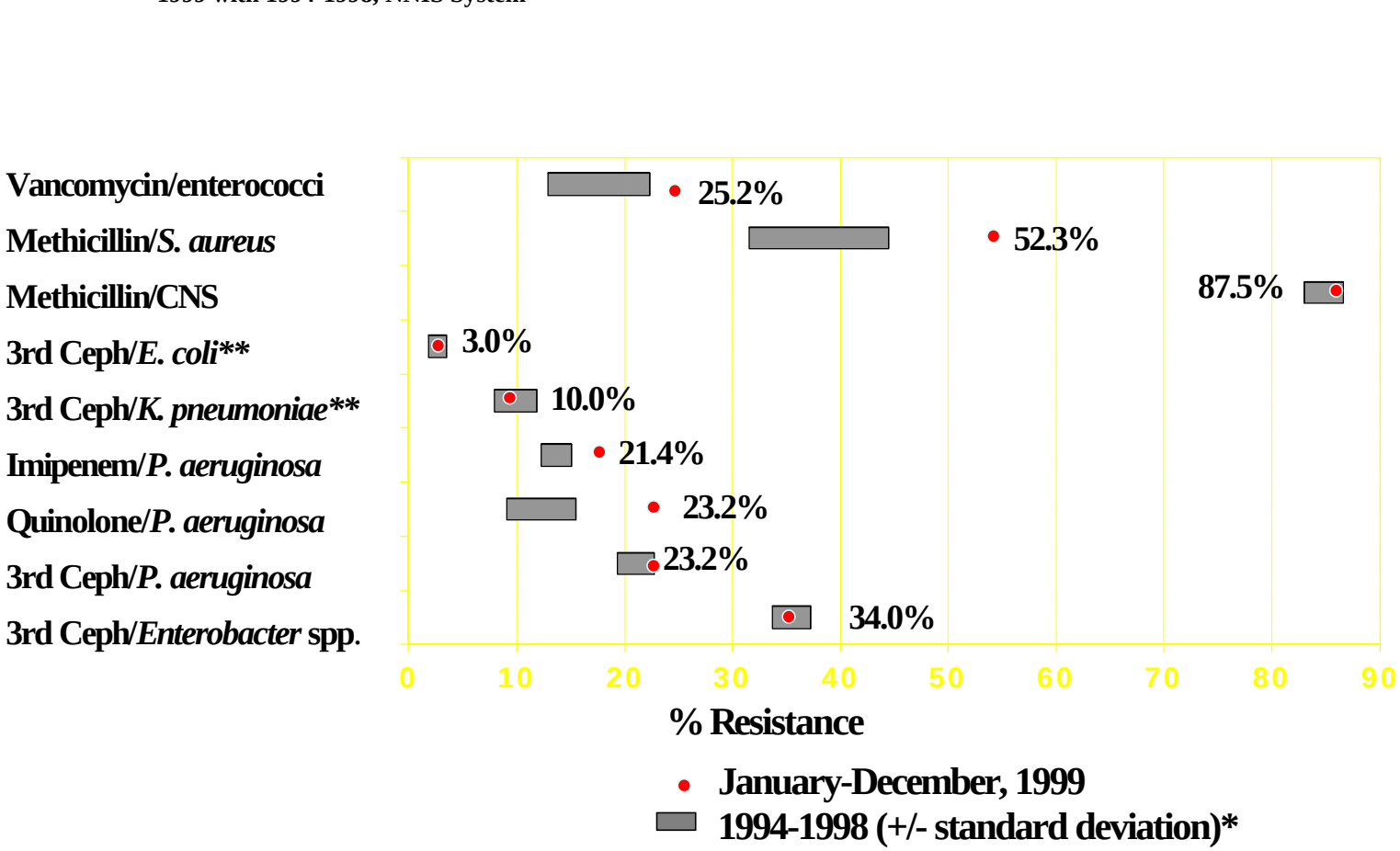
Figure 1. Selected antimicrobial resistant pathogens associated with nosocomial infections in ICU patients, comparison of resistance rates from January-December 1999 with 1994-1998, NNIS System



	January-December no. isolates tested	% increase in resistance (99 vs 94-98)*
Vancomycin/enterococci	1579	43%
Methicillin/*S. aureus*	2106	37%
Methicillin/CNS	3358	2%
3rd Ceph/*E. coli***	1425	8%
3rd Ceph/*K. pneumoniae***	773	- 3%
Imipenem/*P. aeruginosa*	1119	56%
Quinolone/*P. aeruginosa*	1639	50%
3rd Ceph/*P. aeruginosa*	1763	10%
3rd Ceph/*Enterobacter* spp.	1426	- 4%

Note: CNS=coagulase-negative staphylococci, 3rd Ceph = resistance to $1 of the following: ceftriaxone, cefotaxime, or ceftazidime, quinolone=resistance to either ciprofloxacin or ofloxacin.

* Percentage (%) increase in resistance rate of current year (January-December1999) compared to mean rate of resistance over previous 5 years (1994 through 1998): [(1999 rate - previous 5 year mean rate)/previous 5 year mean rate]*100.

** "Resistance" for *E. coli* or *K. pneumoniae* is the rate of non-susceptibility of these organisms to either 3rd Ceph group or aztreonam.

Figure 1 summarizes antimicrobial resistance among common pathogens identified from ICU patients with nosocomial infections. We first provide the pooled mean rate of resistance for each pathogen for January-December 1999. Second, we graph this rate next to the average rate of resistance (± 1 standard deviation) over the previous 5 years, for each pathogen. Finally, we calculate the percentage increase in the resistance rate in 1999 compared to the previous 5 years. This number provides a general estimate of the relative increase or decrease in this year's resistance rate compared to the historical data. These data display the changes in antimicrobial resistance in U.S. hospitals. Compared to the previous six month period reported in the June 1999 SAR, the rate of increase in resistance rates for MRSA and VRE has diminished slightly. Although these data are limited to patients in ICUs, these data are not risk-adjusted and comparisons of these rates between hospitals should be made with caution. Furthermore, these prevalence rates are derived from susceptibility patterns reported from bacteria associated with nosocomial infections in patients in the ICU and may not be comparable to resistance rates from routine hospital-wide antibiograms which may also include colonizing isolates.