



Antimicrobial-Resistant Organisms (ARO) in LTC: Syllabus

Overview:

Antimicrobial-resistant organisms (AROs) are a growing concern in long-term care (LTC) settings, where vulnerable populations are at increased risk of infection and transmission. This module provides an in-depth exploration of what AROs are, how they develop resistance to antibiotics, and why they pose a significant threat to resident safety. Learners will examine the most common AROs found in LTC environments, understand contributing risk factors, and explore evidence-based prevention strategies tailored to different staff roles—including clinical, laundry, environmental, and dietary teams. The module also emphasizes the critical role of antibiotic stewardship programs and collaborative care models in mitigating the spread of AROs. By the end of this module, learners will be better equipped to recognize, prevent, and respond to ARO-related risks within their LTC homes.

Learning Objectives:

By the end of this module, learners will be able to:

1. Define antibiotic-resistant organisms and explain their mechanisms of resistance to antibiotics
2. Identify the common AROs and their risk factors in long-term care settings
3. Describe the ARO prevention strategies

Module Outline

1. Introduction with Knowledge Check
2. Antibiotic-Resistant Organisms
3. Common AROs
4. Mechanisms of Resistance
 - a. Genetic Mutation
 - b. Gene Transfer
 - c. Biofilm Formation
 - d. Efflux Pumps
5. Risk Factors for ARO Infections
6. Frequent Antibiotic Use
7. Comorbidity
8. Invasive Medical Devices
9. Prolonged Hospitalization
10. Close Contact in Shared Spaces
11. Prevention Strategies for Clinical Staff
 - a. Antibiotic Stewardship Programs
 - b. Infection Control Measures
 - c. Environmental Cleaning

- d. Education and Training
- e. Minimizing Invasive Device Use
- 12. Prevention Strategies for Laundry Staff
 - a. Wear Appropriate PPE
 - b. Use Proper Containment
 - c. Transport Linen Safely
 - d. Avoid Cross-Contamination
- 13. Prevention Strategies for Environmental Staff
 - a. Identify Types of Waste
 - b. Personal Protective Equipment (PPE)
 - c. Regular Waste Disposal
 - d. Waste Transportation
 - e. Disinfection
- 14. Prevention Strategies for Dietary Staff
 - a. Wear PPE
 - b. Dietary Modifications
- 15. Why Are AROs Difficult to Treat?
- 16. Targeted Therapy
- 17. Combination Therapy
- 18. Alternative Treatments
- 19. Supportive Care
- 20. Antibiotic Stewardship
- 21. Key Principles of Antibiotic Stewardship
- 22. Strategies for Implementing Antibiotic Stewardship
 - a. Education and Training
 - b. Establishing Guidelines
 - c. Infection Prevention Measures
 - d. Collaboration and Oversight
 - e. Data Collection and Feedback
- 23. Role of Long-Term Care Homes
- 24. Surveillance
- 25. Collaboration
- 26. Resident-Centered Care

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