

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:

INTERNATIONALLY: AVIAN INFLUENZA:

WHO officials are closely monitoring the largest cluster of cases, closely related in time and place, reported to date in any country. The cluster is from a village in North Sumatra, Indonesia. The cluster is believed to have been exposed during a common family event. WHO update 12 states “The source of exposure for the initial case is still under investigation, with exposure to infected poultry or an environment contaminated by their faeces considered the most plausible” The initial case is believed to be a 37 year-old woman. She developed symptoms on 27 April and died of respiratory disease on 4 May. No specimens were obtained before her burial, and the cause of her death cannot be confirmed. Only hypothesis exist at this time, on the source of illness for the remaining family cases. Current thoughts are that they may have acquired their infection from a shared environmental exposure yet to be identified, which the 37 yr old woman attended. The possibility of limited human-to-human transmission cannot be ruled out at present. The six confirmed cases in Sumatra include the woman’s two sons, aged 15 and 17 years, who died respectively on 9 May and 12 May. The 28-year-old sister of the initial case died on 10 May. This sister had an 18-month-old girl, who died on 14 May. The fifth confirmed case, who is still alive, is the 25-year-old brother of the initial case. The sixth confirmed case is the 10-year-old nephew of the initial case. He died on 13 May.

NATIONALLY: MENINGITIS:

Bacterial meningitis is a rare, but sometimes fatal disease that often strikes young people and can cause hearing loss, brain damage and limb amputations, according to the National Meningitis Association. The disease is caused by the bacterium *Neisseria meningitides*. A vaccine is available to protect against four strains A, C, Y and W-135. Many college campuses do not require their students to be vaccinated but two recent deaths among college students highlight the need for vaccination promotion. The first a Minnesota State, Mankato Campus Student has created a lot of disruption in the health community. “While all cases of meningitis are serious, this diagnosis takes on special importance in Mankato, where in 1995 an outbreak was blamed for the death of a 15-year-old boy and led to the vaccination of 30,000 people in a week” The second lead to a death on May 12, 2006, of a teenage female who attended the Mansfield campus of The Ohio State University. The latter student also lived and worked in Richfield County. *Neisseria meningitides* has seasonal trends, and the CDC reports the highest attack rates in February and March and the lowest in September.

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

	Apr 2006			Apr 2005			May 2005
	Monthly High	Monthly Low	Monthly Mean	Monthly High	Monthly Low	Monthly Mean	Monthly Mean
Pollen Count	740	25	365	1530	5	306	337
Mold Count	4320	1020	2459	3900	320	2021	2850
Air Quality Index	54	29	41	88	27	48	38

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

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

***** Due to a change in the reporting system, the birth & death data are temporarily unavailable.**

	April	YTD	2005
Live Births			4574
Births to Teens			508
Deaths			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 Apr 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 Health			Canton City Health			Massillon City Health			Stark County Health			Stark County Totals			
	Apr 2006	YTD 2006	YTD 2005	Apr 2006	YTD 2006	YTD 2005	Apr 2006	YTD 2006	YTD 2005	Apr 2006	YTD 2006	YTD 2005	Apr 2006	YTD 2006	YTD 2005	5 Year annual average
Amebiasis													0	0	0	0.4
Campylobacteriosis				3	3	3	2	2		2	9	7	7	14	10	51.6
Chlamydia	4	23	24	37	233	222	4	25	27	28	112	99	73	393	372	1217##
Creutzfeldt-Jakob Dis												1	0	0	1	0.6
Cryptosporidiosis				1	2	1				0	3		1	5	1	11.6
E Coli 0157													0	0	0	2.4
E Coli			1										0	0	1	2.4
Enceph., WNV													0	0	0	3
Enceph., Other											1		0	1	0	3.2
Giardiasis	0	1		2	5	2			2	1	10	8	3	16	12	53
Gonorrhea	0	12	7	25	126	114	1	13	15	5	33	23	31	184	159	506
Haemo. Influz., Bac				0	1	1				0	1	1	0	2	2	5.6
Hepatitis A	1	1					0	1		0	1		1	3	0	9.2
Hepatitis B*	1	2	5	0	6	12			1	1	9	7	2	17	25	37.4
Hepatitis C*	2	7	12	7	41	48	2	5	10	7	48	40	18	101	110	281
Kawasaki Syndrome			1										0	0	1	3.4
Legionellosis						2				0	1	1	0	1	3	11.4
Listeriosis										0	1		0	1	0	1.6
Lyme Disease												1	0	0	1	3.2
Malaria												1	0	0	1	1
Meningitis, Asep	1	1	1	0	3	1				0	3	2	1	7	4	58
Meningitis Bac.													0	0	0	4.4
Meningococcal Dis.													0	0	0	2.8
Pertussis			6			3						13	0	0	22	16.4
Salmonellosis				3	7	3			1	1	7	7	4	14	11	48.4
Shigellosis										0	1	1	0	1	1	12.4
Strep Inv A GAS	0	2	1	1	2					0	1	2	1	5	3	10.6
Strep B Newborn						1							0	0	1	1.8
Strep Pneu ISP			4	5	14	8			3	2	9	18	7	23	33	36
Strep TSS													0	0	0	0.6
Syphilis			3	1	1	8			1	1	3	0	2	4	12	32
Typhoid Fever													0	0	0	0.2
Varicella ***	3	8		0	25		2	6		3	139		8	178	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. ## 2005 total, not an average