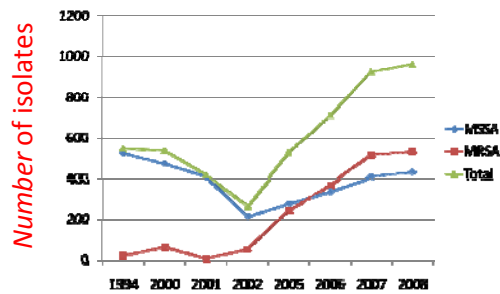


Antibiotic Susceptibilities of Bacterial Isolates at WCHOB: 2008

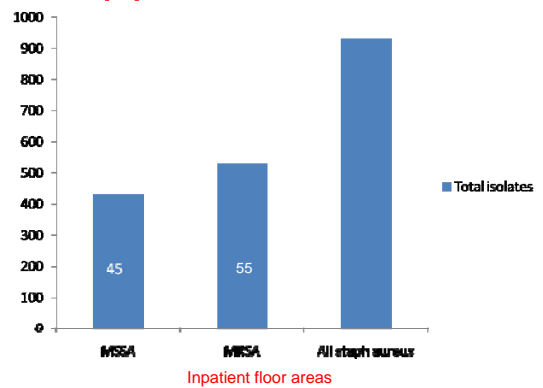
Robert C. Welliver, Sr., MD

Inpatient Floor and Emergency Department

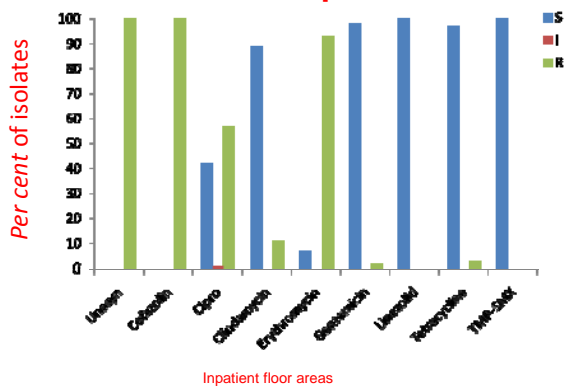
MSSA and MRSA : 1994-2009



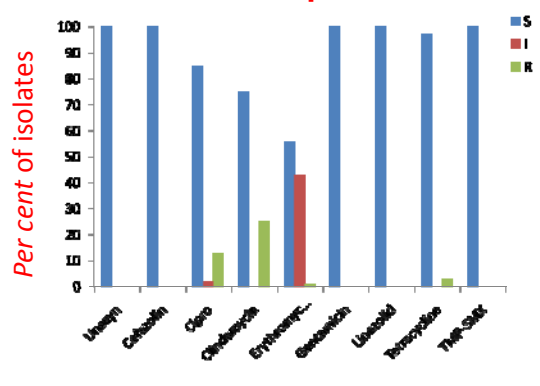
Staphylococcus Aureus Isolates: 2008



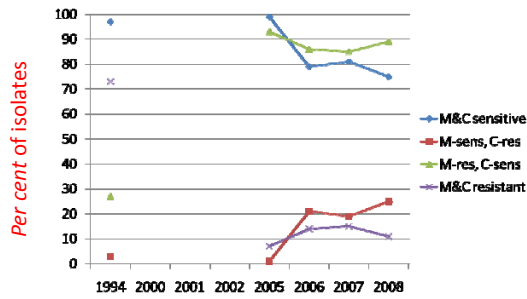
MRSA Susceptibilities



MSSA Susceptibilities

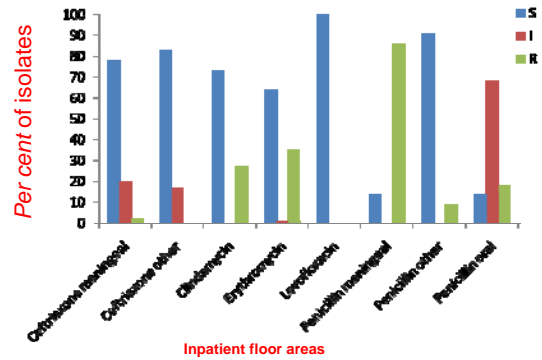


Clindamycin and *Staphylococcus aureus*



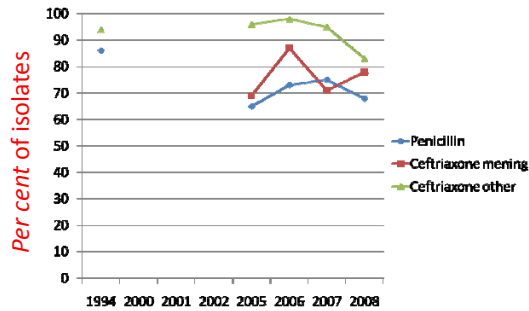
All *Staphylococcus aureus* are sensitive to linezolid and vancomycin

Pneumococcal Susceptibilities



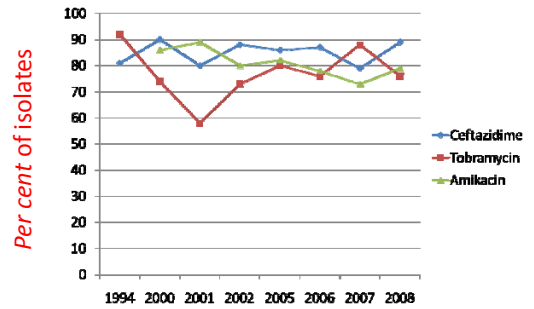
Inpatient floor areas

Changes in Pneumococcal Sensitivity



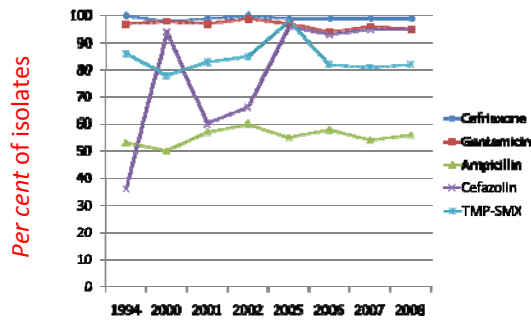
Distinct cutoffs for sensitivity in CNS versus elsewhere

Pseudomonas Susceptibilities



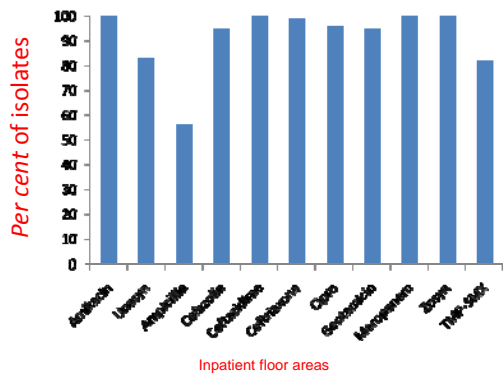
Inpatient floor areas

E. Coli Susceptibilities

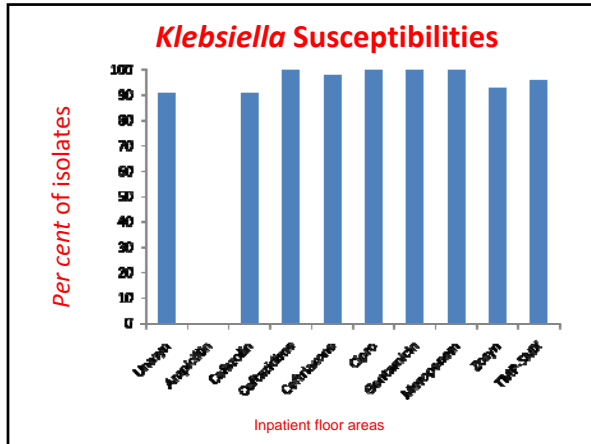


Inpatient floor areas

E. Coli Susceptibilities



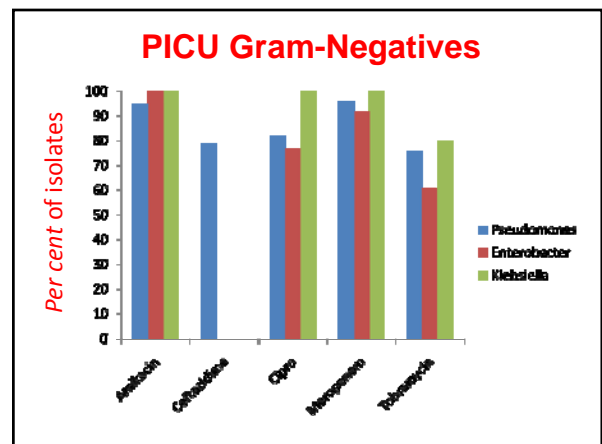
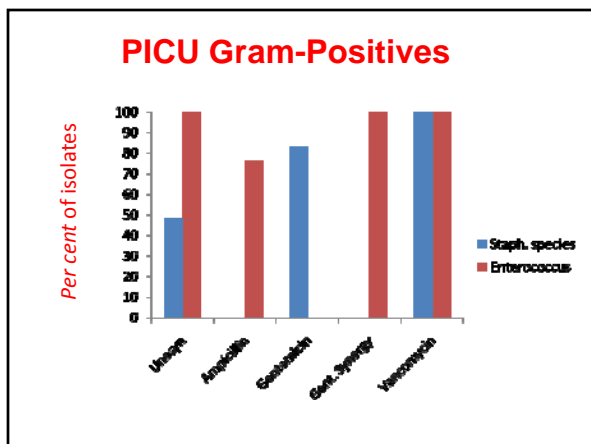
Inpatient floor areas



- ### Inpatient and ER Summary
- MRSA account for the nearly 100% increase in *Staphylococcus aureus* infections
 - 55% of recovered staph are MRSA
 - Clindamycin is now an unreliable drug for staphylococcal infections (25% of MSSA resistant)
 - TMP-SMX, tetracycline available for oral therapy
 - Vancomycin and linezolid have 100% activity *in*

- ### Inpatient and ER Summary II
- Pneumococci remain susceptible to high-dose ceftriaxone in sites other than CNS
 - Vancomycin/ceftriaxone synergy in CNS infection
 - CTX resistance has apparently increased at other body sites, but this may be semantic
 - Clindamycin susceptibility is now 73%, affecting therapeutic decisions in lung infections

PICU



PICU Summary

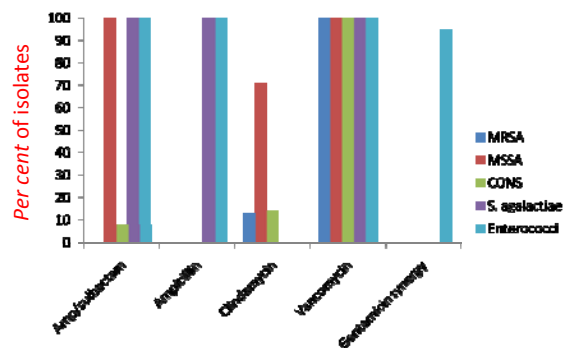
- MRSA (n = 52) and MSSA (n = 74) essentially the same as in other sites
- 73% of MSSA sensitive to clindamycin
- Enterococci susceptible to amp/sulbactam, gentamicin synergy frequent
- E. coli, Proteus not problematic
- Pseudomonas sensitive to meropenem, amikacin

NICU

NICU Gram-Positives in 2008

Organism	Number of isolates
MRSA	16
MSSA	56
Coagulase-negative staphylococci	101
<i>Streptococcus agalactiae</i>	2
Enterococcus species	22

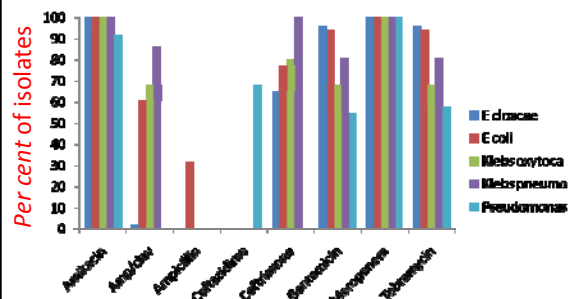
NICU Gram-Positives



NICU Gram-Negatives in 2008

Organism	Number of isolates
<i>Enterobacter cloacae</i>	49
<i>Escherichia coli</i>	31
<i>Klebsiella oxytoca</i>	25
<i>Klebsiella pneumoniae</i>	21
<i>Pseudomonas aeruginosa</i>	38

NICU Gram-Negatives



NICU Summary

- MRSA are comparatively smaller per cent of staph isolates, constitute 22% of staph aureus
- Enterococci demonstrate ampicillin susceptibility, gentamicin synergy
- CONS essentially require vancomycin
- Group B streptococci rarely tested

NICU Summary II

- Aminoglycosides cover GNR in sepsis/meningitis
- Several species exceed E coli in frequency
- Amp/gent still appropriate for newborns
- Amikacin or meropenem to be considered for infections acquired later in newborn period