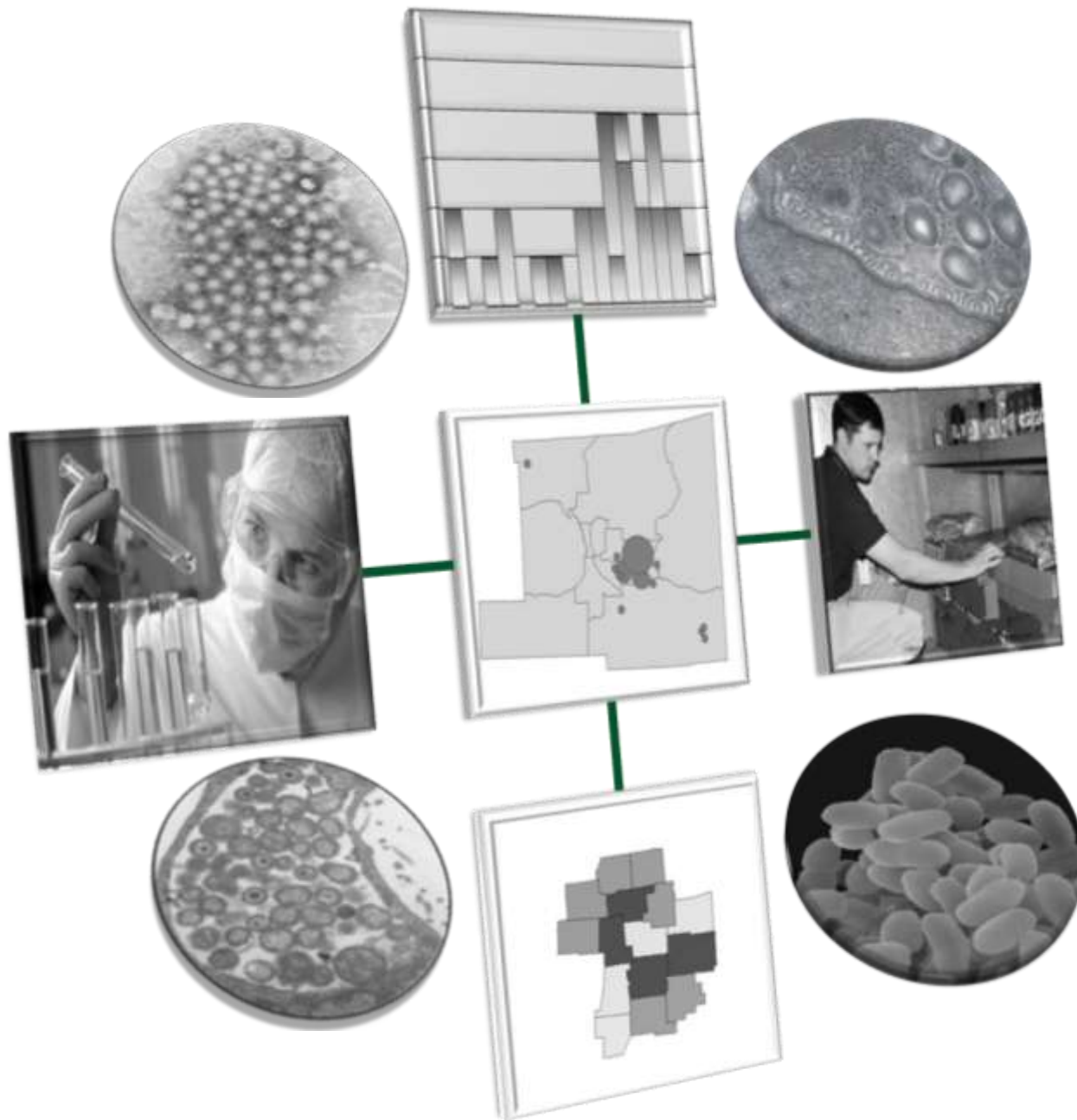


Knox County Health Department 2012 INFECTIOUS DISEASE REPORT



Knox County Health Department : INFECTIOUS DISEASE REPORT

Narrative

The Knox County Health Department (**KCHD**) made some improvements in 2012 for epidemiological activities in the county. These changes should strengthen the response efforts put forth by KCHD staff and county partners.

Epi Team: The Knox County Health Department formed an Epidemiological Team consisting of KCHD nurses, sanitarians, and emergency preparedness staff. A couple of members from Knox Community Hospital including the Infection Preventionist are also on the team. The group meets to discuss infectious disease activity and emerging issues in the county.

Epidemiological Response Plan: The KCHD Epidemiological Response Plan was reviewed in 2012 by the Epi Team and members provided feedback to update the plan. Revisions were made to add current procedures for infectious disease investigations and case management. The plan was also reduced in size while maintaining core concepts to allow staff to navigate and reference the document with ease. The group will continue to review and strengthen the plan when needed.

Infectious Disease Evaluations: A new template was made in 2012 and is being used to assess the investigations of KCHD staff responding to infectious disease reports. The goals of the evaluations are to ensure that all reporting requirements consistent with PHEP standards are being met and procedures are being followed according to the Epi Response Plan.

Sentinel Influenza Site: The Knox County Health Department put in a request to the Ohio Department of Health (**ODH**) to become a Sentinel Influenza Site in late 2012. An issue occurred with ODH and the enrollment packet information had to be resubmitted. KCHD is still waiting on the status of the site.



Knox County Health Department : INFECTIOUS DISEASE REPORT

DISEASE FACT SHEET

Table 1: Top 5 Reportable Diseases

| Reportable Diseases (2012) | | |
|---|-----------|-----------|
| Disease (Rank) | Knox Rate | Ohio Rate |
| 1.) Hepatitis C - chronic | 62.0 | 33.2 |
| 2.) Cryptosporidiosis | 24.5 | 4.9 |
| 3.) Salmonellosis | 11.4 | 11.0 |
| 4.) Hepatitis B - (including delta) - chronic | 6.5 | 11.8 |
| 5.) Pertussis | 6.5 | 7.7 |

Table 2: STD Rankings

| STDs (2012) | | |
|--------------------------|-----------|-----------|
| Disease (Rank) | Knox Rate | Ohio Rate |
| 1.) Chlamydia | 189.3 | 441.2 |
| 2.) Gonorrhea | 16.3 | 136.3 |
| 3.) Syphilis - secondary | 1.6 | 2.5 |

Table 3: Ohio Department of Health HIV Statistics

| ODH HIV (2011) | | |
|--------------------------------------|-----------|-----------|
| HIV Type | Knox Rate | Ohio Rate |
| Prevalence (# living with infection) | 32.8 | 155.3 |
| Initial Diagnosis (# of new cases) | 4.9 | 9.6 |



Notes: Data from **Tables 1** and **2** were collected from the Ohio Disease Reporting System (**ODRS**). The HIV data in **Table 3** were taken from the Ohio Department of Health's HIV/AIDS Surveillance Program page. **Calculated Rates** = number of new cases per 100,000 except for **Prevalence Rate** in **Table 3**. Population information collected from the United States Census Bureau. **2011** population estimate used for **2012**. **2012** not yet available.



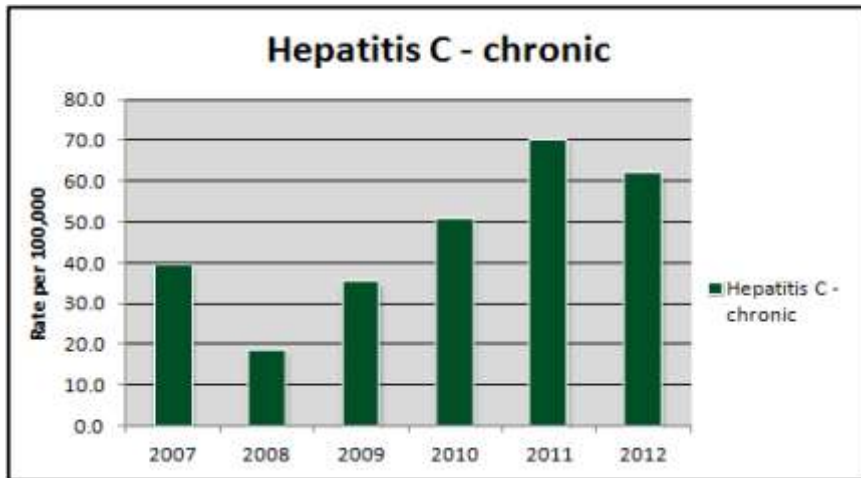
Knox County Health Department : INFECTIOUS DISEASE REPORT

#1 Hepatitis C - chronic

Table 4: Knox County Hepatitis C - chronic History (2007 - 2012)

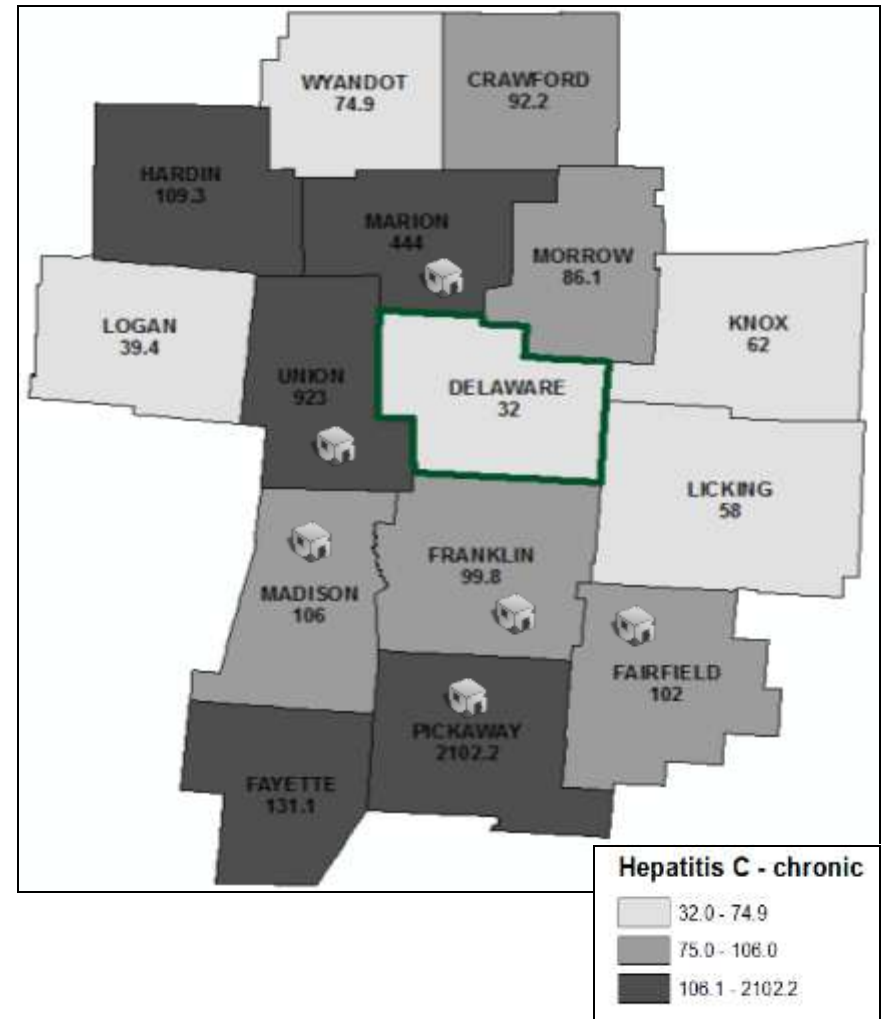
| Hepatitis C - chronic | | | | |
|-----------------------|-------|------|-------------|------------|
| Year | Cases | Rate | Rate Change | Population |
| 2007 | 23 | 39.3 | N/A | 58,489 |
| 2008 | 11 | 18.7 | ↓52.4% | 58,861 |
| 2009 | 21 | 35.4 | ↑89.3% | 59,326 |
| 2010 | 31 | 50.9 | ↑43.8% | 60,921 |
| 2011 | 43 | 70.2 | ↑37.9% | 61,275 |
| 2012 | 38 | 62.0 | ↓11.7% | 61,275 |

Figure 2: Knox County Hepatitis C - chronic (2007 - 2012)



Central Region

Figure 1: Central Region Hepatitis C - chronic Rates



Notes: Calculated Rates = number of new cases per 100,000 in **Table 4** and **Figures 1** and **2**. All data were collected from the Ohio Disease Reporting System (ODRS). Population information collected from the United States Census Bureau. **Symbols** of significance: = **Prison Population**; = **County Rate is below the Ohio Rate**. **2011** population estimate used for **2012**. **2012** not yet available.



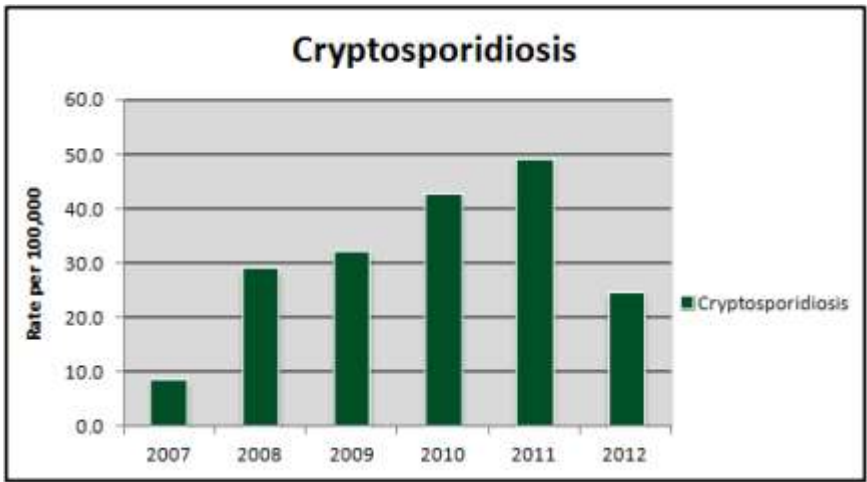
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#2 Cryptosporidiosis

Table 5: Knox County Cryptosporidiosis History (2007 - 2012)

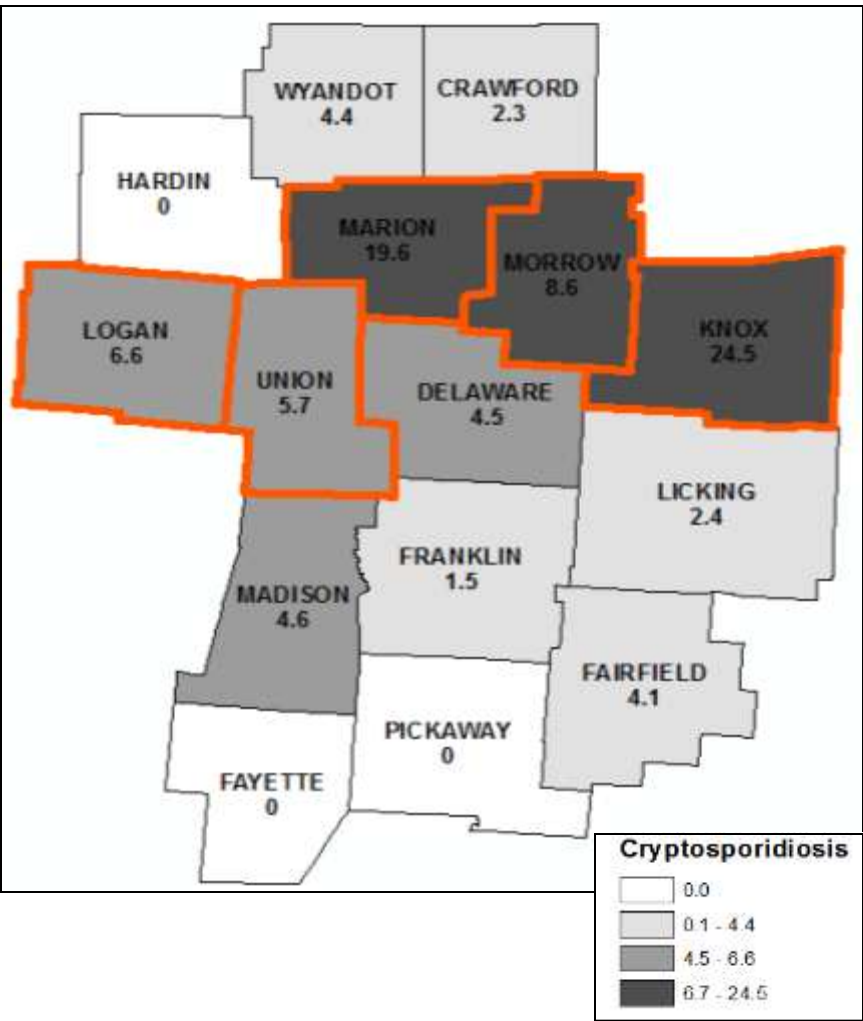
| Cryptosporidiosis | | | | |
|-------------------|-------|------|-------------|------------|
| Year | Cases | Rate | Rate Change | Population |
| 2007 | 5 | 8.5 | N/A | 58,489 |
| 2008 | 17 | 28.9 | ↑240.0% | 58,861 |
| 2009 | 19 | 32.0 | ↑10.7% | 59,326 |
| 2010 | 26 | 42.7 | ↑33.4% | 60,921 |
| 2011 | 30 | 49.0 | ↑14.8% | 61,275 |
| 2012 | 15 | 24.5 | ↓50.0% | 61,275 |

Figure 4: Knox County Cryptosporidiosis (2007 - 2012)



Central Region

Figure 3: Central Region Cryptosporidiosis Rates



Notes: Calculated Rates = number of new cases per 100,000 in **Table 5** and **Figures 3** and **4**. All data were collected from the Ohio Disease Reporting System (ODRS). Population information collected from the United States Census Bureau. **Symbols** of significance: = **County Rate** is above **Ohio Rate**. **2011** population estimate used for **2012**. **2012** not yet available.



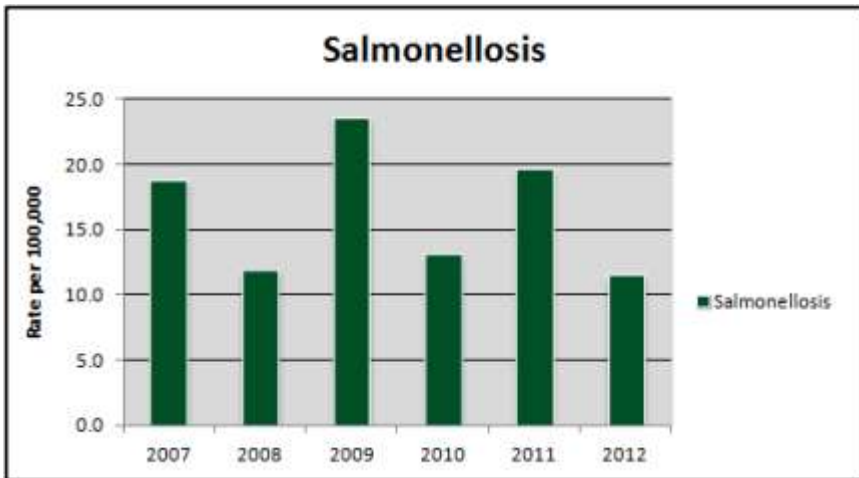
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#3 Salmonellosis

Table 6: Knox County Salmonellosis History (2007 - 2012)

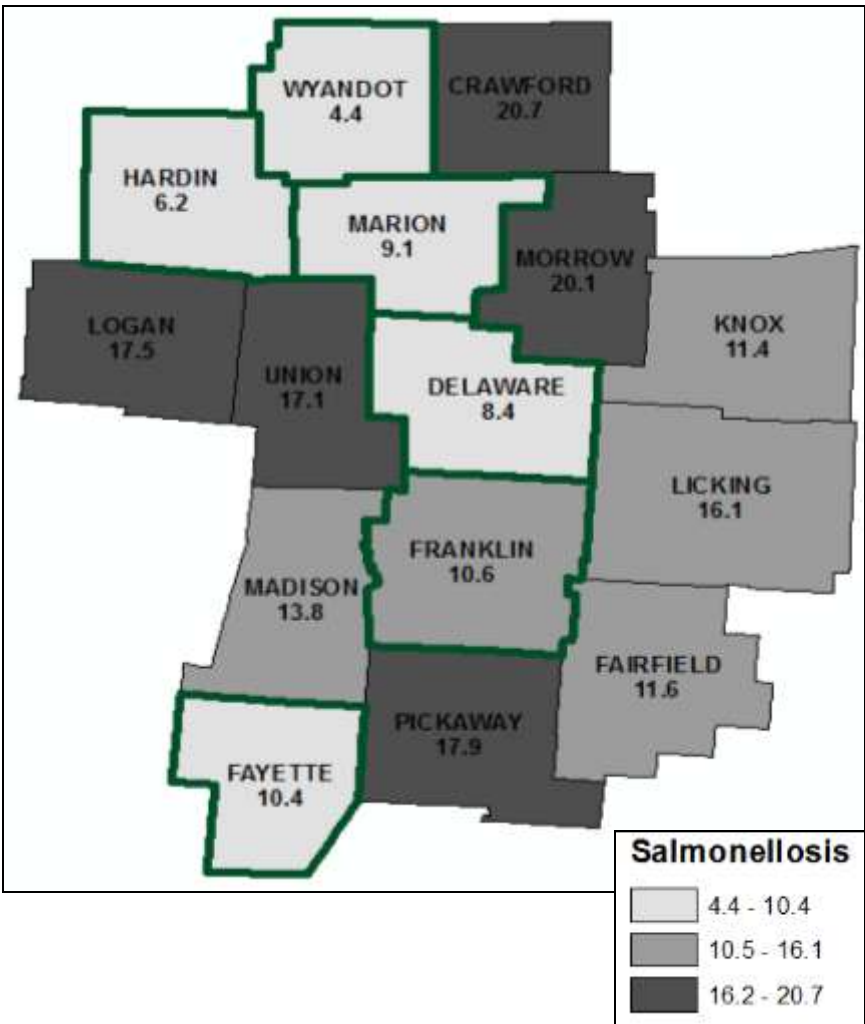
| Salmonellosis | | | | |
|---------------|-------|------|-------------|------------|
| Year | Cases | Rate | Rate Change | Population |
| 2007 | 11 | 18.8 | N/A | 58,489 |
| 2008 | 7 | 11.9 | ↓36.7% | 58,861 |
| 2009 | 14 | 23.6 | ↑98.3% | 59,326 |
| 2010 | 8 | 13.1 | ↓44.5% | 60,921 |
| 2011 | 12 | 19.6 | ↑49.6% | 61,275 |
| 2012 | 7 | 11.4 | ↓41.8% | 61,275 |

Figure 6: Knox County Salmonellosis (2007 - 2012)



Central Region

Figure 5: Central Region Salmonellosis Rates



Notes: Calculated Rates = number of new cases per 100,000 in **Table 6** and **Figures 5** and **6**. All data were collected from the Ohio Disease Reporting System (ODRS). Population information collected from the United States Census Bureau. **Symbols** of significance: = **County Rate** is below **Ohio Rate**. **2011** population estimate used for **2012**. **2012** not yet available.



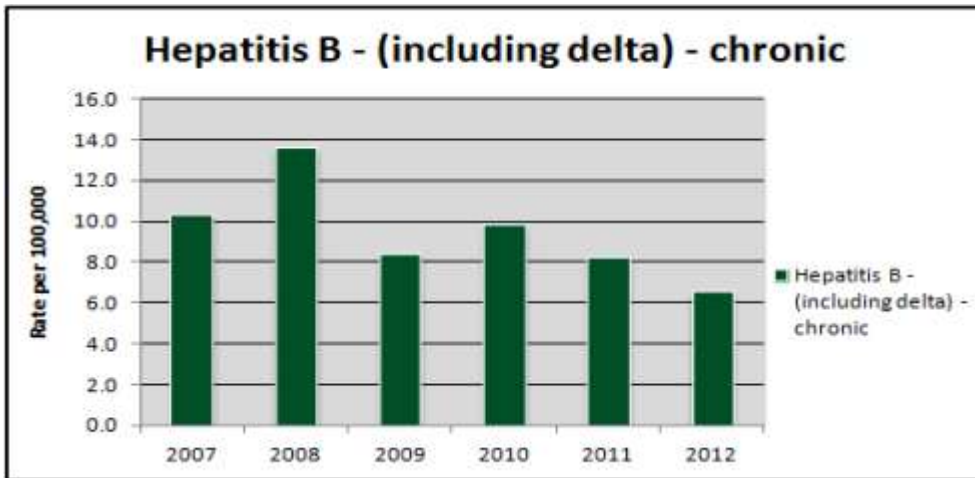
Knox County Health Department : INFECTIOUS DISEASE REPORT

#T4 Hepatitis B - (including delta) - chronic

Table 7: Knox County Hepatitis B - (including delta) - chronic History (2007 - 2012)

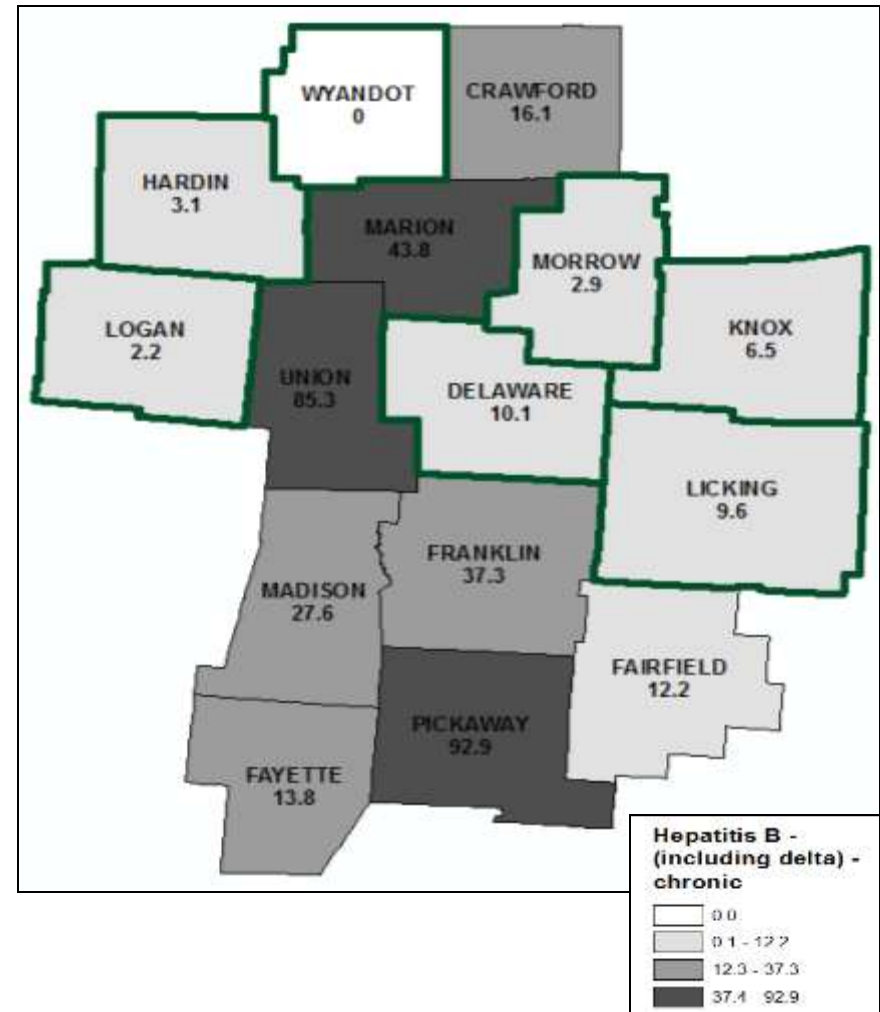
| Hepatitis B - (including delta) - chronic | | | | |
|---|-------|------|-------------|------------|
| Year | Cases | Rate | Rate Change | Population |
| 2007 | 6 | 10.3 | N/A | 58,489 |
| 2008 | 8 | 13.6 | ↑32.0% | 58,861 |
| 2009 | 5 | 8.4 | ↓38.2% | 59,326 |
| 2010 | 6 | 9.8 | ↑16.7% | 60,921 |
| 2011 | 5 | 8.2 | ↓16.3% | 61,275 |
| 2012 | 4 | 6.5 | ↓20.7% | 61,275 |

Figure 8: Knox County Hepatitis B - (including delta) - chronic (2007 - 2012)



Central Region

Figure 7: Central Region Hepatitis B - (including delta) - chronic Rates



Notes: Calculated Rates = number of new cases per 100,000 in **Table 7** and **Figures 7** and **8**. All data were collected from the Ohio Disease Reporting System (**ODRS**). Population information collected from the United States Census Bureau. **Symbols** of significance: = **County Rate** is below **Ohio Rate**. **2011** population estimate used for **2012**. **2012** not yet available.



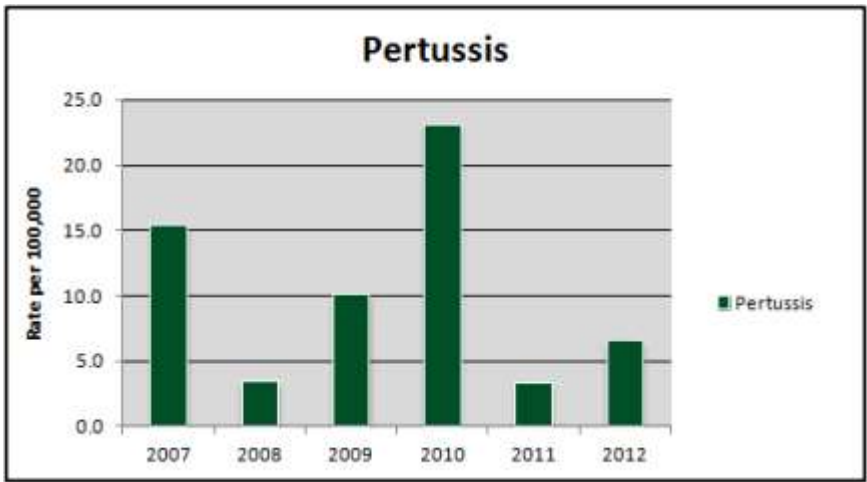
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#T4 Pertussis

Table 8: Knox County Pertussis History (2007 - 2012)

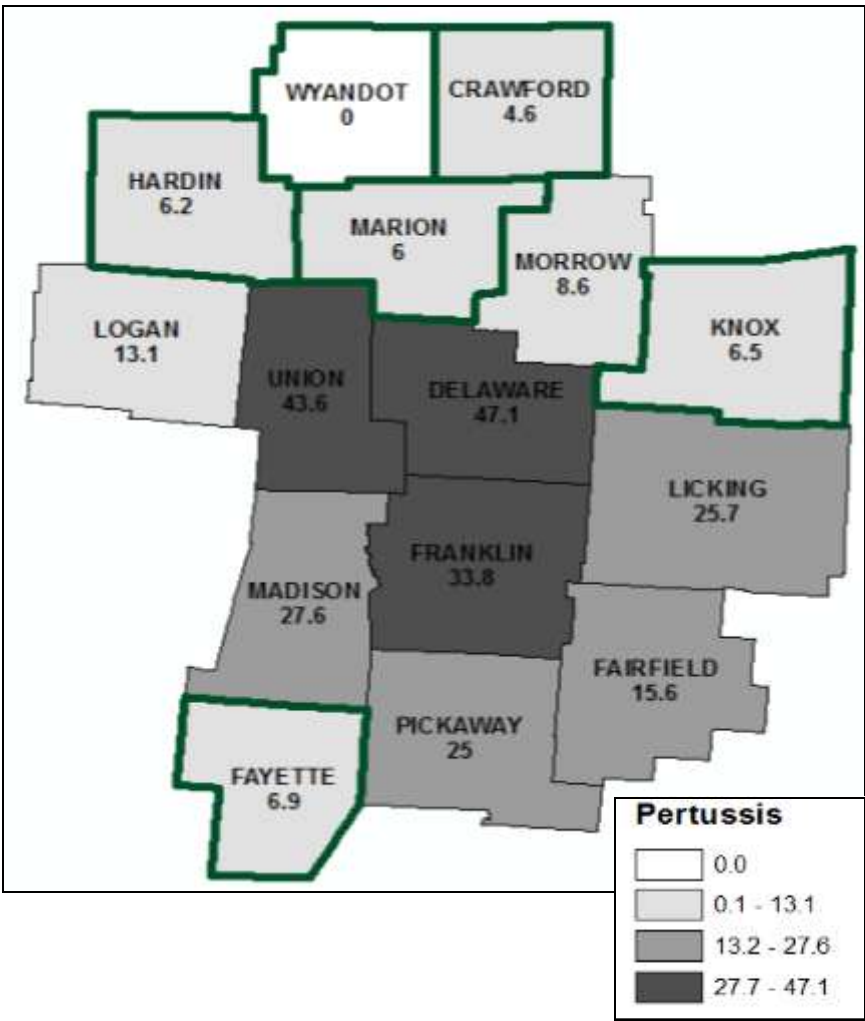
| Pertussis | | | | |
|-----------|-------|------|-------------|------------|
| Year | Cases | Rate | Rate Change | Population |
| 2007 | 9 | 15.4 | N/A | 58,489 |
| 2008 | 2 | 3.4 | ↓77.9 | 58,861 |
| 2009 | 6 | 10.1 | ↑197.1% | 59,326 |
| 2010 | 14 | 23.0 | ↑127.7% | 60,921 |
| 2011 | 2 | 3.3 | ↓85.7% | 61,275 |
| 2012 | 4 | 6.5 | ↑97.0% | 61,275 |

Figure 10: Knox County Pertussis (2007 - 2012)



Central Region

Figure 9: Central Region Pertussis Rates



Notes: Calculated Rates = number of new cases per 100,000 in **Table 8** and **Figures 9** and **10**. All data were collected from the Ohio Disease Reporting System (ODRS). Population information collected from the United States Census Bureau. **Symbols** of significance: = **County Rate** is below **Ohio Rate**. **2011** population estimate used for **2012**. **2012** not yet available.



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STDs

In 2012, the rates for **Chlamydia** and **Gonorrhea** increased in Knox County but this was consistent with what was being seen across the central region. Knox County remained in the lowest tier for both Chlamydia and Gonorrhea despite the noted increases. The percentage of Chlamydia reinfections for the county was 19.0% which could imply that around 1 out of 5 people who have a positive test for Chlamydia will test positive again in Knox County.

In order to effectively combat rising STD rates, KCHD will continue to identify partners and arrange for them to be tested. Treating partners should prevent the chances of reinfection and lower the rates for Chlamydia and Gonorrhea.

Syphilis information was made available in the Ohio Disease Reporting System (**ODRS**) in early 2012 and will be tracked with the rest of the STDs. **HIV/AIDS** information is maintained by the Ohio Department of Health and the most current statistics published were from 2011.



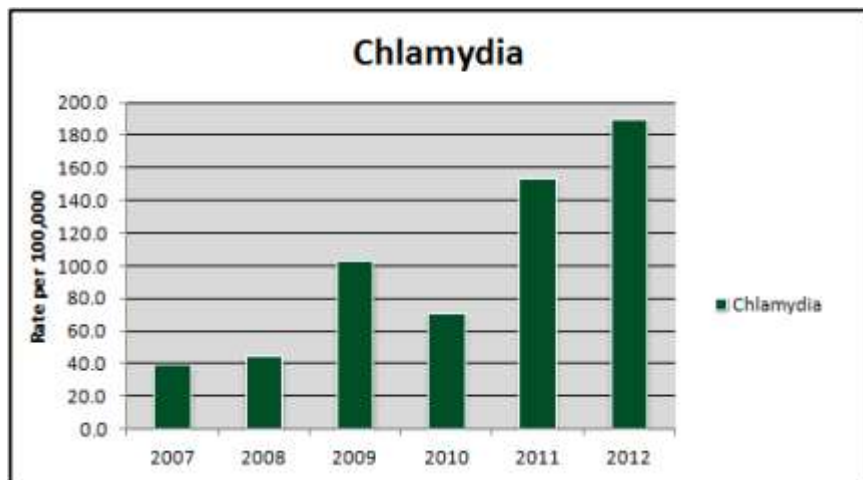
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#1 Chlamydia

Table 9: Knox County Chlamydia History (2007 - 2012)

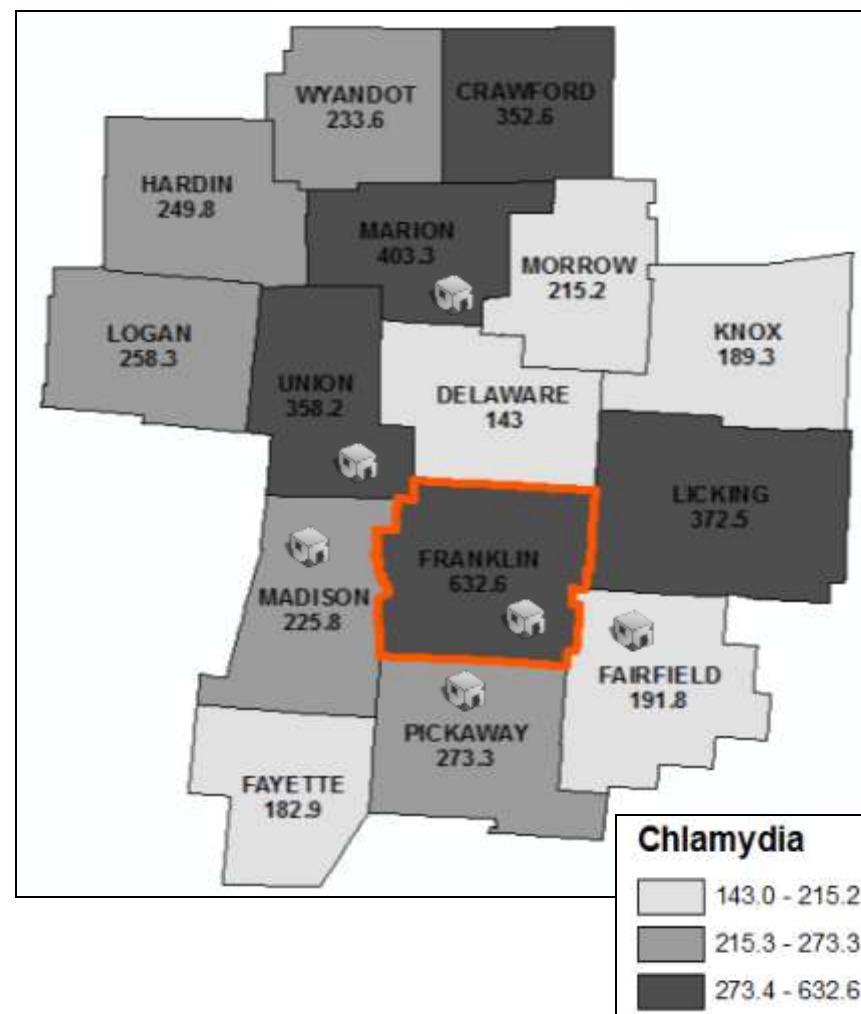
| Chlamydia | | | | |
|-----------|-------|-------|-------------|------------|
| Year | Cases | Rate | Rate Change | Population |
| 2007 | 23 | 39.3 | N/A | 58,489 |
| 2008 | 26 | 44.2 | ↑12.5% | 58,861 |
| 2009 | 61 | 102.8 | ↑132.6% | 59,326 |
| 2010 | 43 | 70.6 | ↓31.3% | 60,921 |
| 2011 | 94 | 153.4 | ↑117.3% | 61,275 |
| 2012 | 116 | 189.3 | ↑23.4% | 61,275 |

Figure 12: Knox County Chlamydia (2007 - 2012)



Central Region

Figure 11: Central Region Chlamydia Rates



Notes: Calculated Rates = number of new cases per 100,000 in Table 9 and Figures 11 and 12. All data were collected from the Ohio Disease Reporting System (ODRS). Population information collected from the United States Census Bureau. Symbols of significance: 🏠 = Prison Population; 📦 = County Rate is above the Ohio Rate. 2011 population estimate used for 2012. 2012 not yet available.



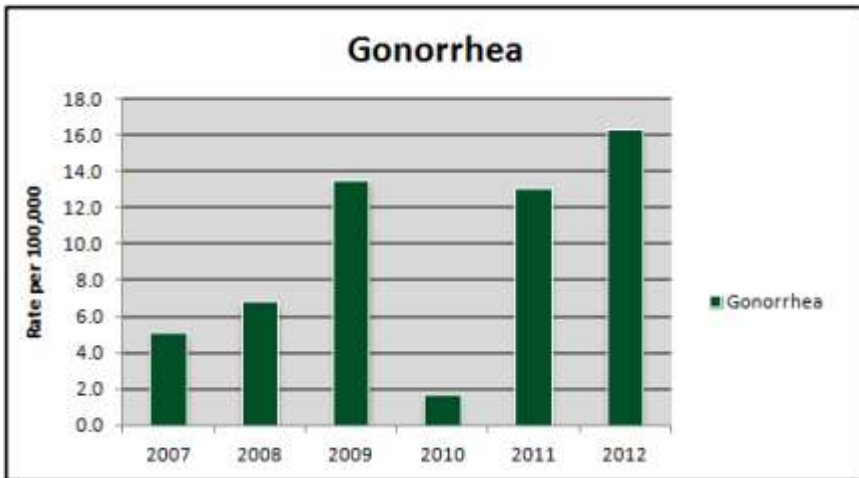
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#2 Gonorrhea

Table 10: Knox County Gonorrhea History (2007 - 2012)

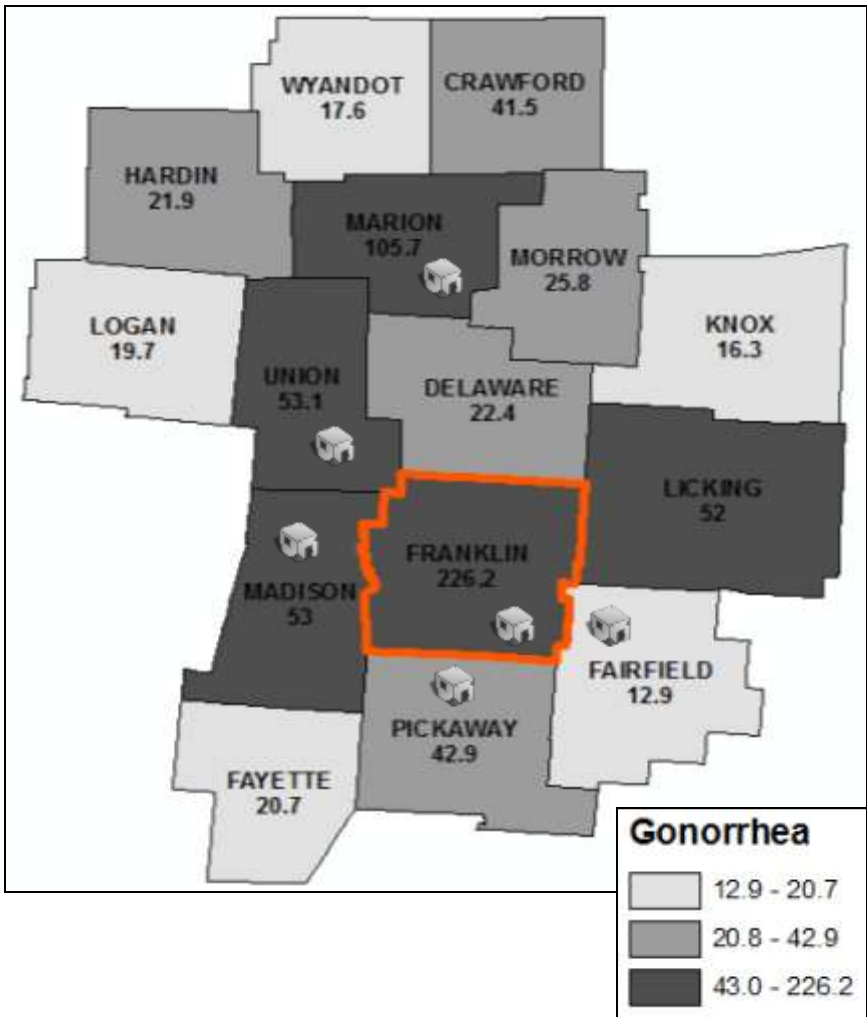
| Gonorrhea | | | | |
|-----------|-------|------|-------------|------------|
| Year | Cases | Rate | Rate Change | Population |
| 2007 | 3 | 5.1 | N/A | 58,489 |
| 2008 | 4 | 6.8 | ↑33.3% | 58,861 |
| 2009 | 8 | 13.5 | ↑98.5% | 59,326 |
| 2010 | 1 | 1.6 | ↓88.1% | 60,921 |
| 2011 | 8 | 13.1 | ↑718.8% | 61,275 |
| 2012 | 10 | 16.3 | ↑24.4% | 61,275 |

Figure 14: Knox County Gonorrhea (2007 - 2012)



Central Region

Figure 13: Central Region Gonorrhea Rates



Notes: Calculated Rates = number of new cases per 100,000 in Table 10 and Figures 13 and 14. All data were collected from the Ohio Disease Reporting System (ODRS). Population information collected from the United States Census Bureau. Symbols of significance: 🏠 = Prison Population; 🟠 = County Rate is above the Ohio Rate. 2011 population estimate used for 2012. 2012 not yet available.



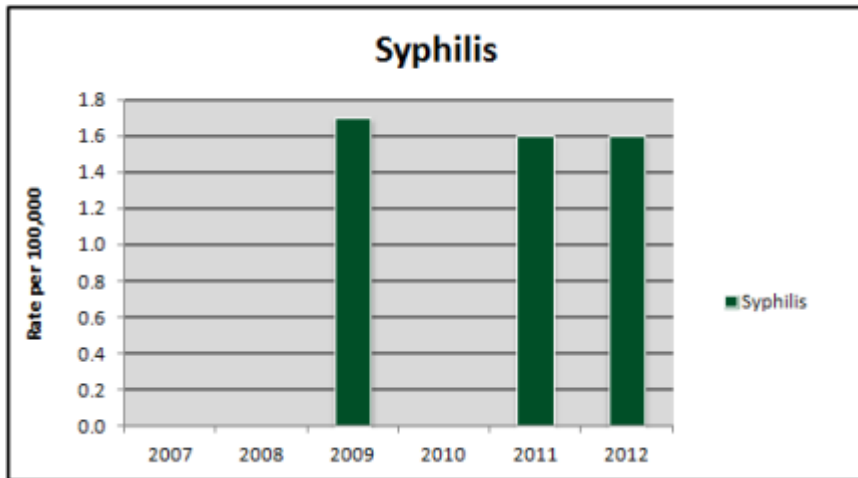
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#3 Syphilis

Table 11: Knox County Syphilis History (2007 - 2012)

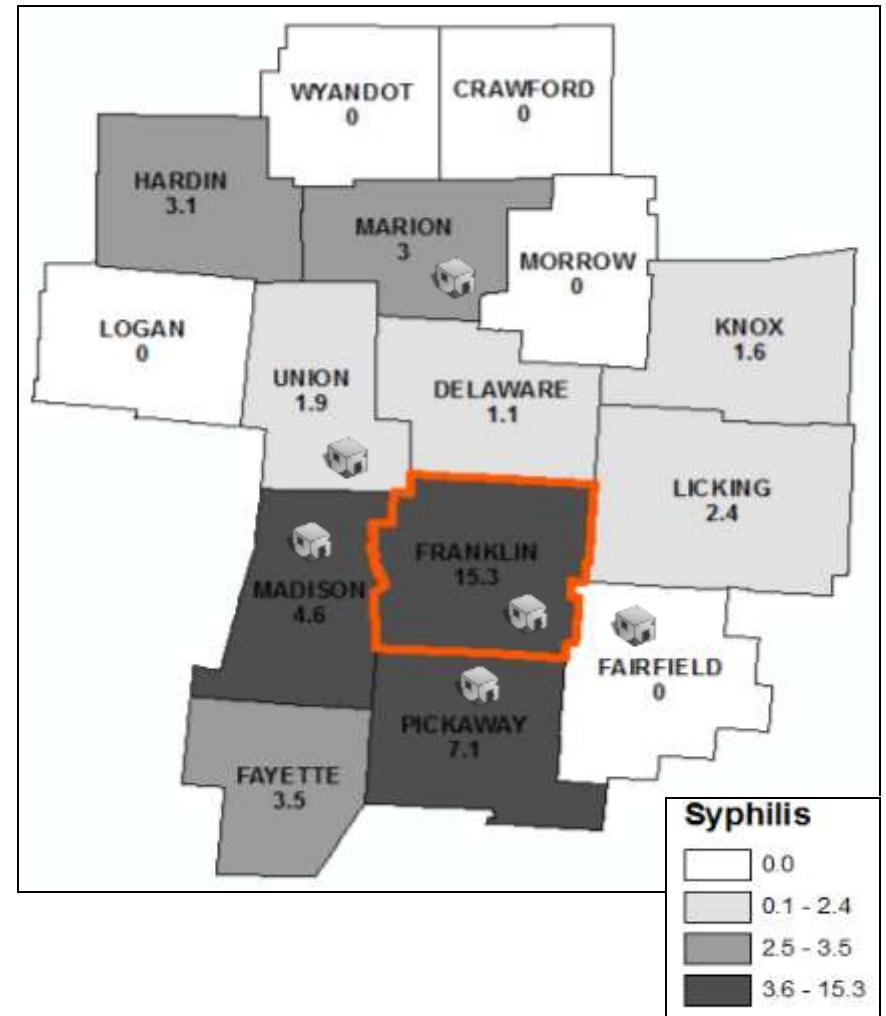
| Syphilis | | | | |
|----------|-------|------|-------------|------------|
| Year | Cases | Rate | Rate Change | Population |
| 2007 | 0 | 0.0 | — | 58,489 |
| 2008 | 0 | 0.0 | — | 58,861 |
| 2009 | 1 | 1.7 | — | 59,326 |
| 2010 | 0 | 0.0 | — | 60,921 |
| 2011 | 1 | 1.6 | — | 61,275 |
| 2012 | 1 | 1.6 | — | 61,275 |

Figure 16: Knox County Syphilis (2007 - 2012)



Central Region

Figure 15: Central Region Syphilis Rates



Notes: Calculated Rates = number of new cases per 100,000 in **Table 11** and **Figures 15** and **16**. All data were collected from the Ohio Disease Reporting System (ODRS). Population information collected from the United States Census Bureau. **Symbols** of significance: = **Prison Population**; = **County Rate** is above the **Ohio Rate**. **2011** population estimate used for **2012**. **2012** not yet available.



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Table 12: Amebiasis — E.coli - 0157:H7

| REPORTABLE DISEASE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YTD |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Amebiasis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Anaplasmosis - Anaplasma phagocytophilum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Anthrax | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Botulism - foodborne | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Botulism - infant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Botulism - wound | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brucellosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campylobacteriosis | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Chancroid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chlamydia | 6 | 11 | 9 | 6 | 16 | 8 | 12 | 11 | 8 | 8 | 10 | 11 | 116 |
| Cholera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coccidioidomycosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Creutzfeldt - Jakob Disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Creutzfeldt - Jakob Disease - variant (vCJD) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cryptosporidiosis | 1 | 2 | 3 | 6 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 15 |
| Cyclosporiasis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cytomegalovirus - congenital (CMV) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dengue | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dengue Hemorrhagic Fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diphtheria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E.coli - Not O157:H7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E.coli - O157:H7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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Table 13: E.coli - Unknown serotype — Hepatitis B (including delta) - acute/chronic

| REPORTABLE DISEASE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YTD |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| E.coli - Unknown serotype | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eastern equine encephalitis virus disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ehrlichiosis/Anaplasmosis - Undetermined | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ehrlichiosis - Ehrlichia chaffeensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ehrlichiosis - Ehrlichia ewingii | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Encephalitis - post chickenpox | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Encephalitis - post mumps | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Encephalitis - post other infection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Encephalitis - primary viral | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Giardiasis | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Gonorrhea | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 3 | 2 | 0 | 10 |
| Granuloma inguinale | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Haemophilus influenzae (invasive disease) | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Hantavirus - infection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hantavirus - pulmonary syndrome | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hemolytic uremic syndrome (HUS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hepatitis - acute viral undetermined etiology | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hepatitis A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Hepatitis B - Investigation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hepatitis B - Perinatal Infection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Hepatitis B (including delta) - acute | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| Hepatitis B (including delta) - acute/chronic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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Table 14: Hepatitis B (including delta) - chronic — Measles - indigenous to Ohio

| REPORTABLE DISEASE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YTD |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Hepatitis B (including delta) - chronic | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 4 |
| Hepatitis C - acute | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hepatitis C - acute/chronic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hepatitis C - chronic | 3 | 1 | 2 | 3 | 4 | 3 | 2 | 2 | 3 | 4 | 6 | 5 | 38 |
| Hepatitis E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Herpes - congenital | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Immigrant Investigation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Influenza A - novel virus infection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Influenza - associated hospitalization | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 8 |
| Influenza - associated pediatric mortality | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Influenza - Seasonal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kawasaki disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LaCrosse virus disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legionellosis - Legionnaires' Disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| Leprosy (Hansen Disease) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Leptospirosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Listeriosis | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Lyme Disease | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| Lymphogranuloma venereum (LGV) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Malaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Measles - imported from outside Ohio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Measles - indigenous to Ohio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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Table 15: Measles - indigenous/imported — Salmonellosis

| REPORTABLE DISEASE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YTD |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Measles - indigenous/imported | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Meningitis - aseptic/viral | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| Meningitis - bacterial (Not N. meningitidis) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Meningococcal disease - Neisseria meningitidis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mumps | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mycobacterial disease - other than tuberculosis | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Pertussis | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 4 |
| Plague | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Poliomyelitis - non paralytic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Poliomyelitis - paralytic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Poliomyelitis - paralytic/non-paralytic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Powassan virus disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Psittacosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Q fever, acute | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Q fever, chronic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rabies - animal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| Reye syndrome | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rheumatic fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rocky Mountain spotted fever (RMSF) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 3 |
| Rubella - congenital | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rubella - not congenital | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Salmonellosis | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 3 | 7 |



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Table 16: Severe Acute Respiratory Syndrome (SARS) — Toxoplasmosis - congenital

| REPORTABLE DISEASE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YTD |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Severe Acute Respiratory Syndrome (SARS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shigellosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Smallpox | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| St. Louis encephalitis virus disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Staphylococcal aureus - (VISA) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Staphylococcal aureus - (VRSA) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Streptococcal - Group A - invasive | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Streptococcal - Group B - in newborn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Streptococcal toxic shock syndrome (STSS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Strep. Pneumo - antibiotic resistance unknown | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Strep. Pneumo - antibiotic resistance/intermed. | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| Syphilis - congenital | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Syphilis - early latent (<1year) asymptomatic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Syphilis - late with symptoms (no neurosyphilis) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Syphilis - neurosyphilis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Syphilis - primary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Syphilis - secondary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Syphilis - stage Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Syphilis - unknown latent | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tetanus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Toxic shock syndrome (TSS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Toxoplasmosis - congenital | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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Table 17: Trichinosis — Yersiniosis

| REPORTABLE DISEASE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YTD |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Trichinosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tuberculosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Tuberculosis - multi –drug resistant (MDR-TB) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tularemia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Typhoid fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Typhus fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Varicella | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Vibrio parahaemolyticus infection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vibrio vulnificus infection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vibriosis - other (not cholera) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Viral Hemorrhagic Fever (VHF) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Nile virus disease (also current infection) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Western equine encephalitis virus disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Yellow fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Yersiniosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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Conclusion

Table 18: Top 5 Reportable Disease Comparison (2011 - 2012)

| 2011 | Knox Rate | Rate Change | 2012 | Knox Rate |
|----------------------------|-----------|-------------|----------------------------|-----------|
| 1.) Hepatitis C - chronic | 70.2 | ↓11.7% | 1.) Hepatitis C - chronic | 62.0 |
| 2.) Cryptosporidiosis | 49.0 | ↓50.0% | 2.) Cryptosporidiosis | 24.5 |
| 3.) Salmonellosis | 19.6 | ↓41.8% | 3.) Salmonellosis | 11.4 |
| 4.) Strep. pneumo. unknown | 13.1 | See Below | T4.) Hepatitis B - chronic | 6.5 |
| 5.) Mycobacterial disease | 9.8 | See Below | T4.) Pertussis | 6.5 |

Table 19: Top 5 Reportable Disease Ranking Change Comparison (2011 - 2012)

| Reportable Disease | Knox Rate | | Rate Change |
|------------------------|-----------|------|-------------|
| | 2011 | 2012 | |
| Strep. pneumo. unknown | 13.1 | 3.3 | ↓74.8% |
| Mycobacterial disease | 9.8 | 3.3 | ↓66.3% |
| Hepatitis B - chronic | 8.2 | 6.5 | ↓20.7% |
| Pertussis | 3.3 | 6.5 | ↑97.0% |

The top three reportable diseases in Knox County from 2011 were again in their same positions for 2012. **Hepatitis C - chronic** was the leading infectious disease reported in the county and in Ohio for 2012 (not including STDs). The Hepatitis C - chronic rate in 2012 decreased by 11.7%. **Cryptosporidiosis** was again the second leading reportable infectious disease in Knox County and in 2012 the rate decreased by 50.0%.

An important consideration for **Cryptosporidiosis** would be the status of the case classification and the type of test used to detect the organism. All 15 Cryptosporidiosis cases were documented as “probable” due to the use of an antigen test to detect the Cryptosporidium antigen. The Ohio Department of Health’s Infectious Disease Manual notes that recent reports have found unacceptably high rates of false-positives associated with Cryptosporidium antigen tests. Due to this finding, an antigen test is not sufficient enough to “confirm” a case of Cryptosporidiosis. The Knox County Epidemiological Team will discuss this issue and see if the antigen test can be used as a screening tool followed up by a laboratory test with a high positive predictive value (PPV) such as a direct fluorescent antibody (DFA) or polymerase chain reaction (PCR). This could potentially drop the Cryptosporidiosis rate in Knox County to a lower tier instead of being the highest county in the region.

Salmonellosis again ranked third in the county for 2012 and had a rate decrease of 41.8%. **Hepatitis B - chronic** and **Pertussis** tied for fourth place replacing **Streptococcus pneumoniae - invasive antibiotic resistance unknown** and **Mycobacterial disease**.



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Conclusion

The Knox County Health Department's Epidemiological Team will continue to discuss new ideas to help lower rates for **STDs**. Since this is a common issue across the region any guidance provided by the state will be utilized to help educate and treat the people of Knox County.

There were no **outbreaks** of any type in Knox County for 2012.

The Knox County Health Department will continue to conduct disease surveillance to help protect the people of Knox County.

