EPI GRAM November, 2015

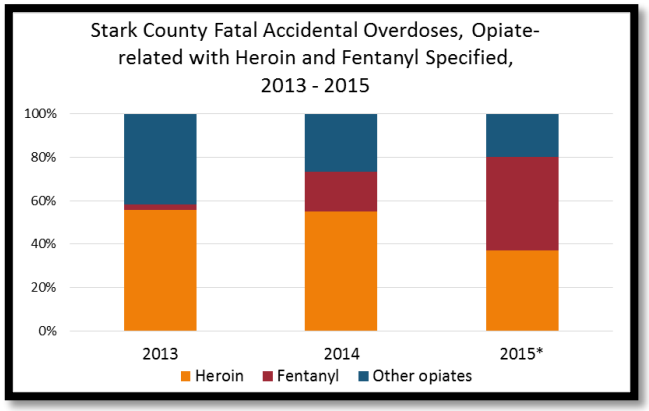
A Monthly Publication of the Stark Public Health Infrastructure Coalition

EPI Gram *is a monthly publication of the Stark County Public Health Infrastructure Coalition. It contains a summary of provisional communicable disease reports and other key public health indicators, with summary tables for Stark County, Ohio. Some reportable conditions may be under investigation and, at any given time, data may fluctuate from month to month for a specific category.*

Monthly Highlight: Fentanyl Deaths and the CDC's Response in Ohio

In late October, 2015, the Centers for Disease Control and Prevention (CDC) distributed an advisory through the Health Alert Network (HAN) to health jurisdictions and partnering agencies across the nation outlining the significant increases in fentanyl-related, unintentional overdose fatalities in multiple states. This was in response to an earlier, nationwide alert issued by the Drug Enforcement Agency (DEA) declaring fentanyl a threat to public health and safety. Fentanyl, a synthetic and short acting opioid analgesic, is 50 to 100 times more potent than morphine. Although pharmaceutical grade fentanyl can be used to manage acute and chronic pain, it is also abused through diversion and misuse. The most recent deadly, occurrences involving fentanyl have been linked to illicitly manufactured fentanyl and fentanyl analogs, collectively referred to as non-pharmaceutical fentanyl (NPF). An increase in NPF related deaths was first identified in several states in late 2013 and throughout 2014, and Ohio was one of the identified states. Ohio reported 514 fentanyl-related deaths in 2014, compared to 92 in 2013.

Following this HAN and a request from ODH, the CDC announced their plan to deliver a six person team to Ohio to study deaths related to fentanyl. The team, made up of experts in epidemiology and behavior, would potentially be in Ohio for several weeks through November with plans to visit Cuyahoga, Hamilton and Montogmery counties, as well as the city of Portsmouth. Their task is to compare victims of fentanyl overdoses with people who died of painkillers and heroin to try to determine what puts people at risk for fentanyl overdoses and how to prevent them. The agency will also recommend strategies to prevent future fentanyl-related deaths in Ohio.



Although not part of the CDC's visit, Stark County has seen its own steady increases in mortality due to opiate and heroin use and abuse. Fentanyl-related deaths have also increased significantly. From 2005 to 2014, the number of accidental overdose deaths increased from 17 to 60 cases, with an average of 76% being opiate-related each year. Heroin related deaths have contributed to 38% or more of the opiate-related deaths since 2010. Fentanyl-related deaths are now beginning to surpass heroin-related deaths. In 2015 (through 7/12/15*), Stark County hase seen more fentanyl-related deaths than heroin-related.

Table 1 Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio, including historical data.

	November 2015				December 2014			
	Monthly High	Monthly Low	Monthly Median	Counts in highest reported health risk category	Monthly High	Monthly Low	Monthly Median	Counts in highest reported health risk category
Pollen Count	Data collected Seasonally, not currently available.				Data collected Seasonally, not currently available.			
Mold Count								
Air Quality Index	41	8	31.5	**0 (All Good)**	32	17	20	**0 (All Good)**

**See the following websites for updated Air Quality Index and mold index terminology and color-coding http://www.airnow.gov/index.cfm?action=aqibasics.aqi https://pollen.aaaai.org/nab/index.cfm?p=reading_charts

Data source for this table is the Air Quality Division of the Canton City Health Department.

Table 2 Summaries of Select Vital Statistics for Stark County

	November 2015	YTD 2015	2014
Live Births	234	3916	4,512
Births to Teens	15	281	380
Deaths	318	4040	4,288

Birth and Death Data is reported by the 4 health districts and may include non county residents.

Table 3 Stark County Crude Birth Rate and Death Rates

	2009	2010	2011	2012	2013
Birth	11.4	10.8	10.8	10.9	11.2
Death	10.9	10.9	11.3	11.4	11.3

*Source: Ohio Department of Health Data Warehouse. Rates are per 1,000 population.

If you have any questions, including how to receive copies of this report, please contact Julia Wagner at 330.493.9904 or Wagnerj@starkhealth.org, or Amanda Archer at 330.489.3327 or aarcher@cantonhealth.org.

Table 4: Jurisdictional Summary of Reportable Diseases in Stark County

	Alliance City		Canton City		Massillon City		Stark County		Total	
	Nov	YTD	Nov	YTD	Nov	YTD	Nov	YTD	Nov	YTD
Amebiasis	0	0	0	0	0	0	0	1	0	1
Babesiosis	0	0	0	0	0	0	0	1	0	1
Campylobacteriosis	0	5	0	16	1	1	5	34	6	56
Chlamydia infection	8	74	66	730	14	161	60	557	148	1522
Cryptosporidiosis	0	3	0	1	0	5	1	18	1	27
Cyclosporiasis	0	0	0	0	0	0	0	1	0	1
E. coli, Shiga Toxin-Producing	0	0	1	4	0	1	2	12	3	17
Giardiasis	1	2	1	10	0	1	2	15	4	28
Gonococcal infection	9	31	24	313	1	40	7	81	41	465
Haemophilus influenzae	0	2	0	3	0	0	0	2	0	7
Hemolytic uremic syndrome	0	0	0	0	0	0	0	0	0	0
Hepatitis A	1	1	0	2	0	0	1	3	2	6
Hepatitis B - Perinatal Infection	0	0	0	2	0	0	0	4	0	6
Hepatitis B - acute	0	1	0	2	0	0	0	0	0	3
Hepatitis B - chronic	0	4	3	11	1	2	2	24	6	41
Hepatitis C - acute	0	3	0	2	0	3	0	5	0	13
Hepatitis C - chronic	2	37	9	117	6	51	14	146	31	351
Influenza-associated hospitalization	0	7	0	75	1	25	2	177	3	284
Influenza-associated pediatric mortality	0	0	0	0	0	0	0	0	0	0
Legionellosis - Legionnaires' Disease	0	0	0	4	0	3	0	12	0	19
Listeriosis	0	0	0	0	0	0	0	0	0	0
Lyme Disease	0	2	0	2	0	2	1	11	1	17
Malaria	0	0	0	0	0	0	0	0	0	0
Measles - indigenous to Ohio	0	0	0	0	0	0	0	0	0	0
Meningitis - aseptic/viral	0	0	0	9	0	3	2	17	2	29
Meningitis - bacterial (Not N. meningitidis)	0	0	0	0	0	1	0	2	0	3
Meningococcal disease -	0	0	0	1	0	1	0	1	0	3
Mumps	0	1	0	1	0	0	0	2	0	4
Mycobacterial disease - other than tuberculosis	1	1	0	2	0	3	3	16	4	22
Pertussis	0	7	0	9	0	6	3	21	3	43
Salmonellosis	1	2	0	13	0	4	1	28	2	47
Shigellosis	0	0	0	5	0	0	0	1	0	6
Streptococcal - Group A -invasive	0	0	1	2	0	2	0	5	1	9
Streptococcal - Group B - in newborn	0	0	0	0	0	0	0	0	0	0
Streptococcal toxic shock syndrome (STSS)	0	0	0	1	0	0	0	0	0	1
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	2	0	7	0	1	3	13	3	23
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	1	3	0	3	0	1	0	8	1	15
Syphilis, Total	0	0	0	1	0	2	0	4	0	7
Syphilis, Primary, Secondary and Early Latent	0	0	0	1	0	2	0	2	0	5
Toxic shock syndrome (TSS)	0	0	0	0	0	0	0	1	0	1
Tuberculosis	0	0	0	3	0	0	0	0	0	3
Varicella	0	0	0	2	0	2	3	21	3	25
Vibriosis (not cholera)	0	0	0	0	0	0	0	4	0	4
Vibrio parahaemolyticus infection	0	0	0	0	0	0	0	0	0	0
West Nile virus disease (also current infection)	0	0	0	0	0	0	0	1	0	1
Yersiniosis	0	0	0	0	0	0	2	8	2	8
Total	24	188	105	1355	24	323	114	1262	267	3128

Source: Ohio Disease Reporting System, downloaded 12/05/2015.

Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County	Nov 2015	Nov 2014	YTD 2015	YTD 2014	All of 2014	5 Yr Annual Average	Rate
Amebiasis	0	0	1	0	0	0.2	0.053
Anaplasmosis	0	0	0	0	0	0.2	0.053
Babesiosis	0	0	1	0	0	0.2	0.053
Brucellosis	0	0	0	0	0	0.2	0.053
Campylobacteriosis	6	3	56	74	77	59.2	15.762
Chlamydia	148	122	1522	1432	1569	1465.2	390.110
Cholera	0	0	0	0	0	0.0	0.000
Coccidioidomycosis	0	0	0	1	1	0.4	0.107
Creutzfeldt-Jakob Disease	0	0	0	0	0	0.6	0.160
Cryptosporidiosis	1	1	27	29	29	27.8	7.402
Cyclosporiasis	0	0	1	0	0	0.2	0.053
Dengue	0	0	0	0	0	0.8	0.213
Escherichia coli , STP, Not O157:H7	3	0	17	0	0	1.2	0.320
Escherichia coli O157:H7	0	0	0	7	7	2.8	0.746
Escherichia coli , STP, Unk Serotype	0	0	0	0	0	0.4	0.107
Ehrlichiosis/Anaplasmosis	0	0	0	0	0	0.2	0.053
Giardiasis	4	1	28	16	16	44.2	11.768
Gonorrhea	41	33	465	506	547	562.8	149.846
Haemophilus influenzae , Invasive	0	0	7	6	6	7.4	1.970
Hemolytic Uremic Syndrome (HUS)	0	0	0	1	1	0.2	0.053
Hepatitis A	2	0	6	7	9	4.8	1.278
Hepatitis B, Perinatal	0	0	6	1	1	2.6	0.692
Hepatitis B, Acute	0	0	3	6	6	5.2	1.385
Hepatitis B, Chronic	6	1	41	34	39	32.4	8.627
Hepatitis C, Acute	0	0	13	3	3	6	1.597
Hepatitis C, Chronic	31	20	351	244	272	247.8	65.977
Hepatitis E	0	0	0	0	0	0.2	0.053
Influenza-associated hospitalization	3	6	284	147	407	208.2	55.433
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.053
LaCrosse virus disease	0	0	0	0	0	0.8	0.213
Legionellosis	0	1	19	5	6	13.6	3.621
Listeriosis	0	0	0	0	1	1.4	0.373
Lyme Disease	1	0	17	9	9	10.8	2.876
Malaria	0	0	0	1	1	1	0.266
Measles (indigenous to Ohio)	0	0	0	9	9	1.8	0.479
Meningitis, Aseptic	2	1	29	22	24	35.6	9.479
Meningitis, Other Bacterial	0	0	3	2	2	3.2	0.852
Meningococcal Disease	0	0	3	1	2	1	0.266
Mumps	0	0	4	4	5	1.4	0.373
Mycobacterial disease - Not TB	4	2	22	32	33	30.4	8.094
Other arthropod-borne disease	0	0	0	1	1	0.2	0.053
Pertussis	3	2	43	81	83	45.6	12.141
Q fever, acute	0	0	0	0	0	0.4	0.106
Salmonellosis	2	3	47	34	38	37.8	10.064
Shigellosis	0	1	6	74	75	34	9.053
Spotted Fever Rickettsiosis	0	0	0	0	0	0.6	0.160
Streptococcal Dis, Group A, Invasive	1	0	9	9	10	15.8	4.207
Streptococcal Dis, Group B, in Newborn	0	0	0	1	1	2.4	0.639
Streptococcal Toxic Shock Syndrome	0	0	1	2	2	1	0.266
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	3	4	23	24	27	36	9.585
Streptococcus pneumo - inv antibiotic resistant/intermediate	1	1	15	7	9	18.8	5.006
Syphilis, Total	0	1	7	7	7	6.4	1.704
Syphilis, Primary and Secondary	0	1	5	7	7	0.8	0.213
Toxic Shock Syndrome (TSS)	0	4	1	0	0	0.8*	0.213*
Tuberculosis	0	0	3	1	1	1.8	0.479
Thyphoid Fever	0	0	0	1	1	0.4	0.107
Typhus Fever	0	0	0	0	0	0.2	0.053
Varicella	3	0	25	21	24	35.4	9.425
Vibriosis - other (not cholera)	0	0	4	0	0	0.6	0.160
Vibriosis parahaemolyticus	0	0	0	0	0	0.2	0.053
West Nile Virus	0	1	1	1	1	0.4	0.107
Yersiniosis	2	1	8	3	3	1.2	0.320

Source: Ohio Disease Reporting System, downloaded 12/05/15. Rates are per 100K population and based on 5 yr average incidence 09-13.*08-12 from ODH Stats pg.