

**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: Clostridium Difficile

### **Nationally:**

During the recent past (2003 to 2006), *C. difficile* has been more frequent, more severe, more refractory to standard therapy, and more likely to relapse. This pattern is widely distributed in the United States, Canada, and Europe and is now attributed to a new strain of *C. difficile* designated BI, NAP1, or ribotype 027 (which are synonymous terms). This strain appears more virulent, possibly because of production of large amounts of toxins, and fluoroquinolones are now major inducing agents along with cephalosporin's, which presumably reflects newly acquired in vitro resistance and escalating rates of use. The recent experience does not change principles of management of the individual patient, but it does serve to emphasize the need for better diagnostics, early recognition, improved methods to manage severe disease and relapsing disease, and greater attention to infection control and antibiotic restraint. [Ann Intern Med.](#) 2006 Nov 21;145(10):758-64.

### **Statewide:**

The Ohio Department of Health website has been updated to reflect monthly counts and rates per 10,000 patients for January through October, 2006. At this time an ODH representative has stated that the reporting was intended to establish a baseline and will be discontinued after the December totals have been posted. The November report will be posted on December 13, 2006 and December's posting date is planned for January 16<sup>th</sup>, 2007. Reporters, please provide totals to your local health department the 2<sup>nd</sup> Friday of the month to ensure proper recording.

### **Locally:**

The January through September report revealed a high degree of variability in the rates of *C. difficile* among local health care facilities. These rates will vary significantly for a wide variety of reasons. Rates may vary due to: type of procedures performed, willingness of staff physicians to prescribe antibiotics, reporting errors, size of facility, level of care, number and size of other facilities that "feed" into a specific facility, aggressiveness of patient identification, change in lab procedures/tests, percentage of population > 65 years of age, improved reporting methods throughout the year, etc. It is imperative that the data is used for its intended purpose, to establish a baseline and promote education, and not to make any comparisons.

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

	October 2006				November 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	Suspended for season				Suspended for season			
Mold Count	Suspended for season				Suspended for season			
Air Quality Index	52	8	26	1-moderate	72	4	24	1-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 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 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**

	Oct 2006	YTD 2006	2005
Live Births	137	3107	4574
Births to Teens	10	302	508
Deaths	305	3318	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 October 2006 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			
	Oct 2006	YTD 2006	YTD 2005	Oct 2006	YTD 2006	YTD 2005	Oct 2006	YTD 2006	YTD 2005	Oct 2006	YTD 2006	YTD 2005	Oct 2006	YTD 2006	YTD 2005	5 Year annual average
Amebiasis										0	0	1	0	0	1	0.4
Campylobacteriosis		1	1	2	11	14	0	4	2	0	31	25	2	47	42	51.6
Chlamydia	12	68		57	510		11	52		43	351		123	981		1217
Creutzfeldt-Jakob Ds													0	0	0	0.6
Cryptosporidiosis	0	0	1	1	6	2				0	9	4	1	15	7	11.6
E Coli 0157										0	1	0	0	1	0	2.4
E Coli	0	1	1							0	1	1	0	2	2	2.4
Enceph., WNV				0	1	1				2	2	0	2	3	1	3
Enceph., Other	0	1	1							0	1	0	0	2	1	3.2
Giardiasis	1	2	8	1	9	11				3	24	21	5	35	40	53
Gonorrhea	3	25		25	319		10	21		12	102		50	467		506
Haemo. Influz., Bac				0	1	5				0	2	2	0	3	7	5.6
Hepatitis A	0	1	0				0	1	0	0	3	2	0	5	2	9.2
Hepatitis B*	0	3	5	1	17	21	0	0	1	0	19	16	1	39	43	37.4
Hepatitis C*	0	17	22	10	94	120	0	8	28	5	89	75	15	208	245	281
Kawasaki Syndrome	0	0	1							0	0	1	0	0	2	3.4
Legionellosis				0	1	6	0	1	1	3	6	8	3	8	15	11.4
Listeriosis	0	1	0	1	2	1				0	1	0	1	4	1	1.6
Lyme Disease										1	2	3	1	2	3	3.2
Malaria										0	0	1	0	0	1	1
Meningitis, Asep	2	6	13	3	15	3	2	4	0	3	15	31	10	40	47	58
Meningitis Bac.										0	1	3	0	1	3	4.4
Meningococcal Dis.				1	1	0							1	1	0	2.8
Mumps										0	1	0	0	1	0	0
Pertussis	0	0	7	0	0	12	0	0	3	1	9	25	1	9	47	16.4
Salmonellosis	0	3	0	0	11	7	0	8	3	1	19	25	1	41	35	48.4
Shigellosis										0	2	4	0	2	4	12.4
Strep Inv A GAS	0	3	2	0	3	3				0	3	5	0	9	10	10.6
Strep B Newborn				0	1	2	0	1	0	1	1	0	1	3	2	1.8
Strep Pneu ISP	1	7	5	1	21	19	0	0	4	1	20	26	3	48	54	36
Strep TSS													0	0	0	0.6
Syphilis	0	0		0	2					3	12		3	14		
Typhoid Fever										0	1	0	0	1	0	0.2
Varicella***	0	24		5	40		0	8		8	169		13	241	***	**
Vibriosis													0	0	0	0.2
Yersinosis	1	1	0										1	1	0	0.8

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

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