

ANTIMICROBIAL RESISTANT ORGANISMS: ARO'S ALSO CALLED "SUPERBUGS"

WHAT ARE THEY?

An antimicrobial is a medication used to treat infections caused by organisms (germs) such as bacteria, fungi, parasites or viruses. An example of an antimicrobial is an antibiotic called penicillin.

Many of the germs that cause infections have developed the ability to 'resist' the action of the antimicrobial. This means that the infection will not be easily cured or not be cured at all, which can lead to disability or even death. It also increases the cost of health care, as very expensive medications may have to be used – if any are available at all.

Infections or organisms that have developed resistance to medications include tuberculosis, *staphylococcus aureus*, gonorrhea, E. coli, HIV and many others.

WHY THE CONCERN?

Finding new treatments for infections has not kept pace with new antimicrobial organisms. The World Health Organization states "In much of the developing world without access to good quality medicines, infections continue to be the major killers, and in all countries [including Canada] healthcare-associated infections with resistant microorganisms are a major cause of death."

Hospital-acquired infections are infections that people get while in hospital. This is particularly a concern as hospitalized patients often have weakened immune systems and the infections can be very severe. The cost to health care for treatment of AROs in hospital is in the millions of dollars each year.

More recently antibiotic resistant organisms have developed in Canada for people who have never been hospitalized. These are called community-acquired organisms.

WHAT CAUSES ANTIMICROBIAL RESISTANCE?

The misuse and overuse of antimicrobials are the most important causes. This happens when individuals do not take their medication correctly or completely as prescribed. It can also occur when health care providers prescribe the incorrect medication, the wrong amount of medication or use them for diseases that do not need treatment (such as the common cold).

WHAT CAN BE DONE?

- Handwashing is a good way to help prevent the spread of many infections
- Clean wounds appropriately so a minor wound does not turn into a major infection
- Do not expect an antimicrobial or antibiotic for all infections. Many minor or common infections do not need this type of treatment
- If given an antimicrobial or antibiotic, take it as directed and finish all the medication
- Hospitals, Long-Term Care Homes and other similar facilities are screening patients/residents for certain ARO's such as MRSA and VRE (see specific information on MRSA and VRE)

*For further information contact the Infectious Disease Program at 625-8318
or toll free 1-888-294-6630, ext. 8318*

ARO, ID-11
April 2011