

# St. Joseph County Health Department

## 2016 Annual Report

**Luis Galup, MD**  
Health Officer

**Nick Molchan, MPA, REHS**  
Administrator

### **Main Office**

St. Joseph County Health Department  
227 West Jefferson Boulevard  
South Bend, IN 46601  
(574) 235-9750

### **Branch Office**

219 Lincolnway West  
Mishawaka, IN 46544  
(574) 256-6223

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## Board of Health Members

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### **President**

Michael Harding  
Appointed by the County Commissioners  
Democrat, Term Expires December 31, 2017

### **Vice President**

Dale D. Deardorff, MD  
Appointed by Mayor of Mishawaka  
Independent, Term Expires December 31, 2019

### **Secretary**

Luis Galup, MD  
Health Officer

### **Members**

Karen Davis, MD  
Appointed by the Mayor of South Bend  
Independent, Term Expires December 31, 2018

Sharon Imes, RN, MSN, CEN  
Appointed by the County Commissioners  
Democrat, Term Expires December 31, 2016

Mark Kricheff, MD  
Appointed by the County Commissioners  
Independent, Term Expires December 31, 2017

Heidi Beidinger-Burnett, PhD, MPH  
Appointed by the Mayor of South Bend  
Democrat, Term Expires December 31, 2019

Feranmi Okanlami, MD  
Appointed by Mayor of South Bend  
Independent, Term Expires December 31, 2016

### **Board Attorney**

J. David Keckley, JD

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## Mission, Vision and Value Statements

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### Mission

To promote physical and mental health and facilitate the prevention of disease, injury and disability for all St. Joseph County residents.

### Vision

Healthy people in a healthy St. Joseph Community

### Values

Daily we will:

Carry out the MISSION of the Health Department while striving to achieve EXCELLENCE in our work product and interactions with customers and coworkers.

Exhibit INTEGRITY in the workplace, always being truthful, honest and trustworthy.

Show RESPECT to customers, supervisors, coworkers and oneself.

Display a POSITIVE ATTITUDE.

ADVOCATE for our community's health.

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## Health Officer

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In the first quarter of the year, several meetings involving the Division Managers were held in an effort to define a Strategic Plan for the Health Department. However, no new sources of revenue were identified and the possibility of future budget cuts was envisioned even though the Department had maintained for several years a conservative budgeting policy. The latter was confirmed when later in the year County Governance requested a 3% reduction in the budget for 2017. The group suggested the possibility of bringing to the public the diverse responsibilities of the Health Department.

In the latter part of the year, a report from the Indiana State Department of Health brought notoriety to St. Joseph County when a Census tract was identified as having the greatest percentage in the State with children with blood lead levels above 5 µg/dL. Several articles were published in the media which required answering.

An important foreseeable threat for 2017 is that the Indiana State Department of Health announced their intention of lowering the action level for blood lead levels in children in agreement with the 2012 Centers for Disease Control and Prevention action levels. If implemented by the State, it would require increasing the staff of the Environmental Health and Nursing Divisions to cope with the increase in the numbers of cases requiring investigation.

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## St. Joseph County Health Department Staff

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Staffing as of 12/31/2016

Luis Galup, MD – Health Officer

Nick Molchan, MPA, REHS – Administrator

Mary Rooney – Executive Assistant

Amy Ruppe – Finance Manager

### **Epidemiology & Emergency Preparedness**

Genessa Doolittle, MPH – Supervisor

Paul Burrows – Local Public Health Coordinator

Sally Dixon, RN – FIMR Coordinator

### **Environmental Health Services**

Linda Mauller, BS – Director

Mark Espich – Assistant Director

Denise Kingsberry – Administrative Assistant

LaTeesha Wright – Staff Assistant

Amber Allen

John Engstrom

Whitney Griffin

Jordan Maiden

Jeff Murawski

Paula Reinhold

Patrick Sovinski

### **Food Services**

Carolyn Smith, BS, – Director

Kevin Harrington, BS, CP-FS, C.P.O – Assistant  
Director

Pam Thompson – Administrative Assistant

Sharyl Smith – Staff Assistant

Susan Burnett, BS

Karen Flanigan, BA, CP-FS

Melissa Papp

Lynette Wesby

### **Health Education**

Robin Vida, MPH, CHES – Director

Kirstin Boyd, BS

Betsy McCue, MS

Kirsten Zalas, BS, CHES

### **Nursing**

Christine Hinz, RN, BSN – Director

Neiko Rust, RN – Assistant Director

Donna Donlin-Sriver – Medical Records/Staff  
Assistant

Carol Frazee – Billings Clerk

Linda Brock, RN, BSN

Kathryn Carmichael, RN

Deborah Gaddy, BSN, RN

Lori Montgomery, RN, MSN

Susan Rabe, RN

Danielle Sims

Rebecca Stayton, RN

Paula Sulentic

Jill Tyler, RN

Connie Wawrzyniak

### **Vital Records**

Ericka Tijerina, BS – Supervisor

Zamiki Chism – Assistant Supervisor

Sue Sjoberg

Katie Way

## Financial

During FY2016, the Health Department sought out and applied for five new grant opportunities and were awarded grant agreements for all of them. In regards to revenue, the Health Department saw a slight increase in fee revenue, which when compared to 2015 was up by approximately 1.25%. The Health Department also saw an increase in tax revenue, which when compared to 2015 was up by approximately 5.5%.

### Grants Awarded to the St. Joseph County Health Department:

- A \$26,072 ISDH grant for our Bioterrorism/Emergency Preparedness program
  - (valid 07/01/15 thru 06/30/16)
- A \$32,135 ISDH grant for our Health Ebola program
  - (valid 07/01/15 thru no expiration date)
- A \$50,000 ISDH grant for our Health F.I.M.R. program
  - (valid 10/01/15 thru 09/30/17)
- A \$13,300 ISDH grant for our Physical Activity program
  - (valid 11/01/15 thru 06/29/16)
- A \$10,000 ISDH grant for our Physical Activity program
  - (valid 06/30/16 thru 06/29/17)
- A \$74,153 ISDH grant for our Immunization CoAg program
  - (valid 01/01/16-06/30/16)
- A \$74,153 ISDH grant for our Immunization CoAg program
  - (valid 07/01/16-12/31/16)
- A \$5,822 ISDH grant for our P.H.E.P.C.A. program
  - (07/01/15 thru no expiration date)
- A \$2,987 ISDH grant for our Zika Virus program
  - (valid 09/01/16-06/30/17)
- A \$72,672 ISDH grant for our Local Health Maintenance program
  - (valid 01/01/16 thru 12/31/16)
- A \$95,631.31 ISDH grant for our Local Health Department Trust Account
  - (valid 01/01/16 thru 12/31/16)
- A \$1,000 Walmart grant for our Cooking Healthy program
  - (no expiration date)

### Overview of Revenue and Expenditures

	2014	2015	2016
County Health Fund Tax Revenue	\$720,310.20	\$1,532,193.61	\$1,616,320.20
County Health Fund Fee Revenue	\$1,086,948.60	\$1,357,432.58	\$1,375,772.33
County Health Other Revenue	\$1,572.48	\$501,555.86*	\$400.00
Grant Revenue	\$309,799.28	\$279,594.63	\$418,155.16
<b>TOTAL REVENUE</b>	<b>\$2,118,630.56</b>	<b>\$3,670,776.68</b>	<b>\$3,410,647.69</b>
County Health Fund Expenditures	\$2,575,691.41	\$2,400,780.45	\$2,407,381.33
Grant Expenditures	\$325,096.52	\$209,015.21	\$438,381.52
<b>TOTAL EXPENDITURES</b>	<b>\$2,900,787.93</b>	<b>\$2,609,795.66</b>	<b>\$2,845,762.85</b>

\*In 2014 the amount allocated to the Health Department was underestimated by \$500,000. The amount required to balance the Health Department fund was added to the 2015 allocation of funds.

County Health - Fund 1159

To provide services to the citizens of St. Joseph County, Indiana

Tax Revenue & Fee Revenue

Beginning Balance	\$490,755.48																					
REVENUE																						
Tax Revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$886,685.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$729,634.68	\$1,616,320.20
Fee Revenue	\$207,933.74	\$185,862.11	\$128,677.40	\$103,750.47	\$103,786.37	\$111,348.08	\$89,016.12	\$95,102.41	\$102,914.19	\$91,963.33	\$74,313.84	\$81,104.27	\$1,375,772.33									
Other Revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$275.00	\$0.00	\$125.00	\$0.00	\$400.00									
<b>TOTAL REVENUE</b>	<b>\$207,933.74</b>	<b>\$185,862.11</b>	<b>\$128,677.40</b>	<b>\$103,750.47</b>	<b>\$103,786.37</b>	<b>\$998,033.60</b>	<b>\$89,016.12</b>	<b>\$95,102.41</b>	<b>\$103,189.19</b>	<b>\$91,963.33</b>	<b>\$74,438.84</b>	<b>\$810,738.95</b>	<b>\$2,992,492.53</b>									
EXPENDITURES																						
Salary & Benefits	\$148,817.23	\$148,847.65	\$596,522.61	\$221,748.91	\$149,822.38	\$143,644.67	\$143,159.88	\$129,718.71	\$131,456.66	\$129,859.94	\$129,101.72	\$202,032.96	\$2,274,733.32									
Supplies	\$1,208.90	\$2,832.38	\$2,388.06	\$5,016.11	\$1,557.92	\$1,117.48	\$2,135.44	\$1,326.49	\$1,382.31	\$1,642.70	\$5,152.12	\$3,808.45	\$29,568.36									
Other Services and Charges	\$8,734.74	\$20,807.75	\$3,890.48	\$7,769.75	\$15,005.86	\$2,558.67	\$9,008.98	\$8,016.12	\$11,850.95	\$3,057.61	\$4,341.86	\$8,036.88	\$103,079.65									
Equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00									
<b>TOTAL EXPENDITURES</b>	<b>\$158,760.87</b>	<b>\$172,487.78</b>	<b>\$602,801.15</b>	<b>\$234,534.77</b>	<b>\$166,386.16</b>	<b>\$147,320.82</b>	<b>\$154,304.30</b>	<b>\$139,061.32</b>	<b>\$144,689.92</b>	<b>\$134,560.25</b>	<b>\$138,595.70</b>	<b>\$213,878.29</b>	<b>\$2,407,381.33</b>									
MONTHLY SURPLUS/(SHORTFALL)	\$49,172.87	\$13,374.33	(\$474,123.75)	(\$130,784.30)	(\$62,599.79)	\$850,712.78	(\$65,288.18)	(\$43,958.91)	(\$41,500.73)	(\$42,596.92)	(\$64,156.86)	\$596,860.66										
ACCUMULATIVE SURPLUS/(SHORTFALL)	\$539,928.35	\$553,302.68	\$79,178.93	(\$51,605.37)	(\$114,205.16)	\$736,507.62	\$671,219.44	\$627,260.53	\$585,759.80	\$543,162.88	\$479,006.02	\$1,075,866.68										

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## Epidemiology & Emergency Preparedness

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The Epidemiology & Emergency Preparedness Division is responsible for:

- Communicable disease investigation and surveillance
- Implementation of the Fetal and Infant Mortality Review Program
- Medical countermeasure dispensing planning
- Coordination of Emergency Support Function #8
- Emergency preparedness collaboration with other response agencies
- Emergency preparedness training and education

The Epidemiology & Emergency Preparedness Division provided support to other Divisions within the Health Department in the investigation and surveillance of communicable disease and public health threats. The Division provided data to community workgroups as requested and compiled natality and mortality reports.

The Division participated in one full scale emergency exercise, one functional exercise, and one tabletop exercise in 2016. Three new Closed Point-of-Dispensing Sites were added to the Health Department's plans, and quarterly meetings of the Emergency Support Function #8 were conducted. Emergency Preparedness staff participated in the South Bend flood recovery (August 2016), reporting to the County Emergency Operations Center and facilitating well testing for affected residents. The Medical Reserve Corps of St. Joseph County participated in the Sunburst race and in lead testing events in East Chicago. Two Active Shooter Trainings (with St. Joseph County Police Department) were hosted for all Health Department employees, which were very well received and timely. Major upgrades to the Department's Emergency Response Vehicle were completed, resulting in an effective mobile clinic.

A Coordinator for the St. Joseph County Fetal and Infant Mortality Review (FIMR) Program was hired in May 2016. A FIMR Case Review Team (CRT) and a FIMR Community Action Team (CAT) were formed, relationships and data gathering policies were made with hospitals, and case abstractions and maternal home interviews began. Three FIMR CRT meetings were held in 2016, resulting in eleven FIMR cases being completed. The FIMR CAT will meet quarterly beginning in January 2017, to learn about the recommendations and issues brought forth by the CRT and to create strategies for addressing them.

Continued collaboration was had with several other organizations (including, but not limited to, the Child Fatality Review Team, the District 2 Healthcare Coalition, the District 2 Emergency Support Function 8, the Healthy Babies Coalition, the Indiana State Department of Health's Fetal and Infant Mortality Review, the Indiana Medical Reserve Corps, the Michiana Perinatal Consortium, and the Penn-Harris-Madison District Safe Schools Committee). The Epidemiology & Emergency Preparedness Division will continue collaborating with community partners to be successful in maintaining preparedness and surveillance, and addressing the issue of infant mortality in St. Joseph County.



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## Environmental Health Services

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The Environmental Health Division continued to help maintain a healthy community by implementing the following environmental health programs that protect our community from pathogens in the environment:

- Septic System Permitting and Inspection Program
- Subdivision Planning and Review Program
- Wellhead Protection Permitting and Inspection Program
- Well Drilling and Water Supply Permitting Program
- Source Water Protection Program
- Lead and Healthy Homes Program
- Concentrated Animal Feeding Operations Permitting and Inspection Program
- Air Quality Program
- Vector Program
- Solid Waste Disposal Program
- Massage Permitting and Inspection Program
- Tattoo and Body Piercing Permitting and Inspection Program

### Accomplishments in 2016

#### *Staffing*

Marc Nelson retired from the Division Director position in July. He had served as the director since 2003. An additional staff member was lost to Indiana Department of Environmental Management (IDEM), increasing the number of technical staff members to six that have been hired directly from our Environmental Health Division by the Northern Regional Office of IDEM.

#### *Source Water Protection Program*

The Division supported the community on many special projects. Assistance was given to residents in the Jewell Woods area after the significant rain event the county experienced in August. There were many different flooding issues, but drinking water well contamination was a top priority. The staff coordinated well water sampling, sample delivery to the Indiana State Department of Health for free testing, and well chlorination. The Division also oversaw the monitoring of drinking water wells in a Granger neighborhood contaminated with road salt, and provided technical assistance to State and Federal agencies involved in the Galen Myers Superfund Site.

#### *Other Programs*

Other programs proceeded as planned with no significant issues.

<b>Work Activities</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Septic Program</b>			
Inspections Performed	771	830	984
Consultations Performed	27	33	16
<b>Subdivision Program</b>			
Health Officer Reports	31	31	28
Subdivision Reviews	32	36	39
Rezoning & Replat Reviews	18	11	15
<b>Wellhead Program</b>			
Inspections Performed	103	178	136
<b>Well Drilling Program</b>			
On-Site Inspections Performed	150	121	172
Well Abandonments	159	130	191
<b>Source Water Program</b>			
Phase I Inquiries	75	123	124
Spill Responses	5	4	3
Meth Lab Occurrence Response	18	21	10
Other Source Water Inspections	65	71	89
<b>Surface Water Program</b>			
Surface Water Sampling	1	3	1
<b>Lead Program</b>			
HUD Lead Inspections	49	25	0
Lead Risk Assessments	60	34	41
Public Information Events	19	4	3
Children Tested for Lead	1,485	775	1,792
<b>CAFO Program</b>			
Inspections Performed	0	0	0
<b>Air Quality Program</b>			
Indoor Air Quality Investigations	0	2	0
Mold Investigations	3	0	1
<b>Vector Program</b>			
Larvicide Swimming Pools/Stagnant Water	7	6	24
<b>Healthy Homes Program</b>			
Total Complaints	78	72	63
Dwellings Declared Unfit	15	13	5
<b>Massage Program</b>			
Establishment Inspections Performed	69	53	67
<b>Tattoo/Body Piercing Program</b>			
Inspections Performed	15	18	17

<b>Work Activities continued</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Complaints / Investigations</b>			
Trash	58	49	45
Sewage	71	40	70
Water (ditches, lakes, ponds & swells)	3	11	18
Motels/Hotels	0	1	3
Burning	7	2	2
Other	14	19	38
<b>Abatement Correspondence</b>			
Abatement Letters Sent	85	190	288
Immediate Threat to Public Health Letters Sent	2	1	0
Impending Legal Action Letters Sent	18	24	41

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## Food Services

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As an authorized representative of the Indiana State Department of Health (ISDH), St. Joseph County Health Department's Food Services Division is the local enforcement body responsible for ensuring that the 1,547 retail food permits and 355 temporary food permits held in 2016 were operated in compliance with state regulations, federal statutes, and local ordinances. The Food Services Division staff is also responsible for educating and advising the management and staff of all retail food establishments on current food industry practices.

To accomplish the required routine on-site food establishment reviews, 2,416 routine and 858 temporary inspections were performed by the Food Services Division Staff in 2016. The unannounced inspections are designed to assess an establishment's level of compliance and evaluate its staff's knowledge of food safety regulations. Additionally, the Food Services Division has the responsibility of investigating complaints, reviewing plans for new or extensively remodeled establishments, inspecting mobile food truck vendors, conducting public/semi-public pool inspections and investigating pool complaints. Fire investigations, consultations with prospective establishments, and the collection and submission of samples for state analysis are also responsibilities of the Division.

### 2016 Highlights

The complexity of a retail food establishment's menu, plus the degree of preparation menu items require, are factors used to determine the number of inspections annually performed at retail food establishments. Food Services staff completed 2,416 retail inspections in 2016, compared to 1,966 in 2015. A 22.9% increase in inspections can be attributed to current staffing levels. Two inspectors, hired after staff losses in 2014 and 2015, were fully trained and working independently.

Twelve retail food establishment fires were investigated, representing a 33.3% decrease as compared to the 18 fire investigations done in 2015.

Guidance documents, detailing the steps for starting a retail food establishment, were created and made available on the Health Department website. The documents provide the prospective retail food establishment owner with information to help them identify and follow specific opening procedures based on whether their establishment is new construction, previously owned or an existing facility.

### *Staffing*

Food Services staff routinely participated in web-based training sessions covering a variety of food industry related topics. Additionally, select staff members attended training workshops for Certified Pool Operators, Reduced Oxygen Packaging, Agro Security Planning, and numerous sessions offered during the IEHA Annual Fall Conference held in Michigan City, Indiana.

### *Mobile Street Vending*

A 2015 amendment to the City of South Bend's ordinance, which began to allow street vending for mobile food trucks, resulted in the Health Department issuing permits to six mobile truck vendors in 2016. While these mobile food vendors largely operated independent of any scheduled events or celebrations, the Health Department-issued permit is literally carte blanche for their participation in any temporary event held within St. Joseph County for the entire calendar year.

<b>Food Division</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Complaints - Food Service	141	179	193
Complaints - Food Store	27	28	31
Certificates of Perfect Inspection	512	403	483
Abatement Correspondence	25	50	53
Health Officer Hearings	17	16	15
Number of Opening Inspections	194	157	189
Retail Inspections Completed	2,507	1,966	2,416
Establishments Ordered to Cease Operations	30	10	15
Temporary Events *	164	174	218
Temporary Inspections	1,040	940	858
Possible Food Borne Illness Investigations	7	11	9
Smoking Complaints	2	3	4
Fire Investigations	8	18	12
<b>Pool Information</b>			
Number of Inspections	164	166	154
Consultations	58	1	6
Pool Complaints	4	1	4
Closings**	33	49	34
<b>Staff Development</b>			
Meetings and Trainings (Total In Hours)	51.25	81	136.25

\*Events listed are for the number of temporary events - not the number of days the event was in operation.

\*\*Closed due to improper water quality reports or facilities not submitting water reports as required by ISDH.

## Health Education

TOPIC	2014		2015		2016	
	School (K-College)	Adults	School (K-College)	Adults	School (K-College)	Adults
Wellness	474	112	339	106	232	125
Substance Abuse Prevention	0	7	0	9	0	4
Communicable Disease	0	15	0	9	4	9
Sexuality	74	19	55	14	52	6
Chronic Disease	0	3	2	10	0	0
<b>Total Presentations (participants)</b>	<b>704 (13,352)</b>		<b>544 (9,964)</b>		<b>432 (8,826)</b>	

**Total Number of Events**  
(Health Fairs, Community Events, etc.)

	2014	2015	2016
	37	34	42
<b>Total Participants</b>	3,135	3,473	3,927

### Highlighted Programs/Projects/Events

#### *St. Joseph County Health Improvement Alliance*

During 2016, the St. Joseph County Health Improvement Alliance continued work on their five focus areas. Upon completion of short term projects, the steering committee began strategic planning in the summer of 2016. As the culture of public health shifts, the alliance has begun a collective impact approach model. The shift to this model will allow a truer impact to be made with change that is sustainable.

#### *Reducing Obesity Coalition of St. Joseph County (ROC)*

In 2016, work continued on *Let's Move! City All-Star* efforts. The Health Education Director and the Mayor of South Bend were invited back to the White House to attend the First Lady's final event and speak on behalf of the work in South Bend. The first stakeholders meeting was held and work on four strategies (bicycle-friendly community, slow zones, business recognition, and community gardens/urban agriculture) began. Outreach for the Walking School Bus program continued with the enrollment of nine primary centers. This year's ROC UR BODY event saw over 1,500 participants as it was merged with Down Town South Bend's Kids Night Out and the Memorial Children's Hospital's Family Fun Walk. An official partnership between the 3 entities has been initiated for 2017.

#### *St. Joseph County Food Access Council*

Beginning in the late summer of 2016, as the direction of the Health Education Division began to shift to work more directly with social determinants of health, they began to see where they could assist in food

access efforts. As food insecurity plays a role directly with obesity, it was felt that this fit into the overall priorities. The Division has since convened over 50 stakeholders to begin discussions of collaborations to address hunger and food access together. A resource map was developed by students at the University of Notre Dame, and food system assessments will be conducted early in 2017 which will drive action at a Census tract level.

*Let's Move! Childcare Program*

At the end of 2015, the Indiana State Department of Health awarded the Health Education Division with a \$13,300 grant to work with up to 50 childcare provider sites to enroll in the *Let's Move! Childcare* program, which aims to encourage best practices for nutrition and physical activity with the community's youngest residents. In the spring of 2016, the Division received an additional \$10,000 to implement a phase 2 of the project. 25 local childcare sites (servicing over 1,500 children aged 0-5 years) enrolled in the initial part of the program and were trained in the Early Childhood CATCH curriculum. Upon completion, each site received age-appropriate physical activity equipment to be utilized with the training. As phase 2 began, each site received the actual curriculum box set and family nights will be scheduled for 2017 to showcase changes to families.

## Nursing

The Nursing Division includes the Public Health Nursing Division, the Immunization Clinics, Tuberculosis case management, and Medical Records. The Nursing Division is committed to community and public health nursing. They are advocates for providing access to care to the citizens of St. Joseph County. Nursing staff function in multiple roles within the Health Department and continue to expand their knowledge and skills.

Numbers included in these tables are subject to change following Indiana State Department of Health reconciliation.

Communicable Disease Surveillance						
Condition	2014		2015		2016*	
	Started	Confirmed	Started	Confirmed	Started	Confirmed
Arboviral (other)	1	0	0	0	3	2
Campylobacteriosis	50	7	68	20	74	17
Carbapenemase producing – Carbapenem resistant Enterobacteriaceae (CP-CRE)	NPR	NRP	NPR	NPR	11	7
Chickungunya	NPR	NPR	3	1	0	0
Cryptococcus neoformans	0	0	7	5	2	1
Cryptosporidiosis	13	8	17	16	8	7
Dengue	2	0	1	0	4	1
Dengue hemorrhagic fever	NPR	NPR	NPR	NPR	1	1
Ehrlichiosis	1	0	0	0	1	1
Giardiasis	12	7	14	11	13	12
Hemolytic uremic syndrome	0	0	1	1	0	0
Hepatitis A	6	1	2	0	1	0
Hepatitis B – Acute	41	4	44	3	87	3
Hepatitis C – Acute	178	0	206	2	263	4
Hepatitis E	1	0	0	0	1	0
Histoplasmosis	5	5	8	6	6	4
Influenza - Associated Death	8	7	9	8	1	1
Invasive Haemophilus Influenzae**	3	2	2	2	13	12
Legionellosis	24	23	18	18	19	18
Leptospirosis	1	0	0	0	0	0
Listeriosis	2	2	1	1	1	1
Lyme Disease	62	18	112	4	70	20
Malaria	1	1	0	0	3	3
Measles (Rubeola)**	0	0	2	0	0	0
Meningitis, other	0	0	0	0	2	1
Meningococcal Invasive Disease	1	1	0	0	0	0
Mumps**	4	2	3	1	7	3
Pertussis (Whooping Cough)**	33	28	14	11	5	3
Rocky Mountain Spotted Fever	0	0	0	0	1	0



Communicable Disease Continued	2014		2015		2016*	
	Started	Confirmed	Started	Confirmed	Started	Confirmed
Salmonellosis	22	20	16	14	25	23
Shiga-toxin producing E. coli (O157 and others)	8	4	9	5	6	2
Shigellosis	61	58	9	8	12	12
Severe Staphylococcus Aureus Infection in a Previously Healthy Person	NPR	NPR	NPR	NPR	1	0
Staphylococcus Aureus (VRSA) Invasive Disease	1	0	0	0	0	0
Streptococcal disease, invasive, Group B, Newborn	3	3	2	2	0	0
Streptococcus Group A Invasive Disease	14	13	12	12	7	7
Streptococcus Group B Invasive Disease	26	24	30	30	NR	NR
Streptococcus Pneumoniae (Invasive Pneumococcal Disease)**	37	37	37	35	42	42
Streptococcus Pneumoniae Invasive, Drug-Resistant (DRSP)	2	2	12	12	3	3
Toxic-shock syndrome, Streptococcal (STSS)	0	0	2	2	0	0
Typhoid Fever	0	0	0	0	1	1
Varicella (Chickenpox)	6	0	7	0	14	1
Varicella (Involving Hospitalization or Death)**	0	0	1	0	2	1
Vibriosis (non-Cholera Vibrio Species infections)	0	0	0	0	1	0
West Nile virus non-neuroinvasive Disease (aka West Nile Fever)	1	0	2	0	3	0
Yersiniosis	1	1	1	1	0	0
<b>Total</b>	<b>631</b>	<b>278</b>	<b>672</b>	<b>231</b>	<b>714</b>	<b>214</b>

\*YTD data reflects the date range of 01/01/2016 – 12/31/2016 as of 02/16/2017.

\*\* Positive laboratory reports along with known demographics are forwarded to ISDH for investigations by the staff of the Vaccine-Preventable Disease Epidemiologist.

NPR = Not Previously Reported.

NR = Not Reported.

<b>Immunizations</b>			
	<b>2014</b>	<b>2015</b>	<b>2016</b>
Td Adult, Preservative Free	35	32	21
Tdap	851	535	320
Dtap	193	165	119
DTaP/HepB/IPV	252	214	204
Dtap/IPV	209	98	72
Dtap/Hib/IPV	57	11	0
IPV	267	171	120
PCV13	388	310	274
PPSV23	13	2	1
MMR	282	265	166
Varicella	386	284	191
MMRV	324	225	144
Hib	317	279	237
Pediatric Hepatitis A	1,340	811	471
Pediatric Hepatitis B	158	98	55
Adult Hepatitis A	150	86	58
Adult Hepatitis B	171	91	81
Adult Hepatitis A and B	197	123	90
Pediatric Influenza	327	288	299
Flu Mist	307	118	48
Adult Influenza	416	490	311
Meningitis (MCV4)	980	520	359
Men B	*	*	115
HPV Quadrivalent	1,119	383	11
HPV9	**	260	393
Rotavirus Monovalent	104	80	63
Rotavirus Pentavalent	16	0	0
Typhoid, Oral	132	81	59
Typhoid, VICPS	145	151	87
Yellow Fever	86	75	28
<b>Total Clinic Visits</b>	<b>4,419</b>	<b>2,908</b>	<b>1,976</b>
<b>Immunizations Administered</b>	<b>9,222</b>	<b>6,246</b>	<b>4,397</b>

\*Men B Vaccine first available in 2016.

\*\*HPV9 Vaccine first available in 2015.

<b>Tuberculosis</b>			
	<b>2014</b>	<b>2015</b>	<b>2016</b>
TST Placed	715	787	684
TST Positive	11	30	16
Suspect Cases	218	201	167
Active Cases	6	11	5

<b>Case Management for Elevated Blood Lead Levels</b>			
	<b>2014</b>	<b>2015</b>	<b>2016</b>
New Cases Received	96	98	56
Follow-up Cases Open at Close of the Year	49	68	26
Cases Closed	68	95	98

<b>Animal Bites</b>						
	<b>2014</b>		<b>2015</b>		<b>2016</b>	
	Reported	Rabies +	Reported	Rabies +	Reported	Rabies +
Canine	363	0	394	0	396	0
Feline	117	0	132	0	145	0
Bat	16	1	20	0	40	0
Other	19	1	7	0	9	0
County Resident	101	0	107	0	122	0
Out-of-County Resident	28	0	10	0	15	0
South Bend Resident	273	0	282	0	315	0
Mishawaka Resident	113	0	154	0	138	0
<b>Total</b>	<b>515</b>	<b>2</b>	<b>553</b>	<b>0</b>	<b>590</b>	<b>0</b>

## Vital Records

The data below includes all events that occurred within St. Joseph County during 2016. Numbers included in these tables are subject to change following Indiana State Department of Health reconciliation.

<b>Birth Data</b>			
	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Gender</b>			
Male	2,168	2,133	2,236
Female	2,079	2,165	2,100
Total Births	4,247	4,298	4,336
<b>Race/Ethnicity</b>			
White	3,277*	3,449	3,420
African American	566*	708	816
Asian Pacific	105*	111	90
Native American	2*	4	4
Other	266*	26	6
Hispanic	517*	513	552
Non-Hispanic	3,699*	3,785	3,784
Unknown	0*	0	0
Not Categorized	0*	0	0
<b>Birth Weight (in grams)<sup>A</sup></b>			
< 1,000 (Extremely Low Birth Weight)	78*	64	73
1,000 – 1,500 (Very Low Birth Weight)	66*	75	60
1,501 – 2,500 (Low Birth Weight)	452*	351	356
> 2,501	3,609*	3,808	3,836
Unknown	11*	0	11
<b>Maternal Age (in years)</b>			
< 15	3	4	1
15 – 18	165	157	158
19 – 24	1,194	1,230	1,174
25 – 29	1,271	1,300	1,323
30 – 34	1,043	1,044	1,087
35 – 39	477	464	494
≥ 40	94	99	99
<b>Maternal Characteristics<sup>B</sup></b>			
Inadequate Prenatal Care	455*	**	**
No Prenatal Care	57*	61	62
Tobacco Use	1,772*	492	1,816

<b>Birth Data continued</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Residency</b>			
St. Joseph County Resident	3,285	3,281	3,321
Out-of-County Resident	962	1,017	1,015
<b>Place of Birth</b>			
Memorial Hospital	2,498	2,510	2,392
Saint Joseph Health Center	1,704	1,742	1,918
Not Categorized***	45	46	26
<b>Birth Characteristics</b>			
Twins	86	81	105
Triplets	3	1	3
Cesarean Births	1,052 (25%)*	1,322 (31%)	1,301 (30%)
Congenital Anomalies	16*	22	13
<b>Other</b>			
Correction of Birth Certificate	96	132	144
Adoptions Processed	33	209	204

<sup>A</sup> Transfers from Out of County residents included.

<sup>B</sup> Change in reporting system requires that these questions must now be answered prior to completing form

\*Missing file due to software conversion resulted in a loss of data for 31 births.

\*\*Unable to be calculated.

\*\*\*Births that due to State computer system glitch cannot be categorized accurately by Saint Joseph Health Center, Residence, or Other.

<b>Mortality Data</b>			
	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Gender</b>			
Male	1,390	1,385	1,428
Female	1,439	1,440	1,470
Total	2,829	2,825	2,898
<b>Race/Ethnicity</b>			
White	2,523*	2,502	2,541
African American	280*	306	310
Asian Pacific	10*	14	42
Native American	7*	3	4
Other	1*	0	1
Hispanic	42*	29	22
<b>Age at Death</b>			
Fetal Mortality Rate	7.8 per 1,000	5.8 per 1,000	6.8 per 1,000
0 – 28 days	34	33	37
29 days – 1 year	13	5	5
Infant Mortality Rate	8.5 per 1,000	5.5 per 1,000	6.6 per 1,000
1 year – 24 years	48	52	35
25 years – 44 years	120	137	136
45 years – 64 years	530	521	539
≥ 65 years	2,084	2,077	2,146

\*8 deaths reassigned due to incorrect filing status.

<b>Mortality Data continued</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Marital Status</b>			
Married	974	994	990
Widowed	1,032	928	974
Single	390	395	452
Divorced	428	502	475
Unknown	5	6	7
<b>Residence of Decedent</b>			
South Bend	1,427	1,386	1,457
Mishawaka	562	556	590
St. Joseph County	396	432	426
Other Indiana Counties	277	284	257
Other States	159	167	168
<b>Place of Death</b>			
Nursing Home/Extended Care Facility	915	906	993
Residence	876	900	903
Memorial Hospital	478	505	494
Saint Joseph Regional Medical Center	358	342	352
Other	127	172	156

<b>Causes of Death</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>AIDS</b>	2*	3*	5*
<b>Alzheimer's and Dementia</b>	174	194	229
<b>Aspiration Pneumonia</b>	129	146	105
<b>Cardiovascular</b>			
Coronary Artery Disease/Arteriosclerosis Heart Disease and Vascular Heart Disease	217	270	216
Other Heart Disease	262	351	283
Congestive Heart Failure	140	135	161
Cerebral Vascular Accident	86	155	126
<b>Chronic Obstructive Pulmonary Disease and Emphysema</b>	82	142	96
<b>Renal Failure</b>	40	85	63
<b>Cancer – Gastrointestinal</b>			
Colon	40	37	28
Pancreatic	34	36	29
Esophageal	13	15	11
Rectal	6	3	2
<b>Cancer – Respiratory</b>	142	149	129
<b>Cancer – Urogenital</b>	66	67	45

\*AIDS/HIV number is a total of all deaths which include AIDS or HIV as the primary and/or contributing cause of death. In previous years, number reflected only the primary cause of death. These numbers are a more accurate reflection, and as such 2014 and 2015 have been updated to reflect this.

<b>Causes of Death continued</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Cancer - Integumentary</b>			
Breast	29	36	31
Skin	3	7	0
<b>Cancer – Heme and Lymph</b>			
Leukemia	18	13	9
Lymphoma	24	18	30
<b>Other Cancers</b>	13	129	121
<b>Total Cancer Deaths</b>	496	656	436
<b>Accidental Deaths</b>			
Drug Related	42	56	58
Motor Vehicle	40	30	24
Other Accidents	31	39	44
<b>Suicides (Total)</b>	36	45	46
Drugs	2	5	4
Firearms	20	22	24
Hanging	8	14	15
Other	6	5	3
<b>Homicides (Total)</b>	22	22	18
<b>Misc.</b>	1,012	369	988**

\*\*All 2016 Cause of Death totals may change. Due to a computer software glitch, several causes of death are still uncategorized. This issue is being actively addressed, and this report reflects the totals categorized as of 3/28/17.