

Antimicrobial Resistance Surveillance in the Cayman Islands

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May 10, 2011



Why AMR Surveillance?

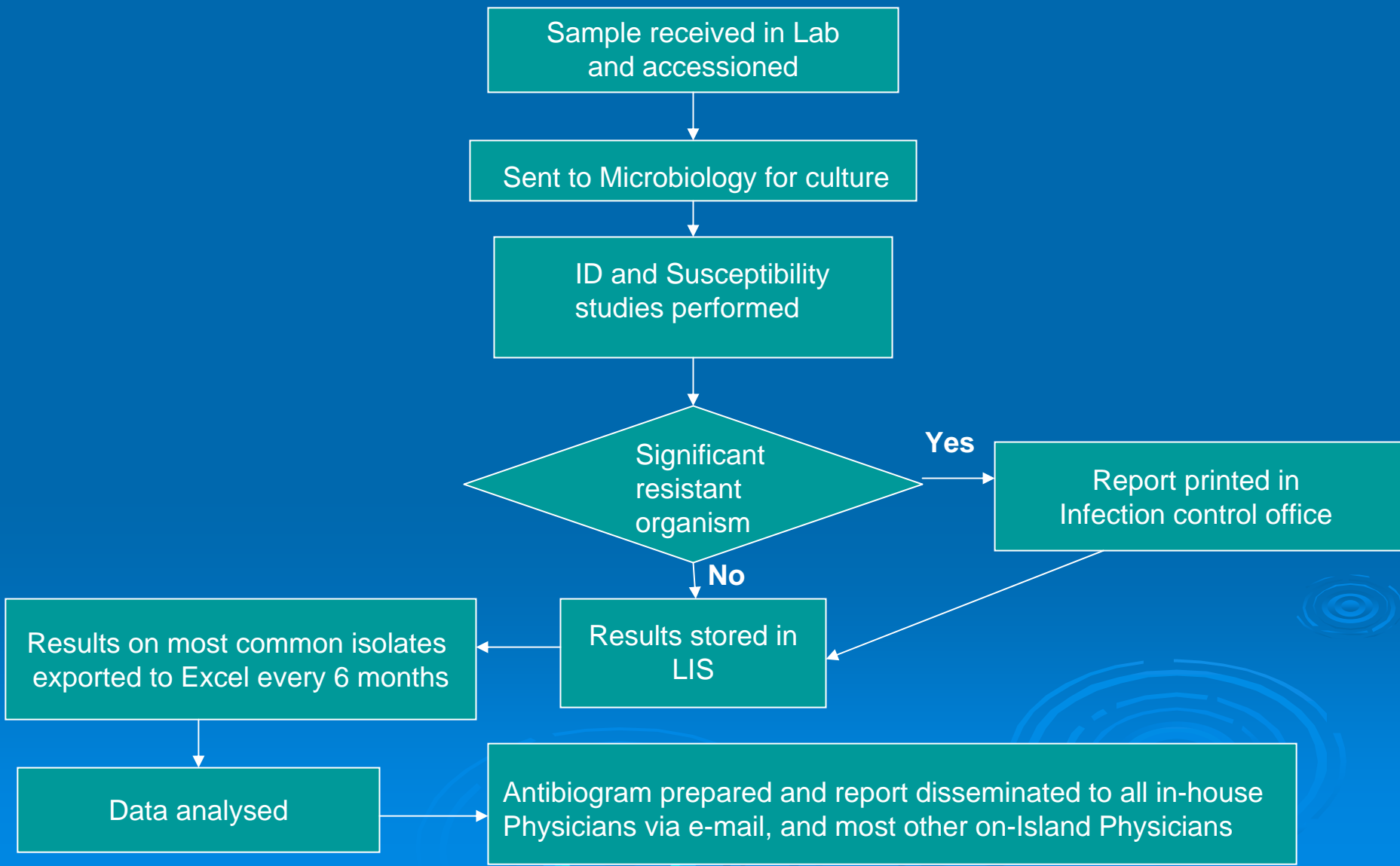
- > Identify the need for infection control measures
- > Assess impact of containment interventions
- > Improve the use of appropriate antimicrobials
- > Stem the rate of development of resistant pathogenic microorganisms

Surveillance Approach

- Surveillance is performed using various approaches
 - Alert organism Tracking
 - Reports on significant resistant organisms are automatically transmitted to Infection control office
 - Targeted Surveys
 - Periodic studies performed and antibiogram and report disseminated

- Antibiograms being produced since 1997

PROCESS FOR ANTIMICROBIAL RESISTANCE SURVEILLANCE IN THE CAYMAN ISLANDS

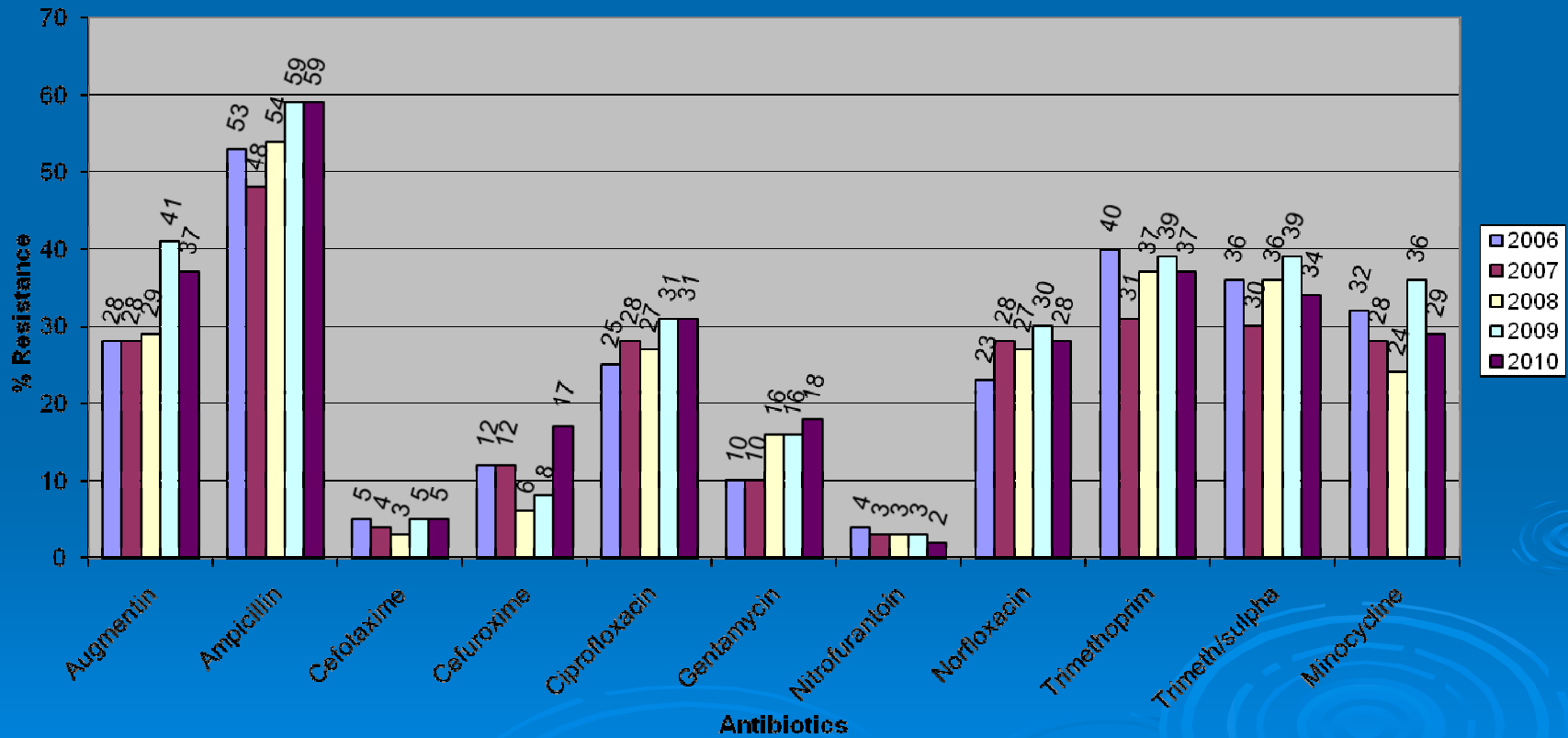


Role of Infection Control Office in AMR Surveillance

- Results of Significant Resistant Organisms printed in Infection Control Office (MRSA, ESBL, and other MDRO's)
- Infection Control Meetings (Quarterly)- chaired by Director of Primary Care Services.
 - Reports presented on:
 - Number of patients admitted with significant resistant organisms
 - Number of patients with Hospital Acquired significant resistant organisms

Example

CI Health Services Authority Pathology Laboratory Antibiotic Resistance
E. coli (Jan 2006 - Dec 2010)



Example

Antibiotic Resistance Patterns of Most Common Isolates at The Cayman Islands Hospital laboratory January 2010 – December 2010

Escherichia coli: -

Approximately 60% of isolates continue to show resistance to Ampicillin rendering this drug practically useless. Resistance to the Cephalosporin and Cefotaxime has remained relatively stable while the percentage of isolates resistant to Cefuroxime has doubled. The overall levels of resistance to this drug however, continue to remain below 20%.

Nitrofurantoin, indicated for the treatment of urinary tract infections, has excellent activity against these isolates, with only 2% being resistant to this antibiotic, thus making it the drug of choice for urinary tract infections where this organism is the causative agent.

Conclusion

- Avoid usage of wide spectrum 2nd line treatment
- Most of them have severe side effects e.g. Quinolone used to treat UTIs almost routinely

THANK YOU

