



Carbapenemase-Producing Enterobacteriaceae (CPE) in LTC: Syllabus

Overview:

Carbapenemase-Producing Enterobacteriaceae (CPE) are a group of highly drug-resistant bacteria that pose a serious threat to residents in long-term care (LTC) settings. This module explores the nature of CPE, including how these organisms develop resistance to powerful antibiotics like carbapenems, and the dangers associated with colonization and infection. Through scenario-based learning, learners will gain insights into how CPE spreads—both directly and indirectly—within healthcare environments. Emphasis is placed on the role of staff across departments in identifying risk factors, managing drainage systems safely, and applying consistent infection prevention and control strategies. Learners will also review practical steps in antibiotic stewardship, environmental cleaning, and appropriate PPE usage to reduce transmission and protect vulnerable populations. This module equips LTC staff with the knowledge and skills needed to mitigate the risks and respond effectively to CPE-related challenges.

Learning Objectives:

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

1. Identify key characteristics of Carbapenemase-Producing Enterobacteriales
2. Describe the difference between colonization and infection in the context of CPE
3. Identify the direct and indirect pathways through which CPE spreads within healthcare environments
4. List the risk factors that contribute to CPE colonization and infection
5. Recall the key infection prevention and control strategies used to reduce the transmission of CPE

Module Outline

1. What Do You Know About CPE?
2. What is CPE
3. Why is CPE Dangerous?
4. Colonization vs. Infection
5. What is Colonization?
6. Key Facts About Colonization
7. Risks of Colonization
8. CPE in Long-Term Care Facilities
9. CPE Infection
10. Types of CPE Infection
11. Why CPE Infections Are Dangerous
12. Diagnosing CPE Infections
13. Scenario-based learning

14. Transmission Modes and Pathways of CPE
15. Direct Contact Transmission
16. Indirect Contact Transmission
17. Drain Management and Its Role in CPE Reduction
18. Proper Disposal of Fluids
19. Regular Drain Treatments
20. Drain Treatment Plans
21. Case Study: CPE Outbreak in Japan
22. Additional Considerations
23. Preventing CPE Transmission
24. Admission to Healthcare Facilities
25. Pre-Emptive Contact Precautions
26. Additional Risk Factors
27. Individual Resident Risk Factors
28. Prevention Strategies for LTC Staff
29. Clinical Staff
30. Antibiotic Stewardship Programs
31. Infection Control Measures
32. Environmental Cleaning
33. Education and Training
34. Minimize Invasive Device Use
35. Prevention Strategies for Laundry Staff
36. Wear Appropriate PPE
37. Use Proper Containment
38. Transport Linen Safely
39. Avoid Cross-Contamination
40. Prevention Strategies for Environmental Staff
41. Identify Types of Waste
42. Personal Protective Equipment (PPE)
43. Regular Waste Disposal
44. Waste Transportation
45. Disinfection
46. Prevention Strategies for Dietary Staff
47. Wear Appropriate PPE
48. Dietary Modifications

End of the document