



# Antimicrobial Resistance (AMR): Potential Impact on Public Health

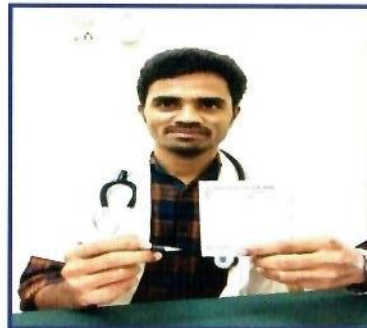
AMR is the ability of microorganisms (like bacteria, viruses and some parasites) to stop an antimicrobials from working against it. As a result, standard treatment becomes ineffective, infections persist and may spread to other animal and humans

**Abuse/misuse of antibiotics (Taking antibiotics without prescription/when they are not needed)**



**Lack of hygiene, cleanliness in the hospitals/dispensaries**  
**Industrial effluents contaminates soil/water/food which spread to humans**

**Not completing the full course of antibiotics**



**Factors responsible for antibiotic resistance**



**Poor personal hygienic practices**

**Over-use of antibiotics in livestock and fish farming for growth promotion and shelf life enhancement**



**Lack of new antibiotics in development pipeline**

# Spread of Antibiotic Resistance



Antibiotics are given to food producing animals to treat infections for improved health and production.

Overuse or misuse of antibiotics leads to development of drug-resistant bacteria.



Drug-resistant bacteria remain in meat/milk/egg and spread to humans through direct/ indirect ways.

Drug-resistant bacteria present in animal feces contaminate water and soil, thereby enter into food crops.



Antibiotics are given to patients either to treat the diseases or to control the infections.

Overuse or abuse (taking antibiotics when not needed/use of inappropriate antibiotics) of antibiotics lead to development of drug-resistant bacteria.



Resistant bacteria spread directly or indirectly to other patients within the hospital.



Drug resistant bacteria in patient pose risk of spreading within the hospital and to the community.

Drug-resistant bacteria remain on food crops which has potential to spread to humans.



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