

## 2009 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 01/01/09 and 12/31/09. 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  $\geq 3$  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 (Remainder are non-susceptible, resistant or intermediate.)

Gram Negative Organisms	No. Tested*	Ampicillin	Augmentin	Piperacillin	Pip/Taz	Cefazolin	Ceftriaxone	Ceftazidime	Imipenem	Gentamicin	Tobramycin	Nitrofurantoin	Ciprofloxacin	Levofloxacin	Tetracycline	Trimeth/sulfa
<i>Citrobacter freundii</i>	419	**** 26			91	1	81	80	100	93	98	87	82	88		76
<i>Enterobacter aerogenes</i>	423	0			92	0	90	90	99	100	100	12	97	98		97
<i>Enterobacter cloacae</i>	697	0			88	4	*** 83	**** 78	100	*** 100	97	29	**** 90	92		87
<i>Escherichia coli</i>	21439	59			96	91	97	96	100	94	93	96	80	83		78
<i>Klebsiella pneumoniae</i>	3001	0			98	94	96	94	100	95	92	* 27	81	85		83
<i>Proteus mirabilis</i>	1532	66			100	91	98	98	93	85	85	0	60	73		62
<i>Serratia marcescens</i>	339	0			98	4	98	100	98	99	97	2	91	95		97
<i>Acinetobacter baumannii</i>	215	0			** 49	0	0	42	61	* 66	* 74	0	42	*** 46		* 67
<i>Pseudomonas aeruginosa</i>	2260	0			92	0	0	87	91	87	92		72	69		0

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

††Blank indicates not tested against that drug.

\* Susceptibility decreased 5-9% from 2008

\*\* Susceptibility decreased 10-13% from 2008

\*\*\* Susceptibility increased 5-9% from 2008

\*\*\*\* Susceptibility increased 10-14% from 2008

**Percent (%) Susceptible** (Remainder are non-susceptible, resistant or intermediate.)

Gram Positive Organisms	No. Tested*	Penicillin	Augmentin	Oxacillin	Cefazolin	Clindamycin	Erythromycin	Gentamicin	Nitrofuratoin	Levofloxacin	Tetracycline	Rifampin	Trimeth/sulfa	Vancomycin
<i>Enterococcus species</i>	2287	87					* 12	** 73	89	66	23			91
<i>Staphylococcus aureus</i>	15337	4		51	54	83	40	97	100	58	95	100	98	100
<i>Staphylococcus coagulase neg.</i>	1729	*** 10		41		58	41	87	99	*** 51	82	97	68	100

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

††Blank indicates not tested against that drug.

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

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***Streptococcus pneumoniae***

Invasive Isolates (blood, CSF)	No. tested	% Susceptible	% Intermediate	% Resistant
Penicillin	115	76.52%	19.13%	4.35%
3rd gen Cephalosporin	115	95.65%	2.61%	1.74%
Macrolide	109	* 72.48%	1.83%	25.69%
Levofloxacin	110	100.00%	0.00%	0.00%
Trimeth-Sulfa	78	89.74%	0.00%	10.26%
Vancomycin	79	100.00%	0.00%	0.00%

†Macrolides include erythromycin and azithromycin

\*Susceptibility decreased 13% from 2008

