person -to-person. Epidemiology staff conducts surveillance activities, investigations and community education to identify sources of infection and prevent further disease transmission.

Particular attention was given to outbreaks in facilities serving highly susceptible populations such as care centers, daycares and schools. These settings are of particular concern because of the high potential for transmission due to the frequency of diapering and toileting, as well as food preparation and feeding of young children in the classroom setting. In younger children, frequent hand-to-mouth activity also increases the potential for transmission. The Epidemiology staff worked closely with employees from these settings to provide information on the appropriate measures to prevent transmission of enteric diseases.

Georgia State Law (OCGA) currently requires reporting all cases of *Campylobacter*, *Cryptosporidium*, *Cyclospora*, *E. coli* O157:H7 or Shiga Toxin-producing *E. coli*, *Giardia*, Hemolytic Uremic Syndrome (HUS), *Listeria*, *Salmonella*, *Shigella*, *Yersinia* and *Vibrio*. Additional follow-up is required for any clusters in person, place, or time. Case investigation with possible special follow-up is recommended for cases of *C. botulinum*, *Cyclospora*, *E. coli* O157:H7 or *STEC*, Hemolytic Uremic Syndrome, *Listeria*, Typhoid fever, and *Vibrio*.



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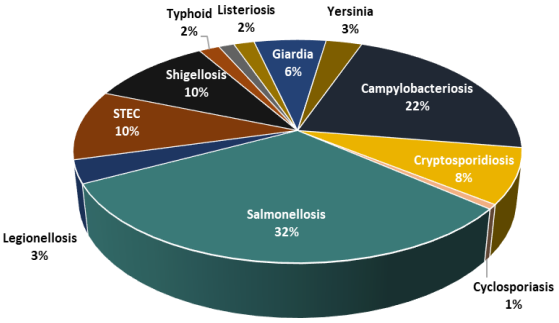
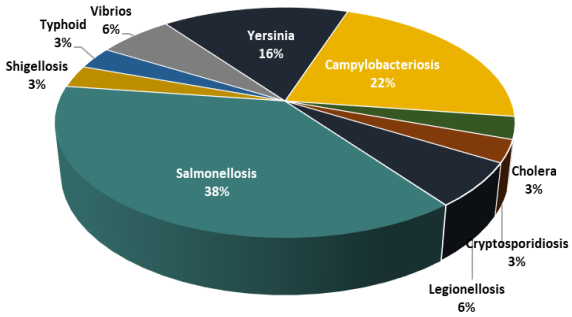
Gwinnett 2023 Common Food/Waterborne Disease Reported (N=538)



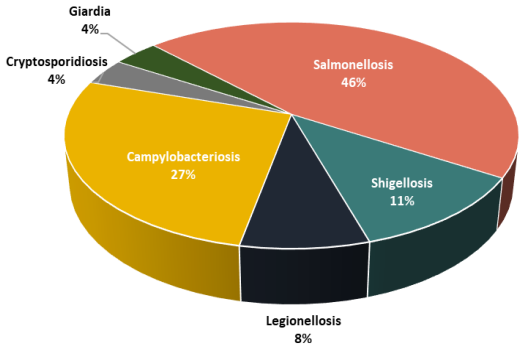
Gwinnett 2023	Reported Cases	Investigated Cases	Confirmed/ Probable Cases
Campylobacter	99	99	96
Cholera	0	0	0
Cryptosporidiosis	36	36	33
Cyclosporiasis	<5	<5	<5
Giardia	28	28	21
Legionellosis	15	14	14
Listeriosis	8	8	<5
Salmonellosis	142	134	128
STEC	46	46	39
Shigellosis	47	47	46
Typhoid	8	7	<5
Vibrios	6	6	<5
Yersinia	14	11	<5
Total	**452**	**439**	**393**

Newton 2023 Common Food/Waterborne Disease Reported (N=27)



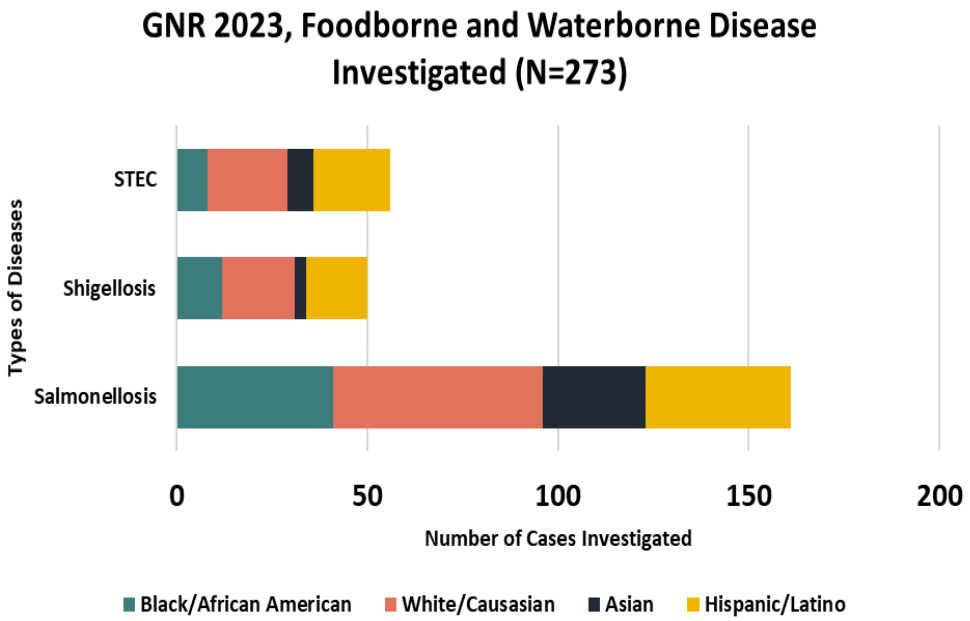
Newton 2023	Reported Cases	Investigated Cases	Confirmed/ Probable Cases
Campylobacter	7	7	7
Cholera	<5	<5	0
Cryptosporidiosis	<5	<5	<5
Legionellosis	<5	<5	<5
Salmonellosis	12	12	12
Shigellosis	<5	<5	<5
Vibrios	<5	<5	<5
Total	**20**	**20**	**12**

Rockdale 2023 Common Food/Waterborne Disease Reported (N=37)



Rockdale 2023	Reported Cases	Investigated Cases	Confirmed/ Probable Cases
Campylobacter	7	7	7
Cryptosporidiosis	<5	<5	<5
Giardia	<5	<5	<5
Legionellosis	<5	<5	<5
Salmonellosis	12	12	11
Shigellosis	<5	<5	<5
Total	**26**	**26**	**24**

The most frequently reported enteric diseases in GNR were *Salmonella* and *Campylobacter* which together accounted for 62.7% all reported enteric illnesses reported in 2023. Shigellosis*, STEC,* and *Giardia* together accounted for about 22% of the total number of reported cases in 2023. Limitations in staff capacity required prioritization of case investigations of foodborne or enteric illness, and staff limitations at the state health department resulted in late reporting of certain enteric illnesses, primarily *Salmonella*, which represented 29% of uninvestigated enteric illness cases. In 2023, the district received 574 reports of enteric illness of which staff investigated 95.8%.



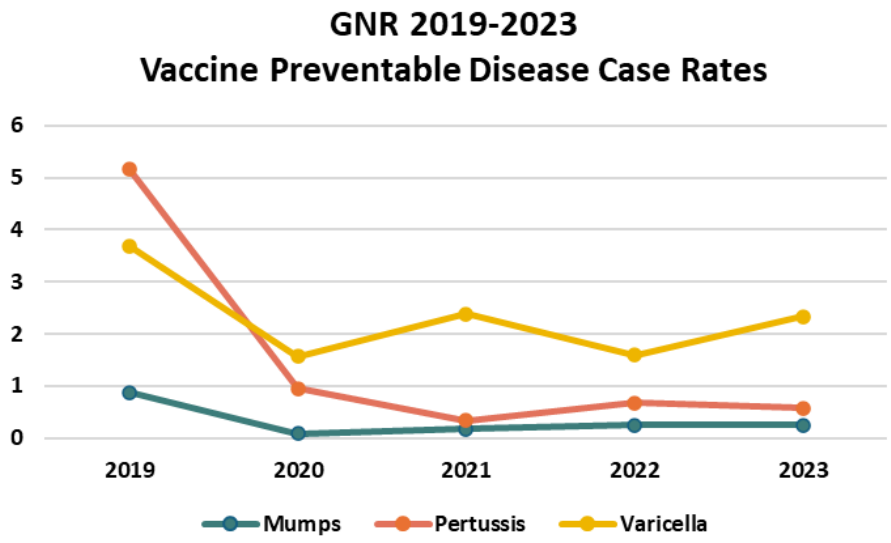
Hispanic/Latino populations made up 35.7% of STEC cases investigated in 2023, falling closely behind White, Non-Hispanic cases that made up 37.5% of total cases investigated. Given that Hispanic/ Latinos are only 21% of GNR's total population this unveils an inequity amongst STEC cases.

Additionally, Hispanic/Latino populations represent 28.5% of investigated cases of shigellosis. Black or African-Americans make up 32% of investigated cases of shigellosis.

Investigated cases of salmonellosis had a race/ethnicity breakdown of 25.5% being Black or African-American, 34% being White, 16.7% being Asian, and 23.6% being Hispanic or Latino.

Vaccine Preventable Diseases

Vaccine preventable diseases are immediately notifiable in the state of Georgia. In the early 2000's, vaccine preventable illnesses were declining in Georgia and in the GNR Health District. Pertussis cases were decreasing in conjunction with a 2005 innovation in adolescent and adult formulations of the Tdap vaccine. Over the past 20 years, anti-vaccination movements have played a role in outbreaks across the country. Outbreaks of measles and pertussis are showing up across the United States. In 2020, GNR Public Health investigated the first case of measles in the district since 2001. The case had traveled to Pakistan. Despite no confirmed cases being reported in GNR since, epidemiology staff continue to facilitate testing of suspect cases and participate in investigating contacts to cases in other districts.

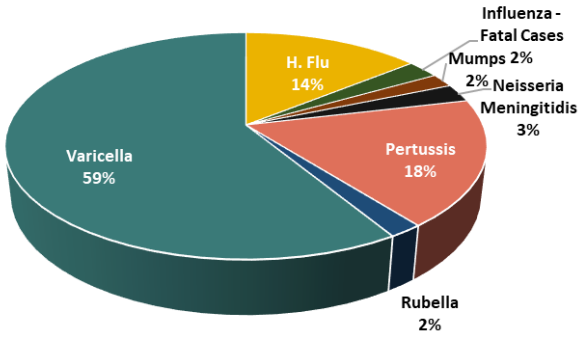


The graph above shows a comparison with a Mumps, Pertussis, and Varicella in GNR. From 2019-2020, there was a decrease with all three diseases, with Pertussis case rates decreasing by 66.4%. From 2020-2021, Varicella increased, while Mumps and Pertussis case rates decreased slightly. From 2022-2023, Varicella case rates increased while Mumps and Pertussis case rates remained fairly constant.

GNR Pertussis case rates are lower than national and state case rates from 2023. From 2019-2021, national, state and district case rates decreased; likely due to the infection control measures in place because of the COVID-19 pandemic. Case reporting was also delayed in many instances, or cases went unidentified.

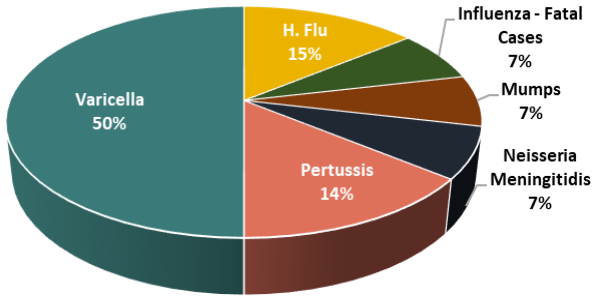
Overall vaccination rates for children under 24 months have declined since 2013.[8] During the 2022 - 2023 school year, coverage was around 93% for all reported vaccines, ranging from 92.7% for DTaP to 93.1% for MMR. Additionally, exemption rates increased in 41 states, exceeding 5% in 10 states. [7]

Gwinnett 2023 VPD Cases Reported (N=155)



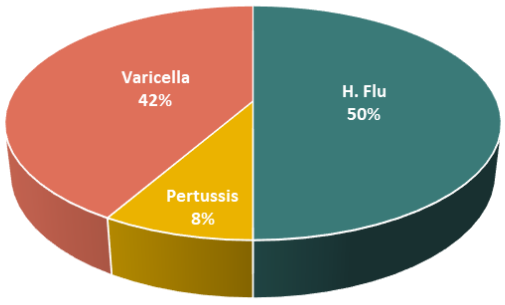
Gwinnett 2023	Reported Cases	Investigated Cases	Confirmed/ Probable Cases
H. *Influenzae (Invasive)*	22	14	16
Influenza - Fatal Cases	<5	<5	<5
Mumps	<5	<5	0
Neisseria Meningitidis	<5	<5	<5
Pertussis	28	28	7
Rubella	<5	<5	<5
Varicella	91	91	24
Total	**155**	**147**	**57**

Newton 2023 VPD Cases Reported (N=14)



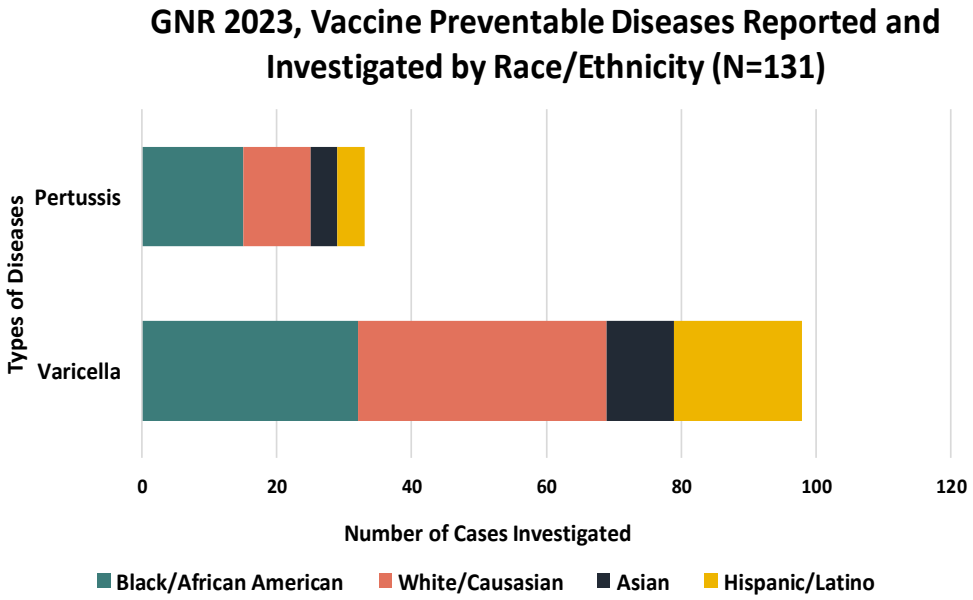
Newton 2023	Reported Cases	Investigated Cases	Confirmed/ Probable Cases
H. *Influenzae (Invasive)*	<5	<5	<5
Influenza - Fatal Cases	<5	<5	<5
Mumps	<5	<5	0
Neisseria Meningitidis	<5	<5	0
Pertussis	<5	<5	<5
Varicella	7	7	<5
Total	**14**	**14**	**6**

Rockdale 2023 VPD Cases (N=12)



Rockdale 2023	Reported Cases	Investigated Cases	Confirmed/ Probable Cases
H. *Influenzae (Invasive)*	6	<5	<5
Pertussis	<5	<5	0
Varicella	5	5	<5
Total	**12**	**10**	**6**

*Though all invasive *H. influenzae* cases are reviewed, only Type B requires public health intervention. *H. influenzae* cases aren't required to be investigated per DPH protocol, but GNR will still investigate the case if it is reported.



In 2023, Black or African-Americans made up 45% of pertussis cases investigated in GNR, showing that Black or African-Americans are affected by pertussis at a disproportionate rate, as Black or African-Americans only made up 35.9% of the total population within GNR. Nationally, overall incidence of pertussis amongst Black or African-Americans is lower than their White or Hispanic/Latino counterparts, however incidence of severe pertussis cases was higher in Black or African-Americans than White or Hispanic/Latinos.[8] Among infants born in the United States between 2010-2017, severe pertussis incidence was 1.4-fold higher in Black or African-Americans than White, Non-Hispanics.[8]

Black or African-Americans also made up a significant percentage of 2023 varicella cases investigated in the GNR district, making up 32.6% of investigated cases, trailing closely behind White, Non-Hispanics that made up 37.7% of investigated cases. Hispanic/Latino populations made up 19.4% of investigated varicella cases and make up 21% of GNR's total population.

Viral Hepatitis

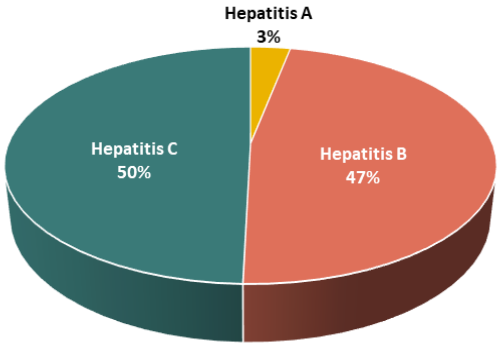
In 2023, GNR epidemiology investigated 924 viral hepatitis cases; 51 (5.5%) of the investigated cases were acute or probable acute, 304 (32.9%) were chronic or probable chronic and 569 (61.6%) were neither classified acute nor chronic. The large number of cases that are neither classified acute nor chronic is likely due to continuous data cleaning during the publishing of this report. All reported viral hepatitis cases are evaluated for acute illness symptomology by GNR epidemiology staff. Preventative treatment can be given to close contacts of Hepatitis A and B cases to prevent illness. There is no preventative medication for Hepatitis C.

The majority of the viral hepatitis reports were Hepatitis C, and it has been a new trend that was identified in 2014 when previous years were predominantly Hepatitis B. Chronic Hepatitis B is found predominately in individuals from areas where hepatitis B is endemic, including much of Asia. In 2023, the most recent available data, Asian/Pacific Islander persons had an incidence case rate of 16.0 cases per 100,000 people with chronic Hepatitis B compared to the an incidence case rate of 1.08 per 100,000 non-Hispanic, White people[10]. 14.1% (n=138,547) of residents in Gwinnett County are Asian according to 2023 population statistics.

Hepatitis A is of significant concern to epidemiology staff due to the potential for outbreaks within the community. Unlike Hepatitis B and C that are spread through contact with blood and other bodily fluids, Hepatitis A is spread through the fecal-oral route, and can be easily transmitted person-to-person or through food or water that has been contaminated with the virus. Epidemiology staff members work closely with Environmental Health to ensure that the risk for exposure to Hepatitis A is minimized in all local food service establishments, and to quickly respond to any reports of Hepatitis A to prevent transmission from food or waterborne sources. In 2023, there was a 40.5% decrease in Hepatitis A cases in comparison to 2022.

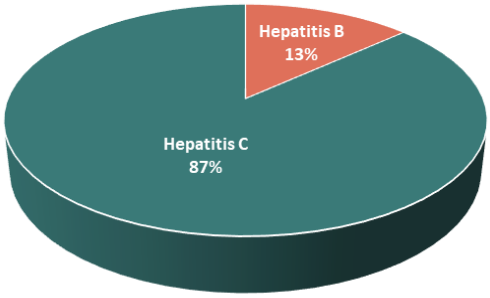
Testing guidance for Hepatitis C has changed in the past five years which has impacted the number of cases reported to GNR. In 1998, testing was recommended for asymptomatic persons with specific risk factors. In 2009, HIV infected persons were added to the recommended testing group, and in 2012 all adults born from 1945 to 1965 were included into the routine testing group. The US Centers for Disease Control and Prevention and US Preventive Services Task Force (USPSTF) recommend a one-time hepatitis C virus (HCV) screening for adults born between 1945 and 1965 (a birth cohort known as “baby boomers”). Approximately three-quarters of persons chronically infected with HCV are baby boomers, many of whom are unaware of their infection.[9] As of April 2020, the CDC recommends primary care providers screen all patients 18 years and older at least once in their lifetime for Hepatitis C and patients with recognized exposures (injecting drugs).[10] These recommendation were implemented in an effort to increase case identification and linkage to care. These changes in testing guidance resulted in an increase in reported Hepatitis C cases over the past 10 years, without an increase in funding or treatment capabilities. To ensure that high priority acute cases are being investigated promptly, epidemiology now investigates only cases thirty years old or younger, unless the patient is experiencing symptoms or elevated liver enzymes.

Gwinnett 2023 Viral Hepatitis Cases Reported (N=1,476)



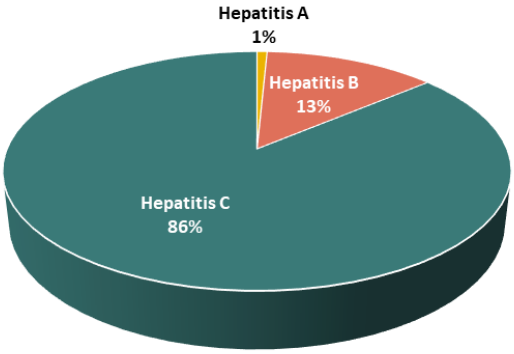
Gwinnett 2023	Reported Cases	Investigated Cases	Confirmed / Probable Cases
Hep A Acute	46	46	6
Hep B	433	433	0
Hep B Acute	<5	<5	<5
Hep B Chronic	263	263	260
Hep C	518	93	<5
Hep C Acute	<5	<5	<5
Hep C Probable Acute	<5	0	<5
Hep C Chronic	103	19	99
Hep C Probable Chronic	107	8	103
Total	**1476**	**865**	**475**

Newton 2023 Viral Hepatitis Cases Reported (N=134)



Newton 2023	Reported Cases	Investigated Cases	Confirmed / Probable Cases
Hep B	13	13	0
Hep B Chronic	5	5	5
Hep C	69	10	0
Hep C Chronic	36	<5	36
Hep C Probable	11	<5	11
Total	**134**	**32**	**52**

Rockdale 2023 Viral Hepatitis Cases Reported (N=130)

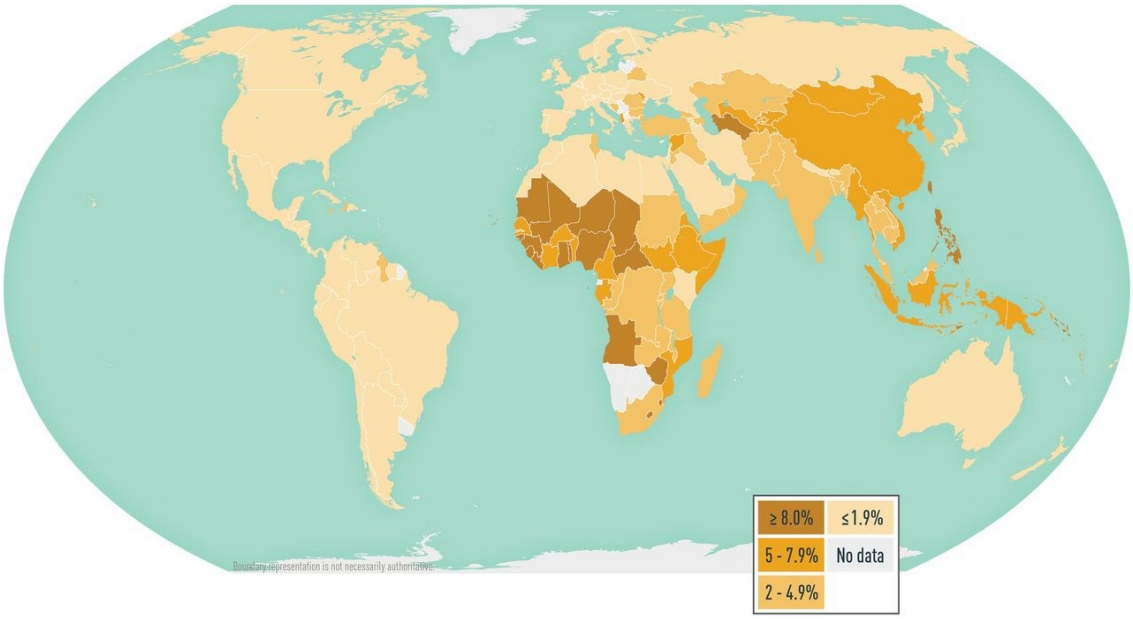


Rockdale 2023	Reported Cases	Investigated Cases	Confirmed/ Probable Cases
Hep A Acute	<5	<5	0
Hep B	12	12	0
Hep B Acute	<5	<5	<5
Hep B Chronic	<5	<5	<5
Hep C	76	8	0
Hep C Acute	<5	0	<5
Hep C Chronic	26	<5	26
Hep C Probable Chronic	9	0	9
Total	**130**	**27**	**41**

A risk of having an adult population with chronic Hepatitis B is the possibility with transmission of the virus to newborns through child birth. Regardless of the delivery method, babies are exposed to the virus when their mother is infected. Transmission of perinatal Hepatitis B infection can be prevented in approximately 95% of infants born to Hepatitis B positive mothers by early active immunoprophylaxis through immunoglobulin administration and vaccination. The Perinatal Hepatitis B Prevention Program (PHBPP) is funded through the CDC's National Center for Immunization and Respiratory Disease, Immunization Services Division, with technical support from CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

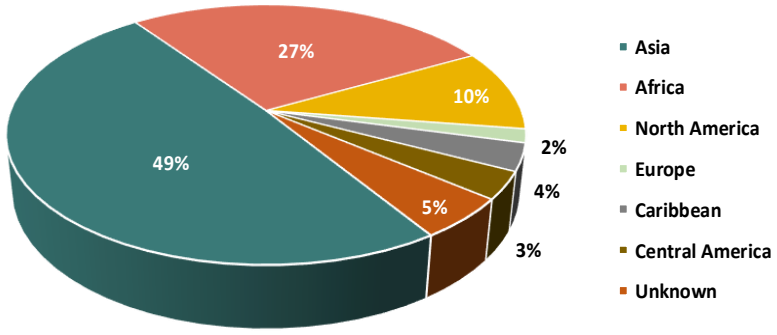
GNR Epidemiology staff work closely with hospitals and pediatricians to ensure babies born to Hepatitis B infected mothers receive needed preventative medication and scheduled vaccinations. Post vaccination testing is also conducted to ensure immunity. GNR has had the largest caseload of babies in the state of Georgia for the last seven years. In 2023, preliminary data showed that there were 214 case managed newborn babies in Georgia's PHBPP with 30% (64) from GNR. Of the PHBPP babies born in the GNR district where mother's country of birth is known, 89% (n=57) were born outside of the United States. The countries of birth for the majority of GNR PHBPP mothers are countries where there is a high prevalence of chronic Hepatitis B.

2021 Estimates of Worldwide Hepatitis B Disease Burden

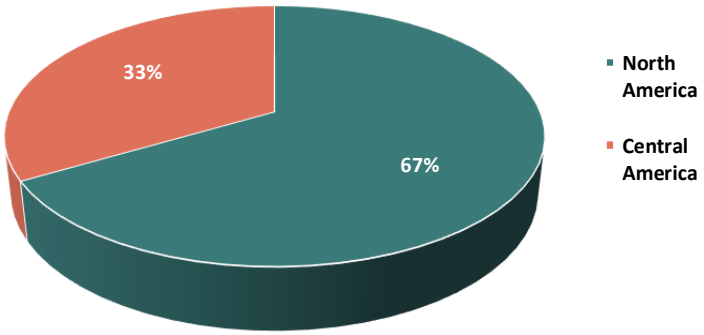


Source: https://wwwnc.cdc.gov/travel/yellowbook/2024/infections-diseases/hepatitis-b

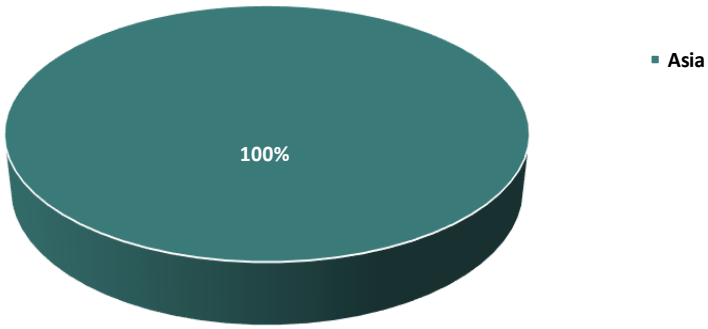
Gwinnett County 2023 Perinatal Hepatitis B Cases by Mother's Region of Birth (N=59)

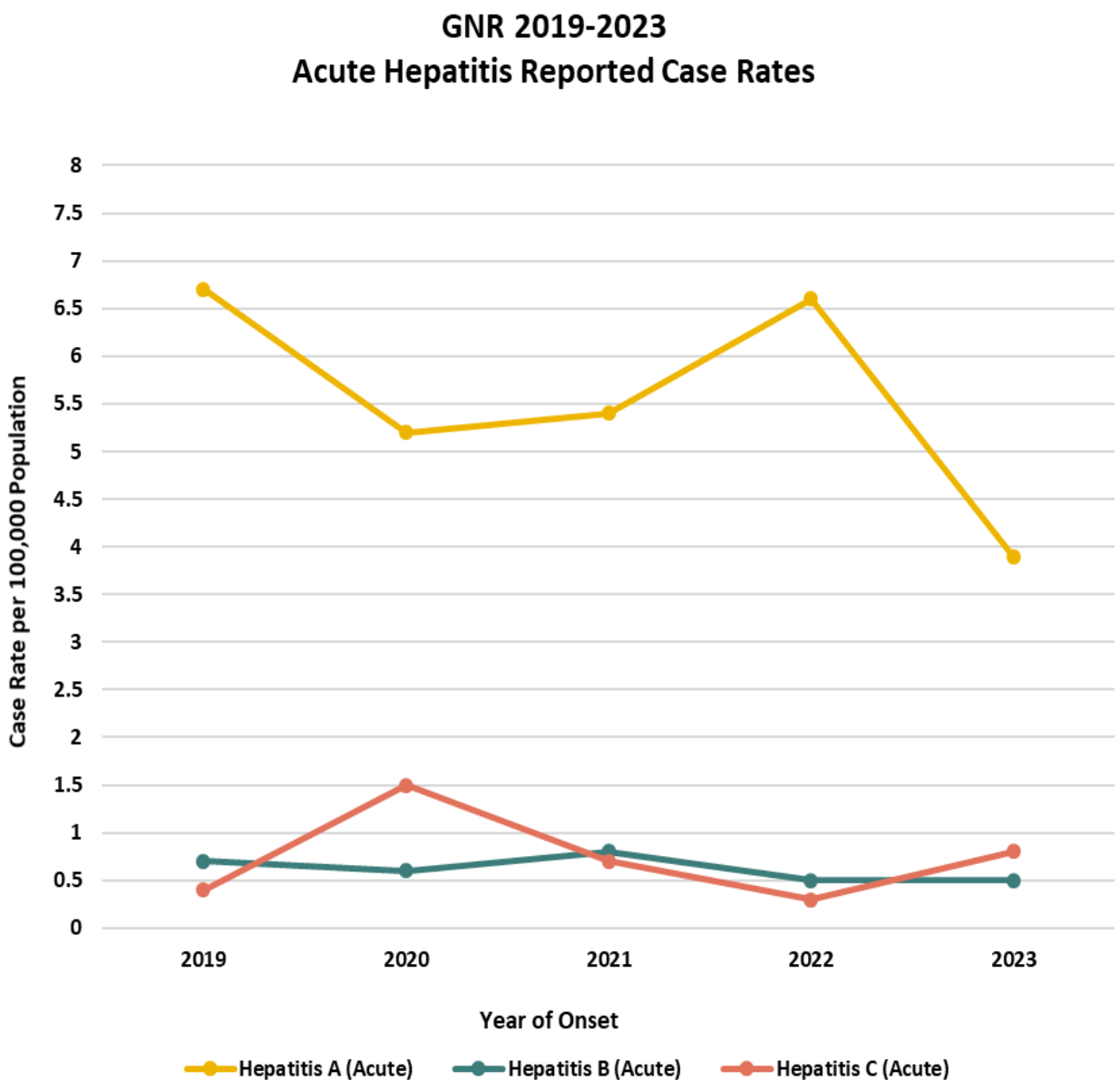


Newton County 2023 Perinatal Hepatitis B Cases by Mother's Region of Birth (N=<5)



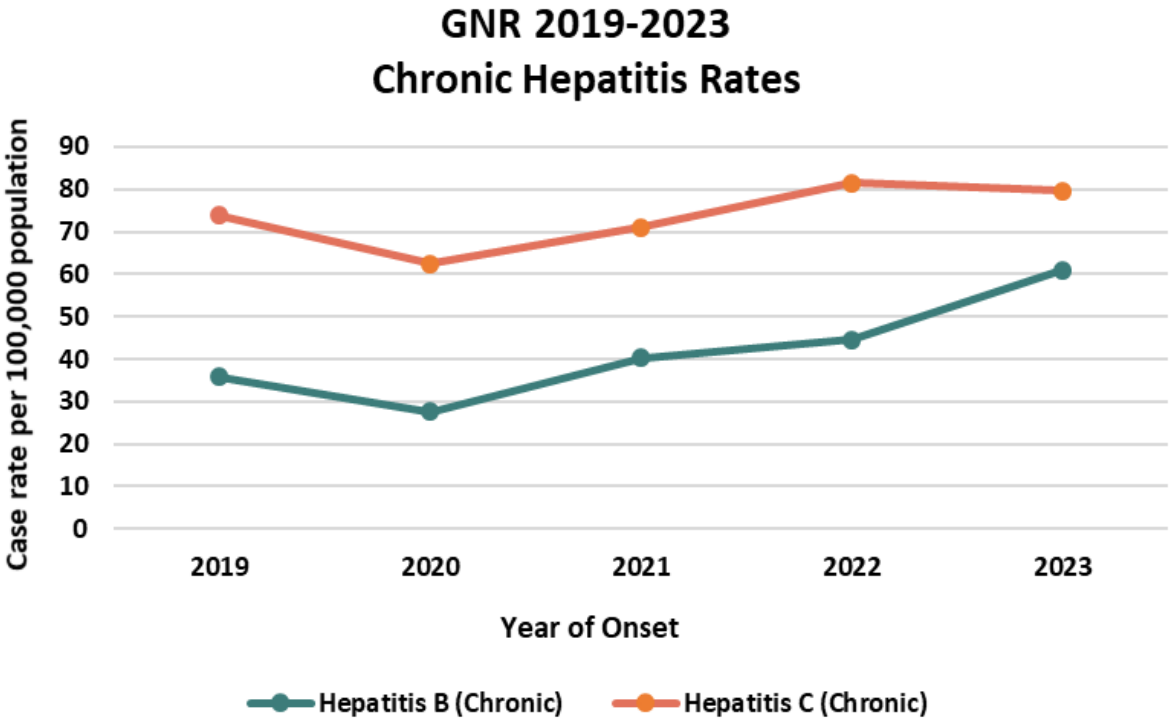
Rockdale County 2023 Perinatal Hepatitis B Cases by Mother's Region of Birth (N=<5)





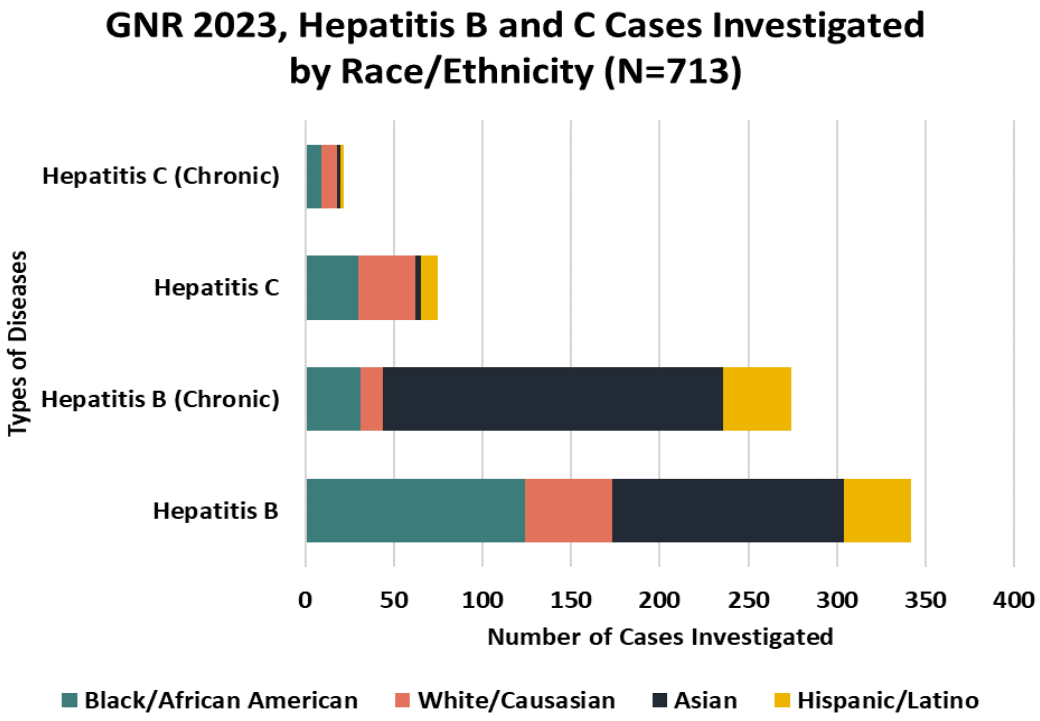
The above graph shows the GNR acute hepatitis case rates by hepatitis type. In addition, the graph compares GNR case rates to the Georgia case rates and Healthy People (HP) 2030 goals, a set of evidence-based 10-year national health benchmarks. While Hepatitis B and C case rates decreased from 2021-2022, Hepatitis A increased during that same timespan. Healthy People 2030 aims to reach target case rates for each hepatitis types, and they are listed below:

- **Hepatitis A**: Reduce case rates to 0.4 cases per 100,000 people.
- **Hepatitis B**: Reduce case rates to 0.1 cases per 100,000 people.
- **Hepatitis C**: Reduce case rates to 0.1 cases per 100,000 people.



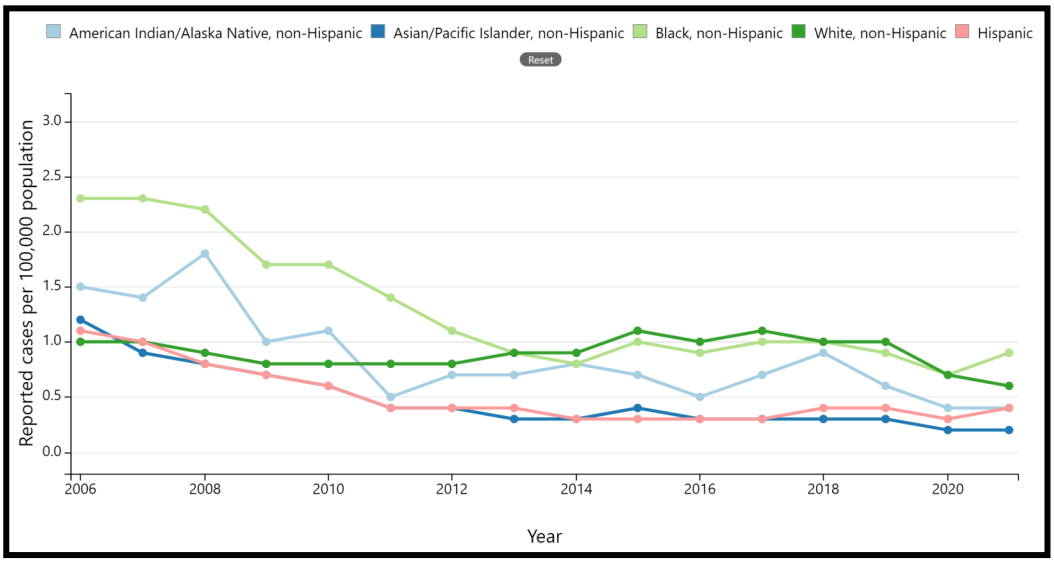
In the graph above, both chronic Hepatitis B and C cases include cases that are considered "Probable Chronic" and "Chronic." While more than half of people infected with Hepatitis C will develop a chronic infection, universal hepatitis C testing is recommended for woman who are pregnant and people who use injection drugs, especially since people can be infected with the virus more than once.[11] Nationally, as of 2020 cases have doubled since 2014, a 129% increase. Half of people infected with hepatitis C will develop a chronic infection. During 2022, 43 U.S. states reported a total of 93,805 newly identified chronic hepatitis C cases, corresponding to 40.2 chronic hepatitis C cases per 100,000 people.

According to the CDC, 6 out of 100 infants born to mothers with chronic Hepatitis C will become infected. Universal hepatitis C testing is recommended for woman who are pregnant and people who use injection drugs, especially because people can be infected with the virus more than once.[12] Hepatitis C can be treated with the use of oral therapy, and can be administered to children starting at age 3.[12] The best way to prevent hepatitis C is by avoiding behaviors that can spread the disease, especially injecting drugs with non-sterile injection equipment. Since 2013, highly effective, well-tolerated curative treatments have been available for hepatitis C, but no vaccine for preventing hepatitis C is yet available.



Asian communities within GNR are disproportionately affected by Hepatitis B infection. In 2023, 70% of the investigated Chronic Hepatitis B cases were Asian. According to the CDC, the rate of newly reported chronic Hepatitis B cases among non-Hispanic Asian/Pacific Islander people in 2021 was 27 cases per 100,000 people, which was 14 times the rate among non-Hispanic White people (1.9 cases per 100,00 people). Rates of acute hepatitis B were highest among non-Hispanic Black people.

Rates* of reported cases† of acute Hepatitis B virus infection, by race/ethnicity — United States, 2006–2021

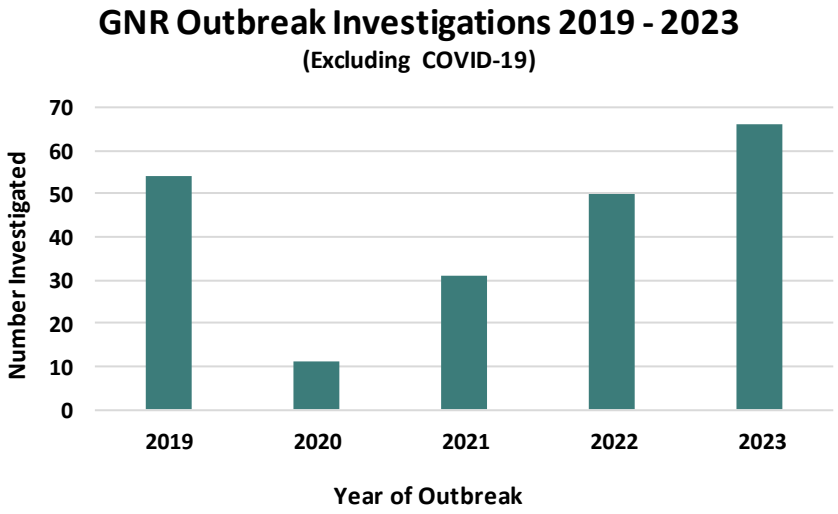


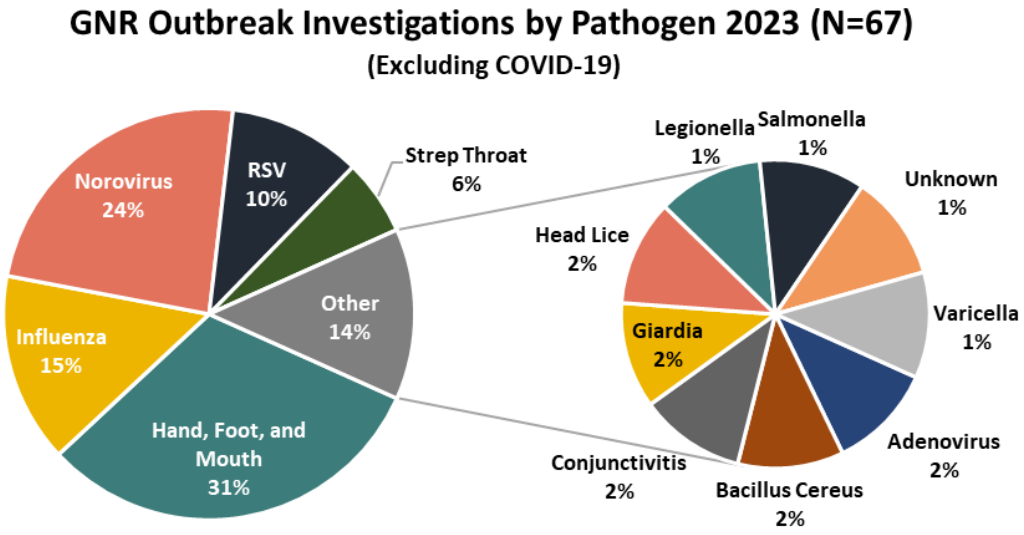
Outbreak Summary

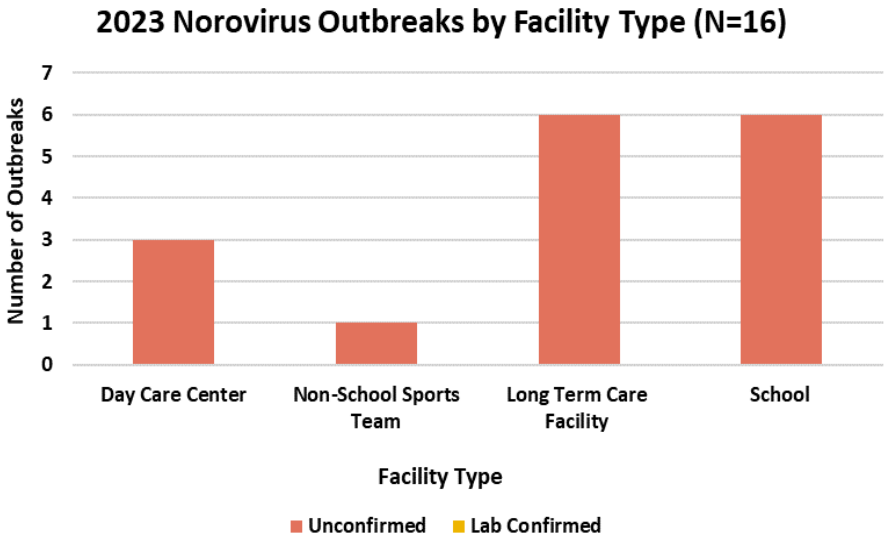
The number of notifiable disease case investigations did not include clusters or other non-notifiable disease investigations. In 2023, priority was given to the investigation of reported outbreaks (N=231), including those cause by SARS-Cov-2 (N=164). Sixty-seven non-COVID-19 outbreaks were reported and 100% were investigated by epidemiology during this time. In 2023, SARS-Cov-2 was the predominate pathogen for illness, causing 164 (70.9%) of the outbreaks reported. Hand, Foot, and Mouth Disease caused the second highest number of outbreaks (N=21, 9.1%).

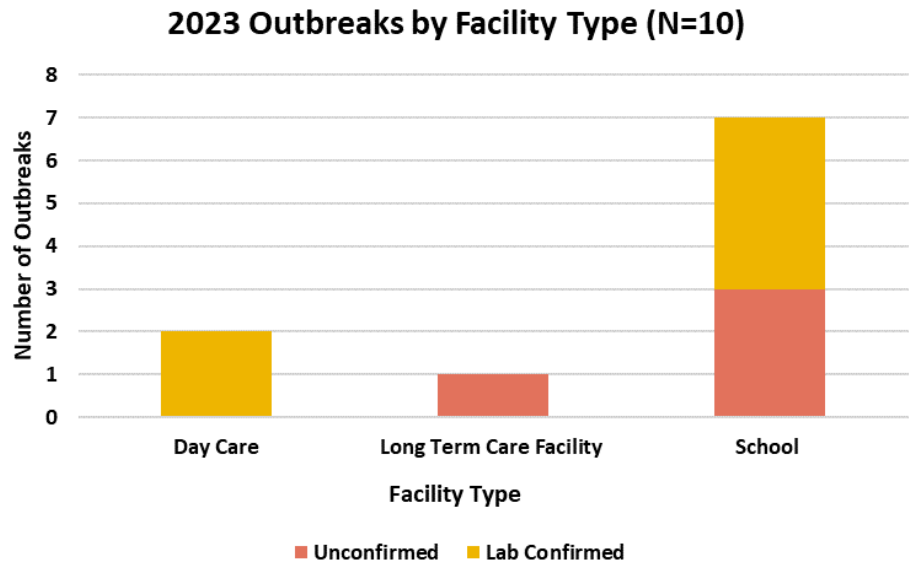
The bar graph below shows outbreaks reported and investigated from 2019-2023. Not all outbreaks were associated with lab-confirmed pathogens.

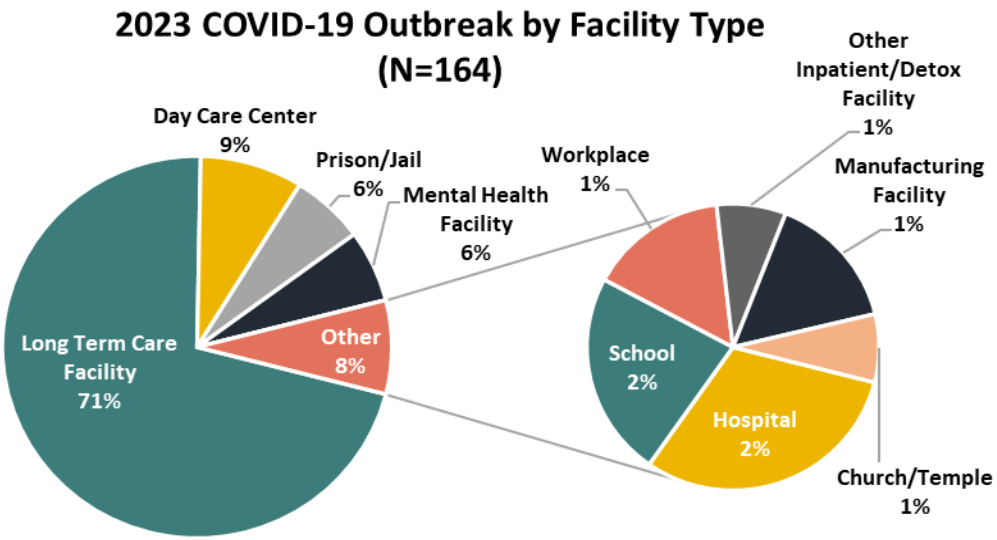
*Note—COVID-19 outbreaks are not included in this summary or the chart below, as this would largely skew the data.






2023 Norovirus Outbreaks by Facility Type (N=16)
Number of Outbreaks
0
1
2
3
4
5
6
7
Day Care Center
Non-School Sports Team
Long Term Care Facility
School
Facility Type
Unconfirmed
Lab Confirmed


2023 Outbreaks by Facility Type (N=10)
Number of Outbreaks
0
1
2
3
4
5
6
7
8
Day Care
Long Term Care Facility
School
Facility Type
Unconfirmed
Lab Confirmed


2023 COVID-19 Outbreak by Facility Type (N=164)
Day Care Center 9%
Prison/Jail 6%
Mental Health Facility 6%
Other 8%
Long Term Care Facility 71%
Workplace 1%
Other Inpatient/Detox Facility 1%
Manufacturing Facility 1%
School 2%
Hospital 2%
Church/Temple 1%

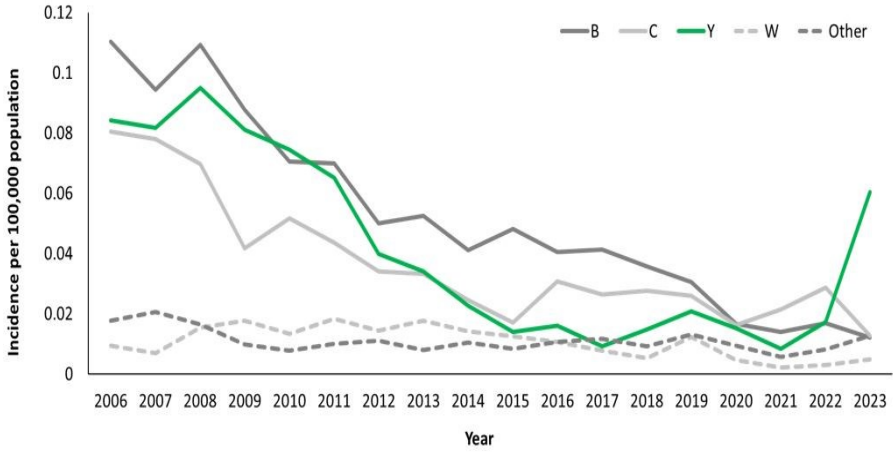
New Emerging Pathogens

Epidemiology works closely with emergency planners to prepare an evidence-based response to emerging pathogens. Epidemiology investigates all reported and suspect/confirmed cases of emerging pathogens and utilizes surveillance data to inform GNR's public health actions. Epidemiology distributes pathogen-specific information on illness prevention to internal and external partners and works with these partners to implement control measures.

Neisseria Meningitidis

In 2023, 422 cases of meningococcal disease were reported in the United States, which was the highest case count since 2014.[13] The increase in cases was mainly due to invasive infections caused by *Neisseria meningitidis serogroup Y* bacteria, which can led to a rare but severe illness with a case fatality rate of 10-15% even with appropriate antibiotic treatment.[13] *Neisseria meningitidis* can be spread person-to-person through coming into close prolonged contact with someone who is carrying the bacteria, examples of this type of contact are sharing drinks and living together.[14] Up to 1 in 10 people can carry the bacteria in their nose or throat without becoming symptomatic.[14] Initial symptoms of invasive *Neisseria meningitidis* infection can be non-specific, and often include fever, headaches, stiff neck, nausea and vomiting. Symptoms can worsen rapidly and an infection can become life-threatening within hours. Infection is preventable through vaccination that is recommended for adolescents. Cases of invasive *Neisseria meningitidis* infection are disproportionately occurring in people aged 30-60 years (65%), Black or African-American (63%), and people living with HIV (15%).[15] In GNR, there was a 100% increase in invasive *Neisseria meningitidis* cases from 2022 to 2023 and 75% of *Neisseria meningitidis* cases in 2023 were Black or African - American.

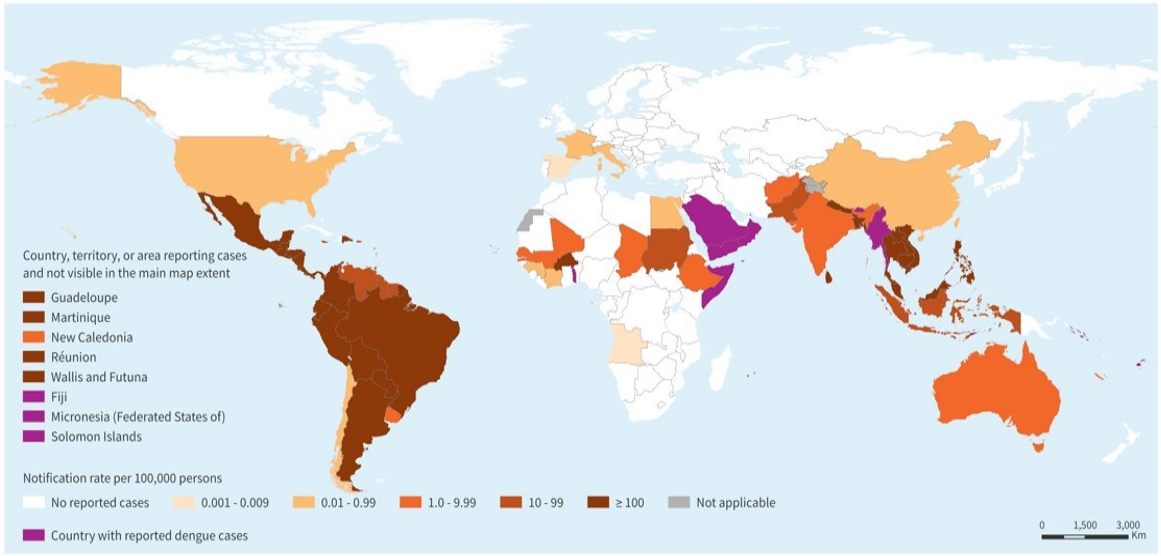
Trends in meningococcal disease incidence per 100,000 population, by serogroup—United States, 2006–2023.



Source: (CDC) National Notifiable Diseases Surveillance System, with additional serogroup data from Active Bacterial Core surveillance (ABCs) and state health departments. 2022 and 2023 data are pre-

Dengue

In 2023 the United States saw the highest number of travel-associated dengue cases reported since the disease became reportable in 2010.[16] Additionally, 23 countries reported outbreaks of dengue in 2023 and 5 million cases of dengue were reported to the World Health Organization. Increases in dengue over the past two decades have been occurring globally and within popular travel destinations for Americans such as the Caribbean. There is currently no chemoprophylaxis for dengue virus, however clinicians are encouraged to counsel patients on preventing mosquito bites when travelling internationally. In addition, the species of mosquito that transmit dengue can be found throughout many areas of the United States making local transmission possible, although limited. Local transmission of dengue has been reported in Florida, Hawaii, Texas, Arizona, and California. Dengue is generally a mild illness with 40-80% of dengue virus infections being asymptomatic, but approximately 5% of cases will progress to severe disease with associated shock, severe bleeding, or organ impairment.[17] Mortality rates can be as high as 13% in patients who do not receive supportive therapy. Currently there is no specific treatment for dengue, only supportive care measures that can include bed rest, analgesics, and fluid replacement. In 2023, GNR had 12 cases of dengue reported which was a significant increase from 2022 when GNR had 0 cases reported.



Other Activities

Emory Rollins Epidemiology Fellowship

GNR Epidemiology has been a host site for the Emory Epidemiology Fellowship managed by Emory University's Rollins School of Public Health since 2020. The fellowship program is a two-year intensive training program for recent Master of Public Health graduates and seeks to improve the epidemiological capacity of the state of Georgia. GNR is currently hosting three epidemiology fellows. The fellows have taken on a wide range of responsibilities, including engaging in notifiable disease investigation, providing education and infection control guidance to the community, and completing data projects and reports.

Emergency Preparedness

GNR Emergency Preparedness is tasked under the Georgia Emergency Operations plan to lead efforts related to Emergency Support Function 8 (Health and Medical) and support Emergency Support Function 6 (Mass Care). GNR Epidemiology provides technical assistance and guidance as well as assists in emergencies as members of Public Health Action Support Team (PHAST). GNR Epidemiology works in conjunction with GNR Emergency Preparedness to plan, facilitate, and participate in public health emergency exercises, drills, and trainings. The Epidemiology staff also monitors surveillance data and reports any unusual activity or bioterrorism agents to Emergency Preparedness. GNR Epidemiology is a member of the shelter inspection team and provides pre-emergency inspections as well as opening inspections and daily surveillance and clinic checks during an emergency. GNR epidemiology coordinated Emergency Preparedness with a Gwinnett County hurricane evacuation shelter in 2016. Shelter teams that included epidemiologists were sent to other locations in Georgia for hurricanes in 2017 and 2018. Epidemiology and Emergency Preparedness worked closely together through the Incident Command System (ICS) to coordinate the complex COVID-19 response from early 2020 into 2021. This large operation included setting up COVID-19 testing locations, resulting operations, contact tracing, case investigations, enhanced partner communications, preparation for and delivery of vaccine, media outreach, and much more. In 2022, GNR Epidemiology and Emergency Preparedness again collaborated to vaccinate over 7,000 patients for Mpox.

Public Health Accreditation Board (PHAB)

GNR Health District completed a two day site visit as part of the national accreditation process through the Public Health Accreditation Board (PHAB) in April 2016 and earned accreditation. GNR was reaccredited in 2022. The accreditation process seeks to improve the standards of quality and performance within public health departments across the county. GNR Epidemiology has been a vital part of the district's accreditation application process. Epidemiology staff have been involved with the Community Health Assessment, Community Health Improvement Plan and the District's Strategic Plan as well as compiling the documentation for the Standards and Measures in the twelve domains of the application.

Attachment 1: Notifiable Disease Reporting Poster

NOTIFIABLE DISEASE
CONDITION REPORTING

All Georgia physicians, laboratories, and other health care providers are required by law to report patients with the following conditions.

LEGEND

* **To be determined** in consultation with DPH Epidemiology. Based on public health impact potential. Ultimate decision made by State Health Officer and State Epidemiologist.

** **Invasive** isolated from blood, bone, CSF, joint, pericardial, peritoneal, or pleural fluid.

*** **ALT and total bilirubin** associated with hepatitis A, B, or C serology should be reported

**** **L. monocytogenes** resulting in infant mortality is reportable to Vital Records.

☢ Potential agent of bioterrorism

SUBMISSION REQUIREMENTS FOR CLINICAL MATERIALS[1]

A All reported cases | I Send invasive[2] specimens | 7 Hold 7 days and submit if DPH requests | ✓ DPH does not routinely test but submission may occur upon DPH approval

REPORT IMMEDIATELY

Call: District Health Office or **1-866-PUB-HLTH (1-866-782-4584)**

all outbreaks/clusters (including infectious and non-infectious causes, toxic substance and drug-related, and any other outbreak)	
unusual occurrence of disease of public health concern*	
all acute arboviral infections • California serogroup viruses (California encephalitis, Jamestown Canyon, keystone, La Crosse, snowshoe hare, trivitattus) • chikungunya virus • dengue virus • equine encephalitis viruses (eastern, Venezuelan, western) • Powassan virus • St. Louis encephalitis virus • yellow fever virus • Zika virus	✓
amebic (free living) infections (*Acanthamoeba* spp., *Balamuthia mandrillaris*, *Naegleria fowleri*, *Sappinia* spp., etc)	
animal bites	
anthrax ☢	A
botulism ☢	A
brucellosis (*Brucella* spp. including B. *abortus*, B. *canis*, B. *melitensis*, B. *suis*) ☢	A
Cronobacter, Invasive (infants under 1 year of age)	A
cholera (toxigenic *Vibrio cholerae*)	A
diphtheria	A
Haemophilus influenzae, invasive infections**	A
hantavirus pulmonary syndrome (HPS)	✓
hemolytic uremic syndrome (HUS)	✓
hepatitis A*** • reactive anti-HAV IgM	
measles (rubeola)	A
melioidosis ☢	A
meningitis (specify agent when reporting)	7
meningococcal disease, invasive infections**	A
novel influenza A virus infections	A
novel respiratory virus infections (SARS, MERS, etc.)	A
orthopoxvirus infections (i.e., smallpox, mpox) ☢	A
pertussis	A
plague ☢	A
poliomyelitis	A
Q fever ☢	A
rabies (human and animal infections)	A
Staphylococcus aureus infections with vancomycin MIC ≥ 4 mcg / mL	7
Shiga-toxin producing *E. coli* infections (including O157)	A
syphilis • positive non-treponemal or treponemal test • during pregnancy • congenital	A
tuberculosis (TB) • confirmed or presumed active TB disease, any age • latent TB infection (inactive TB) in children <6	A
tularemia ☢	A
viral hemorrhagic fevers ☢	A

Report cases electronically through the state electronic notifiable disease surveillance system at **sendss.state.ga.us**

For more information:
www.dph.ga.gov/disease-reporting

DPH GEORGIA DEPARTMENT OF PUBLIC HEALTH

REPORT WITHIN 7 DAYS

acute flaccid myelitis (AFM)		hepatitis D (acute and chronic)	
acquired immunodeficiency syndrome (AIDS)#		hepatitis E (acute)	
anaplasmosis		HIV infection# • Infection, any stage OR progression to stage 3 (AIDS) • Perinatal HIV exposure	
aseptic meningitis			
babesiosis			
blood lead levels			
campylobacteriosis	A	influenza, RSV, or COVID-19-associated death (all ages)	A
Candida auris infections	A	legionellosis	7
carbapenem-resistant Enterobacterales (CRE) infections • *Enterobacter* spp. • *Escherichia coli* • *Klebsiella* spp.	A	leprosy (Hansen's disease) (*Mycobacterium leprae*)	A
		leptospirosis	
chancroid		listeriosis ****	A
Chlamydia trachomatis Infection (including *Lymphogranuloma venereum*	A	Lyme disease	
		malaria	A
Creutzfeldt-Jakob Disease (CJD), confirmed and suspected cases < 55 years old		maternal death (during pregnancy or within 1 year of end of pregnancy)###	
cryptosporidiosis	7	multisystem inflammatory syndrome in children (MIS-C)	
cyclosporiasis	A		
ehrlichiosis		mumps	7
giardiasis		psittacosis	
gonorrhea	A	rubella (including congenital)	A
hearing loss (confirmed or suspected permanent, <6 years old)##		salmonellosis (including typhoid fever and paratyphoid fever)	A
hepatitis B (acute and chronic) *** • reactive HBsAg and all associated HBV lab markers (HBV DNA, anti-HBc IgM, total anti-HBc, anti-HBe, HBeAg, anti-HBs) • detected HBV DNA and all associated HBV lab markers (HBsAg anti-HBc IgM, total anti-HBc, anti-HBe, HBeAg, anti-HBs) • undetectable HBV DNA • HBsAg reactive pregnant women • perinatal HBV exposures • all HBsAg and anti-HBs (positive, negative, indeterminate) for children ≤ 2 years old		shigellosis	A
		Spotted Fever Rickettsiosis (Rickettsia spp.)	A
		streptococcal disease, group A or B (invasive) **	7
		Streptococcus pneumoniae infection (invasive) ** • report with antibiotic-resistance information	7
		tetanus	
		toxic shock syndrome (TSS)	
		varicella (chickenpox)	7
		vibriosis (*Vibrio* spp.)	A
		yersiniosis	A
hepatitis C (acute and chronic) *** • reactive anti-HCV (both serology and point-of-care rapid testing) • HCV RNA by PCR (both detected and undetected) • detected HCV genotype • anti-HCV reactive or HCV RNA detected pregnant women • perinatal HCV exposures • all (positive, negative, indeterminate) anti-HCV and HCV RNA by PCR for children ≤ 3 years of age			

REPORT WITHIN 14 DAYS

Neonatal Abstinence Syndrome (NAS). Information for reporting NAS is available at **dph.georgia.gov/nas**.

Report cases electronically through the state electronic notifiable disease surveillance system at **sendss.state.ga.us**

REPORT WITHIN 1 MONTH

Birth Defects, including fetal deaths of at least 20 weeks gestational age and children < 6 years old. Information for reporting birth defects available at **dph.georgia.gov/birth-defects-reporting**.

Healthcare-associated Infections (HAIs). For facilities required to report HAI data to CMS via NHSN. Report in accordance with the NHSN protocol. Reporting requirements and information available at **dph.georgia.gov/epidemiology/healthcare-associated-infections/nhsn-notifiable-reporting**.

REPORT WITHIN 6 MONTHS

Benign brain and central nervous system tumors

Cancer

Report forms and reporting information for tumors and cancer is available at **dph.georgia.gov/chronic-disease-prevention/georgia-comprehensive-cancer-registry/reporting-cancer**.

REPORTING FOR OTHER CONDITIONS

Report forms and reporting requirements available at **dph.georgia.gov/epidemiology/georgias-hivaids-epidemiology-section/hivaids-case-reporting**.

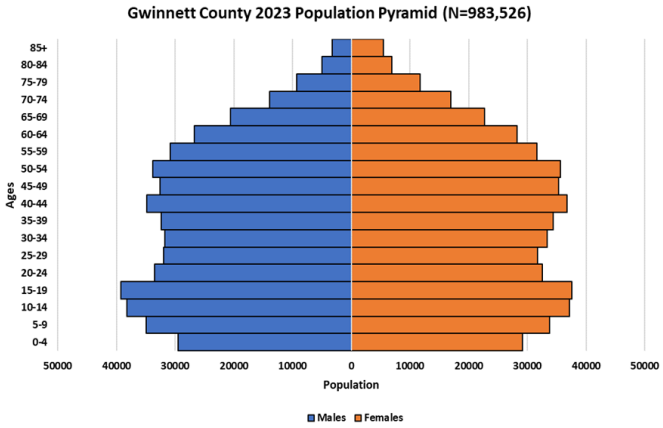
Hearing loss case report form isavailable at **dph.georgia.gov/EHDI**.

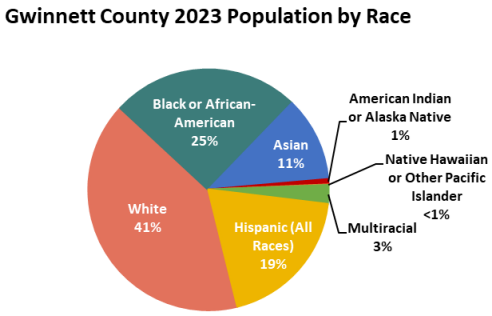
Reporting information for maternal deaths is available at **dph.georgia.gov/maternal-mortality**.

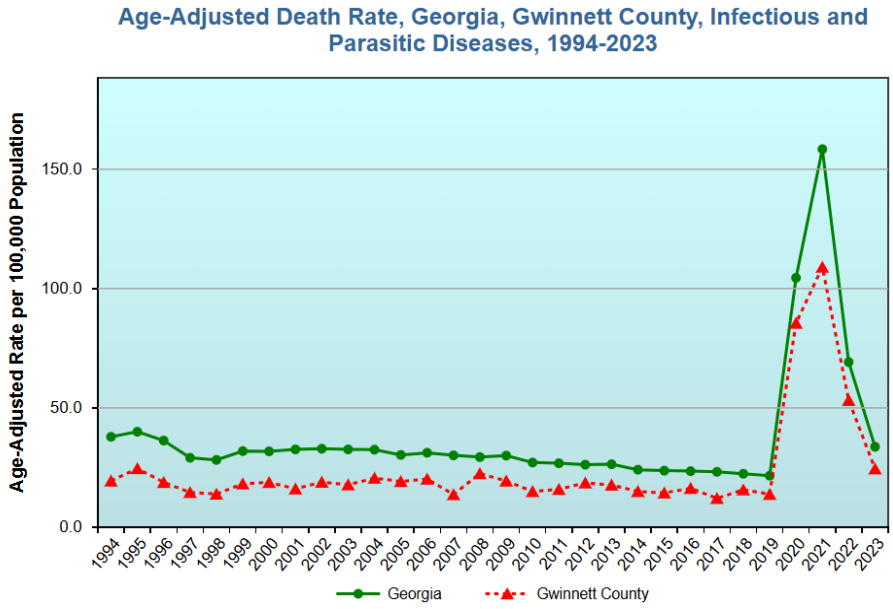
[1] **"Clinical materials" is defined as: A.** a clinical isolate containing the infectious agent for which submission of material is required; or **B.** if an isolate is not available, material containing the infectious agent for which submission of material is required, in the following order of preference: **(1)** a patient specimen; **(2)** nucleic acid; or **(3)** other laboratory material.

[2] **"Invasive disease" is defined as:** isolated from blood, bone, CSF, joint, pericardial, peritoneal, or pleural fluid.

Gwinnett County Population at a Glance







Top 10 Causes of Hospitalizations in Gwinnett County for 2023 by Age-Adjusted De-duplicated Hospital Discharge Rate
Total Discharges: 2,936.4
(rates per 100,000 population)

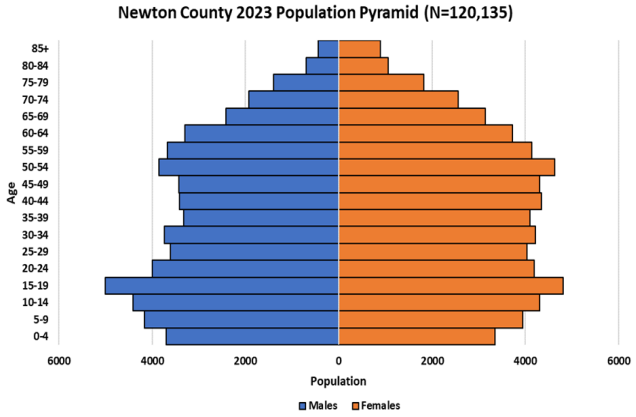
1	Septicemia	428.3
2	Cardiovascular Diseases	377.6
3	Mental and Behavioral Disorders	219.8
4	Bone and Muscle Diseases	185.4
5	Falls	170.7
6	Cerebrovascular Diseases	157.1
7	Nervous System Diseases	142.1
8	Endocrine, Nutritional & Metabolic Diseases	136.1
9	Genitourinary Diseases	128.5
10	Diabetes Mellitus	116.8

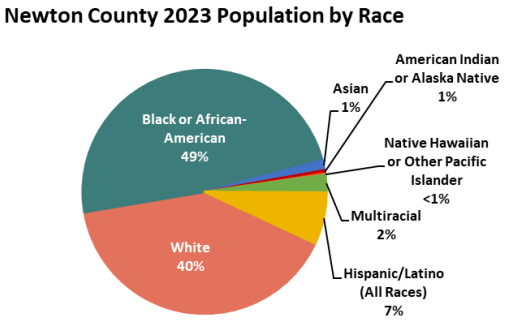
Select Population Based Statistics:

2023 Pregnancy Totals: 14,459
2023 Birth Rate: 40.8 per 1,000 females 15-55 years (GA rate: 36.4)
2023: Infant Mortality Rate: 5.8 per 1,000 births (GA rate: 7.1)

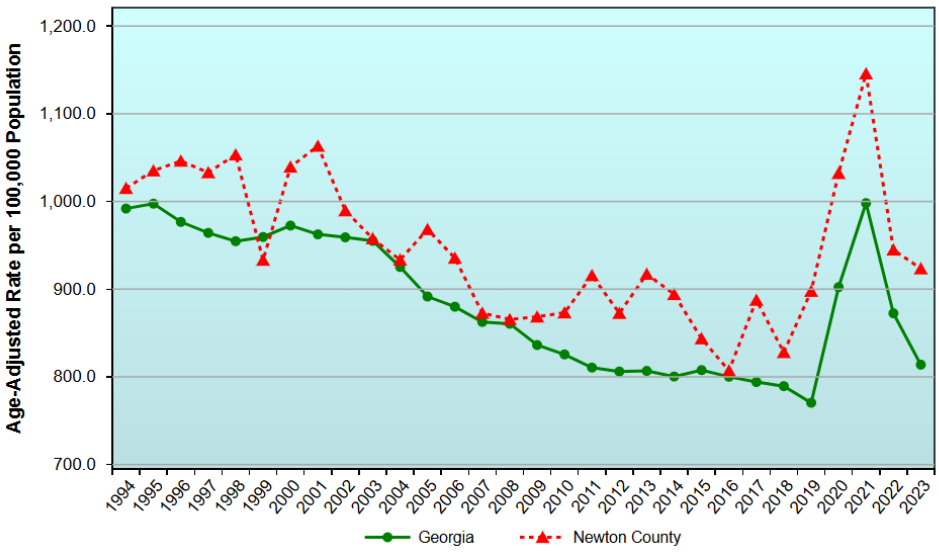
Source: www.oasis.state.ga.us

Newton County Population at a Glance





Age-Adjusted Death Rate, Georgia, Newton County, 1994-2023



Top 10 Causes of Hospitalizations in Newton County for 2023 by Age-Adjusted De-duplicated Hospital Discharge Rate
Total Discharges: 4,807.1
(rates per 100,000 population)

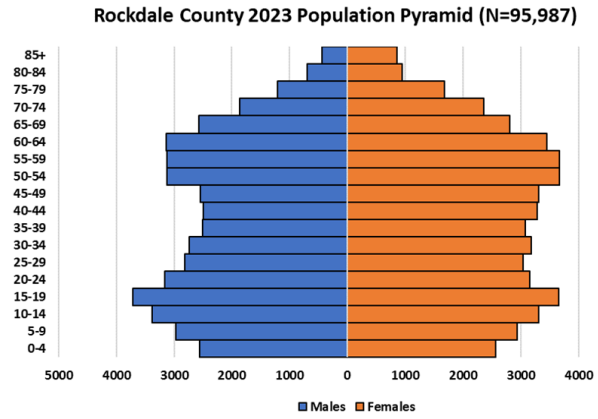
1	Septicemia	997.2
2	Cardiovascular Diseases	732.5
3	Cerebrovascular Disease	287.2
4	Bone and Muscle Diseases	287.2
5	Mental and Behavioral Disorders	244.7
6	Nervous System Diseases	243.1
7	Endocrine, Nutritional, & Metabolic Diseases	227.2
8	Falls	216.4
9	Diabetes Mellitus	195.6
10	Kidney Disease	179.8

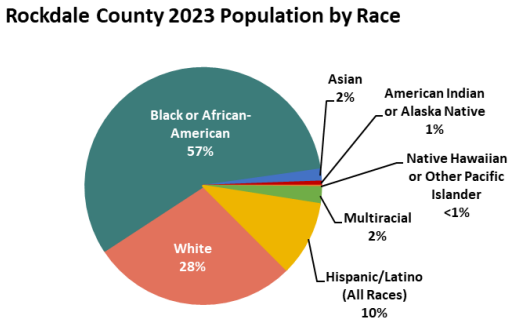
Select Population Based Statistics:

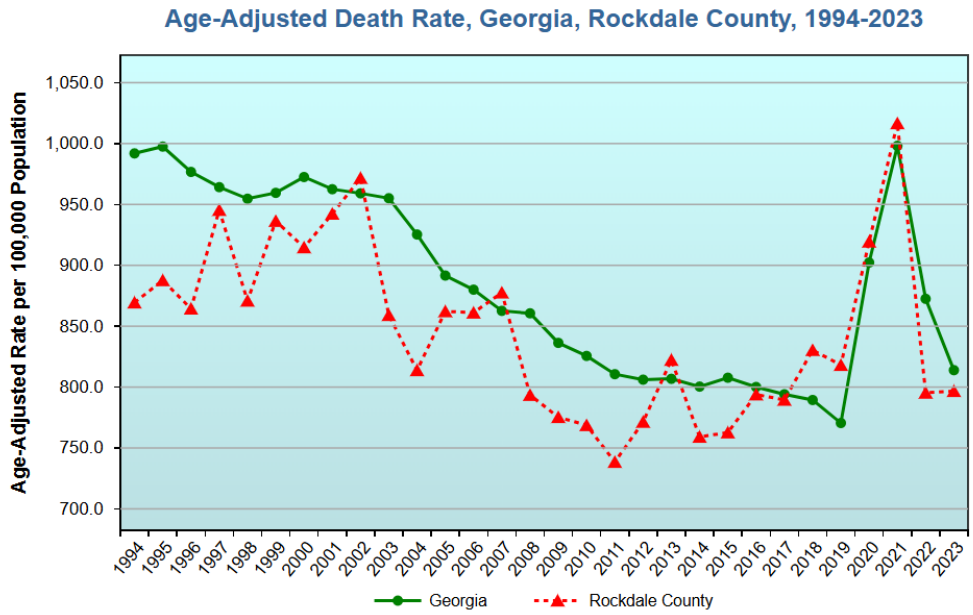
2023 Pregnancy Totals: 1,948
2023 Birth Rate: 38.7 per 1,000 females 15-55 years (GA rate: 36.4)
2023 Infant Mortality Rate: 13.1 per 1,000 births (GA rate: 7.1)

Source: www.oasis.state.ga.us

Rockdale County Population at a Glance







Top 10 Causes of Hospitalizations in Rockdale County for 2023 by Age-Adjusted De-duplicated Hospital Discharge Rate
Total Discharges: 5,011.1
(rates per 100,000 population)

1	Septicemia	1,157.4
2	Cardiovascular Diseases	663.6
3	Cerebrovascular Diseases	324
4	Nervous System Diseases	296.9
5	Endocrine, Nutritional & Metabolic Diseases	279.2
6	Mental and Behavioral Disorders	270.9
7	Bone and Muscle Diseases	236.5
8	Diabetes Mellitus	212.5
9	Falls	202.1
10	Genitourinary Diseases	150

Select Population Based Statistics:

2023 Pregnancy Totals: 1,375
2023 Birth Rate: 34.8 per 1,000 females 15-55 years (GA rate: 36.4)
2023 Infant Mortality Rate: 9.5 per 1,000 births (GA rate: 7.1)

Source: www.oasis.state.ga.us

For additional copies of this report visit
www.gnrhealth.com
or call Epidemiology at
770-339-4260

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