



WORLD HEALTH ORGANIZATION

# Infection control

## AIDE-MEMOIRE

### *For infection prevention and control in a health care facility*

Health care-associated infections lead to death, disability and excess medical costs. Introduction of new technologies, in the absence of infrastructure to use them safely, may lead to adverse events.

Infection prevention and control maximize patient outcomes and are part of the government's responsibility to provide effective, efficient and quality health services. They must be achieved through collaboration with the public and private sectors. Health care facilities must execute infection prevention and control policies supported by institutional management. An overall approach to an infection prevention and control policy at the health care facility level is based upon:

- Management;
- Information, Education and Communication (IEC);
- Continuous availability of essential equipment and supplies;
- Surveillance.

Examples of core infection prevention and control interventions are listed overleaf. In addition, specific activities include:

- Health care worker protection;
- Isolation protocols for specific infectious diseases (e.g., tuberculosis, SARS) and high-risk settings (e.g., dialysis);
- Rational use of anti-microbials;
- Safe and appropriate use of injections and infusions;
- Safe and appropriate use of blood and blood products;
- Hospital sanitation.

### Words of advice

- **Conduct an initial assessment**
- **Establish an infection prevention and control committee coordinated by the infection prevention and control officer**
- **Formulate an Action Plan, with costing, budgeting and financing**
- **Develop an IEC strategy for health care workers and strengthen supervision**
- **Ensure the continuous availability of supplies and equipment for patient care management**
- **Surveillance**
- **Confirm value through monitoring, providing data and measuring the impact of interventions**



### Checklist

#### Management

- Infection prevention and control policy, with committee and officer
- Initial infection control assessment
- Assignment of responsibilities
- Choice of appropriate technologies
- Costing, budgeting and financing
- Quality standards
- Monitoring & supervision
- Performance assessment

#### Information, Education and Communication (IEC)

- Adoption of best practices standards
- Standard precautions
- Pre-service training
- In-service training

#### Equipment and supply

- Establishment of a list of essential infection control equipment and supplies
- Forecasting of needs
- Costing, budgeting and financing
- Procurement
- Inventory control and stock management
- Maintenance

#### Surveillance

- Surveillance
- Feedback
- Outbreak investigation
- Evaluation using indicators of:
  - Structure
  - Process (practices)
  - Outcomes (incidence of infections)



## Core infection prevention and control interventions for health care facilities at a glance

Specific interventions	Target groups	Equipment and supply needs *	Critical process indicators for monitoring
<b>Hand hygiene</b>	<ul style="list-style-type: none"> <li>▪ All health care workers †</li> <li>▪ Visitors</li> <li>▪ Patients</li> </ul>	<ul style="list-style-type: none"> <li>▪ Clean running water</li> <li>▪ Soap (mounted preferable)</li> <li>▪ Sinks or basins</li> <li>▪ Towels</li> <li>▪ Alcohol-based solutions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Proportion of staff observed performing hand hygiene before attending patients</li> </ul>
<b>Personal protective equipment</b>	<ul style="list-style-type: none"> <li>▪ All health care workers †</li> </ul>	<ul style="list-style-type: none"> <li>▪ Gloves</li> <li>▪ Gowns</li> </ul>	<ul style="list-style-type: none"> <li>▪ Proportion of staff observed wearing gloves when exposure to blood or body fluids is anticipated</li> </ul>
<b>Isolation precautions</b>	<ul style="list-style-type: none"> <li>▪ Nurses</li> <li>▪ Physicians</li> <li>▪ Nursing aids</li> <li>▪ Other</li> </ul>	<ul style="list-style-type: none"> <li>▪ Gloves</li> <li>▪ Gowns</li> <li>▪ Masks</li> <li>▪ Eye protection</li> </ul>	<ul style="list-style-type: none"> <li>▪ Average time between admission and isolation for tuberculosis patients</li> </ul>
<b>Aseptic technique</b>	<ul style="list-style-type: none"> <li>▪ Nurses</li> <li>▪ Physicians</li> <li>▪ Laboratory technicians</li> <li>▪ Dental surgeons</li> </ul>	<ul style="list-style-type: none"> <li>▪ Antiseptics</li> <li>▪ Sterile gloves</li> <li>▪ Sterile devices and instruments</li> <li>▪ Sterile barrier devices</li> </ul>	<ul style="list-style-type: none"> <li>▪ Proportion of intravenous lines inserted using aseptic technique</li> </ul>
<b>Cleaning and disinfection</b>	<ul style="list-style-type: none"> <li>▪ Nurses</li> <li>▪ Nursing aids</li> <li>▪ Housekeeping staff</li> <li>▪ Laboratory staff</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cleaning fluids</li> <li>▪ Cleaning equipment</li> <li>▪ Disinfectant</li> </ul>	<ul style="list-style-type: none"> <li>▪ Proportion of rooms appropriately disinfected after patients' discharge</li> </ul>
<b>Sterilization</b>	<ul style="list-style-type: none"> <li>▪ Sterilization staff</li> <li>▪ Nurses</li> <li>▪ Laboratory technicians</li> <li>▪ Dental surgeons</li> </ul>	<ul style="list-style-type: none"> <li>▪ Autoclaves and steam sterilizers</li> <li>▪ Test strips</li> <li>▪ Chemicals</li> </ul>	<ul style="list-style-type: none"> <li>▪ Proportion of sterilized devices whose sterility is documented with test strips</li> </ul>
<b>Waste management</b>	<ul style="list-style-type: none"> <li>▪ Health care workers</li> <li>▪ Waste handlers</li> <li>▪ Logisticians</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sharps boxes and other collection containers</li> <li>▪ Storage space and container for interim storage</li> <li>▪ Final disposal options</li> <li>▪ Personal protection equipment for waste handlers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Presence of health care waste in the surroundings of the health care facility</li> </ul>
<b>Antibiotic use protocol</b>	<ul style="list-style-type: none"> <li>▪ Physicians</li> </ul>	<ul style="list-style-type: none"> <li>▪ Essential list of antibiotics</li> </ul>	<ul style="list-style-type: none"> <li>▪ Proportion of prescriptions including an antibiotic</li> </ul>
<b>Immunization and exposure management</b>	<ul style="list-style-type: none"> <li>▪ All health care workers †</li> </ul>	<ul style="list-style-type: none"> <li>▪ Hepatitis B vaccine and other appropriate vaccines</li> </ul>	<ul style="list-style-type: none"> <li>▪ Three-dose hepatitis B vaccine coverage among nurses, physicians and laboratory technicians</li> </ul>

\* Key indicator: Proportion of essential supplies stocked out.

† Include nursing staff, physicians, dental staff, laboratory staff, housekeeping staff, waste management staff and morgue staff.