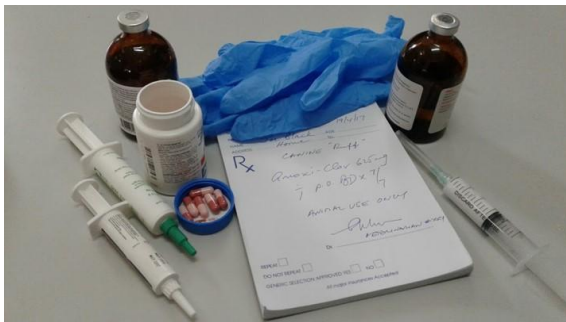


Shots at Antimicrobial Resistance

Dr. Gillian Taylor-Ellis

It is estimated that Antimicrobial Resistance, AMR, currently causes 700,000 deaths every year and this could climb to 10 million after 2050. Something drastic has to happen to take down this silent killer.

Pre-antibiotics, bacterial infections were among the top guns in the human demise. Our discovery of antibiotics is arguably one of the most impacting events in the history of man, benefiting both our human and animal population. But, can there be too much of a good thing or like too many cooks wheeling our own medicinal batons, have we spoilt our broth and given the enemy a one up in the war?



Using too little of the right antibiotics, too much of the wrong ones or using them when not needed is like shooting in the dark. So, what if we were to change our fight? What if, instead of waiting for the foot soldiers to cause unnecessary damage, our forces were already in place to take out the enemy bacteria? We wouldn't be misfiring, but applying intelligence in the war of infection with vaccination.

Vaccines can help limit the spread of antibiotic resistance. Vaccinating humans and animals is a very effective way to stop them from getting infected and thereby preventing the need for antibiotics. Making better use of vaccines we already have and developing new vaccines are important ways to attack antibiotic resistance and cut preventable illness and deaths.

Infection caused by both viruses and bacteria can be prevented with vaccines. The arsenal of vaccines available against bacteria, include those against lockjaw and leptospirosis in many animal species and salmonella in chickens. Additionally antibiotics are used to treat the bacterial infections that result after the body is

weakened by a viral infection. So let's get the viruses before they penetrate with better defenses. When we vaccinate our pets, as we do our children, when they are young and vulnerable, we are the winners. We know it is more difficult and costly to treat antibiotic-resistant infections and recovery is not 'a given'.

We have the winning weapons for this war. Take the shot!

Dr. Gillian Taylor-Ellis is a Senior Veterinary Specialist in the Veterinary Epidemiology, Public Health and Food Safety Unit of the Veterinary Services Division of the Ministry of Industry, Commerce, Agriculture & Fisheries.

