

**EPI Gram** is a monthly publication of the Stark County Public Health 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.

### IN THE NEWS:

**Ehrlichiosis:** The Stark County Health Department received a reported probable case of Ehrlichiosis in August. This is just one of only seven cases reported in Ohio during the previous 12 months. Ehrlichiosis is a tick-borne febrile illness, commonly characterized by headaches, myalgia, rigors, and malaise. The illness is spread by the bite of infected lone star, black legged, and western black legged ticks. Ehrlichiosis most commonly occurs in the southeastern, northeastern, and upper Midwestern United States. There have not been any documented cases of ehrlichiosis acquired in Ohio. The case that occurred in Stark County in August was most likely due to a tick bite that occurred while the patient was in Wisconsin

**Air pollution:** Nationally-Recently released findings from research on mice at Northwestern University found links between poor air quality and blood clots that can trigger heart attacks and strokes. While evidence has been able to demonstrate a link between air pollution and cardiovascular disease and death, this study demonstrated the mechanism that leads to the heart attack and strokes. The researchers believe that “air pollution particles trigger inflammation in the lungs, which then secrete a substance called interleukin-6 that promotes blood clotting. This results in an increased risk of heart attack and stroke ....” Further details can be found at <http://www.northwestern.edu/newscenter/stories/2007/09/mutlu.html>.

Locally- The air quality index (AQI) is used to help monitor possible pollution levels. The AQI is derived by comparing EPA standards from readings of Particulate Matter 2.5 (PM2.5), and ozone. The higher the AQI, the greater the level of air pollution, and the greater the health risk. During the previous three years, August has reported the highest number of moderate counts within each reporting year. Some of the greatest fluctuations in the index are in September. These two statistics combine to make August and September months to encourage patients with previous heart attacks or strokes, or those with lung disease and allergies to monitor the rate of air pollution prior to planning outdoor activities. Daily local AQI counts are listed at the following website [http://www.cantonhealth.org/air\\_quality.htm](http://www.cantonhealth.org/air_quality.htm). Further information can be found at <http://airnow.gov/>

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

	August 2007				September 2006			
	Monthly High	Monthly Low	Monthly Mean	Counts in highest reported health risk category	Monthly High	Monthly Low	Monthly Mean	Counts in highest reported health risk category
Pollen Count	200	5	58	N/A	160	5	40	N/A
Mold Count	22,950	3,740	12,447	9 Mod, 10 High	17,800	4,500	12,038	8 Moderate, 9 High
Air Quality Index	93	19	50	7 Moderate	81	14	43	6 Moderate

Pollen and Mold counts are derived from rotorod samples on the 2<sup>nd</sup> story roof of Canton City Hall. The readings are from a 24 hour period/24 hour avg. on all work days. Mold counts of 6,500-12,999 are moderate and many individuals sensitive to molds may experience symptoms, counts of 13,000 to 49,999 are high and most individuals with any sensitivity to molds will experience symptoms. The Air Quality Index (AQI) is derived by comparison to EPA standards from the following readings: Particulate Matter 10, Particulate Matter 2.5 continuous on CCHD 2<sup>nd</sup> floor roof top; Sulfur Dioxide at Malone College; and ozone monitors in Canton, Brewster, Alliance, and Middlebranch. This index is produced from March to October. AQI ratings are 151-200: unhealthy (UH); 101-150: unhealthy for sensitive groups (UH sg); 51-100: moderate (M); 0-50: good (g).

**Table 2 Summary of Select Vital Statistics for Stark County, Ohio**

	Aug 2007	YTD 2007	2006
Live Births	460	3287	4839
Births to Teens	41	330	434
Deaths	300	2762	4061

**Table 3 Stark County Crude Birth and Death Rates per 100,000 population** Rates are based on the US Census 2000 Stark County population of 377,438.

	2002	2003	2004	2005	2006
Birth	1270	1260	1240	1211	1282
Death	1090	1110	1040	1140	1141

**Table 4 – Summary of Select Reportable Diseases for August 2007 in Stark County, Ohio (provisional data only)**

Refer to “Case Definitions for Infectious Conditions Under Public Health Surveillance,” MMWR (Morbidity and Mortality Weekly Report) 1997; 46 (No. RR-10), the Ohio Department of Health Infectious Disease Control Manual or visit [www.cdc.gov/epo/dphsi/casedef/index.htm](http://www.cdc.gov/epo/dphsi/casedef/index.htm) for case definitions.

This report includes confirmed, probable and suspect cases.

	Alliance City			Canton City			Massillon City			Stark County			Stark County Totals			
	Aug 2007	YTD 2007	YTD 2006	Aug 2007	YTD 2007	YTD 2006	Aug 2007	YTD 2007	YTD 2006	Aug 2007	YTD 2007	YTD 2006	Aug 2007	YTD 2007	YTD 2006	5 Year annual average
Amebiasis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4
Campylobacteriosis	1	3	1	4	6	6	0	1	4	4	25	24	9	35	35	51.8
Chlamydia	7	62	53	44	405	453	11	49	34	32	193	246	94	709	786	1126.4
Creutzfeldt-Jakob Ds	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0.6
Cryptosporidiosis	0	0	0	1	2	4	0	2	0	5	8	7	6	12	11	14
E Coli 0157	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2.4
E Coli	0	0	1	0	0	0	0	0	0	0	1	1	0	1	2	3
Enceph., WNV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.6
Enceph., Other	0	1	1	0	0	0	0	0	0	0	0	1	0	1	2	2.8
Giardiasis	0	4	1	2	6	7	1	3	1	2	17	19	5	30	28	49.2
Gonorrhea	1	11	19	27	280	294	7	36	8	8	81	74	43	408	395	646
Haemo. Influz., Bac	0	0	0	0	1	1	0	0	0	0	0	2	0	1	3	5.8
Hepatitis A	0	1	1	0	1	0	0	0	1	1	5	2	1	7	4	8
Hepatitis B*	0	1	3	1	8	13	1	3	0	3	15	18	5	27	34	44.6
Hepatitis C*#	1	19	15	8	66	79	4	14	5	16	76	76	29	175	175	273.5
Kawasaki Syndrome	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.6
Legionellosis	0	0	0	1	2	1	0	0	1	2	3	2	3	5	4	12.2
Listeriosis	0	0	1	0	0	1	0	0	0	1	1	1	1	1	3	2.4
Lyme Disease	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2.6
Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8
Meningitis, Asep	0	0	1	4	14	8	1	3	2	6	15	7	11	32	18	53.8
Meningitis Bac.	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	4.4
Meningococcal Dis.	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2.4
Mumps	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.4
Pertussis	0	0	0	0	2	0	0	0	0	0	5	4	0	7	4	17
Salmonellosis	0	3	2	0	4	10	1	2	8	5	18	16	6	27	36	49.4
Shigellosis	0	0	0	1	1	0	0	0	0	0	0	2	1	1	2	11.8
Strep Inv A GAS	0	1	2	0	3	3	0	0	0	1	3	3	1	7	8	12.2
Strep B Newborn	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	2
Strep Pneu ISP	0	0	4	1	15	19	0	1	0	0	23	18	1	39	41	47.8
Strep TSS	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0.4
Syphilis	0	1	3	0	0	2	0	0	0	1	7	8	1	8	13	21.6
Typhoid Fever	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.4
Varicella#	0	6	23	1	18	32	0	4	8	0	92	154	1	120	217	
Vibriosis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
Yersiniosis	0	0	0	0	0	0	0	1	0	0	4	0	0	5	0	2

\*This includes all hepatitis reports; acute, chronic, and status not known. # Incomplete 5 yr average due to a change in reporting.

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