

## 5. ENHANCE INFECTION PREVENTION AND CONTROL

Measures to ensure good hygiene are the basis for preventing the spread of infections and for bringing disease outbreaks under control. The need for antimicrobials is reduced by good infection control practices.

### WHY ARE PREVENTION AND CONTROL OF INFECTION ESSENTIAL FOR COMBATING ANTIMICROBIAL RESISTANCE?

- > Poor infection control in any setting can greatly increase the spread of drug-resistant infections, especially during outbreaks of disease.
- > Effective infection prevention and control (IPC) practices are particularly important for reducing the risk of infection associated with health care that entails the use of antimicrobials.
- > When alternative antimicrobial treatment options are not available, IPC measures are critical for containing the spread of antimicrobial resistance (AMR).
- > Infections caused by resistant microorganisms often fail to respond to standard treatments, resulting in prolonged illness and hospitalization, and increased costs.

### CHALLENGES TO OVERCOME

- > **Hospital infections:** hospitalized patients constitute one of the main reservoirs of antimicrobial-resistant microorganisms. Due to their compromised health status and need for medical interventions, these patients are at high risk of acquiring resistant infections that result from frequent use of antimicrobials.
- > **Infection of health-care staff:** health-care workers may also be at increased risk of acquiring resistant infections that lead to further spread of AMR.
- > **Infections beyond health care facilities:** transmission of drug-resistant infections can occur in other health-care facilities and congregate settings.<sup>1</sup> Patients who are carriers of

resistant microorganisms act as a source of infection for others within congregate and community settings.

- > **Lack of responsibility and accountability:** there is often no clearly defined responsibility for leading IPC efforts within ministries of health or other governmental organizations at the national and regional levels. Leadership is needed to guide actions on containment of AMR, implementing Standard Precautions,<sup>2</sup> and rational use of medicines across the spectrum of health-care facilities and in congregate and community settings.
- > **Deficient IPC support in congregate settings:** regulations and reporting systems to support IPC are frequently lacking in congregate settings that are not directly under the authority of the ministry of health.

### CORE ACTIONS

WHO has defined core elements for IPC programmes involved in health care, some of which may also be applicable to congregate and community settings. Some governments have moved actively to establish IPC support structures within and beyond health facilities.

<sup>1</sup> For the purposes of this document, congregate settings refer to a mix of settings that range from correctional facilities and military barracks, to homeless shelters, refugee camps, dormitories and long-term facilities.

<sup>2</sup> *Standard precautions in health care: aide-memoire*. Geneva, World Health Organization, 2007 (also available at <http://www.who.int/csr/resources/publications/standardprecautions/en/index.html>; accessed January 2011).

**A. ENSURE AVAILABILITY OF IPC PROGRAMMES ACROSS THE SPECTRUM OF HEALTH CARE, WITH CORE ELEMENTS INCLUDING:**

- > A formal organizational structure to facilitate proper development and management of IPC policies and strategies;
- > Infection control strategies and guidelines, including strategies and guidelines for AMR;
- > Training of health-care providers in the principles and practices of IPC;
- > Appropriate environment (including the facilities and environmental designs) for application of IPC principles and practices;
- > Laboratory and diagnostic support services to inform antimicrobial prescribing, and accurate and timely detection of resistant microorganisms;
- > Surveillance systems to enable rapid detection and containment of emerging drug-resistant microorganisms;
- > Monitoring and evaluation framework to enable timely adaptation of IPC strategies;
- > Links with public health, other services and societal bodies to facilitate communication.

**B. FOSTER BASIC IPC STANDARDS IN CONGREGATE SETTINGS**

- 1) Assess the facilities for risks of infection transmission and design IPC strategies accordingly.

- 2) Ensure an appropriate environment to permit the application of good hygiene practices, adequate ventilation and engineering controls, hand-washing facilities and avoidance of overcrowding.
- 3) Ensure timely identification of infected individuals; establish proper and timely case management.
- 4) Include congregate settings in national, provincial or state surveillance systems.
- 5) Educate care providers and residents of congregate settings.
- 6) Ensure complete vaccination coverage in congregate settings.

**C. PROMOTE STANDARD IPC MEASURES AND PROVIDE EDUCATION ON IPC IN THE COMMUNITY SETTING**

- 1) Provide public education on good hygiene practices to ensure that all understand the importance of hand and respiratory hygiene.
- 2) Collaborate with public health personnel, civil society and community organizations regarding education on good hygiene practices.
- 3) Foster appropriate IPC principles and practices in the community setting.
- 4) Strengthen vaccination programmes to reduce the burden of infectious diseases.

***Selected IPC practices for prevention of emergence and spread of antimicrobial-resistant microorganisms***

- Hand hygiene
- Patient placement
- Barrier precautions
- Aseptic practices
- Appropriate antimicrobial usage
- Sterilization and disinfection
- Environmental hygiene and waste management
- Facility environmental design for appropriate IPC practices

For more information, go to: <http://www.who.int/world-health-day/2011>

© World Health Organization 2011. All rights reserved.

