STARK COUNTY HEALTH DEPARTMENT

*Striving Toward a **Healthier** Community.*






MISSION: "Our mission is to assess, protect, promote, and improve the health of Stark County through leadership, quality service, and community partnerships."

VISION STATEMENT: "Striving towards a healthier community with public health excellence."

ACCREDITED HEALTH DEPARTMENT • PHAB Advancing public health performance • PUBLIC HEALTH ACCREDITATION BOARD •

2018 Annual Report

Health Commissioner's Report

Kirkland K. Norris
Health Commissioner

This has been an extremely productive year for the Stark County Combined General Health District.

We have, as a community, accomplished a great deal working collaboratively to improve the health of Stark County residents. Here are a few high value projects of 2018.

- **Youth Suicide Prevention Activities** – The health department, working in partnership with the Ohio Department of Health and the Center for Disease Control and Prevention, released the Interim Recommendations and County Level Data Report from the Northeast Ohio Youth Health Survey. The goal of these reports is to identify factors contributing to risk and spread of suicidal behaviors and distinguish what activities, social supports, and other factors that protect against suicide.
- **Infant Mortality Reduction Initiatives** – The health department has formed new structured and cross-sector partnerships designed to develop and guide initiatives to reduce infant mortality and strengthen health equity within our communities.
- **Overdose Prevention and Reduction of Overdose Deaths** – The health department, along with other service providers, has developed an overdose prevention strategic plan and community response plan that addresses prevention and education, treatment and recovery, and law enforcement assistance.
- **Strategic Plan Update** – The health department, with input from our community partners, worked to revise the four strategic priority areas within the plan. The new updated priority areas were identified as Sustainability, Public Health Services, Strengthened Public Image, and Innovative Technology. We look forward to working with the health district in implementing and achieving our strategic priorities.

These high value projects are just some of many public health responsibilities that the department administers on a daily basis. This report provides an overview of services and programs that are implemented within our community to protect and promote public health. The report also focuses on vital partnerships and accomplishments aimed at creating a healthier Stark County.

I would like to thank all of the Townships, Cities, and Villages for your continued support of the health department. The health of our community is our number one priority and the dedicated health professionals of the Stark County Health Department are working very diligently to assure a healthier and safer Stark County.

On behalf of the Stark County Board of Health, staff, and myself, it is with great pride that we present the Stark County Combined General Health District 2018 Annual Report.

Respectfully Submitted,
Kirkland K. Norris, *Health Commissioner*

Accredited Health Department • Public Health Accreditation Board • PHAB Advancing public health performance

SCHD'S 2018 ACCREDITATION JOURNEY

Although the SCHD officially achieved National Public Health Accreditation in 2017, the department must submit annual reports to the Public Health Accreditation Board (PHAB) every year until 2022, when the reaccreditation process will begin. The annual reports ensure that the department is continuing to meet conformity with PHAB's standards and measures; identifies opportunities for improvement; and assists with the progression and advancement of the department's preparation towards reaccreditation.

In June of 2018, the SCHD submitted their first annual report. The report consists of two sections with specific requirements under each. Throughout the first year of becoming accredited, the SCHD worked to strengthen areas that were identified by PHAB, continued to enhance the quality of services, and demonstrated leadership within the community regarding emerging public health issues and innovations. Both sections of the SCHD's Annual Report were approved by PHAB. The SCHD is no longer required to report on Section I during the remainder of this accreditation cycle. PHAB provided the following comment on Section II of the annual report: "The work that has been accomplished collectively across the health department could be an inspiration to other similarly situated organizations."

As PHAB continues to improve the quality and performance of all public health departments throughout the United States, the SCHD, along with the other 25 accredited health departments within Ohio will continue to support and advance the practice of public health.

THE SCHD LAUNCHES NEW LOOK

STARK COUNTY HEALTH DEPARTMENT

*"Striving Toward a **Healthier** Community."*

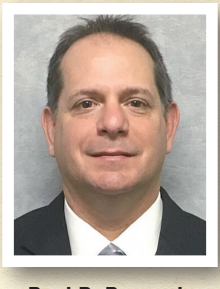
This new year brings forth a fresh look to the Stark County Health Department's logo. Nine staff members, representing all three services areas, convened over the course of a year to develop the new face of the department. The team implemented the strategies in the National Association for County and City Health Official's handbook, Branding Your Local Health Department: The Process. For instance, the team brainstormed the meaning behind logos, conducted surveys of the staff, visitors and community stakeholders, and developed hundreds of different logos options. Great care was put into the development of the new logo to create a logo which was meaningful, simple, timeless, versatile and appropriate for this agency.

THE MEANING BEHIND THE NEW LOGO:

- Dark blue is a historic color for public health.
- Dark blue represents trust worthiness and responsibility.
- The arrow's shape was based on the Hall of Fame Bridge which runs over interstate 77.
- The arrow covers the county to signify protection and care.
- The arrow also represents moving toward the future.
- The tip of the arrow points to the word "health", as the striving towards health is the focus of the Stark County Health Department.

Service Directors

Kay Conley
Administration & Support Services Director



Paul DePasquale
Environmental Health Services Director

Sherry Smith, RN
Nursing Services Director

Maureen Ahmann, DO
Medical Director

TABLE OF CONTENTS

Page 4
- Updated Priorities for the 2019-2023 Strategic Plan
- Water Pollution Control Loan Fund Project

Page 5
- Community Surveyed in 2018
- Property Transfer Summary
- 2018 Property Transfer Inspection Breakdown

Page 6
- 2018 Leading Causes of Death
- Leachate Collection System Upgrade at the Former Exit Landfill
- Quality Improvement...The New Culture
- Tuberculosis Case Management

Page 7
- Overdose Prevention & Reduction of Overdose Deaths

Page 8
- Local Response to a Suicide Cluster
- 2018 At-A-Glance

Page 9
- Reportable Infectious Disease Summary
- Communicable Disease Highlights, 2018

Page 10
- Communicable Disease Highlights, 2018 continued

Page 11
- Infant Mortality Initiatives
- Financial Statement Fiscal Year 2018

THE STARK COUNTY HEALTH DEPARTMENT IS MOVING!

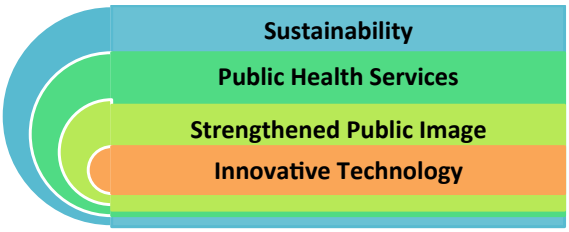
The Stark County Health Department will be moving its headquarters to a new address located at 7235 Whipple Ave. NW in Jackson Township, tentatively scheduled for November, 2019. The new location is just north of the current facility and will allow all Department services, including nursing services which is currently located adjacent to the main site, to be housed together. In addition, there is opportunity for expansion if needed in the future.

The 27,579 square-feet of floor space will house not only Stark County Health Department services but will also include the Stark County Building Department that moved to the same location as the Health Department in 2014. Clinical services, including immunizations, Reproductive Health and Wellness services, and the Women, Infants and Children (WIC) special supplemental nutrition program, will be located on the second floor of the facility.

UPDATED PRIORITIES FOR THE 2019-2023 STRATEGIC PLAN

The Stark County Health Department facilitates a strategic planning process, every five years, to update the department's priorities. This plan provides direction for the accomplishment of future goals and activities and serves as a guide for organizational and individual development efforts. It is a working document that takes into consideration the ever changing environment and newly identified opportunities which highlight the need for the department to maintain flexibility. During 2018, a series of activities were conducted to get feedback and input for the plan including: internal staff interviews; a SWOC (Strength, Weaknesses, Opportunities and Challenges) analysis; a key stakeholder survey; a community survey; and department-wide planning meetings. The goal of the strategic planning process is for the department to use the strengths, seize new opportunities, and minimize weaknesses to increase the success of the organization.

LISTED BELOW ARE THE DEPARTMENT'S UPDATED STRATEGIC PRIORITIES FOR 2019-2023:



During the planning process, staff wanted a new vision for the next five years. This new vision, "Striving towards a healthier community with public health excellence", reflects the commitment staff have for the department and the community. To achieve its new vision and continue to move forward, new goals and objectives were identified for the updated strategic priorities. Each priority was examined in depth and assigned goals, measurable objectives, and activities.

This plan builds upon the department's first strategic plan and strengthens the framework for our department to continue to be a leader in public health. As a nationally accredited health department we aspire to operate at a high level which reflects our commitment to public accountability, effective community engagement, and resource allocation. A special thank you goes to the Public Health students from Kent State University for their work on this project.

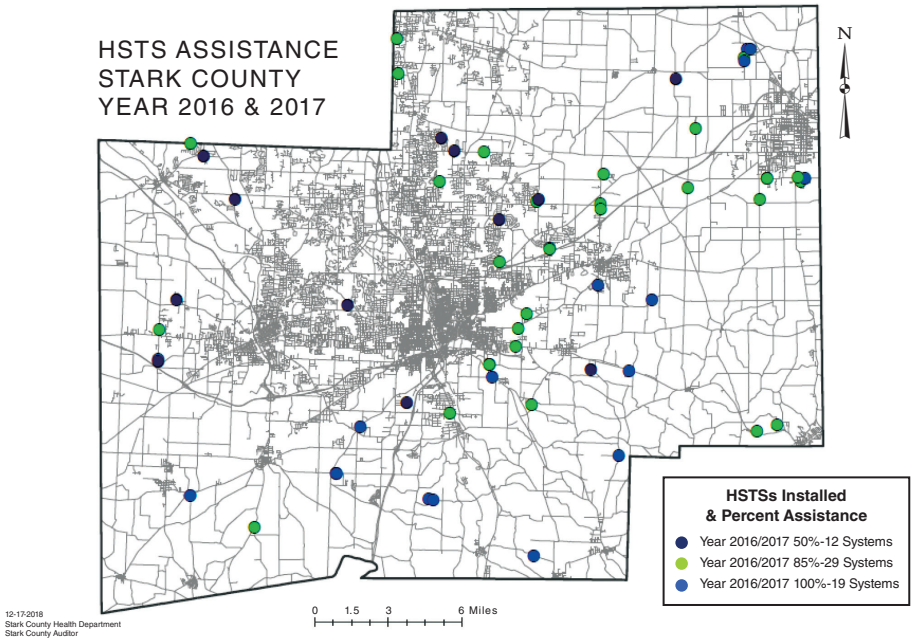
The 2019-2023 Stark County Strategic Plan is available at www.starkhealth.org under Reports/Stats.

WATER POLLUTION CONTROL LOAN FUND PROJECT

In 2016, the Board of Health decided to take on the administration of the Ohio EPA's Water Pollution Control Loan Fund (WPCLF) to replace or update failing septic systems. In 2017, funds were also permitted to be used to connect a home with a failing septic system to the sanitary sewer. Since 2016, a total of $600,000 was spent on updating sixty (60) septic systems within the county. (Please see the map below for distribution across the county.) Twelve homeowners were funded at 50%; twenty-nine homeowners were funded at 85%; and nineteen homeowners were funded at 100%. Bearing in mind that the grant cycle is approximately one year behind, the county was also awarded $200,000 for 2018 and $150,000 for 2019. We estimate that an additional 35 septic systems will be updated with these funds.

Here are some of the Home Sewage Treatment Systems (HSTS) Program Requirements:

- Septic system serving the home must be failing or has already failed
- Household must meet financial guidelines to cover 50%, 85%, or 100% of the total cost
- Applicant must be the homeowner and occupy the dwelling
- Must be current on property taxes (Stark County)
- Must provide all appropriate documentation as required on application forms



ENVIRONMENTAL HEALTH SERVICES STAFF

Front Row: Nancy Petrovski, Paige Seech, Katelyn Caniford, Brittney Alverson, Paul DePasquale *(Environmental Director)*, Angela Raderchak, Gina Davis, Courtney Myers, Christina Gallion

Back Row: Todd Ascani, Ivan Langovsky, Todd Paulus, Deb Moore, Dana Williams, Chris Novelli, Mark Smiraldo, Mike Hesson, Phil Revlock, Tim Heather, Randy Ruszkowski

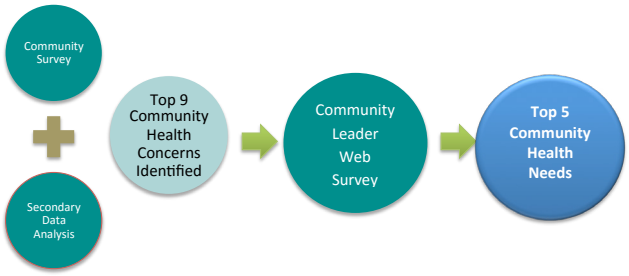
***Not pictured:** John Pavel

COMMUNITY SURVEYED IN 2018

A summary of community and key stakeholder surveys conducted in 2018 was unveiled to over 100 community partners at the annual Health Improvement Summit on February 28th at Walsh University. The data contained in the **2019 Stark County Community Health Assessment (CHA)** will help guide efforts to update the Community Health Improvement Plan (CHIP) to begin in 2020. The Stark County Community Health Needs Assessment Advisory Committee, facilitated by the Stark County Health Department, will use data from the CHA, evaluation of current programs, and innovative strategies and discussion from participants at the Summit to update the current CHIP priorities. The purpose of the assessment is to identify major health problems, gaps in services and other factors that may contribute to less than optimal health status for Stark County residents.

Process for Identifying Community Needs

Analysis included survey data in conjunction with health and demographic data. Using all data available, the CHA identifies the top five needs for the county.



These priority health issues were identified because they were common themes that appeared through the multiple sources of data and there was enough support to identify them as a significant issue. In many cases there were significant differences between demographic groups. The demographic characteristics that had the largest impact were race, income, and age.

Issue Mental Health Services/Suicide

- The need for mental health treatment and intervention continues to increase, especially for youth. High diagnosis rates for depression as well as an increase in suicide rates substantiate this issue.

Issue Heroin/Opioid Use

- A highly addictive opioid drug, heroin use has been steadily rising nationally, statewide and in Stark County.

Issue Access to Health Care

- A large portion of county residents still do not have access to affordable basic health care services.

Issue Infant Mortality

- Infant mortality rates in Ohio are very high and not consistently improving. The situation is even more serious when you consider the disparity in infant mortality between white and black babies. Stark County has one of the highest disparity in birth outcomes of any large urban center in Ohio.

Issue Obesity & Lifestyle Choices

- A large portion of county residents are overweight, not exercising regularly, and not making food choices based on nutritional information.

ADMINISTRATION & SUPPORT SERVICES

Front row, left to right: Kay Conley, Diana Warren, Carmalee Hand-Cannane, Debby Hamilton, Amber Walpole, Amy Ascani, Tasha Catron, and Chelsea Sadinski

Back row, left to right: Amanda Kelly, Kelly Potkay, Mindi Nickels, Sharon Bagnolo, and Steve Ling

PROPERTY TRANSFER SUMMARY

The 2018 property transfer program statistics are listed below, sorted by township. With a total of 945 inspections conducted, the number conducted per year for the last three years has been holding steady. Of the 945 inspections, 33 inspections (which is 3% of the total), were completed by Stark County Health Department staff; the remaining inspections were conducted by private companies. Overall, 16% of the systems inspected were considered failing. "Failing" means that the system is causing a public health nuisance, which is defined in Ohio Revised Code 3718.011. An additional 10% had improperly discharging gray water. Each inspection is submitted to the Health Department for review; when the review is completed, additional information and education is provided to the buyer and seller on how to properly maintain the system to maximize its life span.

2018 PROPERTY TRANSFER INSPECTION BREAKDOWN

Township	Total Inspections	Septic Failure		Gray Water	
BETHLEHEM	27	3	11%	3	11%
CANTON	47	7	15%	4	9%
JACKSON	93	4	4%	1	1%
LAKE	207	9	4%	13	6%
LAWRENCE	60	6	10%	2	3%
LEXINGTON	38	8	21%	5	13%
MARLBORO	41	4	10%	4	10%
NIMISHILLEN	71	10	14%	7	10%
OSNABURG	40	3	8%	5	13%
PARIS	35	7	20%	3	9%
PERRY	43	7	16%	3	7%
PIKE	23	4	17%	1	4%
PLAIN	99	10	10%	6	6%
SANDY	10	3	30%	2	20%
SUGARCREEK	20	4	20%	3	15%
TUSCARAWAS	38	9	24%	8	21%
WASHINGTON	53	17	32%	9	17%
Totals	945	115	16%	79	10%

2018 PROPERTY TRANSFER INSPECTION BREAKDOWN

2013	2014	2015	2016	2017	2018
836	809	857	917	967	945

Leading Causes of Death 2018

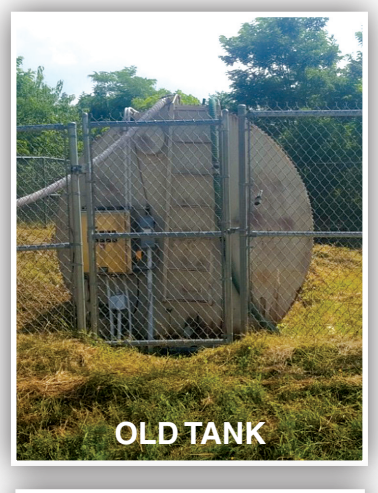
Cancer	519
Heart Disease	469
Alzheimer's Disease	391
Chronic Lower Respiratory	175
Cerebrovascular Disease	134
Kidney Disease	78
Accidents	56
Sepsis	36
Suicide	29
Pneumonia	26
Diabetes	25
Accidental Drug Overdose	16
Influenza	3
Homicide	2
Other	121
Pending	0
TOTAL	2,080

LEACHATE COLLECTION SYSTEM UPGRADE AT THE FORMER EXIT LANDFILL

Earlier this year, while conducting a routine inspection at the former Exit Construction and Demolition Debris disposal facility, it was noted that a hole had developed in the leachate collection tank. The property is being maintained in a joint effort between the Ohio EPA and the Stark County Health Department with the health department monitoring the Osnaburg site weekly. Since the old leachate collection tank began to show signs of aging and was in dire need of repair, the Ohio EPA was able to fund a replacement project.

On May 23, 2018, the Ohio EPA held an onsite pre-bid meeting. The bid package was to update the leachate collection system at the facility. The bids were for the replacement of the 20,000 gallon above ground storage tank, redo the electrical components, set a replacement tank on a cement pad with an earthen berm, and fence the area around the tank. Two companies bid on the project. The bids ranged between $81,000 and $90,000. Mannik-Smith was awarded the contract.

The new leachate collection system has been installed, and has been reactivated at the former Exit C&D. JMW of Canton and SAS Environmental also worked on the project as sub-contractors. Not only was a new collection tank installed, but upgrades were also performed on the electrical system, and the piping systems. The Stark County Health Department's Solid Waste Unit will continue to monitor the site on a weekly basis.


OLD TANK


NEW TANK

QUALITY IMPROVEMENT...THE NEW CULTURE

The SCHD is committed to the ongoing improvement of the quality of services it provides and continues to work toward a state where Quality Improvement (QI) is firmly rooted within the culture of our organization.

Therefore, the Department adopted a Quality Improvement Plan, initially developed in 2014 and updated in 2018. The Quality Improvement Council (QIC), a diverse team comprised of staff from all service areas, oversees the work within the plan and provides oversight for QI activities. **The Council accomplishes this through:**

- Ongoing Leadership
- Oversight of QI Activities
- Encouraging Staff Participation
- Reviewing & Approving Project Ideas
- Monitoring QI Projects
- Coordinating QI Trainings
- Annually Updating QI Plan
- Establishing Goals & Objectives

Over the past five years the QIC has reviewed 16 project submissions, approving nine projects for implementation. An initial survey of staff was administered in 2014 and, most recently, in 2017. There were significant improvements in the knowledge and attitudes of staff related to QI. In addition to revising the Plan, the Council developed a QI Workbook to assist staff with project implementation; approved 3 QI projects; and worked to strengthen the link between the QIC and QI Teams working on projects by assigning a council member to each project team as a liaison. The liaison is responsible for assisting the team with project implementation, keeping the team on track for project completion, and providing the QIC with quarterly updates.

TUBERCULOSIS CASE MANAGEMENT

Tuberculosis (TB) is a serious infectious disease caused by the bacteria Mycobacterium tuberculosis. TB is categorized in two different ways: latent TB infection (LTBI) and TB disease. LTBI cases do not experience any symptoms and are not infectious; however the latent TB may later develop into active TB disease. While TB disease is most often thought of as an infection of the lungs, TB disease can present anywhere in the body, including the brain, spine, bones, joints, or lymph nodes. TB is spread through the expulsion of respiratory droplets when an infectious individual coughs or speaks; newly diagnosed pulmonary TB cases are isolated and told to wear a mask in the presence of other people until they are deemed not infectious. TB incidence is much lower in the United States than in other countries, therefore immigrants from endemic regions are of particular interest to public health officials.

After a case of TB disease has been reported to the local health department (LHD), the LHD will collaborate with the patient's physician to develop a regimen for Direct Observed Therapy (DOT). DOT involves health department personnel observing the patient taking their antibiotics a set number of times per week for 9-12 months, until the illness has been cleared. DOT is important because it ensures that the case is complying with the antibiotic regimen and not developing significant side effects; improper or partial antibiotic uptake can lead to the development of multi-drug resistant TB.

In 2018, Stark County saw a marked increase in TB disease cases. For the past seven years Stark County has been considered a low risk area for TB with about 2 cases per year, while in 2018 there were 5 cases. Stark County hasn't seen 5 cases of TB in a year since 2010. TB control is one of the most important elements of any communicable disease program, and we must continue to be diligent to prevent further TB transmission in our community.

OVERDOSE PREVENTION & REDUCTION OF OVERDOSE DEATHS

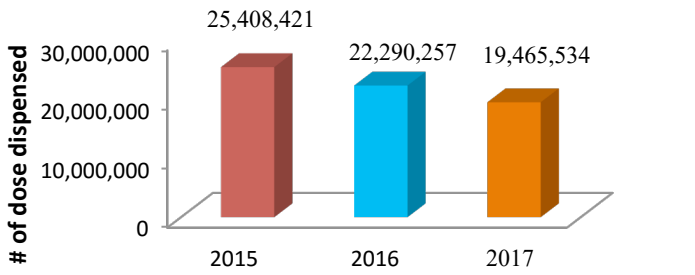
In 2018, Stark County saw a 27% decrease in the number of overdose deaths that occurred in the first half of 2018 compared to the first half of 2015. The Stark County Coroner's Office reported 32 Unintentional Overdose deaths from January through June 2018.

TABLE 1 shows the number of overdoses that occurred during the first half of each year for both county and non-county residents over the past 4 years.

2015 January-June	2016 January-June	2017 January-June	2018 January-June
44	44	43	32

GRAPH 2 shows a three year comparison of opiate doses dispensed by providers in Stark County. The number of Opiate doses dispensed decreased by nearly six million doses over a three year period. This information was reported to Stark County providers at the end of December along with educational information on prescribing guidelines, the state Prescription Monitoring Program integration and use, and online trainings.

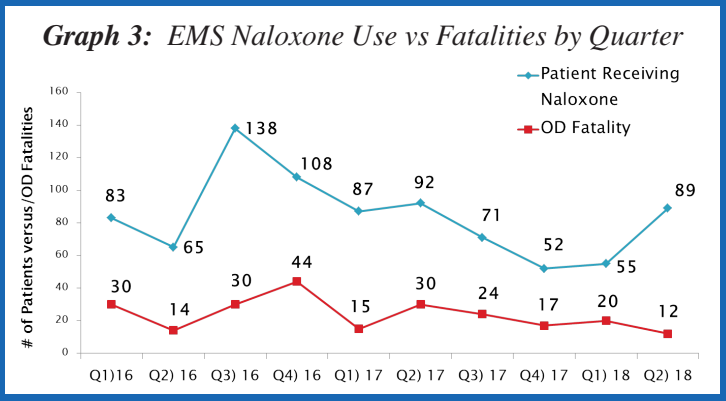
Graph 2: *Stark County 3 Year Comparison of Opiate Doses Dispensed*



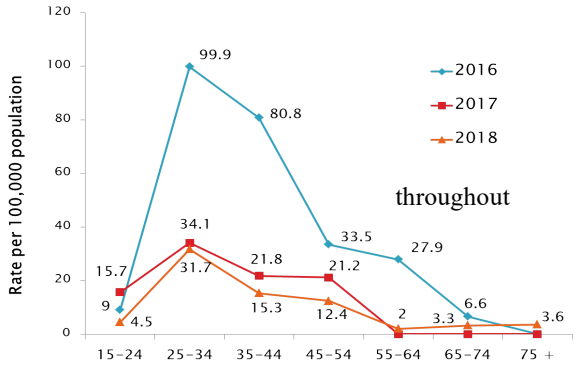
Fentanyl and Fentanyl analogs such as Carfentanil have increased since the second half of 2016 and continue to rise with 12 reported Carfentanil cases in 2016 (10%) and 17 cases in 2017 (20%).

GRAPH 3 showcases the amount of EMS naloxone used per quarter compared to overdose deaths per quarter. The data in this graph comes from coroner reports and the EMS incidence reporting system. When looking at data from quarter 2 in 2018, more naloxone was used with fewer lives lost. This is a significant finding as it relates to the work of the Prescription Drug Overdose Prevention Programs across the county and the distribution of naloxone.

Graph 3: *EMS Naloxone Use vs Fatalities by Quarter*



Graph 4: *Stark County Age-Adjusted OD Deaths 1st Half Age Adjusted OD Rate from 2016-2018*



All of the information in this report has been reviewed by the Overdose Fatality Review (OFR) team which met in November and reviewed the 2018 unintentional overdose deaths; this data comes from the Stark County Coroner's Office. **GRAPH 4**, shows the age-adjusted rate of overdoses occurring in the county, the majority of deaths fall between the ages of 24-44. This is consistent with previous years. The 75 and older age group has seen a slight increase in overdose deaths over the past several years.

One trend noted by the OFR team that has continued to increase throughout the first half of 2018 is the presence of cocaine in the decedent's toxicology reports, increasing from roughly 40% in 2017 to nearly 50% in 2018. The decrease in overdose deaths for the 1st half of 2018 has been promising and we hope to continue this trend for the second half of 2018.

Our department worked closely with Stark MHAR, Stark County GIS, and the Canton City Police Department to develop an interactive Countywide Overdose Death Dashboard. The information contained in this dashboard includes data from 2012-2017 deaths and includes parameters such as age group; gender; year of death; opioids found on toxicology screen; and heroin/fentanyl. In addition to the Dashboard, our department also collaborated with County GIS to develop an interactive drug drop off box locator and geographic mapping of overdose deaths by zip code.

LOCAL RESPONSE TO A SUICIDE CLUSTER

During the 2017/2018 school year, an alarming number of youth deaths shook our community. Through collaboration among Stark County systems, a Coordinating Committee was established to develop a comprehensive plan to prevent tragedies involving young people across the county.

Public Health's part of this plan is the epidemiological investigation and has primarily been working with the data and the schools. Using a statistical formula typically applied to tracking outbreaks of diseases, we are hoping to identify precipitating factors for youth suicide that may contribute to ongoing suicidal behaviors among Stark County youth to prevent further suicides and non-fatal attempts.

Between August 2017 and March 2018, the community of Stark County, Ohio experienced 12 suicides among middle and high school students. During this timeframe, the suicide rate among youth aged 10–19 years rose to more than 7 times the U.S. national rate and 11 times the 2011-2016 Stark County rate. In the past 7 years, Stark County had about 3 suicide deaths per year among youth 10-19 years, representing an incidence rate of about 5.4 deaths/100,000/year. Those twelve youth suicides that occurred between August 2017 and March 2018 raised this incidence rate to 20 deaths/100,000/year. This represents a 270% increase in the suicide rate.

Stark County was experiencing a suicide cluster. A suicide cluster may be defined as a group of suicides or suicide attempts, or both, that occur closer together in time and space than would normally be expected in a given community. Suicide clusters are thought by many to occur through a process of "contagion". In any given suicide cluster, suicides occurring later in the cluster often appear to have been influenced by suicides occurring earlier in the cluster.

Suicide is a serious and growing preventable public health problem. Unfortunately, our understanding of the causes and means of preventing suicide clusters is far from complete (CDC, 2018). Between 2000 and 2016, suicide rates increased by 36% in Ohio and 30% across the United States (Stone et al., 2018). Nationally, suicide is the second leading cause of death for people 10 to 34 years of age (CDC WISQARS, 2018). Suicide and suicidal behaviors are associated with several risk and protective factors, are connected to other forms of injury and violence, and can cause serious health and economic consequences.

In January 2018, in response to a number of youth deaths due to suicide; public health, education, and mental health officials began meeting to develop a suicide community response. The Stark County Health Department asked assistance from the Ohio Department of Health in assessing Stark County's public health issue of suicide. The Ohio Department of Health in turn asked for the assistance of the CDC which turned into an epi-aid investigation. Some of the objectives of the epi-aid investigation include identifying at risk students, identifying suicide risk factors, and identifying protective factors such as youth activities, social supports, and other factors that are most protective against suicide risk in order to guide immediate prevention activities.

The Northeast Ohio Youth Health Survey was used as one of the main methods in the epi-aid investigation. This survey was created by Stark County Health Department, the Ohio Department of Health, and the Centers for Disease Control and Prevention staff and was conducted in the spring of 2018. The electronic survey was administered to over 15,000 students in 7th-12th grades at participating Stark County Educational Services Center-affiliated schools. Questions in the survey asked about connectedness, social media, mental health, life experiences, friendships, suicidal ideation, suicide attempts, and resiliency.

In the month of July, each participating school district was given their confidential district survey results. A report with interim recommendations for suicide prevention strategies was created based on an initial analysis of this survey data and literature on youth suicide prevention. These interim recommendations were also given to the schools along with their survey results.

THIS REPORT'S OVERALL RECOMMENDED STRATEGIES ARE:

1. Develop a protocol to help students at risk of suicide
2. Develop a protocol to respond safely to a suicide death
3. Identify students who are at risk of suicide
4. Integrate suicide awareness & prevention into curriculum for staff, students, and families
5. Enhance protective factors

In October, the preliminary Stark County-level findings of the Northeast Ohio Youth Health Survey were released to guide county, school district, and community-based suicide prevention and response activities. This report builds on information shared at the school-district level, providing an overview of suicide risk and protective factors among Stark County youth.

These reports have been prepared using initial analysis of data gathered through the Northeast Ohio Youth Health Survey and other public health data. Some of the results and recommendations may evolve as further analyses are completed. The full report and interim recommendations for youth suicide prevention are available at www.starkcountyohio.gov/public-health.

STARK COUNTY HEALTH DEPARTMENT

2018 AT-A-GLANCE

- **250,000**, total population served by the health department
- **10th**, Stark County Health Department's ranking of the largest health districts in Ohio
- **$2,865,429**, total number of grant funds received
- **3,707**, total number of immunizations administered
- **2,717**, total number of food program inspections
- **1,801**, total number of infectious diseases reported
- **8,137**, total number of death certificates issued
- **8,085**, total number of environmental health inspections
- **3,649**, total number of birth certificates issued
- **162**, total number of student academic experiences
- **373,** cribs distributed within the safe sleep program
- **4,474,** total number of visits completed with WIC clients
- **977**, Nursing Services home visits completed
- **150**, Project Dawn Kits distributed
- **330**, replacement naloxone doses distributed
- **26**, overdoses reversed reported to SCHD by first responders
- **335**, Reproductive Health and Wellness visits
- **56**, Maternal Home Visit Birth Outcomes with 0 infant deaths (both THRIVE and Moms & Babies First/KOBA)
- **5,** School Based Immunization Education Provided
- **177,** Baby & Me Tobacco Free sessions
- **193,** Directly Observed Therapy (DOT) visits

REPORTABLE INFECTIOUS DISEASE SUMMARY

Stark County Health Department Jurisdiction

DISEASE	2018	2017	DISEASE	2018	2017	DISEASE	2018	2017
Amebiasis	0	0	Hepatitis C - Chronic	137	127	Pertussis	23	13
Anaplasmosis	0	0	Hepatitis E	0	0	Salmonellosis	45	31
Babesiosis	2	0	Influenza-associated			Shigellosis	11	6
Campylobacteriosis	57	54	Hospitalization	374	237	Streptococcal – Group A invasive	14	15
Chlamydia	682	693	Influenza-associated pediatric			Streptococcal-Group B Newborn	1	1
Coccidioidomycosis	0	0	mortality	0	0	Streptococcal Toxic Shock		
Creutzfeldt-Jacob Disease	1	1	LaCrosse Virus Disease	3	0	Syndrome (STSS)	0	0
Cryptosporidiosis	18	20	Legionellosis	20	8	Streptococcal – Invasive Pneumoniae	24	23
Cyclosporiasis	8	2	Listeriosis	1	1	Toxic Shock Syndrome (TSS)	0	0
E. Coli, Shiga Toxin-producing	10	9	Lyme Disease	31	21	Tuberculosis	5	2
Giardiasis	12	12	Malaria	0	0	Typhoid Fever	0	1
Gonorrhea	175	154	Measles	0	0	Varicella	12	13
Haemophilus Influenza Bacteremia	2	7	Meningitis – Aseptic/Viral	32	24	Vibriosis	1	2
Hepatitis A - Acute	6	8	Meningitis-Bacterial			West Nile Virus	5	1
Hepatitis B – Acute	3	2	(Not N. Meningiditis)	1	1	Yersiniosis	1	7
Hepatitis B – Chronic	48	40	Meningococcal Disease	0	0	Zika Virus Disease	0	0
Hepatitis B – Perinatal infection	1	0	Mumps	1	1			
Hepatitis C - Acute	0	0	Mycobacterium Other Than TB	0	0	**Total**	**1812**	**1560**

**This report includes confirmed, probable, and suspect cases reported 01/01/2017 – 12/31/2018*

COMMUNICABLE DISEASE HIGHLIGHTS, 2018

Microorganisms such as bacteria, viruses, parasites, or fungi cause communicable diseases (also known as infectious diseases). A person can contract a communicable disease from an infected person, an infected animal, and/or another infected source such as water or food. Stark County Health Department (SCHD) communicable disease staff keeps track of the number of persons infected by different communicable diseases throughout the year. They also conduct follow-up investigations on all reported diseases by collecting demographic and clinical information, as well as exposures to potential sources of disease. By collecting this data, we are able to determine potential sources of disease, quickly implement control measures, detect trends and outbreaks, and create targeted policies and programs to protect or improve the health of the community.

This annual summary represents the 2018 communicable disease data required by Ohio law reported to state and local health departments. Only those communicable diseases determined to be of public health importance are reportable therefore, this summary does not reflect all communicable disease in our community. Additionally, the summary represents only cases of disease for residents of Stark County Health Department jurisdiction therefore does not include disease data for the cities of Alliance, Canton, or Massillon.

Starting on the bottom row seated pictured left to right:
Tiffany Streb RD, LD, WIC Program Coordinator; Sue Seifert BSN, RN, Immunization Program Coordinator; Delight Howells BSN, RN, Nursing Unit Manager; Sherry Smith MS, BSN, RN, Director of Nursing Services; Christina May MS, BSN, RN, Nursing Unit Manager; Carolyn Jennings BSN, RN, Communicable Disease Program Coordinator;

Second row standing pictured left to right:
Kalita Bell, Moms & Babies First Community Health Worker; Allison Devore BSN, RN, Public Health Nurse; Dawn Hopkins, WIC Clerk; Renae Smith, RD, LD, WIC Dietitian; Nicole Davis BSN, RN, Public Health Nurse; Cheryl Dietrich, Immunization Clerk; Ashlee Wingerter BSN, RN, Public Health Nurse; Angelena Schapiro LSW, Social Worker; Diane Coblentz BSN, RN, Public Health Nurse; Sharon Cartwright, WIC Clerk;

Third row standing pictured left to right:
Latoya Trice BA, Moms & Babies First Community Health Worker; Marquisha Ledwell, THRIVE Community Health Worker; Meghan Wilson BSN, RN, Public Health Nurse; Tiffany Belknap BSN, RN, Public Health Nurse; Courtney Wright RD, LD, WIC Dietitian; Jamie Warfield BA, THRIVE Community Health Worker; Vicky Coffman; Billing Specialist; Annette Elsmore RD, LD, WIC Dietitian; Amanda Uhler BSN, RN, Public Health Nurse; Avinash Joseph MPH, Epidemiologist;

Not Pictured: Bridget Tan CNP, RHWP Practitioner; Darla Berry, WIC and Nursing Clerk; Diana Greene, WIC LPN; Maureen Ahmann DO, Medical Director; Michelle Schoonover MSN, RN, Public Health Nurse; Shelly Curtiss, RHWP Clerk

1) In 2018, SCHD reported and/or investigated several communicable disease outbreaks. Among these were:

- 1 outbreak of Campylobacter (associated with an animal shelter)
- 2 outbreaks of Hand, Foot, and Mouth Disease (associated with daycare facilities)
- 1 outbreak of MRSA (associated with an educational institution)
- 1 outbreak of Norovirus (associated with a long-term care facility)
- 2 outbreaks of Scabies (associated with a long-term care facility and a daycare facility)

Each of these outbreaks was managed utilizing the guidelines and regulations developed by the Ohio Department of Health, and in conjunction with other health departments. Through the cooperation of every organization and private party impacted, SCHD was able to terminate and/or assist in termination of each outbreak.

2) During 2018, several reportable infectious diseases significantly increased in the number of cases reported in the Stark County jurisdiction compared to that of 2017. These diseases are as follows:

- **Salmonella** – Cases of salmonella within Stark County's health jurisdiction increased from 31 to 45 between 2017 and 2018. During the previous 3 years Stark County averaged approximately 33 cases per year.

continued on page 10

- **Cyclosporiasis** – There were 8 cases of cyclosporiasis in Stark County in 2018 compared to 2 cases all of 2017. During 2018 there was a large multi-state outbreak of cyclosporiasis associated with contaminated lettuce; Ohio was one of the states associated with the outbreak.

- **Lyme Disease** – Lyme Disease cases increased this year, from 21 cases in 2017 to 31 cases in 2018. Most of these cases were reported during the summer and early fall when tick-borne illnesses are most prevalent. Tick-borne illnesses can be prevented by taking specific precautions in wooded or grassy areas (long sleeved, light colored clothing, spraying tick repellent, routine tick checks, etc.)

- **West Nile Virus infection (WNV)** – Stark County experienced a large increase in WNV infections, with 5 cases reported in 2018 compared to 1 in 2017. Stark County also had an increased number of mosquito pools test positive for WNV.

- **Pertussis** – Stark County reported 23 cases of pertussis during 2018 compared to 13 in 2017. . This case load for the Stark County jurisdiction surpassed the five-year annual average of 4.6 for the entire county. Pertussis incidence nationally has also increased over the last several years, in part due to increasingly widespread misinformation about pertussis-containing vaccines.

- **Legionella** – Stark County experienced a significant increase in reports of Legionnaire's Disease, from 8 cases reported in 2017 to 20 cases reported in 2018. Legionella cases also increased significantly statewide. The CDC also reported a large number of legionella outbreaks associated with hotels across the country.

3) Influenza season stretches from October of one year until May of the next.

Across all of Stark County (including all four health jurisdictions), the 2018-2019 influenza season thus far has seen 15 cases of hospitalized influenza. Last year at the same time there were 174 cases reported, while the previous five year annual average was around 84 cases. Nationally since October 1, 2017, all viruses antigenically characterized have matched the current vaccine by at least 50% or higher, with some components matching the vaccine 100%. The predominant strain for this season is influenza A (H1N1), the same strain associated with the 2009 pandemic. The influenza vaccine remains the primary and most effective form of protection against the influenza viruses circulating this season. Common symptoms of the flu include fever, cough, sore throat, body aches, headaches, chills, and fatigue. Complications may include conditions such as bronchitis or pneumonia and may make chronic health problems, such as asthma, worse. Staying home while sick and practicing proper hand hygiene are the best ways to stay healthy this season.

4) There were several diseases reported in 2018 that are not commonly seen within Ohio and/or the SCHD jurisdiction, and are briefly discussed below.

- **Babesiosis** is a tick-borne illness caused by the parasite Babesia microti. While many infected people do not have symptoms, others develop flu-like symptoms including fever, chills, headache, myalgia, fatigue, and loss of appetite. Babesia parasites affect red blood cells and can cause hemolytic anemia. Complications from invasive disease include low and unstable blood pressure, low platelet count, blood clotting, organ dysfunction, and death. This parasite cannot be transmitted to other humans without a tick as a vector. Babeosis is best prevented by avoiding tick bites and actively checking for ticks while outdoors.

- **Tuberculosis (TB)** is an infectious disease caused by the bacteria Mycobacterium tuberculosis. TB infection can occur anywhere in the body, but is of primary public health concern when it occurs in the lungs. TB is transmitted when a case with pulmonary tuberculosis (infection of the lung) coughs or exhales the bacteria into the air. While TB does occur in the United States, it is not nearly as common as it is in other endemic regions of the world. Reported TB cases are of significant concern to local health departments; each case is followed until they have completed their antibiotic regimen and been cleared of the bacteria. Proper antibiotic uptake is important for TB cases due to the potential development of multi-drug resistant TB.

- **Mumps** is a vaccine preventable disease caused by a virus. The most well-known symptom is swollen salivary glands, which causes an appearance of puffy cheeks and swollen jaw. Other symptoms include fever, headache, myalgia, fatigue, and loss of appetite. Mumps is considered a rare disease due to the high coverage of the measles, mumps, and rubella (MMR) vaccine. Severe complications such as deafness or encephalitis were known to occur before the introduction of the vaccine. Outbreaks of the disease still occur, often originating in unvaccinated communities and spreading quickly through direct contact with a sick individual's respiratory secretions. Keeping children up to date on their vaccine schedule is the best way to prevent mumps outbreaks.

- **Creutzfeldt-Jakob Disease, (CJD)** is a rare, prion-caused neurodegenerative disease that always results in death, normally within a year of infection. Prions are not bacteria or viruses, but abnormal proteins that may cause disease in hosts. 85% of CJD cases occur with no recognizable pattern of transmission, while the other 15% are associated with inherited genetic mutations. CJD normally presents in two different varieties: classic CJD and variant CJD. Classic CJD presents with dementia-like symptoms and often affects older individuals, while variant CJD cases have a median age of 28 and often presents with severe behavioral changes. CJD was once thought to be associated with contaminated neurosurgical instruments or transplanted tissues (i.e. brain tissue or corneal grafts).

- **LaCrosse Encephalitis** is an arboviral disease transmitted by the bite of an infected eastern treehole mosquito. Symptoms of this illness often include fever, rash, headache, nausea, vomiting and fatigue. Severe neuroinvasive disease such as encephalitis or meningitis most often occurs in children under the age of 16. Most cases affected with the neuroinvasive disease fully recover, though occasionally neurological sequelae may persist. While LaCrosse encephalitis is a rare condition, the disease most frequently occurs in Midwestern states such as Ohio, Indiana, Illinois, Wisconsin, and Minnesota, largely due to their endemic eastern treehole mosquito population. Prevention activities for LaCrosse virus and other arboviral infections include spraying mosquito habitats with insecticide and larvicide and removing potential habitats, such as tires, pots, tree stumps, and other sources of stagnant water.

The Communicable Disease Unit continues to provide information and resources to schools, healthcare facilities and the community regarding infection prevention and control. Common topics that foster significant public interest include influenza, scabies, head lice, Methicillin-resistant Staphylococcus aureus (MRSA), tuberculosis, enteric (intestinal) illnesses, and sexually transmitted diseases.

**The approximate population of the Stark County Health Jurisdiction is 249,087 (U.S. Census Bureau: State and County Quick Facts, 2014).*

INFANT MORTALITY INITIATIVES

Infant mortality is considered the mark of the overall health of a city, state, or nation. Infant mortality is the death of a live-born baby before his/her first birthday. The infant mortality rate is the number of babies who died during the first year of life per 1,000 live births. Sadly, both Stark County & Ohio's infant mortality rate (IMR) is worse than the national average and the African-American community is disproportionally affected. The majority of these infant deaths occur within the neonatal period, or within the first 28 days of life. Prematurity-related conditions continue to be the leading cause of these infant deaths. Below are the programs currently being offered through the Stark County Health Department to combat infant mortality.

HOME VISITING:

The Stark County Health Department offers two home visiting programs utilizing Community Health Workers to provide free, confidential outreach services, and health education for pregnant mothers in Stark County. The mission of our home visiting programs is to serve the community by providing care coordination, empowerment, home visiting, health education, mentoring, and support to pregnant females and their families.

THRIVE STARK COUNTY — EVERY CHILD DESERVES TO CELEBRATE THEIR FIRST BIRTHDAY

MOMS & BABIES FIRST
Ohio's Black Infant Vitality Program

Cribs for Kids® Helping every baby sleep safer

SAFE SLEEP:

The Stark County Health Department provides both the Cribs for Kids© and Safe Sleep programming aimed at reducing infant sleep-related deaths by providing safe sleep environments and education. These programs provide an educational class on infant sleep safety and a safe sleep environment (Pack-N-Play) to eligible families in Stark County. In 2018, 373 Pack–n-Plays were distributed through monthly classes and partnerships with 19 programs in the county. Eight of these programs were home visiting services (Help Me Grow, Moms & Babies First, and THRIVE sites).

Baby & me Tobacco Free

SMOKING CESSATION:

The Baby and Me Tobacco Free program aims to improve birth outcomes, reduce low birthweight rates, reduce preterm birth rates, increase smoking quit rates during pregnancy, increase smoking quit rates during the first twelve months postpartum and is offered at the Stark County Health Department. Eligible moms meet with our trained staff at least 4 times during their pregnancy and once a month for up to a year to receive smoking cessation education and services. Moms who blow smoke-free on a carbon monoxide detector are eligible to receive a $25 gift card for diapers and wipes each month starting in the 3rd prenatal session and every month after as long as they remain smoke free. They can receive double the gift cards if someone living with them also works to quit alongside them, attending sessions and staying quit. We also refer moms to the Ohio Quit Line (1-800-QUIT-NOW) which provides support and incentives for pregnant women who are working to quit smoking during pregnancy.

To refer a pregnant mom, or for more information on any of these programs, please call Nursing Services at 330-493-9928.

Financial Statement Fiscal Year 2018 (unaudited)

SOURCES OF REVENUE	
Contract Fees	281,179
Fees for Services	282,586
C&D User Fees	711,617
Inspection Fees	213,207
Vital Statistics	298,787
Permits	1,344,715
Fines/Late Charges	163,813
State Subsidy	125,237
Local Tax Subdivisions	1,466,720
Public Health Infrastructure	224,897
Prescription Drug O.D. Grant	151,881
Maternal Child Health Grant	398,244
Get Vaccinated Ohio (IAP) Grant	46,577
WIC Grant	389,396
Reproductive Health Grant	94,855
Moms & Babies First Grant	106,884
Injury Prevention Grant	158,246
Thrive Medicaid Support for CHW	362,407
Joint Solid Waste District Grant	170,000
Moms Quit for Two Grant	33,773
Area Health Education Grant	23,946
Creating Healthy Communities	149,574
Cribs for Kids Grant	41,710
Occupant Protection Coordinator	55,495
Water Pollution Control Grant	287,927
Homeowner Contributions-HSTS	51,835
Community Health Assessment	44,380
Other Receipts	75,865
Reimbursements	8,983
Carryover from 2017	906,375
TOTAL SOURCES OF REVENUE	**8,671,111**

EXPENDITURES	
Salaries	3,189,310
Insurance	738,543
Medicare	47,265
PERS	577,999
Workers Compensation	23,750
Unemployment	-
Supplies	367,600
Utilities	17,556
Contracts & Purchased Services	1,231,467
Phones & Communications	28,723
Equipment / Vehicle Rental	37,629
Rent	337,332
Equipment	14,443
Other Expenses	31,534
State Remittances	881,206
Travel	83,520
Refunds	11,745
Payouts For Sick & Vacation Leave	10,440
Encumbrances Carried Over To 2019	383,544
TOTAL EXPENDITURES	**8,013,606**

STARK COUNTY COMBINED GENERAL HEALTH DISTRICT

Serving the cities, villages, and townships of Stark County since 1920:

TOWNSHIPS

Bethlehem
Canton
Jackson
Lake
Lawrence
Lexington
Marlboro
Nimishillen
Osnaburg
Paris
Perry
Pike
Plain
Sandy
Sugarcreek
Tuscarawas
Washington

VILLAGES

Beach City
Brewster
East Canton
East Sparta
Hartville
Hills & Dales
Magnolia
Meyers Lake
Minerva
Navarre
Waynesburg
Wilmot

CITIES

Canal Fulton
Louisville
North Canton

Environmental Health Services, Vital Statistics, and Administration & Support Services
3951 Convenience Circle NW, Canton, Ohio 44718
Phone: 330-493-9904 | Fax: 330-493-9920

Public Health
Prevent. Promote. Protect.

Nursing Services
3969 Convenience Circle NW, Canton, Ohio 44718
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