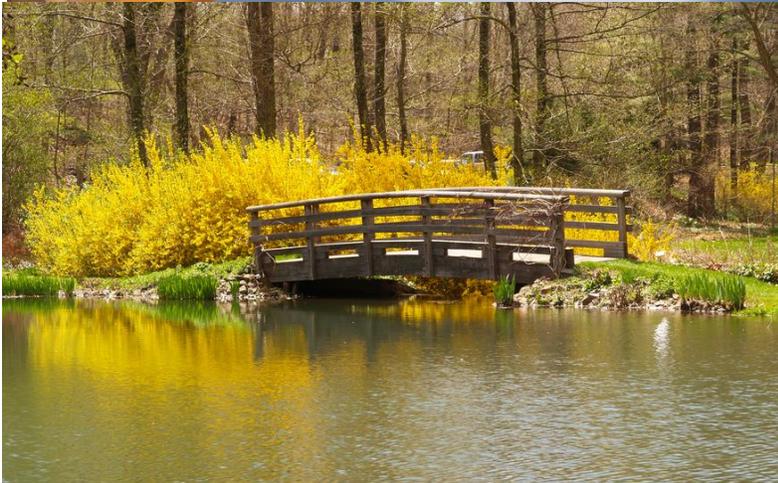




2013 Annual Report



Designed and Edited by: Tracy Metcalfe
Microsoft

Public Health Services

Health Promotion
Health Protection
Disease Prevention

Main Location

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Pinconning Clinic

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Pinconning, Michigan 48650
Ph: (989-879-3081

www.baycounty-mi.gov/Health

Bay County Profile

Population 106,935 (2012)
Births 1,137 (2011)
Deaths 1213 (2011)

Race (2012)

White 97,982
Black 2,565
Native American 774
Asian 696

Hispanic Origin 5,216

Leading Causes of Death (Crude Numbers from 2011)

Heart Disease 398
Cancer 270
Chronic Lower Respiratory Disease 62
Stroke 58
Alzheimer's 47
Unintentional Injury 37
Diabetes 38
Kidney Disease 25
Intentional Self-harm (Suicide) 15
Pneumonia & Influenza 20

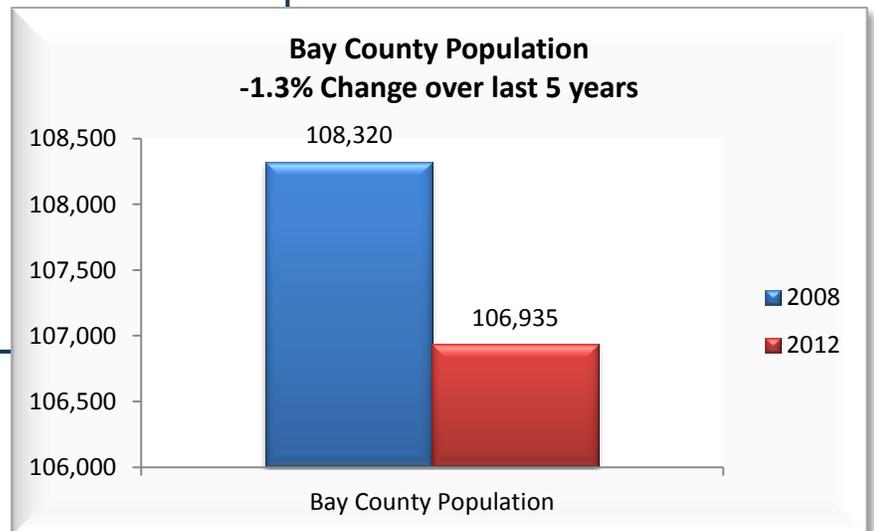
Unemployment Rate 8.3
(As of December 2013– Bureau of Labor Statistics)

Gender (2012)

Male 52,454
Female 54,481

Age (2012)

Under 18 22,953
18-44 34,021
45-64 31,504
65+ 18,457



This report highlights public health services indicators for the year 2013. If there is a particular area of interest that is not listed in this report, please feel free to contact our office.



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 quality health services to the residents of Bay County. The staff and administration of the Health Department offer exceptional programs aimed at enhancing the quality of life for those who live, work and raise our families in this area. I offer my support and sincere congratulations on a job well done.

~ Tom Hickner, Bay County Executive

BAY COUNTY HEALTH DEPARTMENT MISSION: To protect and promote a healthy community and safe environment by providing quality services through all stages of life.

VISION: To be a recognized public health leader meeting the needs of our community.

VISION PRIORITIES

We will...

- Create a safe, friendly, confidential, and professional environment.
- Create an environment that values and respects all customers and employees.
- Promote our programs and services in the community.
- Partner with community organizations.
- Provide responsible fiscal management.
- Utilize the latest technology to reach a broader audience.

GUIDING PRINCIPALS

Accountability, Kindness, Commitment, Positivity, Communication, Professionalism, Dependability, Respect, Empowerment, Teamwork

At a time when State and local funding for services to the public are continually being reduced, the Bay County Department of Community Health manages to “do more with less.” This is a testament to the commitment and drive of Health Director Joel Strasz and staff of the Health Department who work very hard to successfully ensure that this community receives the best health services possible. 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 carry out these programs with efficiency, commitment, dedication and respect.

*Ernie Krygier, Chair
Bay County Board of Commissioners*

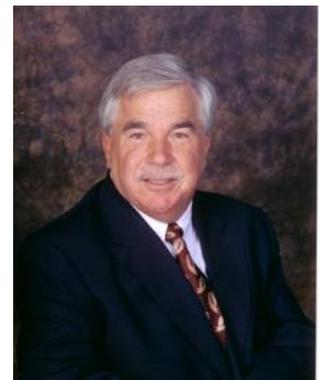


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A Message from the Management and Staff of the Bay County Health Department

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

On behalf of the management and staff of the Bay County Health Department, I am pleased to present the 2013 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 work very diligently 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.

Though 2013 was a very challenging year for the Bay County Health Department, in this report you will see how we collaborated with community, state and federal partners to provide many services. These include:

- Investigation of communicable and food-borne illness outbreaks
- 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
- Collection and disposal of household hazardous wastes
- Inspection and licensing of body art and pawnshops

In 2013 the Bay County Health Department also developed and began to implement our Community Health Improvement Plan (CHIP) with many community partners including McLaren Bay Region, the Bay Health Plan and Bay Arenac Behavioral Health Authority. The CHIP, in addition to providing a roadmap to better health for all of Bay County residents, will help us effectively develop and provide services that truly meet the needs of Bay County residents.

Furthermore, in 2013, the Department completed a three year strategic plan that further develops essential community initiatives and partnerships that will improve services that are offered in Bay County.

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. We 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,



Joel R. Strasz
Health Officer

Communicable Disease Division

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.

MICHIGAN DISEASE SURVEILLANCE SYSTEM (MDSS) Reportable Communicable Disease Statistics - 2011-2013			
DISEASE	2011	2012	2013
FOODBORNE DISEASE GROUP			
Campylobacter	4	5	10
Giardiasis	1	4	5
Listeriosis	1	1	0
Salmonellosis	10	10	8
MENINGITIS DISEASE GROUP			
Aseptic Meningitis	14	12	11
Bacterial Meningitis	1	3	0
OTHER DISEASE GROUP			
Animal Bite	238	158	90
Botulism – Infant	0	0	0
Coccidioidomycosis	2	1	1
Cryptococcosis	1	1	0
Cryptosporidiosis	-	-	5
Guillain-Barre Syndrome	0	0	2
Influenza	-	-	18
Legionellosis	1	1	1
Norovirus	-	-	1
Streptococcal Dis. Inv. Group A	2	0	5
STD GROUP			
Chlamydia	345	315	279
Gonorrhea	28	24	30
Syphilis	3	2	3
VACCINE PREVENTABLE DISEASE GROUP			
Mumps	1	1	0
Pertussis	1	0	2
Shingles	-	-	3
Varicella	12	14	4
VIRAL HEPATITIS			
Hepatitis B (Acute)	2	1	1
Hepatitis B (Chronic)	8	9	1
Hepatitis C (Acute)	0	0	0
Hepatitis C (Chronic)	78	87	57

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.

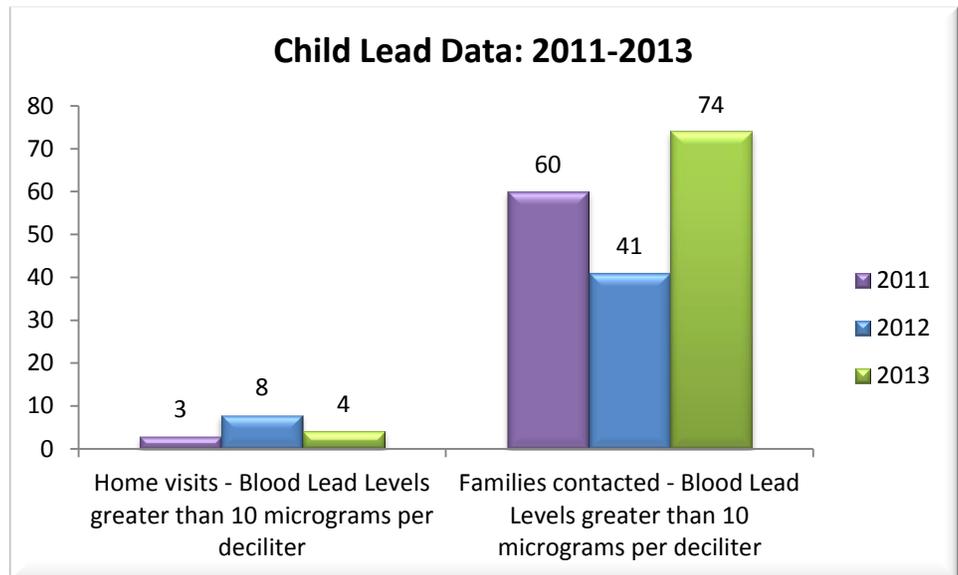


* No Bay County Residents have been reported as being affected by the ongoing multi-state fungal meningitis infection.

Child Lead Education and Screening

Effective October 2012, as recommended by the CDC, children with a blood lead level (BLL) of 5 microgram per deciliter (mcg/dl) or greater are identified as having an Elevated Blood Lead Level (EBLL) “of concern”. At this level parents and medical providers are encouraged to take action and prevent further exposure by providing education to families on sources of lead in the environment and methods parents could practice to reduce or eliminate lead exposure for their child. The state continues to **recommend**, as local resources allow, a public health nurse (PHN) home visit and case management for children with EBLL equal to or greater than 10 mcg/dl, and **mandates** a PHN and environmental health EBLL investigator for children with EBLL equal to or greater than 20 mcg/dl.

The BCHD continues to screen all children for EBLL through the WIC program at 1 and 2 years old. In addition, the BCHD Laboratory receives and completes referrals for lead screenings. Children who had an initial screening capillary BLL at or above 10 mg/dl of blood were directed to obtain a confirmatory test with a venous blood sample. For confirmatory results equal to or greater than 10 mcg/dl a Bay County Health



Department PHN contacts the family to schedule a home visit to provide EBLL education, which includes information on sources of environmental lead and methods to reduce and/or eliminate further exposure to lead. Children whose BLL equaled or exceeded 20 mcg/dl, had a home visit by both a Public Health Nurse and an Environmental Health Elevated Blood Lead (EBL) Investigator/Risk Assessor.

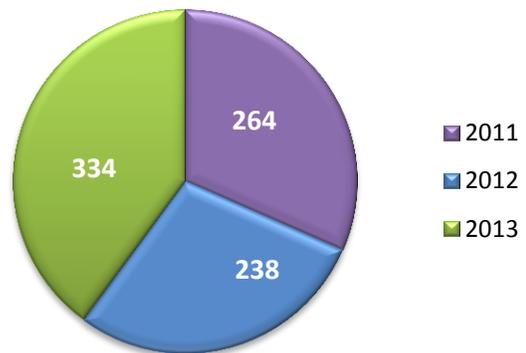
In July of 2013, MDCH introduced a new program called Healthy Homes and Lead Poisoning Surveillance System (HHL PSS). This is an electronic data base, to identify children with EBLL who need local health department follow up and it will also track homes where a child has been diagnosed with EBLL. It is still in transition to replace the former electronic data base called Stellar.

Currently in Bay County there are 14 children with an EBLL. PHN follow up for these children includes reminder calls to the family for repeat BLL testing at recommended intervals until a child’s BLL returns to less than 10 micrograms/dl. In 2013, 4 children were opened to EBLL case management by the PHN for an EBLL of 10 mcg/dl or greater, of which 2 of these children had an EBLL of 20 mcg/dl or greater and also received an environmental investigation from the Environmental Health division. This past year, one child was closed to case management as their BLL returned to normal.

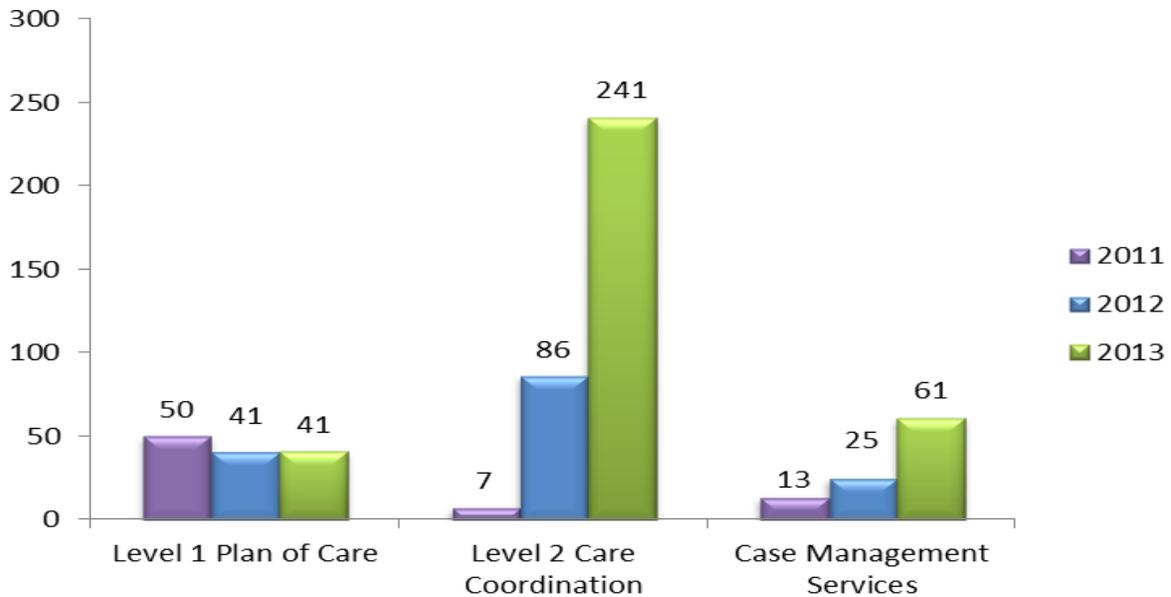
Children's Special Health Care Services

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.

CSHCS - Number of Families Enrolled



CSHCS Program Data - 2011-2013



Emergency Preparedness

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).



Throughout the year BCHD is represented at various preparedness related meetings. These meetings include monthly Michigan Department of Community Health (MDCH) Office of Public Health Preparedness (OPHP) teleconferences, Region 3 Emergency Preparedness Coordinator (EPC) meetings, Region 3 Healthcare Preparedness Network (HPN) Advisory Committee and Planning Board meetings, bi-monthly Local Emergency Planning Committee (LEPC) meetings, quarterly Local Planning Team (LPT) meetings, and other collaborative meetings as they are scheduled. The EPC is also responsible for making sure BCHD participates in required monthly and quarterly radio and other communication drills.



Additionally, the BCHD has to maintain and test several plans throughout the year. These plans include, but are not limited to, the Emergency Operations Plan (EOP), Crisis Emergency Risk Communications (CERC) Plan, Strategic National Stockpile (SNS) Plan, Continuity of Operations Plan (COOP) and Mass Vaccination Plan. MDCH OPHP requires, at minimum, that each plan is revised and updated annually. Some of these plans are required to be submitted to MDCH OPHP for plan review and score. The SNS Plan is required to meet a minimum score of 89%. In 2013, BCHD scored 94%, thereby meeting and exceeding minimum requirements.

Emergency Preparedness (EP) staff attended the National Public Health Preparedness Summit in March where they gained additional knowledge and resources to further emergency preparedness planning and response at the local level. In addition, EP staff facilitated the required annual preparedness training for BCHD staff as part of the health department's all day staff in-service as well as conducted a mini-SNS point of dispensing drill to further train staff on their roles and responsibilities during an emergency event requiring the dissemination of antibiotics to Bay County's population.

Additional events EP staff participated in include: a DEQ facilitated tabletop exercise at the Bay County West Side Wastewater Treatment Facility. The scenario focused on a terrorism incident at the facility and what the response would be from all the agencies who participated; "National Night Out" Event and numerous trainings, webinars and teleconferences throughout the year all focused on being ready to respond in a public health emergency.

Environmental Health

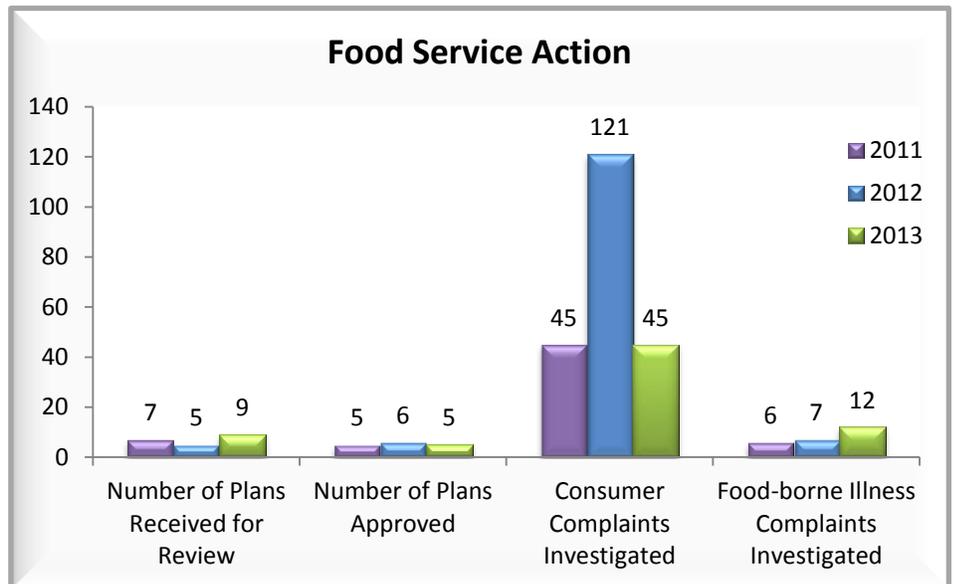
The Environmental Division of the Bay County Health Department protects the public’s health through programs established by the Michigan Public Health Code and local Sanitary Ordinances. These programs focus on the prevention of disease and exposure to pollutants via education, inspection of facilities 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.

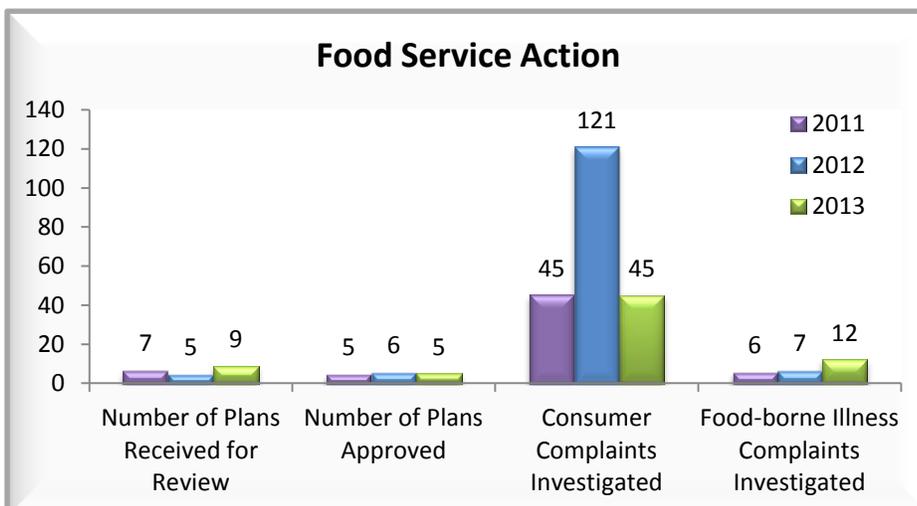
Food Service Program:

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 2013, approximately 264 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 Sanitarian Daniel Dicks. 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

	2011	2012	2013
Number of Participants	56	67	88
Number of Participants that Passed ServSafe Exam	56	66	85

Household Hazardous Waste Collection Program:

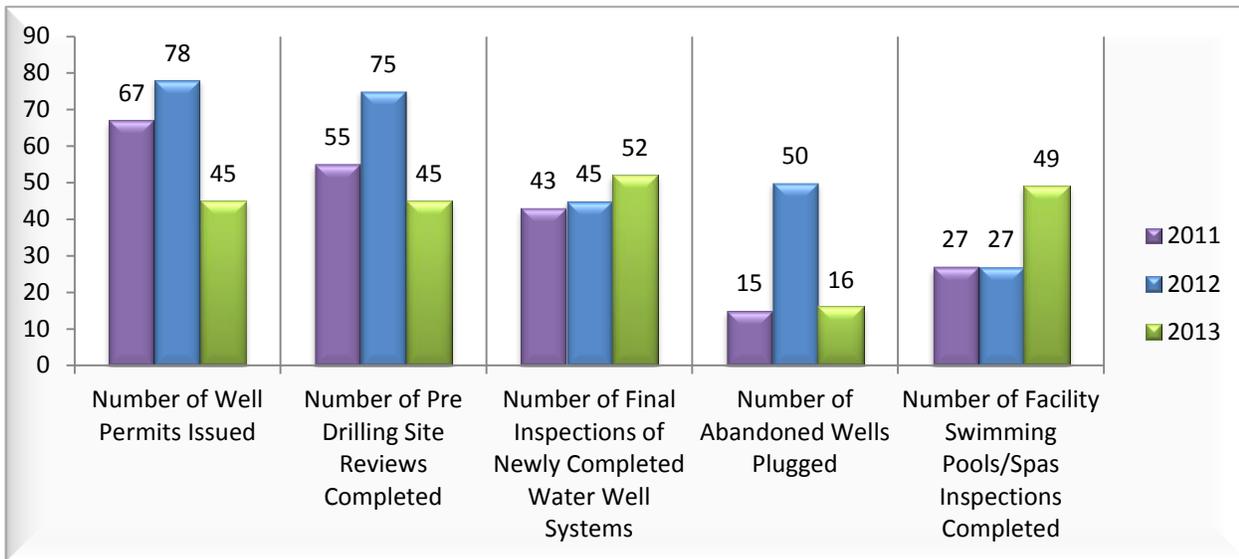
The Household Hazardous Waste Collection Program gives Bay County residents a legal and cost-free way to dispose of unwanted household chemicals that cannot be disposed of in the regular trash. The program is sponsored by the Dow Chemical Foundation and Bay County Health Department. A variety of items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



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.



2013 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	0	11	0
2	Saginaw River – Bay City	15	2	11	0
3	Wenona Beach	41	0	37	0
4	Kawkawlin River	13	1	9	0
5	Bay City State Rec Area	41	0	37	0
6	Brissette Beach	15	0	11	0
7	S. Linwood Beach	15	0	11	0
8	Pinconning Park	15	0	11	0
	Total	170	3	138	0

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:

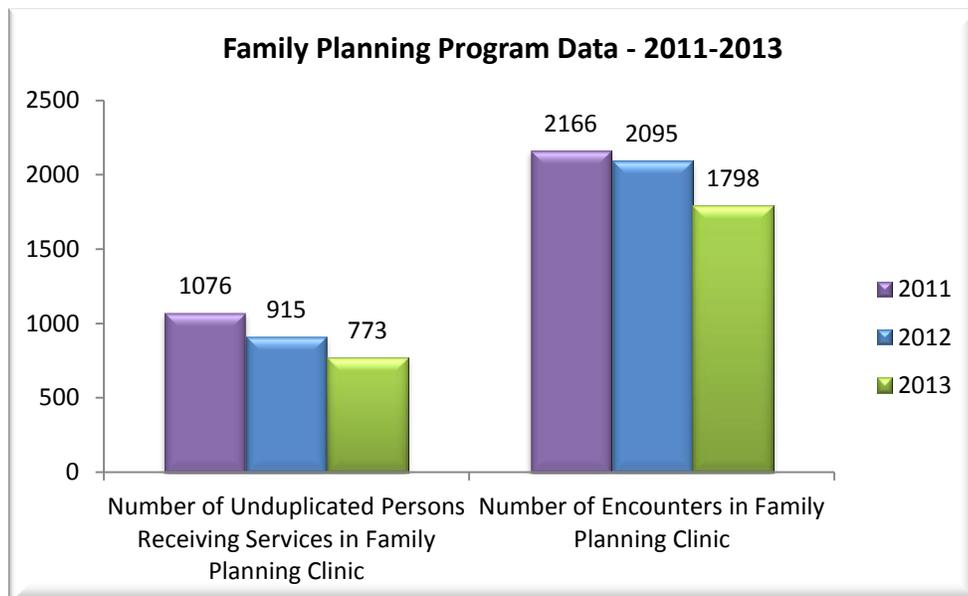
On-site sewage disposal permits are issued for homes and businesses that are not served by municipal sewer systems. Sanitarians conduct field evaluations to determine the suitability of conditions for on-site disposal of sewage. The Division reviews construction plans and consults with owners and engineers 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:

	2011	2012	2013
Number of Parcels Evaluated	307	263	224
Number of On-Site Sewage Disposal & Tank Permits Issued	97	62	93
Number of Alternative/Engineered Systems Approved	0	0	0
Number of Complaints Investigated	22	21	27

Family Planning Program

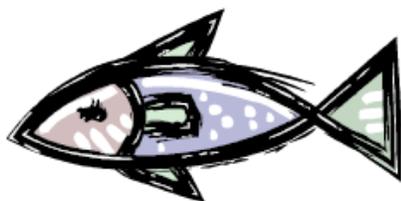
The Family Planning Clinic serves men and women of childbearing age for reproductive health needs. Clients may utilize the clinic for the following types of services: pregnancy testing and referral, sexually transmitted disease testing and treatment, and contraceptive needs. Women desiring a physical 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.



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 Education Division

The Goal of the Health Education Division is to improve the health of individuals and the community through presentations, community events, and providing educational materials on health related topics. In 2013, the BCHD participated in over 20 community events promoting the programs and services provided by the health department.



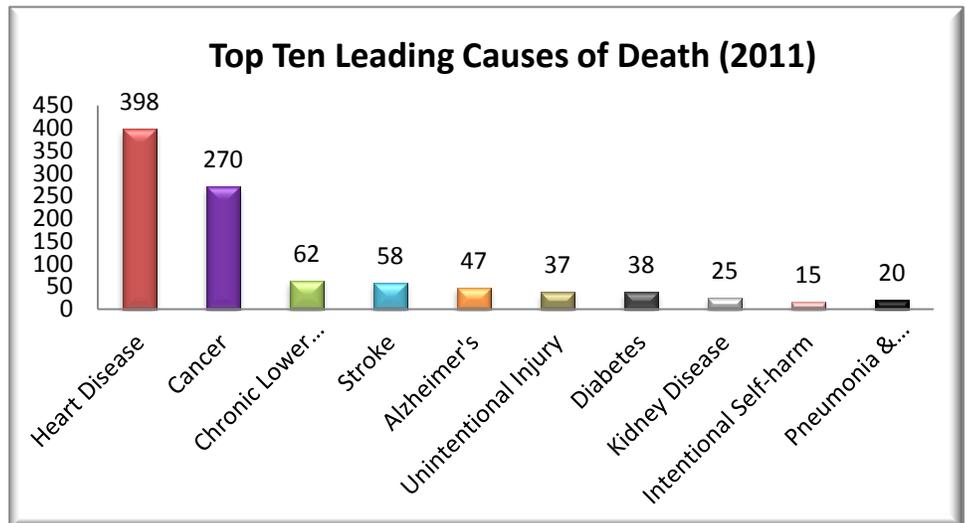
Eat Safe Fish

Through the Eat Safe Fish and Wild Game program, Health Educators participated in numerous outreach events and provide education and presentations to local schools and organizations. The number of outreach provided this year exceeded the number provided in 2012. The Eat Safe Fish program provided a total of 48 presentations to various groups throughout Saginaw and Bay County and participated in 28 community events.

Eat Safe Fish also assisted the Environmental Protection Agency, Region V with 10 additional community outreach events. Additionally, Eat Safe Fish has established several new relationships and brochure drop-off locations and assisted Bay City State Recreation Area with 10 "Lessons Learned from the Bald Eagle" field trips.

Community Health Assessment

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 Department's webpage: www.baycounty-mi.gov/health. The information gathered will be used to 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.

Community Health Improvement Plan

The Bay County Health Department, along with its many partners, is pleased to present the 2013 Community Health Improvement Plan (CHIP). The CHIP is possible because of all the hard work and support from the Health People Healthy Bay (HPHB) Coalition. Health People Healthy Bay is a community collaborative comprised of several multidisciplinary organizations. The organizations came together throughout several months to review the findings from the 2012 Community Health Assessment and create a plan to address the health priorities for Bay County.

As a result of the Community Health Assessment (CHA), Healthy People Healthy Bay was formed to create a plan to address the health issues in Bay County. From the CHA, four health priority areas were identified with certain focus areas for each one. The Community Health Improvement Plan (CHIP) outlines the goals and objectives for each health priority area.

To provide oversight and decision-making for the CHIP, a Leadership Team was formed within Healthy People Healthy Bay comprised of representation from various community organizations. Additionally, work groups were formed to create work plans for each health priority area. These work plans consist of long-term goals and objectives, and provides a framework for completing the plan.

Bay County Health Priority Areas

- 1. Access to Care:** This work group focuses on assisting residents in establishing a medical home, obtaining health insurance and establishing a system of common intake and referral.
- 2. Behavioral Health:** The focus of this workgroup is on creating a work plan dedicated to improving mental health among adults and youth, and increasing resiliency in youth.
- 3. Children's Health:** The focus of this work group is on creating a work plan dedicated to reducing obesity, chronic disease and abuse and neglect in children.
- 4. Chronic Diseases:** This work group's focus is on preventing and managing chronic disease in older adults.

A community forum was held to present the data obtained from the CHA and begin the process of the health improvement plan. Participants had the opportunity to discuss the health priority areas and provide feedback on where the focus should be directed. At the end of the forum, community members decided which work group they wanted to participate in.

In February, we held the first work group meeting. Each health priority area work group was represented at the meeting. The purpose of this meeting was to provide the structure of the workgroups and layout of the work plan. The workgroups met once a month through June to complete the plans.

The complete Health Improvement Plan can be found on the Bay County Health Departments webpage at: <http://www.baycounty-mi.gov/health/>

Hearing and Vision Program



The Bay County Health Department Hearing & Vision Program provides screening by certified technicians for all Bay County Schools (public, private and charter), Day Care Programs and Head Start Preschools. The program also provides free vision and hearing screenings for children prior to entering kindergarten, as required by the Michigan Public Health Code. Bay County school children receive annual hearing tests in grades

K, 2nd, 4th, and special education classrooms, and annual vision tests in grades 1st, 3rd, 5th, 7th, 9th and special education classrooms. The Health Department's goal is early identification of a hearing or vision impairment which leads to prompt and possibly preventative treatment, before the impairment could affect a child's ability to learn.

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.

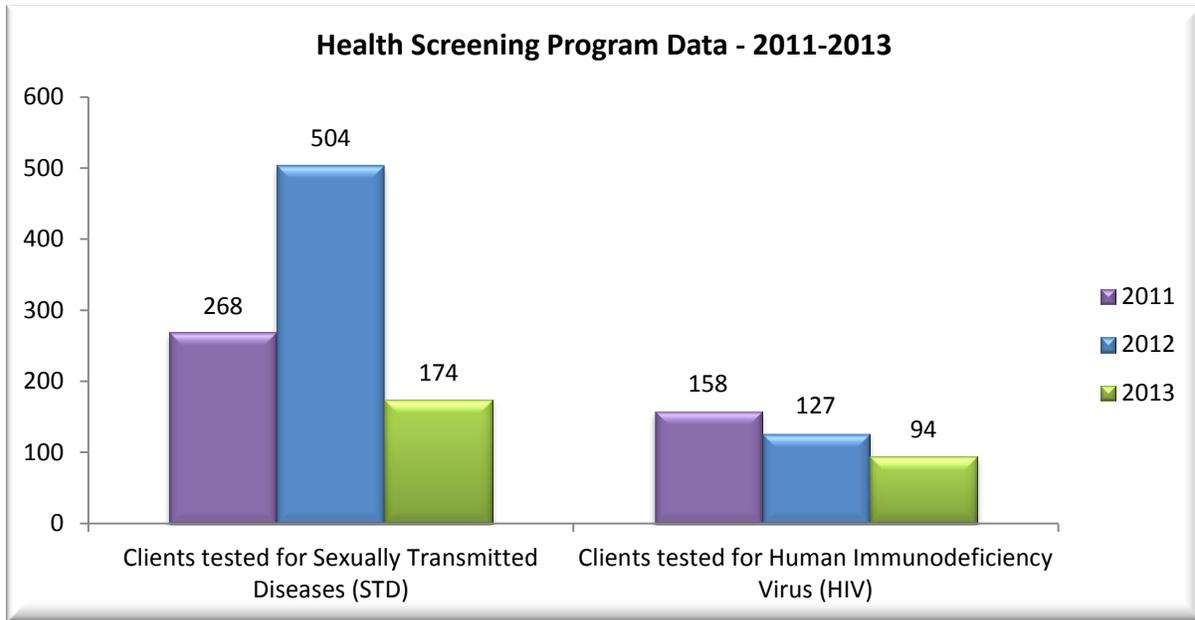
	Vision		Hearing	
	2011/2012	2012/2013	2011/2012	2012/2013
Preschool aged Children	1,075	937	1,087	944
Special education students	217	157	30*	29*
School age	6,404	5,982	3,994	4,085
Total	7,696	7,076	5,111	5,058

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.

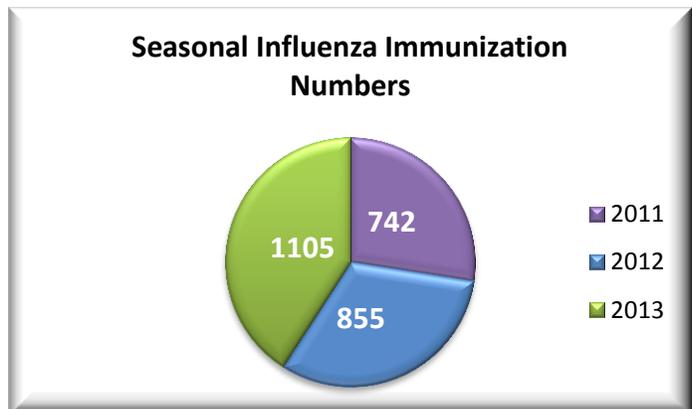
Left untreated, these diseases can develop into pelvic inflammatory disease (PID), which costs, on average, \$3,600 to treat. Based on the number of women screened and referred for treatment, every dollar invested in STD screening results in at least \$2.50 in savings.¹

Health Screening Data:



Immunizations 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.



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

Vaccine	2011	2012	2013
DTaP	179	126	169
Dtap/IPV	103	122	131
DTaP-Hep B-IPV	181	150	200
DTaP-Hib-IPV	-	-	7
Hep A (Adult)	79	120	100
Hep A (Pediatric)	520	453	456
Hep A/Hep B	26	0	0
Hep B (Adult)	88	144	130
Hep B (Pediatric)	47	18	34
Hib-Pedvax	208	195	285
HPV	312	291	296
Influenza (seasonal)	742	855	1105
IPV Dose	90	62	84
Meningococcal Conjugate	581	382	447
MMR	277	231	144
MMRV	18	12	151
Pneumococcal Conjugate	427	271	324
Pneumonia	1	0	8
Rotavirus	118	110	111
TB Testing	184	139	143
Td Adult Only	7	2	3
Tdap	658	441	495
Varicella	556	402	281
Zostavax	10	0	0
TOTAL	7423	6538	7117

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.



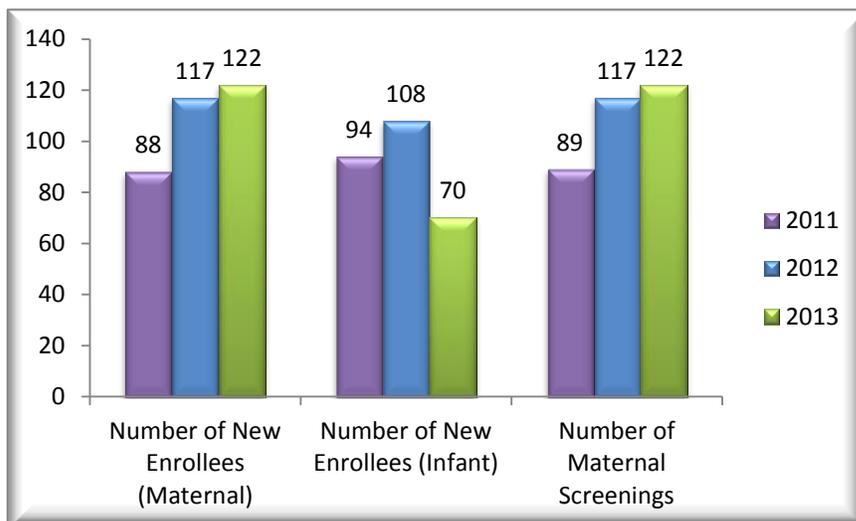
Laboratory Services

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.

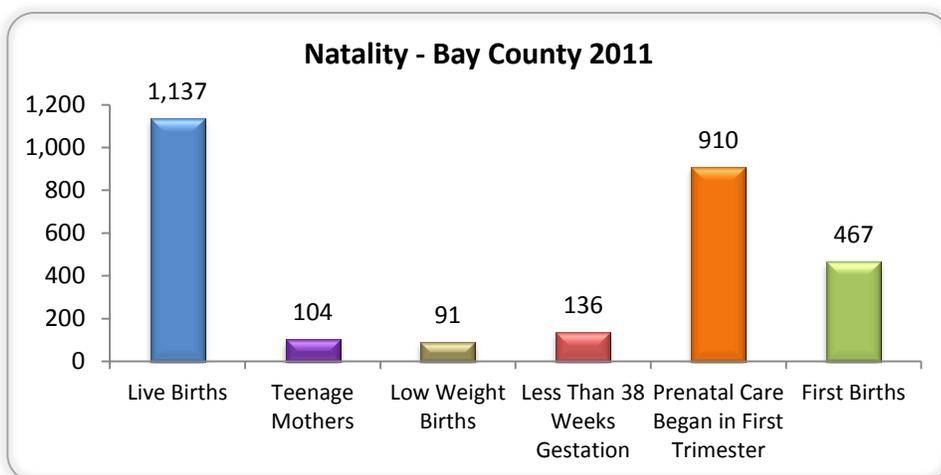
Laboratory Stats 2013:	Number
Total Clinical Tests	1726
Total Water/Non-Clinical Tests	2637

Maternal Infant Health Program

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 for education and referrals to community resources.



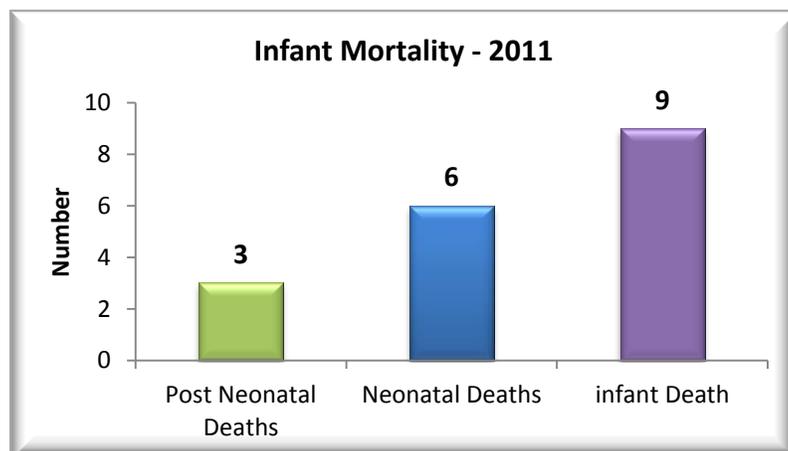
Infant Natality and Mortality



Post Neonatal deaths are deaths that occurred during days 28 and 364 of live.

Neonatal deaths are deaths that occurred in the first 27 days of life.

Infant deaths are the total number of deaths within the first year of life.



Bay County Medical Examiner

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	2011	2012	2013
0-10 yrs.	5	4	2
11-20 yrs.	2	3	3
21-30 yrs.	11	8	11
31-40 yrs.	14	13	6
41-50 yrs.	19	15	19
51-60 yrs.	20	28	23
61-70 yrs.	13	8	9
71+	8	11	12
Total	92	90	85
Gender			
Male	55	61	59
Female	37	29	26
Cause of Death			
Blunt Force Trauma - Total	14	18	11
<ul style="list-style-type: none"> • Auto Accident • Homicide • Industrial • Falls 	13 0 1	17 1 (Airplane Crash)	9 (3 motor cycle) 0 0 2
Liver Disease	10	1	6
Homicide	0	1	1
Hanging	0	1	1
Heart	41	27	34
Drug Overdose	24	25	21
Gunshot	3	1	5
Drowning	-	-	1
Manner of Death			
Accidental	21	20	19
Homicide	0	1	1
Indeterminate	24	25	19
Miscellaneous	0	16	0
Natural	40	40	39
Suicide	7	3	9
Alcohol/Drug Involved			
Alcohol	8	1	13
Cocaine	0	2	5
Hydrocodone	8	7	7
Methadone	6	5	1
Morphine	2	4	6
Oxycodone	0	2	0
Fentanyl	0	4	1

Women, Infants and Children

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	2011	2012	2013
WIC Base Caseload	3,000	3,000	2952
Closeout Participation	2,875	2,811	2741
% Closeout Participation to Base Caseload	96%	94%	93%

WIC Program Appointments	2011	2012	2013
Certifications (including Priority Certifications)	1,897	1,892	1886
Re-Certifications	3,579	3,385	2845
CEVALS (New in 2013)	-	-	491
Infant Evaluation	661	596	611
Registered Dietitian Assessments	390	254	343
Nutrition Education	1,678	1,683	1592
Lead Screens	611	697	684
Project Fresh Coupons Issued	3,480	3,555	3,555

Research has shown that there is no better food than breast milk for a baby's first year of life. Breastfeeding provides many health, nutritional, economical and emotional benefits to mother and baby. Since a major goal of the WIC Program is to improve the nutritional status of infants, WIC mothers are encouraged to breastfeed their infants. WIC has historically promoted breastfeeding to all pregnant women as the optimal infant feeding choice, unless medically contraindicated. (Reference: USDA)

Bay County WIC now offers this support with a breastfeeding peer counselor. Breastfeeding education and support includes: individual appointments, group classes and telephone calls to any WIC participant

In 2013, \$1,820,239.40 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.

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, 2012– September 30, 2013



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.

Tammy Roehrs: Director, Division on Aging

Volunteer Program

The Division on Aging programs relies on volunteers of all ages to assist with Friendly Transportation, Shopping, Senior Center Helpers, Wonderful Times Distribution, Tax Credit Volunteer, Special Events and Program Helpers, and any other requests that are needed.

Volunteers gave 9,713 hours of their time in 2013 to the Division on Aging.

Bay County Division on Aging Services Provided

Home delivered meals provide seniors in Bay County with hot, nutritious meals. The program also supports the caregiver with a daily check from a Division on Aging representative. Menus are created to ensure that each meal shall provide, at a minimum 1/3 of the daily recommended dietary intake (DRI) allowance established by the Food and Nutrition Board of the Institute of Medicine of the National Academy of Sciences.

Senior Dining Centers (Congregate Meals) are located in several locations throughout Bay County. They provide opportunities to promote better health among the older population through improved nutrition. Congregate nutrition reduces social isolation often experienced by the older adult as they can experience fellowship, and participate in a variety of activities such as classes and special speakers, exercise and health clinics.

Services Provided Fiscal Year 2012-2013 (October 1, 2012, through September 30, 2013)					
Program	Total Clients	Contract Meals	Waiver Meals	NSIP**	Total Meals
Congregate Nutrition	734	35,689	0	1,173	36,862
Home Delivered Meals	873	110,968	8,433	0	119,401

Case Coordination & Support Program provides a Case Manager that visits the senior at home and provides a comprehensive assessment of persons 60 and over, and assistance in linking them with available community services and informal support systems.

Homemaking Program aids seniors by taking care of tasks as such as cleaning, laundry, shopping, and taking care of basic errands.

Personal Care provides bathing and other personal hygiene needs. This program also helps prevent accidents in the home setting.

Support Services in Hours								
Program	Total Clients	AAA Contract	*Waiver	VA	Care Mgmt.	DHS	Senior Millage	Total Hours
Case Coordination & Support	1,036	5,181	0	0	0	0	0	5,181
Caregiver Training	73	551	0	0	0	0	0	551
Exercise Program	88	1,433	0	0	0	0	0	1,433
Homemaking	226	7,295	0	0	134	0	0	7,429
Personal Care	44	1,233	0	0	218	299	0	1,750

Exercise Program is evidence-based disease prevention program that demonstrates through evaluation to be effective for improving the health and wellbeing of reducing disease, disability and /or injury among older adults.

Caregiver Program provides support groups, and trainings to a range of individual and groups with services that assist caregivers in making decisions, solving problems, and gaining knowledge related to their caregiving roll

Division on Aging Sources of Income:

Sources of Income		
Source	Amount	Percentage
Senior Millage Fund	\$1,412,224	45%
Additional Senior Millage (Kitchen & Services)	\$847,334	27%
Region VII Area Agency on Aging Grants	\$463,116	15%
Client Contributions	\$244,014	7%
NSIP***	\$96,313	3%
Medicaid Waiver	\$44,810	1%
Other Income/Rebates	\$24,099	.8%
Client Fees	\$21,111	.7%
General Fund	\$6,200	.2%
Department of Human Services	\$4,238	.1%
Total	\$3,163,459.00	100%

* Service units converted to hours
 ***Nutrition Services Incentive Program (formerly USDA)
 NOTE: All statistics and dollar amounts are subject to final audit.

Additional Senior Millage

With the assistance of the additional senior millage of 0.3 mills voters approved in the November 2012 general election, the Division on Aging resumed the Friday Home Delivered Meal services to 525 Bay County Senior clients

The "Request for Qualifications Committee" awarded the kitchen project bid for the Architectural Services to Spicer Group Engineering from a field of ten (10) submissions. Construction on the project is set to begin in the summer of 2014

Senior Olympics

We are proud to be able to help promote healthy lifestyles for adults, particularly seniors 50 years of age and older. Staying fit and active is the best answer to aging and our Olympic games provide an excellent way for seniors to maintain or improve their physical and mental condition, as

well as their coordination, while enjoying some friendly competition. Senior Olympics is Division on Aging's largest social event.

The 2013 Bay County Senior Olympic games were

held from May 29 through June 14, 2013. The theme was "Mind, Body & Spirit 26 Years Strong" **There were 258 participants and 16 medal events.**

A total of 37 gold, 38 silver and 32 bronze medals were given out. Games offered during the event include: Shuffleboard, Fishing, CO-ED Tennis, Horseshoes, Cycling, Euchre, Putt-Putt Golf, Bowling, Smear, Corn hole Toss, Walking Race, Pinochle and Golf.

Health and Wellness Programs:

The Division on Aging in cooperation with the Bay County Community Center offered new fitness classes geared to age 60 and older, with exercises for everyone, especially those with weakness, balance issues and diminished range of motion.

Osteoporosis Strength Exercise Classes

This program demonstrates through a pre and post evaluation to be effective for improving the health and wellbeing among the older adults. This is a six week program concentrated on the bones and muscles that deteriorate due to age, disease, and lack of use.

Transportation Request

The Division on Aging transportation program will coordinate transportation for the older adult to and from community facilities in order to receive support services, reduce isolation, or otherwise promote independent living. **Provided 637 rides**



**A MATTER OF
BALANCE**
MANAGING CONCERNS ABOUT FALLS

Matter of Balance

Matter of Balance emphasizes practical strategies to reduce fear of falling and increase activity levels. Participants learn to view falls and fear of falling as controllable, set realistic goals to increase activity, change their environment to reduce fall risk factors, and exercise to increase strength and balance. Division on Aging offered a total of 24 sessions with 36 in attendance.

Special Events

Bay County Division on Aging is the resource for various Special Events and Programs for the older adult. The Special Events for Seniors and Special Programs for Older Adults enable Bay County seniors to enjoy cultural, educational and recreational events and to be recognized as valued members of the community

Some of the special events offered:

- Movie and Lunch Series at the Bay County Library Systems
 - Dinner Theatre, Bay City Players
 - Country Fireside Picnic
 - Dow Gardens Tour
 - Dinner Theatre, Local High Schools
 - Variety of Educational In-Services- Caregiver Program and Volunteer Programs
- All of the special events were accompanied by a breakfast, lunch or dinner.



The Division on Aging served 3,366 meals through special events.

Medicare Part D

Bay County Division on Aging in conjunction with Michigan Medicare Medicaid Assistance Program (MMAP) held clinics to assist seniors with Medicare Part D and Medicare Advantage Plans, with the clinics being held at the Division on Aging office and conducted by Case Managers that are Medicare Medicaid Assistance trained counselors. **During the 2013 open enrollment Division on Aging served 138 seniors.**

Holiday Gift Baskets

In cooperation with the Bay County Food Network the Division on Aging delivered 72 holiday food boxes to 36 homebound clients.

Happy 20th Anniversary, Riverside Friendship Center

The Division on Aging celebrated a 20th Anniversary at the Riverside Friendship Center on October 7, 2013. The Dining Center addition provided more than 4,000 square feet for senior citizen activities and was built as the result of a 1989 petition drive and the creation of a building committee for senior citizens.



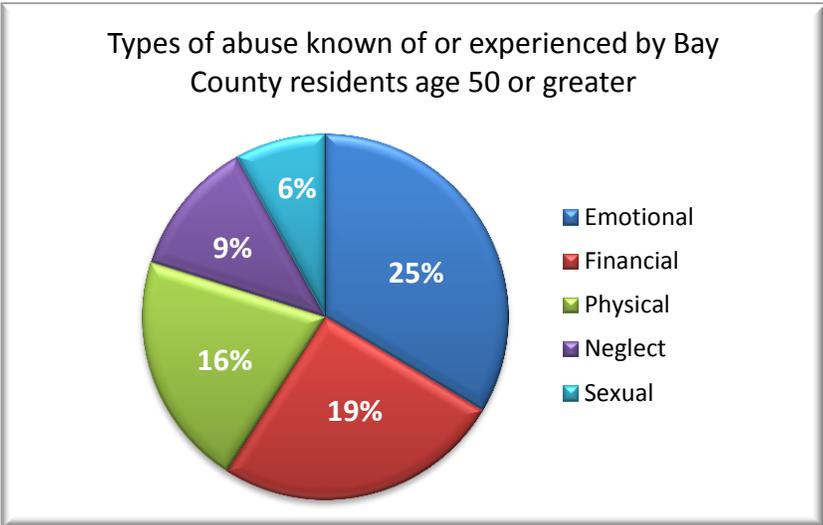
Banfield
Charitable Trust

Grant Awards

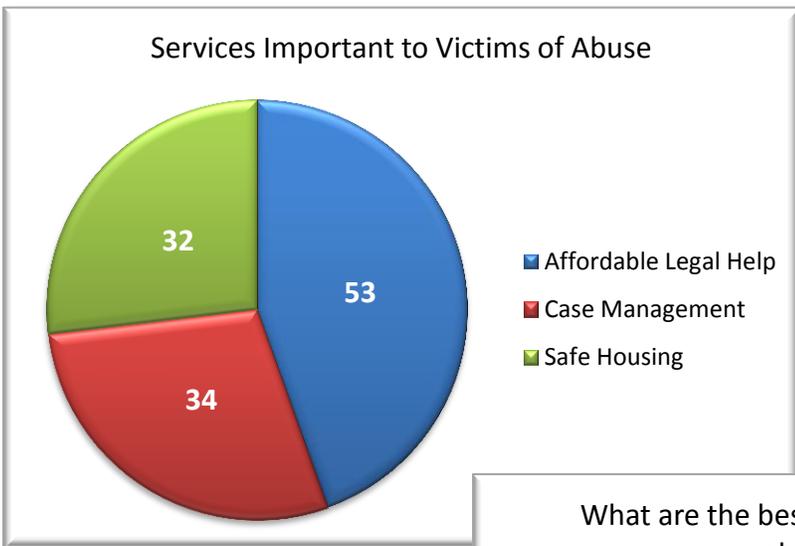
The Bay County Division on Aging received a grant award in the amount of \$2,500.00 from the Banfield Charitable Trust Fund. The funds are being used to help support the Division on Aging in providing a pet food delivery program that will enable homebound clients to receive food and litter for their companion animals. The Division on Aging partnered with the Humane Society of Bay County to help package and distribute the pet food to the pets of the homebound clients.

Elder Abuse Grant - Project Survey Results

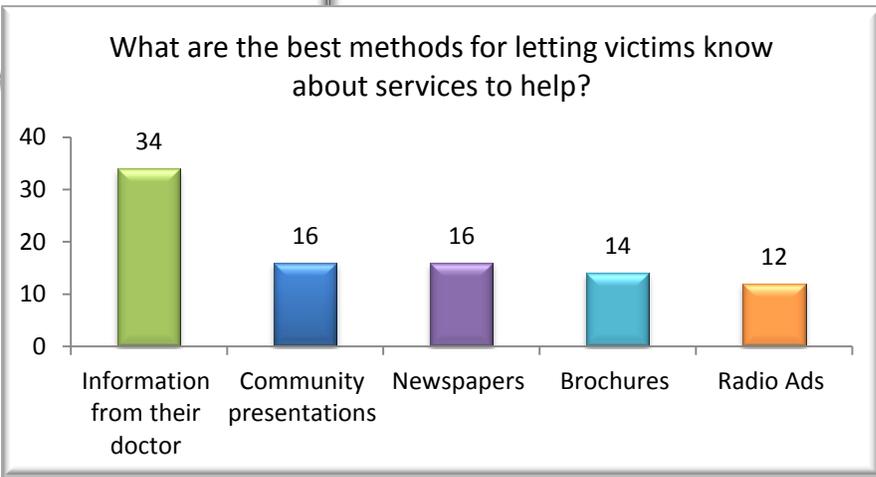
With funding provided by the U.S. Department of Justice, Office on Violence Against Women, surveys were conducted to gather data from people age 50 and older living in Bay County. According to 25 percent of the 665 Bay County residents who were surveyed about their experiences with abuse at the age of 50 and older the answer was yes. That amounts to one out of every four people living in Bay County who are 50 or older or over 10,500 people. The surveys included three areas: personal knowledge and experience with abuse, the best methods for reaching victims and services needed to help them stop the abuse.



The responses provided a snapshot of the types of abuse that occur in the community. The information has been used by the Bay County Elder Abuse Coordinated Community Response Team. The team held a planning session in September 2013 and continues to work on improving service coordination, enhancing existing services, and establishing new ways to aid older victims of abuse.

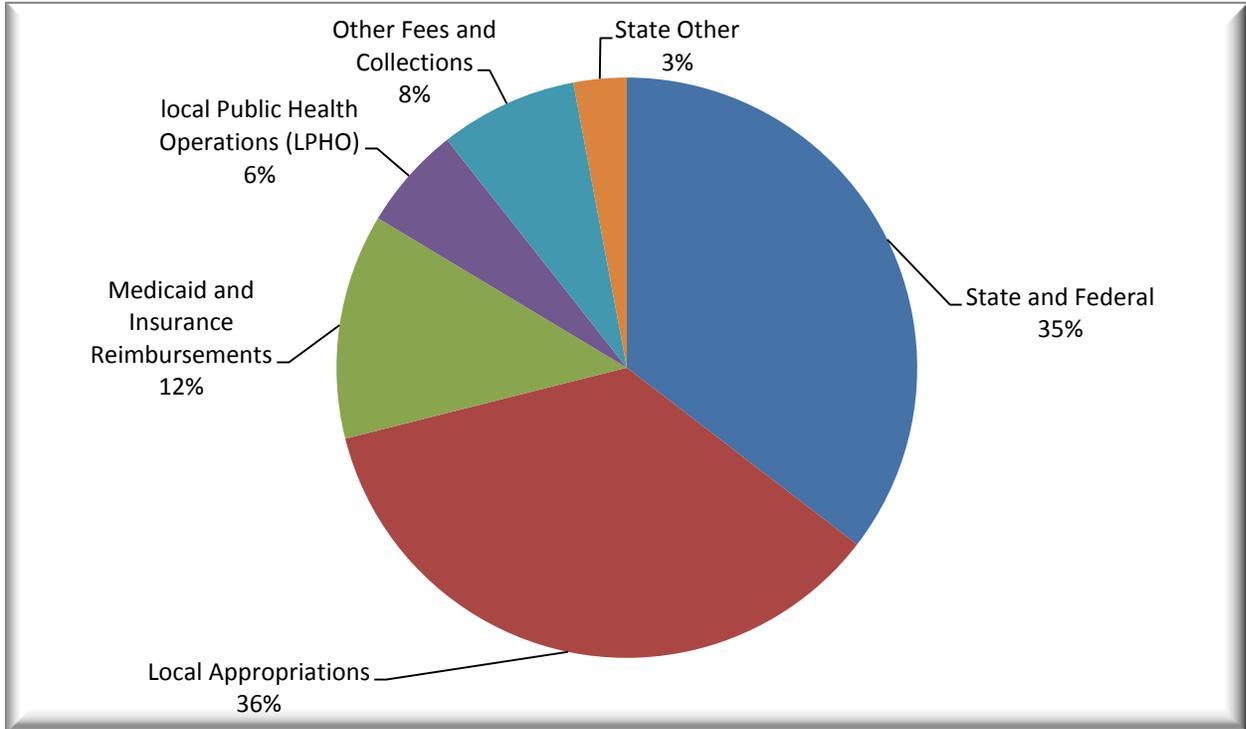


The survey data also identified the services needed by older victims to help them become independent from their abusers, as well as the best ways to get information about services for help.



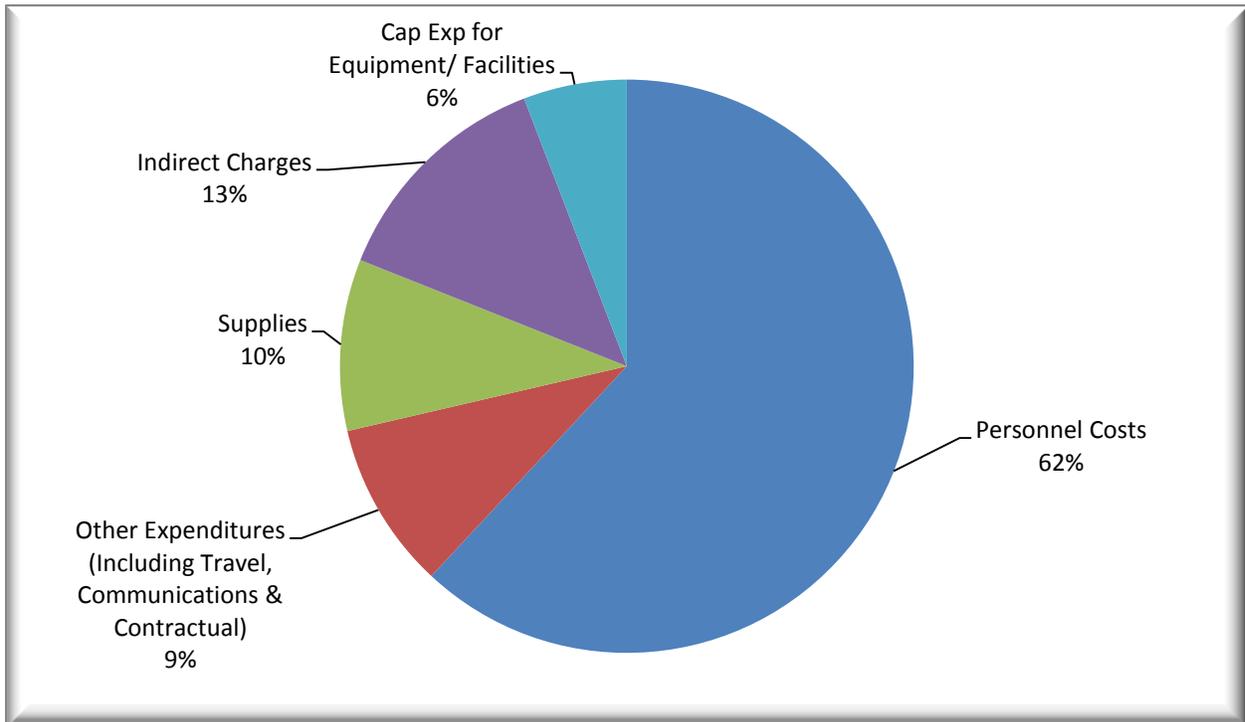
Bay County Health Department Financials

Fiscal Year End 9/30/2013 Revenues



Health Department Revenue	
State and Federal	\$1,306,324
Local Appropriations	\$1,313,857
Medicaid and Insurance Reimbursements	\$462,616
Local Public Health Operations (LPHO)	\$212,341
Other Fees and Collections	\$282,696
State Other	\$109,079
Total Revenues	\$3,686,913

Bay County Health Department Financials
Fiscal Year End 9/30/2013 Expenditures



Health Department Expenditures	
Personnel Costs	\$2,283,339
Other Expenditures (Including Travel, Communications & Contractual)	\$347,914
Supplies	\$356,495*
Indirect Charges	\$484,309
Cap Exp. for Equipment/ Facilities	\$214,856
Total Expenditures	\$3,686,913

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

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