

Gram Positive Isolates	# of isolates (all sources)	penicillins			Trimethoprim-Sulfamethoxazole	Rifampin	Vancomycin	Tetracycline	Linezolid	Daptomycin	Meropenem	cephems		Levofloxacin	# of isolates (non-urine)	macrolides			# of isolates (urine only)	quinolones			Nitrofurantoin	Tetracycline
		Penicillin	Ampicillin	Oxacillin								Cefotaxime	Ceftriaxone			Azithro, Clarithro, or Erythromycin	Clindamycin	Erythromycin		Ciprofloxacin	Levofloxacin	Norfloxacin		
<i>S. aureus</i> (non-differentiated)	2318	1164 13.3 ± 3.5		2786 64.0 ± 2.2	2786 97.8 ± 0.5	2394 99.3 ± 0.3	2786 99.3 ± 0.2	2412 96.5 ± 0.8	2210 99.3 ± 0.4	815 100.0 ± 0.0*				624	402 46.0 ± 8.0*	624 83.8 ± 3.2	556 43.5 ± 5.9*	148				146 98.2 ± 1.4		
<i>S. aureus</i> (MRSA)	2292			172 2.5 ± 2.5	2281 96.1 ± 1.6	2087 96.3 ± 1.4	2281 99.8 ± 0.2	2167 95.1 ± 1.4	2167 98.1 ± 1.3	157 98.5 ± 1.5*				396	247 29.7 ± 14.6*	396 63.7 ± 5.7	231 33.0 ± 24.0*	85				85 98.9 ± 1.1		
<i>S. aureus</i> (MSSA)	4278	1696 15.8 ± 2.9		4104 97.9 ± 2.0	4278 99.1 ± 0.2	3969 99.7 ± 0.3	4278 99.9 ± 0.1	3997 96.1 ± 0.7	4049 98.8 ± 1.2	242 99.7 ± 0.3*				779	52 66.5 ± 0.5*	779 79.1 ± 2.7	562 62.5 ± 4.7*	157				157 99.6 ± 0.3		
<i>S. pneumoniae</i>	467	391 82.0 ± 12.2			371 79.9 ± 4.8		407 100.0 ± 0.0	407 81.5 ± 5.2				275 97.6 ± 1.7*	371 97.0 ± 1.3	311 98.5 ± 0.8	151		151 60.0 ± 3.0*							
<i>Enterococcus spp.</i>	1021	417 90.2 ± 2.5*	1160 92.1 ± 2.1				1178 95.1 ± 1.7		170 100.0 ± 0.0*	55 100.0 ± 0.0*								403	397 79.0 ± 3.7*	379 79.0 ± 3.6*		397 96.8 ± 2.6*		
<i>E. faecalis</i>	2427	1672 98.3 ± 0.5	2460 98.6 ± 1.1				2149 98.1 ± 1.1		1692 93.6 ± 3.8	159 98.3 ± 0.9*								491	384 66.0 ± 3.1	367 67.1 ± 3.1		491 97.5 ± 0.9	384 23.0 ± 3.5	
<i>E. faecium</i>	180	110 12.0 ± 9.0*	182 36.4 ± 17.4*				182 33.0 ± 11.1*		110 99.5 ± 0.5*									84	84 12.0 ± 5.0*	84 14.5 ± 5.5*		84 8.5 ± 4.5*	84 58.5 ± 8.5*	

Gram Negative Isolates	# of isolates (all sources)	aminoglycosides			b-lactam/b-lactamase inhibitor				cephems					quinolones		carbapenems			sulfona- mide	penicillins		# of isolates urine only	single agents					
		Gentamicin	Tobramycin	Amikacin	Amoxicillin-Clavulanic Acid	Ampicillin-Subactam	Piperacillin-Tazobactam	Ticarcillin-Clavulanic Acid	Cefazolin	Cefuroxime	Cefepime	Cefotetan	Cefoxitin	Cefotaxime or Ceftriaxone	Ciprofloxacin	Levofloxacin	Ertapenem	Imipenem	Meropenem	Trimethoprim-Sulfamethoxazole	Piperacillin		Ampicillin	Cephalothin	Norfloxacin	Nitrofurantoin	Sulfisoxazole	Trimethoprim
<i>E. coli</i>	19473	18674 94.3 ± 0.5	19199 94.6 ± 0.9	11201 96.9 ± 2.5	6283 87.6 ± 1.5	16485 70.9 ± 1.8	17071 97.5 ± 0.2	463 94.5 ± 1.8	19446 89.0 ± 2.6	3425 89.9 ± 2.8	17205 96.1 ± 1.4	1388 99.0 ± 0.4*	9423 94.9 ± 0.9	17744 97.4 ± 0.5	19473 84.2 ± 1.2	17118 82.6 ± 1.2	11871 99.8 ± 0.4	12419 99.7 ± 0.2	7135 100.0 ± 0.0	19473 82.6 ± 0.8	2309 61.0 ± 3.7*	17532 62.5 ± 2.4	7126	1233 58.5 ± 8.1	1022 79.3 ± 5.9*	7120 95.9 ± 0.6	354 79.5 ± 0.5*	
<i>K. pneumoniae</i>	2954	2954 98.6 ± 0.4	2921 98.7 ± 0.4	1457 99.3 ± 0.5	1019 96.1 ± 1.6	2482 92.2 ± 1.3	2500 97.5 ± 0.7	59 98.0 ± 2.0	2989 96.2 ± 1.0	447 94.3 ± 1.1	2921 98.4 ± 0.4	199 99.8 ± 0.3*	1508 97.0 ± 0.3	2633 98.3 ± 0.5	2195 95.2 ± 1.5	2954 95.1 ± 1.4	2141 99.8 ± 0.2	1668 99.9 ± 0.1	1475 100.0 ± 0.0	2954 95.4 ± 0.9	296 33.2 ± 13.3	1282 3.6 ± 2.4	929	179 90.0 ± 5.1*	132 97.0 ± 2.1	929 46.7 ± 5.2		
<i>Enterobacter spp.</i>	1191	1163 99.4 ± 0.2	1163 99.1 ± 0.5	647 99.0 ± 1.0	333 0.6 ± 0.6*	65 43.7 ± 29.6*	646 91.9 ± 2.1	61 100.0 ± 0.0*	443 16.3 ± 9.3	89 63.0 ± 15.7*	972 99.0 ± 0.7	61 70.3 ± 23.0*		819 90.7 ± 1.9	929 96.9 ± 1.4	999 97.3 ± 0.9	748 97.1 ± 1.4	720 97.8 ± 1.9	488 96.8 ± 2.8	1071 95.2 ± 1.0	89 73.3 ± 11.8*	246 61.6 ± 23.5*	352			352 35.0 ± 8.6		
<i>Serratia spp.</i>	100	100 99.3 ± 0.8	100 92.5 ± 2.5*	44 94.0 ± 3.0							100 97.8 ± 2.3*			88 99.7 ± 0.3*	62 97.0 ± 3.0*	82 92.7 ± 3.8*		44 97.5 ± 2.5*	56 99.0 ± 1.0*	100 97.0 ± 2.1*								
<i>P. aeruginosa</i>	1770	1631 90.8 ± 1.5	1660 98.4 ± 0.7	1254 98.8 ± 0.6		1254 96.3 ± 1.5					1624 94.8 ± 0.8			1643 83.5 ± 2.5	1517 81.5 ± 2.5		1052 91.2 ± 1.8	1156 95.3 ± 1.8		85 100.0 ± 0.0*								
<i>Acinetobacter spp.</i>	< 30																											

2013 Montana Antibiogram. Data were collected from January 1 through December 31. The antibiogram reflects data submitted by 25 clinical laboratories throughout the state (see map). Note: data are presented for surveillance purposes only and should not be used solely in the determination of therapy for individual patients. Number of isolates tested for each drug is displayed in red font; percentage of isolates susceptible to each drug (expressed as mean ± SEM) is shown in black font⁵; *data from five laboratories or fewer (minimum of two); green square indicates variability in the data set with a coefficient of variation (CV) greater than 20%; gray square indicates either no tests performed or fewer than thirty isolates submitted; orange square indicates isolates that are a cause of concern.

- 1) Analysis and Presentation of Cumulative Antimicrobial Susceptibility Test Data; Approved Guideline-Third Edition. CLSI document M39-A3. Wayne, PA: Clinical and Laboratory Standards Institute; 2009.
- 2) Performance Standards for Antimicrobial Susceptibility Testing; Twenty Second Informational Supplement. CLSI document M100-S23. Wayne, PA: Clinical and Laboratory Standards Institute; 2013.
- 3) Antibiotic Resistance Threats in the United States, 2013. Atlanta, GA: Centers for Disease Control and Prevention; 2013.
- 4) Laboratory Reporting of Communicable Diseases in Montana (June 2013); <http://www.dphhs.mt.gov/publichealth/lab/documents/LABDPHSDiseaseReportingtoLHJ.pdf>
- 5) Mean ± SEM was calculated using the percent susceptible value submitted by each laboratory for each drug/organism combination. N values (i.e. number of laboratory submittals) ranged from 2 to 26