

## **Transfer of antibiotic resistant bacteria from animals to man**

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Antibiotic resistance develops in zoonotic bacteria in response to antibiotics used in food animals. A close association exists between the amounts of antibiotics used and the levels of resistance observed. The classes of antibiotics routinely used for treatment of human infections are also used for animals either for therapy or for growth promotion. Antibiotic resistance in zoonotic bacteria constitute a public health hazard, primarily through the increased risk of treatment failures. This paper describes the zoonotic bacteria, salmonella, campylobacter, yersinia and entero-haemorrhagic E. coli (EHEC). Infections with these agents do not generally require antibiotic therapy, but in some cases antibiotics are essential to obtain a successful cure. The levels and types of resistance observed in zoonotic bacteria in some countries, especially the increasing levels of fluoroquinolone resistance in salmonella and campylobacter, gives cause for concern. The principles of controlling resistance development involve infection control at herd level and prudent use of antibiotics.

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