ANTIBIOTIC RESISTANCE

2022 International Conference Topic

+ TOPIC DESCRIPTOR +

Antibiotics are the most common treatment for bacterial infections in humans, animals, and plants. Antibiotics are added to livestock feed to protect livestock from diseases. This allows for greater growth and production. Antibiotics are also often in the foods humans consume. Antibiotic sprays are commonly used in agriculture, especially for fruit trees. Many plastics today, such as those used in public hygiene stations for babies and children, have antimicrobial additives embedded within the materials. These additives reduce bacterial growth on the plastic's surfaces.

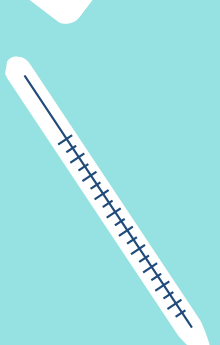
With this widespread use of broad-spectrum antibiotics, they have become far less effective as medical treatments. This use has also contributed to the emergence of antibiotic-resistant bacteria. For example, the treatment of tuberculosis requires an increasingly diverse cocktail of antibiotics as bacteria becomes more resistant to previously effective medications. Scientists are continually developing new therapies in a race to stay ahead of the evolution of new antibiotic-resistant pathogens. However, despite these precautions, multi-resistant bacteria continue to appear.

How might the population potentially suffer from emerging antibiotic-resistant bacteria? How might the overuse of antibiotics be addressed? How might we protect all species being treated by broad-spectrum antibiotics, while still protecting populations as a whole?

+ SUGGESTED READINGS +

Theme 1: Antibiotics in Agriculture

- Lab to Study Fruit Tree Bacteria
- UK risks falling behind on reducing farm antibiotics after EU ban



Theme 2: Antibiotic Resistance Effects on Global Populations

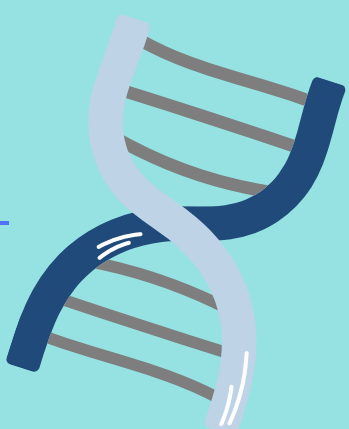
- Antimicrobial resistance is a leading cause of death globally
- World's rivers suffer 'toxic levels' of pharmaceutical pollution, study warns

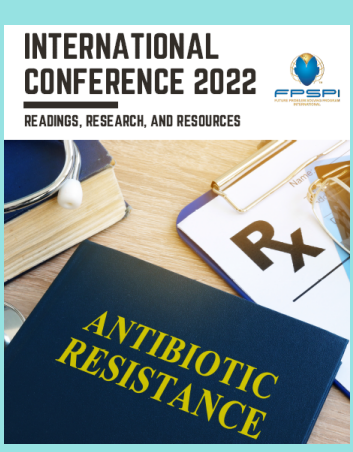
Theme 3: Misuse of Medication

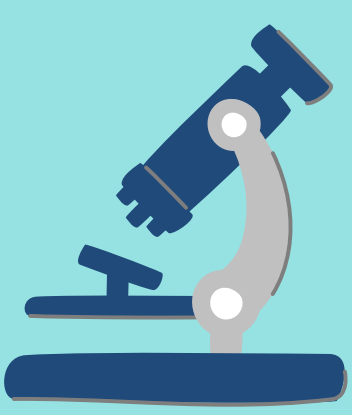
- Hedgehogs are the cutest reminder that we shouldn't overuse antibiotics
- The widespread misuse of antibiotics in humans, animals and the environment must stop

Theme 4: Innovative Treatments & Technologies

- Supercomputers used in arms race with antibiotic resistance
- Discovery illuminates a blueprint to develop new antibiotics for killing bacteria







Learn More -Get the Readings, Research, & Resources for Antibiotic Resistance

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