



Control of Antimicrobial Resistance in the Hospital : Infection Control Strategies

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The ecology of antibiotic resistance in the hospital is a complex one. The spectrum of antibiotics used is ever increasing, matched by the escalation of new treatment modalities. Modern medicine has produced a host of highly susceptible immunocompromised patients and there are a growing number of new microbial pathogens. In such an environment, controlling the spread of antibiotic resistance is obviously a difficult and daunting task.

Five Infection Control Measures for the control of antimicrobial resistance will be discussed and these are: surveillance, appropriate patient care practices, appropriate disinfection practices, isolation and barrier precautions and modifying host responses.

A summary of these measures are shown in table one with mechanisms of control and the type of healthcare workers involvement. Data from Queen Mary Hospital will be presented to illustrate each of these measures.

Table 1. Infection control measures for reducing antibiotics resistance

Infection Control Measures	Key Mechanisms in Assisting Control	Main HCWs Involved
1. Surveillance for Antibiotics Resistance	Identify sources Identify outbreaks Feedback of data Monitor control measures	IC team Microbiology Laboratory Staff
2. Appropriate Patient-care Practices	General reduction of nosocomial spread	Implement by IC team with HCWs' compliance
3. Appropriate Disinfections and Sterilization	General reduction of microbial contamination Eliminate common source	Implement by IC team with HCWs' compliance
4. Appropriate Isolation Practices & Barrier Precautions	Reduce transmission of resistant bacteria	Implement by IC team with HCWs' compliance
5. Modify Host Risk Profile (eg. by treatment)	Reduce colonization and halt progression to infection	Attending clinicians and nursing staff

HCW: Healthcare Worker