## EPI GRAM-July, 2006

## A Monthly Publication of the Stark Public Health Infrastructure Coalition

**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, State Wide

West Nile Virus (WNV) is now confirmed in the human population in the state of Ohio and in the mosquito population in Stark County. To date one 2 year old female has been confirmed with WNV and there are at least 6 suspect cases. The cases range in age from 2 to 80, with 3 female and 3 male. Of the cases with full reports the typical presentation for treatment is diarrhea and/or watery stools, malaise, and fever. Additional symptoms at time of presentation include headache, dizziness, and loss of appetite. The following test is available at the Ohio Department of Health Laboratory (ODHL) for confirmatory testing:

- ELISA (Enzyme linked immunosorbent assay) will be run on paired acute and convalescent sera, or a single convalescent serum sample.
- ELISA run on a single acute CSF sample, or an acute CSF paired with convalescent serum sample, as necessary.

ODHL does not charge for arboviral serologies; please call your local health department for details.

## **IN THE NEWS,** Locally

**Typhoid Fever was** reported in a 14-year-old female who had recently returned from a trip with her family to a resort in the Dominican Republic. Typhoid fever is caused by the bacteria *Salmonella* typhi and is spread by the ingestion of food or water that has been contaminated by feces. Ohio reports an average of fewer than 10 cases of Typhoid Fever per year, most related to foreign travel. Neither the Ohio Department of Health nor the Centers for Disease Control and Prevention has received additional reports of any other visitors to this particular resort becoming ill to date. Subsequent testing has revealed that family members were not infected.

**Vibriosis** (*vibrio parahaemolyticus*) was reported in a 74-year-old female. In the U.S., *vibrio parahaemolyticus* infection has recently been most often associated with the consumption of raw oysters or other shellfish, causing gastrointestinal symptoms. *Vibrio parahaemolyticus* can also cause skin or blood infections when a wound is exposed to brackish saltwater. The patient had a bloodstream infection and did not report any seawater exposure, but had recently been fishing in a freshwater lake.

**Dengue Fever** was reported in a 33-year-old male and is currently listed as a suspect case. The patient had recently returned from India and Bangladesh, which are currently experiencing outbreaks of Dengue Fever. Dengue Fever is a mosquito-borne disease caused by a virus found in tropical and subtropical areas. Each year approximately one or two cases are identified in Ohio that has been contracted internationally. Additional lab results are still pending from the Centers for Disease Control and Prevention laboratory.

Rabies has been reported in two bats in Stark County. To date no human cases have been reported in the State of Ohio. Postexposure prophylaxis (PEP) is indicated for persons possibly exposed to a rabid animal. Possible exposures include animal bites, or mucous membrane contamination with infectious tissue, such as saliva. {For more information on types of exposures, see <a href="Human Rabies Prevention - United States">Human Rabies Prevention - United States</a>, 1999 Recommendations of the Immunization Practices Advisory Committee (ACIP).} PEP should begin as soon as possible after an exposure. There have been **no** vaccine failures in the United States (i.e. someone developed rabies) when PEP was given promptly and appropriately after an exposure. For questions regarding PEP please contact your local health department.

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

		July 2006			Aug 2005		
	Monthly High	Monthly Low	Monthly Mean	Monthly High	Monthly Low	Monthly Mean	Monthly Mean
Pollen Count	30	5	15	30	10	21	48
Mold Count	17,490	3,800	11,149	19,810	8,290	12,781	7,140
Air Quality Index	95	32	55	72	24	50	48

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. 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; 101-150: unhealthy for sensitive groups; 51-100: moderate; 0-50: good.

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

	Jul 2006	YTD 2006	2005
Live Births	210	2396	4574
Births to Teens	22	240	508
Deaths	282	2073	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 July 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 <a href="www.cdc.gov/epo/dphsi/casedef/index.htm">www.cdc.gov/epo/dphsi/casedef/index.htm</a> for case definitions. This report

includes confirmed, probable and suspect cases.

× 1	Alliance City		Canton City			Massillon City			Stark County			Stark County Totals				
																5 Year
	Jul	YTD	YTD	Jul	YTD	YTD	Jul	YTD	YTD	Jul	YTD	YTD	Jul	YTD	YTD	annual
	2006	2006	2005	2006	2006	2005	2006	2006	2005	2006	2006	2005	2006	2006	2005	average
Amebiasis												1	0	0	1	0.4
Campylobacteriosis	1	1	1	1	4	10	2	4	1	5	21	18	9	30	30	51.6
Chlamydia	5	48		39	400	336	8	28		29	193		81	669		1217
Creutzfeldt-Jakob Ds												1	0	0	1	0.6
Cryptosporidiosis					4	2				1	6	2	1	10	4	11.6
E Coli 0157					1								0	1	0	2.4
E Coli	1	1	1								1		1	2	1	2.4
Enceph., WNV													0	0	0	3
Enceph., Other											1		0	1	0	3.2
Giardiasis		1			7	6		1	3	1	14	11	1	23	20	53
Gonorrhea	6	18		36	246	168	3	6		10	61		55	331		506
Haemo. Influz., Bac					1	1					2	2	0	3	3	5.6
Hepatitis A		1						1		1	2	2	1	4	2	9.2
Hepatitis B*	1	3	5	2	10	16			1	2	15	13	5	28	35	37.4
Hepatitis C*	2	12	17	6	74	83		5	20	10	81	47	12	166	167	281**
Kawasaki Syndrome			1										0	0	1	3.4
Legionellosis						4	1	1			2	3	1	3	7	11.4
Listeriosis	1	1		1	1						1		2	3	0	1.6
Lyme Disease											1	3	0	1	3	3.2
Malaria												1	0	0	1	1
Meningitis, Asep		1	3	3	6	2	1	1			5	6	4	13	11	58
Meningitis Bac.											1	1	0	1	1	4.4
Meningococcal Dis.													0	0	0	2.8
Mumps											1		0	1	0	0
Pertussis			7			8	1		1	2	4	16	3	4	32	16.4
Salmonellosis	1	2		1	10	4		1	1	2	14	16	4	27	21	48.4
Shigellosis										1	2	3	1	2	3	12.4
Strep Inv A GAS		2	2		3	1					2	5	0	7	8	10.6
Strep B Newborn													0	0	0	1.8
Strep Pneu ISP		4	4	1	17	13			4	1	18	6	2	39	27	36
Strep TSS													0	0	0	0.6
Syphilis	0	3			2						4		0	9		32
Typhoid Fever										1	1		1	1	0	0.2
Varicella***		23		1	28			8			154		31	213	0	0
Vibriosis										1	1		1	1	0	0.2
Yersinosis													0	0	0	0.8
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<sup>\*</sup>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.

If you have any questions, including how to receive copies of this report, please contact Karen Schanz at (330) 493-9928 x287 or Schanzk@starkhealth.org or Christina Henning at (330) 489-3454 or Chenning@cantonhealth.org.