# 2015 State of the County Health Report



# UNION COUNTY PUBLIC HEALTH



The intent of this document is to provide an overview of both the health status of Union County and the health issues impacting county residents, both personal and environmental. The document will provide information on areas that were identified in the 2012 Community Health Assessment as priority areas. This report will indicate any actions that have been taken by the Union County Division of Health and / or the community toward resolving health related issues and improving health outcomes.

State of The County Health Reports and the Community Health Assessments are available to the public at the Reference Desk of the Monroe branch of the Union County Library, and on-line. <u>www.co.union.nc.us/Divisions/Publichealth</u>

Sincerely,

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# **Division of Public Health**

The mission of Public Health is to prevent the spread of disease, protect the health of the community and promote healthy living. Public Health provides medical clinical services in eight programs, a full service dental clinic, WIC services, four grant funded health programs, Environmental Health services, and Public Health Emergency Preparedness. All programs are focused on improving the health of county residents through access to care, information and prevention services.



### **2015 Highlights**

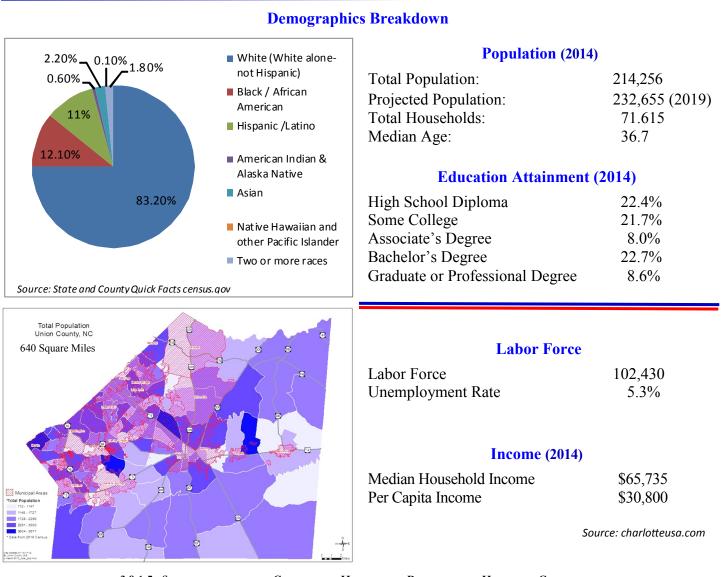
- Union County secured land for new Human Services Building; completed building design
- Electronic Medical Record (EMR) for clinical services and practice management
- GlaxoSmithKline Individual Staff Recognition Award for Prevention Programs
- Hosting and Conducting Full Scale Emergency Preparedness Exercise for CRI Region
- Participation in CHS Union Tabletop Emergency Preparedness Exercise
- Creation of Ebola Response Plan



Union County was founded in 1842. Located southeast of Charlotte, with 640-square miles and 14 municipalities, the county continues to experience growth. Significant population change occurred over the past decade, resulting in approximately 6% residential increase since the 2010 census. The median age in the county is 36.7 years old, With many young households with children, Union County Public Schools has also experienced growth, and is currently one of the largest school systems in the state.

Diversity is a prevalent theme in all aspects of county life. Demographic changes are reflected in population numbers. Business and industry clusters in Union County range from aerospace to plastics, to poultry production. Lifestyle options include the rural, agricultural eastern side of the county, to the suburban lifestyle of the western side of the county.

With growth comes change. The Union County Parks and Recreation Department wrote a Master Plan to provide direction for future park projects in the county. The County Planning Department took part in a regional planning effort to set direction of growth across the entire Charlotte Region.





The North Carolina State Demographics Unit expects the County's population to grow by 20.58 percent or 41,622 residents between 2010 and 2020, reaching 243,793 residents by the year 2020. Public school enrollment, per Union County Public Schools final ADM (average daily membership) for 2014, was 41,296 students; and is projected to increase to approximately 42,484 students by 2023. The county's utility system added approximately 1,629 new water connections in Fiscal Year 2015.

Contributing to the county's growth during the past decade is its proximity to the City of Charlotte and Mecklenburg County, which contain the largest population in the State and comprise the major urban center of North Carolina's piedmont crescent. The County's diverse economic base and the interdependence of the Charlotte-Gastonia-Concord Metropolitan Statistical Area or MSA are major factors that contributed to the county's rapid growth during the previous decade.

Although it is anticipated the county will experience steady growth, maintenance of existing infrastructure and facilities will become an even greater challenge. While the County's current debt load is significant, forty percent or \$163.1 million of the County's general fund principal will be retired within the next five years. Within the next ten years, 70.7 percent or \$288.3 million of the County's tax supported principal will be retired. This maturation of debt continues to add to the long-term fiscal sustainability of the County.

Union County's tax base is predominately residential (86 percent of value). The tax base does not exhibit a high degree of taxpayer concentration, with the top ten taxpayers representing a modest 3.10 percent of assessed value.

The county's economic indicators are trending in a positive direction. Labor statistics show the county's unemployment rate declined by 1.0 percent year over year in August 2015 to 5.2 percent. North Carolina's statewide unemployment rate was 6.1 percent in August.

The North Carolina median household income, from 2009-2013, was \$46,344 in comparison to the county's median household income during the same period of \$65,892. During the same time period, 9.4% of the county's population was below the poverty level, compared to 17.5% for the state.

During Fiscal Year 2015, there were 519 commercial and 3,177 residential construction permits issued countywide, compared to fiscal year 2014 of 400 commercial and 3,285 residential permits; showing a slight increase in the total number of permits. This trend is anticipated to continue into 2016.

\*Sources: Comprehensive Annual Financial Report (CAFR) 2015 U.S. Census Bureau

November 2013, Union County Public Schools Population and Enrollment Forecasts 2013-2023

Human Services	FY 2015 Adopted	% of Total	
Divisions			
Administration of Human Services	\$ 3,800	0.0%	
Fleet Management	\$ 860,322	2.1%	
Nutrition Program for the Elderly	\$ 498,158	1.2%	
Public Health	\$ 9,486,302	23.2%	
Social Services	\$ 28,313,135	69.4%	
Transportation	\$ 1,288,529	3.2%	
Veterans' Services	\$ 356,165	0.9%	
Total Division Expenditures	\$40,806,411	100.0%	





### **Division of Public Health**

The Division of Public Health provides many clinical services and prevention programs to county residents: Maternal Health, High-risk Maternal Health, Family Planning, Breast and Cervical Cancer Control, Immunizations, Child Health, Communicable Disease, and Dental services. In addition to these programs, the agency expands their menu of services to include grant funded initiatives such as the Susan G. Komen funded About Breast Cancer program, Alliance for Children funded Breast Feeding Peer Counselor program. Federally funded Ryan White services are available in five funded categories. The agency receives CDC funding for a Public Health Emergency Preparedness Coordinator to draft, exercise, and implement plans for Public Health related emergencies. The department also provides health care services to all inmates in the Union County jail.

In addition to clinical services, the department also provides Environmental Health services to the community. The Food, Lodging and Institution section conducts inspections of all restaurants, schools, cafeterias, hospitals, and jails.

In 2015 the Union County Division of Public Health experienced many changes. The change that will be most evident to the public will be the addition of a new Electronic Medical Record system for use in all medical services at the Health Department. The EMR is intended to improve both clinical efficiencies and practice management.

Maria Clara Laury, a bilingual Program Coordinator won the 2015 Glaxo Smith Kline Individual Staff Recognition

Award for community outreach work in prevention based programs. Maria collaborates with Union County Public Schools, Union County Child Care Association, Environmental Health and CHS Union. She provides dental education classes, Scrub Club Hand Washing classes for children, coordinates and teaches Parenting with a Purpose classes, and coordinates the About Breast Cancer Project. A donation was made by Glaxo Smith Kline in Maria's name to the North Carolina Public Health Association scholarship fund. The award was presented in September in Winston Salem at the Glaxo Smith Kline Luncheon. Also recognized was Lydia Lyon, RN for her dedicated service to Public Health.



#### **Public Health Staff**

Health Department – Health Care Services: 78 Environmental Health: 17

FY	Local Allocation	FY	Expenses	FY	Revenues
2015	\$ 4,385,889.00	2015	\$ 9,518,488.00	2015	\$ 5,132,599.00
2014	\$ 3,833,601.00	2014	\$ 8,663,447.00	2014	\$ 4,829,846.00
2013	\$ 4,403,622.00	2013	\$ 8,539,056.00	2013	\$ 4,135,434.00
2012	\$ 3,716,638.00	2012	\$ 8,424,567.00	2012	\$ 4,707,929.00



#### **Public Health Emergency Preparedness**

The U.S. Department of Health and Human Services (HHS) is the principal federal agency responsible for protecting public health. Since 2002, HHS, through the Centers for Disease Control and Prevention (CDC) began awarding funds for Public Health emergency preparedness activities. Funds are awarded as part of the Public Health Emergency Preparedness Cooperative Agreement (PHEP). Union County receives \$41, 543.00 in Preparedness dollars and an additional \$10,000 in Cities Readiness Initiative (CRI) funds. The PHEP grant address the Capabilities, the MCMORR (SNS), Respiratory Protection Program, and ICS/NIMS training. All monies received pay for the Preparedness Coordinator salary, required drills and exercise costs, and emergency preparedness supplies. The PHEP requires Public Health to develop plans to receive, distribute and dispense medical countermeasures from the Strategic National Stockpile (SNS) to affected populations in a declared emergency. Items in the SNS are capable of supporting all-hazards emergencies, with emphasis on acts of bioterrorism.

The Preparedness Program has been working collaboratively with the Union County Sheriff's Office on plans for four public PODs or Points of Dispensing to be opened in the event of a declared emergency. PODs will be dispersed across the county to provide the most efficient, logistical distribution of necessary medications. The Sheriff's Department will play a major support role during an emergency event, providing secure transport of medication, security and traffic control at PODs.

In April 2015, a full scale exercise was held in Union County to assess the ability of Public Health to receive medications at the Local Receiving Site (LRS), open a POD, assess medication dispensing and citizen throughput, POD security, plan evaluation, and communication with the County Emergency Operations Center (EOC). The exercise was hosted by Union County Public Health and was evaluated by regional Emergency Preparedness partners and state officials.

Public Health signed a separate Preparedness agreement addendum to develop a Concept of Operations Plan to respond to Ebola Virus Disease (EVD). The plan is inclusive of information and training sessions with community partners: CHS Union, EMS, Emergency Management, Emergency Communications, and the Union County Sheriff's Office and Fire Marshall's Office. The plan addresses monitoring procedures for travelers from impacted areas, isolation protocols, and Personal Protective Equipment (PPE) training for staff and partners. Funds from the addendum were used to purchase a Porta Count Machine to more effectively and efficiently FIT test employees and partners in emergencies requiring health officials to wear PPE.

The CDC adopted a new method for reviewing state and local medical countermeasure operational readiness in 2014—2015, the Medical Countermeasure Operational Readiness Review Tool (MCMORR). CDC's new review process is designed to better measure a jurisdiction's ability to plan and successfully execute any large-scale response requiring distribution and dispensing of medical countermeasures. It is meant to build upon the medical countermeasure planning progress PHEP awardees have already made in years past, as well as identifying medical countermeasure response operational capabilities and gaps which may require more targeted technical assistance.

# **Union County Emergency Communications 2015**

Union County is a consolidated, single Public Safety Answering Point (PSAP), allowing Telecommunicators to process calls once, dispatching all necessary disciplines simultaneously.

#### **Union County Emergency Communications Division**

34	FT Telecommunicators					
8	PT Telecommunicators					
	ADMINISTRATION					
1	Executive Director					
1	Division Director					
1	Operations Manager					
1	911 Database Coordinator					
1	CAD Technician					
2	Radio Technicians					
2	PT Quality Assurance Technicians					

Employs 50 personnel to conduct various duties within the department.

#### **Union County Communications 2015 Calls**

Type of Call	Number of Calls
Fire Service	20,142
Medical Service	20,868
Law Enforcement	249,343
TOTAL CALLS	290,353

- 95.01% of calls answered within 15 seconds
- 99.6% of calls answered within 40 seconds

All calls processed utilizing the National Academy of Emergency Dispatching (NAED) protocols.

Union County is one of the very few agencies in the nation to be in the accreditation program for the Fire, EMS and Law Enforcement phases.

# **Grant Funded Programs**

	Funded	Clients Served
About Breast Cancer (ABC)—funded by		
Susan G. Komen	\$ 65,133	120 clients
Breast Feeding Support—funded by		
Alliance for Children	\$ 51,000	1,640 clients
NC Health Childcare Consultant Program—funded by		NEW PROGRAM
Alliance for Children	\$ 36,360	for 2016
Ryan White— funded by Federal Government	\$ 10,497	12 clients



### **Clinical Services**

Unduplicated Patient Count: 9,251 Visit Count: 19,814

2015 Individual Program Data					
Program	Non-duplicated Patient Count	Visit Count			
Child Health	3578	5366			
Care Coordination for Children (CC4C)	919	N/A			
Family Planning	2019	3099			
Immunizations/International Travel	2404	2601			
STD	693	801			
ТВ	287	556			
Epidemiology	222	424			
Maternal Health/ High Risk	766	4436			
Pregnancy Care Management (PCM)	776	N/A			
BCCCP / Wise Woman	206	228			
Adult Health (Pregnancy Tests)	165	184			
Other Services (Titers/Labs)	82	84			
Dental Health	827	2032			
WIC (3,773 avg. monthly caseload)	Clients per month	Contacts per month			
WIC Breast Feeding Program	112	225			



<b>Maternal Health</b>	UC Total Number	2014 %	NC Total Number	2014 %
Very Low Birthweight (1,500 grams or <)	34	1	2,044	1.7
Low Birthweight (1,501—2,500 grams or <)	163	7	8,764	7.2
Preterm (less than 37 weeks)	230	9.7	13,842	11.4
Late or No Prenatal Care	38	1.60	2,234	1.8
Gestational Diabetes	155	6.5	6,454	5.3
Mother Smoked	161	6.8	11,896	9.8
C-section	716	30.1	35,707	29.5

Women 15—44	Births	Fertility Rate	Total Pregnancies	Pregnancy Rate	Total Abortions	Abortion Rate
Union County	2,289	55	2,549	61.2	248	6
NC State	118,983	60.3	139,582	70.8	19,818	10.1
Teens 15—17						
Union County	41	7.5	51	9.4	10	*
NC State	2,422	13.1	3,066	16.6	623	3.4
* rate not given						

Source: Sate Center, Vital Records



# Infant Mortality

(2014)	Total Infant Deaths	White Non- Hispanic Deaths	African American Deaths	Hispanic Deaths	American Indian Deaths	Other Non- Hispanic Deaths
Union County	14	5	5	3	0	1
North Carolina	860	345	369	110	15	21
Infant Mortality Rates Racial Disparities	White Rate	African American	Disparity Ratio			
Union County	2.7	15.7	5.81			
North Carolina	5.4	12.9	2.39		Source: Sate Center, Vital Records	



#### **Communicable Diseases** 2015 CONFIRMED **Campylobacter Infection** 21 Chikungunya (Mosquito borne disease) 1 Cryptosporidiosis (Caused by a parasite-diarrheal disease) 10 E. Coli 3 Ehrlichiosis, HE (Tick borne disease) 1 3 Haemophilus Influenza (Bacterial infection causing meningitis) 1 Hepatitis A acute 14 Hepatitis B chronic Hemolytic Uremic Syndrome (HUS) (Severe complication caused by E. Coli infection resulting in renal failure) 1 Influenza, Death: Adult (18 > years)2 3 Legionella Lyme Disease 1 Pertussis (Whooping cough) 3 Salmonellosis 61 Shigellosis 4 Streptococcal Invasive Disease 3

#### SEXUAL TRANSMITTED DISEASES

	INVESTIGATED	CONFIRMED
AIDS	N/A	5
Chlamydia	802	877
Gonorrhea	217	225
HIV Disease	N/A	11
Non-gonococcal Urethritis (NGU)	9	4
Syphilis	N/A	8
TOTAL	1244	1262



# **Leading Causes of Death**

#### **Union County 2010-2014**

Rank	Leading Causes of Death	Total Deaths	as % of Deaths
1	Cancer	1,436	33%
2	Diseases of heart	1345	29.5%
3	Alzheimer's disease	359	7.5%
4	Chronic lower respiratory disease	320	7.5%
5	Cerebrovascular diseases	307	7%
6	Other unintentional injuries	172	3.5%
7	Nephritis, nephrotic syndrome and nephrosis	156	3.5%
8	Diabetes mellitus	133	3%
9	Pneumonia and influenza	122	2.8%
10	Motor vehicle injuries	121	2.8%
	TOTAL DEATHS — ALL CAUSES	4471	100%

Source: NC State Center for Health Statistics, County Health Data Book-2016

# North Carolina 2010-2014 T

Rank	Leading Causes of Death	Total Deaths	as % of Deaths
1	Cancer	92,542	32%
2	Diseases of the heart	86,699	30%
3	Chronic lower respiratory diseases	24,042	8%
4	Cerebrovascular diseases	22,116	7.5%
5	Other unintentional injuries	14,791	5%
6	Alzheimer's disease	14,595	5%
7	Diabetes mellitus	11,798	4%
8	Pneumonia and influenza	9,011	3%
9	Nephritis, nephrotic syndrome and nephrosis	8,813	3%
10	Septicemia	6,798	2.5%
	TOTAL DEATHSALL CAUSES	291,205	100%

Source: NC State Center for Health Statistics, County Health Data Book-2016



# **County Hospital Utilization Rates and Charges**

Union County	Total Cases	Discharge Rate (per 1,000 population)	Average Days Stay	Days Stay Rate (per 1,000 population)	Total Charges	Average Charge Per Day	Average Charge Per Case
DIAGNOSTIC CATEGORY							
Malignant Neoplasms	516	2.4	6.9	16.3	\$37,367,224	\$10,514	\$72,417
Colon, Rectum, Anus	57	0.3	7.3	1.9	\$3,721,040	\$8,902	\$65,281
Trachea, Bronchus, Lung	55	0.3	4.8	1.2	\$2,555,878	\$9,645	\$46,471
Female Breast	16	0.1	2.8	0.2	\$1,029,010	\$23,387	\$64,313
Prostate	52	0.2	1.9	0.5	\$2,634,877	\$26,615	\$50,671
Endocrine, Metabolic & Nutrit. Diseases	566	2.6	3.2	8.4	\$14,532,107	AL	\$25,675
Diabetes	284	1.3	3.5	4.6	\$6,338,459	\$6,326	\$22,319
~							
Cardiovascular & Circulatory Diseases	2,239	10.2	4.1	42.4	\$102,997,008	\$11,107	\$46,001
Heart Disease	1,494	6.8	4	27.2	\$67,880,915	\$11,399	\$45,436
Cerebrovascular Disease	428	2	4.3	8.5	\$15,745,115	\$8,461	\$36,788
Respiratory Diseases	1,292	5.9	4.9	28.9	\$34,770,209	\$5,502	\$26,912
Pneumonia / Influenza	397	1.8	4.9	8.9	\$10,616,993	\$5,433	\$26,743
Chronic Obstructive Pulmonary Disease (excludes Asthma)	233	1.1	3.8	4	\$4,515,460	\$5,149	\$19,380
Asthma	209	1	3.3	3.1	\$3,157,867	\$4,637	\$15,109
Digestive System Diseases	1,397	6.4	4.7	29.8	\$50,219,065	\$7,719	\$35,948
Chronic Liver Disease / Cirrhosis	38	0.2	5.7	1	\$1,491,930	\$6,939	\$39,261
Genitourinary Diseases	668	3.1	3.5	10.8	\$16,384,291	\$6,966	\$24,527
Nephritis, Nephrosis, Nephrotic Syndrome	259	1.2	4.3	5.1	\$6,376,958	\$5,776	\$24,621
Injuries & Poisoning	1,151	5.3	4.9	25.8	\$56,057,957	\$9,939	\$48,704
Other Diagnoses (includes mental health)	1,264	5.8	8.2	47.6	\$31,524,499	\$3,029	\$24,940
ALL conditions	15,000	68.6	4.5	308.1	\$536,728,426	\$7,972	\$35,782



# **State Hospital Utilization Rates and Charges**

NORTH CAROLINA	Total Cases	Discharge Rate (per 1,000 population)	Average Days Stay	Days Stay Rate (per 1,000 population)	Total Charges	Average Charge Per Day	Average Charge Per Case
DIAGNOSTIC CATEGORY							
Malignant Neoplasms	28,252	2.8	6.7	19.1	\$1,565,095,750	\$8,227	\$55,427
Colon, Rectum, Anus	3,640	0.4	7.4	2.7	\$202,702,747	\$7,505	\$55,718
Trachea, Bronchus, Lung	4,069	0.4	6.4	2.6	\$202,442,120	\$7,746	\$49,801
Female Breast	814	0.1	3.5	0.3	\$33,900,502	\$11,975	\$41,647
Prostate	1,923	0.2	2.3	0.4	\$76,901,527	\$17,297	\$39,990
Endocrine, Metabolic & Nutrit. Diseases Diabetes	38,533 18,744	3.9 1.9	4 4.5	15.6 8.5	\$1,009,448,329 \$465,337,426	\$6,496 \$5,520	\$26,202 \$24,830
Cardiovascular & Circulatory Diseases	149,289	15	4.8	71.3	\$6,496,432,767	\$9,160	\$43,529
Heart Disease	100,123	10.1	4.8	48.1	\$4,578,684,447	\$9,582	\$45,742
Cerebrovascular Disease	27,850	2.8	4.7	13.2	\$976,222,464	\$7,447	\$35,073
<b>Respiratory Diseases</b>	88,251	8.9	5.4	47.9	\$2,620,820,059	\$5,499	\$29,706
Pneumonia / Influenza	28,004	2.8	5	14	\$698,856,747	\$5,030	\$24,957
Chronic Obstructive Pulmonary Disease (excludes Asthma)	18,006	1.8	4.1	7.4	\$380,645,830	\$5,176	\$21,140
Asthma	9,035	0.9	3.2	2.9	\$139,306,354	\$4,872	\$15,420
Digestive System Diseases	87,611	8.8	4.8	42.4	\$2,699,745,325	\$6,400	\$30,819
Chronic Liver Disease / Cirrhosis	2,576	0.3	5.5	1.4	\$89,121,588	\$6,271	\$34,610
Genitourinary Diseases	43,290	4.4	4.3	18.7	\$982,584,635	\$5,290	\$22,699
Nephritis, Nephrosis, Nephrotic Syndrome	18,459	1.9	5	9.4	\$434,420,517	\$4,668	\$23,537
Injuries & Poisoning	75,151	7.6	5.7	43	\$3,564,920,096	\$8,338	\$47,478
Other Diagnoses (includes mental health)	91,127	9.2	8.3	75.7	\$1,961,312,609	\$2,604	\$21,524
ALL conditions	934,408	94	5	470.2	\$30,907,104,638	\$6,610	\$33,085



### **Health Projections**

Life Expectancy Years						
	Total Male Female White African America					
Union County	79.5	77.5	81.5	80.1	76	
State	78.3	75.8	80.7	79.1	75.9	

Source: State Center for Health Statistics (County Data Book) 2016

Projected New Cancer Cases 2012—2014						
	Total Cases	Lung/ Bronchus	Breast Cancer (Female)	Prostate	Colon/ Rectum	
Union County	1,111	161	194	155	88	
State	57,624	8,669	9,772	7,998	4,633	

Source: State Center for Health Statistics (County Data Book) 2016



# **Hospital Discharge Data**

Hospital Discharges with Primary Diagnosis of Asthma							
	TOTAL Number	TOTAL Rate	Number of Children 0—14 years	Rate for Children 0-14 years			
Union County	209	95.6	68	133.3			
State	9,035	90.9	2,754	144.6			

Source: State Center for Health Statistics (County Data Book) 2016



### **Environmental Health Food, Lodging and Institutions**

The Food, Lodging, and Institutions Program (FLI) is a mandated program administered by the local Health Department pursuant to Chapter 130A of the General Statutes of North Carolina. The FLI Program staff issue permits for operation of facilities and are required to conduct over 2,000 facility inspections, critical violation visits, and permits per year to help protect public health. In fiscal year 2015, 100% of the required food inspections were completed.

According to the CDC, Foodborne illness (sometimes call "foodborne" or "stomach flu") is a common costly— yet preventable—public health problem. Each year, 1 in 6 Americans gets sick by consuming contaminated foods or beverages. Many different disease-causing microbes, or pathogens, can contaminate foods, so there are many different foodborne infections.

The top five risk factors in food safety are unapproved source, inadequate cooking, improper time/ temperature, poor personal hygiene, and cross contamination. Each of these factors is critical and, if no corrected, can results in serious maladies for individuals that eat food that has not be safely prepared.

Some form of food standards have been in place in the U.S. since 1906 to ensure the safety and protection of individuals who patron food service facilities. Effective September 1, 2012, the most comprehensive change in North Carolina's food protection standards in more than 30 years took place when North Carolina rules incorporated most of the 2009 FDA Food Code, which specifically address the five risk factors mentioned above.

In anticipation of the new standards, the Union County Health Department enrolled in the FDA Voluntary National Retail Food Regulatory Program Standards (VNRFRPS) in 2007. The main goal of a national food safety program is the reduction and prevention of foodborne illness. To that end, FDA provides several pathways, one of which is the Standardization of retail food inspection personnel. This process provides regulatory personnel the opportunity to subject their knowledge and skills related to the Code's provisions to a uniform system of measurement. The process and criteria for demonstrating proficiency in the required performance areas are described in the FDA Procedures for Standardization of Retail Food Safety Inspection Officers.

It is critical that food safety personnel become Standardized through this process to ensure that retail foods are safe, unadulterated, and honestly presented at retail throughout the United States. A certificate of standardization as an FDA standardized food safety inspection officer is issued to all candidates who successfully complete the standardization process. All of Union County Environmental Health FLI staff is Standardized.

# **Environmental Health Program Data**

Food / Lodging / Institutions						
Types	Permits	Inspections	Compliance Visits			
Nursing Homes, Asst. Living, Hospitals, Adult Day Service	20	36	4			
Lodging (Hotels, Motels, B & B)	13	13	9			
Pools (all types)	154	162	120			
Residential Care Facilities	41	41	14			
Restaurants, Meat Markets and Food Stands	415	1,368	351			
School Cafeterias and Concession Stands	82	276	44			
MFU/PC	27	82	21			
Nursing/Rest Home Cafeterias, Elderly Nutrition, Jail	17	53	5			
Mass Gathering Events	3	N/A	N/A			
Temporary Food Permits	46	N/A	N/A			

<b>Tattoo Facilities</b>				
14 Facilities / Artists				
3 New Facilities				

15 Inspections

- Methamphetamine Labs
- 3 Meth Labs reported through SBI
- 3 Meth Labs decontamination notices



Children's Environmental Health					
Lead					
1	Confirmed elevated blood lead level				
2	Investigation / follow-up elevated blood lead levels				
1	Confirmed lead poisoning				
19	Clearance testing / visits / consultations for lead poisoning				
5	Maintenance Standard Program inspections / visits				

	Child Care Facilities
92	Licensed Child Care Facilities
3	New Child Care Facilities/Ownership Change
207	Child Care Facility Inspections
69	Child Care Facility Visits / Consultations

Schools					
68	Public, Private or Religious Schools				
1	New School				
90	Inspections				
20	Visits / Consultations				

### **Environmental Health Program Data continued...**

Well Program Activities for 2015		Well Program Field Activities	
Numbers	Permits	Numbers	Completed Wells
196	New wells (Drinking Water)	341	Well site permitting visits
56	Irrigation wells	178	Grout inspections
73	Well abandonments	423	On-Site consultative visits
16	Well repairs	142	Well head completion visits
341	Well Permits Prepared	41	Well abandonments observed
142	Certificates of Completion	27	Well camera inspections performed
		2063	Consultative contacts made

The Union County Well Program protects ground water resources in the County, and assists residents in having safe potable water supply where public water is not available. This is accomplished through permitting private drinking water and irrigation wells in Accordance with 15A NCAC 02C.0300, Rules Governing Permitting and Inspection of Private Drinking Water Wells.



15A NCAC 18A .3800 requires water quality samples be collected on newly constructed wells. Environmental Health also provides water quality samples on existing wells. Residents may use this information to determine if a treatment system is needed to remove the contaminant(s), thus providing a safe potable water source.

352	Bacteria samples collected						
118	Positive samples for presence of coliform bacteria (33.5%)						
6	Positive samples for E. coli bacteria (1.7%)						
194	Inorganic Samples (146 New Well Panels, 48 individual) *(63.4% decrease in individual inorganic samples collected compared to 2014)						
41	Arsenic levels ≥EPA maximum contaminant level (MCL) of 0.01 mg/I						
51	<b>Iron</b> levels $\geq$ EPA MCL of 0.30 mg/I						
77	Manganese levels $\geq$ EPA MCL of 0.05 mg/I						
1	Lead levels $\geq$ to th eEPA MCL of 0.015 mg/I						
165	Nitrate/Nitrite (146 New Well Panels, 19 individual)						
2	Nitrate levels $\geq$ to the EPA MCL of 10.0 mg/I						
1	Herbicide No levels > EPA MCL						
3	Pesticide No levels > EPA MCL						
2	<b>Petroleum/VOC</b> No levels > EPA MCL						

In 2014 the State Laboratory of Public Health dramatically increased the cost of water quality testing. This increase in cost (inorganic sampling went from \$3.15 per sample to \$60.00) was passed onto the consumer. This decrease of individuals testing wells is a public health concern. Union County has known ground water contaminants (arsenic, manganese) which are known to adversely affect human health; however, people are not testing due to cost.



### **Union County Health Trends**

- Union County Alzheimer's Disease exceeds the state (Union County 7.5% vs. NC 5%)
- Cancer and Heart Disease remain leading causes of death
- Public Health dental clinic non-duplicated patient count increases from 425 to 827 in past year
- Environmental Health permit requests increase in On-site Waste Water Program
- International travelers followed by Public Health as low risk for Ebola per CDC protocol
- Two Gastro Communicable Disease outbreak investigations involving 100 or more people

# **2012 CHA Health Priorities**

The 2012 Community Health Assessment identified multiple health and wellness priorities facing county residents. Action plans were developed for childhood obesity and diabetes. From 2012 through 2014 incremental steps were made to create infrastructure, resources, and collaborations to work on challenges presented by obesity and diabetes. Without sustainable staff or fiscal resources to pursue action plan activities, 2015 shifted focus to realigning Public Health's prevention efforts. In 2016 the Community Health Assessment will revisit obesity and chronic disease, and all other potential impediments to positive health outcomes and healthy lifestyles in Union County. Public Health will continue to work with community partners to identify and develop opportunities to address what threatens the health of county residents. The Union County Division of Public Health will request a Health Education position in the 2016 budget to assist with implementation of 2016 CHA priorities and expand the prevention focus of the agency.



# **Childhood Obesity**

Date	Strategy / Action	Audience	Intended Outcome	Resources	Status
2012	Boys and Girls Club Fitness and Nutri- tion Pilot Program Development	Boys and Girls Club partici- pants	Teach healthy eating and establish fitness as a scheduled part of Boys and Girls Club	Fitness Equipment, JUA-UCPS with Boys & Girls Club, RD for Nutrition Class, Fitness Instructor, Physician to monitor participant health status	Fitness equipment purchased, JUA signed, lack of funding for staffing components has delayed program
2012- 2014	Promote Local Farmers Markets, Produce Stands; Advertise in local newspapers, radio and billboards	Union County Families	Raise awareness of local produce, and encourage consumption of local foods for improved nutrition	CTG Funds	On-going for duration of CTG funding
2012	Teach Where Food Comes From in Child Care Centers	Union County Children in pre-school settings	Nutrition Education and encourage consumption of fruits & vegetables	UCHD Health Education Staff, or Intern - Nutrition Books	Dependent upon availability of staff or intern for out- reach
2012- 2013	Physical Activity Outreach in Child Care Settings	Union County Children in pre-school settings	Encourage fitness in child care settings, provide child cares with parachutes, teach parachute fitness activities	UCHD Health Education Staff, or Intern - Parachute Play Book, Parachutes	Dependent upon availability of staff or intern for out- reach
2012- 2013	Create access at UCPS to track, tennis courts, ballfields	Union County Families	Zero cost access to fitness opportunities within local communities	Agreement with UCPS	UCPS was unable to accommodate request due to liability
2013	Host Children's Scavenger Hunt at Union County Farmers Market	Union County Families	Educate children on where food comes from, encourage consumption of more fruits and vegetables	Food demonstration supplies	Completed 7/24/13
2014	Expansion of CHIPRA / CHET classes for Health Department children referred for obesity, includes fitness lesson	Union County Families	Incorporate fitness and healthy eating options into the lives of at-risk children, provide fitness opportunities for families, teach proper nutrition decisions, change family behaviors	CHET Instructor, fitness instructor	On-going, liability waiver needed for participants, fitness instructor needed, additional planning required
2015	Expand community outreach partners to decrease childhood chronic disease	Union County Families	Prevention programs and services for families with obese children	Wingate University Pharmacy student to lead obesity interventions	Met with Wingate University Pharmacy Professor to discuss potential collaborations



### Diabetes

Date	Strategy / Action	Audience	Intended Outcome	Resources	Status
2012- 2013	Teach Diabetes Self-Management Classes	Diabetic Healthquest Clients	Provide disease management to people with diabetes	Public Health RN, Public Health RD	2 PHN II trained in Diabetes Self- Management
2012- 2013	Create access to free fitness opportunities	Diabetic Healthquest Clients	Encourage clients to lose weight, or maintain healthy weight via exercise	Fitness Equipment	Elipticals purchased for Healthquest
2012- 2013	Murphy to Manteo Challenge	Diabetic Healthquest Clients	Encourage clients to lose weight, or maintain healthy weight via exercise	Murphy to Manteo Challenge forms provided to Healthquest	Health screens needed prior to reissuing challenge for 2015
2012- 2013	Increase access to fresh, local produce via setting up Produce stand at Healthquest on Mondays	Diabetic Healthquest Clients	Change dietary habits, include more fresh fruits and vegetables	Farmer, Produce Stand items - canopy, table, signage	Completed for season
2014	Monthly Diabetes Newsletter to educate clients	Diabetic Healthquest Clients, Community Health Clients	Provides continual educational reinforcement, diabetic friendly recipe, local resource awareness	Staff time, office supplies	On-going
2014	Diabetes Oral Hygiene Class - Two Way Connection	Diabetic Healthquest Clients, Community Health Clients, Diabetes Center Clients	Educate clients on connection between oral health and disease management	Dental Hygienist	On-going
2015	Teach Diabetes Self-Management classes	Diabetic Healthquest Clients	Educate and assist Diabetic and pre- diabetic patients in disease management and prevention measures with emphasis on oral hygiene and dental health as part of overall health	Public Health RN Public Health Dentist	Diabetes Self- Management RN met with local PCP to asses interest to educate and assist; PCPs all had referral sources in place for patients



Fiscal Year 2015 was a year of improvements, changes and successes in Public Health.

Improvements in clinic flow identified in the 2014 Quality Improvement project assisted in the transition to Cure MD (electronic medical records) for all Public Health medical clinics. In October the practice management component was implemented to establish a scheduling system and billing system. Within 30 days, the clinical component of Cure MD was implemented. Short term inconveniences such as a reduced clinic schedule and longer patient wait times were part of the growing pains. Long term benefits will include more efficient clinics, increased patient access, and increased opportunity for patient self-education, expedited billing, and expanded administrative report functions.

Environmental Health experienced upward and downward trends. Permitting application requests significantly increased within the OSWP, following an upward trend in county building inspection permits. Requests for water sampling for inorganics, herbicide, pesticide, and petroleum were cut in half largely due to a significant increase in cost from the state to process samples. Cost prohibitive sampling can have negative impacts on the well-being of residents who are unaware of potential hazards in their drinking water.

The Consolidated Human Services Board model was reinstated in Union County. In January, the Board of County Commissioners appointed a new Consolidated Human Services Board to provide oversight for the Human Service Agency.

The role of Public Health in Emergency Preparedness continues to expand in response to international and national disease and threat trends. In 2015 Public Health staff hosted a regional full scale exercise, participated in a tabletop exercise with CHS Union, and signed an Ebola Agreement Addendum with the state. All preparedness activities have singular focus, providing education and training necessary to appropriately prepare staff for an efficient, effective response in a real world emergency. Preparedness efforts will continue to expand to be inclusive of all potential threats to our county.

In 2016 Public Health will continue to work with technology, quality improvement, and training to focus on readiness and prevention.

# Goals

- Add Health Education position
- Continue Quality Improvement projects agency wide
- Complete 2016 Community Health Assessment (CHA)
- Develop 2016 Public Health Strategic Plan, based upon CHA results
- Expand collaboration with Community Services Division to strengthen awareness around local foods, community gardens, tobacco-free facilities and fitness opportunities
- Transition to electronic Environmental Health tool for On-Site Waste Water Program (OSWP)
- Strengthen Environmental Health OSWP customer service