EPI GRAM-October, 2007

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:

Update on Nationwide Outbreaks with Ohio Cases

Salmonella. Ohio had two cases with reported exposure to turtles less than 4 inches in length (currently sales are illegal in the USA, but do still occur). Both of these cases were children with a primary symptom presentation of severe bloody diarrhea. Testing on the turtles, water from the turtle habitats and human isolates found matching PFGE patterns of *S. oranienburg* within one household and *S. paratyphi B, var. L (+) tartrate + (Java)* in the second household. The *S. paratyphi B* has matching PFGE patterns to 40 other, previously thought to be isolated cases, throughout the US. The USDA is currently investigating the source of the turtles.

Salmonella Tennessee The Centers for Disease Control is now attempting to determine how long problems with the peanut butter manufacturing plant linked to the nationwide outbreak were in existence. A search through a PFGE database found eight cases that existed prior to August 1 2006. One of the cases was from Stark County Ohio and had an onset of illness of January 21, 2005. All eight cases will be contacted in an effort to determine food history.

Salmonella Typhimurium, variant B:i:-(monophasic), associated with pot pies. To date there are 245 confirmed cases throughout the United States with one in Stark County. Laboratory testing on a turkey potpie from the home of the Alliance City case was positive for S *typhimurium*. University testing failed to prove that following the package instructions for microwave cooking would produce a safe cooking temperature of 165F.

Clostridium Botulinum The Castlebury products linked to the nationwide outbreak are still on store and consumer shelves, this as of an FDA report on the 25th of October. Typically, they are finding the product in food pantries and small "Mom and Pop" type stores. Physicians are urged to include C. Botulinium in rule out diagnosis when patients present with botulinic symptoms, particularly, if these patients also have a history of consuming any canned, home or commercial, foods. Symptoms can include gastrointestinal symptoms vomiting, diarrhea, abdominal pain, ptosis (droopy eyelids), visual difficulty (blurred or double vision), dry mouth, sore throat and dysphagia (difficulty swallowing). Paralysis can occur and continue for days or weeks. Fever is absent.

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

	October 2007				November 2006			
	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	25	5	25	N/A	Suspended for Season			
Mold Count	32440**	5870	1279	10 Mod, 5 High				
Air Quality Index	65	14	36	3 Mod, 0 High	61	9	28	2 Moderate

Pollen and Mold counts are derived from rotorod samples on the 2nd story roof of Canton City Hall. The readings are 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).

**NOTE: This is the second highest count seen in the past twenty years. It is expected to account for an increase of sinus and other allergy symptoms in humans and skin irritation in animals.

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

	OCT 2007	YTD 2007	YTD 2006	2006
Live Births	372	4139	3107*	4839
Births to Teens	52	422	302*	434
Deaths	338	3439	3318	4061

*Under reporting due to change in birth certificate reporting mechanism, which was corrected in Jan 2007.

Table 3 Stark County Crude Birth and Death Rates per 100,000 Population

Rates are based on the US Census 2000 Stark County population of 377,438.

	2002	2003	2004	2005	2006
Birth	1270	1260	1240	1211	1282
Death	1090	1110	1040	1140	1076

Table 4 – Summary of Select Reportable Diseases for October 2007 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 for case definitions.
This report includes confirmed, probable and suspect cases.

	Alliance City			Canton City			Massillon City			Stark County			Stark County Totals			
	Oct 2007	YTD 2007	YTD 2006	Oct 2007	YTD 2007	YTD 2006	Oct 2007	YTD 2007	YTD 2006	OctSep 2007	YTD 2007	YTD 2006	Oct 2007	YTD 2007	YTD 2006	5 Year annual average
Amebiasis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.4**
Campylobacteriosis	0	**3**	**1**	**2**	**10**	**11**	0	**1**	**4**	**1**	**29**	**31**	**3**	**43**	**47**	**51.8**
Chlamydia	**8**	**83**	**68**	**47**	**537**	**510**	**10**	**65**	**52**	**30**	**266**	**351**	**95**	**951**	**981**	**1126.4**
Creutzfeldt-Jakob Ds	0	0	0	0	0	0	0	0	0	0	**3**	0	0	**3**	0	**0.6**
Cryptosporidiosis	0	0	0	0	**2**	**6**	0	**4**	0	**2**	**18**	**9**	**2**	**24**	**15**	**14**
E Coli 0157	0	0	0	0	0	0	0	0	0	**1**	**2**	**1**	**1**	**2**	**1**	**2.4**
E Coli	0	0	**1**	0	0	0	0	0	0	0	**1**	**1**	0	**1**	**2**	**3**
Enceph., WNV	0	0	0	0	**1**	**1**	0	0	0	0	0	**2**	0	**1**	**3**	**3.6**
Enceph., Other	0	**1**	**1**	0	0	0	0	0	0	0	0	**1**	0	**1**	**2**	**2.8**
Giardiasis	0	**5**	**2**	0	**6**	**9**	**2**	**5**	0	**0**	**19**	**24**	**2**	**35**	**35**	**49.2**
Gonorrhea	**3**	**16**	**25**	**29**	**365**	**319**	**5**	**43**	**21**	**8**	**102**	**102**	**45**	**526**	**467**	**646**
Haemo. Influz., Bac	0	0	0	0	**1**	**1**	0	**1**	0	0	0	**2**	0	**2**	**3**	**5.8**
Hepatitis A	0	**1**	**1**	0	**1**	0	0	0	**1**	0	**5**	**3**	0	**7**	**5**	**8**
Hepatitis B*	0	**2**	**3**	**5**	**17**	**17**	0	**3**	0	**7**	**23**	**19**	**12**	**45**	**39**	**44.6**
Hepatitis C*#	**1**	**20**	**17**	**9**	**80**	**94**	**3**	**20**	**8**	**6**	**96**	**89**	**19**	**216**	**208**	**273.5**
Kawasaki Syndrome	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3.6**
Legionellosis	0	0	0	0	**3**	**1**	0	0	**1**	**2**	**7**	**6**	**2**	**10**	**8**	**12.2**
Listeriosis	0	0	**1**	0	0	**2**	0	0	0	0	**2**	**1**	0	**2**	**4**	**2.4**
Lyme Disease	0	0	0	0	0	0	0	0	0	0	0	**2**	0	0	**2**	**2.6**
Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.8**
Meningitis, Asep	**1**	**1**	**6**	**2**	**21**	**15**	0	**3**	**4**	**4**	**25**	**15**	**7**	**50**	**40**	**53.8**
Meningitis Bac.	0	0	0	0	0	0	0	0	0	0	**1**	**1**	0	**1**	**1**	**4.4**
Meningococcal Dis.	0	0	0	0	0	**1**	0	0	0	0	**1**	0	0	**1**	**1**	**2.4**
Mumps	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**	**0.4**
Pertussis	0	0	0	0	**2**	0	0	0	0	**1**	**6**	**9**	**1**	**8**	**9**	**17**
Salmonellosis	0	**5**	**3**	0	**5**	**11**	**1**	**3**	**8**	**1**	**20**	**19**	**2**	**33**	**41**	**49.4**
Shigellosis	0	0	0	**0**	**2**	0	0	0	0	0	0	**2**	0	**2**	**2**	**11.8**
Strep Inv A GAS	0	0	**3**	0	**3**	**3**	0	0	0	**1**	**4**	**3**	**1**	**7**	**9**	**12.2**
Strep B Newborn	0	**1**	0	0	**1**	**1**	0	0	**1**	**1**	**1**	**1**	**1**	**3**	**3**	**2**
Strep Pneu ISP	0	**2**	**7**	**1**	**16**	**21**	0	**2**	0	**0**	**23**	**20**	**1**	**43**	**48**	**47.8**
Strep TSS	0	0	0	0	0	0	0	0	0	0	**2**	0	0	**2**	0	**0.4**
Syphilis	0	**1**	0	0	**2**	**2**	0	0	0	**0**	**7**	**12**	0	**10**	**14**	**21.6**
Typhoid Fever	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**	**0.4**
Varicella#	**3**	**9**	**24**	**2**	**20**	**40**	0	**4**	**8**	**3**	**99**	**169**	**8**	**132**	**241**	
Vibriosis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.2**
Yersiniosis	0	0	**1**	0	0	0	0	**1**	0	0	**4**	0	0	**5**	**1**	**2**

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

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.