

Dec – 2004

EPI Gram is a monthly publication of the Stark County Public Health Coalition. It is a summary of provisional communicable disease reports and other key public health indicators in Stark County, Ohio. This report includes confirmed, probable and suspect cases. Some reportable conditions may be under investigation, and at any given time, data may fluctuate from month to month for a specific disease category.

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.

Table 1 – Summary of Select Reportable Diseases for Dec 2004 in Stark County, Ohio (provisional data only)

	Alliance City Health			Canton City Health			Massillon City Health			Stark County Health			Stark County Totals		
	Dec 2004	YTD 2004	2003	Dec 2004	YTD 2004	2003	Dec 2004	YTD 2004	2003	Dec 2004	YTD 2004	2003	Dec 2004	YTD 2004	2003
Amebiasis						1							0	0	1
Campylobacteriosis		2	4		4	8		3	4	2	33	40	2	42	56
Creutzfeldt-Jakob Ds												2	0	0	2
Cryptosporidiosis		1	1					2	9		9	8	0	12	18
E Coli		3	3								1	2	0	4	5
E Coli 0157			1							2	2	2	2	2	3
Enceph., WNV			1						1			4	0	0	6
Enceph., Other		1	2								2	3	0	3	5
Giardiasis		2	2	2	9	7		2	8	3	39	40	5	52	57
Haemo. Influz., Bac				1	4	1		1			4	3	1	9	4
Hepatitis A*			3			5			1		1	9	0	1	18
Hepatitis B*		6	3		19	19	1	7	1	2	32	38	3	64	61
Hepatitis C*		16	27	10	138	171		18	31	9	124	155	19	296	384
Kawasaki Syndrome					1	3			1		3	6	0	4	10
Legionellosis					3	8		1			3	8	0	7	16
Listeriosis									1		2	1	0	2	2
Lyme Disease									2			5	0	0	7
Meningitis, Asep		5	6	1	11	24		3	5		27	33	1	46	68
Meningitis Bac.			1			2			1		2	7	0	2	11
Meningococcal Dis.						1					3	1	0	3	2
Pertussis					2	1		2		1	14	3	1	18	4
Salmonellosis		2	3	1	11	8		6	5		32	34	1	51	50
Shigellosis			2		2	1						20	0	2	23
Strep B Newborn					1	1					2		0	3	1
Strep Inv A GAS		1			3	9			3		2	12	0	6	24
Strep Pneu ISP	1	5	7	2	17	20		3	6	3	26	41	6	51	74
Strep TSS											2		0	2	0
Typhoid Fever		1	0										0	1	0
Vibriosis											1		0	1	

*This includes all hepatitis reports; acute, chronic, and status not known. 2003 case counts are not complete due to a change in reporting requirements.

Table 2 Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio has been suspended for the season. The index will resume in March 2005.

Table 3 Summary of Select Vital Statistics for Stark County, Ohio

	Alliance City Health District			Canton City Health District			Massillon City Health District			Stark County Health District			Total in Stark County		
	Dec	YTD 2004	2003	Dec	YTD 2004	2003	Dec	YTD 2004	2003	Dec	YTD 2004	2003	Dec	YTD 2004	2003
Number of Live Births*	37	384	339	505	4081	4145	0	4	92	16	223	195	558	4692	4771
Number of Teenage births*	7	65	64	52	379	429	0	0	10	1	39	27	60	483	530
Number of Deaths*	27	326	357	155	1928	2089	46	388	415	107	1266	1327	335	3908	4188

*These numbers represent occurrences within the jurisdiction and are not indicative of births and deaths of residents of each jurisdiction, therefore jurisdictional rates are not computed.

The 2002 Birth Rate for Stark County was 0.01266 and 0.1262 for 2003. The 2002 Death Rate for Stark County was 0.01091 and 0.0111 for 2003. (crude rates are based on US Census 2000 Stark County population of 377,438)

IN THE NEWS:

INFLUENZA:

Nationally: During week 2 (January 9-15, 2005)*, influenza activity continued to increase in the United States. The proportion of patient visits to sentinel providers for influenza-like illness (ILI) is above the national baseline and the proportion of deaths attributed to pneumonia and influenza is above the epidemic threshold. There have been two influenza-associated pediatric deaths reported to CDC this season. Ten states and New York City reported widespread influenza activity, 14 states reported regional influenza activity, and 11 states reported local activity. Fifteen states, the District of Columbia, and Puerto Rico reported sporadic influenza activity.

Locally, we are only receiving sporadic reports, although reports have indicated that both Influenza A and B are circulating in Stark County.

SURVEILLANCE: Real-time Outbreak and Disease Surveillance (RODS) has now been established in Stark County. The RODS system is an electronic public health surveillance system deployed since 1999 in Pennsylvania, since 2002 in Utah, and since 2003 in parts of Ohio, New Jersey, Michigan, California, Texas and Taiwan

RODS collects data from existing computer systems in clinical and other settings and displays them for public health departments through a secure web-based user interface. The data collected are being routinely collected for other purposes, thus *no data entry* is necessary. RODS monitors the health of the community for both culture-proven cases of disease as well as for abnormal incidences of selected infectious disease *syndromes* by examining these data.

RODS is also conducting research on other, non-traditional types of data, to determine if outbreaks can be detected through analysis of these (anonymous) data, including daily sales volumes of different product categories of over-the-counter and prescription drugs, daily volumes of calls to 911 call centers and poison center, animal health, absenteeism, insurance claim data, utility usage, etc.

RODS provides tools that enable public health officials to (1) detect the presence of a disease outbreak, and (2) support the characterization of that outbreak. These tools include case definition, automatic detection algorithms that can be attached to specific data streams and tools that support temporal and spatial data analysis and visualization.

Data reviewed daily by the local health departments are seen on a regional level. Currently in our region, North East Central Ohio, has three hospitals participating, all three are from Stark County. The data observed displays information into eight categories. Those eight categories are:

1. All. The total number of emergency department visits.
2. Gastrointestinal: pain or cramps anywhere in the abdomen, nausea, vomiting, diarrhea, and abdominal distension or swelling.
3. Constitutional: non-localized, systemic problems including fever, chills, body aches, flu symptoms (viral syndrome), weakness, fatigue, anorexia, malaise, lethargy, sweating (diaphoresis), light headedness, faintness and fussiness.
4. Respiratory: problems of the nose (coryza) and throat (pharyngitis), as well as the lungs. Examples of Respiratory include congestion, sore throat, tonsillitis, sinusitis, cold symptoms, bronchitis, cough, shortness of breath, asthma, chronic obstructive pulmonary disease (COPD), and pneumonia. The presence of both cold and flu symptoms is counted in this category, not constitutional.
5. Rash: any rash, such as macular, papular, vesicular, petechial, purpuric, or hives. Ulcerations are not counted as Rash unless consistent with cutaneous anthrax (an ulcer with a black eschar).
6. Hemorrhagic: bleeding from any site, e.g., vomiting blood (hematemesis), nose bleed (epistaxis), hematuria, gastrointestinal bleeding (site unspecified), rectal bleeding, and vaginal bleeding. Bleeding from a site for which there is a syndrome is counted as Hemorrhagic and as the relevant syndrome (e.g., hematochezia is Gastrointestinal and Hemorrhagic; hemoptysis is Respiratory and Hemorrhagic).
7. Botulinic: ocular abnormalities (diplopia, blurred vision, photophobia), difficulty speaking (dysphonia, dysarthria, slurred speech), and difficulty swallowing (dysphagia).
8. Neurological: non-psychiatric complaints that relate to brain function. Included are headache, head pain, migraine, facial pain or numbness, seizure, tremor, convulsion, loss of consciousness, syncope, fainting, ataxia, confusion, disorientation, altered mental status, vertigo, concussion, meningitis, stiff neck, tingling and numbness. (Dizziness is both Constitutional and Neurological.)

The above information has been excerpted from the following website and from information provided by involved individuals: http://www.astho.org/templates/display_pub.php?pub_id=660

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