

## Antimicrobial Resistance and Your Pet's Health - Dr. John Josephs, Medical Director, Noah's Ark Veterinary Centre



I lay here writing this article from my bed recovering from bacterial pneumonia undoubtedly secondary to the latest variant of influenza making its rounds in Kingston. The MDs put me on Cefuroxime initially, then Augmentin and Clarithromycin, all pretty potent antibiotics and undoubtedly all necessary. I write this not to elicit sympathy in any way but to reflect on how essential our ability to rely on antibiotics has become.

In Companion Animal Medicine where we see patients who are constantly in contact with their owners, on their patios, couches and beds we are acutely aware that bacteria and fungi are often moving between species usually with no ill effect. But when we see germs emerging that are resistant to many modern antibiotics who is the culprit, our pets or ourselves? The instinctive answer may be to blame the pet because they are rolling around in the grass digging holes in the dirt so surely they must be exposed to more germs, but the truth is actually more complex.

One must first recognize that antibiotic resistance does not develop from exposure to germs but rather from exposure to the antibiotics themselves. There are over 7 billion humans on this planet, a significant percentage of which would have taken an oral antibiotic at least once in their life. As no antibiotic kills 100% of susceptible germs the resistant ones go on living on, and in, these humans. When we recover, we go back to petting and interacting with our pets, inadvertently exposing them to our resistant germs. If their immune systems are not strong they could very well come down with a life threatening illness caught from us!

So the next time you see your Veterinarian with your sick pet and he says, "I think we are going to have to take a culture here;" don't get mad with him for trying to pad your bill. He is simply aware of the growing risk of resistant germs and by doing a laboratory culture, can identify the bacteria involved and the antibiotics to choose to treat it most effectively.