

Missouri Department of Health and Senior
Services (DHSS)

Weekly Communicable Disease Report
for the

Clay County

Missouri Department of Health and Senior Services (DHSS)

Weekly Communicable Disease Report

for the

Clay County

Report for Week 50 of 2016

Report Run Date = December 20, 2016

**For DHSS and LPHA Internal Use Only.
Data Included in This Report is Provisional.**

Data Source: Confirmed or Probable Cases of Diseases & Conditions
entered into the Missouri Health Surveillance Information System (WEBSURV)

Missouri Department of Health and Senior Services (DHSS)
Weekly Communicable Disease Report
Quartile Analysis of Year-to-date Counts for Week 50, 2016

Clay County

| Disease or Condition | Week 50 YTD¹ | Week 49 YTD¹ | Week 48 YTD¹ | Five Year 1st Quartile | Five Year Median | Five Year 3rd Quartile |
|---|--------------------------------|--------------------------------|--------------------------------|--|-------------------------|--|
| Anaplasma phagocytophilum | 1 | 1 | 1 | 1 | 2 | 3 |
| Animal Bites | 85 | 84 | 84 | No Data | 62 | No Data |
| Campylobacteriosis | 37 | 37 | 36 | 5 | 8 | 25 |
| Coccidioidomycosis | 1 | 1 | 1 | 1 | 1 | 1 |
| Cryptosporidiosis | 12 | 12 | 12 | 4 | 7 | 25 |
| Dengue Fever | 1 | 1 | 1 | 1 | 1 | 1 |
| E Coli Shiga Toxin Positive | 3 | 3 | 3 | 1 | 1 | 3 |
| Ehrlichia chaffeensis | 3 | 3 | 3 | 2 | 2 | 3 |
| Giardiasis | 4 | 4 | 4 | 2 | 6 | 7 |
| Haemophilus Influenzae, Invasive | 1 | 1 | 1 | 2 | 2 | 3 |
| Hansen's Disease (Leprosy) | 1 | 1 | 1 | No Data | 0 | No Data |
| Hepatitis A Acute | 1 | 1 | 1 | 1 | 1 | 1 |
| Hepatitis B (Pregnancy) Prenatal | 1 | 1 | 1 | 2 | 2 | 2 |
| Hepatitis B Chronic Infection | 3 | 3 | 3 | 4 | 4 | 6 |
| Hepatitis C, Chronic Infection | 27 | 27 | 27 | 36 | 36 | 43 |
| Influenza | 35 | 23 | 17 | No Data | 43 | No Data |
| Legionellosis | 5 | 5 | 4 | 2 | 2 | 2 |
| Pertussis | 8 | 8 | 8 | 4 | 5 | 15 |
| Rabies Post Exposure Prophylaxis | 3 | 3 | 3 | No Data | 8 | No Data |
| Rocky Mountain Spotted Fever | 2 | 2 | 2 | 2 | 2 | 6 |
| Salmonellosis | 14 | 14 | 13 | 17 | 19 | 24 |
| Shigellosis | 13 | 13 | 13 | 2 | 8 | 8 |
| Strep Disease, Group A Invasive | 4 | 4 | 4 | 2 | 3 | 5 |
| Strep Pneumoniae, Drug-Resistant | 7 | 7 | 6 | 1 | 3 | 4 |
| Tb Infection | 37 | 37 | 37 | 21 | 24 | 26 |
| Tuberculosis | 2 | 2 | 2 | 1 | 1 | 4 |
| Varicella (Chickenpox) | 6 | 6 | 6 | No Data | 14 | No Data |
| West Nile Viral Encephalitis/Meningitis | 1 | 1 | 1 | 1 | 2 | 2 |

¹ **Analysis Results Legend:**

The Year-to-Date (YTD) count is above the 5-year median.

The Year-to-Date (YTD) count is above the 5-year 3rd quartile for a period of one or two weeks.

The Year-to-Date (YTD) count is above the 5-year 3rd quartile for a period of three weeks.

The Year-to-Date (YTD) count is above the 5-year Maximum.

² **First Week Reported in 2016**

Missouri Department of Health and Senior Services (DHSS)
 Weekly Communicable Disease Report
 Quartile Analysis of Year-to-date Counts for Week 50, 2016

Clay County

| Change from Week 49 to Week 50 | Change from Week 50 to 5-Year Median | Rate per 100,000 Week 50 | Relative Rate Week 50 | First Week Reported ² | Last Week Reported ² |
|--------------------------------|--------------------------------------|--------------------------|-----------------------|----------------------------------|---------------------------------|
| 0.0% | (50.0%) | 1.00 | 5.60 | 38 | 38 |
| 1.2% | 37.5% | 85.00 | 0.67 | 1 | 50 |
| 0.0% | 362.5% | 37.00 | 1.60 | 3 | 49 |
| 0.0% | 0.0% | 1.00 | 2.94 | 20 | 20 |
| 0.0% | 71.4% | 12.00 | 1.67 | 5 | 42 |
| 0.0% | 0.0% | 1.00 | 4.66 | 34 | 34 |
| 0.0% | 200.0% | 3.00 | 0.89 | 31 | 34 |
| 0.0% | 50.0% | 3.00 | 0.74 | 25 | 40 |
| 0.0% | (33.3%) | 4.00 | 0.69 | 4 | 31 |
| 0.0% | (50.0%) | 1.00 | 0.42 | 41 | 41 |
| 0.0% | 0.0% | 1.00 | 55.95 | 10 | 10 |
| 0.0% | 0.0% | 1.00 | 3.73 | 35 | 35 |
| 0.0% | (50.0%) | 1.00 | 0.57 | 3 | 3 |
| 0.0% | (25.0%) | 3.00 | 0.42 | 9 | 48 |
| 0.0% | (25.0%) | 27.00 | 0.32 | 4 | 46 |
| 52.2% | (19.0%) | 35.00 | 2.58 | 41 | 50 |
| 0.0% | 150.0% | 5.00 | 1.84 | 3 | 49 |
| 0.0% | 60.0% | 8.00 | 1.44 | 25 | 34 |
| 0.0% | (64.0%) | 3.00 | 0.33 | 1 | 8 |
| 0.0% | 0.0% | 2.00 | 0.31 | 26 | 30 |
| 0.0% | (26.3%) | 14.00 | 0.79 | 1 | 49 |
| 0.0% | 62.5% | 13.00 | 0.91 | 2 | 26 |
| 0.0% | 60.0% | 4.00 | 1.85 | 2 | 15 |
| 0.0% | 133.3% | 7.00 | 1.51 | 1 | 49 |
| 0.0% | 54.2% | 37.00 | 0.75 | 1 | 46 |
| 0.0% | 100.0% | 2.00 | 1.18 | 3 | 21 |
| 0.0% | (57.1%) | 6.00 | 2.27 | 1 | 48 |
| 0.0% | (33.3%) | 1.00 | 6.99 | 37 | 37 |

¹ Analysis Results Legend:

The Year-to-Date (YTD) count is above the 5-year median.

The Year-to-Date (YTD) count is above the 5-year 3rd quartile for a period of one or two weeks.

The Year-to-Date (YTD) count is above the 5-year 3rd quartile for a period of three weeks.

The Year-to-Date (YTD) count is above the 5-year Maximum.

² First Week Reported in 2016

Missouri Department of Health and Senior Services (DHSS)
Weekly Communicable Disease Report for Week 50, 2016
Disease or Condition Analysis
Relative to Last Report run on 12/13/2016 for Week 49, 2016

Clay County

| Disease or Condition | Data Status^{1,2} | 1st Week Reported Current Report | 1st Week Reported Last Report | Change in Count | Week 50 Quartile Results³ | Week 49 Quartile Results⁴ | Data Trend Analysis⁵ | Data Elevation Analysis⁶ |
|----------------------------------|----------------------------------|--|---|------------------------|---|---|--|--|
| Anaplasma phagocytophilum | Old | 38 | 38 | 0 | Below Median | Below Median | Flat | Below Normal |
| Animal Bites | Old | 1 | 1 | 1 | Above Median | Above Median | Increase | Above Normal |
| Campylobacteriosis | Old | 3 | 3 | 0 | Above Maximum | Above Maximum | Flat | Very Elevated |
| Coccidioidomycosis | Old | 20 | 20 | 0 | Below Median | Below Median | Flat | Below Normal |
| Cryptosporidiosis | Old | 5 | 5 | 0 | Above Median | Above Median | Flat | Above Normal |
| Dengue Fever | Old | 34 | 34 | 0 | Below Median | Below Median | Flat | Below Normal |
| E Coli Shiga Toxin Positive | Old | 31 | 31 | 0 | Above 3 rd Quartile | Above 3 rd Quartile | Flat | Elevated |
| Ehrlichia chaffeensis | Old | 25 | 25 | 0 | Above Median | Above Median | Flat | Above Normal |
| Giardiasis | Old | 4 | 4 | 0 | Below Median | Below Median | Flat | Below Normal |
| Haemophilus Influenzae, Invasive | Old | 41 | 41 | 0 | Below Median | Below Median | Flat | Below Normal |
| Hansen's Disease (Leprosy) | Old | 10 | 10 | 0 | Above Median | Above Median | Flat | Above Normal |
| Hepatitis A Acute | Old | 35 | 35 | 0 | Below Median | Below Median | Flat | Below Normal |
| Hepatitis B (Pregnancy) Prenatal | Old | 3 | 3 | 0 | Below Median | Below Median | Flat | Below Normal |
| Hepatitis B Chronic Infection | Old | 9 | 9 | 0 | Below Median | Below Median | Flat | Below Normal |
| Hepatitis C, Chronic Infection | Old | 4 | 4 | -1 | Below Median | Below Median | Decrease | Below Normal |
| Influenza | Old | 41 | 41 | 17 | Below Median | Below Median | Increase | Below Normal |
| Legionellosis | Old | 3 | 3 | 1 | Above Maximum | Above Maximum | Increase | Very Elevated |
| Pertussis | Old | 25 | 25 | 0 | Above Median | Above Median | Flat | Above Normal |

¹ Data Status: Old=Continuing Occurrence in 2016, New=First Occurrence in 2016 and Out=Case was Removed from WEBSURV

² First Week Reported and/or First Occurrence of Disease or Condition in 2016

³ Week 50 Quartile Results are from the Current Report

⁴ Week 49 Quartile Results are from the Last Report

⁵ Based on Change in Count Current Report vs Last Report

⁶ Based on Quartile Analysis from Current Report where: Below Normal=below median, Above Normal= above median, Elevated=above 3rd quartile and Very Elevated=Above Maximum.

Missouri Department of Health and Senior Services (DHSS)
 Weekly Communicable Disease Report for Week 50, 2016
 Disease or Condition Analysis
 Relative to Last Report run on 12/13/2016 for Week 49, 2016

Clay County

| Disease or Condition | Data Status ^{1,2} | 1 st Week Reported Current Report | 1 st Week Reported Last Report | Change in Count | Week 50 Quartile Results ³ | Week 49 Quartile Results ⁴ | Data Trend Analysis ⁵ | Data Elevation Analysis ⁶ |
|---|----------------------------|--|---|-----------------|---------------------------------------|---------------------------------------|----------------------------------|--------------------------------------|
| Rabies Post Exposure Prophylaxis | Old | 1 | 1 | 0 | Below Median | Below Median | Flat | Below Normal |
| Rocky Mountain Spotted Fever | Old | 26 | 26 | 0 | Below Median | Below Median | Flat | Below Normal |
| Salmonellosis | Old | 1 | 1 | 0 | Below Median | Below Median | Flat | Below Normal |
| Shigellosis | Old | 2 | 2 | 0 | Above Maximum | Above Maximum | Flat | Very Elevated |
| Strep Disease, Group A Invasive | Old | 2 | 2 | 0 | Above Median | Above Median | Flat | Above Normal |
| Strep Pneumoniae, Drug-Resistant | Old | 1 | 1 | 1 | Above Maximum | Above Maximum | Increase | Very Elevated |
| Tb Infection | Old | 1 | 1 | -1 | Above Maximum | Above Maximum | Decrease | Very Elevated |
| Tuberculosis | Old | 3 | 3 | 0 | Above Median | Above Median | Flat | Above Normal |
| Varicella (Chickenpox) | Old | 1 | 1 | 0 | Below Median | Below Median | Flat | Below Normal |
| West Nile Viral Encephalitis/Meningitis | Old | 37 | 37 | 0 | Below Median | Below Median | Flat | Below Normal |

¹ Data Status: Old=Continuing Occurrence in 2016, New=First Occurrence in 2016 and Out=Case was Removed from WEBSURV

² First Week Reported and/or First Occurrence of Disease or Condition in 2016

³ Week 50 Quartile Results are from the Current Report

⁴ Week 49 Quartile Results are from the Last Report

⁵ Based on Change in Count Current Report vs Last Report

⁶ Based on Quartile Analysis from Current Report where: Below Normal=below median, Above Normal= above median, Elevated=above 3rd quartile and Very Elevated=Above Maximum.

**Missouri Department of Health and Senior Services (DHSS)
Weekly Communicable Disease Report
Year-to-Date Rates for Week 50, 2016**

| <i>Disease or Condition</i> | <i>Rate</i> ¹ | <i>Relative Rate</i> ^{2,3,4} |
|--|--------------------------|---------------------------------------|
| <i>Anaplasma phagocytophilum</i> | 1.00 | 5.60 |
| <i>Animal Bites</i> | 85.00 | 0.67 |
| <i>Campylobacteriosis</i> | 37.00 | 1.60 |
| <i>Coccidioidomycosis</i> | 1.00 | 2.94 |
| <i>Cryptosporidiosis</i> | 12.00 | 1.67 |
| <i>Dengue Fever</i> | 1.00 | 4.66 |
| <i>E Coli Shiga Toxin Positive</i> | 3.00 | 0.89 |
| <i>Ehrlichia chaffeensis</i> | 3.00 | 0.74 |
| <i>Giardiasis</i> | 4.00 | 0.69 |
| <i>Haemophilus Influenzae, Invasive</i> | 1.00 | 0.42 |
| <i>Hansen's Disease (Leprosy)</i> | 1.00 | 55.95 |
| <i>Hepatitis A Acute</i> | 1.00 | 3.73 |
| <i>Hepatitis B (Pregnancy) Prenatal</i> | 1.00 | 0.57 |
| <i>Hepatitis B Chronic Infection</i> | 3.00 | 0.42 |
| <i>Hepatitis C, Chronic Infection</i> | 27.00 | 0.32 |
| <i>Influenza</i> | 35.00 | 2.58 |
| <i>Legionellosis</i> | 5.00 | 1.84 |
| <i>Pertussis</i> | 8.00 | 1.44 |
| <i>Rabies Post Exposure Prophylaxis</i> | 3.00 | 0.33 |
| <i>Rocky Mountain Spotted Fever</i> | 2.00 | 0.31 |
| <i>Salmonellosis</i> | 14.00 | 0.79 |
| <i>Shigellosis</i> | 13.00 | 0.91 |
| <i>Strep Disease, Group A Invasive</i> | 4.00 | 1.85 |
| <i>Strep Pneumoniae, Drug-Resistant</i> | 7.00 | 1.51 |
| <i>Tb Infection</i> | 37.00 | 0.75 |
| <i>Tuberculosis</i> | 2.00 | 1.18 |
| <i>Varicella (Chickenpox)</i> | 6.00 | 2.27 |
| <i>West Nile Viral Encephalitis/Meningitis</i> | 1.00 | 6.99 |

¹ Rates are Year-to-Date Counts per 100,000 population for Week 50, 2016

² The relative rate is computed as the county or district rate divided by the overall state rate

³ Relative rate between 2.0 and 3.0

⁴ Relative rate above 3.0

Missouri Department of Health and Senior Services (DHSS)
Weekly Communicable Disease Reports
Comparison of 4-week Count Mean for Week 50, 2016 with Historical Limits

Clay County

| <i>Disease or Condition</i> | <i>Analysis Results ¹</i> | <i>4-week Count Mean for Week 50 ²</i> | <i>Upper Limit for Week 50 ³</i> | <i>4-week Count Mean for Week 49 ²</i> | <i>Upper Limit for Week 49 ³</i> | <i>4-week Count Mean for Week 48 ²</i> | <i>Upper Limit for Week 48 ³</i> |
|--------------------------------|--------------------------------------|---|---|---|---|---|---|
| Campylobacteriosis | | 0.3 | 0.8 | 0.3 | 0.8 | 0.0 | 0.8 |
| Cryptosporidiosis | | 0.0 | 0.3 | 0.0 | 0.4 | 0.0 | 0.5 |
| Giardiasis | | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.4 |
| Hepatitis C, Chronic Infection | | 0.0 | 1.8 | 0.3 | 1.9 | 0.5 | 2.0 |
| Pertussis | | 0.0 | 0.6 | 0.0 | 0.5 | 0.0 | 0.5 |
| Salmonellosis | | 0.5 | 0.7 | 0.5 | 0.7 | 0.3 | 0.8 |
| Shigellosis | | 0.0 | 0.9 | 0.0 | 0.9 | 0.0 | 0.8 |

¹ **Analysis Results Legend for Week 50:**

The 4-week Count mean is between the Historical Mean and the Historical Mean plus 1 Std. Dev.

The 4-week Count mean is between the Historical Mean plus 1 Std. Dev. and the Historical Mean plus 2 Std. Dev.

The 4-week Count mean is between the Historical Mean plus 2 Std. Dev. and the Historical Mean plus 3 Std. Dev.

The 4-week Count mean is above the Historical Mean plus 3 Std. Dev.

² **4-week Count mean based on the current and 3 previous weeks.**

³ **The Historical Count mean plus two standard deviations based on the current week, 7 previous weeks and 4 subsequents or leading weeks for the past five years.**

Weekly Communicable Disease Reports

4-week Count Mean Z-Scores for Week 50, 2016

(Z-Scores greater than 2.0)

Clay County