

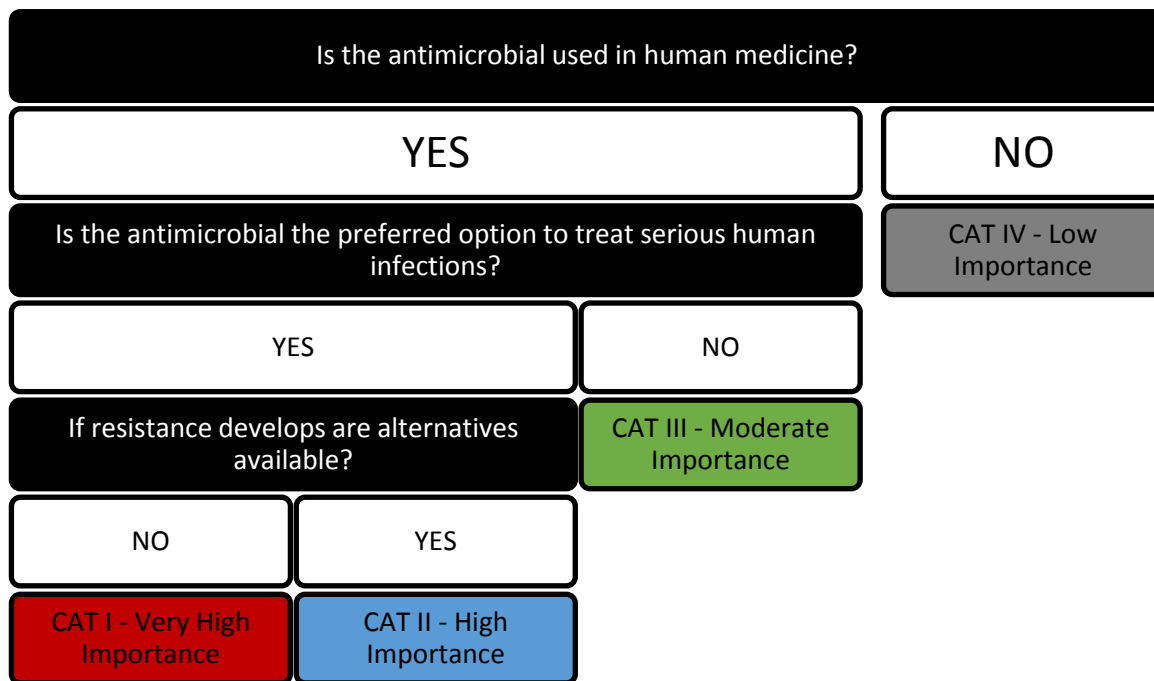
# RESISTANCE TO ALL DRUGS IS NOT EQUAL: THE CLASSIFICATION OF ANTIMICROBIALS ACCORDING TO THEIR IMPORTANCE IN HUMAN HEALTH

Antimicrobials are used in human and veterinary medicine to treat, control and prevent bacterial diseases. Antimicrobial resistance does not respect species, geographical or political borders. Everyone who uses antimicrobials must take responsibility for good antimicrobial stewardship.

Obviously all antimicrobials are important but modern medicine relies on certain drugs more than others. There are real consequences if resistance becomes common to these antimicrobial classes.

Health Canada’s Veterinary Drugs Directorate has classified antimicrobials for their importance in human health. This categorization is used to prioritize risk analysis, product licensing and registration, and surveillance. Within the livestock and poultry industry, we use this categorization to develop programs and policies to minimize risk from on-farm antimicrobial use.

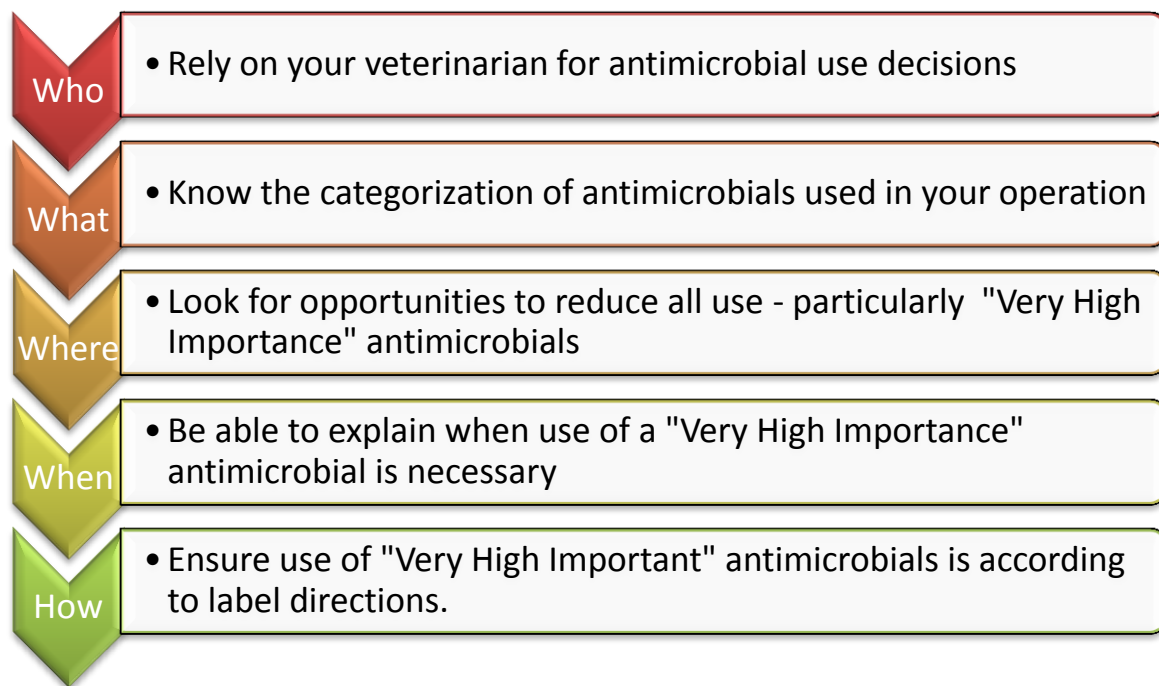
Figure 1 - Flow chart of decision process used by Health Canada to categorize antimicrobials for their importance in human medicine



Veterinarians consider this categorization when making antimicrobial use decisions. There are 13 families listed as Category I – Very High Importance. Only two, the fluoroquinolones and 3<sup>rd</sup> & 4<sup>th</sup> generation cephalosporins, have products licensed for veterinary use. Ask your veterinarian if these products are being prescribed for your operation.

Every producer is responsible to work with their veterinarian to develop a strategy to minimize the use of antimicrobials of very high importance to human medicine. You should be aware that all Category I antimicrobials are available by prescription only and are not to be used in an extra-label manner. This means they are not to be used in a different species, dose, duration or indication than is described on the label.

Figure 2. Things to know when Category I antimicrobials of Very High Importance are used in your operation.



This information has been prepared by Dr. Leigh Rosengren with support from Saskatchewan's Ministry of Agriculture.

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