



Bullitt County Health Department Annual Report

2009

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Bullitt County Health Department:

Bullitt County Health Department is located in Shepherdsville, KY and provides services to an estimated population of 75,653⁽¹⁾. The Health Department constitutes 5 divisions: Clinical and Preventative Services, Environmental Services, HANDS, Health Promotion & Education, and the Emergency Preparedness Branch. The Core objectives that drive the Health Department are preventing epidemics of public health significance, protecting the residents from possible environmental hazards, injury prevention, promoting healthy life through healthful behaviors, responding to natural or unnatural disasters by helping communities recover, assuring equitable and accessible health services to all residents.

These core public health functions are met through a set of essential services that most Public Health agencies offer to the residents in their respective jurisdictions. The core essential services listed below are broad community based services offered in one form or another.

Essential Public Health Services:

- Monitor health status to identify community health problems
- Diagnose and investigate health problems and health hazards in the community
- Inform, educate, and empower people about health issues
- Mobilize community partnerships to identify and solve health problems
- Develop policies and plans that support individual and community health efforts
- Enforce laws and regulations that protect health and ensure safety
- Link people to needed personal health services and assure the provision of health care when otherwise unavailable
- Assure a competent public health and personal health care workforce
- Evaluate effectiveness, accessibility, and quality of personal and population-based health services
- Research for new insights and innovative solutions to health problems

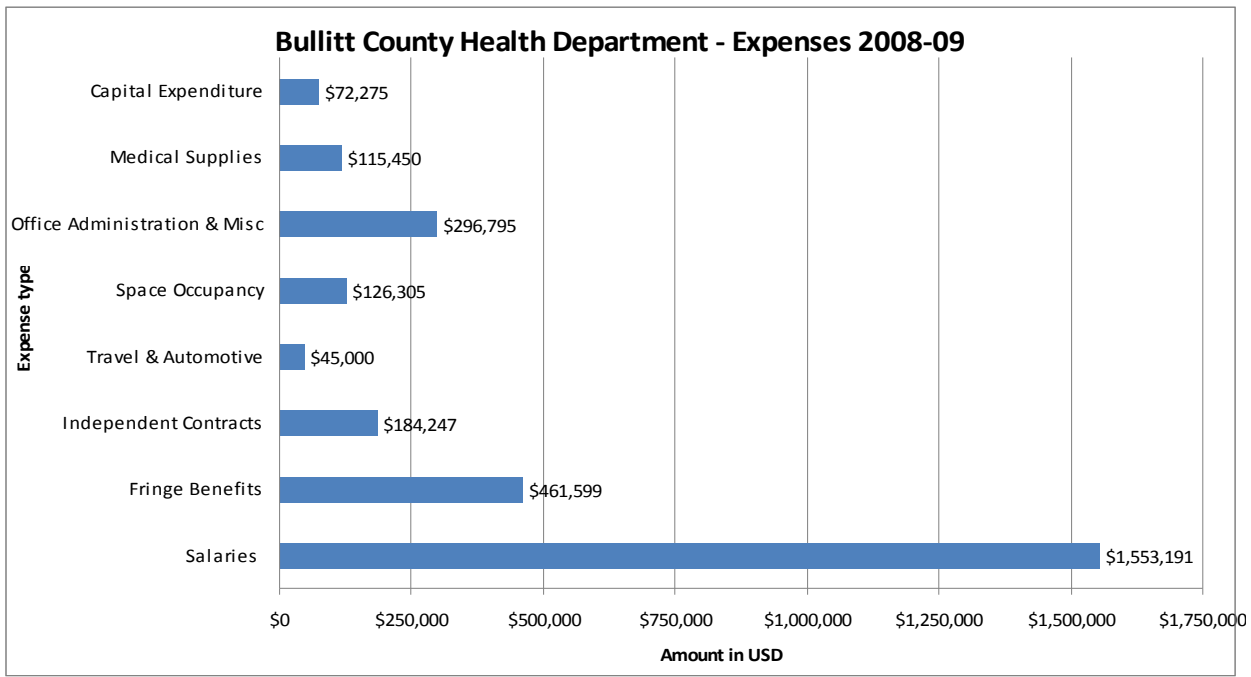
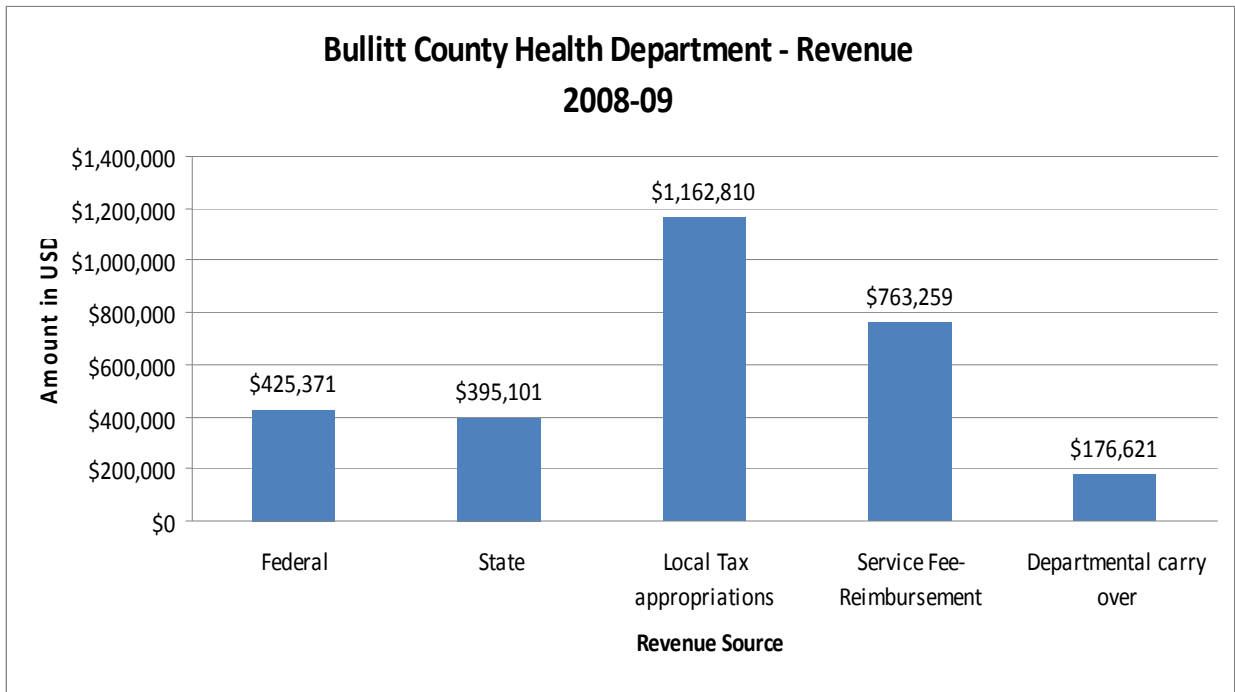
Source: Public Health Functions Steering Committee.

Revenue Source:

The annual revenue for the Health Department is predominantly from four sources: Federal funding (Family Planning, Emergency Preparedness, Immunizations, Diabetes, Cardiovascular, and Abstinence), State funding, Local Tax appropriations and the service reimbursement which in turn consists of; Title XVIII – Medicare, Title XIX- Medicaid, self pay, Co-Insurance, Interest on Deposits. The total budget for the fiscal year 2008-09 amounted to a total of over 2.9 million USD. Local tax appropriations contributed close to 40% of the revenue for the year 2008-09 followed by the service fee reimbursement at 26% of the revenue, Federal Appropriated funding at 14.5% and finally the KY State funds at 13.5% and the remaining 6% carry over. Human capital, in form of salaries was the largest expense for the Health Department, accounting to about 54.5% of the total expenses for the same period, followed by the fringe benefits at 16%,



office administration and miscellaneous at 10.4% and finally independent contract payments for the services at 6% of the total expenses (tables below).





Demographics

Population size ¹	75,653
Total Male Population ¹	37,502
Total Female Population ¹	38,151
Population density (per Sq-mi) ²	229
Individuals living below poverty level ³	9.5%
Per Capita income ⁵	\$25,237

Age distribution¹

Age 19 and Under ¹ :	25.77%
Age 20-64 ¹ :	63.78%
Age 65-84 ¹ :	9.67%
Age 85+ ¹ :	0.76%

Race/ Ethnicity⁴

White	97.8%
Black	0.8%
American Indian	0.3%
Hispanic origin	0.9%

¹The Census Bureau, Current Population Est, 2009.

²HRSA. Area Resource File, 2005

³The Census Bureau. Small Area Income Poverty Est, 2003

⁴The Census Bureau Current Pop Est, 2005

⁵Kentucky Institute of Medicine- Health of Kentucky – A County Assessment 2007 (Data from 2004 -Dept of Commerce)



Clinical services

The Health Department offers essential preventative services to all of its area residents. These services range from immunizations, family planning, pediatric services, cancer screening, WIC and chronic disease screening, and education.

WIC stands for Women, Infants, and Children. The program provides supplemental foods that balanced in nutrition to low-income, nutritionally at risk pregnant women, infants, and Children under the age of 5.

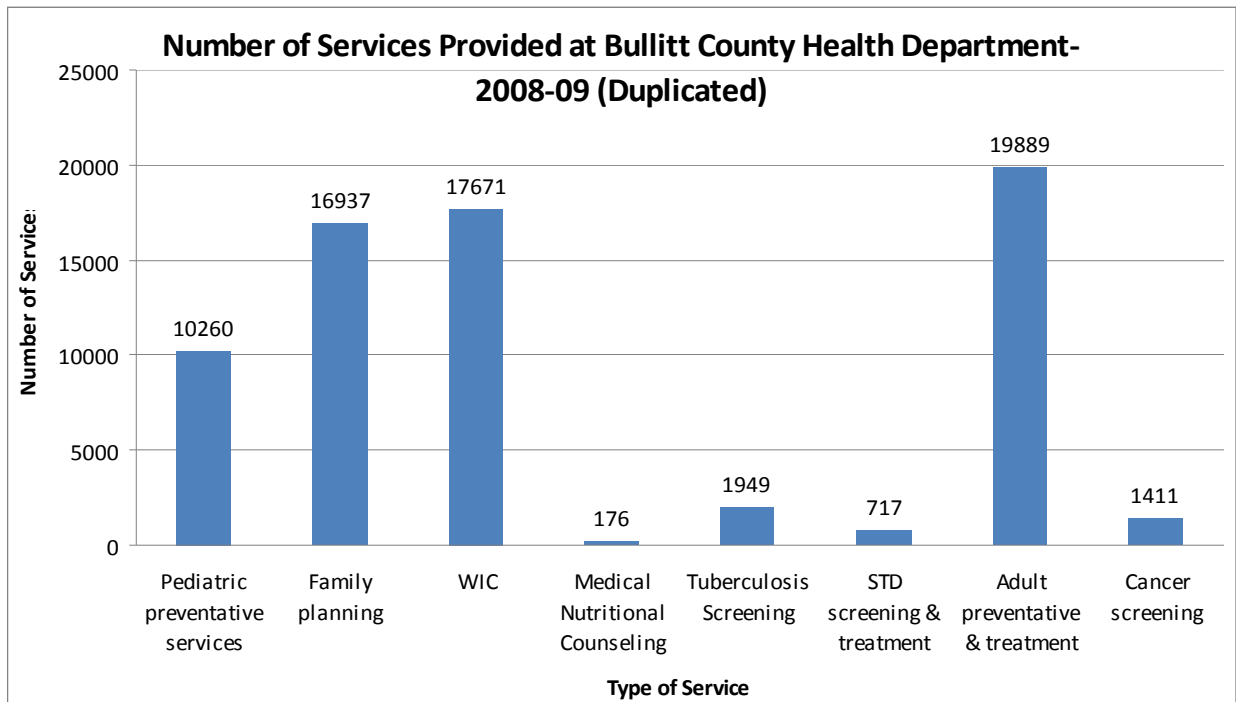
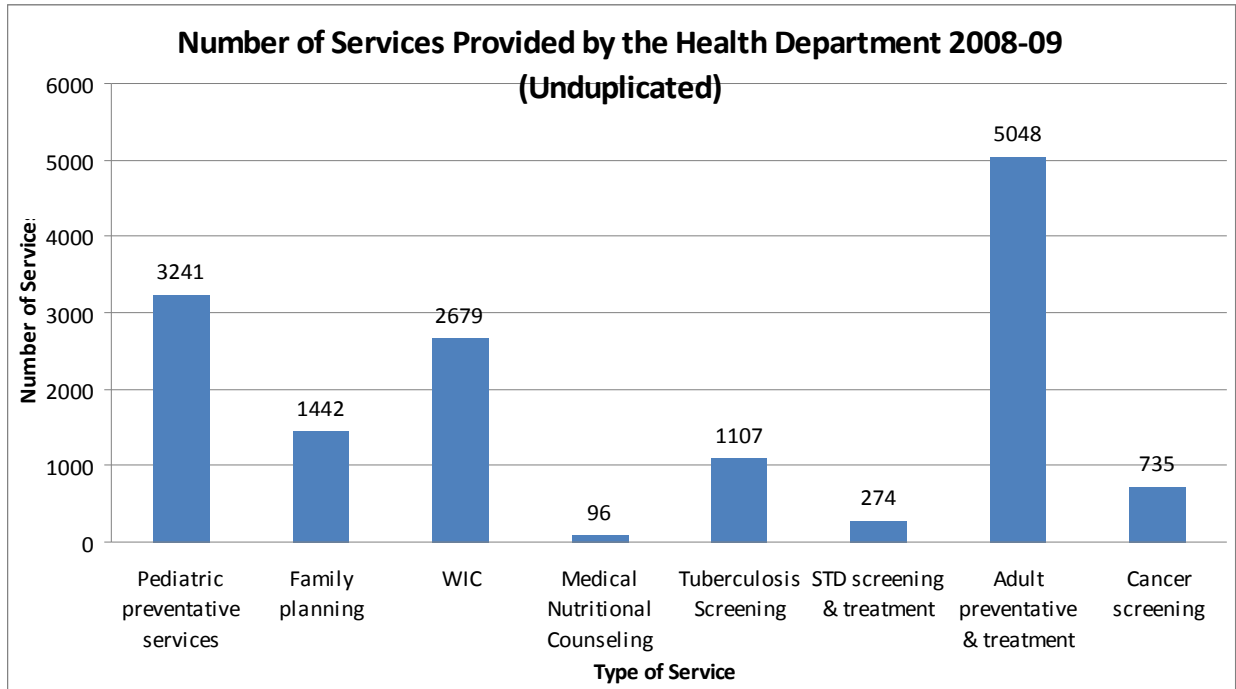
EPSDT (early periodic screening, diagnosis, and treatment) is one of the core components of the Health Department's prevention program; it provides timely diagnosis and treatment along with preventative care for individuals less than 21 years in age. Children receive age appropriate immunizations and timely screening for any risk factors like elevated blood lead levels, and referrals when needed for eligible individuals.

Adult preventative and treatment services provide adult immunizations where necessary, maternal health, screening and treatment for sexually transmitted diseases, screening for tuberculosis and treatment, diagnosis and treatment of infectious conditions of public health significance.

The Health Department provided 14,622 unduplicated services, during the fiscal year 2008-09. About 40% of the services were provided to children through the pediatric preventative service and WIC. During the same period, the Health Department provided 69,010 duplicated services. Adult preventative services, WIC and Family planning were the largest programs with total of 28.8%, 25.6% and 24.5% of services, respectively. The three programs put together, contributed 79% of the total services among the unduplicated services. Duplicated numbers reflect the total number of services provided by the Health Department during the fiscal year and unduplicated numbers are the services provided to individuals; for ex: an individual may come in multiple times for WIC vouchers or services and get counted each time; hence duplicated services are higher as they reflect the total number of services provided during the time period.



Below are respective charts for duplicated and unduplicated services provided at the Health Department during July 1, 2008 – June 30, 2009.





Reportable diseases

Kentucky Department for Public Health requires communicable diseases of public health significance to be reported to the State under the regulatory statutes. Below is the list of selective reportable conditions reported or investigated by the Bullitt County Health Department. The rate of disease is calculated per 100,000 population and is not adjusted by age.

STDs (Chlamydia, Gonorrhea, and Syphilis): There were 127 Sexually Transmitted Disease cases reported during the year 2008 with a case rate or 172 per 100,000 population. The County ranked 20th in the number of Chlamydia, Gonorrhea & Syphilis cases reported to the KY Department for Public Health.

Crude rate for selective diseases, reported to Bullitt County health department.

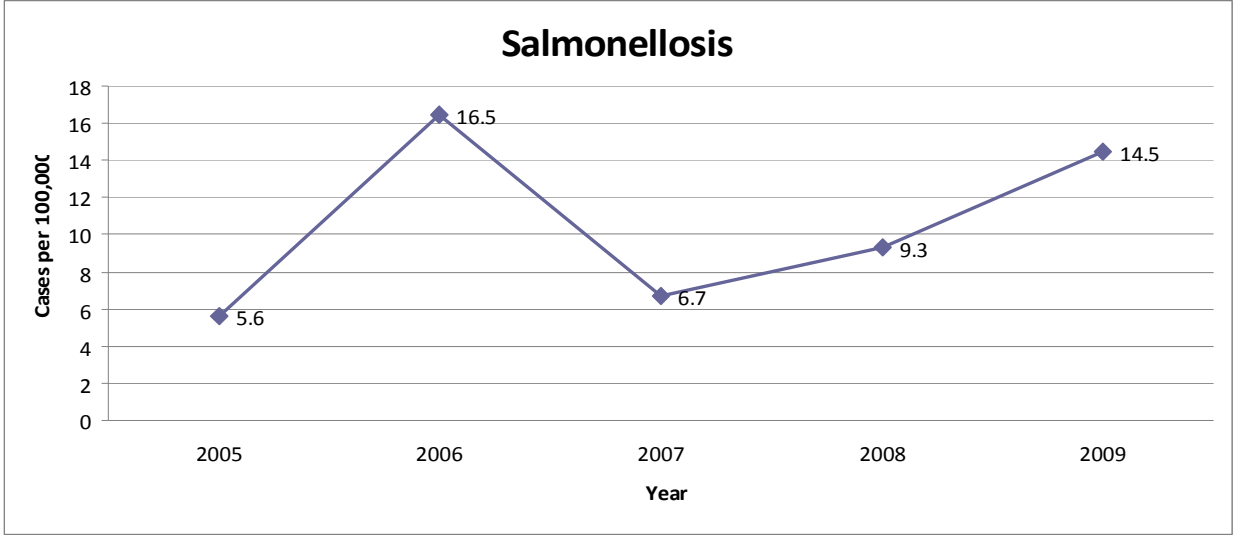
Confirmed Disease	09 Case Rate per 100,000 population. ¹	08 Case Rate per 100,000 population. ¹	07 Case Rate per 100,000 population. ¹	06 Case Rate per 100,000 population. ¹	05 Case Rate per 100,000 population. ¹
Total Population ³	75,653	74,736	73,737	72,398	71,114
Campylobacteriosis	3.96	13.38	2.71	2.76	2.81
Hepatitis A	0	1.33	1.35	0	0
Hepatitis B, acute	1.32	4.01	1.35	1.38	1.40
Hepatitis C, acute	1.32	1.33	0	0	0
Influenza Isolates ²	41	21	20	12	2
Legionellosis	1.32	0	1.35	2.76	0
Pertussis	6.60	14.71	0	0	0
Salmonellosis	14.54	9.36	6.78	16.57	5.62
Shigellosis	0	0	2.71	5.52	1.40
Tuberculosis	0	4.01	1.35	1.38	0
Novel Influenza Isolates ⁴	34	0	0	0	0

¹ Crude rate not age-adjusted, based on population estimates.

² Influenza Isolates are not treated as confirmed cases.

³ Census Population County est 2009.

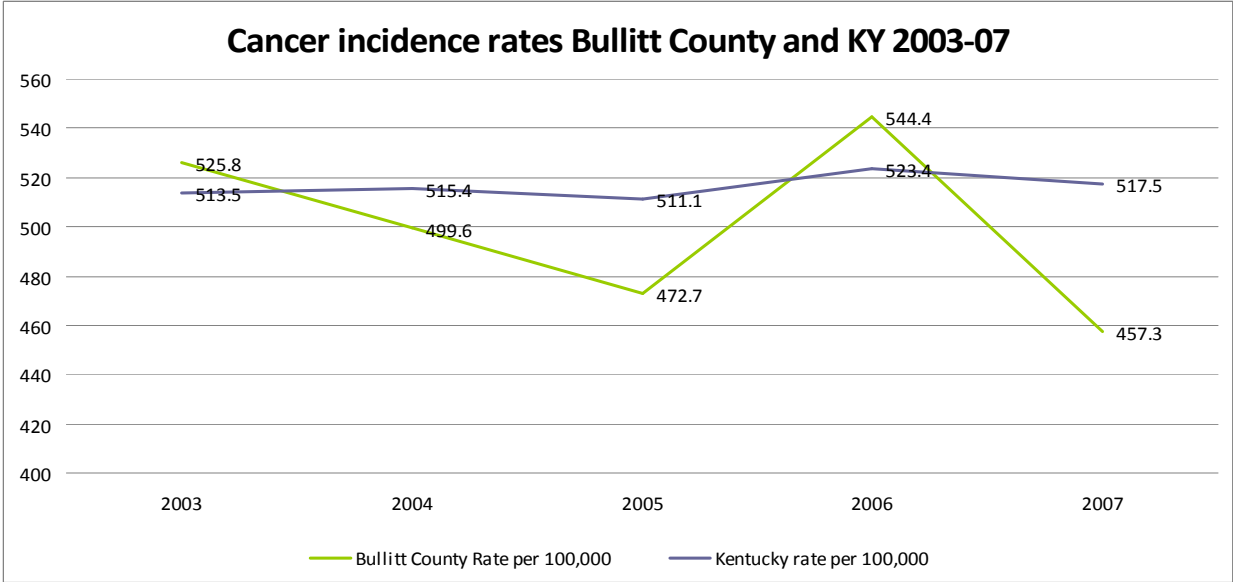
⁴ No cases prior to 2009, isolates are not confirmed cases.



Crude Rate/100,000.
Source: KY Electronic Public Health Records System.

Cancer Incidence: Bullitt County 2003-2007:

Cancer incidence among Bullitt County residents, during the years 2003 to 2007. The chart below shows the newly diagnosed cancer cases per year.



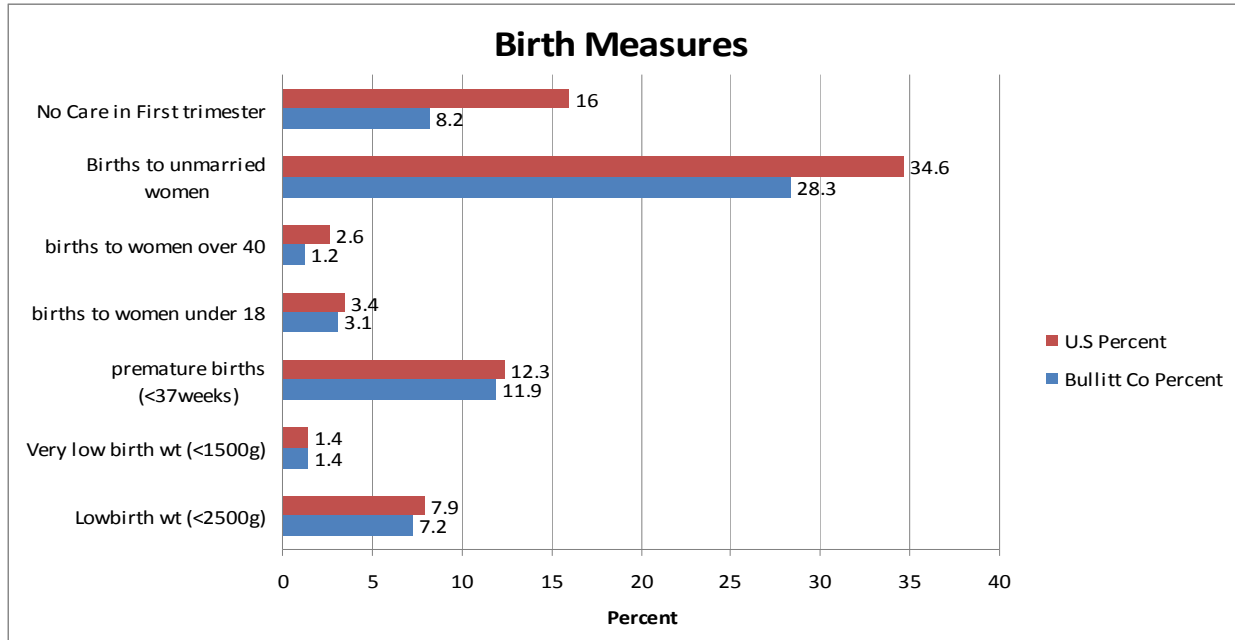
Source: Kentucky Cancer Registry.
Age adjusted to 2000 U.S population.



Community health indicators:

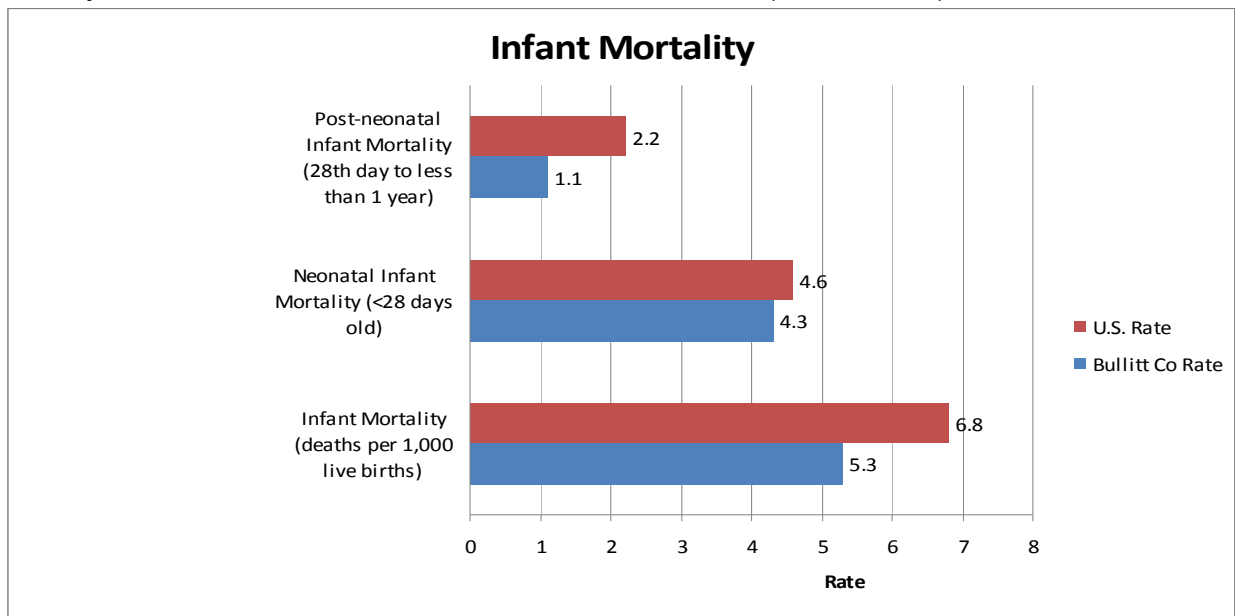
Birth Measures:

Bullitt County has favorable outcomes when compared against all birth measures in United States.



Infant Mortality:

Post-neonatal infants are between age 28 days to less than a year and neo-natal infants are ages less than 28 days old. Infant mortality is rate of deaths per every 1,000 live births. Bullitt County has favorable outcomes in all three measures (table below).



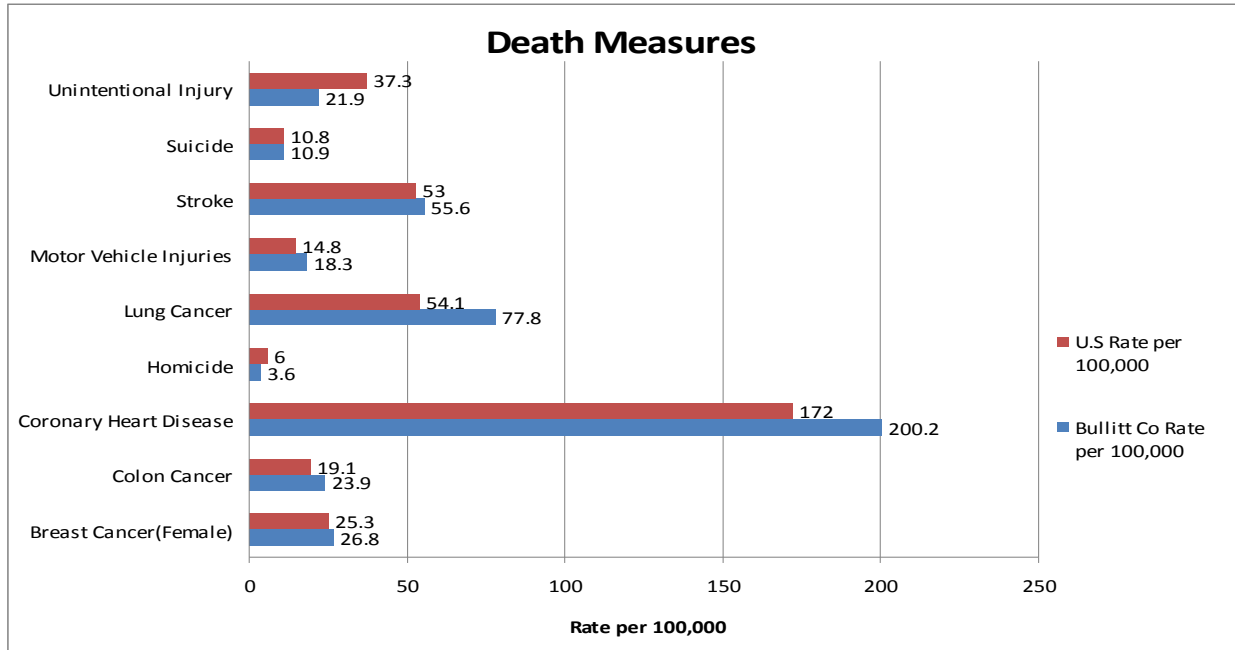
Infant mortality: deaths per 1000 live births (Neonatal: <28 days; post-neonatal: day 28 to under one year).



Bullitt County Health Department

Death Measures:

Among the following death measures, Bullitt County has considerably higher rate of deaths due to Stroke, Lung Cancer, Coronary Heart Disease and slightly higher rate among colon cancer and breast cancer (table below).



Source: NCHS. Vital Statistics Reporting System, 1999-2003

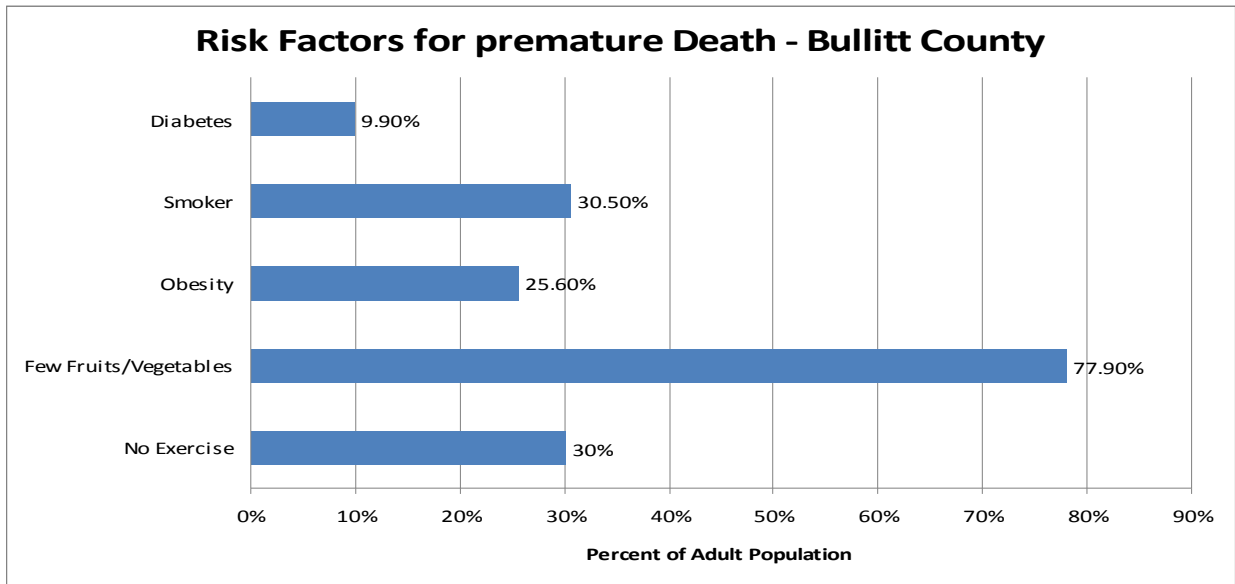
Include 48 States and DC (see the Data Sources for details).

Rates are age-adjusted to the year 2000 standard; per 100,000 population.

Source: County Health Indicators.

Risk Factors for Premature Death (percent of adult population)¹ - Bullitt County, KY.

Table below shows the most common risk factors among adult population; consumption of fewer fruits and vegetables than recommended, smoking, sedentary lifestyle, obesity and diabetes.



¹Source: CDC Behavioral Risk Factor Surveillance System, 2000-2006.



Vulnerable Population: Bullitt County, KY

Vulnerable population may face health risks that are additional or unique; the barriers could be due to social, physical or economical reasons thus requiring specific interventions tailored to reach the target population.

Vulnerable Populations Include People Who¹:

Have no high school diploma (among adults, age 25 and older)	10,927
Are unemployed	2,018
Are severely work disabled	2,437
Have major depression	4,438
Are recent drug users (within past month)	3,840

Access to Care: Bullitt County, KY

Access to care depicts availability of services, utilization, and medical coverage.

Uninsured individuals ¹	5,489
Medicare beneficiaries ² :	
Elderly (Age 65+)	4,396
Disabled	1,504
Primary care physicians per 100,000 population. ²	21.9
Dentists per 100,000 pop. ²	21.9
Community/Migrant Health Centers ³	No
Health Professional Shortage Area ³	Yes

¹ The Census Bureau. Small Area Health Insurance estimates Program, 2000.

² HRSA. Area Resource File, 2005.

³ HRSA. Geospatial Data Warehouse, 2007.

Source: <http://www.kyhealthfacts.org/>



Emergency Preparedness

Bullitt County Health Department works in conjunction with many community partners and other government agencies in order to respond and mitigate undesired outcomes during public health emergencies, regardless of the nature of emergencies whether it be man-made or natural. The two major emergencies of public health significance that the health department responded and exercised preparedness plans were the winter ice storm in January 2009 and responding to the emerging outbreaks of H1N1 influenza during the later part of 2009.

The Health Department preparedness staff and clinic staff had to respond to the novel influenza outbreak. The Health Department in conjunction with the Kentucky Department for Public Health decided to open Mass Vaccination Clinics and planned to provide the vaccine to the residents through their primary care physicians. The Health Department was able to bring 19 community partners on board, to provide vaccine to residents who choose to get vaccinated through their provider network. The providers included 13 private practices and 7 pharmacies. Thirteen (13) providers remained active throughout the duration of the vaccination campaign. During this process, the Health Department enhanced their vaccine storage capacity to ensure cold chain storage and distribution of the extraordinary quantity of vaccine that was supplied to them. A system was developed to advertise, educate, order, receive, maintain, distribute, track, and report H1N1 vaccine.

Throughout the response period, the Bullitt County Health Department began ordering, receiving and banking vaccine for future administration clinics. The vaccine began arriving on October 13th, in limited quantities; and was provided to the priority groups, identified by CDC and the KY Department for Public Health. "Provider toolkits", produced by the Kentucky Department for Public Health, were distributed to enrolled providers as part of on-going communication, as well as information and advice to government and business interests dealing with continuity of operations issues within their own units. Multiple planning sessions were held internally, with the school system and response partners. Vaccine was provided to all healthcare providers to administer it to their employees, clients and the first responders through a partnership with the Jewish Hospital Medical Center South, located in Bullitt County.

By the end of the year, Bullitt County Health Department administered 4,533 doses through public and mass vaccination clinic and provided community partners, with 7,345 doses of H1N1 Influenza vaccine. This whole process of responding to this public health crisis presented the health department with a few challenges and created educational and training opportunities preparing for future emergencies.



Highlights of H1N1 response are:

- *Equipped the Department Operations Center (DOC)*
- *Acquired a trailer to carry/store all Points of Dispensing (POD) supplies along with equipment for cold chain distribution*
- *Practiced our mass vaccination plans*
- *Acquired a “shelter support” trailer, supplied with Metropolitan Medical Response System (MMRS) equipment and Health Emergency response association (HERA) beds.*
- *Bullitt County Health Department is an active participant in local Emergency Management, Local Emergency Planning Committee (LEPC), WMD 6, HERA 6 group meet*
- *Completed Preparedness Gap analysis.*

Overall the success of this operation is attributable to the Bullitt County Health Department’s ability to adapt to changing needs and fill gaps in procedures, personnel, and equipment as they presented. Plans were implemented to the degree they were applicable to the current situation and modifications were made, as necessary, to fulfill the primary objectives. Relationships were formed with local partners that should be maintained and enhanced to improve the delivery of health services during emergencies, as well as on a daily basis.

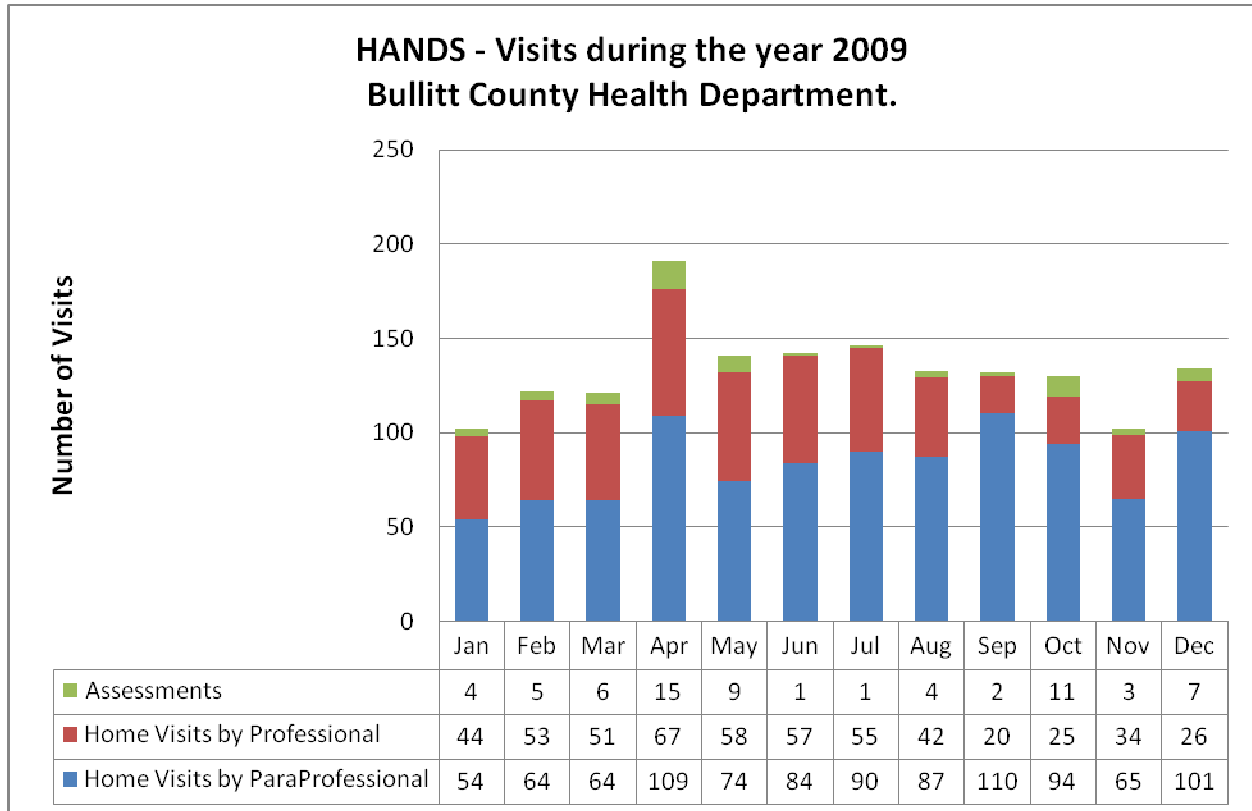
Health, Access, Nurturing, Developmental Services (HANDS)

The HANDS program provides child development and parenting skills classes in the home for first time parents through pregnancy to 2 years of age. Visits consist of discussion, videos, playing games with baby, and making homemade toys to enhance the development of the child. Referrals are made as needed to outside agencies for basic needs, such as mental health, dentist, etc. Quarterly parties are held in collaboration with a school resource center that focuses on building the child’s vocabulary through games and book give-a-ways. Participation in the HANDS program is voluntary, free and confidential.

HANDS participates in community events such as Kidsfest and the community Baby Shower to tell the public about our services. The HANDS Coordinator participates in business meetings with other social agencies to get their support. The objectives of the HANDS program are to demonstrate a reduction in premature birth and child abuse by utilizing interventions such as assessments, visits to improve parenting skills, and referrals when needed.



Number of Services provided by HANDS Program - 2009



Mommy and Me Program:

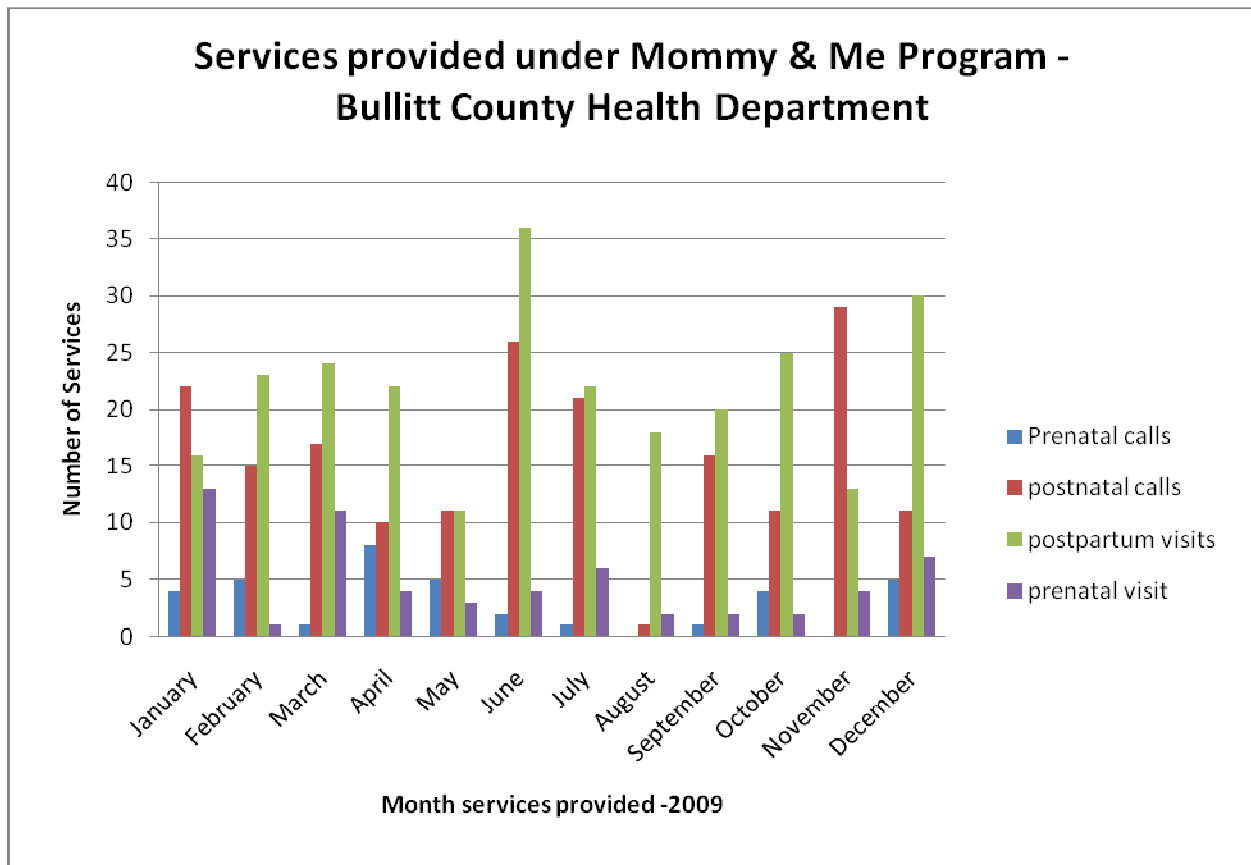
The Mommy and Me program is a voluntary program through Passport that is offered to prenatal and postpartum patients. It involves home visits which are done to promote improved pregnancy outcomes by reducing the number of pre-term births. The initial prenatal contact is used to educate the patient on observing for and timing contractions, signs and symptoms of pre-term labor, warning signs of pregnancy complications and resources to call if these occur. The monthly phone calls monitor the patient's compliance with her Physician appointments and if she is experiencing any complications. The post-partum visit includes putting the infant on WIC, evaluation of mother's physical and emotional well being and appropriate referrals. Any identified warning signs during the post-partum period are discussed and interventions to prevent these including basic rest and adequate nutrition are stressed. The infant's nutritional needs are addressed including formula and breastfeeding basics. Infant brain development is reviewed via activity assessment and the parents are taught activities that promote stimulation from birth to 3 years to maximize that development. Safety issues are also discussed. A post-partum call is made to ensure that, mother has followed up with her Gynecologist for her 6 week check-up and to insure that mother is not experiencing any signs of depression; the most common post-partum complication.



Grief counseling is offered to all parents that have experienced a death of a child from birth to 18 years of age. Typical emotions are reviewed and the parents are allowed to discuss their responses to the event. Interventions are discussed including attending local grief support groups.

The nurse works at the Teenage Parenting Program (TAPP) program one day a week. TAPP is designed to help the teenage mom adjust to the pregnancy and the parenting that follows. Instruction on the following are addressed: discipline, birth control, SIDS, shaken baby syndrome, child abuse, sexually transmitted infections, brain development, labor and delivery, postpartum depression, infant care, breastfeeding, feeding of infants and toddlers, childhood illnesses and other related topics. The children in the daycare are evaluated for illness and developmental delays and referrals to appropriate agencies are made.

Mommy and Me Program - Services provided during Jan-Dec 2009.

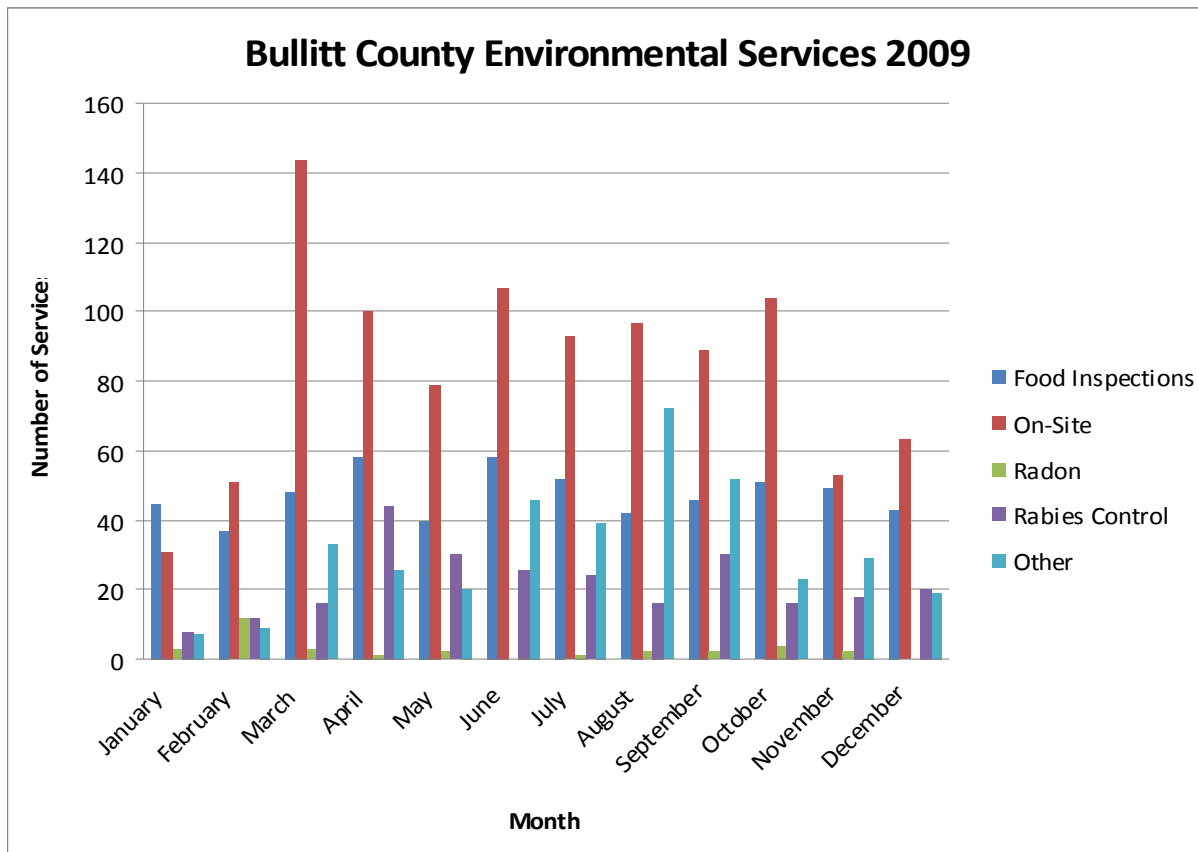




Environmental Health

The Environmental Health Services branch is responsible to uphold the State mandated regulatory statutes to protect the health of the area residents. They primarily engage in inspections, issuing permits, complaint investigations, and assist in disease investigations of public health significance.

Among the various services provided by the Environmental branch; Food service inspections, On-site inspections/permits, and rabies control are the three largest areas that most of the environmental staff resources are allocated. During the calendar year 2009, the environmentalists performed 569 Food Service inspections, 1011 On-site evaluations with permits, 260 Rabies Control quarantine and or Immunizations, 407 Radon Program and Miscellaneous services.





Health Promotion

The Health Promotion team at the Health Department offers a variety of programs that assist, and motivate, area residents to make healthier choices and thereby reducing the risk of chronic disease and also reduce incidence of communicable disease. The Health Promotion team has reached out to, or provided services to more than 7,482 individuals, 40 day care centers and area businesses during 2009.

The Health Promotion and Education team has close to 70 programs either by itself or through partnering with community partners, to reach out to the community. A few of the larger programs under Health Promotion are Healthy Start, CPR & First Aid, Tobacco Cessation, physical activity, dental health education and preventative care (through partnership with Dental School), Postponing Sexual Involvement (PSI), Healthy Hearts, hand washing, etc. The different services offered by the Health Promotion team are targeted to specific age groups based on their risk factors:

Early childhood interventions: Hand washing education, dental health coalition, Healthy Start and CPR training for Day Care Centers.

Teen specific Interventions: PSI, Contraception, Council for Families with Children over 15 years old (CFC), Partners in Prevention (PIP).

Adult Specific Interventions: Work Site Wellness, Healthy Heart, Diabetes Coalition, Smoking Cessation, Health and Wellness Coalition, Partners In Prevention, Coalition working to prevent abuse of Alcohol, Tobacco and Other Drugs (ATOD).

The priorities of the health education and health promotion branch are:

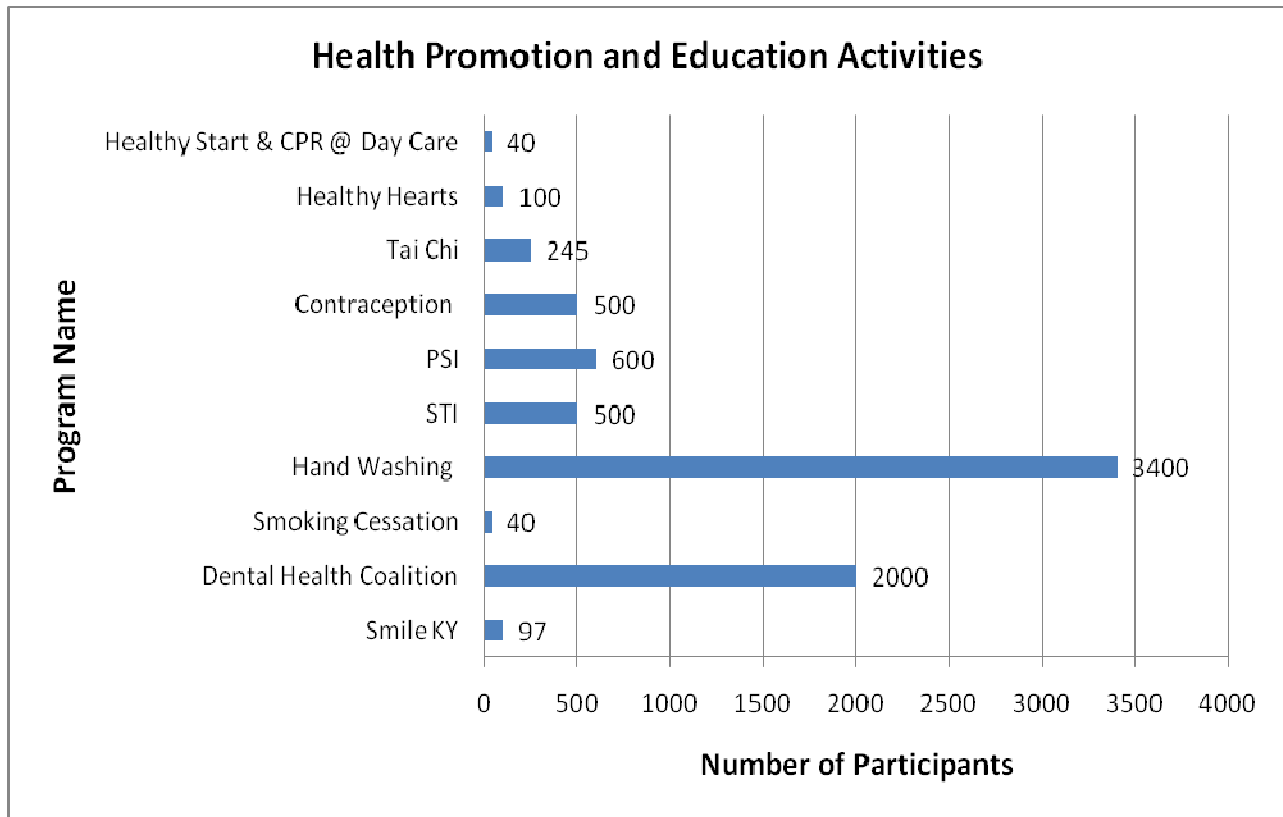
1. Reducing Chronic Illness.
2. Reducing Communicable Diseases.
3. Influencing policy change so as to impact the above mentioned priorities in a positive manner.

Grant activities:

The Drug-Free Communities Grant is funded through Office on National Drug Control Policy. Bullitt County is currently in its second year of the 5-year cycle. PIP Coalition is a group of community partners, including the schools, the media, local government, law enforcement, businesses, youth, and faith community. PIP members meet monthly to work on reducing use and abuse of alcohol, tobacco and other drugs by changing perceptions among student population as well as in the community. For example: many students perceive that "everyone" smokes when studies show that less than 27% of Bullitt County students use tobacco. In the community, less than a third of adults smoke.



Health Promotion and Education Activities during 2009.



The Bullitt County Annual Report is developed by Regional Epidemiologist, Vinay Chiguluri with contributing efforts from all Departmental managers; Andrea Renfrow, Cynthia G Brown, Mary A Blanton, Ida M Butterworth.

Acknowledgement: Special thanks to all the employees of Bullitt County Health Department for their contribution.