



Fact Sheet 3

Antimicrobial Resistance and MRSA in Canada

- "Antimicrobial resistance has escalated to the point where it is believed to be one of the most serious threats to the treatment of infectious diseases worldwide.
- Antibiotic-resistant organisms are continuously eroding current drugs, leaving few or no alternative agents."¹
- Controlling antibiotic resistance is difficult and requires a multi-modal response
- *Staphylococcus aureus* is the most common cause of infections ranging from mild to very severe. If *Staph aureus* develops resistance to the semisynthetic beta-lactam antibiotics it is described as Methicillin-resistant *Staphylococcus aureus* (MRSA).
- MRSA was first reported in the hospital setting but resistant strains are now emerging in the community.
- It is now widely known that these organisms are transferred in and out of the hospital or facility environment.
- The prevalence of MRSA is increasing in Canada.
- Five Characteristics known as the 5C's contribute to the acquisition of staphylococcal infection (and MRSA where present):
 - Crowding
 - Contact
 - Compromised (broken skin)
 - Contaminated (shared) items or surfaces
 - Cleanliness (lack of)
- Optimal hand hygiene practices are critical elements to a multi-modal response to this health threat.

1. Conly J. Antimicrobial resistance in Canada. CMAJ 2002; 167: 885-91.

Information taken from the National Collaborating Center for Infectious Diseases (NCCID) at:
<http://www.nccid.ca/en/antimicrobial-resistant-organisms>

CHICA-Canada offers a number of valuable resources on this subject at: http://www.chica.org/links_aro.html