Antimicrobial Susceptibilities of Selected Pathogens, 2001

| | | *Campylobacter* spp.* | * (One weekly isolate from stewide convenience sample tested at CDC). | *Salmonella* spp. (non-typhoidal) ¶ | ¶ (~10% sample of statewide isolates tested at CDC). | *Shigella sonnei* † | † (All available statewide isolates tested at GPHL). | *Shigella flexneri* † | † (All available statewide isolates tested at GPHL). | *E. coli* O157 ‡ | ‡ (All available statewide isolates tested at CDC). | *Streptococcus pneumoniae* § | § (All invasive isolates from Atlanta (20-cty) MSA tested at CDC). | *Mycobacterium tuberculosis* † | † (All statewide isolates tested at GPHL). |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number tested | 53 | | 185 | | 406 | | 47 | | 27 | | 665 | | 428 | |
| | Total isolates | 640 | | 1721 | | 629 | | 70 | | 45 | | 746 | | 452 | |
| | Percent Tested (%) | 8 | | 11 | | 65 | | 67 | | 60 | | 89 | | 95 | |
| | % Susceptible | | | | | | | | | | | | | | |
| B-lactam antibiotics | amoxicillin | | | | | | | | | | | 89 | | | |
| | amoxicillin-clavulanic acid | | | 98 | | 47 | | 26 | | 100 | | | | | |
| | ampicillin | | | 87 | | 4 | | 15 | | 96 | | | | | |
| | cefotaxime | | | | | | | | | | | 83 | | | |
| | cefoxitin | | | >99 | | | | | | 100 | | | | | |
| | ceftiofur | | | >99 | | | | | | 100 | | | | | |
| | ceftriaxone | | | >99 | | >99 | | 100 | | 100 | | | | | |
| | cefuroxime sodium | | | | | | | | | | | 72 | | | |
| | cephalothin | | | >99 | | 32 | | 81 | | 100 | | | | | |
| | imipenem | | | 100 | | | | | | 100 | | | | | |
| | meropenem | | | | | | | | | | | 78 | | | |
| | penicillin | | | | | | | | | | | 68 | | | |
| other antibiotics | azithromycin | 96 | | | | | | | | | | | | | |
| | erythromycin | 96 | | | | | | | | | | 73 | | | |
| | nalidixic acid | 74 | | 99 | | >99 | | 96 | | | | | | | |
| | ciprofloxacin | 74 | | 100 | | >99 | | 98 | | 100 | | | | | |
| | levofloxacin | | | | | | | | | | | 99 | | | |
| | amikacin | | | 100 | | | | | | 100 | | | | | |
| | gentamicin | 100 | | 98 | | >99 | | 98 | | 100 | | | | | |
| | chloramphenicol | 100 | | 90 | | 96 | | 32 | | 100 | | 96 | | | |
| | clindamycin | 96 | | | | | | | | | | 94 | | | |
| | apramycin | | | 100 | | | | | | 100 | | | | | |
| | kanamycin | | | 94 | | | | | | 100 | | | | | |
| | streptomycin | | | 83 | | 58 | | 2 | | 100 | | | | | |
| | tetracycline | 66 | | 82 | | 79 | | 9 | | | | 90 | | | |
| | sulfamethoxazole | | | 85 | | 79 | | 45 | | 100 | | | | | |
| | trimethoprim/sulfamethoxazole | | | 98 | | 83 | | 60 | | 100 | | 62 | | | |
| | vancomycin | | | | | | | | | | | 100 | | | |
| | ethambutol | | | | | | | | | | | | | 99 | |
| | isoniazid | | | | | | | | | | | | | 94 | |
| | rifampin | | | | | | | | | | | >99 | | 99 | |

## Trends, Comments and Other Pathogens

| | |
|---|---|
| *Campylobacter* spp. | Susceptibilities were determined using 2001 NCCLS breakpoints for Enterobacteriaceae. Erythromycin susceptible: MIC < 4 µg/ml. |
| *Salmonella* spp. | Antimicrobial treatment for enteric salmonellosis generally is not recommended. |
| *Shigella sonnei* | Antimicrobial resistance in *S. sonnei* is dynamic. In 2000, nearly half of isolates were resistant to trimethoprim-sulfamethoxazole (SXT). In 2001 this changed, with large outbreaks among children caused by a strain with SXT-susceptibility. |
| *Shigella flexneri* | *S. flexneri* has been associated with outbreaks among men who have sex with men. |
| *E. coli* O157 | Use of antimicrobials is controversial for enteritis caused by *E. coli* O157. Several studies have shown no symptomatic improvement and increased risk for hemolytic-uremic syndrome among treated patients (Guerrant RL et. al. Clin Infect Dis 2001; 32:331-51). |
| *Streptococcus Pneumoniae* | NCCLS 2001 MIC interpretive standards for *S. pneumoniae* were used for all antimicrobials. For penicillin, 16% (109/665) had intermediate susceptibility and 16% (106/665) were resistant (penicillin MIC breakpoints: susceptible ≤0.06 µg/ml, intermediate 0.12-1 µg/ml, resistant ≥2 µg/ml). For amoxicillin, 6% (37/665) were intermediate and 5% (34/665) were resistant (amoxicillin MIC breakpoints: susceptible ≤2 µg/ml, intermediate 4 µg/ml, resistant ≥8 µg/ml). For cefuroxime, <1% (1/665) were intermediate and 28% (184/665) were resistant (cefuroxime MIC breakpoints: susceptible ≤0.5 µg/ml, intermediate 1 µg/ml, resistant ≥2 µg/ml). For cefotaxime, 14% (94/665) were intermediate and 3% (22/665) were resistant (cefotaxime MIC breakpoints: susceptible ≤0.5 µg/ml, intermediate 1 µg/ml, resistant ≥2 µg/ml). For meropenem, 10% (68/665) were intermediate and 12% (78/665) were resistant (meropenem MIC breakpoints: susceptible ≤0.25 µg/ml, intermediate 0.5 µg/ml, resistant ≥1 µg/ml). Five isolates (<1%) were resistant to levofloxacin. All isolates were susceptible to vancomycin. |
| *Mycobacterium tuberculosis* | 6% (27/427) were INH-resistant. Two cases of multidrug-resistant TB (resistant to at least INH and rifampin) were identified, both among foreign-born persons. |