ABOUT ANTIMICROBIAL RESISTANCE

WHAT IS ANTIMICROBIAL RESISTANCE (AMR)?

Decolonization with Prontoderm®

- Use of antimicrobial agents to inhibit or eradicate microorganisms, typically by topical application.
- Can be used as a prophylaxis measure in patients at risk of developing infections.
- Helps prevent biofilm formation by removing biofilms from the skin.
- Proven barrier effect for up to 24 hours.

Surface Disinfection with Meliseptol®

- Effective in killing a wide variety of microorganisms, including viruses and Gram-negative bacteria.
- Proven efficacy against MRSA, ESBL/ESCR, and VRE.
- Bactericidal efficacy for up to 2.5 hours.

Prevent Infections – Fight AMR

ACTION REQUIRED

Antimicrobial resistance continues to be a major threat to public health. To combat this, several measures are necessary.

1. Decolonization with Prontoderm®
2. Surface Disinfection with Meliseptol®
3. Hand Hygiene with Softa-Man® / Softalind®
4. Wound Cleansing with Prontosan®
5. Antimicrobial barrier effect for up to 24 hours
6. Proven by EN13727
7. Bactericidal efficacy for MRSA, ESBL / ESCR and VRE

PREVENT INFECTIONS – FIGHT AMR

ANTIMICROBIAL RESISTANCE IS A SERIOUS THREAT TO PUBLIC HEALTH IN EUROPE.

FACTS

AMR now

AIDS in 2050

10-20 million

AMR new

1.2 million

AIDS in 2015

1.5 million

AIDS in 2010

1.2 million

AIDS in 2005

0.8 million

AIDS in 1990

0.1 million

Though not currently associated with human disease, resistant E. coli can spread to many other species. Antimicrobial resistance can be transmitted horizontally among species, allowing resistance to spread among many different types of microorganisms. As a result, the potential for resistant microorganisms to cause disease is high. For example, Pseudomonas aeruginosa is a major cause of hospital infections worldwide and is resistant to many antibiotics. Resistance to carbapenem, a last-resort antibiotic, is spreading rapidly due to the misuse of antibiotics.

Antibiotic resistance can be transmitted through a variety of mechanisms, including horizontal gene transfer, the movement of genes between different species of bacteria. Resistance genes can be transferred between bacteria in different ways, including conjugation, transduction, and transformation. Conjugation occurs when a plasmid, a small circle of DNA that can transfer between cells, is transferred from one cell to another. Transduction occurs when a virus injects genetic material from one cell into another. Transformation occurs when a cell takes up DNA from its environment and becomes resistant to antibiotics.

The spread of resistance genes can be limited by the use of appropriate antibiotic therapies, the avoidance of unnecessary antibiotic use, and the implementation of infection control measures. However, the rapid spread of resistance genes makes it difficult to control their spread, and resistance is a global problem that requires international cooperation to address.

By preventing the spread of resistance genes, we can protect the effectiveness of antibiotics and ensure that they remain a viable option for the treatment of infections. This is particularly important in light of the increasing number of drug-resistant bacteria, which pose a significant threat to public health.

References: