



## Healthcare-Associated Infections Control

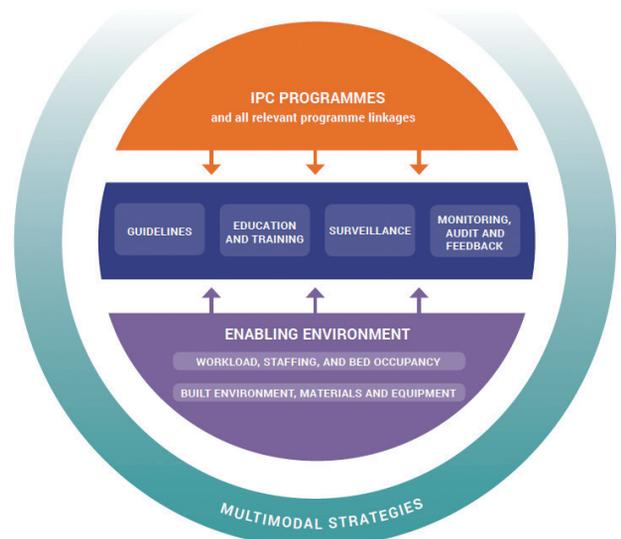
### Summary

- Healthcare-Associated Infections (HAI) are a problem in not only high-income but also low- and middle-income countries, where 1 in 10 hospitalized patients has a risk of HAI.
- HAI control should be comprehensively incorporated into strengthening of the whole management capacity. JICA has provided support to disseminate the concept, to create a framework for HAI control, and to implement practical measures through training in Japan and technical cooperation projects.
- JICA will consider further support (e.g. appropriate antibiotic use, surveillance of HAI, etc.) in addition to basic support to formulate policies and plans on HAI control and its steady implementation.

### Overview

HAI means exposure to pathogens such as bacteria and viruses, and infection to them in hospitals (including those through medical equipment and domestic medical care using advanced medical technology), and HAI control is measures to prevent them. According to WHO<sup>1</sup>, it is reported that the frequency of infection in ICU in low- and middle-income countries is two to three times higher than ICU in high-income countries and it is considered a serious problem. Because it relates to many other issues (e.g. Pathogens causing HAI often have Antimicrobial Resistance (AMR), insufficient biosafety system leads to HAI, HAI harms patient safety, etc.), comprehensive efforts are required. The measures are also indicated in this report, including strengthening the domestic surveillance system, strengthening laboratory functions, introducing standard precautions, and raising awareness among medical professionals, etc. In 2009, WHO published a guideline (Core components for infection prevention and control programmes) on Infection Prevention and Control (IPC). In this guideline, an IPC program to be satisfied by medical facilities is stipulated (see the conceptual diagram below). In this program, in addition to the HAI control surveillance system, AMR and medical waste are also covered, and the establishment of a comprehensive IPC team is required. In Japan, the revision of the medical law in 2007 made it obligatory for all medical institutions to ensure a system such as documenting guidelines for HAI control under the responsibility of the administrator. In addition, domestic surveillance has been strengthened. Recently, infectious diseases, such as the Ebola virus, have been observed spreading within medical facilities and infecting health care workers, which itself is becoming an important field in the measures against the health crisis as well.

AMR is one of the important issues in the Global Health Security Agenda (GHSA). As various AMR pathogens, which are resistance to conventional antibiotics, became known as causes of HAI, reports on drug sensitivity of causative pathogens are required in the HAI surveillance in Japan as well. Recently, besides an expansion of problems at medical institutions, AMR infections in communities outside the medical institution with similar pathogens are increasing. Major countermeasures include strengthening extensive IPC inside and outside the hospital, strengthening HAI surveillance, and improving laboratory functions. These measures are common with those for HAI.



Conceptual diagram for core components for infection prevention and control programmes<sup>2</sup>

1: Report on the Burden of Endemic Health Care-Associated Infection Worldwide: A systematic review of the literature, 2011

2: Interim Practical Manual supporting national implementation of the WHO Guidelines on Core Components of Infection Prevention and Control Programmes

# Cooperation Policy

JICA has been supporting dissemination of the concepts of HAI, establishment of the system of HAI control, and implementation of countermeasure practices through training in Japan and technical cooperation projects. In addition to the possibility of spreading to the community, the pathogens of HAI often have the possibility of AMR. Thus, HAI control is important, including the response to AMR. For this reason, JICA will work on AMR measures continuously as a part of various support, such as improving hospital management and services quality, and training health workers. In doing so, JICA considers the following points.

- Many countries have guidelines for HAI control in place, but it is still necessary to strengthen its implementation on-site. In addition to supporting the strengthening of IPC, such as with clean operations, JICA will consider further support for strengthening proper antibiotics use and HAI surveillance.
- In developing countries, health facilities often have problems in basic matters such as proper cleaning and ventilation. In this case, support for the formulation of basic preventive measures, such as a "HAI Control Manual," and its implementation can be extended according to the situation of each country or hospital.

## Cases

### [Program for Specialists of Healthcare-Associated Infection Control and Prevention]

As a Group Training Course, "Program for Specialists of Healthcare-Associated Infection Control and Prevention" is conducted in collaboration with the National Center for Global Health and Medicine (NCGM), for those in the position to oversee and instruct infection control in the Ministry of Health or public hospitals. It aims to strengthen measures of infection control in hospitals in each country. In addition to exercises on 5S-KAIZEN-TQM<sup>3</sup>, medical waste management, tuberculosis control in hospital, hand hygiene of staff, and use of personal protective equipment (PPE) etc., common points, differences, and tricks of HAI control in various health facilities are learned.



Practicing wearing and removing PPE at a hospital

### [Vietnam: The Project for Improvement of Hospital Management Competency] (2016-2021)

In the project aimed to strengthen the capacity to provide patient-centered high-quality medical services, medical safety, infection control and improvement of services in lower referral level hospitals are set as points of focus. Regarding strengthening of the capacity for infection control, the project plans to provide at least 40 staff members in charge of HAI control (Infection Control Practitioner) in the hospital during the project period, and is carrying out trainings for them.

In addition, the project is supporting the proper use of antibiotics in hospitals through revision of antibiotic guidelines and management of the antibiotic proper use committee.



Discussing proper use of antibiotics in General ICU

3: A method to solve various problems on-site continuously, starting with efforts to change the workplace environment in a short period such as with "Sort" and "Set." It was developed in the Japanese industry, but has also been introduced in hospitals to improve the quality, safety and productivity of health services.