

May – 2005

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 May 2005 in Stark County, Ohio (provisional data only)

| | Alliance City Health | | | Canton City Health | | | Massillon City Health | | | Stark County Health | | | Stark County Totals | | | |
|-----------------------|----------------------|----------|----------|--------------------|----------|----------|-----------------------|----------|----------|---------------------|----------|----------|---------------------|----------|----------|-----------------------|
| | May 2005 | YTD 2005 | YTD 2004 | May 2005 | YTD 2005 | YTD 2004 | May 2005 | YTD 2005 | YTD 2004 | May 2005 | YTD 2005 | YTD 2004 | May 2005 | YTD 2005 | YTD 2004 | 5 Year annual average |
| Amebiasis | | | | | | | | | | | | | 0 | 0 | 0 | 0.2 |
| Campylobacteriosis | | | | | 3 | | 1 | 1 | 2 | 2 | 9 | 5 | 3 | 13 | 7 | 54.6 |
| Creutzfeldt-Jakob Dis | | | | | | | | | | | 1 | | 0 | 1 | 0 | 0.4 |
| Cryptosporidiosis | | | | | 1 | | | | | | | 1 | 0 | 1 | 1 | 10 |
| E Coli 0157 | | | | | | | | | | | | | 0 | 0 | 0 | 2.6 |
| E Coli | | 1 | 2 | | | | | | | | | 1 | 0 | 1 | 3 | 1.8 |
| Enceph., WNV | | | | | | | | | | | | | 0 | 0 | 0 | 2.8 |
| Enceph., Other | | | | | | | | | | | | 1 | 0 | 0 | 1 | 3.2 |
| Giardiasis | | | 1 | 2 | 4 | 3 | | 2 | 1 | 2 | 10 | 17 | 4 | 16 | 22 | 54.6 |
| Haemo. Influz., Bac | | | | | 1 | 2 | | | 1 | | 1 | 2 | 0 | 2 | 5 | 4.6 |
| Hepatitis A | | | | | | | | | | | 2 | 1 | 0 | 2 | 1 | 10 |
| Hepatitis B* | | 5 | 3 | | 12 | 10 | | 1 | 3 | 1 | 8 | 13 | 1 | 26 | 29 | 62.5 |
| Hepatitis C* | 2 | 14 | 8 | 10 | 58 | 60 | 4 | 14 | 8 | 5 | 45 | 54 | 21 | 131 | 130 | 340** |
| Kawasaki Syndrome | | 1 | | | | | | | | | | 1 | 0 | 1 | 1 | 3 |
| Legionellosis | | | | 1 | 3 | 1 | | | | 2 | 3 | | 3 | 6 | 1 | 9 |
| Listeriosis | | | | | | | | | | | | | 0 | 0 | 0 | 1.4 |
| Lyme Disease | | | | | | | | | | 1 | 2 | 3 | 1 | 2 | 3 | 2.8 |
| Malaria | | | | | | | | | | | 1 | | 0 | 1 | 0 | 1 |
| Meningitis, Asep | | 1 | | | 1 | 2 | | | | 1 | 3 | 4 | 1 | 5 | 6 | 52.6 |
| Meningitis Bac. | | | | | | | | | | | | 1 | 0 | 0 | 1 | 4.4 |
| Meningococcal Dis. | | | | | | | | | | | | 2 | 0 | 0 | 2 | 2.8 |
| Pertussis | 1 | 7 | | 2 | 5 | | | 2 | | 2 | 15 | 3 | 5 | 27 | 5 | 7.2 |
| Salmonellosis | | | 1 | | 4 | 3 | | 1 | 1 | 2 | 9 | 10 | 2 | 14 | 15 | 47.4 |
| Shigellosis | | | | | | 1 | | | | | 1 | | 0 | 1 | 1 | 11.6 |
| Strep Inv A GAS | | 1 | | | | 2 | | | | 3 | 5 | 2 | 3 | 6 | 4 | 10.2 |
| Strep B Newborn | | | | | 1 | 1 | | | | | | | 0 | 1 | 1 | 1.4 |
| Strep Pneu ISP | | 4 | 4 | 4 | 12 | 10 | 1 | 4 | 3 | 4 | 22 | 16 | 9 | 42 | 33 | 25 |
| Strep TSS | | | | | | | | | | | | 2 | 0 | 0 | 2 | 0.6 |
| Typhoid Fever | | | 1 | | | | | | | | | | 0 | 0 | 1 | 0.2 |
| Varicella | | | | | | | | | | | | | 0 | 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.

Table 2 Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio, May 2005, including limited historical data.

| | May 2005 | | | May 2004 | | | June 2004 |
|-------------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|
| | Monthly High | Monthly Low | Monthly Mean | Monthly High | Monthly Low | Monthly Mean | Monthly Mean |
| Pollen Count | 1650 | 55 | 366 | 1760 | 50 | 464 | 54 |
| Mold Count | 5050 | 1220 | 2808 | 11820 | 640 | 5931 | 7958 |
| Air Quality Index | 61 | 19 | 38 | 76 | 28 | 56 | 51 |

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 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 | | |
|---------------------------|-------------------------------|----------|------|-----------------------------|----------|------|--------------------------------|----------|------|------------------------------|----------|------|-----------------------|----------|------|
| | May | YTD 2005 | 2004 | May | YTD 2005 | 2004 | May | YTD 2005 | 2004 | May | YTD 2005 | 2004 | May | YTD 2005 | 2004 |
| Number of Live Births* | 31 | 162 | 384 | 426 | 1852 | 4081 | | | 4 | 1 | 51 | 223 | 360 | 1613 | 4692 |
| Number of Teenage births* | 5 | 25 | 65 | 48 | 180 | 379 | | | | 0 | 6 | 39 | 39 | 158 | 483 |
| Number of Deaths* | 22 | 172 | 326 | 148 | 1033 | 1928 | 25 | 188 | 389 | 112 | 665 | 1266 | 322 | 1690 | 3909 |

*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, 0.10262 for 2003 and 0.01243 for 2004. The 2002 Death Rate for Stark County was 0.01091, 0.0111 for 2003 and 0.0104 for 2004 (crude rates are based on US Census 2000 Stark County population of 377,438).

IN THE NEWS:

TUBERCULOSIS

Many people think tuberculosis (TB) is a disease of the past. But, TB is still a leading killer of young adults worldwide. Some 2 billion people – one-third of the world's population – are infected with the TB bacterium, *M. tuberculosis*. TB is a chronic bacterial infection. It is spread through the air and usually infects the lungs, although other organs are sometimes involved. Most persons that are infected with *M. tuberculosis* harbor the bacterium without symptoms but many develop active TB disease. Each year, 8 million people worldwide develop active TB and 3 million die.

Is TB a problem in the United States?

In the United States, TB has re-emerged as a serious public health problem. In 2001, based on provisional data reported to the U.S. Centers for Disease Control and Prevention, the number of cases has decreased for the ninth straight year to 15,991 cases of active TB (infection with full-blown disease symptoms). This all-time low is due largely to improved public health control measures. In addition to those with active TB, however, an estimated 10 to 15 million people in the United States are infected with *M. tuberculosis* without displaying symptoms (latent TB) and about one in ten of these individuals will develop active TB at some time in their lives.

Minorities are affected disproportionately by TB: 54 percent of active TB cases in 1999 were among African-American and Hispanic people, with an additional 20 percent found in Asians.

What caused TB to return?

Cases of TB dropped rapidly in the 1940s and 1950s when the first effective antibiotic therapies for TB were introduced. In 1985, however, the decline ended and the number of active TB cases in the United States began to rise again. Several forces, often interrelated, were behind TB's resurgence:

- The HIV/AIDS epidemic. People with HIV are particularly vulnerable to turn infection with *M. tuberculosis* into active TB and are also more sensitive to developing active TB when they are first infected with the TB germ.
- Increased numbers of foreign-born nationals from countries where many cases of TB occur, such as Africa, Asia, and Latin America. TB cases among those persons now living in the US account for nearly half of the national total.
- Increased poverty, injection drug use, and homelessness. TB transmission is rampant in crowded shelters and prisons where people weakened by poor nutrition, drug addiction, and alcoholism are exposed to *M. tuberculosis*.
- Failure of patients to take their prescribed antibiotics against TB as directed.
- Increased numbers of residents in long-term care facilities such as nursing homes. Many develop active TB from infections with *M. tuberculosis* that occurred much earlier in life because their general health has declined. Other elderly people, especially those with weak immune systems, become newly infected with *M. tuberculosis* and can rapidly develop active TB.

Is TB a problem in Stark County?

In Stark County, TB has remained relatively steady over the past five years. The five year average is 4.6 cases. 2004 saw an increase to 6 cases from a previous low of one case reported in 2003. In 2005 we saw a large number of suspect cases appear in a very short time period. Of the 10 suspect cases reported this year 2 have been confirmed as TB and 4 more are still pending.

Stark County cases do not reflect the national trends, nor does it span the full spectrum of traditional TB patients. TB in stark county reflects all adult age groups, includes individuals that have immune compromised status, ie chemotherapy treatment, and does not include a range in racial diversity or drug use, nor have we seen drug resistant TB.

Within Stark County the TB cases are reported to a TB registrar, Sherry Smith. She can be contacted at the Stark County Health Department (330) 493-9928. Questions about TB can be brought to her attention or to your local health department communicable disease staff.

If you have any questions, including how to receive other copies of this report, please contact Matt Tillapaw at (330) 493-9928 x287 or Tillapawm@starkhealth.org or Christina Henning at (330) 489-3454 or Henningc@cantonhealth.org.