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# TABLE OF CONTENTS

Executive Summary .................................................................................................................. 1  
Highlights ................................................................................................................................. 2  
Top 20 Reportable Diseases ..................................................................................................... 3  
Enteric Diseases  
  - Campylobacteriosis ........................................................................................................ 4  
  - Cryptosporidiosis ........................................................................................................... 5  
  - Giardiasis ......................................................................................................................... 6  
  - Hepatitis A ...................................................................................................................... 7  
  - Salmonellosis .................................................................................................................. 8  
  - Shiga toxin-producing E. coli .......................................................................................... 9  
  - Shigellosis ...................................................................................................................... 10  

Vaccine-Preventable Diseases  
  - Haemophilus influenzae .................................................................................................. 11  
  - Mumps ............................................................................................................................ 12  
  - Pertussis ......................................................................................................................... 13  
  - Varicella (chickenpox) ................................................................................................. 14  

Invasive Diseases  
  - Group A streptococcus .................................................................................................... 15  
  - Group B streptococcus .................................................................................................... 16  
  - Streptococcus pneumoniae ............................................................................................ 17  
  - Streptococcal Toxic Shock ............................................................................................ 18  

Sexually Transmitted Diseases  
  - Chlamydia ...................................................................................................................... 19  
  - Gonorrhea ...................................................................................................................... 20  
  - HIV, new ......................................................................................................................... 21  
  - Syphilis .......................................................................................................................... 22  

Other Reportable Diseases  
  - Acinetobacter, carbapenem non-susceptible .................................................................. 23  
  - Coccidioidomycosis ....................................................................................................... 24  
  - Enterobacter, carbapenem non-susceptible ..................................................................... 25  
  - Hepatitis B, acute ........................................................................................................... 26  
  - Hepatitis C, acute ........................................................................................................... 27  
  - Legionellosis .................................................................................................................. 28  
  - Meningitis, aseptic ......................................................................................................... 29  
  - Meningitis, viral ............................................................................................................. 30  
  - Tuberculosis, active ....................................................................................................... 31  
  - West Nile virus .............................................................................................................. 32  

Data Notes ............................................................................................................................... 33
EXECUTIVE SUMMARY

Utah law requires that over 80 infectious diseases be routinely reported to public health for ongoing surveillance and investigation. Reportable data are collected from laboratories, hospitals, medical providers and outpatient clinics. Salt Lake County Health Department Epidemiology and Infectious Disease Bureaus then investigate each report through patient interview and/or chart abstraction and analyze the data. The results of the data analysis are utilized to implement appropriate control and prevention measures. In 2017, over 15,000 disease reports were investigated to determine the source of infection and interrupt disease transmission.

The Salt Lake County Health Department 2017 Infectious Diseases Morbidity Report highlights diseases and events of interest and summarizes data for the most commonly reported infectious diseases affecting Salt Lake County residents. Highlights include the hepatitis A outbreak and West Nile virus, as well as other diseases with high public interest, those with higher than expected case counts and those not previously seen in Salt Lake County. One-page disease profiles follow the highlights and present relevant demographic, clinical and epidemiologic data.

I hope this report can be a resource for healthcare providers, public health practitioners, community partners and the public, and that it can be used to help target intervention and prevention efforts.

Sincerely,

Dagmar Vitek, MD, MPH
Medical Director
HIGHLIGHTS

Measles Outbreak

Three confirmed cases of measles were identified in January and February of 2017. Thirteen cases were investigated, with ten ruled out. Contacts assessed were 416 individuals, with 28% of contacts receiving post-exposure prophylaxis. Index case was a child who traveled to Myanmar with one vaccination due to young age.

Norovirus

Eleven norovirus outbreaks were investigated in 2017. Three confirmed and six suspect outbreaks were investigated at long-term care facilities. Norovirus GII, norovirus GI.4 and norovirus unknown type were identified among cases at these long-term care facilities. Two confirmed clusters were associated with local restaurants. Norovirus GII.P16-GII.1 and norovirus GII.P16-GII.2 were identified at the two restaurants.

Bat Exposure

Two high schools in Salt Lake County experienced bat exposures in 2017. Fifty-seven students and staff were assessed due to a bat exposure that occurred at one high school. 61% of students and staff received full post exposure prophylaxis (PEP). 28% of students and staff were assessed and deemed not to have sufficient contact with a bat. 9% of students and staff with appropriate exposure refused PEP. Four students and staff were assessed due to a bat exposure that occurred at another high school. Two students and staff received full PEP. Two students and staff with appropriate exposure refused PEP.
## TOP 20 REPORTABLE DISEASES

<table>
<thead>
<tr>
<th>Disease</th>
<th>Rank</th>
<th>Number of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>1</td>
<td>5370</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>2</td>
<td>1672</td>
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<tr>
<td>Hepatitis C, acute &amp; chronic</td>
<td>3</td>
<td>1109</td>
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<tr>
<td>Influenza, hospitalized</td>
<td>4</td>
<td>695</td>
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<tr>
<td>Tuberculosis, latent infection</td>
<td>5</td>
<td>571</td>
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<tr>
<td>Pertussis</td>
<td>6</td>
<td>253</td>
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<tr>
<td>Campylobacteriosis</td>
<td>7</td>
<td>239</td>
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<tr>
<td>Hepatitis B, acute &amp; chronic</td>
<td>8</td>
<td>214</td>
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<tr>
<td>Salmonellosis</td>
<td>9</td>
<td>169</td>
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<tr>
<td>Syphilis (primary, secondary, early latent)</td>
<td>10</td>
<td>144</td>
</tr>
<tr>
<td>Streptococcal disease, invasive, group A</td>
<td>11</td>
<td>143</td>
</tr>
<tr>
<td><em>Streptococcus pneumoniae</em>, invasive disease</td>
<td>12</td>
<td>119</td>
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<tr>
<td>Hepatitis A</td>
<td>13</td>
<td>100</td>
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<tr>
<td>Chickenpox</td>
<td>14</td>
<td>95</td>
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<tr>
<td>HIV, new</td>
<td>15</td>
<td>81</td>
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<tr>
<td>Streptococcal disease, invasive, group B</td>
<td>15</td>
<td>81</td>
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<tr>
<td>Giardiasis</td>
<td>16</td>
<td>67</td>
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<td>Streptococcal disease, invasive, other</td>
<td>17</td>
<td>52</td>
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<tr>
<td><em>Acinetobacter</em>, carbapenem non-susceptible</td>
<td>18</td>
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<tr>
<td>Shiga toxin-producing <em>E. coli</em></td>
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<td>42</td>
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<tr>
<td>Meningitis, viral</td>
<td>19</td>
<td>42</td>
</tr>
<tr>
<td>Meningitis, aseptic</td>
<td>20</td>
<td>34</td>
</tr>
</tbody>
</table>
CAMPYLOBACTERIOSIS

cdc.gov/foodsafety/diseases/campylobacter/index.html

239
Number of cases reported

21.6
Incidence rate per 100,000 population

Clinical Review

23% Hospitalized
0 Deaths
33% Bloody diarrhea
9 Median duration of illness, days

Epidemiologic Review

- Most common risk factors for infection:
  - Immunocompromised
  - Foreign travel – most common countries include Mexico (28%) and Thailand (15%).
  - Animal exposure
  - Out of state travel – most common states include California (24%) and Colorado (17%).
- Salt Lake County was part of a national outbreak associated with Petland puppies.
CRYPTOSPORIDIOSIS

cdc.gov/parasites/crypto

24
Number of cases reported

2.2
Incidence rate per 100,000 population

Clinical Review

8% Hospitalized
0 Deaths
96% Diarrhea
12.5 Median duration of illness, days

Epidemiologic Review

- Most common risk factors for infection:
  - Immunocompromised
  - Foreign travel – most common country was Mexico (33%).
  - Out of state travel – no commonalities identified.
  - Suspect water exposure – most common water exposure reported was natural water, which includes rivers, lakes and ocean.
GIARDIASIS

cdc.gov/parasites/giardia

67
Number of cases reported

6.1
Incidence rate per 100,000 population

Clinical Review

6%    Hospitalized
0     Deaths
9%    Co-infected
49%   Weight loss
18    Median duration of illness, days

Epidemiologic Review

- 12% of cases were refugees or recent immigrants. 26% of these cases recently immigrated from Africa.
- Most common risk factors for infection:
  - Suspect water exposure – 66% of cases reported natural water exposure, which includes lakes and streams.
  - Foreign travel -most common country was Mexico (21%).
  - Outdoor exposure – 43% of cases report backpacking as an outdoor exposure, yet no common location was identified.
  - Sexual exposure

Giardiasis by age and sex

Giardiasis by race and ethnicity

Giardiasis incidence rates, 2008-17
HEPATITIS A

cdc.gov/hepatitis/hav/index.htm

100
Number of cases reported

9.0
Incidence rate per 100,000 population

Clinical Review

58% Hospitalized
0 Deaths
74% Jaundice

Epidemiologic Review

- Salt Lake County was part of a multistate outbreak of hepatitis A. The outbreak primarily affected persons experiencing homelessness, illicit drug users and incarcerated individuals. Viral sequencing confirmed the outbreak strain as 1B; this matched cases in at least seven states including California, Arizona, New Mexico, Illinois, Michigan, Kentucky and Virginia.
- 33% of outbreak cases were co-infected with hepatitis C.
- 17% of outbreak cases were co-infected with hepatitis B.
169
Number of cases reported

15.2
Incidence rate per 100,000 population

Clinical Review

25%  Hospitalized
0  Deaths
7  Median duration of illness, days
31%  Bloody diarrhea
6%  Asymptomatic

Epidemiologic Review

- Five outbreaks were identified and investigated
  - A nationwide outbreak of Salmonella (multiple serotypes) was associated with live poultry.
  - Salt Lake County had an outbreak of *Salmonella* Typhimurium associated with a birthday party. No common food sources were identified.
- Top 5 serotypes: Typhimurium (20%), Enteritidis (13%), Ohio (7%), Saintpaul (6%), Newport (5%).
- Common risk factors for infection include animal exposure, immunocompromised status, foreign travel and outbreak exposure.

Salmonellosis by age and sex

Salmonellosis by race and ethnicity

Salmonellosis incidence rates, 2008-17
SHIGA TOXIN-PRODUCING E. COLI

cdc.gov/ecoli

42
Number of cases reported

3.8
Incidence rate per 100,000 population

Clinical Review

21%
Hospitalized

0
Deaths

5%
Hemolytic uremic syndrome

57%
Bloody diarrhea

13
Median duration of illness, days

Epidemiologic Review

- Top 5 serotypes: O157:H7 (28%), O26 (17%), O103 (10%), O111 (7%), O118 (7%).
- Most common risk factors for infection:
  - Suspect water exposure – 57% of cases reported natural water exposure, which includes lakes and streams.
  - Foreign travel – most common country was Mexico (50%).
  - Out of state travel – most common state was Wyoming (30%).
  - Immunocompromised
22
Number of cases reported

2.0
Incidence rate per 100,000 population

Clinical Review

41%  Hospitalized
0    Deaths
32%  Bloody diarrhea
6    Median duration of illness, days

Epidemiologic Review

- One outbreak was identified and investigated:
  - Local restaurant had a small cluster of illness.
- Common risk factors for infection:
  - Foreign travel – no commonalities identified.
  - Sexual exposure – majority of cases identified as men who have sex with men.
  - Immunocompromised
HAEMOPHILUS INFLUENZAE

cdc.gov/hi-disease

24
Number of cases reported

2.1
Incidence rate per 100,000 population

Clinical Review

100%  Hospitalized
3     Deaths
63%   Bacteremia
0     HIB cases

Epidemiologic Review

- Types include nontypeable (67%), type F (13%), type E (13%), type A (4%) and unknown type (4%).
- 21% of cases were individuals experiencing homelessness.
- There were 8 weeks in 2017 that were statistically elevated. Consecutive elevations occurred during October, with no commonalities detected among cases.
32
Number of cases reported

2.9
Incidence rate per 100,000 population

Clinical Review
6% Hospitalized
0 Deaths
94% Parotitis
78% Vaccinated
21 Cases epi-linked to another case

Epidemiologic Review
- One outbreak was identified and investigated.
  - Outbreak occurred at a charter school.
  - 1,948 contacts were assessed, and 67 people received post-exposure prophylaxis.
  - 4 cases were typed and identified as genotype G.
  - Onsets ranged from 1/20/17-5/15/17.
PERTUSSIS

cdc.gov/pertussis

253
Number of cases reported

22.6
Incidence rate per 100,000 population

Clinical Review

2%  Hospitalized
0   Deaths
95% Paroxysmal cough
52% Inspiratory whoop
49% Post-tussive vomiting

Epidemiologic Review

- Thirteen outbreaks were identified and investigated. Outbreaks occurred at four high schools, four daycares, two elementary schools, one charter school, one school for children with disabilities and a middle school.
- 17% of cases were not vaccinated. Of those cases, 66% sited philosophical objections as the reason for not vaccinating.
- 81% of cases reported receiving at least one vaccine. 72% of those cases were up to date.
VARICELLA (CHICKENPOX)
cdc.gov/varicella

95
Number of cases reported

8.6
Incidence rate per 100,000 population

Clinical Review

3%  Hospitalized
0    Deaths
51%  Cases with 50 lesions or less

Epidemiologic Review

- One outbreak was identified and investigated. Outbreak occurred at an elementary school which involved seven students.
- 44% of cases were not vaccinated. Of these cases, 21% were philosophically opposed to vaccine, 19% were outside the recommended age range to receive vaccine, 16% were behind schedule for their immunizations and 8% had a contraindication to vaccine.
- 8% of cases had prior history of disease.
GROUP A STREPTOCOCCUS (GAS)
cdc.gov/groupastrep

143
Number of cases reported

12.8
Incidence rate per 100,000 population

Clinical Review

97%  Hospitalized
14   Deaths
50%  Chronic heart, liver or kidney disease

Epidemiologic Review

• One ongoing outbreak that was identified in 2016. Primary populations affected continues to be individuals experiencing homelessness and injection drug users.
• 25% of cases are individuals experiencing homelessness.
• 27% of cases report injection drug use.
• 24% of cases had diabetes, 14% were immunocompromised and 13% had chronic pulmonary disease.

Invasive group A streptococcus monthly frequency and cumulative incidence rate

Invasive group A streptococcus by race and ethnicity

Invasive group A streptococcus by age and sex

Invasive group A streptococcus incidence rates, 2008-17

Salt Lake County
Utah
GROUP B STREPTOCOCCUS (GBS)
cdc.gov/groupbstrep/

81
Number of cases reported

7.2
Incidence rate per 100,000 population

Epidemiologic Review

- There were 13 weeks in 2017 that were statistically elevated. No consecutive elevations and no commonalities detected among cases.
- 83% of infected newborns were born via vaginal delivery.
- Six newborns were positive for GBS. 100% of the mothers received prenatal care and 83% of these mothers were screened for GBS prior to delivery.
- One infant was still born due to sepsis and intrauterine infection.

Clinical Review

96% Hospitalized
1 Death

Invasive group B streptococcus by age and sex

- Invasive group B streptococcus monthly frequency and cumulative incidence rate

- Invasive group B streptococcus by race and ethnicity

- Invasive group B streptococcus incidence rates, 2008-17

SLCoHD INFECTIOUS DISEASES MORBIDITY REPORT 2017
119
Number of cases reported

10.6
Incidence rate per 100,000 population

Clinical Review

95%  Hospitalized
11   Deaths
89%  Bacteremia
57%  Pneumonia
51%  Smoke, alcohol abuse, injection drug use

Epidemiologic Review

- 32% of cases received PCV-23 prior to admit. Of those cases, 74% received the vaccine before age 65.
- 26% of cases received at least one dose of PCV-7 prior to admit.
- There were 14 weeks in 2017 that were statistically elevated. Consecutive elevations occurred in January with no commonalities detected among cases.
- 60% of deaths were age 50 and older. 45% of deaths reported substance abuse.
STREPTOCOCCAL TOXIC SHOCK

cdc.gov/groupastrep

22
Number of cases reported

2.0
Incidence rate per 100,000 population

Clinical Review

100% Hospitalized
9 Deaths
55% Acute Respiratory Distress Syndrome

Epidemiologic Review

- 14% of cases were individuals experiencing homelessness and/or injection drug users.
- 32% of cases reported alcohol abuse.
- 32% of cases had underlying lung conditions.
- 27% of cases had underlying heart conditions.
5370
Number of cases reported

478.9
Incidence rate per 100,000 population

Epidemiologic Review

- Males and females of color are disproportionately infected, based on rates comparison (rate not shown).
- Females were more likely to receive testing services.
- Males and females aged 15-24 years comprised over half of all infection.
GONORRHEA
cdc.gov/std/Gonorrhea

1672
Number of cases reported

149.1
Incidence rate per 100,000 population

Epidemiologic Review

- Salt Lake County has been experiencing increasing rates of gonorrhea for the past 6 years.
- African Americans are disproportionately infected, based on rate (rate not shown).
- Males were disproportionately infected, based on rate (rate not shown).

Clinical Review

0  Hospitalized
0  Deaths
HIV, NEW

cdc.gov/hiv

81
Number of cases reported

7.2
Incidence rate per 100,000 population

Clinical Review

10%  Hospitalized
0    Deaths

Epidemiologic Review

• 94% of all infections were males.
• Hispanic and African American males and females were disproportionately infected, based on rates comparison (rate not shown).
SYphilis
(Primary, Secondary, Early Latent)
cdc.gov/std/syphilis

144
Number of cases reported

12.8
Incidence rate per 100,000 population

Clinical Review

4 Neurological involvement
0 Deaths

Epidemiologic Review

- 2017 saw the largest number of diagnosed, early stage syphilis cases in Salt Lake County on record.
- 94% of cases were males who have sex with males.
- 35% of cases were co-infected with HIV.
43
Number of cases reported

3.8
Incidence rate per 100,000 population

Acinetobacter monthly frequency and cumulative incidence rate

Clinical Review

49% Hospitalized
6 Deaths
23% Patients with tracheostomies
23% Patients seeking wound care

Epidemiologic Review

- One outbreak occurred in 2017, which was a continuation of 2016 pan-resistant Acinetobacter cases at a long-term acute care hospital.
- 84% of isolates were identified as Acinetobacter baumannii.
- 84% of isolates were resistant to meropenem, 41% were resistant to imipenem and 35% were resistant to both meropenem and imipenem.
- Comorbidities include respiratory conditions (17%), diabetes (16%), heart conditions (14%), and current smokers (12%).
COCCIDIOIDOMYCOSIS

cdc.gov/fungal/diseases/coccidioidomycosis

16
Number of cases reported

1.4
Incidence rate per 100,000 population

Epidemiologic Review

- Cases report travel to California, Nevada, Arizona, New Mexico and Texas prior to illness.
- 44% of cases report outdoor exposures, which include camping, hiking and ATV riding.
- Frequently reported symptoms include cough (63%), arthralgias and fatigue (44%), and chest pain (38%).
- 25% of cases report construction as an occupational exposure.

Clinical Review

25% Hospitalized
0 Deaths
25% Immunocompromised
ENTEROBACTER
(CARBAPENEM NON-SUSCEPTIBLE)
cdc.gov/hai/organisms/cre/index.html

27
Number of cases reported

2.4
Incidence rate per 100,000 population

Clinical Review

26% Hospitalized
1 Death
30% Recurrent urinary tract infections

Epidemiologic Review

- 56% of isolates were identified as Enterobacter cloacae. 15% of isolates were identified as Enterobacter aerogenes.
- 59% of isolates were resistant to imipenem.
HEPATITIS B, ACUTE

cdc.gov/hepatitis/hbv/index.htm

13
Number of cases reported

1.2
Incidence rate per 100,000 population

Clinical Review

38% Hospitalized
0 Deaths
69% Jaundice
54% Fatigue, nausea, abdominal pain

Epidemiologic Review

- 46% of cases are individuals experiencing homelessness.
- 54% of cases endorse illicit drug use. Of those cases, 86% report injection drug use.
- There were 4 weeks in 2017 that were statistically elevated. No consecutive elevations or commonalities among cases.
- 23% of cases were coinfected with hepatitis A. 38% of cases were coinfected with hepatitis C.
HEPATITIS C, ACUTE

59
Number of cases reported

5.3
Incidence rate per 100,000 population

Epidemiologic Review

- Risk factors for infection include injection drug use (IDU) (48%), incarceration (17%), homelessness (19%) and high risk sexual contacts (15%).
- Genotypes identified include 1a or 1b (12%), 3a (8%), 1a (3%) and 1(undifferentiated) (2%).
- There were 17 weeks in 2017 that were statistically elevated. Consecutive elevations occurred in February, April and June with no commonalities identified among cases.

Clinical Review

24% Hospitalized
0 Deaths
20% Jaundice
13
Number of cases reported

1.2
Incidence rate per 100,000 population

Clinical Review

100% Hospitalized
3 Deaths
46% Immunocompromised

Epidemiologic Review

- Common risk factors include smoking (38%) and chronic lung disease (23%).
- 15% of cases were possibly nosocomial.
- 46% of cases had an exposure in Utah.
- 54% of cases stayed in a hotel during their incubation period.
34
Number of cases reported

3.0
Incidence rate per 100,000 population

Epidemiologic Review

- Common symptoms include headache (65%), fever (56%), altered mental status (47%), nausea/vomiting (44%) and stiff neck (32%).
- There were 15 weeks in 2017 that were statistically elevated. Consecutive elevations occurred from October to November with no commonalities identified among cases.
- Common comorbidities include current/former smokers (21%) and migraines (15%).

Clinical Review

97% Hospitalized
1 Death
71% Meningitis
15% Encephalitis
9% Meningoencephalitis
MENINGITIS, VIRAL

cdc.gov/meningitis/viral.html

42
Number of cases reported

3.7
Incidence rate per 100,000 population

Clinical Review

95% Hospitalized
1 Death
90% Meningitis
12% Encephalitis

Epidemiologic Review

- Viruses identified include enterovirus (50%), herpes simplex viruses (29%) and varicella-zoster virus (22%).
- Death was positive for enterovirus and rhinovirus.
- Common symptoms include fever (69%), headache (60%), nausea and/or vomiting (43%), stiff neck (38%) and photophobia (36%).
- There were 14 weeks in 2017 that were statistically elevated. Sporadic elevations with no commonalities identified among cases. Did not follow the same elevation pattern as aseptic meningitis cases.
TUBERCULOSIS, ACTIVE

cdc.gov/tb

23
Number of cases reported

2.1
Incidence rate per 100,000 population

Clinical Review

52%  Hospitalized
0    Deaths
0    Multi-drug resistant cases

Epidemiologic Review

- 26% of cases were smear positive. Two contacts to smear positive cases became active cases.
- Mexico was the most common country of foreign origin (35%). Other countries of origin for cases include the United States, Philippines, Marshall Islands, Cambodia, Israel, Democratic Republic of Congo, Peru and Myanmar.

Active tuberculosis by age and sex

Active tuberculosis by race and ethnicity

Active tuberculosis incidence rates, 2009-17
WEST NILE VIRUS

cdc.gov/westnile

30
Number of cases reported

2.7
Incidence rate per 100,000 population

Clinical Review

67%   Hospitalized
4     Deaths
53%   Neuroinvasive
10%   Immunocompromised

Epidemiologic Review

- 20% of cases reported having seen mosquitos near their home.
- 80% of cases are known to have acquired the disease in Utah.
- 10% of cases are individuals experiencing homelessness.
- 70% of cases report not using insect repellant or other preventative measures while outside.
DATA NOTES

Summarized diseases include reportable conditions with a 2017 count ≥ 10. Diseases with a 2017 count < 10 are not included and influenza data are summarized in a separate report. Analysis included data based on date reported to public health (1/1/17-12/31/17) and case status (Table 1). Outbreak data are only provided for diseases where outbreaks were identified (Table 1). Rates were calculated per 100,000 population. Population denominators were obtained from the Utah Indicator-Based Information System (IBIS). U.S. incidence rates are not available for diseases that are not nationally notifiable or whose data are otherwise unavailable. Historical incidence rates for carbapenem non-susceptible Acinetobacter and Enterobacter are only available for 2013 when they became notifiable diseases. Race and ethnicity data may not sum exactly to 100% due to rounding error. Age and sex data may not sum exactly to 100% due to the exclusion of unknown data.

Table 1. Reportable disease case statuses and outbreak definitions used in data analysis.

<table>
<thead>
<tr>
<th>Reportable Disease</th>
<th>Case status</th>
<th>Outbreak definition*</th>
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<tbody>
<tr>
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<td>probable</td>
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<td>Enteric Diseases</td>
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<tr>
<td>Cryptosporidiosis</td>
<td>x</td>
<td>x</td>
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<td>Giardiasis</td>
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<td>Hepatitis A</td>
<td>x</td>
<td></td>
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<td>Salmonellosis</td>
<td>x</td>
<td>x</td>
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<td>Shiga toxin-producing <em>E. coli</em></td>
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<td>Shigellosis</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Vaccine-Preventable Diseases</td>
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<tr>
<td><em>Haemophilus influenzae</em></td>
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<td>x</td>
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<tr>
<td>Mumps</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Pertussis</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Varicella (chickenpox)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Invasive Diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A streptococcus</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Group B streptococcus</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><em>Streptococcus pneumoniae</em></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Streptococcal Toxic Shock</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Sexually Transmitted Diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlamydia</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>HIV</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Syphilis (primary, secondary, early latent)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Other Reportable Diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Acinetobacter</em>, carbapenem non-susceptible</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Coccidioidomycosis</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><em>Enterobacter</em>, carbapenem non-susceptible</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Hepatitis B, acute</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Hepatitis C, acute</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Meningitis, aseptic</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Meningitis, viral</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Tuberculosis, active</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>West Nile virus</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

* Outbreak definition is only provided for diseases where outbreaks were identified.
† ≥ 2 related cases
§ ≥ 2 related cases in 21 days
‡ 1 case