

Antibiotic-Resistant Organisms

- There are many diseases which are becoming more and more difficult to treat due to the organisms being resistant to antibiotic treatment.
- People who are infected with antibiotic resistant organisms (ARO's), will likely have a longer hospital stay and will require more complicated treatment.
- Examples of ARO's include: *Staphylococcus aureus*, *M. tuberculosis* and *Clostridium difficile* to name a few

How Does Resistance Happen?

Antibiotic resistance can happen naturally, however over-use and misuse of antibiotics is the single most important factor leading to antibiotic resistance all over the world. Antibiotics should only be used to manage infections, and *must* be used as indicated, ensuring they are taken to completion.

How Can We Stop Antibiotic Resistance?

Antibiotic resistance is already a major problem, and bacteria will continue to develop resistance. However, there are a few things we can do to slow down or fight antibiotic resistance:

1. Prevent Infections.
 - Stopping infections from happening in the first place reduces the amount of antibiotics that need to be prescribed. There are many ways to prevent infection including: immunization, safe food preparation and handling, **good hand hygiene**, and only using antibiotics as directed and when necessary.
2. Tracking.
 - Keeping data on antibiotic resistant infections will help us identify trends, and examine whether there are particular risk factors that are contributing to the onset of disease. At present, the province of Saskatchewan has a provincial surveillance system for *Clostridium difficile* infections acquired in hospitals, and also monitors active tuberculosis cases. Some hospitals also record *Methicillin resistant Staphylococcus aureus* (MRSA) infections among others.
3. Improving Antibiotic Prescribing/Stewardship.
 - If we can improve the way antibiotics are used, we can have a great impact on slowing down the development and spread of resistant infections.

US Centers for Disease Control. 2015. About Antimicrobial Resistance.

For More Information Check Out:

Northern Antibiotic Resistance Partnership:

<http://www.narp.ca/index.htm>

Do Bugs Need Drugs?: <http://www.dobugsneeddrugs.org/>

US Centers for Disease Control:

<http://www.cdc.gov/drugresistance/about.html>

Health Canada: <http://canada.ca/antibiotics>



It was on a short-cut through the hospital kitchens that Albert was first approached by a member of the Antibiotic Resistance.