

## Enhancing innovative training and education in infection prevention and control: a call to action for World Hand Hygiene Day 2024



For the past 16 years, World Hand Hygiene Day has been celebrated on May 5. Through this annual campaign, WHO has brought the global health community together to accelerate hand hygiene action at the point of care and contribute to reducing health-care-associated infections and achieving safer, quality health care for all. This year, the focus is to highlight the importance of promoting knowledge and building the capacity of health-care workers through innovative and impactful infection prevention and control training and education.<sup>1</sup>

Training and education, including hand hygiene, is one of the eight core components identified by WHO for achieving effective infection prevention and control programmes at both a national and health-care facility level.<sup>2</sup> Having a national policy and curriculum to support health-care workers' training in infection prevention and control, as well as providing this training to all front line health-care workers and cleaners (upon employment in all facilities, at a minimum, and annually in tertiary care hospitals), are minimum requirements for all countries to ensure delivery of safe care and adequate preparedness for outbreaks.<sup>3</sup> Evidence supporting these recommendations was based on a systematic review that identified 15 studies showing a reduction of health-care-associated infections and increased hand hygiene compliance following health-care workers' infection prevention and control or hand hygiene training.<sup>2</sup>

Studies published during the COVID-19 pandemic underscored the crucial role of infection prevention and control and hand hygiene training in preventing health-care-associated infections and their significance in global health security. Education and training in infection prevention and control, including appropriate hand hygiene practices, were consistently associated with a decreased risk of SARS-CoV-2 infection among health-care workers, together with other factors such as the availability and correct use of personal protective equipment.<sup>4</sup> Furthermore, in a study on the effects of infection prevention and control interventions on

return on investment in health-care settings during the first 6 months of the COVID-19 pandemic, Özçelik and colleagues<sup>5</sup> estimated that enhancing infection prevention and control and training associated with hand hygiene and the use of personal protective equipment could have averted 9.8 million new SARS-CoV-2 infections among health-care workers.

However, country progress on implementing training programmes and evaluating their effects remains very poor. WHO global surveys of infection prevention and control programmes conducted between 2017 and 2022 consistently showed training and education as the lowest-scoring core component, indicating deficits in preparedness for effective infection prevention and control implementation.<sup>6-8</sup> In particular, the 2021-22 WHO global survey on infection prevention and control minimum requirements at the national level found only 21 of 106 (20%) of countries fulfilling minimum requirements for infection prevention and control training and education in health-care settings.<sup>8</sup> Challenges and gaps identified were the lack of: infection prevention and control experts, standardised infection prevention and control curricula for pregraduate courses (medicine, nursing, midwifery), in-service training, and a postgraduate specialisation in infection prevention and control.<sup>8</sup>

As we look towards the future, it is imperative that policy makers and other decision makers invest in the capacity building of the health-care workforce through adequate infection prevention and control training,

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Figure: WHO World Hand Hygiene Day resources banner

as well as in the education of those accessing health care to improve their understanding of fundamental prevention measures such as hand hygiene. In 2023, all countries committed to such a step by adopting the new global strategy on infection prevention and control,<sup>9</sup> which includes a key strategic direction on training and education. It calls not only for integrating infection prevention and control into the entire health education system through the development of infection prevention and control curricula spanning pregraduate, postgraduate, and in-service training, but also advocates for creating local expertise in infection prevention and control and recognised career pathways for infection prevention and control professionals, in parallel with the development of educational resources for patients and relatives.

Building on these commitments, and given the growing threats posed by health-care-associated infections, antimicrobial resistance, and new emerging infections, World Hand Hygiene Day 2024 offers a unique platform for all health-care workers, infection prevention and control professionals, policy makers, decision makers, and the public to get engaged and take action. A range of resources (figure) is provided to support these efforts. The proposed approach advocates for a shift towards continuous, practical, and experiential learning that engages health-care workers, moving beyond mere theoretical knowledge acquisition. Innovative training methods, including those valuing the unique experiences of health-care workers, and the use of gaming and other technology (such as the new WHO game on hand hygiene<sup>10</sup>), are strongly encouraged. The integration of infection prevention and control training within clinical practice, continuous education, and periodic evaluation to ensure effectiveness and knowledge retention are crucial for progress. By seizing the opportunity, all those

who influence better and safe health-care environments can forge a path towards a more resilient health workforce and a more equitable and sustainable future for global health care to better prepare for outbreaks and safeguard the wellbeing of both health-care workers and patients alike.

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