

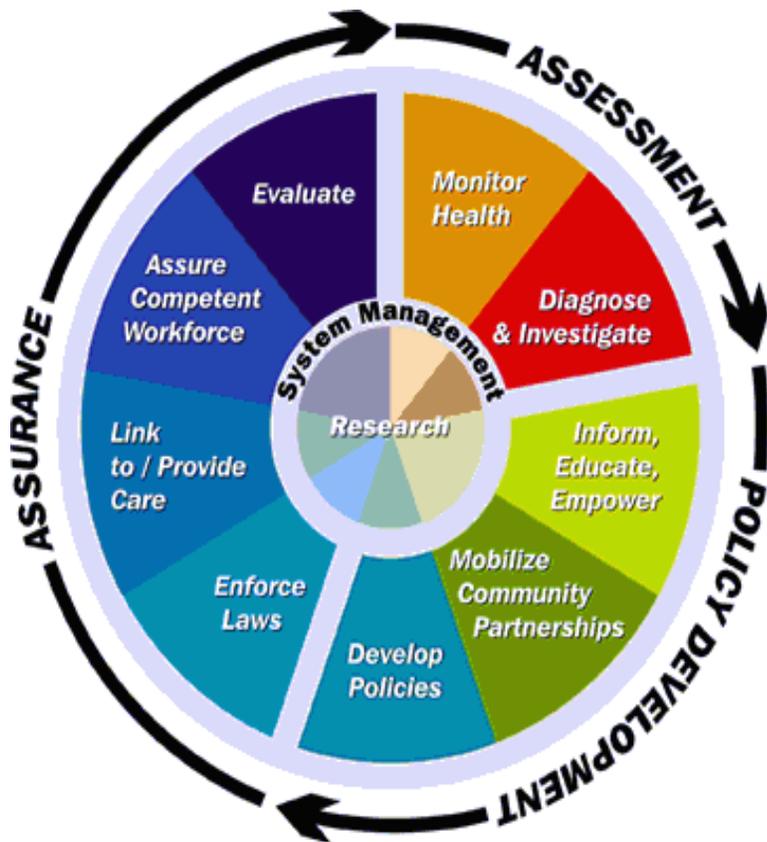


Public Health
Prevent. Promote. Protect.

Taney County Health Department
An Accredited Local Public Health Department

2015

Taney County Health Department Annual Services Report



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TCHD

3/31/2015

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VISION

*T*aney County Health Department will enable the community’s health through education, services, collaboration, and professional leadership.

MISSION

*T*aney County Health Department improves the health and environment of the community through outreach, leadership, education, and coordination of services, accepting nothing less than excellence, professionalism, and compassion.

VALUES

*W*e value improvement through teamwork, learning, and sharing of information. We strive to make a positive difference through education and communication, treating each other and those we serve with respect.

Introduction

The Taney County Health Department (TCHD) works in close collaboration with local partners to strengthen and broaden public health initiatives that focus on communicable diseases, chronic diseases, environmental health, animal control, immunizations, community outreach, emergency response and many other prevention efforts. The department works through various collaborative efforts with community leaders, businesses, hospitals, private practitioners, other agencies, and schools to identify the health status, needs, strengths, health concerns, gaps and assets in the community. Many community partners provide resources and engage in partnerships with the health department to address the public health issues in the county. Without these partnerships, much of the progress in addressing public health concerns that has been achieved in the county would not have been possible. The Taney County Health Department is committed to building healthier communities in Taney County and “making a positive difference”.

The purpose of this report is to provide an overview of the services provided to the residents and visitors of Taney County by the Taney County Health Department. These services represent some of the work accomplished by the department in 2014 and will help guide TCHD Program managers and board members as they review trends to determine future policy changes and budgetary issues. This report has a broad scope and reflects general program trends and issues. Identified trends should be used to initiate discussion among TCHD managers, staff, board members and community members as strategic planning considerations are reviewed.

Ten Essential Services serve as a performance standard models for public health, national public health standards and the public health accreditation board. This is the goal for Taney County Health Department and our Community.

Ten Essential 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.

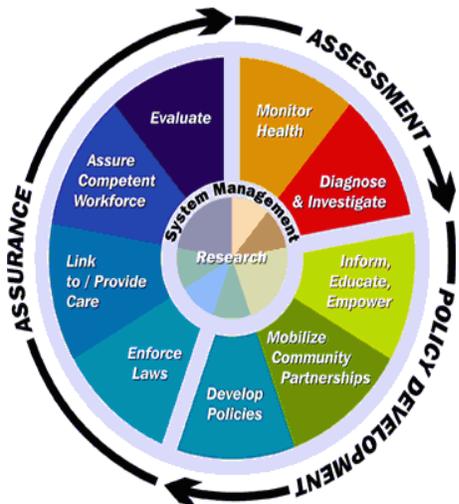
Enforce laws and regulations that protect health and ensure safety.

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.



Environmental Health Services

Environmental Health Services include a variety of responsibilities to enforce city codes, state statutes, and county ordinances. These focus on inspections of food service, lodging, childcare, swimming pools and spas, mobile food vending, temporary food events, and massage/tattoo businesses. Environmental Health responsibilities also include investigation of sewage complaints, well water testing, and other environmental hazards that could pose a risk to the public’s health. The Environmental Health/Epidemiology Division at the Taney County Health Department (TCHD) also provides education on food safety, mold removal, radon, norovirus prevention, pool maintenance, bed bugs, communicable disease surveillance and investigations as well as other environmental health topics. Environmental Public Health Specialists (EPHS) also have significant responsibilities responding to natural and man-made disasters or emergencies. In the past few years the EPHS have responded to local flooding, tornadoes, fires, power outages, disease outbreaks, and truck wrecks. The EPHS personnel also work closely with area food services to provide health advisories; food re-calls, and response to truck wrecks.

Number of Facilities By Type-Taney County, 2013-2014			
Type of Facility	2013	2014	Percent Change Compared to 2013
Restaurants/Food Service	575	590	2.6
Lodging	160	160	0.0
Pools	335	339	1.2
Tattoo/Massage	19	21	10.5
Childcare	21	44	109.5
Total	1,110	1,154	4.0

Source: TCHD, Environmental Health Division/Epidemiology Division, 2015

Number of Facilities By Type- City of Branson, 2010-2014						
Type	2010	2011	2012	2013	2014	Percent Change, Compared to 2013
Restaurants/ Food Service	435	435	410	412	420	1.9
Lodging	145	139	129	129	129	0.0
Pools	316	309	297	301	305	1.3
Tattoo/ Massage	17	16	14	19	21	10.5
Childcare	7	6	5	5	6	20.0
Total	920	905	855	866	881	1.7

Source: TCHD, Environmental Health Division/Epidemiology Division, 2015

Number of Food Service Facilities By Jurisdiction and Risk Level, 2013-2014						
Risk Level	County	Hollister	Branson	2014 Total	2013 Total	Percent Change, Compared to 2013
High	46	9	147	202		
Medium	38	8	119	165		
Low	52	17	154	223		
Total	136	34	420	590	575	2.6

Source: TCHD, Environmental Health Division/Epidemiology Division, 2015

The information in the charts reflects the number of facilities operating in 2014 and the percent change compared to the previous year. The numbers for the facilities that are closed or inactive are not included.

Number of Lodging Facilities By Jurisdiction, 2013-2014						
	County	Hollister	Branson	2014 Total	2013 Total	Percent Change, Compared to 2013
Lodging Facilities	28	3	129	160	160	0.0

Source: TCHD, Environmental Health Division/Epidemiology Division, 2015

Number of Pools and Spa By Jurisdiction- Taney County, 2010-2014						
Type	2010	2011	2012	2013	2014	Percent Change, Compared to 2013
Hollister	0	0	0	0	0	0.0
County	45	35	34	34	34	0.0
Branson	316	309	297	301	305	1.3
Total	361	344	331	335	339	1.2

Source: TCHD, Environmental Health Division/Epidemiology Division, 2015

From 2013 to 2014 a number of facilities had either been closed or taken off inventory due to not meeting the definition of a food establishment, or were identified as being exempt due to changes in state statutes. Many new facilities will be opening in 2015 which will positively reflect on our community.

Environmental Public Health Services Inspections, Taney County, 2014			
Type of Inspection	Routine Inspections 2013	Routine Inspections 2014	Percent Change Compared to 2013
Food	1041	1013	-2.7
Lodging	187	160	-14.4
Pools	725	723	-0.3
Childcare	29	44	51.7
Massage/Body Art	25	37	48.0
Total Inspections	2,007	1,977	-1.5

Source: TCHD, Environmental Health Division/Epidemiology Division, 2014

Water samples are routinely analyzed by the Taney County Health Department Certified Drinking Water Laboratory. This laboratory is certified by the Missouri Department of Health and Senior Services and the Missouri Department of Natural Resources. Water tests are routinely conducted to determine levels of Total Coliform and E.Coli that are present. The table below provides information on the number of tests performed by year and the percent change. A 15.7% decrease was observed in the number of water test performed in 2014 as compared to 2013.

Water Laboratory Tests-January through December, 2014				
	2012	2013	2014	Percent Change Compared to 2013
Private Water Tests Performed	237	275	286	4.0
Public Water Tests Performed	196	244	149	-38.9
Non Community Water Tests	--	11	12	9.0
Total Number	440	530	447	-15.7

Source: TCHD, Environmental Health/Epidemiology Division, 2015

Animal Control Services

The TCHD provides animal control services for the City of Branson and the unincorporated areas of Taney County through contractual agreements with these jurisdictions. Other cities in the county contract with the TCHD Animal Care and Control shelter to house animals. The services provided by animal control include: responding to field calls such as abandoned animals, animal abuse, animal at large, vicious animals, animal bite investigations, injured animals, lost animals, and mutual aid requests from law enforcement and fire. The Animal Control Officers (ACOs) also routinely assist law enforcement officers as they perform their duties and encounter situations with animals that require animal handling training and expertise. The ACOs also have responsibility for transporting animals, responding to emergencies, inspecting facilities in the City of Branson for animal establishment permits, animal temporary event permits, and facility inspections where animals are located. The Taney County Animal Shelter provides animal sheltering, adoptions, and animal quarantine services. The Animal Shelter staff work closely with area veterinarians, humane societies, and rescue organizations to ensure a high rate of animal adoptions. Euthanasia services are not performed at the TCHD Animal Control Shelter.

In 2014, a total of 1,258 animals (dogs and cats) were impounded by the TCHD animal control program. This was a 15.2% decrease as compared to the previous year. This decrease is the result of a concerted effort by the Animal Control officers to better identify owners of stray animals when out in the field before impounding the animal. This has allowed for more educational encounters with owners and has also decreased the number of animals sheltered and managed by the kennel.

Shelter Services Provided, Taney County Animal Control 2011-2014					
	2011	2012	2013	2014	Percent Change 2013-2014
Dogs Impounded	964	1110	938	753	-19.7
Cats Impounded	543	522	546	462	-15.4
Other	--	--	--	43	--
Total Animals Impounded	1,507	1,640	1,484	1,258	-15.2

Source: TCHD, Animal Control, 2015

Number of Dogs and Cats Adopted/Redeemed or Transferred to Rescue By Jurisdiction, 2014

Jurisdiction	Adopted		Redeemed		Transferred to Rescue		Total Number
	Dogs	Cats	Dogs	Cats	Dogs	Cats	
Branson	33	53	48	10	54	60	258
Taney County	97	20	65	0	275	26	483
Hollister	10	6	15	0	39	5	75
Forsyth	1	7	2	0	13	4	27
Merriam Woods	4	0	7	0	11	0	22
Total (Number)	145	86	137	10	392	95	865

Source: TCHD, Animal Control, 2015

During 2014, a total of 145 dogs and 86 cats were adopted, 137 dogs and 10 cats were redeemed by their owners, and 392 dogs and 95 cats were transferred to rescue groups throughout the United States as part of the animal care and control program. There were 33 animals transferred to the Joplin Humane Society in 2014. The kennel operations have been hugely successful with adoption events and collaborating with rescue groups. However, future efforts will focus on educating owners and micro-chipping animals to increase the number of pets who are successfully returned to their owners.

Number of Incoming Dogs and Cats By Jurisdiction, 2014

Jurisdiction	Number of Dogs	Number of Cats	Number of other species	Total Number	Percent of Total
Branson	154	270	43	467	34.5
Taney County	480	128	-	608	50.0
Hollister	70	29	-	99	8.1
Forsyth	15	32	-	47	3.9
Bull Creek	11	1	-	12	0.98
Merriam Woods	19	1	-	20	1.6
Rockaway Beach	4	1	-	5	0.4
Total	753	462	43	1,258	100.0

Source: TCHD, Animal Control, 2015

In 2014, an estimated total of approximately 1,234 field complaints were answered by the animal control officers. The City of Branson accounted for 43.8% of the field complaints while the county accounted for 51.4% of calls. Due to a lack of a reliable data collection application, these numbers of field calls are considered to be low estimates of the true number of field calls and complaints that are responded to annually. Many field complaints were not included in this inventory because of incomplete data entry. This has been identified as a priority area of improvement for the animal control division. Training, procedural, and technological solutions for this issue will be explored and implemented in 2015.

Women, Infants, and Children (WIC) Program

The Women, Infants & Children (WIC) program is a supplemental nutrition program that provides valuable services and benefits to pregnant women, new mothers, infants, and children up to the age of five. Services, provided at no cost to the participant, include nutrition education, breastfeeding support, checks to purchase nutritious supplemental foods, and referrals to health and social services. WIC participants must meet income guidelines and be considered to have a nutritional risk factor. In order to meet WIC income guidelines, the household income must be at or below 185 percent of the federal poverty level.

In 2014, the average monthly caseload of participants provided services through the TCHD in the WIC program was 1,914. This was a slight decrease compared to the previous year's average monthly caseload. During the year, it was observed that other WIC programs in Missouri also experienced a decrease in services provided.

WIC Clients Receiving Services Fiscal Year (October –September)- Taney County, 2011-2014					
	FY 2011	FY2012	FY2013	FY2014	Percent Change FY2013-FY2014
Total Number of WIC Clients Receiving Services	24,460	24,565	23,451	22,966	-2.07
Average Monthly Caseload	2,038	2,047	1,954	1,914	-2.05

Source: TCHD, Women's, Infants, and Children Program, 2015

Children's Dental Division

In January 2014, the Jordan Valley Community Health Center (JVCHC) began operating a federally qualified health center (FQHC) in Hollister. In early discussions with JVCHC, it was apparent that as this program expands, there would be impacts to the operations of TCHD's Dental Clinic. These impacts would be the result of a natural process of attrition. In 2014, approximately 50% of TCHD dental patients traveled from the Hollister and Branson areas for appointments at the TCHD Forsyth location. Over the next few years, it was anticipated that an increasing percentage of these patients would begin to seek care at JVCHC in order to:

- Reduce time commitment (travel, school absence, work absence)
- Decrease fuel expense
- Take advantage of other services (dental, health, etc.)

Patients by City/Zipcode			
City	Zip Code	Total	% of Total
Bradleyville	65614	7	0.4%
Branson	65615, 16	617	35.4%
Cedar Creek	65627	8	0.5%
Forsyth	65653	384	22.1%
Hollister	65672, 73	225	12.9%
Kirbyville	65679	116	6.7%
Kissee Mills	65680	48	2.8%
Powersite	65631	11	0.6%
Protem	65733	1	0.1%
Reeds Spring	65737	4	0.2%
Ridgedale	65739	18	1.0%
Rockaway Beach/ Merriam Woods	65740	188	10.8%
Taneyville	65759	84	4.8%
Walnut Shade	65771	30	1.7%
Total Patients		1,741	

Source: TCHD, Children's Dental Clinic, 2014

Based on this information and projections, the anticipated decrease in clients would have created problems for the TCHD Dental program in the next 1-3 years. Typically, during a normal year, TCHD general revenue funds were utilized to support the dental clinic by approximately \$50,000 annually. However, in 2013, the dental clinic required approximately \$90,000 of general revenue funds and projections indicated that this amount would continue to increase. Supporting the dental clinic with general revenue funding would have become increasingly difficult, and eventually unsustainable, due to increased budgetary stress from decreased dental program revenue, rising health insurance costs, decreased funding from the City of Branson for environmental services, decreased/stagnant funding from state programs, increased expenses overall, and lackluster growth in tax revenue.

In 2014, the TCHD Children's Dental provided services to children under the age of 18 and pregnant women with active Medicaid/MO HealthNet and was limited to Taney county

residents only. The purpose of the Children’s Dental Division was to treat, prevent and educate underserved clients in Taney County. The Dental Division was funded by Medicaid reimbursement and Taney County tax dollars. Medicaid reimbursement was less than 50% of normal and customary fees.

Services provided through the TCHD Dental Division included: Cleanings, x-rays, fluoride, oral hygiene education, sealants, restoration, space maintainers, stainless steel crowns, root canals, and extractions. The Clinic was open five days a week and staffed with a full-time dentist, two full-time dental assistants and a division manager.

In 2013 the Children’s Dental Division provided a total of 2,557 office visits. The Dental Division also provided fluoride treatments to 1,261 patients in Taney County; and provided dental screening for the Ozarks Area Community Action Corporation (OACAC) which includes 150 Head Start children.

The Dental Division referred many younger patients each year to pediatric dentists in Springfield, MO for hospital sedation. Additionally, multiple referrals for teenagers were made to oral surgeons for wisdom teeth removal and children that qualify for braces covered by MoHealthNet and based on medical needs were referred to orthodontists.

In early 2014, sustainability strategies that could be implemented to ensure the long-term success of the TCHD’s Children Dental Clinic were explored by TCHD management and the board of trustees. Strategies identified included: transitioning the Taney County Health Department’s Children Dental Clinic to a Jordan Valley Community Health Center Clinic or implementing internal improvements to the program to increase capacity. Based on funding and other limitations, these two strategies were the only viable options available at the time.

Children’s Dental Division-Taney County Health Department, 2013				
	2011	2012	2013	Percent Change Compared to 2012
Total Visits	2,451	2,687	2,557	-5%
Total Extractions	248	272	194	-29%
Total Sealants	137	128	90	-30%
Oral Hygiene Instructions Given	1,396	1,646	1,498	-9%
Fluoride Treatments	1,439	1,392	1,261	-9%
OACAC	150	150	150	0%
Total Toothbrushes	1400	1500	1300	-13%
Total Toothpastes	1400	1500	200*	-87%

Source: TCHD, Children’s Dental Clinic, 2014 *Free samples for toothpaste not available

Discussions with the JVCHC focused on several areas that would need to be addressed if the TCHD Dental Clinic became a JVCHC operation. These areas included: staff, services, and assets, among others.

The Jordan Valley Community Health Center has 250 employees in four locations with a human resources professional on staff and comparable salaries and benefits. The JVCHC expressed the desire to keep the current management, staff and dentist to allow for continuity of operations and stability to the program and clients. They did not want to move clients from Forsyth to Hollister. However, this would likely happen in the future to accommodate appointments and schedules of clients. JVCHC wanted to maintain a close relationship with TCHD in order to allow for seamless referrals and coordination of services and appointments, such as WIC and immunizations.

Jordan Valley would be able to expand services beyond the limited focus of the TCHD Dental Program which could only provide services to children and pregnant women on Medicaid; and increase treatment types. These service expansions would include: expanding the number of treatment rooms to three initially; in-house oral surgery with a pediatric dentist rotating through Forsyth; providing services to adults on a sliding scale fee (mostly extractions); providing services to patients without Medicaid; provide presumptive Medicaid based on income; and services for dentures and partials for children and adults.

Additional changes to services would include less downtime as dentists and staff from other JVCHC locations could cover vacations, trainings, etc. The JVCHC would also experience higher reimbursement rates for these services than what the TCHD Dental Program would have been able to receive. Jordan Valley disclosed that they are reimbursed at a level of 72%, whereas the TCHD Dental program was reimbursed significantly less. With this increased reimbursement, Jordan Valley would be able to improve the facility, expand services at a faster pace, and implement a sustainable program.

In the fall of 2014, the TCHD Board of Trustees determined that in order to sustain and expand dental services for the residents of eastern Taney County, a partnership with Jordan Valley Community Health Center was necessary. This partnership resulted in JVCHC establishing a dental clinic in the TCHD Forsyth office location to provide client services beginning January 1, 2015.

Community Outreach Division

Community Outreach fosters positive relationships within the community through a variety of methods. The division collaborates with multiple community coalitions, agencies, and businesses to improve the health and wellness of the community. Guided by the Community Health Assessment (CHA) and the Community Health Improvement Plan (CHIP), the Community Outreach Division work on identified health priorities to deliver measureable and evidence based programs. Health education messaging is a component of this process as the team strives to reach the community through a multitude of avenues that includes; participation in health fairs, promoted health messages using the TCHD website, Facebook and Twitter, community presentations, monthly radio show, press releases and live media interviews.

Newspaper

- Press Releases – 23 submitted
 - Branson Tri-Lakes News – with a reach of 9,000 per article
- Taney County Times
 - Reach 4, 850
- Independent (Free)
 - Reach approximately – 10,000

Social Media

- Face Book
 - 790 Likes
 - 116 posts – Average reach of 253 viewers per post
- Twitter
 - Tweets = 116
 - Followers =238
 - Following = 351
- HealthEmail
 - Average 217 email participants
 - 19 messages sent

Hometown Radio “At Your Service” one-hour show – 12

- Reach approximately 6000 per show

Health Fairs- 15

Number of participants reached 482-500

Community Coalition participation

Ozarks Wellness Network (OWN it)

- Board Representation
- Representation in 7 Action Teams
- Leadership role in 1 Action Team

Alcohol Drug Abuse Prevention Team (ADAPT)

- Leadership role

- Drug take back events, After Prom Event, Generation Rx Curriculum, Compliance Checks, Permanent Drug Drop Boxes

Tri-Lakes Clean Air Alliance

- Active Participation

Healthy Families Taskforce

- Active Participation

Safe Kids Springfield (Regional)

- Active Participation

Faith Community Health Advisory Board

- Member

OACAC Advisory Board

- Member

Hollister Parents As Teachers Advisory Board

- Member

Grant Activity

Missouri Foundation for Health Tobacco Cessation and Policy Advocacy- (CoxHealth Partnership)

- Increase access to tobacco cessation and promote tobacco policy advocacy

SOAR - \$131,688 (2013 & 2014 OPHI Partnership)

- Partnership provides a mental health trauma intervention method to children and adults who suffer from traumatic, anxiety and stress related mental health disorders.

Staying Fit - \$125,660 (2013 & 2014 OWN it Community Grant)

- Physical activity, nutrition and positive body image curriculum for middle school students

Grow Healthy - \$98,331 (2014 OWN it Community Grant)

- Physical education and nutrition curriculum offered at local schools and Boys and Girls Clubs

OWN it Meet the Doc - \$51,825 (2014 OWN it Community Grant)

- Support quarterly access events across Stone and Taney counties

Drug Free Community (DFC) - \$150,000 (ADAPT Partnership)

- Community and coalition development addressing drug abuse prevention strategies

Healthy Eating Active Living (HEAL) - \$39,798

- Aid local daycare providers in becoming MOve Smart Certified (pre-school physical activity program)
- Develop 11 community gardens

Through outreach activities, the Community Outreach Division has made many successful strides this year towards the CHIP objectives and overall community health. Leadership and active participation in multiple coalitions, taskforces, and teams have lead to successes such as the passing of a clean indoor act in the city of Branson, as well as the implementation of the DFC ADAPT coalition development grant. Coalition success, of which the Community Outreach Division have played integral roles, include the successful development and implementation of the Access to Health Care Community Assessment, examining gaps in services and barriers to receiving care and the Senior Health Survey, which assessed healthcare needs of area senior citizens.

Clinical Services Programs

The Taney County Health Department provides many clinical services for members of the community. These services include: child and adult immunizations, travel immunizations, family planning, pandemic Influenza Response/Mass Vaccination Clinics, pregnancy testing, pre-natal case management, blood pressure checks, TB case management, breast and cervical cancer screening, communicable disease investigation and prevention, health education, blood lead screening, laboratory tests through the State Public Health Laboratory, and STD testing and treatment. A total of 9,234 clients received 13,734 clinical services through TCHD. An additional 160 communicable disease investigations were completed by the communicable disease nurse.

In 2014, a total of 7,657 vaccinations were provided. This represented a 34.5% increase compared to 2013. Decreases were seen in services provided in pre-natal case management (-61.9%), and well women’s visits (-43.1%) due to the extended absence of a nurse which limited the work that could be completed in those programs. Decreases in Family Planning may be attributed to changes in other local programs which have increased local family planning services available. Another attributing factor could be increased referrals of women to Mo Health Net for woman’s health services which allows them to use other providers.

Clinical Services Provided-Taney County, 2010-2014						
	2010	2011	2012	2013	2014	Percent Change Compared to 2013
Total Vaccinations	6,767	5,546	5,576	5,692	7,657	34.5
Number of People Vaccinated	3,194	2,915	2,860	3,836	3,477	-9.4
Prenatal Case Management	84	188	151	344	131	-61.9
Well Women’s Visits	1,178	1,392	1,075	1,718	977	-43.1
Family Planning Clients	841	1,043	975	922	728	-21.0

Source: TCHD, Clinical Division, 2015

Pre-Natal Visits, Taney County Health Department, 2014	
	Number
Under the age of 18 years old	18
Smoked before pregnancy	28
Smoked before pregnancy who have quit	35
Decreased smoking	11
Total number of visits	153

Source: TCHD, Clinical Division, 2015

Other services provided by the TCHD clinical division included:

- A total of 47 car seat installations by the five certified car seat technicians.
- Through Cooperation with the Senior Citizen's Tax Fund we have provided residents 60 and older with 400 doses of Zostavax vaccine to prevent shingles.

Emergency Preparedness and Response

The Taney County Health Department is an active partner with other emergency response agencies in the community. The Health Department is a member of the Local Emergency Planning Committee (LEPC), Southwest Missouri Emergency Services Organization (SMESO), Missouri Food Safety Task Force, and the Tri-lakes Health Care Coalition. These groups meet regularly to discuss issues, review plans, participate in exercises, and provide updates regarding current activities. This exercise involved multiple agencies in the area from the hospital, law enforcement, fire, Emergency Medical Services, the health department, and emergency management. This exercise was a tremendous success and allowed area responders to gain valuable information regarding responding to large-scale Hazmat incidents.

In 2014, the TCHD emergency preparedness and response activities included the following:

- Disease Surveillance
- Table top Exercise with response partners
- Annual Reports and Assessments
- Annual updates of Emergency Response Plan

Epidemiology

Communicable disease surveillance is a multi-component system that monitors and analyzes data that includes – but is not limited to – demographic, geographic, and disease/condition-specific information. Accurate identification and timely reporting are integral parts of successful disease control, enabling public health agencies to:

- Identify contacts who may be infected or other individuals at risk for infection,
- Determine the incidence and prevalence of disease in a specific area of the state,
- Assist physicians and hospitals in evaluating illnesses in their patients and communities, and
- Assist the public in making better decisions regarding their health and lifestyle.

Successful communicable disease surveillance enhances control efforts; such as developing prevention/intervention strategies and policies, and responding to events involving potential exposure to communicable disease.

Gastrointestinal (GI) illnesses affect the digestive tract and may include symptoms such as nausea, vomiting, diarrhea (watery and/ or bloody), cramping, headache, chills, malaise or fever.

People become infected through fecal-oral route and may occur as food or water becomes contaminated as a result of contact with improperly prepared or cooked foods, unpasteurized milk or untreated water source. Food may also become contaminated if individuals do not properly wash their hands after using the toilet or prior to preparing, handling or eating food.

Gastrointestinal Illnesses Rate Per 10,000- Taney County,2013-2014				
County	Taney			
	2013		2014	
Condition	Cases	Rate	Cases	Rate
Campylobacteriosis	0	0	1	0.19
Cryptosporidiosis	0	0	0	0.00
E Coli Shiga Toxin Pos	2	0.39	3	0.56
E. Coli O157:H7	1	0.19	0	0.00
Giardiasis	0	0	1	0.19
Salmonellosis	4	0.76	9	1.68
Shigellosis	1	0.19	0	0.00
Listeriosis	0	0	0	0.00

Source: CrystalReports, 2015

Hepatitis Surveillance

The word "**hepatitis**" means inflammation of the liver and also refers to a group of viral infections that affect the liver. Viral hepatitis is the leading cause of liver cancer and the most common reason for liver transplantation. The most common types of Hepatitis in the U.S. are Hepatitis A, B, or C. In the United States, an estimated 1.2 million Americans are living with chronic Hepatitis B and 3.2 are living with chronic Hepatitis C.

Viral Hepatitis Cases, Rate per 10,000-Taney County, 2013-2014				
	2013		2014	
	Number	Rate	Number	Rate
Hepatitis A Acute	0	0	0	0.00
Hepatitis B (Pregnancy) Prenatal	1	0.19	1	0.19
Hepatitis B Acute	0	0	0	0.00
Hepatitis B Chronic Infection	2	0.39	1	0.19
Hepatitis C Chronic Infection	64	12.39	76	14.19

Source: Websurv, 2015

Seasonal influenza is a highly contagious viral disease that usually affects the respiratory system. Symptoms include fever, cough, sore throat, headache, runny nose, body aches, chills, and sometimes diarrhea and vomiting. Influenza can range from mild to severe illness and may sometimes lead to death. It can lead to pneumonia, dehydration, ear and sinus infections, and worsening of previous medical conditions. Those aged 65 years and older, children under age 2, and persons of any age with chronic medical conditions are at highest risk for serious complications of flu. In Missouri, influenza and pneumonia are associated with approximately 1,500 - 3,000 deaths per year (DHSS,2013). The economic impact of influenza illness is staggering.

Tuberculosis(TB) is a disease caused by a bacterium called *Mycobacterium tuberculosis*. It is transmitted person-to-person through air droplets when someone is sick with active TB. Not everyone who ingests the germs becomes sick. Two results can happen from exposure to a person with active TB, both are treatable and curable. Person can develop active TB or latent TB infection (LTBI). With latent TB infection you will have no symptoms and TB cannot be spread to others and will usually have a positive skin test reaction. TB may develop later in life if they do not receive treatment for LTBI.

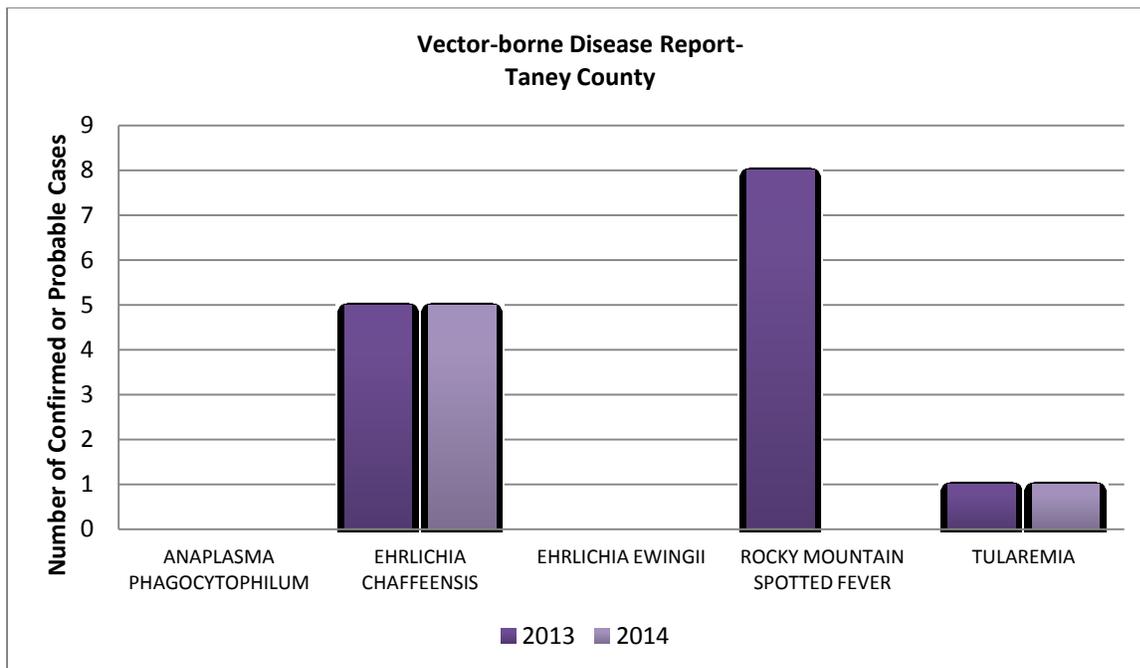
Number of Confirmed or Probable Tuberculosis Infections and Disease By County 2014				
	Infection		Disease	
	Cases	Rate per 10,000	Cases	Rate per 10,000
Barry	4	1.12	0	0.00
Taney	4	.75	0	0.00
Southwest Missouri	369	3.32	10	0.09

Source: CrystalReports, 2015

Vector-borne Diseases

Vector-borne diseases are those diseases that are transmitted to humans or other animals by an insect or other arthropod. Vectors of human disease in Missouri are typically ticks or mosquitoes. Some species of mosquitoes and ticks are able to transmit viruses, rickettsiae, bacteria, or parasites to humans.

In the United States, ticks are responsible for more human disease than any other insect. Tick-borne diseases are also known as zoonotic diseases. A zoonotic disease is an infectious disease that can be transmitted between animals and humans. Ticks are very effective transmitters of disease because most ticks take blood from a large variety of small and large mammals, reptiles, and even birds. In general, ticks must ingest a blood meal before they can molt and move to the next stage in their life cycle. Ticks become infected with a disease-causing agent by feeding on infected mammals or birds. For example, a tick can pick up Lyme disease from a field mouse, and later in its life transmit bacteria to a deer, dog, or human.



Source: MO DHSS, Crystal Reports: Accessed February 2015

One of the leading health indicators for Healthy People 2020 is Clinical Preventive Services, which includes routine disease screening and scheduled immunizations that are key to reducing death and disability and improving the Nation’s health. These services both prevent and detect illnesses and diseases—from flu to cancer—in their earlier, more treatable stages, significantly reducing the risk of illness, disability, early death, and medical care costs. Below is the Healthy People 2020 goal and where Taney County stands within those goals.

Healthy People 2020 Goal Compared to Taney County Report 2012-2014 (Rate per 100,000)				
Communicable Disease	2012	2013	2014	Healthy People 2020
Campylobacter	1.9	0.0	1.9	8.5
E.coli (STEC)	1.9	3.7	5.6	0.6
Listeria Monocytogenes	0.0	0.0	0.0	0.2
Salmonella	7.6	7.5	16.8	11.4
Tuberculosis (new cases)	1.9	33.6	7.5	1.0

Source: HP2020, TCHD, 2015

Discussion

The Taney County Health Department programs provide services to clients throughout Taney County. The majority of the clients live in Western Taney County where the larger cities of Branson and Hollister are located. The table below provides an overview of the percent of clients by location and program.

Public Health Services, By Client Place of Residence- Taney County, 2014		
	WIC Clients- FY14 (%)	Clinical Services (%)
Bradleyville	0.87	0.98
Branson	46.97	41.87
Cedar Creek	0.19	0.98
Forsyth	10.12	19.41
Hollister	15.54	10.07
Kirbyville	6.39	4.15
Kissee Mills	1.99	2.84
Point Lookout	0.19	0.61
Powersite	0.58	0.39
Protem	0.24	1.69
Ridgedale	2.13	1.71
Rockaway Beach/ Merriam Woods	8.38	5.40
Rueter	0.39	0.00
Taneyville	3.00	2.95
Walnut Shade	0.77	1.50
Out of County	2.23	5.45
Number of Clients	2,065	7,683

Source: TCHD, 2015

Trends observed in the data from the various programs indicated that some programs have experienced decreasing trends in the number of services provided to individual clients. Services provided through the Clinical Division, Animal Control, and the water lab demonstrated a decrease in demand for some of the services provided by these divisions. Other programs such as immunizations and Environmental Health inspections have demonstrated increasing trends in the amount of services provided. These changes have been due to a number of reasons.

The TCHD engages in a rigorous Continuous Quality Improvement and Program Evaluation program to analyze trends throughout the year. This allows for program adjustments as needed.

The TCHD also reviews the annual *County Health Rankings* to identify trends and areas of improvement for identify health measures. The *County Health Rankings*, which are a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, measure the health of nearly all counties in the nation and rank them within states. The *Rankings* are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights.

The *County Health Rankings* synthesizes health information from a variety of national data sources to create the Rankings. Most of the data we use are public data available at no charge. Measures based on vital statistics, sexually transmitted infections, and Behavioral Risk Factor Surveillance System (BRFSS) survey data were calculated for us by staff at the National Center for Health Statistics and other units of the Centers for Disease Control and Prevention (CDC). Measures of health care quality were calculated for us by staff at The Dartmouth Institute.

The *County Health Rankings* are compiled from many different types of data. To calculate the ranks, the measures were first standardized and then the ranks are calculated based on weighted sums of the standardized measures within each state. The county with the lowest score (best health) gets a rank of #1 for that state and the county with the highest score (worst health) is assigned a rank corresponding to the number of places we rank in that state.

In 2014, Taney County had higher rates in several important measures as compared to the state of Missouri. As compared to other jurisdictions of Missouri, Taney County had higher rates for reported:

- Poor or fair health,
- Poor physical health days,
- Poor mental health days,
- Low birth weight
- Adult smoking
- Adult obesity
- Physical inactivity
- Lack of access to exercise opportunities
- Uninsured

These measures all continue to point to the need for increased public health programs and collaborative efforts to address these issues in Taney County. These risk factors contribute to many negative health outcomes that impact the local economy, communities and families. Prevention and education initiatives are the keys to changing behaviors to impact these public health measures.

2014 County Health Ranking						
	Taney	Chrisitan	Stone	Greene	Missouri	Top U.S.
	County	County	County	County		Performers*
Health Outcomes						
Length of Life						
Premature death	7,582	6,089	7,980	7,902	7,827	5,317
Quality of Life						
Poor or fair health	20%	12%	18%	15%	16%	10%
Poor physical health days	4	2.8	3.2	4.1	3.7	2.5
Poor mental health days	5.2	3.7		3.6	3.8	2.4
Low birthweight	7.60%	6.30%	7.50%	7.20%	8.10%	6.00%
Health Factors						
Health Behaviors						
Adult smoking	31%	21%	25%	21%	23%	14%
Adult obesity	31%	29%	31%	29%	31%	25%
Food environment index	6.8	8.2	7.8	7.4	7.3	8.7
Physical inactivity	30%	26%	30%	24%	27%	21%
Access to exercise opportunities	41%	37%	67%	74%	70%	85%
Excessive drinking	10%	18%	17%	12%	17%	10%
Alcohol-impaired driving deaths	24%	20%	51%	37%	34%	14%
Sexually transmitted infections	199	183	140	451	464	123
Teen births	53	34	49	37	41	20
Clinical Care						
Uninsured	22%	17%	21%	17%	16%	11%
Primary care physicians	1,256:1	2,619:1	3,226:1	983:01:00	1,455:1	1,051:1
Dentists	3,218:1	3,655:1	7,967:1	1,544:1	2,042:1	1,439:1
Mental health providers	3,039:1	2,773:1	3,541:1	616:01:00	975:01:00	536:01:00
Preventable hospital stays	61	48	52	50	72	46
Diabetic screening	83%	90%	87%	89%	86%	90%
Mammography screening	61%	65%	68%	64%	62%	71%
Social & Economic Factors						
High school graduation	87%	91%	90%	83%	82%	
Some college	55%	71%	42%	68%	63%	70%
Unemployment	10.30%	5.80%	10.40%	5.90%	6.90%	4.40%
Children in poverty	30%	18%	30%	23%	23%	13%
Inadequate social support	20%	15%	17%	17%	19%	14%
Children in single-parent households	37%	21%	37%	33%	33%	20%
Violent crime	540	243	324	543	466	64
Injury deaths	65	52	69	79	73	49
Physical Environment						
Air pollution - particulate matter	10.6	10	10.3	9.5	10.2	9.5
Drinking water violations	8%	24%	6%	1%	4%	0%
Severe housing problems	17%	12%	14%	15%	14%	9%
Driving alone to work	77%	82%	76%	83%	81%	71%
Long commute - driving alone	19%	39%	47%	16%		

Source: County Health Rankings 2014