

# **Hospital Hygiene and Prevention of Healthcare-Associated Infections**

## **I - Training Program**

| <b>Sessions</b> | <b>Topic</b>                                                                                                       | <b>Elements to Develop</b>                                                                                                                                                                                                                                                                                                                                   |
|-----------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1               | <b>Epidemiology of Healthcare-Associated Infections (HAIs)</b>                                                     | <ul style="list-style-type: none"> <li>• Definition of concepts</li> <li>• Contributing factors</li> <li>• Modes of transmission</li> <li>• Prevalence and incidence of HAIs</li> <li>• Legislative and regulatory aspects</li> <li>• Prevention strategies</li> </ul>                                                                                       |
| 2               | <b>Organization and Operation of Structures for the Prevention and Control of Healthcare-Associated Infections</b> | <ul style="list-style-type: none"> <li>• Structures for HAI prevention and control</li> <li>• CLIN (Hospital Infection Control Committee): composition and mission</li> <li>• Composition and role of the operational hygiene team</li> <li>• Role of correspondents in HAI control</li> <li>• Operation of HAI prevention and control structures</li> </ul> |
| 3               | <b>Standard Precautions</b>                                                                                        | <ul style="list-style-type: none"> <li>• Hand hygiene</li> <li>• Use of gloves</li> <li>• Personal protective equipment</li> <li>• Management of contaminated equipment and surfaces</li> <li>• Procedure in the event of accidental exposure to blood (AES)</li> </ul>                                                                                      |
| 4               | <b>Hand Hygiene</b>                                                                                                | <ul style="list-style-type: none"> <li>• Skin flora</li> <li>• Indications for hand hygiene</li> <li>• Factors promoting compliance with hand hygiene</li> <li>• Types of handwashing</li> <li>• Alcohol-based hand rubbing</li> <li>• Protocol for simple handwashing and alcohol-based hand rubbing</li> </ul>                                             |
| 5               | <b>Endoscope Reprocessing</b>                                                                                      | <ul style="list-style-type: none"> <li>• Infection risk in endoscopy</li> <li>• Good practices for endoscope maintenance</li> <li>• Level of disinfection</li> <li>• Endoscopy equipment disinfection procedures: manual / automatic</li> <li>• Endoscope storage conditions</li> <li>• Environmental management</li> </ul>                                  |

| Sessions | Topic                                                               | Elements to Develop                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| 6        | <b>Sterilization of Medical Devices</b>                             | <ul style="list-style-type: none"> <li>• Organization of sterilization activities</li> <li>• Pre-sterilization steps</li> <li>• Sterilization process</li> <li>• Quality control</li> <li>• Validation and storage</li> <li>• Traceability</li> </ul>                                                                                                                                                                                                                                             |
| 7        | <b>Cleaning and Disinfection of Premises (Surface Bio-cleaning)</b> | <ul style="list-style-type: none"> <li>• Definitions and objectives of bio-cleaning</li> <li>• Survival of microorganisms</li> <li>• Sources of contamination</li> <li>• Personnel involved in surface bio-cleaning</li> <li>• Definitions</li> <li>• Products used</li> <li>• Examples of cleaning equipment</li> <li>• Classification of areas according to infection risk</li> <li>• General principles</li> <li>• Protocol: daily bio-cleaning of a patient room</li> </ul>                   |
| 8        | <b>Operating Room Bio-cleaning</b>                                  | <ul style="list-style-type: none"> <li>• Definition of concepts</li> <li>• Issues related to surface bio-contamination in the operating room</li> <li>• Stakeholders (role of healthcare staff, etc.)</li> <li>• General principles</li> <li>• Operating room bio-cleaning protocol: at room opening; between two procedures; at the end of the operating schedule; weekly; after construction or renovation work</li> <li>• Traceability</li> <li>• Monitoring and evaluation methods</li> </ul> |
| 9        | <b>Airborne Surface Disinfection (DSVA)</b>                         | <ul style="list-style-type: none"> <li>• Definition</li> <li>• Principle</li> <li>• Areas of application</li> <li>• Frequency and methods</li> <li>• Quality requirements for a diffuser (VA)</li> <li>• Quality requirements for a disinfectant (VA)</li> <li>• Protocol</li> <li>• Microbiological monitoring of surfaces</li> </ul>                                                                                                                                                            |
| 10       | <b>Management of Medical and Pharmaceutical Waste (DMP)</b>         | <ul style="list-style-type: none"> <li>• Definition of concepts</li> <li>• Risks associated with DMP</li> <li>• Regulations</li> <li>• Classification of DMP: infectious-risk medical waste; pharmaceutical, cytotoxic and chemical waste; human organs and tissues easily identifiable by a non-specialist; waste comparable to household waste</li> <li>• DMP management process</li> </ul>                                                                                                     |

| Sessions | Topic                                                                             | Elements to Develop                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| 11       | <b>Hospital Catering:<br/>Food Health Risks</b>                                   | <ul style="list-style-type: none"> <li>• Introduction</li> <li>• What is the purpose of hospital catering?</li> <li>• Food-related risks</li> <li>• Factors contributing to foodborne infections and poisoning</li> <li>• Food poisoning and its symptoms</li> <li>• People most at risk of illness</li> <li>• Costs caused by foodborne diseases</li> <li>• The five keys to safer food (introduction)</li> </ul>                     |
| 12       | <b>Hospital Catering:<br/>Prevention of Food<br/>Health Risks (5M<br/>Method)</b> | <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Environment</li> <li>• Personnel</li> <li>• Materials / raw materials</li> <li>• Equipment</li> <li>• Method</li> <li>• Control</li> <li>• Photos and commentary</li> <li>• Occupational Health and Safety Flash</li> </ul>                                                                                                                                           |
| 13       | <b>Hospital Linen<br/>Management</b>                                              | <ul style="list-style-type: none"> <li>• Definition of concepts</li> <li>• Risks associated with hospital linen</li> <li>• Classification</li> <li>• Process for soiled and clean linen</li> </ul>                                                                                                                                                                                                                                     |
| 14       | <b>Fire Safety</b>                                                                | <ul style="list-style-type: none"> <li>• Fire theory</li> <li>• Causes and consequences</li> <li>• Modes of heat propagation</li> <li>• Fire classes</li> <li>• Extinguishing agents</li> <li>• Principles of fire extinguishing</li> <li>• Firefighting equipment</li> </ul>                                                                                                                                                          |
| 15       | <b>Training According to<br/>Needs in Various Care<br/>Areas</b>                  | <ul style="list-style-type: none"> <li>• Management of care units</li> <li>• Nursing care in intensive care</li> <li>• Proper use of antiseptics and disinfectants</li> <li>• Bladder catheterization and infection prevention</li> <li>• Peripheral venous catheterization</li> <li>• Blood sampling</li> <li>• Preoperative skin preparation</li> <li>• Tracheobronchial suction</li> <li>• Surgical wound dressing, etc.</li> </ul> |

• Target audience: Training for healthcare staff (doctors and nurses) and other categories depending on the selected topic (quality officers, governors, kitchen staff, housekeepers, etc.).

## II - Other Services

| Area                                  | Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <b>Audit and Evaluation</b>           | <ul style="list-style-type: none"> <li>• Conduct audits of all components of the hospital environment using the 5M method (sterilization, catering, surface bio-cleaning, DMP management, linen management, cleaning and disinfection of medical devices, etc.)</li> <li>• Process and analyze data</li> <li>• Prepare a report: feedback of results to Management</li> <li>• Propose recommendations on the measures required to address identified problems</li> </ul> |
| <b>Procedures and Protocols</b>       | <ul style="list-style-type: none"> <li>• Develop protocols and posters on good hospital hygiene practices, etc.</li> </ul>                                                                                                                                                                                                                                                                                                                                               |
| <b>Environmental Sampling</b>         | <ul style="list-style-type: none"> <li>• Collect samples from surfaces, food, linen, air, water, etc. for microbiological, physicochemical and toxicological analyses</li> </ul>                                                                                                                                                                                                                                                                                         |
| <b>CPS</b>                            | <ul style="list-style-type: none"> <li>• Review and develop CPS (special specifications) for hospital catering, surface cleaning and disinfection, management of medical and pharmaceutical waste, vector control (3D), linen management, etc.</li> </ul>                                                                                                                                                                                                                |
| <b>Epidemiological Investigations</b> | <ul style="list-style-type: none"> <li>• Participate in epidemiological investigations (healthcare-associated infections, TIAC, etc.)</li> </ul>                                                                                                                                                                                                                                                                                                                         |
| <b>Scientific Events</b>              | <ul style="list-style-type: none"> <li>• Participate in organizing seminars and scientific days in the field of hospital hygiene</li> </ul>                                                                                                                                                                                                                                                                                                                              |
| <b>Expert Opinion</b>                 | <ul style="list-style-type: none"> <li>• Review plans for development or redevelopment projects to ensure safety and good hygiene practices</li> </ul>                                                                                                                                                                                                                                                                                                                   |
| <b>Pest Control</b>                   | <ul style="list-style-type: none"> <li>• Insect control</li> <li>• Rodent control</li> <li>• Disinfection</li> <li>• Reptile control</li> </ul>                                                                                                                                                                                                                                                                                                                          |
| <b>Sale of Hygiene Products</b>       | <ul style="list-style-type: none"> <li>• Range for hospitals and clinics</li> <li>• Range for laboratories and medical practices</li> <li>• Range for hotels and kitchens</li> <li>• Range for laundries</li> </ul>                                                                                                                                                                                                                                                      |