



## **2010 State of the County Health Report**

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### **Overview**

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 2008 Community Health Assessment as priority areas. This report will indicate any actions that have been taken by the Health Department and / or the community toward resolving health related issues and improving health outcomes.

In addition to Community Assessment data updates, the report contains statistical health indicators such as the county's leading causes of death, pregnancy and abortion rates hospital discharge data, air quality data, water quality data, and food and lodging inspection data.

#### **Overview**

**Union County 2010**  
**Community Health Assessment Progress**  
**Union County Health Department**  
**Citizen Health**  
**Dental Health**  
**Mental Health**  
**Safety Matters**  
**Environmental Health**  
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**Conclusions & Goals**  
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#### **Union County Statistics**

- **643 square miles, 14 municipalities**
- **201,174 Estimated 2010 Population**
- **Median Age 35**
- **Median Household Income \$66,561**
- **85,018 Civilian Labor Force (2010Q2)**
- **18.93% Unemployment Rate (2010Q2)**
- **18% population 18 to 64 is uninsured**
- **\$9.7 billion dollar total tax base (FY 09-10)**

## **Union County 2010**

2009 – 2010 was an economically challenging year for Union County. As unemployment numbers increased, retail sales and real estate sales flat lined, leaving the county with an anemic revenue stream and a large outstanding debt service of \$627,568,767. The economic picture included operational budget adjustments, capital outlay cuts and a reduction of county force by 78 positions.

Despite the economic challenges, the three bond rating agencies for the county awarded Union County with strong credit ratings for general obligation school bonds. This was positive news in an otherwise bleak financial picture.

As the economy weakened the demand for human services increased, particularly the need for health care services. Unemployment translated into uninsured residents. Many local agencies were serving new clients from populations and demographics rarely seen previous to the economic downturn. Unemployed, uninsured residents faced stressful situations with fewer resources, and a limited capacity to access medical services, meet basic needs, or to pay recurring household bills.

In FY '09 – '10 Human Services' share of county tax dollars was 7%. That percentage had to be shared across multiple departments and further shared by multiple programs and services.

The political and managerial landscape of the county changed once again. In September 2010 the Board of Commissioners did not renew the contract for the County Manager. Wes Baker (Internal Auditor) served as Interim County Manager. In October, the Board of Commissioners announced the hiring of Cindy Coto as the incoming County Manager, with a start date of November 15<sup>th</sup>.

The November Board of Commissioner elections also changed the future composition of County Government, with the election of three new Commissioners: Jerry Simpson, Jonathan Thomas and Todd Johnson.

With economy and budget still in the forefront of discussions, fiscal year 2010 -2011 will provide challenges to sustain existing programs and services to meet the needs of residents.

## 2008 Community Health Assessment Results

The 2008 Community Health Assessment (CHA) was an opportunity to study the health of the county, both from an individual perspective and from a community perspective. The CHA included internal data and external data. The internal data was collected to develop an understanding regarding health concerns, disparities, behaviors and environmental factors impacting the health of residents. External data was collected from the State Center for Health Statistics. The data represents key health indicators of a community. The results categorized below were determined to be problematic for residents in achieving positive health outcomes during the 2008 CHA.

<u>Adult</u>	<u>Senior</u>	<u>Teen</u>
Lack of Exercise	Concerns over Long Term Care	Teen Pregnancy
Poor Eating	Prescription Drug Costs	Sex Education
Alcohol Abuse	Medical Problems / Indigent Issues	Peer Pressure / Self Image
Obesity	Lack of Adult Daycare	Soft Drink Consumption
<u>Chronic Diseases</u>	<u>Environmental Health</u>	<u>General Concerns</u>
Cancer	Restaurant Safe Food Handling	Affordable Healthcare
Heart Disease	Drinking Water Access, Quality	Stress Related to Money
Alzheimer's	Outdoor Air Quality	Mental Health Services
Diabetes	Smoke Free Restaurants	

Entering into fiscal year 2010 – 2011 the same concerns exist. Due to the economic challenges facing many residents a greater emphasis is now being placed on priorities that can be connected to finances. Accessibility to mental health services has become a more prevalent problem. Mental health service providers indicated access as problematic due to the downturn of the economy, loss of jobs and related loss of medical benefits, therefore limiting resources for needed mental healthcare.

Access to care, cost of care, and prescription drug costs are all being impacted with the passing of the Federal Healthcare Reform. The effects are beginning to reach the local level, particularly for providers and employers that provide insurance to their workforce.

According to the North Carolina Institute of Medicine, 1.7 million people, or 20.4% of the non-elderly population were uninsured in 2009. Two thirds of the NC uninsured reported having someone in the family working fulltime. Union County has consistently had close to 20,000 people uninsured for several years in a row, with [www.countyhealthrankings.org](http://www.countyhealthrankings.org) reporting 18% of Union County residents 18 to 64 years old as uninsured.

Teen pregnancy numbers for Union County are declining, including the minority teen pregnancy rate. Although the county is trending in the right direction efforts will still be needed for prevention of teen pregnancy. The Health Department is pursuing a comprehensive teen wellness grant that would address specific areas of concern including sex education. The intent of the program is to target the schools with the highest rates of teen pregnancy and implement a prevention based program that

touches all aspects of teen health: self-esteem, safe dating, goal setting, peer pressure, nutrition, soft drink consumption and physical activity.

Chronic diseases remain a concern. In 2010 the North Carolina Division of Public Health reported cancer as the leading cause of death in North Carolina. Locally, heart disease rates and the rate for all cancers declined. However, diabetes and asthma numbers increased.

In the Environmental Health arena several things are changing.

With regard to restaurant safe food handling, the Union County Food Lodging and Institutions (FLI) division of the Health Department has taken an active role in a national retail food program that has given local health professionals access to the most current science-based federal food safety standards. The Voluntary National Food Regulatory Program Standards, coordinated by the U.S. Food and Drug Administration, focuses on advancing the importance of retail food protection nationally. The local FLI division applied science-based risk management practices during unannounced food service inspections, demonstrating commitment to educating local food operators and providing the best possible protection to the public through reduction and elimination of the occurrences of food borne illness.

The water quality and access issue remains a concern for the county. The Environmental Health division of the Health Department is working collaboratively on a well water research project with Duke University. The well water division will assist Duke University by taking water samples from residents that voluntarily agreed to participate in the study. The water will be tested for arsenic levels and other trace metals. Duke will also collect toe nail clippings from the residents in order to test for the presence of trace metals in their bodies. The study will look for correlations between the high levels of arsenic in the well water and the high levels of trace metals found in the toe nail samples. The Health Department is further interested in ascertaining any potential connections between chronic disease diagnosis and these higher levels of arsenic present in the water and the body.

Outdoor air quality remains a challenge for the entire Charlotte region. Locally the effects of poor air quality are becoming more evident in the rising hospital asthma admission rates for both children and adults.

Smoke free restaurants have become a non-issue with the implementation of the NC Smoke Free law that was enacted January 2, 2010. Union County has had virtually no issues with local establishments not adhering to the new law.

## **Union County Health Department 2010 in Review**

As the Health Department moves forward the mission remains the same, to serve the citizens of Union County in the prevention of disease, promotion of health, and the protection of our community's health.

Phillip Tarte is the Health Director. The Health Department has a staff of 105 operating Environmental Health, Personal Health, and Jail Health services. The annual budget for FY 2010 – 2011 was \$8 million dollars.

The health service programs offered at the department in personal health are: Maternal Health Clinic, High-Risk Maternal Health, Family Planning Clinic, Dental Health Clinic, Breast and Cervical Cancer Control, Immunization Clinic, Communicable Disease, Child Health Clinic, Diabetes Self Management, Health Promotions and Parenting. The Women Infants Children Program (WIC) is also housed at the Health Department. Several programs that are offered are through Smart Start; Breast Feeding and Smart Start Smiles.

The health service programs offered in Environmental Health are: On-site Waste Water, Wells, Food Lodging and Institutions, Tattoo Artist Inspection, Children's Environmental Health, and Methamphetamine Labs.

### **Health Department FY 2010 –2011**

- **Staff of 105**
- **Departmental Budget \$8 million**
- **19,172 Patients Seen (non-duplicated)**
- **34,654 Patient Visits**
- **Recommended for Departmental Accreditation by the state**
- **Partnered with Duke University on well water study**
- **Spanish Parenting Classes started**
- **HIS implemented**
- **Food Lodging & Institutions brought public pools / spas into Virginia Graeme Baker Safety Act compliance**
- **UCHD provided distribution of 2800 doses of H1N1 vaccine to private providers**
- **UCHD administered 6800 doses of H1N1 vaccine to residents**
- **Adult Immunization Program for UCPS employees implemented**

### **Health Department Programs**

#### **19, 172 Clients Served in 2009-2010**

- **1847 Family Planning**
- **1503 Maternal Health**
- **2607 Child Health**
- **7395 Child Immunizations**
- **277 Child Service Coordination**
- **121 Breast & Cervical Cancer Control**
- **914 STD**
- **1156 Dental Clinic**
- **235 Smart Start Smiles Dental Program**
- **215 About Breast Cancer (Komen Grant)**
- **16,784 Laboratory Clients**
- **31,912 Lab Tests Processed**
- **4,260 WIC (average monthly caseload)**
- **1,138 Breast Feeding Program**
- **26 Diabetes Education**
- **217 Parenting Education**
- **Communicable Disease**

## Citizen Health / Child Health

### Child Population / Health Indicators

- 19,593 Elementary School Enrollment
- 822 Children enrolled in NC Health Choice (2009)
- 3,269 Children enrolled in Medicaid (2009)
- 14.4 % Union County children uninsured (0 - 18 years old) (children) (2007)
- 11.3 % children (5,986 children 5 to 17 years old) living in poverty NC 18.2% (2008)
- 32% school age children on free or reduced lunch (2009 – 2010)
- 121 children received forensic interviews & medical exams at Tree House for sexual abuse
- 9.1% of all Union County births are low birth weight babies (under 2500 grams) 2009
- 8 SIDS deaths in Union County (2005 – 2009)
- Prevalence of obesity in children ages 2 to 4 years in Union County 14.0 % vs NC 15.4% (2008)
- Prevalence of obesity in children ages 5 to 11 years in Union County 19.6 % vs NC 25.7% (2008)
- 2004 – 2008 Infant Mortality Rate, 7.3 / 8.4 NC Rate (per 1,000 live births)
- 2004 – 2008 Post Neonatal Death Rate, 2.7 / 2.7 NC Rate (per 1,000 live births)
- 2004 – 2008 Neonatal Death Rate, 4.6 / 5.7 NC Rate (per 1,000 live births)
- 2004 – 2008 Fetal Death Rate, 5.2 / 6.7 NC Rate (per 1,000 live births)
- 2008 Hospital Pediatric Asthma Admission Rates 220.6 / 192.9 NC Rate (per 100,000)
- 335 Childcare Facility Inspections and Compliance Visits

In 2009 – 2010 the state budget reflected a recurring reduction of \$4 million dollars for state vaccine appropriations. This reduction in funding limits the availability of vaccine to local health departments and private practice providers. Previously, the vaccine had been provided to local health departments at no cost. Under this new budget reduction, health departments are forced to pay retail prices for vaccine. They must purchase vaccine in order to assure that vaccines are available for the most vulnerable populations. By statute the local health departments are required to enforce the state immunization laws. Not all local health departments have the ability to bill private insurance, therefore none of the vaccine cost or staff time to administer vaccine can be recovered by the agency. Parents of insured children must pay out of pocket for the needed vaccines, and can be subject to high co-pays and deductible fees for these vaccines. In December 2009, the Union County Board of Health drafted a Resolution to restore the \$4 million dollars to the Immunization Program and therefore fund the Universal Childhood Vaccination Program. The Resolution was sent to state officials.

## Citizen Health / Adolescents

### Union County Adolescent Population 2009-2010

- **8,954 Middle School Students**
- **10,819 High School Students**
- **2,170 High School Graduates / Graduation Rate 80.7%**
- **88% of graduates plan to attend college**
- **\$51.1 million in Scholarship monies awarded in 2009**
- **2.32% drop out rate 9 (grades 7 – 12) (2007 – 2008 rate)**
- **121 of victims served for sexual abuse at United Family Services (under 18m)**
- **836 Teen Motor Vehicle Crashes (2009)**
- **1 Teen Driver Crash resulting in fatality (2009)**
- **26 Teen Driver Crashes Involving Alcohol (2009)**
- **2009 Teen Pregnancy Rate 22.8 / 30.1 NC Rate**
- **2009 Minority Teen Pregnancy Rate 42.2 / 40.9 NC Rate**
- **2009 Teen Abortion Rate 7.0 / 3.3 NC Rate**
- **2009 Minority Teen Abortion Rate 9.9 / 11.3 NC Rate**  
(ALL Pregnancy & Abortion Rates are for girls 15 to 17, per 1,000)

The Union County Health Department and local law enforcement have become aware of the emergence of a new legal form of Marijuana, commonly referred to as Spice, K2, Yucatan, Fire and Genie. It was developed when Dr. John Huffman, a Clemson University organic chemist was studying the effects of Cannabinoids on the brain. At the conclusion of his research, a paper was written that contained the method and ingredients used to make the compound now known as K2 or Spice. The product is being produced in China and Korea. It is created by spraying a synthetic compound chemically similar to THC (psychoactive ingredient in Marijuana) onto mixtures of herbs and spices. Users roll it up or inhale it from pipes. It provides the same effects as Marijuana. However, the chemical compound in K2 is reported to be 60 to 800 times more potent than the THC found in Marijuana. Even though K2 is legal, a driver that is impaired from using it can be arrested. This would be similar to someone that is under the influence of prescription or over the counter medications.

The Union County Sheriff's Office has only come in contact with K2 once in the past year. However they believe it is becoming very popular with teens and young adults.

When the NC Legislature returns to session, it is anticipated that a bill will be introduced to make this substance illegal.

The federal Drug Enforcement Administration has classified it a drug or chemical of concern.

## Citizen Health / Adults

### Adult Health Indicators

Agency for Healthcare Research (2008)

Prevention Quality Indicators (represent hospital admission rates)	County Rate (per 100,000)	NC Rate (per 100,000)
Diabetes short-term complication	184.7	223.7
Diabetes long-term complication	298.3	297.5
Congestive heart failure	468.8	429.7
Chronic Obstructive pulmonary disease	397.8	577.2
Adult Asthma	440.4	286.0

- 8,895 General Hospital Discharges (2009)
- 157 CMC Union General Hospital Beds (2009)
- 607 Nursing Facility Beds in 6 facilities (2009)

Pregnancy, Fertility, Abortion Rates (Rates per 1,000)	Union County	NC
2009 Pregnancy Rates (ages 35- 44)	24.8	27.5
2009 Fertility Rates (ages 35 – 44)	21.6	24.8
2009 Abortion Rates (ages 35 – 44)	3.0	4.0
<b>Uninsured Adults (2010)</b>	<b>Union County</b>	<b>NC</b>
<b>Adults 18 to 64</b>	<b>18%</b>	<b>17%</b>

The Health Department has started adult immunization outreach. The Department is traditionally known as a provider of flu shots. While flu shots are important and can still be received at the department, other immunizations are needed. The reemergence of old diseases such as Pertussis or Whooping Cough, created the need to educate adult residents on the importance of lifelong vaccinations.

Adult vaccinations are needed for protection against diseases: Hepatitis B, Shingles, Tetanus, Chickenpox, Influenza and Pneumococcal Disease. Adults over the age of 50, as well as adults in high-risk groups, need specific immunizations on an annual basis.

In 2008, the UCHD began offering the adult Tdap vaccine (Tetanus, Diphtheria, Pertussis). There have been numerous outbreaks of Pertussis in Union County and nationally. Since January 2010 there have been over 5,000 reported cases of Pertussis and nine Pertussis infant deaths in the state of California alone. In efforts to prevent outbreaks and deaths, UCHD is taking steps to educate adults on the importance of lifelong immunizations. Special emphasis is placed upon receiving Pertussis immunization to not only protect yourself, but others with whom you have daily contact.



The latest statistics from the UNC Sheps Center illustrate the following medical professional availability.

<b>Health Professionals in Union County vs. NC, per 10,000 population</b>			
	<b>Union County 2008</b>	<b>Union County 2009</b>	<b>NC 2009</b>
<b>Dentists</b>	<b>2.2</b>	<b>2.1</b>	<b>4.4</b>
<b>Physicians</b>	<b>7.1</b>	<b>7.9</b>	<b>21.2</b>
<b>Primary Care Physicians</b>	<b>4.4</b>	<b>4.9</b>	<b>9.2</b>
<b>Pharmacists</b>	<b>7.6</b>	<b>7.2</b>	<b>9.3</b>
<b>Registered Nurses</b>	<b>45.1</b>	<b>44.7</b>	<b>96.9</b>
<b>Nurse Practitioners</b>	<b>0.8</b>	<b>1.2</b>	<b>3.6</b>
<b>Certified Nurse Midwives</b>	<b>0.5</b>	<b>0.5</b>	<b>1.2</b>
<b>Physician Assistants</b>	<b>1.0</b>	<b>1.3</b>	<b>3.7</b>
<b>Psychologists</b>	<b>0.4</b>	<b>0.5</b>	<b>2.0</b>
<b>Chiropractors</b>	<b>1.3</b>	<b>1.3</b>	<b>1.4</b>
<b>Occupational Therapist</b>	<b>1.7</b>	<b>2.0</b>	<b>2.6</b>
<b>Optometrist</b>	<b>0.6</b>	<b>0.6</b>	<b>1.1</b>
<b>Podiatrist</b>	<b>0.1</b>	<b>0.1</b>	<b>0.3</b>
<b>Physical Therapist</b>	<b>2.0</b>	<b>2.5</b>	<b>5.2</b>
<b>Respiratory Therapist</b>	<b>1.78</b>	<b>1.78</b>	<b>4.2</b>

### Mortality / Morbidity

<b>Mortality Rates (Age Adjusted) (per 100,000)</b>	<b>Union County 2003 – 2007</b>	<b>Union County 2005 - 2009</b>	<b>NC 2005-2009</b>
Heart Disease	203.0	183.2	191.7
Cerebrovascular Disease	50.8	48.0	50.5
Diabetes	20.6	21.4	23.6
All Cancers	178.4	167.9	185.6
Septicemia	12.8	13.2	13.8
Nephritis, Nephrotic Syndrome, Nephrosis	18.4	17.4	18.7
Pneumonia & Influenza	15.1	16.7	19.4
Chronic Lower Respiratory Disease	41.0	45.9	47.0
Chronic Liver Disease	5.9	6.6	9.1
Alzheimer's Disease	54.2	57.5	28.3
Motor Vehicle Injuries	20.0	16.7	17.6
Suicide Rate	8.7	10.7	12.0
Homicide Rate	5.1	5.3	7.0
All Other Unintentional Injuries	20.0	22.3	28.6

<b>Cancer Data (Cancer incidence rates per 100,000 Population, age adjusted)</b>			
	<b>Union County 2002 – 2006</b>	<b>Union County 2003 - 2007</b>	<b>NC 2002 - 2006</b>
Colon / Rectum	43.4	18.4	48.4
Lung / Bronchus	65.4	56.6	75.0
Breast Cancer	120.9	150.9	147.2
Prostate	132.3	23.7	153.2

**Adult Health Indicators / Communicable Disease**  
**Sexually Transmitted Diseases**

	<b>Union County 2007</b>	<b>Union County 2008</b>	<b>NC 2008</b>
<b>Number of Cases</b>			
<b>HIV Disease</b>	<b>18</b>	<b>0</b>	<b>2,276</b>
<b>AIDS</b>	<b>9</b>	<b>0</b>	<b>961</b>
<b>Chlamydia</b>	<b>242</b>	<b>420</b>	<b>28,313</b>
<b>Syphilis</b>	<b>0</b>	<b>0</b>	<b>359</b>
<b>Gonorrhea</b>	<b>208</b>	<b>214</b>	<b>11,339</b>

**Adult Health Indicators / Communicable Disease**

	<b>Union County 2007</b>	<b>Union County 2008</b>	<b>NC 2008</b>
<b>Number of Cases</b>			
<b>Campylobactor</b>	<b>13</b>	<b>34</b>	<b>384</b>
<b>E. Coli</b>	<b>3</b>	<b>4</b>	<b>71</b>
<b>Hepatitis A</b>	<b>1</b>	<b>0</b>	<b>52</b>
<b>Hepatitis B</b>	<b>1</b>	<b>0</b>	<b>61</b>
<b>Hepatitis B Carrier</b>	<b>13</b>	<b>15</b>	<b>362</b>
<b>Hepatitis C</b>	<b>0</b>	<b>0</b>	<b>37</b>
<b>Lyme Disease</b>	<b>2</b>	<b>0</b>	<b>29</b>
<b>Meningococcal</b>	<b>1</b>	<b>1</b>	<b>12</b>
<b>Meningitis Pneumococcal</b>	<b>0</b>	<b>3</b>	<b>30</b>
<b>Rocky Mountain Spotted Fever</b>	<b>6</b>	<b>8</b>	<b>313</b>
<b>Salmonellosis</b>	<b>29</b>	<b>29</b>	<b>908</b>
<b>Shigellosis</b>	<b>3</b>	<b>1</b>	<b>147</b>
<b>Whooping Cough</b>	<b>20</b>	<b>3</b>	<b>79</b>

## Dental Health

### **Union County Dental Clinic**

- **1156 Patient Count**
- **2649 Visit Count**
- **83 visits by children 5 years of age (largest age group seen)**
- **67 visits by adults 30 to 34 years of age (largest adult age group seen)**
- **Clinic accepts Medicaid, NC Health Choice and Private Pay**

The Union County Health Department operates a dental clinic for both children and adults. The clinic is located inside the Health Department and offers a wide variety of comprehensive and preventative services, including cleanings, annual dental exams, x-rays and sealants. They also perform restorative fillings, extractions, crowns and bridges, as well as full and partial dentures.

The clinic is reaching a population that otherwise may not have access to dental care. The clinic accepts Medicaid, NC Health Choice and private pay.

The Union County Health Department has applied for and received a Smart Start Smiles grant for the past three years. The grant provides education, dental screenings and dental services for children birth to five years of age and for pregnant women.

The Smiles program is a one time program that covers a percentage of treatment costs at the Union County Health Department Dental Clinic.

During the course of the grant, the Smiles program has positively impacted the dental health of many Union County families. The program provides outreach to the community by offering dental classes and screenings in childcare centers, pre-schools and at the Walter Bicket Education Center. Participating families are educated on the importance of good oral hygiene and the connection between oral health and total body health. They learn best practices for oral health and the appropriate ages to begin seeing a dentist. Parents learn how to assist children in taking proper care of their mouth and teeth. The children are taught age appropriate lessons on dental health that can start a lifetime of good oral hygiene.

## **Mental Health**

**Psychologists 0.5 vs. NC 2.0 (per 10,000 population) 2009**

**Daymark Recovery Mental Health Clients (2009– 2010)**

- **2618 average number of clients served per month**
- **1267 average number of clients served Emergency & Mobile Crisis Services (per month)**
- **5.5 Average number of clients seen as walk in patients for Emergency Services / Advanced Access (July 2010)**

**United Family Services (UFS) Clients (June 2009 – July 2010)**

- **9,398 clients served; counseling, education, crisis intervention, advocacy and economic independence**
- **5,227 counseling sessions to 2,765 clients in family and group sessions**
- **UFS runs 24 hour rape crisis hotline**
- **Accompanied 36 rape victims to the hospital**
- **UFS Advocacy Center “Tree House” provided 121 medical exams and forensic interviews to children as part of the sexual assault response team**
- **283 education / awareness programs provided to 5,603 community members about child abuse and sexual assault**

Numerous agencies in Union County offer counseling services; two of the largest providers are Daymark Recovery Services and United Family Services.

The state of the economy is having a direct impact on the ability of residents to access mental health services. A large number of Daymark clients lost employment, resulting in a reduction in benefits which translated into limited access or loss of access to mental health services. Daymark suspects that many of these clients may qualify for Medicaid, but they have not seen an increase in that funding stream. With the loss of private insurance, many clients became eligible for state dollars (IPRS dollars). In March 2010, the Piedmont Behavioral Health Local Management Entity reduced outpatient services to clients funded by IPRS dollars.

## **Emergency Services & Safety**

### **2009 – 2010 Emergency Statistics / Injury Indicators**

- **225,926 calls received into 911**
- **42,141 dispatched 911 calls**
- **8.65 minutes, average response time for Union EMS for Emergency calls**
- **17,156 Union EMS Responses resulting in 11,670 Transports**
- **55.7 % Union EMS Transports went to CMC Union**
- **39 % Union EMS Transports went out of County**
- **3,652 motor vehicle crashes (2009)**
- **18 crashes resulting in fatalities (2009)**
- **194 crashes involving alcohol (2009)**
- **10 crashes involving alcohol with fatalities (2009)**
- **415 reported crashes in Union County that cited deer as a factor (2009)**

In July 2010, Union EMS joined other Union County agencies in moving primary radio communications to the 800 Mhz system which improved local and regional communications interoperability. The 800 system also significantly improved radio coverage throughout the county for all agencies.

Union EMS has budgeted to purchase wireless modems for all the EMS vehicles to facilitate additional communication links between EMS units and dispatch, to include GPS vehicle location tracking and improved navigation capabilities. This will provide the foundation for improved efficiency in routing the closest ambulance to the calls.

Union EMS indicated that they are currently experiencing significant growth in call volumes. They plan to continue to evaluate alternative staffing patterns to better match staffing with the demands for service. They are examining how to efficiently add personnel and equipment to meet the increasing call volumes while maintaining and improving response times.

The Union County 911 Department has been actively seeking a new Director since November 2009 when the previous director resigned. The county anticipates the announcement of a new director before the end of the calendar year.

## **Environmental Health**

### **Environmental Health Factors and Statistics**

- **2,132 Inspections and Compliance Visits of Food and Lodging Establishments**
- **114 Food Service Permits Issued**
- **136 Food, Lodging and Institutions Program Complaints Taken**
- **39 Inspections and Compliance Visits of Nursing Homes, Adult Day Cares**
- **179 Well Permits Issued**
- **137 final inspections of wells**
- **205 on-site wastewater system improvement permits issued**
- **97 Water samples taken from new wells**
- **332 Bacteria Water samples taken (from both new and existing wells)**
- **137 water samples taken with coli form present**
- **19 water samples taken with E. Coli bacteria present**
- **Methamphetamine Labs (Review of Abatement Plans)**
- **solid waste complaints**
- **1,910 tons of yard debris disposed of at the county landfill**
- **655 Swimming Pool, Wading Pool, Spa Inspections and Compliance Visits**
- **3 child lead investigations, 0 child lead poisoning cases**
- **16 Tattoo Artist permits issued**
- **335 Childcare Facility Inspections and Compliance Visits**

2010 has been a very busy year for the Union County Environmental Health Division. May 1, 2010 was the implementation date for the Virginia Graeme Baker Pool and Spa Safety Act (VGBPSSA) within the North Carolina Public Swimming Pool Rules.

Virginia Graeme Baker was the granddaughter of former Secretary of State James Baker. Virginia died in a tragic swimming pool drain cover accident in 2002. As a result of her death, the VGBPSSA was enacted requiring that all public swimming pools and spas have safety drain covers that meet specific standards to prevent bather entrapment. In addition to the drain cover standardization, the installation of the drain cover grates is also monitored and inspected. The inspection should ensure that upon installation maximum pump flow will exist for each pool pump. The intent of the law is to prevent entrapment with the new, safer pool drain covers and provide a pool drainage system capable of draining water at a rapid rate for safety purposes.

In March 2010, in anticipation of the implementation of this law, the Environmental Health Department hosted a meeting to educate and assist owners and operators of public use swimming pools and spas with required improvements, upgrades and installations at their facilities.

## Air Quality

### Health Indicators

- **0 Code Purple Ozone days in Monroe(2010)**
- **0 Code Red days in Monroe (2010)**
- **0 Code Orange Days in Monroe (2010)**
- **40 Code Yellow Days in Monroe (2010)**
- **152 Code Green Days in Monroe (2010)**
- **Charlotte Region ranked 10<sup>th</sup> smoggiest**
- **Charlotte region designated moderate non-attainment**
- **Clean Air Carolina educates and advocates for cleaner air**
- **220.6 Pediatric Asthma Hospitalization Rate vs 192.9 NC (per 100,000 population) 2008**
- **440.4 Adult Asthma Hospitalization Rate vs. 286.0 NC (per 100,000)**
- **Incidence of asthma in children has increased significantly in the past two decades**

Poor air quality impacts both the personal health and the economic health of the region.

The Charlotte region has been growing for decades. With the growth came increasing air quality issues. The region has failed to meet EPA ozone standards for the past 25 years. Presently, it is designated as moderate non attainment for ozone, with the constant threat of slipping into the category of serious non attainment. If the air quality slides into the serious non attainment classification, it will impact the business climate. It will further complicate the process of cleaning up the air enough to meet EPA standards. As long as the region remains in non attainment, status it constrains and restricts the regional economic developers in the types of industries that can be recruited to the Charlotte region.

In 2010, the EPA announced new stronger standards for ozone pollution control. These standards required that ozone be kept within 60 to 70 parts per billion. This range was determined to be stringent enough to protect both the public health and the environment.

The Charlotte region has an education and advocacy organization, Clean Air Carolina, that continually works toward cleaner air for everyone. The organization raises awareness on the affects of air quality on health, while advocating for policies to improve, protect and sustain good air quality in the Charlotte region.



## **Environmentally Friendly Practices in Union County**

Union County continues to take steps toward reducing its carbon footprint. In April 2010 the County, along with the City of Monroe and Union County Habitat for Humanity, held their second annual Earth Day event. The event was expanded by adding a 5K run with all proceeds benefiting Union County Habitat for Humanity. The focus of Earth Day was on sustainability, environmental stewardship and healthy living, while providing residents the opportunity to drop off items to be recycled. At the one day event, an impressive amount of items were collected for recycling including; 10.3 tons of household hazardous waste, 4.35 tons of electronics, 215 gallons of oil, 25 oil filters, 174 tires and 57 batteries. Next year's event will be held on April 16, 2011.

A new NC State Law will go into effect January 1, 2011 banning electronics (televisions and computer equipment) from landfills. Union County began their electronics-recycling program in January 2010 and anticipated recycling approximately 4.5 tons annually. The program has been a huge success; to date Union County has recycled in excess of 139 tons of electronics. Union County offers a wide variety of recycling.

### **Recycled Items for 2010 (January through October)**

- **5,274 tons of household hazardous waste**
- **1,409 tons of yard waste**
- **113 tons of white goods (appliances)**
- **2,190 tons of tires**
- **433 tons of wood pallets**
- **15,662 gallons of oil**
- **41 drums of oil filters**

## **Conclusions**

At the local level, 2010–2011 will be a fiscally challenging year. It will be a year in which the department is expected to sustain the same level of services and programs, with limited resources. The Department will remain true to the core mission of public health, prevent disease, protect the health of the community, and promote health.

Community Action Plans that were drafted as a result of the 2008 Community Health Assessment (CHA) will continue to be pursued.

The action plan focusing on reducing the local teen pregnancy rate will take the form of a grant proposal in 2011. The grant is intended to target schools with high minority teen pregnancy rates. The comprehensive curriculum proposed will assist teens with knowledge and tools needed to set a positive healthy course for their future and to work through peer pressure pertaining to sex and substance abuse.

The action plan related to improving access to care has already been underway at the Health Department. The Health Department implemented same day scheduling or open access which allows patients to be seen the day they make the appointment. Open access improves the patient flow and provides the flexibility needed to work in additional patients and therefore improve access to care.

The Health Department will be pursuing the establishment of a viable, active Healthy Carolinians Partnership. With an active partnership, the intent would be to continue to work on the priorities that were set during the 2008 Community Health Assessment, with a community approach. The economy has impacted the entire county, however, with a strengthened collaborative approach more resources can be applied to the priorities.

The Health Department will partner with other County Departments and the City of Monroe on the 3<sup>rd</sup> Annual Earth Day event, specifically the 5K run / walk. The event and race encourages families to live greener, healthier lives for themselves and the environment. This strengthens the Health Department's efforts to provide wellness opportunities and encourage physical activity for county residents.

The Environmental Health Division will be taking an active role with Duke University to examine the connection between Union County residential wells with high arsenic content and chronic disease. Duke will be conducting the research and the county will assist with water sampling and community awareness and education.

Union County will be dealing with economic issues and the health of our population in 2010-2011. However, the 2008 CHA provided insight as to the concerns and priority areas to focus our collective community efforts on within the healthcare arena. The Union County Health Department will continue to work collaboratively on behalf of county residents to foster a healthy environment, encourage healthy lifestyles, improve quality of life and prevent the spread of disease.

**2011 Goals**

- **Continue to provide quality healthcare at the Union County Health Department**
- **Increase public awareness of the Union County Health Department programs and services through community outreach.**
- **Work toward healthy lifestyles and improved quality of life for Union County residents**
- **Provide adequate access to affordable, quality dental care.**
- **Plan for new Health Department facility in 2015**
- **Write a grant proposal to pursue funding for a teen wellness program**
- **Strategic Plan for 2012 Community Health Assessment**
- **Assist Duke University with Well Water Study**
- **Union County Employee Wellness Program Implementation**
- **Assist Corporate Community with wellness initiatives**
- **Draft a COOP Plan (Continuity of Operations Plan)**
- **Implement opportunities for residents to increase physical activity**
- **Community Outreach and Education on adult immunizations**



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