

# Infection prevention and control explained

The **World Health Organization** identifies infection prevention and control (IPC) as a critical component in combating emerging and ongoing health-related threats, including antimicrobial resistance (AMR) and sepsis.

IPC is essential for the provision of quality and safe health care, and it is central to health emergency preparedness and response. Effective use of IPC measures continues to save lives.

## What is infection prevention and control?

IPC is an evidence-based clinical and public health specialty. IPC measures prevent patients, health workers and visitors to health facilities from being harmed by avoidable infections, including epidemic- and pandemic-prone infections, and AMR. Defects in IPC implementation can lead to death.

Effective IPC requires programmatic, institutional, financial and knowledge support. Constant action is also needed at all levels of the health system, from policy-makers to facility managers, health workers and other relevant stakeholders. All those who access health services, and their family members, must observe IPC measures too.



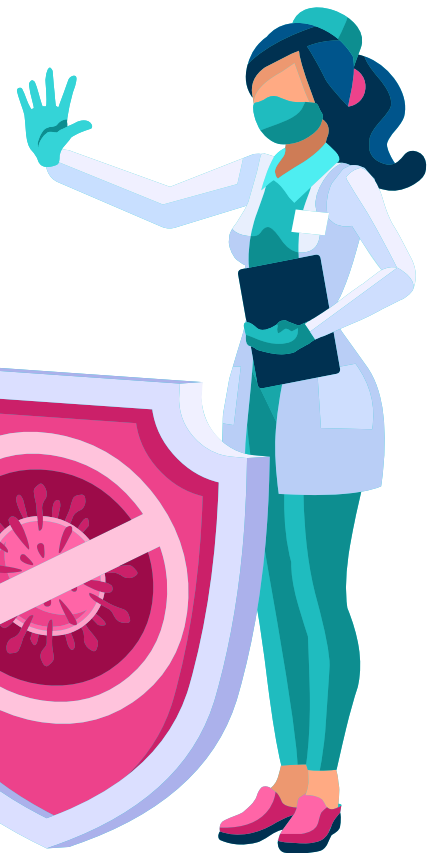
## Why is IPC important?

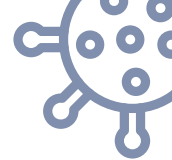
Without effective IPC, it is impossible to deliver quality health care.

- IPC is crucial to maintain the health and safety of patients, health workers and the wider community.
- Investing in IPC is one of the most effective and cost-saving interventions available.

It has been found that hand hygiene and environmental hygiene in health facilities are capable of more than halving the risk of dying from infections with AMR pathogens.

These measures can also reduce the associated long-term complications and health burden of AMR by at least 40%.





## What are health care-associated infections?

### How do they affect health care delivery?

- Health care-associated infections (HAIs) are infections acquired during health care delivery. HAIs represent one of the most frequent adverse events during health care delivery that can harm patients, health workers and visitors to health facilities.
- These infections may be transmitted in many ways depending on the type of organism. Some infections may be transmitted by direct or indirect contact, others by the droplet or airborne routes.
- Health and care workers' hands can play a critical role in the transmission of HAIs. Infections may be spread from an infected patient or a contaminated inanimate object if hand hygiene is not performed before touching another patient.
- The consequences of HAIs are diverse and can be very serious. An infection can lead to a prolonged hospital stay, long-term complications, disability or even death. The patient's suffering may also result in social and psychological repercussions, for the individual, family and community. For the health system, the burden of HAI translates into added pressure and costs.
- In high-income countries, an estimated 7 in every 100 patients in acute care hospitals will acquire at least one HAI during their hospital stay; this rises to 15 in every 100 patients in acute care hospitals in low- and middle-income countries (1).



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1. Report on the burden of endemic health care-associated infection worldwide. Geneva: World Health Organization; 2011 (<https://apps.who.int/iris/handle/10665/80135>).

## What is the role of hand hygiene in IPC?

- Hand hygiene is a way to reduce the number of microorganisms on the skin of one's hands. It can be performed either by handwashing with soap and water or using an alcohol-based hand sanitizer.
- Hand hygiene is one of the simplest and most practical ways to prevent the spread of infections. In turn, it supports more effective health care, leading to savings on costs associated with prolonged hospital stays and treatment expenses for infections.
- Hand hygiene can save millions of lives a year when performed at the right times in health care settings. It is thus a minimum requirement for IPC in all health facilities.



### **In health facilities, what measures are being taken to improve IPC and prevent HAIs?**

Health facilities implement a range of measures to improve IPC, including leadership support; adequate resources; training and education; antimicrobial stewardship programmes to optimize antibiotic use; and robust surveillance systems to monitor and prevent HAIs.

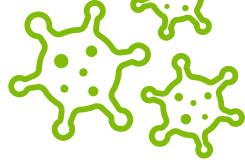
## Why is the Eastern Mediterranean Region more vulnerable to HAIs, including epidemic- and pandemic-prone infections, and AMR?

Conflicts, humanitarian crises and vulnerability to natural disasters put the Region at greater risk of the emergence and rapid transmission of disease outbreaks and pandemics owing to various demographic, environmental and socioeconomic factors. Such outbreaks include Middle East respiratory syndrome (MERS), avian influenza A (H5N1), cholera and dengue.

The Region is also more vulnerable to the development and spread of infections because of:

- fragmented and/or destroyed health infrastructure;
- inadequate legal frameworks and regulations to enforce IPC measures;
- lack of national surveillance systems to track HAIs and AMR;
- inadequate supplies and infrastructure, including water, sanitation and hygiene (WASH) services;
- limited local data and evidence on the extent of the problem; and
- lack of awareness and understanding of the problem at all levels, from the general public to policy-makers.

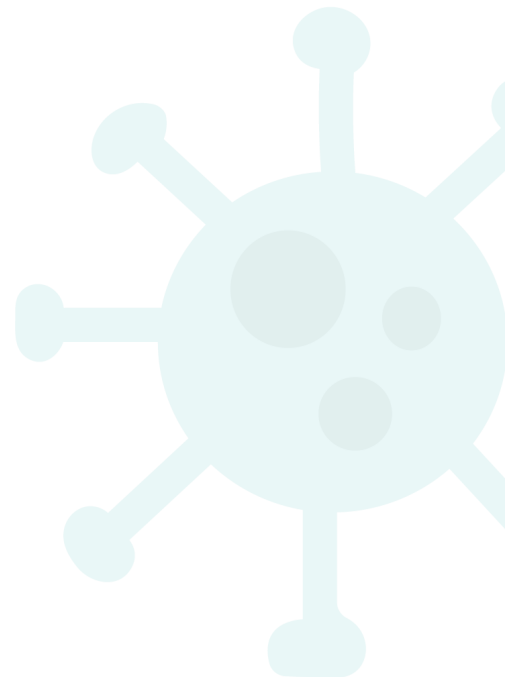




## What is the situation of IPC in the Eastern Mediterranean Region?

IPC is an area in which the Region made substantial gains during the COVID-19 emergency.

- Prior to the COVID-19 pandemic, only 50% (11 out of 22) of the Region's countries and territories had established an IPC unit or programme, and just 45% (10 out of 22) had developed national IPC guidelines. As of 2023, 18 Member States have a functioning IPC programme; 19 countries have IPC guidelines; and 13 countries have adopted multimodel intervention strategies to improve implementation of IPC at health facilities.
- Prioritizing and sustaining these substantial gains across most of the Region will enhance IPC implementation and preparedness for future responses. This will ultimately support health system resilience.



## How can the media help combat HAIs and promote IPC?



The media can appeal to people's values and help change behaviours, including by providing guidance on what actions can and should be taken.

Regular reporting on the importance of IPC and of WASH services to combat HAIs, including epidemic- and pandemic-prone infections, and AMR will help raise awareness of the issue.

It is also useful to report on efforts to strengthen readiness to respond to infectious disease outbreaks, disasters and conflicts. Emergency settings are often characterized by overcrowding, inadequate WASH services, a large number of injured individuals, and limited resources to treat infections. It is thus critical to implement effective IPC measures to prevent the spread of infections in such contexts.



## What lessons have we learned from previous outbreaks or pandemics that we can apply to IPC today?

Past outbreaks and pandemics have taught us the value of early detection, a swift response and international collaboration in controlling the spread of infectious diseases. We've learned that transparency, clear communication and public trust are essential if we are to implement public health measures effectively.

Further, previous experiences have highlighted the importance of strong health systems, vaccine and treatment research and development, and preparedness for future outbreaks. These lessons, which emphasize the importance of proactive measures, data-driven decision-making and cross-sector collaboration, inform our current approach to IPC.

