

2010 Antimicrobial Susceptibility Summary for Pierce County, Washington

All civilian and military hospital laboratories within Pierce County reported antibiotic susceptibility testing results for the time period between 01/01/10 and 12/31/10. Inpatient and outpatient data have been included. Data represents only bacterial isolates that were collected for diagnostic purposes; no surveillance cultures are included.

Starting in 2008, all isolates were reported as long as there are ≥ 3 days separating isolates. Previous to 2008, no standard mechanisms for eliminating duplicate isolates were agreed on across hospitals which may have negatively impacted the reliability of percent susceptible data prior to 2008.

A county-wide antibiogram may be useful in providing context to individual hospital susceptibility trends. This would be especially important when small numbers of certain pathogens are reported by individual facilities making the percent susceptible/resistant appear artificially inflated due to the small denominators (e.g. *S. pneumoniae*).

Percent (%) Susceptible

Gram Negative Organisms	No. Tested	Amikacin	Ampicillin	Pip/Taz	Cefazolin	Ceftriaxone	Ceftazidime	Imipenem	Gentamicin	Tobramycin	Nitrofurantoin	Ciprofloxacin	Levofloxacin	Trimeth/sulfa
<i>Citrobacter freundii</i>	380	99	↓↓↓ x	↓ 85	x	86	↑ 83	96	91	94	87	84	88	76
<i>Enterobacter aerogenes</i>	348	100	x	89	x	90	87	99	100	100	x	95	95	98
<i>Enterobacter cloacae</i>	647	100	x	↓ 83	x	↓ 78	↓ 73	100	↓ 95	93	x	86	88	↓ 80
<i>Escherichia coli</i>	22521	100	60	95	91	97	96	100	94	94	95	81	83	79
<i>Klebsiella pneumoniae</i>	3261	100	x	97	92	95	94	100	92	91	x	78	↓ 80	81
<i>Proteus mirabilis</i>	1679	100	65	99	91	97	96	↑ 100	85	86	x	59	↓ 67	62
<i>Serratia marcescens</i>	342	100	x	94	x	97	99	99	96	↓ 92	x	88	↓ 89	95
<i>Acinetobacter baumannii</i>	208		x	↑ 56	x	x	↑ 48	↑↑ 71	↑ 75	↑↑ 84	x	↑ 51	44	64
<i>Pseudomonas aeruginosa</i>	2561	↓ 91		↓ 87			85	88	↓ 78	91		72	↓↓ 59	x

†The actual number of isolates tested against each agent may vary.

††Blank indicates not tested against that drug

xSusceptibility is 30% or less.

↓Susceptibility decreased 5-9% from 2009

↓↓Susceptibility decreased 10-14% from 2009

↓↓↓Susceptibility decreased 20-26% from 2009

↑Susceptibility increased 5-9% from 2009

↑↑Susceptibility increased 10-14% from 2009

Percent (%) Susceptible

Gram Positive Organisms	No. Tested*	Penicillin	Oxacillin	Clindamycin	Erythromycin	Gentamicin	Nitrofurantoin	Levofloxacin	Tetracycline	Rifampin	Trimeth/sulfa	Vancomycin
<i>Enterococcus species</i>	2451	85			↓↓	70	89	70	↓↓↓ x			93
<i>Staphylococcus aureus</i>	14178	x	52	81	↑	99	98	59	95	99	98	100
<i>Staphylococcus coagulase neg.</i>	1350	x	40	60	37	86	99	51	84	97	67	100

†The actual number of isolates tested against each agent may vary.

††Blank indicates not tested against that drug or susceptibility is 30% or less.

†††*Staph aureus* isolates not sensitive to oxacillin are considered resistant to other beta-lactams, including cephalosporins.

xSusceptibility is 30% or less.

↓↓Susceptibility decreased 10-13% from 2009

↓↓↓Susceptibility decreased 20-26% from 2009

↑Susceptibility increased 5-9% from 2009

Streptococcus pneumoniae[†]

Invasive Isolates (blood, CSF)	No. tested	Susceptible	Intermediate	Resistant
Penicillin	80	80.00%	↓ 12.50%	7.50%
3rd gen Cephalosporin	80	95.00%	5.00%	0.00%
Macrolide ^{††}	73	76.71%	0.00%	23.29%
Levofloxacin	79	100.00%	0.00%	0.00%
Trimeth-Sulfa	47	↓ 82.98%	2.13%	14.89%
Vancomycin	48	100.00%	0.00%	0.00%

†Does not contain data from Madigan Army Medical Center (MAMC). Because 2009 data did include MAMC data, no comparisons to 2009 data have been made.

††Macrolides include erythromycin and azithromycin

↓Susceptibility decreased 5-9% from 2009