Bay County Health Department

2011 Annual Report

"Creating a Healthy Environment for the Community" | Design/ Editor Tracy Metcalfe

Public Health Services
Health Promotion
Health Protection
Disease Prevention

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www.baycounty-mi.gov/Health

Bay County Profile (2010)

Population	107,771
Births	1,169
Deaths	1,132 (07-09 Average)

Gender

Male	52,751
Female	55,020

Race

White	101,451
Black	1,702
Native American	564
Asian	578
Hispanic	5,093

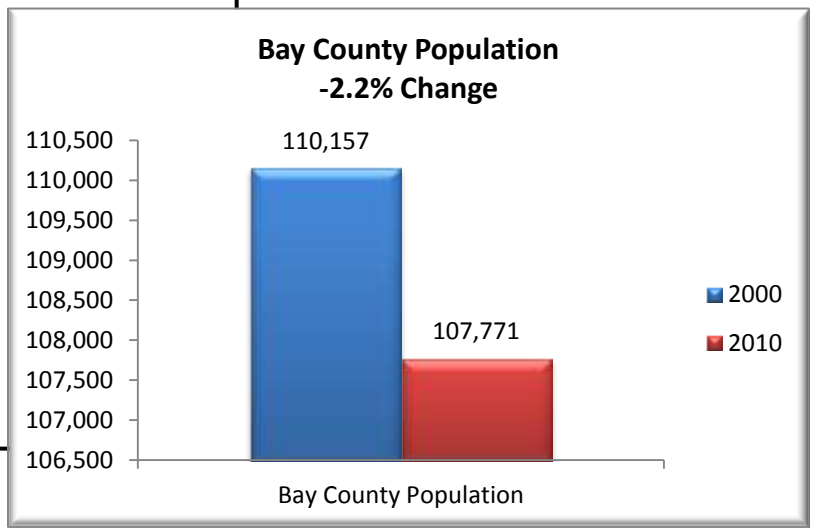
Age

Under 18	9,579
18-64	66,312
65 +	17,507

Leading Causes of Death (Rates/100,000)

Heart Disease	337
Cancer	272.7
Diabetes Related	106
Chronic Lower Respiratory Disease	78.3
Stroke	50.3
Alzheimer's	40.6
Unintentional Injury	34
Diabetes	32
Kidney Disease	20.8
Pneumonia & Influenza	19.3

Unemployment Rate 9.6
(As of May 2011 – Bureau of Labor Statistics)



This report highlights public health services indicators for the year 2011. If there is a particular area of interest that is not listed in this report, please feel free to contact our office.

[1] **Cost savings data was retrieved from *Analysis of the Value of Local Public Health Operations Funding* (April 2010). Prepared for: Michigan Association for Local Public Health (MALPH) Prepared by: Public Sector Consultants, Inc. Lansing, MI**

BAY COUNTY MISSION STATEMENT

Bay County will provide efficient, customer and taxpayer-focused, public services that improve the quality of life for Bay County residents.

BAY COUNTY VISION STATEMENT

The vision of Bay County Government is to provide a continuously improving quality of life in our community through leadership and services.

"The Bay County Health Department continues to provide excellent health services to the citizens of Bay County. Even though our economy remains uncertain and many of us impacted have had to "tighten our belts," the staff of the Health Department continues to offer programs and services aimed at improving our quality of life. I applaud the efforts of Health Department administration and employees and urge our Bay County residents to take advantage of the public services provided."

~ Tom Hickner, Bay County Executive

BAY COUNTY HEALTH DEPARTMENT MISSION STATEMENT

The mission of the Bay County Health Department is to improve the community's quality of life by the promotion of optimum health through the prevention and control of disease.

GOALS

The goal of public health administration is to establish and maintain a community focus on public health through the development of an efficiently organized, adequately staffed and effective Health Department.

The Health Department was created to meet the needs and the expectations of all citizens in Bay County. Many of the services are free of charge while others are based on income, eligibility criteria, and fee for service.

No participant requesting assistance from the Bay County Health Department will be excluded from participation, denied the benefits of, or be otherwise subject to discrimination under these programs, on the basis of race, creed, age, color, national origin or ancestry, religion, sex, marital status or disability.

"On behalf of the Bay County Board of Commissioners, I am happy to comment briefly on the 2011 Bay County Department of Community Health Annual Report. The Bay County Board of Commissioners is extremely proud of the programs provided by the Bay County Department of Community Health and the staff who, under the direction of Health Director Barbara MacGregor, carry out these programs with efficiency, commitment, dedication and respect. With dwindling financial assistance and resources, the Health Department continues to effectively serve this community without jeopardizing the health and safety of its populace. This is both commendable and praiseworthy. The 2011 Bay County Department of Community Health Annual Report reflects the success achieved through their efforts."

~Donald Tilly, Board of Commissioners Chairman

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A Message from the Bay County Health Department Public Health Director
Barbara MacGregor, RN, BSN

To the Bay County Executive, Board of Commissioners and Citizens of Bay County:

I am pleased to present the 2011 Bay County Department of Community Health Annual Report. The Annual Report provides an overall picture of the quality programs and services the Health Department delivers to the citizens of Bay County.

The staff of the Bay County Health Department and our many community partners work together to protect you from health threats, to educate you and your neighbors regarding health issues, and to provide healthy solutions in order to advance our community's health. Many of the activities performed by this Department occur behind the scenes, with the primary focus of preventing disease or conditions that may cause disease, disability or injury. Because of this, many people do not recognize the important role public health plays in their daily lives.

Throughout the 2011 Annual Report, you will see how the Health Department collaborated with community, state and federal partners to provide many services. These include:

- Inspection and licensing of body art and pawnshops
- Implementation of the Michigan Smoke-Free Law
- Education regarding safe consumption of wild game and fish caught in the Saginaw Bay
- Delivering immunizations to uninsured and under-insured individuals
- Providing in-depth research and evaluation of local surface waters and beaches, including an innovative daily forecast of the Bay City State Recreation Area Beach, which will be available in the coming year
- Collection and disposal of household hazardous wastes
- Investigation of communicable and food-borne illness outbreaks

Furthermore, 2011 was a significant year for collaboration with the launch of the Bay County Community Health Assessment. Partnering with McLaren Bay Region, the Bay Health Plan, Bay Arenac Community Mental Health, and with additional support from the Bay Area Community Foundation, a comprehensive report has been completed. The Community Health Assessment looks at demographic, economic, education and health status trends of Bay County residents. Additionally, a telephone survey of County residents was conducted regarding health behaviors and community needs and complimented several focus groups held. The focus groups explored issues such as access to health care, prevention, and improving health behaviors. The Community Health Assessment has allowed the Health Department to effectively plan for the future and provide services that effectively meet the needs of Bay County residents.

The mission of the Bay County Health Department is to improve the community's quality of life by the promotion of optimum health and through the prevention and control of disease. I hope this report provides insight to the dedicated and tireless work of the staff and partners of Bay County Health Department, in fulfilling this mission. Should you want to learn more about our programs and services do not hesitate to contact us or visit us on the web at www.baycounty-mi.gov/Health.

Yours in good health,

Barbara M. MacGregor
Health Officer

EMERGENCY PREPAREDNESS & HEALTH EDUCATION DIVISION

Melissa Maillette, Emergency Preparedness & Health Education Division Manager

The Michigan Department of Community Health, Health Preparedness Planning Section, is comprised of eight coalitions. These coalitions work with local partners within each region to prepare hospitals, emergency medical services, and supporting healthcare organizations to deliver coordinated and effective care to victims of terrorism and other public health/healthcare emergencies. Bay County is part of Region 3 of the Healthcare Preparedness Network (HPN).

The staff of the Emergency Preparedness and Health Education (EP&HE) Division had a very busy year. This Division gained a new Health Educator/Health Analyst, Tracy Metcalfe. Ms. Metcalfe works on projects with the Division Manager for the Public Health Emergency Preparedness grant, as well as coordinates activities for Bay County's Community Health Assessment. Ms. Metcalfe also serves as BCHD's Public Information Officer (PIO).

Emergency Preparedness

Health Department staff participated in the Bay County Tabletop Exercise and Debrief facilitated by Bay County Emergency Management. The exercise scenario involved an intentional anthrax attack on a long-term care facility. The facility was evacuated and patients and contacts treated. Through this exercise, BCHD was able to simulate activating response plans, coordination with planning partners, and establishing a Strategic National Stockpile (SNS) distribution node and dispensing site.

In June, BCHD underwent two on-site evaluation visits from the Michigan Department of Community Health, Office of Public Health Preparedness (MDCH-OPHP). The MDCH-OPHP performed a sub-recipient monitoring visit, as well as a SNS evaluation visit. BCHD met both Federal and State program requirements.

An important accomplishment in 2011 was the establishment of Bay Alerts and Bay Health Alerts. Bay Alerts and Bay Health Alerts is a notification system that enables the County to notify residents of important emergency information, such as road closures, severe weather alerts, traffic accidents etc. In addition, the systems can be used as an internal notification system to perform staff call-downs for drills or real emergency events. BCHD has tested the utilization of "Bay Health Alerts" to complete a staff notification drill of key incident command team members with 100% of staff persons completing the drill.

Implementation of this alerting system was the result of the Division's collaboration with Bay County Central Dispatch and Bay County Emergency Management. Promotion efforts included billboard advertisements, television commercials, and taping a segment on Bay 3TV that could be utilized throughout the year.

Additionally, Division staff participated in various training webinars and teleconferences, as well as emergency planning meetings throughout the year. On-site training included attendance at the Great Lakes Homeland Security Training Conference and the national Public Health Preparedness Summit. Division staff, including other BCHD staff members, attended the annual MDCH Communicable Disease Conference held at the Bay City Doubletree Hotel.

Health Education and Community Outreach

Building upon 2010's education and outreach activities, the Health Education Team, provided more than 50 health education presentations and participated in 30 outreach events. Presentations included:

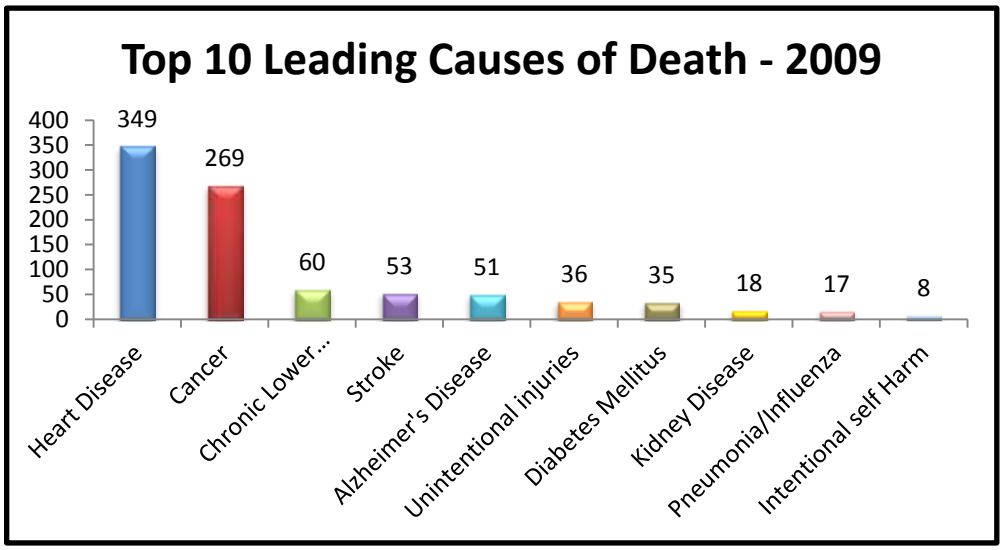
- School Tobacco Prevention Education
- Safe Game and Fish Consumption Education
- Bay County Community Baby Shower
- Pinconning Health Fair
- HeadStart Family Fun Day
- Delta College's 50+ Health for Life Expo
- Helen M. Nickless Volunteer Clinic
- Bay County Farmers Market
- Bay County Project Connect
- 20 Minutes a Day Reading Event
- McLaren Bay Region (formerly Bay Regional Medical Center) Halloween and Safety Program

In addition to education and outreach activities, Community Health Educators participated in training webinars, teleconferences and meetings. Staff also coordinated Cardiopulmonary Resuscitation and Automated External Defibrillator re-certification training for BCHD employees.

2011 Bay 3TV Videos/Presentations	
MDCH 5 County Cardiovascular Disease Project	Making the Right Choice
Bay Health Alerts Information and Outreach	Maternal Infant Health Program Information
Educate Yourself, Protect Yourself	Reality Matters: Sex and STD's
Hearing and Vision Department Information	Taking Charge of Your Life Video
Hepatitis and Your Liver	Unnatural Causes
In the Swim of Things Video	Warning Signs of a Stroke
It's in Your Hands	Water Sampling: Start to Finish
Jamie Foxx HIV/AIDS PSA	WIC Cooking Class
Lice Prevention Information	

Bay County Community Health Assessment 2011-2012

In late 2011, the Bay County Health Department received funding from the Bay Area Community Foundation and partnered with McLaren Bay Region, Bay Health Plan and Bay Arenac Behavioral Health, to conduct a countywide Community Health Assessment (CHA). The CHA consisted of a phone survey, focus groups, an online survey and a collection of existing data.



BCHD worked with Lake Research Partners to conduct both the phone survey and the focus groups. The phone survey consisted of 505 randomly selected Bay County residents and was implemented in January 2012. Both landline and cell phone numbers were used in the survey. Three focus groups were conducted in April of 2012. The focus groups consisted of adults lacking preventive care, parents with children lacking preventive care and school personnel. The online survey and the collection of existing data were conducted by the Bay County Health Department. The online survey reached a total of 183 Bay County residents. This survey is not considered to be representative of the entire County, as respondents self-selected to participate. Existing data collected and analyzed included information on morbidity and mortality, population, vital statistics, infant mortality, communicable disease, insurance coverage, employment, income and poverty.

Results of the CHA are available on the Health Departments webpage: www.baycounty-mi.gov/health. The information gathered will be used determine issues and gaps in programs and services in the community. A Community Health Improvement Plan will be developed to address the identified priority areas in late 2012 and 2013.

The aging population in Bay County showed the most significant gain (42%) and occurred in the 65 to 64 year age group.

The majority of parents surveyed reported their children are NOT up to date on vaccinations.

22% of children are NOT seeing a doctor or pediatrician on an annual basis.

26% of children are NOT seeing a dentist on an annual basis.

More than half of Bay County men surveyed are NOT getting their cholesterol levels checked regularly.

Nearly 4 in 10 Bay County adults are NOT getting their blood pressure checked regularly

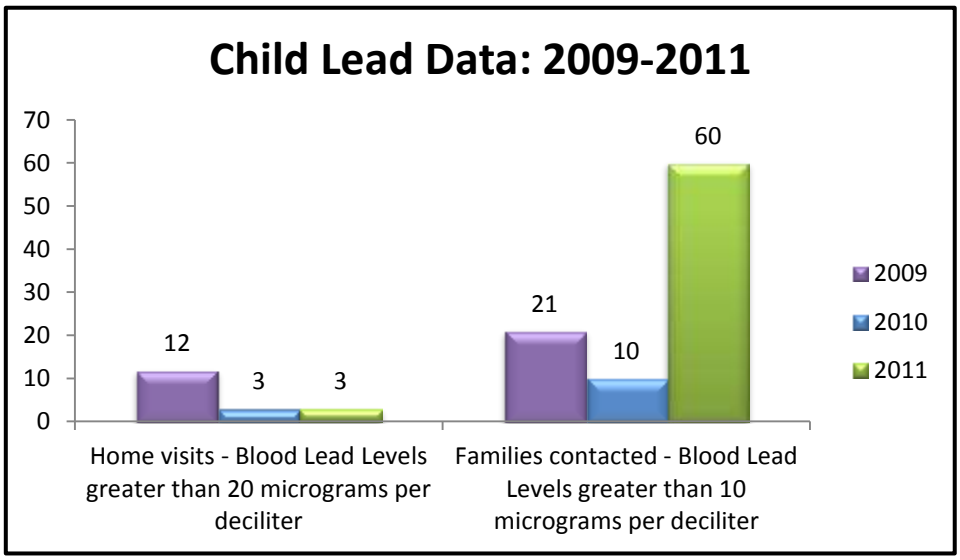
80% of surveyed men report they currently have health insurance yet 4 in 10 report they are not getting a routine physical exam or dental care.

MATERNAL & CHILD HEALTH SERVICES DIVISION

Marilyn Laurus, Maternal and Child Health Services Division Manager

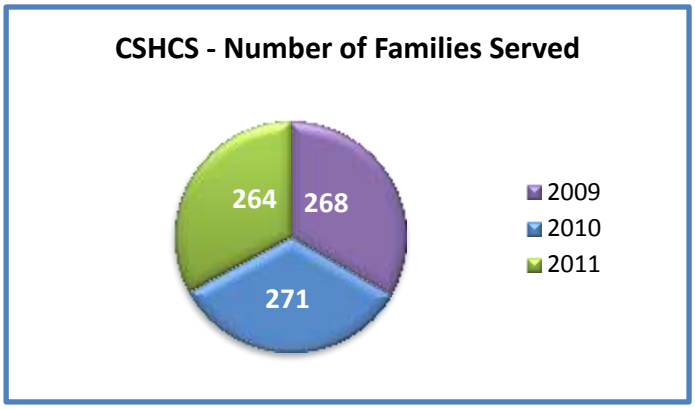
Child Lead Education and Screening Program

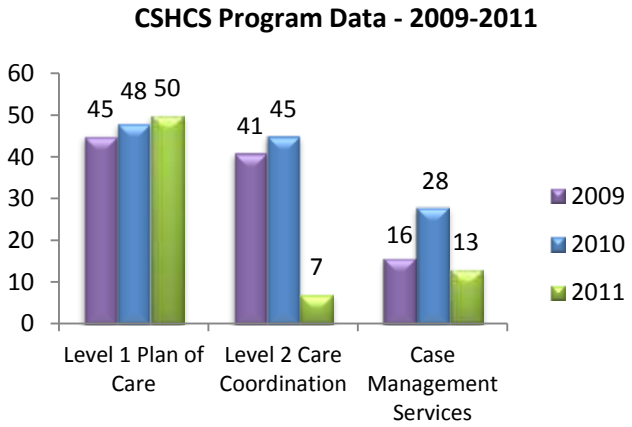
The BCHD continues to screen Medicaid-eligible children for elevated blood lead levels through the WIC program. Referrals to the BCHD Laboratory for lead screening are also made and completed. Children whose Blood Lead Levels (BLL) were at or above 10 mg/dl of blood via capillary screening were directed to obtain a confirmatory test via a venous sample. For confirmatory results of BLL greater or equal to 10 mg/dl of blood, a Public Health Nurse contacted the family with follow-up lead information. For those children whose BLL exceeded 20 mg/dl of blood, a home visit was made by both a Public Health Nurse and an Environmental Health Elevated Blood Lead (EBL) Investigator/Risk Assessor.



Children's Special Health Care Services (CSHCS)

The Children's Special Health Care Services Program provides medical specialty care and assistance to children from birth to age 21 who have a qualifying medical diagnosis (over 2,000 covered diagnoses). Persons aged 21 and over with cystic fibrosis or certain blood disorders (hemophilia) may also qualify for services. This program provides case management, care coordination, and referrals for specialty care or community agency-based services, for children and families in Bay County. A Public Health Nurse provides each family with a Plan of Care annually and case management, when necessary.





Hearing and Vision Program

The Hearing & Vision Program provides screening by certified technicians in all Bay County schools (public, private and charter), Day Care Programs and Head Start Preschools. The Bay County Health Department provides free vision and hearing screenings for children prior to entering Kindergarten, as required by the Michigan Public Health Code. The Health Department's goal is to identify, at the earliest possible point, any hearing or vision defects. Difficulties can often be remedied if discovered at a time when easiest to treat. Vision screening is effective in early detection of eye problems that can largely be prevented with early treatment.

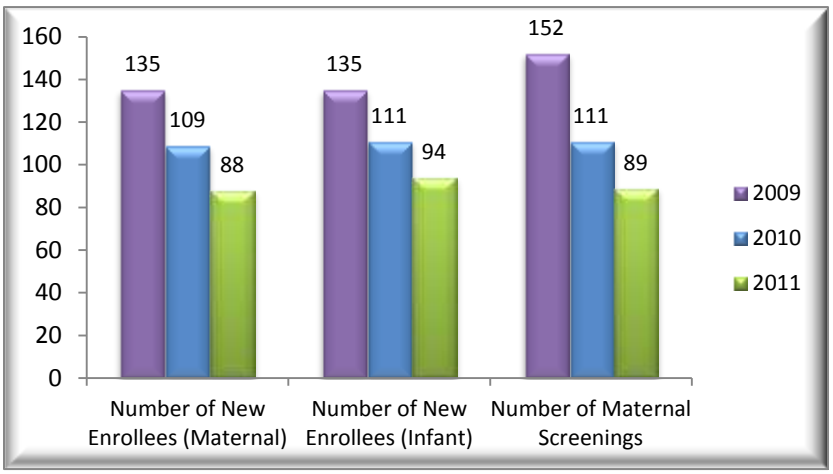
Hearing and Vision Data:

	Vision		Hearing	
	2009/ 2010	2010/2011	2009/2010	2010/2011
Preschool aged children screened	**1095**	**1067**	**1130**	**1061**
Special education students	**239**	**248**	**191**	**176**
School age	**6173**	**6542**	**4273**	**3941**
Total	**7507**	**7857**	**5594**	**5178**

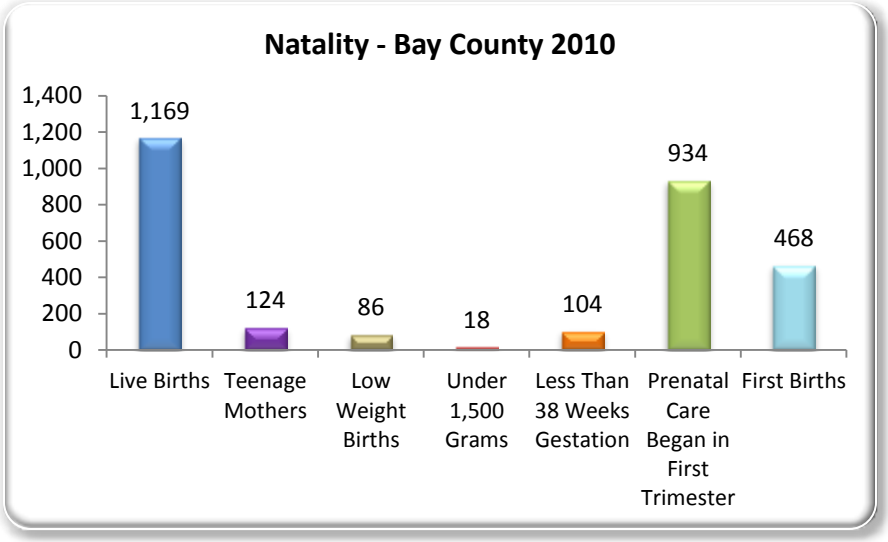
Every dollar spent on hearing screening potentially saves $112 in future work productivity with appropriate early intervention. Vision screening is effective in early detection of eye problems that can largely be prevented with early treatment. Every dollar spent on vision screening saves $162.[1]

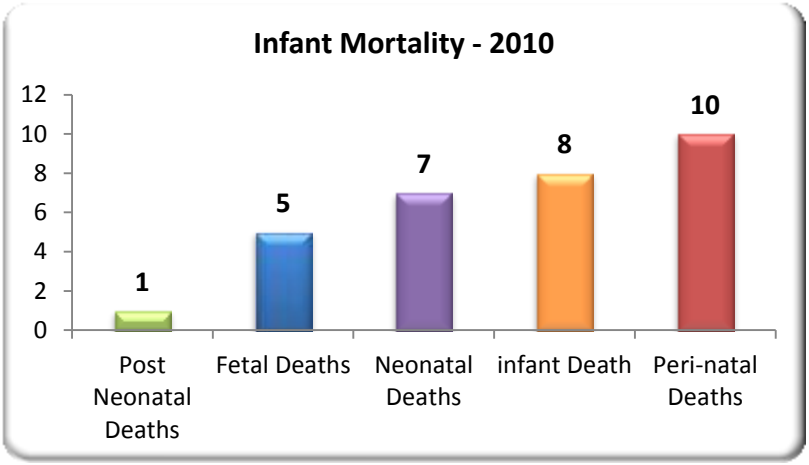
Maternal Infant Health Program (MIHP)

The Maternal Infant Health Program (MIHP) is a voluntary, supportive, and educational program. It provides support to Medicaid-eligible pregnant women and families with infants, who reside in Bay County and meet appropriate criteria, from pregnancy until the child is three years old. MIHP can provide expectant parents a home visit from a Social Worker and Public Health Nurse.



Natality Trends for Bay County





Bay County Medical Examiner

Howard Hurt, D.O

Bay County's Medical Examiner investigates the cause and manner of sudden and unexpected, accidental, violent and suspicious deaths in Bay County. Bay County Medical Examiner, Dr. Howard Hurt, D.O., provides a very important service by identifying the cause of these types of deaths. This information is helpful in planning efforts to prevent early deaths and improve the community's health.

Autopsied Deaths Dr. Howard Hurt, Medical Examiner			
AGE	**2009**	**2010**	**2011**
0-10 yrs.	4	1	5
11-20 yrs.	3	5	2
21-30 yrs.	11	7	11
31-40 yrs.	8	8	14
41-50 yrs.	23	17	19
51-60 yrs.	13	25	20
61-70 yrs.	10	7	13
71+	5	6	8
Total	**77**	**76**	**92**
GENDER			
Male	52	53	55
Female	25	23	37
CAUSE OF DEATH			
Blunt Force Trauma - Total	8	1	14
• Auto Accident	7	0	13
• Homicide	1	1	0
• Industrial	0	0	1
Liver Disease	6	3	10
Homicide	1	1	0
Hanging	2	0	0
Heart	0	0	41
Drug Overdose	1	14	24
Gunshot	1	0	3
MANNER OF DEATH			
Accidental	21	18	21
Homicide	2	1	0
Indeterminate	13	17	24
Miscellaneous	2	0	0
Natural	0	0	40
Suicide	4	14	7
ALCOHOL / DRUG INVOLVED			
Alcohol	12	8	8
Amphetamine	1	2	0
Cannabis	1	1	0
Cocaine	3	3	0
Hydrocodone	1	4	8
Methadone	6	5	6
Morphine	2	2	2
Oxycodone	2	0	0

Public Health Services

Joel Strasz, Public Health Services Manager

Communicable Disease Division

The goals of the Communicable Disease Division are to conduct disease surveillance activities, promptly investigate disease outbreaks and clusters, to provide case follow-up, completion and guidance to prevent disease transmission and to implement control measures to minimize further transmission of disease. Other communicable disease control efforts include: monitoring disease reporting by physicians and laboratories to detect trends and assess the impact of diseases on the public's health; ensure communication between public health agencies, private physicians and hospital/infection control personnel; advise and educate health care providers regarding public health interventions; and disseminate health education messages to the community and media to enhance disease control efforts.

MICHIGAN DISEASE SURVEILLANCE SYSTEM (MDSS) - 2000-2011 Reportable Communicable Disease Statistics			
DISEASE	2009	2010	2011
FOODBORNE DISEASE GROUP			
Campylobacter	9	4	4
Giardiasis	3	-0-	1
Listeriosis	-0-	2	1
Salmonellosis	12	2	10
MENINGITIS DISEASE GROUP			
Aseptic Meningitis	10	9	10
Bacterial Meningitis	1	1	-0-
OTHER DISEASE GROUP			
Animal Bite	237	207	226
Botulism – Infant	-0-	-0-	-0-
Coccidioidomycosis	1	-0-	1
Cryptococcosis	-0-	-0-	1
Cryptosporidiosis	-0-	-0-	4
Influenza, Novel H1N1 (confirmed cases)	23	-0-	6
Legionellosis	2	-0-	1
Norovirus	-0-	-0-	10
Shiga Toxin Producing E-Coli (STEC)	-0-	-0-	2
Streptococcal Dis. Inv. Group A	1	1	2
Streptococcal Pneumonia, Invasive	-0-	-0-	10
Streptococcal Pneumonia, drug resistant	-0-	-0-	1
STD GROUP			
Chlamydia	305	289	339
Gonorrhea	38	38	28
Syphilis	-0-	3	-0-
VACCINE PREVENTABLE DISEASE GROUP			
Varicella	18	8	3
Mumps	-0-	0	-0-
Pertussis	9	20	-0-
VIRAL HEPATITIS			
Hepatitis B (Acute)	1	1	2
Hepatitis B (Chronic)	1	4	5
Hepatitis C (Acute)	14	1	-0-
Hepatitis C (Chronic)	43	42	33

Physicians, clinical laboratories, primary and secondary schools, childcare centers, and camps are required to report the occurrence or suspected occurrence of any disease, conditions or infection, as identified in the Michigan Communicable Disease Rules. In addition, all other health care providers are authorized to report to local health authorities. Together, they play a key role in state and local efforts to control communicable diseases. The public health system depends upon these reports of diseases to monitor the health of the community and to provide the basis for preventive action.

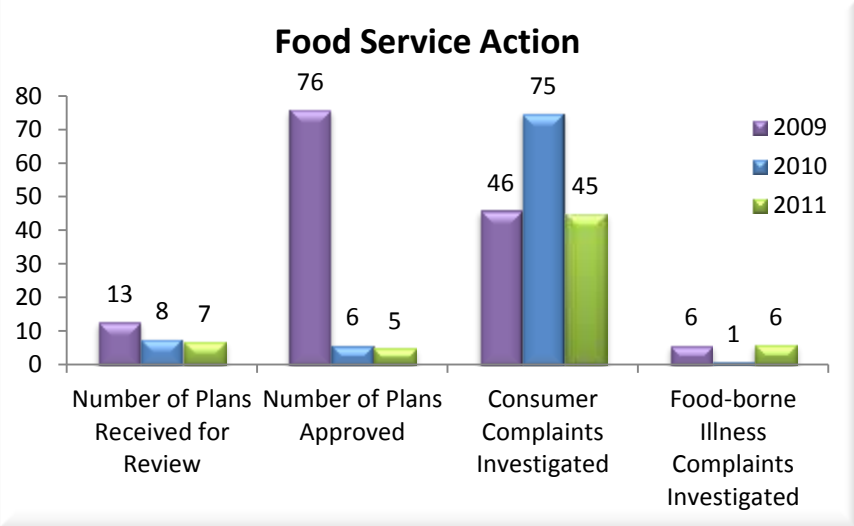
Environmental Health Division

The Environmental Division of the Bay County Health Department protects the public's health through programs established by the Michigan Public Health Code and local Sanitary Ordinances. These programs focus on the prevention of disease and exposure to pollutants via education, inspection of facilities and enforcement of the referenced laws. The majority of prevention and abatement of environmental threats are accomplished through education.

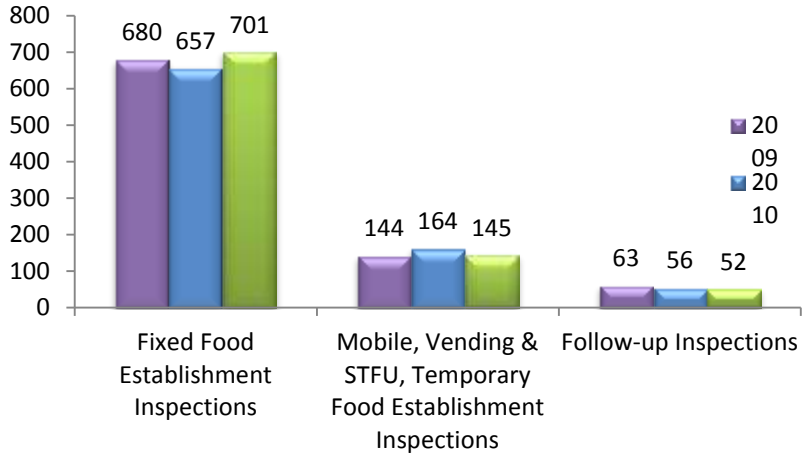
The Environmental Health Division of the Health Department consists of five Sanitarians and one Secretary. The Sanitarians are registered by the State of Michigan to provide the services of the Division.

Food Service Program:

Food establishments and vending locations, which dispense food and drinks to the public, are routinely inspected by the Health Department. Sanitarians consult with food service operators and food service personnel on the safe handling and preparation of food. Education of the food service operator on the proper methods of safe food handling is a vital function of the Division. Sanitarians review and approve proposed new and remodeled food service facilities and approve food service licenses. In conjunction with the Michigan Department of Agriculture, Sanitarians work closely with the Health Department's Communicable Disease staff to investigate instances of possible food poisoning. The Environmental Health Division is responsible for restaurant inspections, as well as investigation and follow-up when a suspected food-borne illness outbreak occurs.



Food Service Inspections



In 2009, approximately 187 confirmed cases of food borne illness occurred in the state of Michigan, at an estimated cost of over $1.5 million for treatment. Costly food borne illness outbreaks would be more likely in the absence of this program. [1]

ServSafe Food Service Sanitation Program:

The ServSafe Food Service Sanitation Program is a 16-hour ServSafe Essential course offered to all persons in the Food Service Industry. This course is offered through the Bay County Health Department and taught by Registered Sanitarians Daniel Dicks and Barry Hugo. The program provides training in basic sanitation principles: Food Microbiology, Prevention of Food-borne Illness, Safe Food Handling, Personal Hygiene, Construction and Maintenance of Food Service Facilities, Pest Control, and Hazard, Analysis and Critical Control Points (HACCP) Principles.

ServeSafe Data

	2009	2010	2011
Number of Participants	**138**	**122**	**56**
Number of Participants that Passed ServSafe Exam	**136**	**119**	**56**

Household Hazardous Waste Collection Program:

In 2011, over 160 households participated in the Household Hazardous Waste Collection Program. Approximately 7,000 pounds of material were collected and safely disposed of. The Household Hazardous Waste Collection Program gives Bay County residents a legal and cost-free way to dispose of unwanted household chemicals that cannot be disposed of in the regular trash. The program is sponsored by the Dow Chemical Foundation and Bay County Health Department. A variety of items are accepted during collection, such as automotive products, cleaning products, garden and lawn products, paint products, personal and health care products.

Michigan Smoke-Free Law:

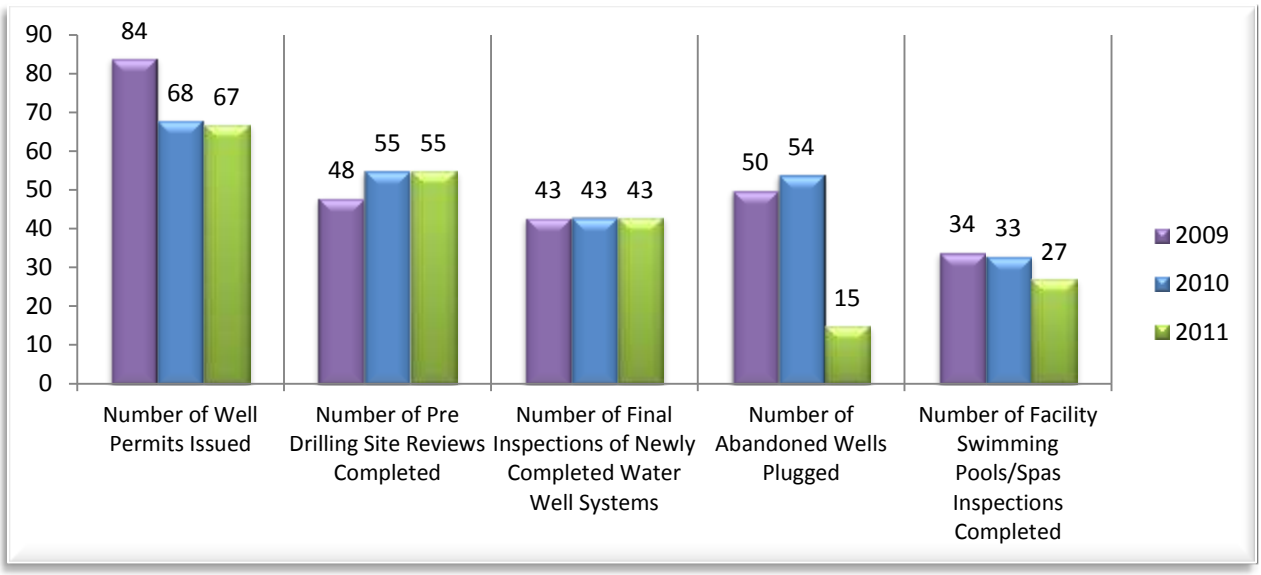
On May 1, 2010, Michigan joined the majority of other states in becoming smoke-free and protecting employees, residents, and visitors from the health risks associated with secondhand smoke exposure. The new law provides for smoke-free air in public places, including bars, restaurants, and hotels. In addition, under the new law, smoking is not allowed on patios and decks where service is intended and is also prohibited in enclosed areas of hotels, motels, and inns (including rooms). Cigar bars, tobacco specialty retail stores, and the gaming floors of casinos may be granted exemptions from the smoke-free law, if certain requirements are met.

Compliance with the law is the responsibility of the owner, manager, or other person in charge of the establishment. The Bay County Health Department is responsible for the enforcement of the Smoke-Free Air Law in Bay County. Fines may be issued if an establishment is found to be allowing persons to smoke within smoke-free areas. Information and resources related to Michigan's Smoke-Free Air Law can be found at www.michigan.gov/smokefreelaw .

Private/Public Water Program:

Well permits are issued for homes and businesses that are not served by municipal water systems. The Division conducts field evaluations, reviews construction plans, and consults with homeowners and well- drillers on proper well installations. Sanitarians issue permits for construction of new and replacement wells and assists persons who have concerns or problems with water quality.

Private and Type III Public Ground Water Supply Program Data



Beach Monitoring and Kawkawlin River Sanitary Survey Program

For over twenty-five years, staff from the Bay County Health Department's Environmental Health Division have conducted the Bathing Beach/Surface Water Quality (BB/SWQ) Monitoring Program. The United States Environmental Protection Agency (USEPA) provides resources through the Michigan Department of Natural Resources and Environment (MDNRE) via funding from the Beaches Environmental Assessment and Coastal Health Act of 2000 (Beach Act). Bay County, in return, receives funds to administer the BB/SWQ program for all public beaches. The County, as a whole, examines eight (8) sampling stations in Bay County. Five (5) locations are sampled on the Saginaw Bay (Pinconning Park Beach, South Linwood Township Park Beach, Brissette Beach, the Bay City State Recreation Area, and Wenona Beach) and are supported through Beach Act funds. Other sampling stations--two (2) on the Saginaw River and one (1) on the Kawkawlin River are funded locally.

Although point and non-point sources of these contamination events cannot be identified directly, there are many different explanations as to what may contribute to bacterial contamination in the rivers and bay. First and foremost, combined and separated sewage overflows have been theorized to be the main source of E. coli contamination. Both of these are caused from excess storm water runoff into combined and sanitary sewers. The construction of additional sewage retention basins and improvements to existing municipal wastewater collection and treatment systems within the Saginaw Bay watershed in recent years has significantly reduced the number of combined and raw sewage overflow events. It is anticipated that future improvements will further reduce and/or eliminate municipal and residential sewage discharges into the Saginaw River, its tributaries, and the Saginaw Bay.

2011 Bathing Beach/Surface Water Quality - Sample Analysis Summary

Station	Location of Sampling Station	Single-Day Sampling Events	Number of Exceedences	30-Day Sampling Events	Number of Exceedences
1	Saginaw River – South	15	2	11	0
2	Saginaw River – Bay City	15	2	11	1
3	Wenona Beach	59	2	44	0
4	Kawkawlin River	15	1	11	0
5	Bay City State Rec Area	60	0	44	0
6	Brissette Beach	59	3	44	0
7	S. Linwood Beach	59	3	44	0
8	Pinconning Park	59	5	44	0
	Total	341	18	253	1

In addition to the bacteriological water sampling program, staff members from the Health Department have been working in conjunction with representatives from the Michigan Department of natural Resources and Environment (MDNRE), National Oceanic and Atmospheric Administration (NOAA), and the University of Michigan to develop a predictive model for the beach at Bay City State Recreation Area. The predictive model, which is now in its initial deployment, will be used to provide an accurate early warning of potentially unsafe conditions at a beach.

BCHD staff are also partnering with Saginaw Valley State University (SVSU) to implement a rapid testing method. In 2011, a Quantitative Polymerase Chain Reaction (qPCR) system was purchased and located at SVSU. Beginning in 2012, the rapid testing method will be used to reduce the delay time between when the samples are collected and test results are obtained. This is especially important when issuing beach closures due to elevated E-coli levels.

On-Site Sewage Program:

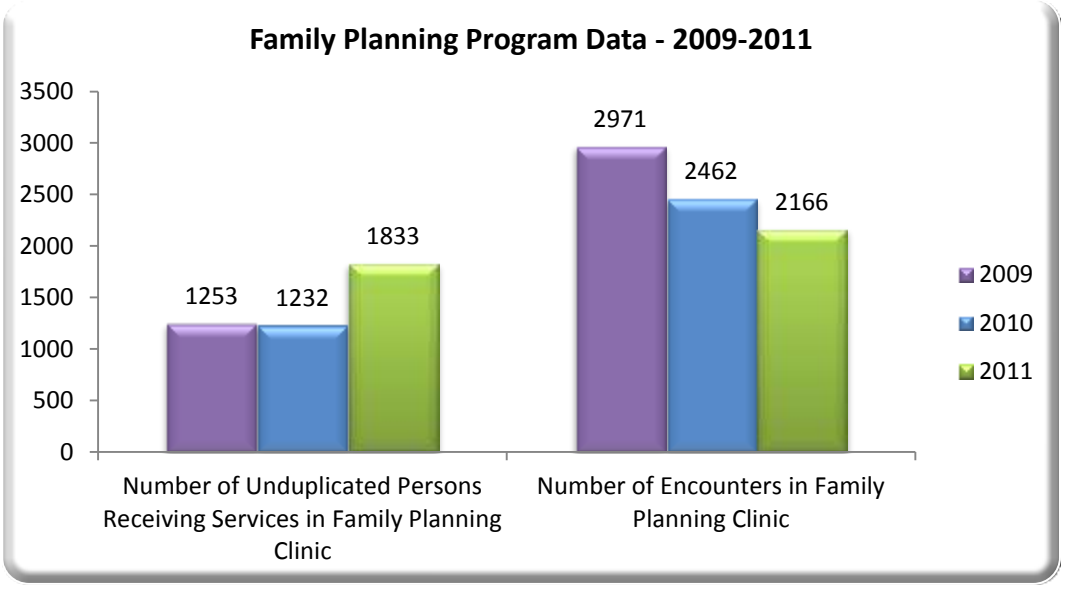
On-site sewage disposal permits are issued for homes and businesses that are not served by municipal sewer systems. Sanitarians conduct field evaluations to determine the suitability of conditions for on-site disposal of sewage. The Division reviews construction plans and consults with owners and engineers on proper design and construction of on-site systems. The Division issues permits for the construction of new and replacement sewage system and conducts final inspections to assure that systems are installed according to required rules and regulations.

On-Site Sewage Disposal Program Data:

	2009	2010	2011
Number of Parcels Evaluated	**87**	**226**	**307**
Number of On-Site Sewage Disposal & Tank Permits Issued	**66**	**40**	**97**
Number of Alternative/Engineered Systems Approved	**12**	**8**	**0**
Number of Complaints Investigated	**7**	**9**	**22**

Family Planning Program

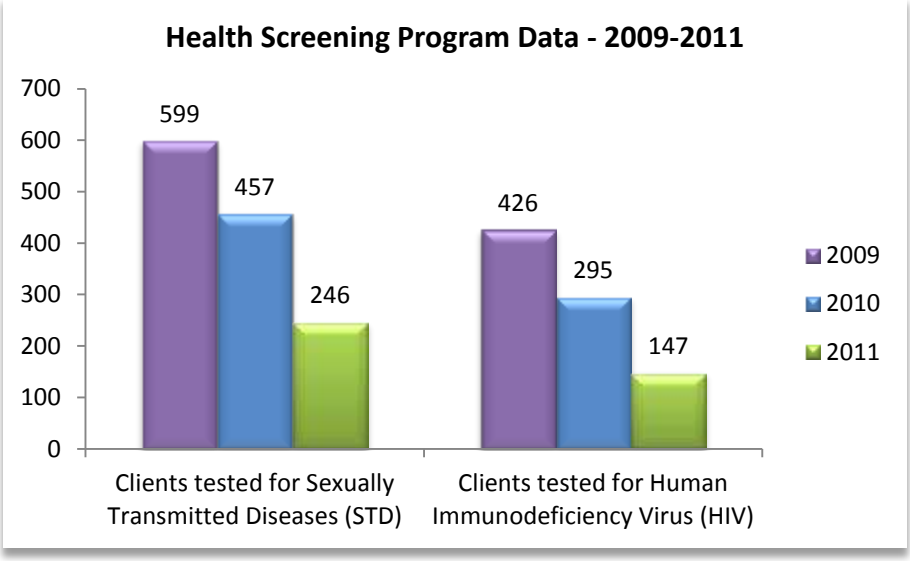
The Family Planning Clinic serves men and women of childbearing age for reproductive health needs. Clients may utilize the clinic for the following types of services: pregnancy testing and referral, sexually transmitted disease testing and treatment, and contraceptive needs. Women desiring a physical exam may obtain a breast exam, pelvic exam, Pap smear, and appropriate lab work. All methods of birth control are available, as well as abstinence information and pre-conception education. Fees for service are based on a sliding scale according to the client's income and family size. All services are rendered in a confidential and caring manner.



Health Screenings Program

The Health Screening Program provides testing, diagnosis and treatment of sexually transmitted diseases, thereby helping to promote and protect the health of the community. Chlamydia, gonorrhea, syphilis, Human Immunodeficiency Virus and Hepatitis B and C can be tested for through this clinic. Positive results are counseled, treated or referred for treatment and a process of partner notification is initiated.

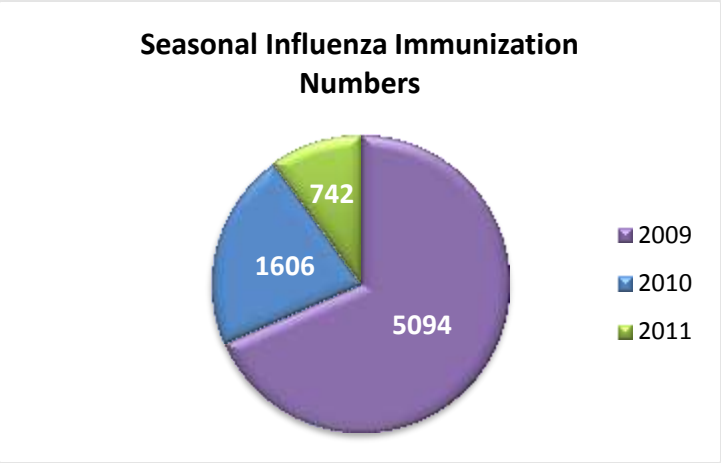
Left untreated, these diseases can develop into pelvic inflammatory disease (PID), which costs, on average, $3,600 to treat. Based on the number of women screened and referred for treatment, every dollar invested in STD screening results in at least $2.50 in savings.[1]



Immunization Program

The Immunization Division provides immunizations to individuals in the community with an emphasis on the pediatric population. The Division runs daily clinics with evening hours twice a month. While the majority of vaccines distributed are for infants and children, the Division also provides seasonal immunizations, including: influenza, pneumococcal, and meningococcal for seniors, adults and college students. The Immunization Division plays a major role in the distribution of vaccine to area providers enrolled in the Vaccines for Children Program (VFC). Annual site visits are made to VFC providers to assure vaccine safety, contract compliance, and implementation of the Michigan Care Improvement Registry (MCIR). To ensure this, area providers are assisted with entry of vaccines into the MCIR to assure accuracy of immunization records. The Division works with area schools to provide oversight and monitoring of immunization levels for children and entry of vaccinations into the MCIR.

Vaccine	2009	2010	2011
DTaP	285	171	179
Dtap/IPV	-0-	-0-	103
DTaP-Hep B-IPV	232	232	181
Hep A (Adult)	163	75	79
Hep A (Pediatric)	599	522	520
Hep A/Hep B	-0-	-0-	26
Hep B (Adult)	204	44	88
Hep B (Pediatric)	24	24	47
Hib-Pedvax	374	385	208
HPV	137	225	312
Influenza (seasonal)	5,094*	1,606	742
IPV Dose	198	85	90
Meningococcal Conjugate	256	459	581
MMR	260	296	277
MMRV	-0-	-0-	18
Pneumococcal Conjugate	377	547	427
Pneumonia	-0-	55	1
Rotavirus	166	174	118
TB Testing	360	304	184
Td Adult Only	28	17	7
Tdap	303	517	658
Varicella	342	630	556
Zostavax	13	140	10
TOTAL	9,415	6,508	5,412



*Includes 4022 doses Avian Influenza, HINI Vaccine

The Immunization Division puts considerable time and effort to ensure that children in Bay County are vaccinated according to schedules developed by the Centers for Disease Control and Prevention (CDC). Bay County has consistently maintained the highest rates of immunized children for its region in Michigan. The Immunization Division coordinates the Bay County Immunization Task Force which brings together key individuals in the community who have a vested interest in assuring children's vaccinations and a Public Health Nurse provides in-services to area providers to help ensure staff is knowledgeable and up-to-date on vaccine information.

Finally, the Bay County Health Department is committed to the sustainability of vaccines for Bay County residents. To this end, the Division ensures that payment is derived from insurance sources and accommodations are made for the uninsured, including a sliding fee scale to match resources of individual persons.

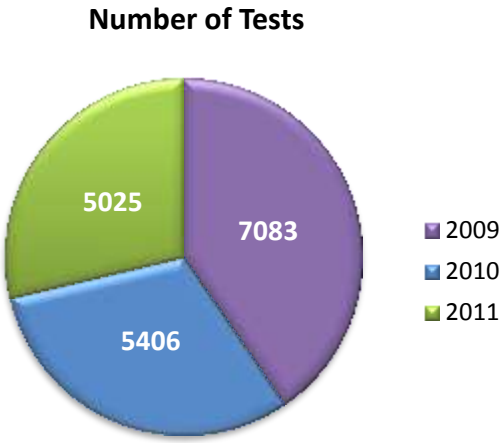
Laboratory Services

The Bay County Health Department's Laboratory Services Division provides a variety of diagnostic and analytical services to support public health initiatives related to the citizens of Bay County. These services include: testing for sexually transmitted diseases, cholesterol screening, lipid profiles, glucose screening, lead testing, and pregnancy testing. The Bay County Health Department's lab also tests well water for fecal coliform, measures bacterial counts of public swimming pool water, and analyzes water from rivers, beaches and streams for suspect contaminations.

The Laboratory is licensed by the Michigan Department of Environmental Quality (MDEQ) for water testing, and licensed for clinical analysis by Clinical Laboratory Improvement Amendment.

Laboratory Stats:

Clinical Tests	Number
Cholesterol	5
Fasting Glucose	2
Family Planning Chlamydia	102
Family Planning Gonorrhea	26
GC Smear	8
Hemoglobin	1
Hepatitis B Antigen/Antibody	31
Total	175



Non-Clinical Tests	Number
DNA	202
Drug Tests	129
Pools	1429
Wells	166
Beach/E-coli	1037
Total	2,963

Women, Infants and Children (WIC) Program

WIC is a Federally funded program that provides nutritious food, nutrition education and assistance with community referrals for high-risk pregnant women, infants and children under the age of five. Eligibility is at or below 185% of poverty, which serves low- to moderate-income families who meet income requirements. Families receive nutrition counseling, access to other support services offered through the Health Department and local community agencies. The WIC Clinic also partners with Michigan State University Extension (MSUE) to provide Project Fresh, a program that offers locally grown produce through the farmers' markets during the summer and early fall for eligible WIC families.

WIC Program Data	2009	2010	2011
WIC Base Caseload	2,747	2,989	3,000
Closeout Participation	2,964	2,989	2,875
% Closeout Participation to Base Caseload	108%	100%	96%

WIC Program Data WIC Program Appointments	2009	2010	2011
Certifications (including Priority Certifications)	1,477	1,830	1,897
Re-Certifications	2,867	3,775	3,579
Infant Evaluation	534	637	661
Registered Dietitian Assessments	235	425	390
Nutrition Education	851	1,546	1,678
Lead Screens	269	536	611
Project Fresh Coupons Issued	2,080	1,950	3,480

In 2011, $1,875,203.90 was spent in Bay County by WIC Program participants. These dollars greatly and positively affect our community's economy

BAY HEALTH PLAN

The Bay Health Plan is a low cost, community-sponsored program that provides basic healthcare coverage to low-income individuals in Bay County. The plan provides limited coverage for doctor visits, prescriptions, lab tests and X-rays with affordable co-pay amounts. This is not insurance, however, the coverage for many basic healthcare services has assisted many Bay County residents with their healthcare needs. Eligible residents must be between the ages of 19-64 and do not qualify for any other governmental insurance program.

Bay Health Plan Data (Total Number of Enrollees)

2009		2010		2011	
Plan A	**Plan B**	**Plan A**	**Plan B**	**Plan A**	**Plan B**
7,312	**6,296**	**5,653**	**7,642**	**7,492**	**9,051**

Plan A is the Adult Benefit Waiver Program through Michigan Department of Community Health.
Plan B is for Bay County residents who have no health insurance, are U.S. citizens and meet income requirements.

DIVISION ON AGING

Services Provided Fiscal Year October 1, 2010– September 30, 2011

Tammy Roehrs: Director, Division on Aging

Bay County Division on Aging is dedicated to providing continued opportunities for the community's older adults by maintaining independence, offering social opportunities, and enhancing their lives through quality services in a cost-effective manner. In addition to the listed programs, the following programs are provided to Bay County senior citizens, financed by the Bay County Senior Millage and client's fees: Wonderful Times newsletter, Volunteer program, special events, Senior Olympics, and Information and Referral. Other Grant Programs include Caregiver Education and Exercise Program.

Meal Services	Total Clients	ARRA**	Contract Meals	Waiver Meals	NSIP***	Total Meals
Congregate Nutrition	**733**	**1,080**	**37,403**	**-0-**	**809**	**39,292**
Home Delivered Meals	**861**	**-0-**	**105,770**	**11,405**	**-0-**	**117,175**

**American Recovery and Reinvestment Act of 2009
***Nutrition Services Incentive Program

Support Services	Total Clients	AAA Contract	*Waiver	VA	Care Mgmt.	DHS	Senior Millage	Total Hours
Case Coordination & Support	1,050	5,595	-0-	-0-	-0-	-0-	-0-	5,595
Caregiver Training	63	402	-0-	-0-	-0-	-0-	-0-	402
Exercise Program	70	1,077	-0-	-0-	-0-	-0-	-0-	1,077
Homemaking	255	7,281	80.5	-0-	228	195	-0-	7,784.5
Personal Care	111	693	-0-	295	47	362	1,952	3,349

BAY COUNTY DIVISION ON AGING

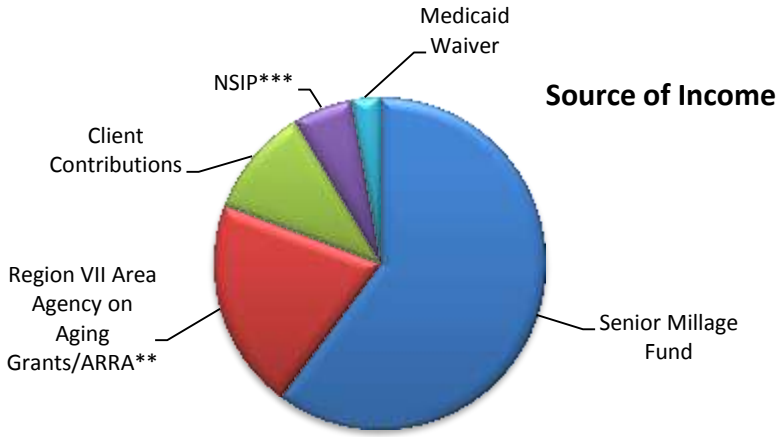
Source of Income	Amount	Percentage
Senior Millage Fund	$1,374,551	58.8
Region VII Area Agency on Aging Grants/ARRA**	468,019	20.0
Client Contributions	243,313	10.4
NSIP***	132,206	5.7
Medicaid Waiver	64,180	2.7
Other Income/Rebates	25,557	1.1
Client Fees	16,059	0.7
General Fund	4,650	0.2
Department of Human Services	10,689	0.4
Total	$2,339,224	100

* Service units converted to hours

**American Recovery and Reinvestment Act of 2009 (ARRA)

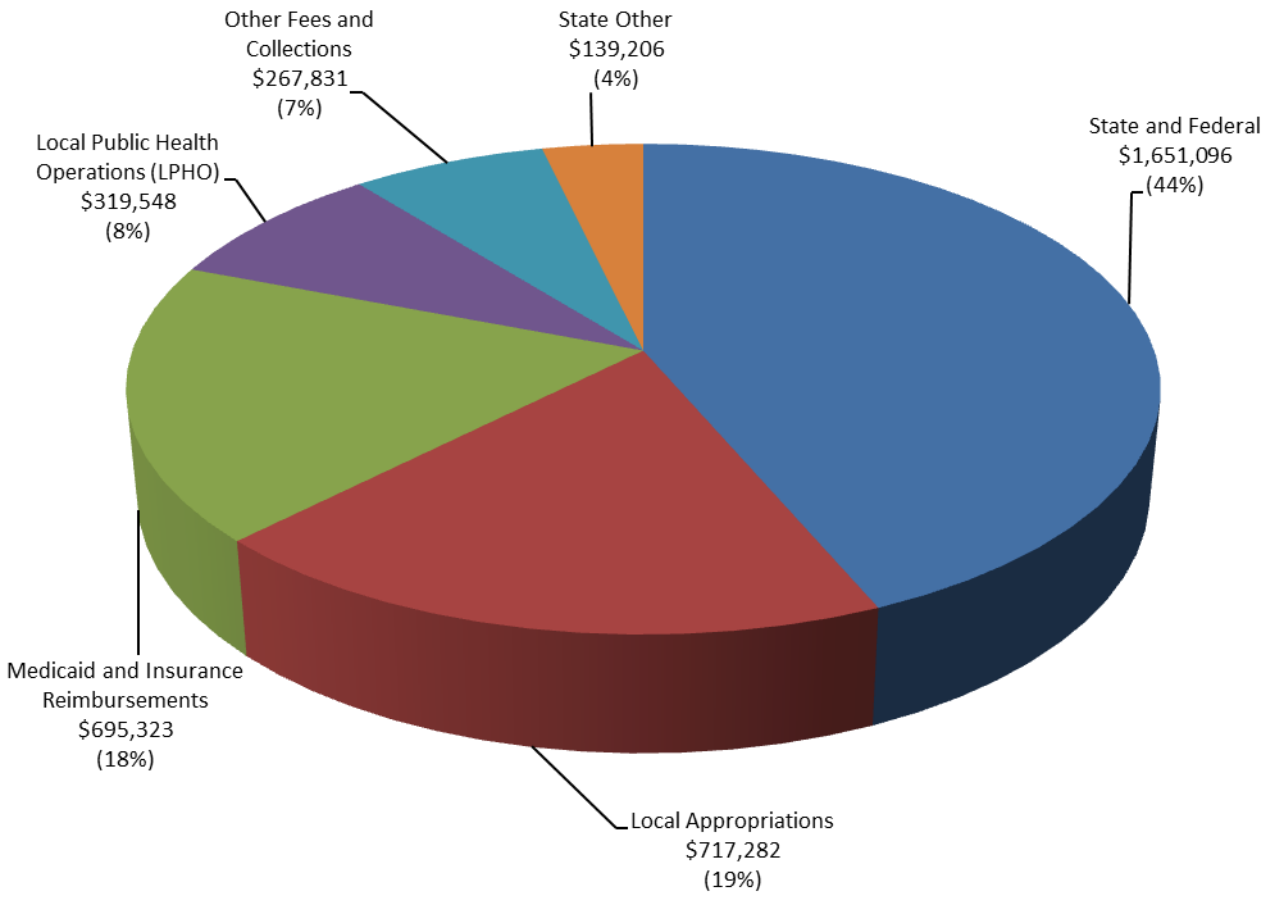
***Nutrition Services Incentive Program (formerly USDA)

NOTE: All statistics and dollar amounts are subject to final audit.



BAY COUNTY HEALTHDEPARTMENT FINANCIALS

Fiscal Year End 9/30/2011 Revenues

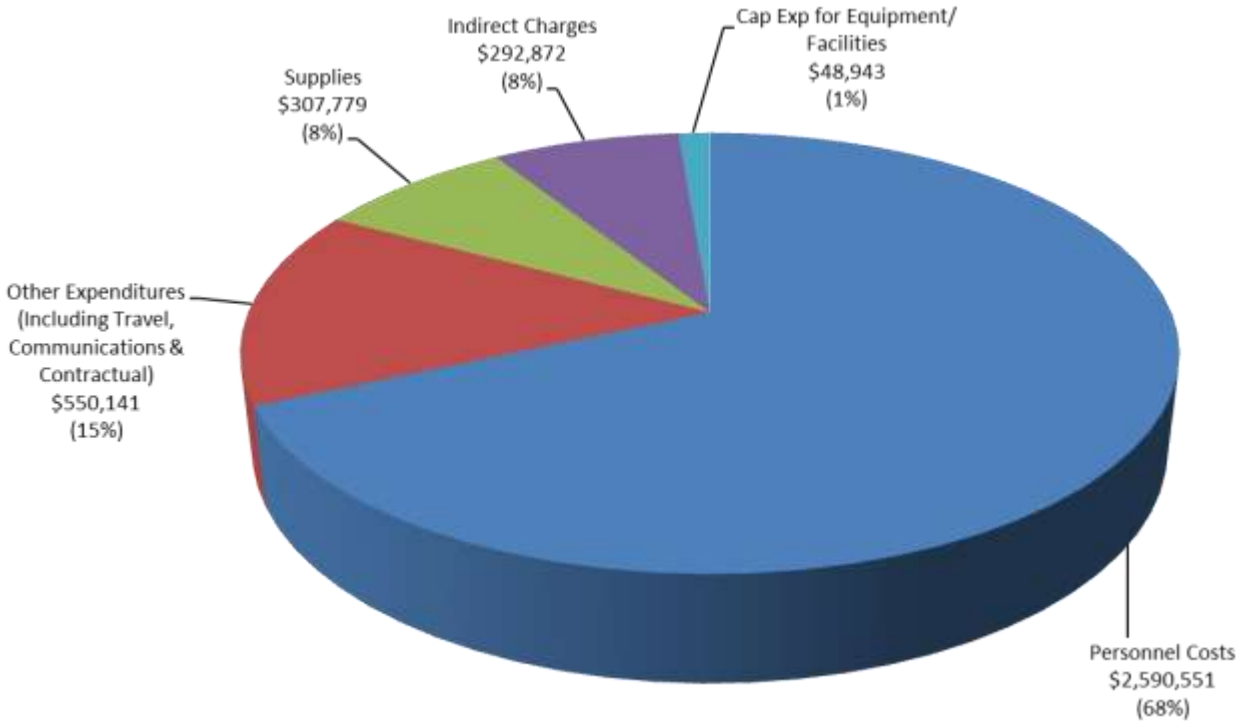


Health Department Revenue	
State and Federal	**$1,651,096.00**
Local Appropriations	**$717,282.00**
Medicaid and Insurance Reimbursements	**$695,323.00**
Local Public Health Operations (LPHO)	**$319,548.00**
Other Fees and Collections	**$267,831.00**
State Other	**$139,206.00**
Total Revenues	**$3,790,286.00**

NOTE: All statistics and dollar amounts are subject to final audit.

BAY COUNTY HEALTHDEPARTMENT FINANCIALS

Fiscal Year End 9/30/2011 Expenditures



Health Department Expenditures	
Personnel Costs	**$2,590,551.00**
Other Expenditures (Including Travel, Communications & Contractual)	**$550,141.00**
Supplies	**$307,779.00***
Indirect Charges	**$292,872.00**
Cap Exp. for Equipment/ Facilities	**$48,943.00**
Total Expenditures	**$3,790,286.00**
Per Capita Spending	**$35.42**

Includes value of Federally Funded Vaccines amount of $139,206

NOTE: All Statistics and dollar amounts are subject to final audit.