VIGO COUNTY HEALTH DEPARTMENT



2017 ANNUAL REPORT



The Vigo County Health Department serves to promote, protect and provide for the well-being of the citizens in Vigo County

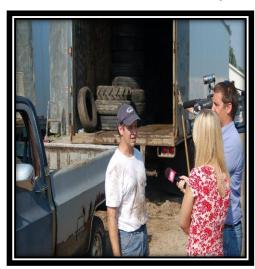
BOARD OF HEALTH

For almost 50 years, the Vigo County Health Department has provided the citizens of Vigo County with the very best public health services possible. Today, those services have expanded into areas our predecessors never imagined, challenging us to keep pace with the demands of an ever changing environment and population. The Vigo County Health Department has continued in the successful tradition established under the leadership of its Board of Health. Members of the Board of Health have roots in medicine, law, business, industry, labor and social services. Maintaining communication between the governing body and staff members has been instrumental in relating regulation and procedures that best serve the community. The Vigo County Board of Health is appointed by elected officials in order to represent the needs of the community. The Vigo County Board of County Commissioners appoint all seven members of the board, no more than three from the same political party.

2017 BOARD OF HEALTH

Jeffery Depasse, Chair
Jared Farnsworth, Vice-Chair
David Runyan
Brian Garcia
James Turner, D.O.
Ajit Singh, M.D.
Sarah Ciolli, R.N.

Board members actively involved in Health Department activities:



Board President, Jeff Depasse



Warren Sweitzer & Dr. Jim Turner

PUBLIC HEALTH IN VIGO COUNTY





Dr. Darren Brucken Health Officer

Joni Wise Administrator

Vision: Healthy People in Healthy Communities

Mission: Promote physical &mental health, prevent disease, injury and disability

Public Health Goals

- Prevents epidemics and the spread of disease
- Protects against environmental hazards
- Prevents injuries
- Responds to disasters and assists communities in recovery
- Assures the quality and accessibility of health services

Essential Public Health Services

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

Programs and services are developed, implemented, evaluated and revised (if needed) to enable carrying out the essential public health services and meet the public health goals.

VIGO COUNTY HEALTH DEPARTMENT

Administration

Darren Brucken, M.D., Health Commissioner
Joni Wise, Administrator
Travella Myers, Deputy Administrator
Rhonda Coombs, Bookkeeper
Brooke Foltz, Purchasing Clerk

Environmental Health Division

Travella Myers, Supervisor
Theresa Jackson, Food Specialist
Amanda Bales, Food Specialist
Mark McClintock, Wastewater Specialist
Marci Shaw, Lead Specialist
Steve Thompson, Wastewater Specialist

Health Education/Media Coordination

Christina Keller

Vector Control Division

Mike Grayless, Supervisor Tony Grayless, Assistant Supervisor Warren Sweitzer, Assistant David Higgins, Assistant Logan Edwards, Assistant Kim Edwards, Secretary Jeremy Johnson, Seasonal

Vital Statistics Division

Loretta Nicoson, Supervisor Cheryl Clements, Registrar Brandie Draser, Registrar Kirsten McGrew, Registrar July 2017

Nursing Division

Catherine Brown, M.D., Pediatrician
Andrea Craft, RN, Staff Nurse
Twyla Spidel, RN, Staff Nurse
Chelsea Willis, RN, Staff Nurse
Dolly Moss, Secretary
Teresa Bechtel, Immunization Registry Clerk
Roni Rozina, Insurance Billing Specialist
Chrissy Barbour, RN, Staff Nurse-November 2017
Chelsea Kizer, RN, Staff Nurse-October 2017

FINANCIAL REPORT FOR 2017

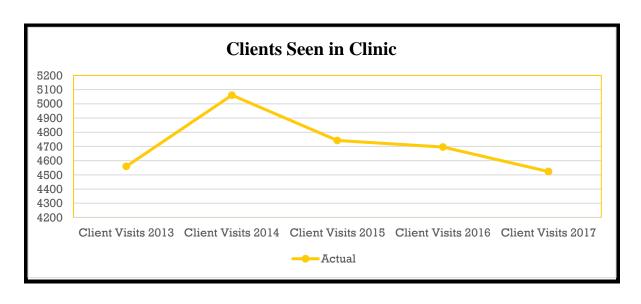
Cash Balance in General Health: January 1, 2017 Receipts January 1 – December 31, 2017 Expenditures January 1 – December 31, 2017 Cash Balance in General Health: December 31, 2017	\$ \$	773,131.19 1,493,781.51 1,465,667.79 801,244.91
Cash Balance in <u>Health Donation</u> : January 1, 2017 Receipts January 1 – December 31, 2017 Expenditures January 1 – December 31, 2017 Balance in Health Donation: December 31, 2017	\$ \$ \$	52,290.45 28,921.83 24,904.73 56,307.55
Cash Balance Carry Over in <u>Health Maintenance</u> : January 1, 2017 Cash Balance in Health Maintenance: January 1, 2017 Receipts January 1 – December 31, 2017 Expenditures January 1 – December 31, 2017 Cash Balance in Health Maintenance: December 31, 2017)	\$ \$ \$ \$	17,731.50 36,336.00 36,336.00 87,364.03 3,039.47
Cash Balance in Coroner's Fund: January 1, 2017 Receipts January 1 – December 31, 2017 Expenditures January 1 – January 31, 2017 Cash Balance in Coroner's Fund: December 31, 2017	\$ \$ \$	1,444.00 16,930.00 15,306.00 3,068.00
Cash Balance in Health Trust: January 1, 2017 Receipts January 1 – December 31, 2017 Expenditures January 1 – January 31, 2017 Cash Balance in Health Trust: December 31, 2017	\$ \$ \$	55,843.97 22,298.79 19,344.08 58,798.69
Cash Balance in voucher submitted <u>Immunization Grant:</u> January 1, 2017 Receipts January 1- December 31, 2017 Expenditures January 1 – December 31, 2017 Balance as in Immunization Grant: December 31, 2017	\$	-5,991.24 59,158.55 62,348.44 -9,181.13

NURSING DIVISION



Left to right: Chrissy Barbour RN, Roni Rozina, Teresa Bechtel, Dolly Moss, & Chelsea Kizer RN

The Vigo County Health Department (VCHD) Clinic is located at 696 S. 1st Street at the southwest corner of the Vigo County Annex Building. In 2017, three full-time Registered Nurses, a Secretary, an Immunization Registry Clerk and an Insurance and Billing Clerk provided staffing for the Clinic. In addition, a Pediatrician, Dr. Catherine Brown, staffed our weekly Well Child Clinics. The Health Department Clinic provided services to both children and adults for a nominal fee or free of charge.



WELL CHILD PROGRAM/SPORTS PHYSICALS/KINDERGARTEN PHYSICALS/VACCINE FOR CHILDREN PROGRAM

The Well Child Program serves children from birth through 18 years of age. In 2017, the VCHD Clinic continued weekly Well Child Clinics, in which Dr. Brown provided well child physicals, sports physicals, kindergarten physicals, and Head Start physicals for a nominal fee. The clinic is also a provider enrolled in the Vaccines for Children program and provided childhood immunizations to those who qualified. With some of the pediatricians in and around town not carrying immunizations the VCHD helped immunize those children. Most major insurances are accepted at the VCHD with the help of Vaxcare.



Dr. Catherine Brown



Chrissy Barbour, RN

ADULT VACCINE PROGRAM/ADULT WELL PHYSICALS

The Adult Stay Well Program was continued by Dr. Brown who provided adult physicals to college students, daycare employees, and foster care parents for a nominal fee. The VCHD is enrolled in the Vaccines for Adult program to provide immunizations for adults with no insurance or insurance not covering vaccines.

COMMUNITY INVOLVEMENT

Immunizations are an important part of what the nurses at the Vigo County Health Department do on a daily basis. Approximately 170 flu vaccines were given to Vigo County Employees in the fall of 2017. The VCHD nurses serve at clinical preceptors for nursing students from Indiana State University, University of Southern Indiana, and Saint Mary of the Woods College. The Health Department nurses, Christina Barbour RN, Chelsea Kizer RN, and Andrea Craft RN, sit on the Vigo County Immunization Task Force; which meets quarterly with other medical professionals, school nurses, and childhood development members to collaborate and create new ways to increase immunization rates for Vigo County.

EPIDEMIOLOGY AND COMMUNICABLE DISEASE

Indiana Code 16-41-2-1 requires local health departments to investigate and report communicable diseases listed in the Indiana State Department of Health Communicable Disease Reporting Rule. Once the investigations are completed, they are entered into the computerized data base known as the Indiana National Electronic Disease Surveillance System (I-NEDSS). VCHD Clinic nurses investigated and reported 345 confirmed communicable disease cases in 2017. Chronic Hepatitis C continued to be the most prevalent communicable disease investigated by the VCHD in 2017.

	TOTALS 2016	TOTALS 2017
Animal Bites	134	146
Campylobacteriosis	5	19
Carbapenemase-		
producing carbapenemase-resistant enterobacteriaceae (CRE)	9	1
Chicken Pox	8	5
Hepatitis C	134	110
Hepatitis B	14	9
Histoplasmosis	9	4
Lyme Disease	7	5
Streptococcus A	6	1
Streptococcus Pneumoniae	8	14

^{*}This table includes cases that might not be determined. Investigation must be initiated in order to make a final determination. Not publicly reported it total is less than 5.

LEAD SCREENING

In 2017, approximately <u>85 children were</u> screened for lead poisoning by the Vigo County Health Department Clinic. We held many lead screening outreach clinics throughout the county such as Head Start, Early Head Start, and ISU Early Childhood Center. Lead poisoning case management and environmental lead risk assessment consists of patient cases that are over the level of 10 mcg/dl for venous blood lead levels. The Lead Case Manager had 2 lead cases >10mcg/dl, 35 cases <10mcg/dl, and 5 home investigations.



Andrea Craft, RN performs a lead screening

EDUCATION

The public health nurses attended numerous training and educational courses in 2017 including ISDH Public Health Nursing Conference, National Public Health Conference, CHIRP User Group Meeting, CASA Open House, Mayo Clinic Tri-State TB Clinical Intensive, Lead Case Management Training, and ISDH TB Training. Training was done in the VCHD Clinic.



National Public Health Nurse Conference in San Diego



Working with the Vigo County School Nurses to provide sport physicals

TUBERCULOSIS CASE MANAGEMENT AND TESTING

Tuberculosis (TB) control and case management by Local Health Departments is a mandated task under the Indiana Code 410 IAC 1-2.3-106. This includes investigating positive skin tests, collection of sputum samples for evaluation by the ISDH lab, providing medications for both active and latent TB cases, home visits for medication administration, evaluation and testing of contacts of the infected patient, communication with the patient's physician, and patient education. In 2017, less than 5 active TB cases, less than 5 suspect, and 57 latent TB cases were managed by the VCHD Clinic. In addition, the VCHD Clinic provided 1,211 TB skin tests on a walk in basis on Mondays and Fridays for the community for a nominal charge.

ANDREA CRAFT, RN

TWYLA SPIDEL, RN

CHELSEA WILLIS, RN

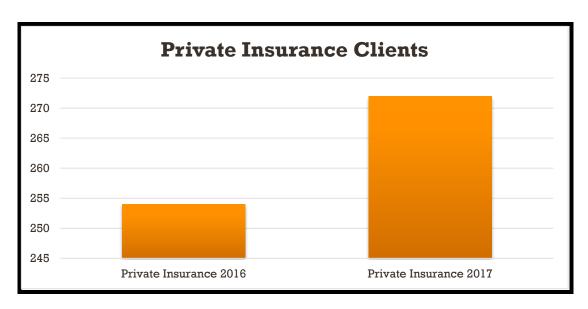






INDIANA STATE IMMUNIZATION GRANT

A grant was awarded to the Vigo County Health Department Nursing Division by the Indiana State Immunization Division in 2017 for \$87,184. Funds from this grant were used in various ways to increase immunization rates and promote services offered at the health department clinic. The VCHD Clinic were able to purchase various supplies and equipment for the health department clinic. Since the immunization grant was started in 2014, immunization rates in Vigo County have increased from 28% to 65% in 2017. The grant funded the VCHD Clinics ability to accept most private insurances. A total of 272 private insurance clients were administered vaccines in 2017.





HEALTH EDUCATION / MEDIA COORDINATION



Christina Keller, MHA

Health Education is the process of assisting individuals and groups to make informed decisions and build skills on matters affecting personal, family and community health. Health Education provides information about awareness and prevention with the goal of providing Vigo County Citizens with the opportunity to their fullest potential. Health Education utilizes the following outlets to provide education:



SCHOOL AGED PROGRAMING

Research has shown that the majority of an individual's adult behavior and attitudes are shaped as children. Consequently, the Health Education Division provides a variety of health education services for our school aged children in Vigo County to promote healthy behaviors and lifestyles. School-age programming is presented not only in the schools, Head Starts, day care centers, summer camps and other children friendly venues, but also to parents in programs such as afterschool sessions, community events, and foster parent presentations. In 2017, VCHD provided the following services and program for school aged children.

- The Glo Germ Hand Washing Class
- Oral Hygiene
- Healthy Relationships
- Hygiene Class
- Reproductive Health Programs
- Lead Poison Prevention
- Stress Management/Coping Skills
- Food Safety
- Personal Safety Courses



COMMUNITY INVOLVEMENT

Health Education and Media Coordination works collaboratively with hundreds of Vigo County members in order to provide fast, reliable, and educational information to our citizens. We would be unable to host events, such as our Health Fair, without the assistance of so many partners.

- Minority Health Coalition of Vigo County
- Vigo County Immunization Awareness Task Force
- Regional Hospital
- Union Hospital
- Maple Center
- Healthy Hoosiers CSA
- Crisis Pregnancy
- Vigo County 911
- Vigo County EMA
- Area 7 Aging & Disabled

- VNA Hospice
- Mental Health America of Vigo County
- UAP
- Sam's Club
- Baesler's Market
- IU Health
- Hamilton Center, INC.
- CVS
- Minority Health Coalition
- YMCA
- Cummins Behavioral
- CODA

- Office of the Indiana Attorney General
- Chances and Services for Youth
- Vigo County School Corporation
- Indiana State University
- Walgreens
- Lighthouse Mission
- United Way
- Better Health Wabash Valley

PRESENTATIONS

Presentations offer a comprehensive look at today's public health issues that are of concern. Some presentations are multi-faceted, such as an overview of the Health Department and its role in public health in Vigo County while others can be an in-depth look into issues such as bedbugs, influenza, or tobacco use in our community. This involvement offers the public the opportunity to learn about their health and well-being, ask questions, and become familiar with the Health Department. The Vigo County Health Department works collaboratively with many community partners which include but are not limited to; the Vigo County School Corporation, Hamilton Center, Vigo County Head Start, and Indiana State University.

The following is a brief list of programs & presentations conducted by the Health Department:

- Vigo County Employee CPR Program
- ISU Nursing Program Presentations (Health Literacy/Needle Exchange)
- Tobacco Prevention for West Vigo Middle School
- CASY Child Care Provider Hand Washing/Food Safety Presentation
- Great American Smoke Out
- Vigo County School Corporation Health In-service
- March of Dimes Community Baby Shower
- Family Day at the Vigo County Library
- IEHA West Central Opioid Crisis Presentation



ISU Nursing Program
Needle Exchange Presentation

- Hand Washing & Food Safety at West Vigo Middle School
- HIV/AIDS Education at West Vigo Middle School
- Lead Poisoning Awareness
- Stress Management at Hamilton Center
- Handwashing at Hamilton Center
- Tobacco Cessation at Hamilton Center
- Head Start Handwashing Day
- "Dine With A Doc" Presentation
- FSS Housing Health Relationships
- Vigo County Library Opioid Presentation
- Will Center Health Department Overview



Vigo County Library Opioid Presentation

HEALTH FAIRS

Health fairs are a great way to promote health awareness and encourage participants to take responsibility for their health and provide valuable health information. Health fairs allow health department employees the opportunity to meet with the public and discuss their specific concerns in locations that are convenient and easily accessible. This year, Vigo County Health Department participated in the following health fairs:

- ISU Health Fair
- Rose Hulman Health Fair
- Vectren Energy Health Fair
- March of Dimes Baby Shower
- First Friday Downtown Booth
- Wabash Valley Health Clinic Health Fair
- "We Live" Community Health Fair
- Terre Haute Community Health Fair
- Community Church Health Fairs



March of Dimes Baby Shower

PARTNERSHIPS

Working with the media is an extremely important component of Health Education. In order to ensure the residents of Vigo County receive the most accurate and up to date health information, the Vigo County Health Department has developed an excellent relationship with the media. The Health Educator/Media Coordinator works diligently with media outlets to compose important health messages in order to promote, provide, and protect the citizens of Vigo County and the surrounding areas. The following health topics were covered in the media:

- Influenza
- Antibiotic Use
- Bed Bugs
- Vaccinations Requirements
- Cold Weather Safety
- Vital Records
- Pneumonia
- County Health Rankings
- Mumps
- Measles
- E-cigarettes
- Ticks
- Pertussis
- Lead Poisoning
- Annual Health Reports

- Tire Amnesty Program
- Child immunizations
- West Nile Virus/Zika
- Obesity
- Flu Shot Clinics
- Food Safety/Leftovers
- Needle Exchange
- HIV statistics
- Food Permits/Mobile Units
- Heat Stoke
- Rabies
- Norovirus
- Pool Safety
- Rodent Infestations
- And many more!

SOCIAL MEDIA

An evolving key piece of Health Education is our Social Media presence. We are very excited to be a part of Facebook, Twitter, LinkedIn, YouTube, Pinterest, and Instagram! With the growing usage of social media it is crucial to use that to our advantage in reaching the public in every way possible for education and information. The use of social media in emergency situations such as an outbreak or natural disaster is also one of our main reasons to jump on board. Our goal is to provide the most accurate, up-to-date information as quickly as possible to our community. If you haven't already come visit our pages!





"We Live" Community Health Fair

VITAL STATISTICS DIVISION



Left to Right: Cheryl Clements, Brandie Draser & Loretta Little-Nicoson

THE VITAL RECORDS DIVISION'S OBJECTIVE IS TWO-FOLD:

- Carry out uniform procedures
- Maintain and protect the integrity of the Vital Records Systems

THE DIVISION HAS THE RESPONSIBILITY TO:

- Maintain a system that accurately records all births, deaths and fetal deaths.
- Efficiently issue certified copies of records.
- Issue provisional notification of death-burial transit permits.
- Process paternities when they come to us from the courts.
- Type and process paternities by appointment only.
- Type affidavits of amendment by appointment to correct birth record.
- Work with funeral homes in filing death certificates.
- Verify birth records for the Military, Social Security and Division of Family & Children.
- Assist citizens who wish to inspect permanent birth and death records.
- Assist customers in doing genealogy.



VITAL STATISTICS ANNUAL REPORT 2017

BIRTHS REPORTED

In-Wedlock Out-of-Wedlock Total Births	1125 <u>1025</u> 2150
HOME BIRTHS	3
<u>STILLBIRTHS</u>	16
DEATHS REPORTED	1406
CORONER CASES	216
CORRECTIONS PROCESSED Affidavit of Amendments Adoption Paternity Affidavit Legal Name Changes CODP Total Corrections	23 179 86 23 <u>80</u> 391
BIRTH CERTIFICATES ISSUED	8372
DEATH CERTIFICATES ISSUED	8698
CERTIFICATES ISSUED FREE	405
GENEALOGY SEARCHES	184
Notifications of Death (in County) Notifications of Death (out of County)	202 20
GENERAL HEALTH FUND	\$150,730
CORONER'S TRAINING AND EDUCATION FUND	\$16,840
TOTAL CASH RECEIVED	\$167,570

ENVIRONMENTAL HEALTH DIVISION



Left to right front row: Mark McClintock and Steve Thompson Left to right back row: Mandy Bales, Marcy Shaw, Travella Myers and Theresa Jackson

Environmental Health Division protects public health and the environment by ensuring conformance with State laws and County ordinances pertaining to a wide variety of environmental health programs. Much of this work is accomplished by performing routine inspections and investigations and taking enforcement action when warranted. The division also interacts with various federal, state, regional, and local governmental agencies associated with environmental health programs.

The division addresses these threats through a multi-dimensional approach:

- Public education
- Regulation
- Monitoring

- Remediation
- Coalition building
- Advocacy

Our programs seek to minimize or eliminate risk factors in the human environment that may threaten life and overall health.

SUPPORT STAFF



Bookkeeper Rhonda Coombs and Purchasing Clerk Brooke Foltz manage the finances and purchases for nearly \$2,000,000 in budgeted funds.

FOOD SAFETY PROGRAM





Some typical violations found in restaurants

The Food Safety Program involves the planning of new and remodeled retail food establishments, planning of fairs and festivals in Vigo County, and the licensing and inspecting of all retail food establishments within Vigo County. We work closely with the state department of health on any food recalls and food borne illnesses.

By promoting food safety education and fostering understanding, communication, and cooperation among regulators, industry and consumers, VCHD seeks to provide the best public health and consumer protection in an expeditious and cost-effective manner.

YEARLY OVERVIEW

Licensed:

- 578 Retail food establishments
- 45 Temporary food stands
- 15 Mobile units

Inspections Conducted:

- 927 routine inspections
- 6 follow-up inspections
- 48 plan reviews
- 36 opening inspections

WASTEWATER MANAGEMENT PROGRAM





An on-site system is one which treats the sewage in a septic tank so that most of the sewage becomes effluent and is disposed of in an area close to the house or buildings. An example of an on-site disposal system consists of a septic tank and leach drains.

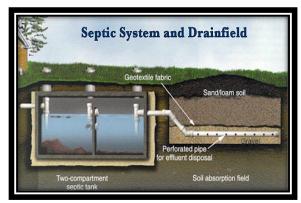
The planning, installation, and repair of on-site sewage disposal systems must be reviewed and inspected by one of our full-time environmental health specialist. This includes the reviewing of soil scientist reports, drawing of installed systems for department records, and giving recommendations for proposed subdivisions.

A total of:

- 62 New installations of on-site sewage disposal systems
- 3 Additions to on-site sewage disposal systems
- 38 Replacements of on-site sewage disposal systems
- 336 Improvement Location Permits
- 27 Subdivisions



Failed Septic System



Septic System and Drainfield

RECREATIONAL WATER PROGRAM



- 132 Regular inspections
- 2 Openings
- 23 Follow-up inspections
- 21 Closings

Waters used for recreational purposes are subject to a variety of environmental influences which can affect the health and/or safety of individuals using those waters.

Recreational water program includes the inspection and review of bacteriological reports of swimming and wading pools, spas, therapy pools, and public access beaches. The inspection entails an evaluation of the pool area, water quality, safety equipment, and mechanical room.

The goals of these programs are to minimize safety hazards, reduce the potential for disease transmission and assure that waters used for recreational purposes are operated and maintained in compliance with the applicable ordinances.

DRINKING WATER PROGRAM



Clean water is vital to our health, communities, and economy, it is a fundamental human need. Each person on Earth requires at least 20 to 50 liters of clean, safe water a day for drinking, cooking, and simply keeping themselves clean.

Tens of millions of people are seriously sickened by a host of water-related ailments—many are easily preventable.

The drinking water program includes the review of water sampling results from daycares, mobile home parks, and retail food establishments that utilize well water; education on proper care and shocking of wells, and guidance when flooding is an issue.

We have also been involved with the local water company when we have found homes with high levels of lead in their water due to city water lines that had not been replaced.

BODY ART SAFETY PROGRAM



The use of improperly sanitized needles and instruments for invasive procedures on the human body and/or procedures being completed by inadequately trained individuals can contribute to the spread of communicable diseases and/or cause permanent injury.

Through the Body Art Safety program the Environmental Health Specialist works to ensure the safe and proper operation of the licensed body art establishments in Vigo County. We educate operators, evaluate plan reviews, and perform opening inspections on new or remodeled body art establishments. We also ensure general safety and sanitation standards, and proper disposal methods of infectious waste.

The Artist licensing program ensures the individuals that are performing the body art are knowledgeable and competent.

- 7 Body Art establishments licensed
- 7 Routine inspections
- 1 Opening inspection
- 20 Regular Artist License
- 15 Temporary Artist License



LEAD POISONING PREVENTION PROGRAM



Lead was a common ingredient in house paint where it acted as a pigment and increased durability. This was before the dangers of lead were known. Though banned for use in paint in the U.S. in 1978, millions of homes, schools, and businesses still have lead based paint on their walls, both inside and out. According to the Environmental Protection Agency, lead paint can be found in:

- 24% of homes built from 1960-1978
- 69% of homes built from 1940-1960
- 87% of homes built before 1940

If the paint is in good condition and has been painted over, it usually doesn't pose a problem. But if the paint is peeling or has been disturbed by scraping, sanding, or burning, it can pose significant health risks to people especially young children. The state of Indiana mandates the local health department to follow children with elevated blood lead levels of 10 μ g or more and to follow up services to provide parent education and blood testing of children with elevated blood lead levels of 5 μ g/dL of blood or more. This includes educating the parents and conducting a risk assessment on the home.

- 50 open cases
- 6 new cases
- 6 risk assessments
- 0 clearance exams

PUBLIC HEALTH COMPLAINT PROGRAM





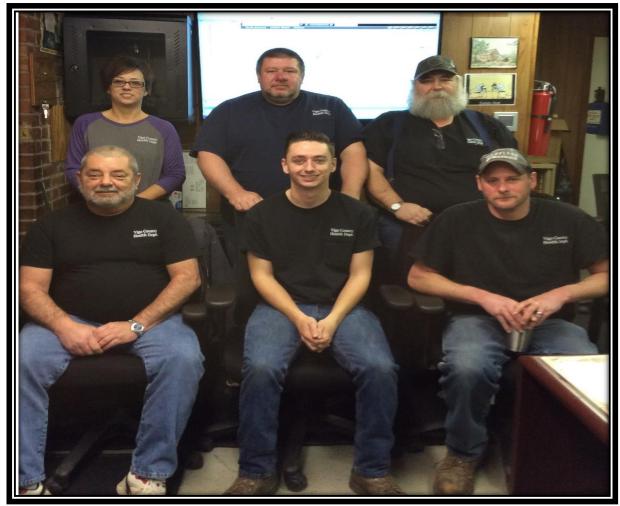
Above are pictures from two different homes we inspected

Housing and property complaints filter through this program. Some of the problems addressed are: mold, rodents, roaches, animal feces, meth lab clean up, surfacing sewage, and human feces. We are called by other agencies as well such as Child Protective Services, Adult Protective Services, City and County Building Inspection, City Environmental, City and County law enforcement.

- 17 surfacing sewage complaints
- 3 unfit housing situations
- 3 animal feces complaints
 - BY THE ORDER OF THE VIGO COUNTY HEALTH DEPARTMENT
 THIS ESTABLISHMENT
 IS
 CLOSED
 UNSANITARY CONDITIONS
 This is in direct violation of the following:
 Vigo County Food Protection Ordinance, Chapter 42
 3-42-6(8)
 THIS SIGN IS THE PROPERTY OF THE VIGO COUNTY HEALTH DEPARTMENT DO NOT REMOVE
- 21 bed bug complaints
- 18 mold complaints
- 22 Meth Lab letters



VECTOR CONTROL DIVISION



Left to Right Front Row: Mike Grayless, Logan Edwards and David Higgins Left to Right Back Row: Kim Edwards, Warren Sweitzer and Tony Grayless

The primary goal of the Vector Control Division is to reduce the risk of disease and death from pathogens carried by animals and/or vectors. The Vector Control Division also repairs and maintains all Health Department vehicles and spraying equipment.

A "vector" is an agent capable of transmitting a pathogen from one organism to another. (I.e. mosquito, rodent). The Vector Control Division devotes its time primarily to:

- Vector control
- West Nile surveillance

- Dead animal removal
- Fleet maintenance and repair

MOSQUITO CONTROL

The spraying for adult mosquitoes in Vigo County was as diligent as the weather would allow in 2017. The adulticiding program consists of five ½ ton pickup trucks and three ATVs (equipped with ultra-low volume cold aerosol fog machines) to spray insecticides throughout the county, as well as the city of Terre Haute, for the control of adult mosquitoes. The ATV mounted ULV makes most sites accessible. All eight ultra-low volume-fogging machines must be certified for droplet size and calibrated for flow rate prior to each spraying season. Calibration is monitored daily throughout the spraying season. Adult mosquito control is accomplished using four insecticides, Mosquitomist 1.5 and Bio-Mist 4+12, Pyrofos and Kontrol 4X4.





Chris Novak of Clarke Mosquito Control testing equipment

Vector Control Specialist Tony Grayless

All ULV units are fitted with GPS compatible "Smart Flow" systems. This enables Vector Control staff to preset and record calibration, time of spraying, flow rate and vehicle speed.

Vector Control staff prepares and updates 26 maps that are 40-45 miles of county and city roads. The 26 maps show the areas to treat and also areas that we do not treat, which we consider no spray zones. Some of the areas that are considered no spray zones might be areas with organic gardens, beekeepers, large bodies of water or persons who have requested no spraying be done in the area they live, either for health or personal reasons. The 26 maps are treated weekly, biweekly or monthly depending on adult mosquito population and weather conditions.

Vector Control employees spend an extended amount of time treating stagnant water for mosquito larvae. Several brands of insecticide targeting several species are employed to kill the larvae. One type of insecticide (Golden bear) can last for seven days in stagnant low area water, covering the surface of the water denying the mosquito larvae access to air. All "catch basins"



or dry wells are treated with Altosid briquettes and Bactimas briquettes which lasts 30 or 150 days. Altosid Briquettes inhibit the growth of the larvae preventing them from becoming adults. Catch basins have been identified as one of many ideal habitats for the Vector (*Culex pipiens*), a mosquito, notoriously known for the transmission of West Nile. Culex mosquito larvae love the stagnant dirty water left behind from rain that doesn't soak into the ground but runs off into catch basins, retention ponds, and roadside ditches.



In 2017, approximately 1410 catch basins were treated. That number will continue to increase due to community growth. Parking lots and subdivisions will install retention ponds and or catch basins to contain water run-off. Catch basins and larvaciding sites are mapped out using the County's GIS system. Larvae samples are examined for identification of species to insure proper insecticide treatment.

A list of the amount and types of insecticide used to control adult mosquitoes and larvae in 2017:

	INSECTICIDE	AMOUNT USED
55 Gallon Drum	Biomist 4 + 12	14 Drums
55 Gallon Drum	Aqua Anvil	12.5 Drums
55 Gallon Drum	Kontrol	14.5 Drums
220 Per Case	Altosid Briquettes (150 Day)	6 Cases
100 Per Case	Bactimas Briquettes	12 Cases
³ / ₄ Gallon	Talstar P	¹ / ₄ Gallon

WEST NILE VIRUS SURVEILLANCE

We use two different types of light traps. One type of light trap (CDC –CO2-Baited trap) uses dry ice or an attractant called "octonol" which simulates the exhaled respiratory gases of birds or mammals. The other is a gravid trap that uses alfalfa pellets mixed with water. The fermentation of these pellets releases an odor, similar to a livestock barn, and creates dirty, stagnant water that attracts gravid culex mosquitoes.

Light traps were set out at numerous locations throughout Vigo County with 1976 mosquito samples being collected between June and October 2017. Once the mosquitoes are collected they are separated into groups ranging in number from 5 to 100 and are then labeled as pools of mosquitoes, which are sent to the Indiana State Department of Health for West Nile testing. A total of 81 pools were sent in for testing in 2017. The Indiana State Department of Health reported 18 positive pools for Vigo County. Vector control specialists will continue to set, maintain and collect mosquito pools for ISDH West Nile Virus testing in the upcoming year.

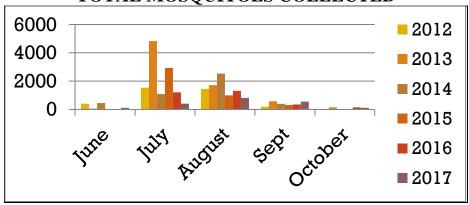


Warren Sweitzer

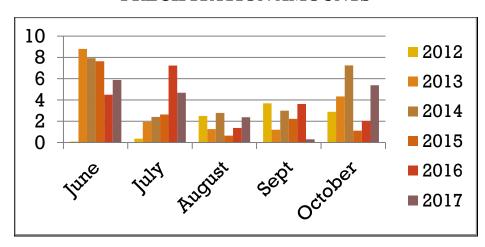


Gravid Trap

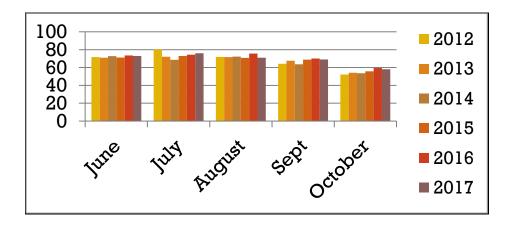
TOTAL MOSQUITOES COLLECTED



PRECIPITATION AMOUNTS



AVERAGE TEMPERATURES



MOSQUITO BORNE DISEASE PREVENTION ACTIVITIES IN 2017:

- Distributed 5600 "Skeeter Beater" coloring books to pre-school through 3rd grade elementary students on preventing and identifying prime breeding areas for mosquitoes.
- Distributed "Skeeter Beater" coloring books to Saint Patrick's School and CASY (Community Alliance & Services for Young Children, Inc.).
- Worked with home owners (high grass, weeds, swimming pools, fishponds, standing water).
- Sent out Notice to Abate letters to all Vigo County cemetery caretakers.
- Worked with Terre Haute Street Department to remove standing water from alleys.
- Participated in Clean up Terre Haute program in May and September 2017.
- Continued to monitor home owners, tire retailers and salvage yards to ensure compliance with the Tire Storage Ordinance.



2018 MOSQUITO & LARVAE CONTROL STRATEGIES

- 1. Intensify local culex and aedes mosquito larval control to prevent the emergence of adult mosquitoes that feed on birds and contribute to the virus amplification transmission cycle.
- 2. Continue active West Nile surveillance to determine the presence of new or expanding West Nile transmission. (Light traps-Adult mosquito testing)
- 3. Reinforce public education and outreach programs to reduce mosquito- breeding sites around homes.
- 4. Educate on personal protective measures (long sleeves, insect repellent) with the use of the media (TV, radio and newspapers)
- 5. Implement local mosquito control to reduce the number of virus infected mosquitoes, thus reducing the immediate risk to humans.
- 6. Monitor adult and larval mosquito control efforts to ensure that the local programs are effectively reducing mosquito densities and virus infection rates.
- 7. Conduct inspections of local tire retailers and junkyards for tire storage ordinance compliance.

TIRE AMNESTY PROGRAM

In 2017 Vigo County Health Department employees removed discarded tires from the alleys and streets of Terre Haute and surrounding communities. A total of <u>4919 tires</u>, filling four 53' semitrailers, were collected. Residents that had tires stored outside were given information on our Tire Storage Ordinance informing them that the tires must be stored inside or removed from the property.









Rhonda Coombs and Brooke Foltz

Staff waiting to unload tires

RODENTS

Rodents (i.e. rats, mice) are another source of disease transmission. Rodents must have adequate food, shelter, and water in order to survive. For these reasons, a large majority of rodent complaints are located within the city of Terre Haute.

A vector control specialist investigates complaints about rodents and proceeds to make recommendations to the property owner on findings and rodent control (i.e. removal of debris, animal feces). In some cases, the vector control specialist may set out bait and remove dead rodents, but the majority of the extermination is usually the responsibility of the property owner. A vector control specialist will continue to make follow up inspections to insure the property owner is correctly handling the problem. Eight rodent complaints were investigated in 2017. Three of the rodent complaints were located on South 17th Street and required the VCHD to use rat bait leading to the removal of 103 dead rodents from this location.

















REMOVAL OF DECEASED ANIMALS

In 2017 a total of 698 deceased animals were taken to the county landfill. <u>659</u> were removed from private properties as well as city and county roadways. An additional <u>39</u> were removed from the Terre Haute Humane Shelter.

RABIES

In 2017 Vector Control staff sent in <u>fifteen bats</u> to the ISDH for rabies testing. All tests results were negative for rabies virus. Night surveillance was performed by Vector Control staff at three homes in Terre Haute to assist in bat proofing.





VEHICLE MAINTENANCE

During the winter months the Vector Control Division is busy with repairing, cleaning and inspection of all vehicles and equipment. All ULV spray units must be cleaned and broken down during the winter months, checked, repaired and parts replaced as needed. Along with routine maintenance, all trucks and cars are thoroughly inspected and repaired. All Health Department vehicles and equipment have routine maintenance throughout the year.



David Higgins & Tony Grayless



Vector Control staff doing vehicle repair

TOYS FOR TOTS

In 2017 Vigo County Health Department employees donated money to purchase toys for the Toys for Tots program in Vigo County, \$1500 was collected.









THE END