

Fact Sheet for a Strategy on Infection Protection¹

24. February 2026

Long Version

Challenges | Healthcare associated infections

- The prevalence of healthcare associated infections (HAI) remains at an unacceptably high level.
- More than 700,000 patients are affected by healthcare associated infections each year.
- Up to 20,000 people die annually in Germany because of healthcare associated infections.
- The risk of antibiotic resistance increases through inappropriate or poorly considered use of antibiotics in cases of healthcare associated infection. As a result, the prevalence of antibiotic use remains at a constant level.
- A single infection prolongs the hospital stay by an average of 5 days and causes additional healthcare costs of 5,000–20,000 euros.
- Long-term consequences after sepsis are common and result in additional substantial costs for the healthcare system. These include impairments of physical, cognitive, or psychological functions (Post-Intensive Care Syndrome, PICS), diffuse organic brain dysfunction (delirium), or cognitive dysfunctions.
- Beyond immediate healthcare costs, effects on workforce participation must be considered.

Solution | Strategy on infection prevention

- Introduction of secured Infection Prevention and Control (IPC) combined with the optimization of antibiotic use through Antibiotic Stewardship in all medical facilities.
- Ensuring the structural and personnel prerequisites for preventive infection medicine by combining IPC and Antibiotic Stewardship as minimum requirements for the quality of hospital care and prescribing authorization, including in the context of the political aim of increasing outpatient treatment.
- Continuous review and adjustment of professional staff training through compliance surveillance to ensure quality of care.
- Clear and sustainable anchoring of fixed indicators of structural and process quality in both inpatient and outpatient care.
- Review of existing digital tools and, where appropriate, consolidation of already established digital measures for infection surveillance.

Clearly defined structures not only support infection prevention and control but also serve as effective pandemic preparedness. They promote the continuous and consistent implementation of required hygiene measures, the correct use and handling of necessary medical devices, and the execution of evaluations within the healthcare system.

The importance of infection protection has increased further in times of crisis or war. A resilient approach to changing global circumstances is therefore essential.

¹ Translated with the assistance of an AI tool (2026).

Introduction

Healthcare-associated infections (HAIs) pose a major challenge to patient safety and, consequently, to the health economy in Germany. Healthcare-associated, or treatment-associated, infections are infections that occur in medical facilities in connection with medical procedures; this applies to the inpatient and outpatient sectors as well as to long-term care. These include postoperative wound infections, catheter-associated urinary tract infections, central venous catheter-associated bloodstream infections, ventilator-associated pneumonias, and infections caused by multidrug-resistant organisms (MDROs).

In the inpatient setting, an infection extends the average hospital stay by five days and results in additional costs of 5,000–20,000 euros.¹ If a bloodstream infection (sepsis) occurs, it can lead to death or severe long-term consequences.²

Healthcare associated infections caused by antibiotic-resistant pathogens are particularly serious. An estimated 136 million cases of healthcare-acquired, antibiotic-resistant infections occur worldwide each year.³ This is the result of a research article that extracted resistance prevalence data from 474 point-prevalence surveys (PPS) conducted in 99 countries and published between 2010 and 2020. According to estimates from a 2025 study by the Robert Koch Institute (RKI) in collaboration with the Institute for Health Metrics and Evaluation (IHME) at the University of Washington, 45,700 deaths in Germany in 2019 were attributable to antibiotic-resistant pathogens associated with an antibiotic-resistant infection.⁴ For around 9,600 people in this affected group, there is strong evidence to suggest that they would likely have survived had they been infected with the same pathogen without resistance. However, they died directly because of the pathogen's resistance. The WHO points out that approximately 75% of the disease burden (DALYs) attributable to antimicrobial resistance (AMR) in EU/EEA countries is caused by healthcare-associated infections (HAIs).⁵

According to estimates by the German Society for General and Hospital Hygiene (DGKH), more than 700,000 patients in Germany are affected by healthcare-associated infections each year.⁶ The National Reference Center (NRZ) noted in the most recent 2022 point-prevalence survey that HCAI prevalence in Germany remains at a stable level.⁷

Infection prevention and the monitoring of compliance with corresponding measures are among the essential pillars of medical facilities and, in everyday practice, can even be life-saving. Up to one-third of healthcare-associated infections are considered preventable. Protecting patients as well as medical and non-medical healthcare staff in Germany from healthcare-associated infections requires a comprehensive set of measures and coordinated efforts from all stakeholders and actors.

1. Required Framework Conditions and Measures

In accordance with the Infection Protection Act (IfSG), various measures must be integrated and implemented in medical facilities.⁸ The Commission for Infection Prevention in Medical Facilities and in Care and Support Institutions (KRINKO) at the Robert Koch Institute (RKI) develops and publishes recommendations, including those for the prevention of healthcare-associated infections in medical settings.⁹ Based on these recommendations, the respective facilities are required to implement the mandated hygiene guidelines.

To further strengthen awareness of antibiotic resistance, the RKI has compiled and published guidance on basic knowledge, professional answers to frequently asked questions, and several surveillance systems for monitoring antibiotic resistance.¹⁰

Professional societies such as the German Society for Hospital Hygiene (DGKH), the German Society for Hygiene and Microbiology (DGHM), the Society for Hygiene, Environmental Medicine and Preventive Medicine (GHUP), the German Coalition for Patient Safety, and others develop informational materials and practical guidance. They convey these through events and training sessions for healthcare professionals to demonstrate how preventive measures should be routinely implemented in medical facilities.

1.1 Quality of Care

The foundation of quality of care is the correct performance of medical procedures on patients. Hygiene plays a central role in hospitals, outpatient settings, and long-term care facilities. It begins even before contact with patients, is carried out during the procedure, and continues afterward.¹¹

This includes the professionally correct application of comprehensive hygiene solutions for disinfection and cleaning. Sterilization, as well as the proper and regular use of suitable medical devices and personal protective equipment (gloves, protective gowns, and medical masks), helps ensure the highest standards of infection protection.

In home care involving disposable nursing aids (PHM), proper instruction of patients by qualified personnel plays a crucial role in ensuring correct and safe use.

1.2 Legal Framework and Recommendations

The implementation of the required hygiene measures in medical facilities is specified through various recommendations issued by KRINKO.¹² These recommendations are subject to the legal requirements of Section 23 of the Infection Protection Act (IfSG).¹³ They also include structural and technical requirements that must be observed.

The management of medical facilities is therefore responsible for preventing healthcare-associated infections, avoiding the further spread of pathogens—particularly those with resistance—and implementing the necessary measures in their facilities in accordance with current medical science.

According to KRINKO's recommendation on the personnel and organizational prerequisites for preventing healthcare-associated infections, this includes, among other things, "[...] that, depending on the size and risk profile of the facility, appropriately trained staff must be employed in sufficient numbers [...]. Without effectively organized hospital hygiene, quality and risk management are incomplete."¹⁴

1.3 Adequate Resources for Quality of Care and Surveillance

Qualified hygiene specialists serve, among other roles, as key communication partners and interfaces within the teams of a medical facility to ensure hygiene quality in patient care. They develop hygiene plans and standards, are responsible for the implementation of correct hygiene practices, and conduct inspections and audits together with, for example, the Public Health Service.¹⁵

The recording of hospital infections, including their pathogens and resistance profiles, the evaluation of these data in relation to antibiotic consumption, antibiotic therapy, and efficient outbreak management constitute another central component of the surveillance required under Section 23 of the Infection Protection Act (IfSG).

To manage this extensive range of tasks, an adequate staffing structure of hygiene specialists, hospital hygienists, and antibiotic stewardship officers and experts is indispensable.

Regular training and continuing education are essential elements, but the subsequent monitoring of the implementation of hygiene measures by qualified staff must be strengthened. A key cause of healthcare-associated infections is, among other factors, insufficient hygiene compliance.

1.4 Compliance

The challenge lies in meeting these requirements even under the various current conditions shaped by reforms and crises, particularly in the context of a potential shortage of skilled personnel.¹⁶

Additional efforts are needed to increase compliance among healthcare staff. In previous years, cross-sectional observations conducted during the first six years of the "Clean Hands Campaign" (AKTION Saubere Hände, ASH) highlighted issues related to compliance. In these observations,

medical and nursing staff were monitored regarding their application and implementation of hygienic hand disinfection in intensive care units (ICUs).¹⁷

The compliance rate among physicians increased to 64% during the first three years but declined again to 48.4% in the following two years. Similarly, nursing staff initially improved their compliance rate to 71.3%, but this also decreased over the same period to 55.8%, returning to baseline levels. This illustrates the so-called Hawthorne effect, which means that surveillance – in this case – temporarily influences the behaviour of medical staff, but that the effect diminishes over time as routine habits reassert themselves.¹⁸

1.5 Structural Changes

The existing shortage of skilled workers—particularly in nursing—along with the ongoing structural changes in hospitals as a result of the hospital reform and the political shift toward outpatient care, is leading to maximum workload for medical staff and to uncertainties within care situations. According to the Federal Statistical Office, the demand for nursing staff is expected to increase by one-third between 2019 and 2049, reaching 2.15 million. Due to the steadily aging population, calculations suggest that by 2049 at least 280,000 nursing professionals will be lacking.¹⁹

To ensure that infection prevention can continue to be guaranteed—and even further strengthened—under these changing structural conditions, evidence-based measures form the foundation of infection protection. To this end, topics such as hygiene and infection prevention and control could be integrated as fixed components with appropriate scope into medical training pathways and medical degree programs.

The content and curricula would need to be standardized so that, in practice, they can be applied with a uniform level of knowledge. This is particularly important because physicians working in outpatient care take on leadership roles—for example, in medical practices—and are responsible under Section 23 of the Infection Protection Act (IfSG) for adhering to the required hygiene measures.

The role of hospital hygiene and hygiene in outpatient facilities is essential and requires:

- a) ***Ensuring the structural and personnel prerequisites for both hospital hygiene and preventive infection medicine, for example through Antibiotic Stewardship, as a minimum requirement for the quality of hospital care and for prescribing authorization.***
- b) ***Consistent monitoring and adjustment of the implementation of required hygiene measures in accordance with the Infection Protection Regulation, thereby ensuring the continuous and correct use of medical devices.***

These measures can be sustainably ensured through a clearly defined strategy. Such a strategy anchors Infection Prevention and Control (IPC)—consisting of binding hygiene measures and their consistent implementation—in combination with Antibiotic Stewardship (ABS) uniformly across all medical facilities, ensuring their regular application.

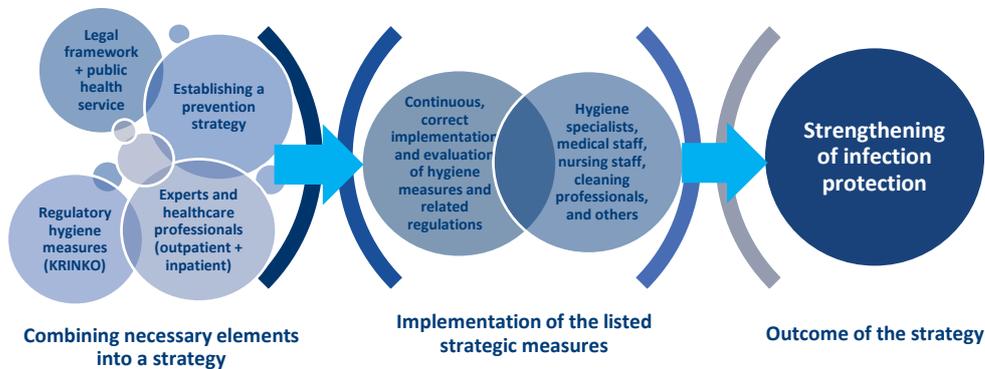
The World Health Organization (WHO) points out that IPC interventions have been shown to reduce hospital-acquired infections and antibiotic resistance by 35–70% while simultaneously reducing costs.²⁰ This underscores the role of IPC as a fundamental pillar of high-quality, safe, and efficient medical care.

2. Necessary Infection Strategy

To ensure infection protection, all relevant stakeholders must be involved. These include hygiene specialists, the healthcare professionals responsible for implementing the measures in both inpatient and outpatient settings, subject-matter experts from professional societies, and, where applicable, experts from research and development, the Public Health Service (ÖGD), and KRINKO at the RKI.

The development and implementation of a strategy—one that should particularly be applied across sectors—must be accompanied accordingly and reviewed in the sense of Infection Prevention and Control (IPC). (Fig. 1)

Fig. 1 – Development and Implementation of an Infection Protection Strategy



Source: own illustration 2026

Through evaluation and transparency, the following outcomes can be achieved:

- (1) Strengthening of nursing and medical staff through structural and personnel support.
- (2) Knowledge transfer for the implementation of hygiene measures and thus for preventive infection medicine.
- (3) Reduction or even prevention of healthcare-associated infections by 35–70%.
- (4) Shortening or even avoidance of (prolonged) inpatient stays.
- (5) Minimization of long-term consequences and thus of subsequent treatments.
- (6) Reduction of healthcare expenditures.

Example

The implementation of the hospital reform aims to further advance the shift toward outpatient care. For infection protection, this means that even during structural changes, continuous evaluation and, where necessary, adjustment of the hygiene structures and measures already in place are required—across all sectors.

The discontinuation of the Hygiene Special Program at the end of 2025 creates additional uncertainty in healthcare provision.²¹ Hygiene measures and thus infection protection are to be incorporated into the state base case value starting in January 2026. The final federal base case value for 2026 will be calculated and published by March 31, 2026, in accordance with Section 10 (9) of the Hospital Remuneration Act (KHEntgG).²²

The removal of the previously planned “Infectiology Service Group” from the Hospital Reform Adjustment Act (KHAG) plays a significant role in this context.²³ Using this eliminated service group as an example, it becomes clear how essential it is to anchor indicators related to hygiene and infection protection in medical facilities across all currently 60 service groups, with a focus on:

- *Adequate structural and personnel resources,*
- *Ensuring hygiene-related structural requirements, aligned with KRINKO recommendations, and*
- *Evaluation concepts to safeguard the quality of care.*

Evaluations are essential but must be promoted without adding bureaucratic burden.

This includes the review of existing digital tools that could be used for evaluation purposes and, where appropriate, the consolidation of already established digital measures. Digital systems should be reviewed and, if necessary, adapted and modernized for the surveillance of structural requirements.

Implementation of a Strategy

Several existing strategic plans—some originating from earlier legislative periods—have been published but often remain inactive due to political changes such as coalition shifts. In its 11th statement, the Expert Council on Health and Resilience emphasized that healthcare-associated infections are directly linked to medical and nursing procedures.²⁴ Among other points, it refers to conservative estimates for Germany indicating that the cost of a single wound infection amounts to nearly €15,000.

The need for new strategies to ensure precise infection surveillance, prevention, and control is particularly highlighted.

For the development of an effective strategic plan, it is therefore essential to clearly outline how this strategy is to be implemented in practice once finalized. This can be achieved through the following elements:

Phase 1 | Consolidation of legal foundations, definition of minimum standards and indicators for implementing and reviewing hygiene measures, integration of infection prevention into medical curricula, etc.

Phase 2 | Specification of personnel review and development measures, adaptation of infrastructure measures, and implementation of training and continuing education programs in medical facilities, as well as surveillance tools.

Phase 3 | Rollout in inpatient and outpatient facilities, initially selectively as a pilot phase.

Phase 4 | Evaluation after one year and during the first three years, or until the desired outcome has been confirmed.

Conclusion

Without effective strategies, Germany will have to spend up to €144 million annually by 2050 on infections caused, for example, by antibiotic-resistant pathogens, according to estimates by the Organisation for Economic Co-operation and Development (OECD).²⁵ These additional costs arise from direct healthcare expenditures, such as high mortality, as well as indirect costs, including extended hospital stays.

A clearly defined strategy is therefore essential—one that addresses the task of strengthening infection protection and incorporates all relevant perspectives, especially in times of reforms, crises, and civil protection needs.

A strategy for infection protection helps to **reduce** or even **prevent**:

- (potentially increasing) prevalence of healthcare-associated infections,
- antibiotic resistance,
- long-term complications, including subsequent treatments,
- extended inpatient hospital stays, and
- unnecessary and growing treatment costs.

Infection protection has gained additional importance in times of crisis or war. A resilient approach that accounts for changing global circumstances is therefore indispensable.

Healthcare associated infections can be prevented through clear structures and measures that ensure safe inpatient and outpatient care, supported by reliable hygiene measures and optimized antibiotic use.

Everyone has the right to be protected from healthcare associated infections.

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