**Reportable Diseases, MN Rule 4605.7040**

**Report Immediately by Telephone**

**Report Within One Working Day**

### Antimicrobial Susceptibilities

- Anthrax (of unknown origin)
- Amebiasis (Entamoeba histolytica/dispar)
- Listeria monocytogenes
- Botulism (Clostridium botulinum)
- Anaplasmosis (Anaplasma phagocytophila)
- Lyme disease (Borrelia burgdorferi)
- Brucella spp.
- Arboviral disease (including, but not limited to, West Nile virus)
- Malaria (Plasmodium spp.)
- Babesiosis (Babesia spp.)
- Diphtheria (Corynebacterium diphtheriae)
- LaCrosse encephalitis, eastern equine encephalitis, western equine encephalitis, St. Louis encephalitis
- Measles (rubeola)
- Babesiosis (Babesia spp.)
- Chancroid (Haemophilus ducreyi)
- Chlamydia trachomatis infection
- Chlamydophila psittaci infection
- Orthopox virus
- Plague (Francisella tularensis)
- Pneumocystis jirovecii pneumonia
- Pneumonia (all causes, including, but not limited to, community-acquired, hospital-acquired, and health-care–associated pneumonia)
- Pneumonia, hospital-acquired (HAP)
- Pneumonia, ventilator-associated (VAP)
- Pneumonia, health-care–associated (HCAP)
- Pertussis (Bordetella pertussis)
- Poliomyelitis
- Q fever (Coxiella burnetii)
- Rocky Mountain spotted fever (R. rickettsii)
- Rocky Mountain spotted fever (R. rickettsii) (infants under 1 year of age)
- Salmonellosis, including typhoid (Salmonella spp.)
- Rubella and congenital rubella syndrome
- Shigella spp.
- Cryptosporidiosis (Cryptosporidium spp.)
- Coccidioidomycosis (Coccidioides immitis)
- Coccidioidomycosis (Coccidioides immitis) (at sites designated by the Commissioner)
- Cyclosporiasis (Cyclospora spp.)
- Dengue virus infection
- Giardiasis (Giardia lamblia)
- Haemophilus influenzae disease
- Hemolytic uremic syndrome
- Hepatitis (all primary viral types including A, B, C, D, and E)
- Kawasaki disease
- Kingella disease (Kingella spp. (invasive only))
- Hantavirus infection
- Legionellosis (Legionella spp.)
- Measles (rubeola)
- Meningococcal disease (Neisseria meningitidis)
- Mumps (all age groups, including, but not limited to, infants, children, and adults)
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- Mumps (all age groups, including, but not limited to, infants, children, and adults)
- Pertussis (Bordetella pertussis)
- Plaintes, or death or workers hospitalized for pneumonia or acute respiratory distress
In 2012, no cases of pertussis were tested for susceptibility in Minnesota. Nationally, only 11 erythromycin-resistant isolates from a normally sterile site were submitted.

<table>
<thead>
<tr>
<th>Antimicrobial Susceptibilities of Selected Pathogens, 2012</th>
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<tbody>
<tr>
<td><strong>Number of Isolates Tested</strong></td>
</tr>
<tr>
<td>amoxicillin</td>
</tr>
<tr>
<td>ampicillin</td>
</tr>
<tr>
<td>penicillin</td>
</tr>
<tr>
<td>ceftriaxone</td>
</tr>
<tr>
<td>cefotaxime</td>
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<tr>
<td>cefuroxime sodium</td>
</tr>
<tr>
<td>ceftazidime</td>
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<tr>
<td>meropenem</td>
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<tr>
<td>ciprofloxacin</td>
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<tr>
<td>levofloxacin</td>
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<tr>
<td>azithromycin</td>
</tr>
<tr>
<td>erythromycin</td>
</tr>
<tr>
<td>clindamycin</td>
</tr>
<tr>
<td>chloramphenicol</td>
</tr>
<tr>
<td>gentamicin</td>
</tr>
<tr>
<td>trimethoprim/sulfamethoxazole (TMP/SMX)</td>
</tr>
<tr>
<td>vancomycin</td>
</tr>
<tr>
<td>ethambutol</td>
</tr>
<tr>
<td>isoniazid</td>
</tr>
<tr>
<td>pyrazinamide</td>
</tr>
<tr>
<td>rifampin</td>
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</tbody>
</table>

**Trends, Comments, and Other Pathogens**

- **Carbapenem-susceptible Staphylococcus aureus (CMB)**
  - The 478 isolates tested represent 95% of 503 total cases. Among cases associated with bloodstream infection, clindamycin-susceptible or intermediate isolates (86%) had inducible resistance to clindamycin for a total of 35% that were susceptible to clindamycin and did not exhibit inducible clindamycin resistance.
  - Of 77 CRE isolates submitted from 76 cases, 29 (38%) were resistant to 3 or more classes of antibiotics.
  - For community-associated (CA) cases (31/39 with isolates), susceptibilities were as follows: 42% (13/31) were susceptible to clindamycin by broth microdilution; however, 23/47 isolates that were clindamycin resistant were inducible resistant to clindamycin for a total of 55% (283/512) that were susceptible to clindamycin and did not exhibit inducible clindamycin resistance.
  - National guidelines recommend initial four-drug therapy for TB disease, at least until first-line drug susceptibility results are available.

- **Staphylococcal enterica (non-typhoidal)**
  - For cases in which treatment is required and susceptibility is unknown in an ampicillin and TMP/SMX-resistant strain isolated, azithromycin for 3 days, parenteral ceftriaxone for 5 days, or a fluoroquinolone (such as ciprofloxacin) for 3 days should be administered. For susceptible strains, amoxicillin or TMP/SMX is effective, azithromycin is less effective because of rapid absorption from the gastrointestinal tract. (2012 Red Book).

- **Neisseria gonorrhoeae**
  - Routine resistance testing for Neisseria gonorrhoeae by MDH PHL was discontinued in 2008. Susceptibility results were obtained from the CDC Regional Laboratory in Cleveland, OH, and are for isolates obtained through the Gonococcal Isolate Surveillance Program. Isolates (n = 89) were isolated from the Red Door Clinic in Minneapolis. Resistance criteria for ceftazidime, ciprofloxacin, and azithromycin have been established. Using nonmeningitis breakpoints (minimum inhibition concentration ≥0.5 μg/ml, ≥0.5 μg/ml, and ≥2.0 μg/ml, respectively). Also, the Neisseria gonorrhoeae isolate isolated from the meningitis patient showed resistance to cephalosporins and fluoroquinolones.

- **Staphylococcus aureus**
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- **Group A Streptococcus**
  - Of 378 group A streptococcal infections reported in 2012, 204 (54%) were from children younger than 15 years of age. Of these, 17% (59%) were residents of the 7-county metro area. Additionally, 33% of isolates were screened as nalidixic acid-susceptible and 21% (52%) were resistant to ciprofloxacin.

- **Streptococcus pneumoniae**
  - Of 398 isolates tested, 96% (380) of isolates were susceptible to penicillin. Of this group, 98% (377) were susceptible to amoxicillin and 96% (374) were susceptible to amoxicillin/克拉维酸 (最小抑制浓度 ≥0.5 μg/ml, ≥0.5 μg/ml, ≥2.0 μg/ml, respectively). Also, the Neisseria gonorrhoeae isolate isolated from the meningitis patient showed resistance to cephalosporins and fluoroquinolones.

- **Mycobacterium tuberculosis (TB)**
  - National guidelines recommend initial four-drug therapy for TB disease, at least until first-line drug susceptibility results are obtained. Of the 23 TB cases reported in 2012 to last at least first-line drug therapy, 21 (91%) were in foreign-born, including the results of 11 multidrug-resistant (MDR) TB (i.e., resistance to at least isoniazid and rifampin) patients. Of the results of 11 multidrug-resistant (MDR) TB (i.e., resistance to at least isoniazid and rifampin) patients, 100% (21/21) of isolates were susceptible to linezolid, 100% (21/21) of isolates were susceptible to rifampin, 100% (21/21) of isolates were susceptible to ethambutol, 100% (21/21) of isolates were susceptible to pyrazinamide, and 100% (21/21) of isolates were susceptible to isoniazid.

- **Invasive meticillin-resistant Staphylococcus aureus (MRSA)**
  - Of 233 cases of invasive MRSA infection were reported in 2012 in Ramsey and Hennepin Counties, of which 152 (65%) were from blood, 79% (184/233) had an isolate susceptibility testing for clindamycin (minimum inhibition concentration ≥0.5 μg/ml) and ciprofloxacin (minimum inhibition concentration ≥0.5 μg/ml, ≥0.5 μg/ml, ≥2.0 μg/ml, respectively). Also, the Neisseria gonorrhoeae isolate isolated from the meningitis patient showed resistance to cephalosporins and fluoroquinolones.

- **Botulism toxicin toxin**
  - In 2012, no cases of pertussis were tested for susceptibility in Minnesota. Nationally, only 11 erythromycin-resistant & pertussis cases have been identified to date.

- **Carbapenem-resistant Enterobacteriaceae (CRE)**
  - Of 27 CRE isolates submitted from 26 cases, 29 (99%) were resistant to 3 or more classes of antibiotics. For isolates associated with bloodstream infection, clindamycin-susceptible or intermediate isolates (86%) had inducible resistance to clindamycin for a total of 35% that were susceptible to clindamycin and did not exhibit inducible clindamycin resistance.

- **Escherichia coli O157:H7**
  - Antimicrobial treatment for E. coli O157:H7 infection is not recommended.