

HAP/VAP Pathogens, Risk Factors, and Resistance

June 1, 2024 to May 31, 2025

Speaker

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Learning Objectives

At the completion of this activity, the participant will be able to:

1. Define and classify nosocomial pneumonia
2. Review the epidemiology and incidence rates for nosocomial pneumonia
3. Discuss the impact of nosocomial pneumonia on patient outcomes and healthcare costs
4. Identify common pathogens causing nosocomial pneumonia, with a focus on aerobic gram-negative bacilli
5. Review specific pathogens, including *Pseudomonas aeruginosa*, *Enterobacter* species, *Escherichia coli*, *Klebsiella pneumoniae*, *Acinetobacter* species, and *Stenotrophomonas*
6. Discuss antimicrobial resistance patterns and implications for therapy
7. Identify risk factors associated with nosocomial pneumonia, including mechanical ventilation in VAP
8. Review diagnostic approaches and techniques, such as radiographic findings and microbiological sampling

Target Audience

This activity was planned to meet the educational needs of pharmacists and physicians. The educational content is also relevant for other practitioners working in infectious diseases.

Accreditation

This activity is accredited for one year from June 1, 2024 to May 31, 2025. Learners can claim Continuing Education credit via this activity evaluation; MAD-ID will send credits for pharmacy learners to CE Monitor within four weeks thereafter. The evaluation will close June 30, 2025 and the final upload of credits will happen before July 31, 2025. Learners claiming AMA PRA Category 1 Credits™ can expect to receive PDF certificates via email in a similar timeframe. Please reach out to info@mad-id.org with any questions or specific requests.

The types of CE available for this activity include:

Continuing Pharmacy Education:



Making a Difference in Infectious Diseases (MAD-ID) is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education.

MAD-ID designates this home-study, application-based activity for 1.0 contact hour (.1 CEU). The ACPE Universal Activity Number (UAN) is: 0485-0000-24-002-H01-P. This activity is provided at no cost to participants.

Continuing Medical Education:



This activity has been planned and implemented in accordance with the accreditation requirement and policies of the Accreditation Council for Continuing Medical Education (ACCME). Making a Difference in Infectious Diseases (MAD-ID) is accredited by the ACCME to provide continuing medical education for physicians. MAD-ID designates this enduring activity

for a maximum of 1.00 AMA PRA Category 1 Credit™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Disclosure Statement

In accordance with the disclosure policy of MAD-ID and the *Standards for Integrity and Independence in Accredited Continuing Education* adopted by the ACPE and ACCME, all individuals involved in the development and presentation of CE activities have been asked to disclose all financial relationships with ineligible companies.

Such disclosure is not intended to suggest or condone bias in any presentation but is solicited to provide the course director and participants with information that might be of potential importance to their evaluation of a given presentation. The following planners, speakers, and content reviewers have reported financial relationships with an ineligible company:

NAME	COMPANY	RELATIONSHIP	
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	Merck	Research Support and Advisory Committee/Board	
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	Kerry LaPlante, PharmD, FCCP, FIDSA, FIDP	Pfizer	Research Support
		Melinta	Research Support and Consulting
AbbVie		Research Support	
Entasis		Research Support	
Shionogi, Inc.		Consulting	
Basilea		Consulting	
Ferring		Consulting	
Course Faculty:			
Marin Kollef, MD	Shionogi, Inc.	Consulting	
	Cellics	Consulting	

All other individuals including course directors, planners, reviewers, faculty, staff, etc., who are in a position to control the content of this educational activity have reported no financial relationships related to the content of this activity. All relevant financial relationships have been mitigated prior to the CE activity.

ACTIVITY COMMERCIAL SUPPORT

This activity is supported by an educational grant from Shionogi, Inc.