

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

Nationally, E Coli O157:H7 Infections from fresh Spinach.

As of 1 PM (ET) September 24, 2006, 173 persons infected with the outbreak strain of *E. coli* O157:H7 have been reported to CDC from 25 states. Among the ill persons, 92 (53%) were hospitalized, 28 (16%) developed a type of kidney failure called hemolytic-uremic syndrome (HUS), and an adult in Wisconsin died. One hundred twenty-five (72%) were female and 15 (9%) were children under 5 years old. The proportion of persons who developed HUS was 29% in children (<18 years old), 8% in persons 18 to 59 years old, and 16% in persons 60 years old or older. Among ill persons who provided the date when their illnesses began, 88% became ill between August 19 and September 5. The peak time when illnesses began was August 30 to September 1 -- 35% of persons with the outbreak strain became ill on one of those 3 days. For the most up-to-date information please visit: <http://www.cdc.gov/foodborne/ecolispinach/current.htm>.

State Wide, E Coli O157:H7 there have been 20 confirmed cases linked to the nationwide outbreak. In order to determine if more cases are present in Ohio, the Ohio Department of Health Laboratory is testing stool in symptomatic patients who report consuming spinach during a time period consistent with this outbreak. Contact your local health department for further details on stool specimen collection and shipment.

Locally, Salmonella reports are on the rise. Comparing the same time period from 2005 to 2006, the number of reported cases of Salmonella in the state are down by 11%, but the reports within Stark County are elevated by 30%. The majority of the additional cases of Salmonella are linked to a single party. The party was attended by 22 individuals, 9 of whom became ill from 6 to 120 hours later. Six of the submitted stool samples revealed the presence of the same PFGE pattern of Salmonella Thompson, a relatively rare strain in the state of Ohio. There are no other known cases with this same PFGE pattern. Although an in depth investigation was performed, including testing of human and bird stools and leftover food to determine the source, no exact cause of the outbreak could be identified.

Locally, a change in diagnosis was made for July Vibriosis case. In July, a case of Vibriosis was reported in a 74-year-old female. The patient did not report any typical risk factors for *vibrio parahaemolyticus* infection, which normally include the ingestion of raw shellfish or exposure to seawater. Further laboratory testing indicated that the patient was infected with *pasteurella multocida*, rather than *vibrio*. *Pasteurella multocida* is found in wild and domestic animals, including cats and dogs. Pasteurellosis in humans is most often associated with animal bites or scratches.

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

	August 2006				September 2005			
	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	175	5	61		160	5	49	
Mold Count	21,520	6,910	13,570	13 or 23 high	10,840	4,560	7,694	16 of 21 moderate
Air Quality Index	82	22	52	12 of 23 moderate	108	19	56	1 of 21 UH sg

Pollen and Mold counts are derived from rotorod samples on the 2nd story roof of Canton City Hall. The readings are taken 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 2nd 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 2006	YTD 2006	2005
Live Births	280	2677	4574
Births to Teens	22	262	508
Deaths	284	2677	4305

Table 3 Stark County Crude Birth and Death Rates

Crude rates are based on US Census 2000 Stark County population of 377,438.

	2002	2003	2004	2005
Birth	0.0127	0.0126	0.0124	0.0121
Death	0.0109	0.0111	0.0104	0.0114

Table 4 – Summary of Select Reportable Diseases for August 2006 in Stark County, Ohio (provisional data only)

Please 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 for case definitions. This report includes confirmed, probable and suspect cases.

	Alliance City			Canton City			Massillon City			Stark County			Stark County Totals			
	Aug 2006	YTD 2006	YTD 2005	Aug 2006	YTD 2006	YTD 2005	Aug 2006	YTD 2006	YTD 2005	Aug 2006	YTD 2006	YTD 2005	Aug 2006	YTD 2006	YTD 2005	5 Year annual average
Amebiasis												1	0	0	1	0.4
Campylobacteriosis	0	1	1	2	6	13	0	4	1	3	24	23	5	35	38	51.6
Chlamydia	5	53		53	453		6	34		53	246		117	786	0	1217
Creutzfeldt-Jakob Ds												1	0	0	1	0.6
Cryptosporidiosis				0	4	2				1	7	2	1	11	4	11.6
E Coli 0157				0	1	0							0	1	0	2.4
E Coli	0	1	1							0	1	0	0	2	1	2.4
Enceph., WNV													0	0	0	3
Enceph., Other	1	1	1							0	1	0	1	2	1	3.2
Giardiasis	0	1	7	0	7	9	0	1	3	5	19	17	5	28	36	53
Gonorrhea	1	19		48	294		2	8		13	74		64	395	0	506
Haemo. Influz., Bac				0	1	2				0	2	2	0	3	4	5.6
Hepatitis A	0	1	0				0	1	0	0	2	2	0	4	2	9.2
Hepatitis B*	0	3	5	2	13	17			1	3	18	15	5	34	38	37.4
Hepatitis C*	3	15	18	7	79	94	0	5	22	8	76	60	18	175	194	281
Kawasaki Syndrome			1										0	0	1	3.4
Legionellosis				1	1	4	0	1	1	0	2	3	1	4	8	11.4
Listeriosis	0	1	0	0	1	0				0	1	0	0	3	0	1.6
Lyme Disease						1				1	1	3	1	1	4	3.2
Malaria												1	0	0	1	1
Meningitis, Asep	0	1	7	2	8	3	2	2	0	2	7	13	6	18	23	58
Meningitis Bac.										0	1	1	0	1	1	4.4
Meningococcal Dis.													0	0	0	2.8
Mumps										0	1	0	0	1	0	0
Pertussis			7			10			3	0	4	16	0	4	36	16.4
Salmonellosis	0	2	0	0	10	5	7	8	3	1	16	19	8	36	27	48.4
Shigellosis										0	2	4	0	2	4	12.4
Strep Inv A GAS	0	2	2	0	3	1				1	3	5	1	8	8	10.6
Strep B Newborn				1	1	2	1	1	0				2	2	2	1.8
Strep Pneu ISP	0	4	4	2	19	14	0	0	4	0	18	9	2	41	31	36
Strep TSS													0	0	0	0.6
Syphilis	0	3		0	2					4	8		4	13	0	32
Typhoid Fever											1		0	1	0	0.2
Varicella***	0	23		4	32		8	8			154		12	217	0	0
Vibriosis													0	0	0	0.2
Yersinosis													0	0	0	0.8

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

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