

2000 Wisconsin Antibiotic Resistance Report

Invasive *Streptococcus pneumoniae*

The **Wisconsin Division of Public Health** conducts surveillance for invasive bacterial infections in Wisconsin residents. Invasive pneumococcal isolates are obtained from blood or another normally sterile body site. More than 90% of eligible laboratories submit invasive pneumococcal isolates for testing.

TABLE 1. Penicillin susceptibility of invasive *S. pneumoniae* by patient characteristics.

	# Isolates Tested	# Interm. (Pen-I)	# Resist. (Pen-R)	Total Nonsusceptible	
				2000	1999
Male	158	19	20	39 (25%)	24%
Female	131	18	16	34 (26%)	24%
Age					
0-4 yrs.	78	11	13	24 (31%)	28%
5-19 yrs.	16	0	1	1 (6%)	10%
20-59 yrs.	86	10	12	22 (26%)	31%
60+ yrs.	109	16	10	26 (24%)	19%
Total	289	37	36	73 (25%)	24%

Intermediate resistant (Pen-I) includes isolates with MIC 0.1 to 1.0 mcg/mL. Resistant (Pen-R) includes all isolates with MIC \geq 2 mcg/mL. Isolates with MIC $<$ 1 are susceptible (Pen-S).

TABLE 2. Susceptibility to seven antibiotics for invasive pneumococcal isolates.

	# Interm.	# Resist.	Total Nonsusceptible	
			2000	1999
TMP/Sulfa	21	33	54 (19%)	26%
Cefotaxime	4	35	39 (13%)	11%
Erythromycin	7	26	33 (11%)	14%
Meropenem	1	27	28 (10%)	5%
Ceftriaxone	0	23	23 (8%)	6%
Chloramphenicol	1	6	7 (2%)	2%
Levofloxacin	1	0	1 (<1%)	0%

Inappropriate antibiotic prescribing contributes to the spread of resistant pneumococcal infections. For more information on appropriate antibiotic use, visit www.wismed.org. For more information on pneumococcal surveillance and susceptibility testing, contact Susann Ahrabi-Fard at the Wisconsin Division of Public Health: 608-261-6955 or ahrabs@dhfs.state.wi.us.

FIGURE 1. Penicillin resistance (Pen-R) by public health region.

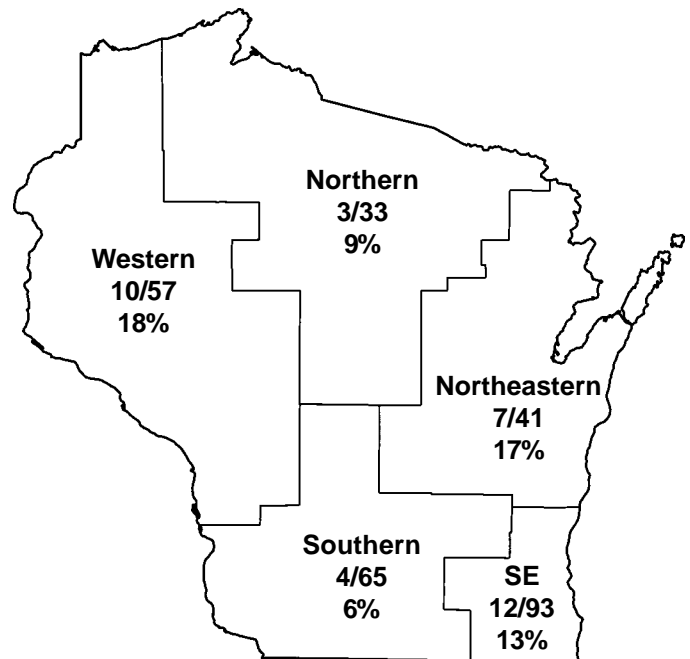
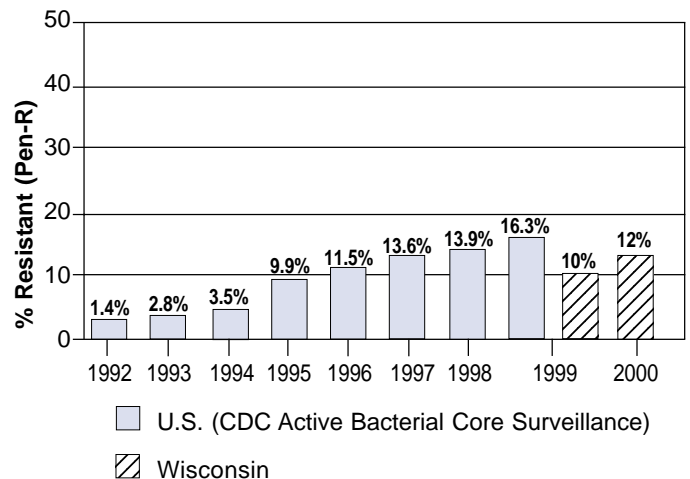


FIGURE 2. Temporal trends in penicillin resistance (Pen-R) among invasive isolates in Wisconsin and the U.S.



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