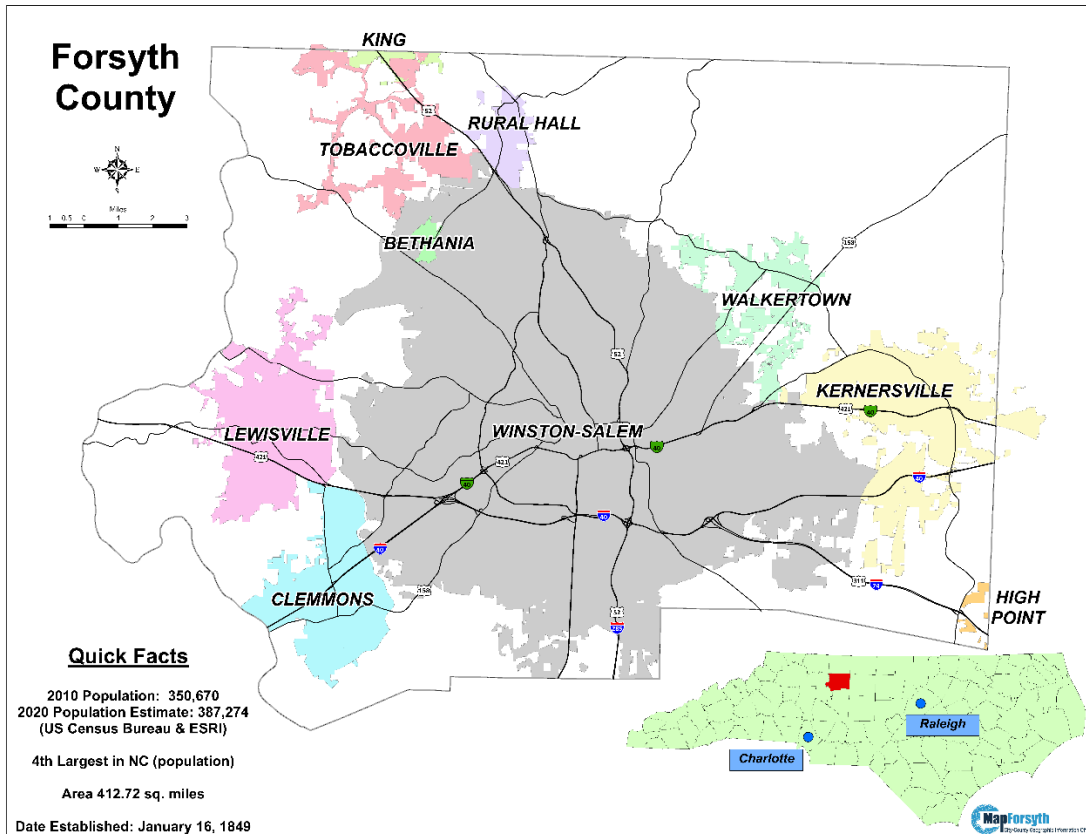


2020 Forsyth County, NC State of the County Health (SOTCH) Report



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Introduction

The 2020 Forsyth County State of the County Health (SOTCH) Report provides an overview of changes in Forsyth County's population health since the 2019 SOTCH Report. Specifically, it provides an update on each Community Health Improvement Plan (CHIP) that was implemented after the 2017 Community Health Assessment (CHA). These CHIPs are aimed at reducing infant mortality, improving oral health among populations ages 0-5 years, and improving sexual health among populations ages 15-24 years. The 2020 SOTCH also informs the Forsyth community about major changes in mortality and morbidity factors, and highlights emerging issues and new initiatives.

CHIP I: Reduce Infant Mortality

2020 Update

Objective 1: Increase the multidisciplinary and multiagency composition of the coalition with 15 additional members by 12/31/2019

In 2019, this objective was partially achieved when 10 agencies/community groups responded positively and are now represented at Coalition meetings (2019 Forsyth County SOTCH). In 2020, five (5) additional agencies/community groups became members of the Coalition. Thus, this objective was met in 2020.

Objective 2: Increase the percentage of members who attend bi-monthly meetings from 50% to 75% or more by 12/31/2019

This objective was met in 2019 (2019 Forsyth County SOTCH).

Objective 3: Provide information on safe/unsafe sleep practices to parents and caregivers in zip codes 27101 and 27105 because from 2014 to 2019, the majority of infants who died in Forsyth County were born to families who lived in these zip codes (Appendix XX). To achieve this objective:

- i. By February 2020, recruit 10 Forsyth County pediatric providers who will agree to discuss safe/unsafe sleep with parents and caregivers of babies born in Forsyth County.

This objective was achieved in January 2020.

- ii. By February 2020, recruit each of the 10 pediatric providers to distribute safe sleep package/bags to each family that visits their practice. The contents of each package/bag will include safe sleep and SIDS prevention booklets, posters for the waiting areas, a one-page handout for parents/caregivers to help visualize what a safe sleep space looks like, and "do's and don'ts" of 'safe/unsafe' sleep magnets

This objective was achieved in February 2020.

- iii. By February 2020, prepare and deliver 40 packages of safe sleep booklets and other materials to each of the 10 providers.

This objective was achieved in February 2020.

Objective 4: By February 1, 2021, instruct all Novant Health, Women's Services' staff who provides service to pregnant women and their partners, as well as the parent(s) and caregivers of infants to discuss and distribute safe sleep materials at each visit.

- i. By February 1, 2020, Novant Health, Women’s Services, will email a directive to all pregnancy and pediatric care service providers to discuss safe sleep with clients at each visit, and to distribute safe/unsafe materials to each client.

This objective was achieved in January, 2020.

- ii. By March 1, 2020, Novant Health, Women’s Services will distribute safe sleep materials to all pregnancy and pediatric care service providers for their distribution to clients at the end of each visit.

This objective was achieved in February, 2020.

Changes in the Data that Underpin the Infant Mortality Reduction CHIP

The reduction of Forsyth County’s infant mortality rate has been one of the Forsyth community’s major goals during the last 3 CHA cycles. Yet, Table 1 shows that Forsyth County’s 5-year rolling average infant mortality rate has remained relatively unchanged from 2011-2015 to 2014-2018, and increased from 8.2 to 8.9 from 2014-2018 to 2015-2019. For the 5-year rolling average periods 2011-2015 to 2015-2019, Forsyth County’s infant mortality rate has ranked the highest or second highest among peer counties (Table 1). Forsyth County’s 5-year rolling average infant mortality rate has exceeded that of North Carolina’s from 2011-2015 to 2015-2019 (Table 1).

Table 1. Trends in the 5-year Infant Mortality Rate for Forsyth, Peer Counties and North Carolina, 2011-2015 to 2015-2019

Jurisdiction	2015-2019	2014-2018	2013-2017	2012-2016	2011-2015
Forsyth	8.9	8.2	8.2	8.3	8.4
Durham	6.1	6.3	6.4	7.0	7.0
Guilford	8.7	8.4	8.4	8.1	7.9
Mecklenburg	5.9	5.9	6.1	6.2	6.0
Wake	5.6	5.4	5.3	5.6	5.9
North Carolina	7.0	7.1	7.1	7.2	7.2

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, May 6, 2021

Source: State Center for Health Statistics

Table 2 (page 6) shows that Forsyth County’s total infant deaths in 2019 was among the highest of the past 5 years. Similar to previous years, the majority of infant deaths in 2019 were due to *extreme immaturity, prematurity, and/or congenital abnormalities* (77.3%). During the upcoming Community Health Assessment (CHA) cycle, the Forsyth County Infant Mortality Reduction Coalition (FCIMRC), the Department of Public Health’s Care Management for High-Risk Pregnancies (CMHRP) and Nurse Family Partnership (NFP) programs will work together to identify outreach programs and goals that could help to reduce this infant health outcome.

Table 2. Summary Characteristics of Infant Deaths for Forsyth County, NC 2015-2019*

Infant Deaths	2019		2018		2017		2016		2015	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
Extreme immaturity, prematurity, & congenital abnormalities	34	77.3%	27	81.8%	37	84.1%	39	92.9%	29	90.6%
Homicide	1	2.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Illness	3	6.8%	1	3.0%	0	0.0%	0	0.0%	0	0.0%
Sudden Infant Death	0	0.0%	1	3.0%	4	9.1%	0	0.0%	1	3.1%
Unsafe sleep/co-sleeping	3	6.8%	4	12.1%	3	6.8%	3	7.1%	2	6.3%
Unknown	3	6.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total infant deaths	44	100.0%	33	100.0%	44	100.0%	42	100.0%	32	100.0%

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, May 25, 2021

Source: 2020 (2019 cases) Community Child Protection Team (CCPT)/Child Fatality Prevention Team (CFPT) Review

* Total % could be off due to rounding

CHIP II: Sexual Health (Chlamydia)

2020 Update

Objective 1: By July 2022, POSSE (Prevent Ongoing Spread of STIs Everywhere) will increase by 20% the number of education sessions (including printed information materials) that are conducted in partnership with universities (Winston-Salem State University (WSSU), Wake Forest University (WFU), Salem College, and University of North Carolina, School of the Arts (UNCSA)) to provide sexually transmitted infections' (STI) education to students on campus. During 2017/2018, a total of 30 education sessions were held.

- i. To achieve this objective, two (2) education sessions per month will be conducted on each college campus from September to November, and January to April of each academic year.

Table 3 shows that this objective has not been met. Inadequate staff continues to negatively impact POSSE's goal of achieving a 20% increase in STI education sessions from a high of 30 sessions in the 2016/2017 school year. Additionally, the COVID-19 pandemic prevented on campus education sessions for March and April, 2020.

Table 3. Number of STI Education Sessions Conducted at Salem College, UNCSA, WFU, and WSSU for the 2015/2016 to 2019/2020 School Years

School Year/ College	2019/2020	2018/2019	2017/2018	2016/2017	2015/2016
Salem College	2	2	4	4	2
UNCSA	3	3	6	6	6
WFU	6	10	12	10	10
WSSU	6	10	12	10	10
Total	17	25	34	30	28

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, February 20, 2020

Source: Forsyth County Department of Public Health, Personal Health & Clinical Services, POSSE (Prevent Ongoing Spread of STIs Everywhere), May 14, 2021

Objective 2: By June 2022, increase by 10% the number of high school students who participate in Teen POSSE.

To achieve this objective, incentives were offered to students to get them to participate.

Table 4 shows that this objective has not been met. Inadequate staff and the COVID-19 pandemic prevented further outreach and follow-up with students.

Table 4. Number of Winston-Salem/Forsyth County (WS/FC) High School Students who Participated in Teen POSSE, 2015/2016 to 2019/2020 School Years

School Year/ Demography	2019/2020	2018/2019	2017/2018	2016/2017	2015/2016
Boys	2	4	4	4	2
Girls	5	5	6	6	6
Total	7	9	10	10	8

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, February 20, 2020

Source: Forsyth County Department of Public Health, Preventive & Health Education Services, Teen POSSE (Prevent Ongoing Spread of STIs Everywhere), May 14, 2021

Changes in the Data that Underpin the Sexual Health (Chlamydia) CHIP

Table 5 shows that Forsyth County's 2019 chlamydia rate of 844.6 is its highest of the past 5 years. However, although it exceeds the state's average (679.3), it is lower than Durham's (931.3), Guilford's (999.9) and Mecklenburg's (904.9).

Table 5. Newly Diagnosed Chlamydia Annual Rates for Forsyth County, Peer Counties and North Carolina based on Year of Diagnosis, 2015-2019¹

Jurisdiction	2019		2018		2017		2016		2015	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
Forsyth	3,229	844.6	2,847	750.8	2,534	674.2	2,630	708.4	2,485	676.4
North Carolina	71,296	679.8	66,763	643.0	62,988	613.3	58,182	572.8	54,390	542.1
Durham	2,994	931.3	2,862	902.9	2,741	878.1	2,427	788.4	2,284	759.3
Guilford	5,371	999.9	5,161	967.1	4,992	942.8	4,611	898.2	4,137	799.6
Mecklenburg	10,048	904.9	9,205	841.5	8,837	820.3	7,984	755.6	7,889	763.5
Wake	6,594	593.1	6,500	595.1	6,093	568.4	5,524	526.9	4,967	485.8

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, May 24, 2021

Source: 2019 North Carolina STD Surveillance Report. <https://epi.dph.ncdhs.gov/cd/stds/figures/std19rpt.pdf> Accessed May 24, 2021

¹ Rates are expressed per 100,000 population

2020 data will be finalized after June 30, 2021

Table 6 summarizes the number of new Forsyth County chlamydia cases from 2015 to 2019. Overall, there has been relatively very little change in the percentage of chlamydia cases among populations ≤ 24 years of age from 2015 to 2019. It has consistently been between 65% and 68%. In 2019, populations ≤ 24 years of age accounted for 67% of Forsyth County's newly diagnosed chlamydia cases. While the percentage of new cases attributed to the age ≤ 24 population in 2019 (67%) has increased slightly from

the previous year (65%), Table 6 shows that 70% of this younger group were females. This observation is consistent with the percentage attributed to females in previous years among this group. Between 2015 and 2019, females accounted for between 70% and 73% of the number of new chlamydia cases among populations who were age ≤ 24 years.

Table 6. New Chlamydia Cases for Poulations Age 24 Years or Younger, Forsyth County, NC, 2015-2019

Year	Total	Age ≤ 24 years, Total		Age ≤ 24 years, Females only	
	# of cases	# of cases	% of total cases	# of cases	% of total age ≤ 24 years cases
2019	3,171	2,137	67.4%	1,495	70.0%
2018	2,848	1,863	65.4%	1,324	71.1%
2017	2,534	1,701	67.1%	1,212	71.3%
2016	2,631	1,750	66.5%	1,246	71.2%
2015	2,485	1,686	67.8%	1,237	73.4%

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, May 24, 2021

Source: North Carolina Electronic Disease Surveillance System (NC EDSS). Current as of May 24, 2021

2020 data will be finalized after June 30, 2021

Trends in Other Major Morbidity and Mortality Factors

Morbidity

Cancer, mental health, diabetes, cerebrovascular disease, hypertension, heart disease and chronic lower respiratory disease are just a few of the major health issues in Forsyth County. For this SOTCH Report, a review of the major morbidity factors is limited to cancer and mental health.

Cancer

Table 7 shows that for 2015-2019, the 5-year rolling average incidence rate for cancer in Forsyth County (472.7) exceeded that of North Carolina's (469.2). Except for Guilford (488.9), it was also higher than Durham's (460.3), Mecklenburg's (460.9), and Wake (462.0) counties. Forsyth County's 5-year rolling average incidence rate for cancer of the lung/bronchus (65.9) exceeded the state's (62.8), and all peer counties (Table 7). However, its 5-year rolling average incidence rate for cancer of the prostate was lower than the state's (116.9) and all peer counties.

Table 7. Preliminary 2015-2019 Cancer Incidence Rates per 100,000 Population for Specific Sites, Forsyth, Peer Counties, and North Carolina¹

Site	Forsyth	N. Carolina	Durham	Guilford	Mecklenburg	Wake
Overall Rate	472.7	469.2	460.3	488.9	460.9	462.0
Colon/Rectum	31.9	35.2	31.8	34.2	33.6	28.9
Lung/Bronchus	65.9	62.8	50.4	62.8	49.4	48.5
Melanoma (Skin)	21.5	25.5	20.9	27.5	22.2	25.8
Female Breast	174.1	163.4	170.0	189.1	179.2	174.9
Cervix/Uterus	5.4	6.7	5.7	6.3	6.7	4.6
Prostate	115.6	116.9	124.9	127.7	146.8	135.9

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, May 30, 2021

Source: State Center for Health Statistics as of May 30, 2021

¹Age-Adjusted to the 2000 US Standard Population Census

Table 8 shows that Forsyth County's projected total number of new cancer cases for 2021 (2,295) is expected to be higher than each of the previous year's. While cancer of the lung/bronchus is expected to remain unchanged (327) from the previous year, cancers of the colon/rectum (171), female breast (419), and prostate (273) are projected to exceed the previous year's estimate of 169, 407 and 263, respectively.

Table 8. Projected Number of New Cancer Cases for Forsyth County, NC, 2017-2021

Year	Total	Colon/Rectum	Female Breast	Lung/Bronchus	Prostate
2021	2,295	171	419	327	273
2020	2,254	169	407	327	263
2019	2,207	168	397	325	255
2018	2,161	167	386	319	259
2017	2,117	164	376	315	262

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, May 15, 2021

Source: State Center for Health Statistics, May 15, 2021

Mental Health

Mental health continues to be a health crisis for Forsyth County. Table 9 shows that the number of residents who visited the Emergency Department (ED) for mental health reasons in 2020 (2,318) declined from the previous year's total (2,746). Nevertheless, the 2020 total is noteworthy because for most of the year, Forsyth County's EDs limited acceptance of non-COVID related emergencies. Table 9 shows that the majority of residents who sought mental health-related ED care were primarily male (56.0%), and based on race/ethnicity, White, non-Hispanic/Latino (54.6%), and Black, non-Hispanic/Latino (35.7%).

Table 9. Forsyth County, NC Residents who Expressed Suicide Ideation during Emergency Department Visits , 2016 – 2020*

Total	2020		2019		2018		2017		2016	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
	2,318		2,746		2,845		2,279		2,421	
Male	1,297	56.0%	1,531	55.8%	1,616	56.8%	1,216	53.4%	1,291	53.3%
Female	1,021	44.0%	1,215	44.2%	1,229	43.2%	1,063	46.6%	1,130	46.7%
Black, non-Hisp/Latino	828	35.7%	822	29.9%	841	29.6%	571	25.1%	474	19.6%
Hispanic/Latino	168	7.2%	191	7.0%	225	7.9%	150	6.6%	163	6.7%
White, non-Hisp/Latino	1,265	54.6%	1,679	61.1%	1,727	60.7%	1,510	66.3%	1,703	70.3%
Other/Unknown	57	2.5%	54	2.0%	52	1.8%	48	2.1%	81	3.3%

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, April 21, 2021

Source: North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT), Accessed April 21, 2021

* Total % could be off due to rounding

Mortality

Chronic diseases and health conditions are the leading causes of death in Forsyth County. Figure 1 shows that although the rate has decreased to 157.9 (2015-2019), cancer remains the number one cause of death in Forsyth County. While the death rate due to heart diseases has ranked second from 2011-2015 (145.2) to 2015-2019 (147.0), it has been increasing. Similarly, the death rate due to unintentional injuries has increased from 31.8 (2011-2015) to 45.0 (2015-2019).

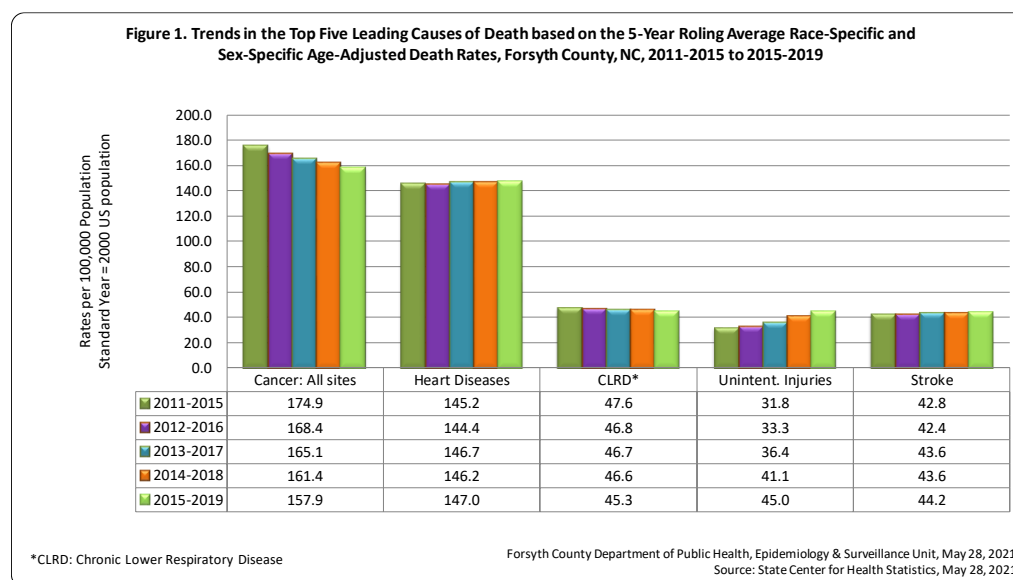


Table 10 shows that Forsyth County's death rate due to *cancer* was fairly similar to North Carolina's but higher than all peer counties. Its death rate due to *heart disease* (147.0) was lower than North Carolina's (157.3) but higher than all peer counties. Except for Mecklenburg's death rate due to *unintentional injuries* (65.0), Forsyth County's death rate due to *chronic lower respiratory diseases*, *unintentional injuries*, and *cerebrovascular diseases* were higher than all peer counties and North Carolina (Table 10).

Table 10. The 2015-2019 5-year Rolling Average Race/Ethnicity-Specific and Sex-Specific Age-adjusted Top Five Leading Causes of Death in Forsyth County with Corresponding Data for Peer Counties and

Diseases	Forsyth	North Carolina	Durham	Guilford	Mecklenburg	Wake
Cancer: All sites	157.9	158.0	147.7	153.3	136.1	134.6
Heart Diseases	147.0	157.3	128.2	136.4	128.1	119.2
Chronic Lower Resp Diseases	45.3	44.0	26.6	22.4	30.0	27.1
Unintentional Injuries	45.0	39.3	31.4	41.8	65.0	28.4
Cerebrovascular Diseases	44.2	42.7	32.6	43.8	37.9	40.6

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, May 27, 2021

¹ Standard = 2000 US Population

Source: State Center for Health Statistics, May 27, 2021

Emerging Issues

Polysubstance overdose remains an emerging issue for Forsyth County. While it is not yet dominating health discourse, public health practitioners should pay attention. Table 11 shows that during the COVID-19 pandemic, 81 residents received service for polysubstance overdose at the County's Emergency Departments. Although this number of residents is lower than previous years, this is a health issue that requires immediate prevention/intervention planning because residents report taking not only illegal drugs of interest but also, common products that are found in most households.

Table 11. Emergency Department Visits due to Polysubstance Overdose (Overdose on 2+ Drugs of Interest) for Forsyth County, NC Residents, 2016–2020*

Age	2020		2019		2018		2017		2016	
	# of Visits	% of Total	# of Visits	% of Total	# of Visits	% of Total	# of Visits	% of Total	# of Visits	% of Total
≤6 yrs	3	3.7%	7	5.1%	12	6.2%	2	1.8%	11	7.3%
7-17 yrs	10	12.3%	18	13.0%	31	15.9%	14	12.7%	24	16.0%
≥18 yrs	68	84.0%	113	81.9%	152	77.9%	94	85.5%	115	76.7%
Total*	81	100.0%	138	100.0%	195	100.0%	110	100.0%	150	100.0%

Forsyth County Department of Public Health, Epidemiology & Surveillance Unit, May 30, 2021

Source: North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT)

* Totals may be off due to rounding

New Initiatives

Beginning in Summer 2021, the Forsyth County Women, Infants and Children (WIC) Program will be implementing four (4) initiatives that aim to inform and improve access to its services.

I. Employment of an *Outreach Coordinator* from July 1st, 2021, to June 30th, 2022.

This position will focus on outreach and promotion of WIC's services to daycares, OB/GYN offices, food banks and food pantries by distributing information on a regular basis to their offices. WIC will finance the position.

II. Improve Coordination and Collaboration of Services with Head Start

Head Start provides comprehensive early childhood education, health, nutrition, and parent involvement services to low-income children and families in our county. All Head Start children are income eligible for WIC services. Both the WIC and Head Start programs offer nutrition education, and perform weight and height measurements as well as hemoglobin testing.

Objective:

- i. To combine services, ideas and information that would better serve clients
- ii. Provide nutrition education, alternately

To achieve these goals, WIC'S assigned staff will be on site at Head Start on its student registration days. A memorandum of understanding (MOU) that will document the agreement between WIC and Head Start regarding the exchange of information such as *measurements* and *adjunctive eligibility* is pending. No additional funding is needed.

III. WIC Certifications at Wake Forest Baptist Medical Center

WIC is awaiting Baptist Hospital's approval to locate a WIC Team (consisting of one nutritionist and one office assistant) within the hospital. This agreement would allow WIC to certify new babies and post-partum women before they depart the hospital. This agreement would allow

WIC to provide breast pumps for premature babies and order special formulas much faster than what is currently experienced. In general, Moms of premature babies wait for discharge to go to a WIC office for support. WIC will provide funding for this team. The expected start date of this collaboration is between June 1 and July 31, 2021.

Objectives:

- i. Reduce stress among new mothers by eliminating the burden of their visiting the WIC office to register for service soon after birth
- ii. Provide breast pumps to Moms of premature babies sooner than before. This shorter turnaround time will allow Moms to remain with their fragile babies while they are in NICU.

IV. Wake Forest and WIC Collaborative Research Project

Purpose:

Study the possibility of Wake Forest/Baptist pediatricians' ability to reduce sugary drink consumption (and promote more water consumption) in early childhood by partnering with the WIC program. This collaboration will focus on both improving connections between the Forsyth County WIC office and pediatric practices at Wake Forest Baptist, and also will enhance the resources available to educate WIC families about healthy beverage choices.

Funding:

Robert Wood Johnson Foundation's Healthy Eating Research program.

Sources

2016 (2015 cases). Community Child Protection Team/Child Fatality Prevention Team (CCPT/CFPT) Review

2017 (2016 cases). Community Child Protection Team/Child Fatality Prevention Team (CCPT/CFPT) Review

2018 (2017 cases). Community Child Protection Team/Child Fatality Prevention Team (CCPT/CFPT) Review

2019 (2018 cases). Community Child Protection Team/Child Fatality Prevention Team (CCPT/CFPT) Review

2020 (2019 cases). Community Child Protection Team/Child Fatality Prevention Team (CCPT/CFPT) Review

2019. NC DHHS, Division of Public Health, HIV/STD/Hepatitis Surveillance Unit

2020. Infant Mortality, NC State Center for Health Statistics (NC SCHS)

2020. North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT).

2020. North Carolina Electronic Disease Surveillance System (NC EDSS).

2020. NC State Center for Health Statistics (NC SCHS), Projected new cancer cases and deaths for selected sites by county.