

## ANTIBIOTIC RESISTANCE ... A Growing Threat

Two main pathogens (germs) - bacteria and viruses - cause most infections. Since penicillin was made available to the public in the 1940's, antibiotics have been the cornerstone of infectious disease control and treatment. Antibiotics can only cure illnesses caused by bacteria ... they cannot kill viruses.

Each time we take antibiotics, sensitive bacteria are killed, but a few resistant ones are left to grow and multiply, passing their resistance to future generations of the mutated bacteria. These bacteria have learned ways to become immune to the effect of antibiotics, becoming *antibiotic* or *antimicrobial resistant*.

Factors that contribute to antibiotic resistance include:

- Misuse and overuse of antibiotics in humans, animals and agriculture
- Demand for antibiotics when antibiotics are not appropriate
- Failure to finish the entire antibiotic prescription
- Availability of antibiotics without a prescription in some countries

Common viruses cause most sore throats, colds and the flu, as well as coughs (bronchitis), and many middle ear and sinus infections. Recovery from a viral illness only occurs when the infection has run its course. Keep your health care provider informed if the illness gets worse or lasts a long time, so that she can re-evaluate the illness and provide proper treatment.

## NEVER TAKE ANTIBIOTICS FOR A VIRAL INFECTION

## **USE ANTIBIOTICS WISELY:**

- Take medicine as prescribed by your health care provider ALWAYS complete the full course of antibiotics, even if you are feeling better before the medicine is finished. Never save some of the medicine to treat yourself or others later.
- Antibiotics may alter the effectiveness of other medications and can cause side effects or allergic reactions. Tell your health care provider if you are taking any other medication (such as birth control pills), drink alcohol, have any known allergies or are pregnant.
- Antibiotics can kill most of the bacteria in your body that are sensitive to them, including good bacteria. By disrupting your body's natural bacterial balance, they may cause stomach upsets, diarrhea or vaginal infections. Eating yogurt with "live cultures" or taking acidophilus pills can often minimize these side effects.
- If your health care provider says you do not have a bacterial infection, do not demand that he prescribe an antibiotic.



## PROTECT YOURSELF FROM DISEASES:

- Always handle, prepare and store food correctly. Rinse fruits and vegetables thoroughly, avoid raw eggs and undercooked meat and do not consume unpasteurized milk products or juices.
- Get immunized against vaccine-preventable diseases. Keep a record of your shots and get a booster when needed.
- Wash your hands thoroughly with soap and water. While many products are promoted as "anti-bacterial", there is no real evidence that they have a public health benefit. These products should be reserved for healthcare facilities, people coming home from the hospital, and those with compromised immune systems.