# HAND HYGIENE IN HEALTH CARE: ADVOCACY BRIEF



# Hand Hygiene - Vital for quality healthcare

With clean hands, health workers can offer clean and safe care, and protect themselves and their patients from infection. Globally, healthcare-associated infections affect more than 1 million people at any given time. Hand hygiene is a highly effective way to prevent infection, but it is estimated that only 40% of health workers practice correct hand hygiene. 2

In healthcare settings, hand hygiene refers to handwashing with soap or using an antiseptic handrub at the five critical times identified by the World Health Organization. Proper hand hygiene requires appropriate supplies, practice, and leadership. With these key elements in place, health workers and patients would have dramatically lower risks of infection, and healthcare costs could drop dramatically.

## Impact of hand hygiene

Poor hand hygiene can lead to a range of health problems, including healthcare-associated infections and sepsis. Healthcare-associated infections often occur when germs are transferred from a healthcare worker's hands to a patient. On average, approximately 15% of patients in developing countries and 7% of patients in developed countries are affected by healthcare-associated infections.<sup>3,4</sup> Health workers and staff are also at risk of acquiring infections.

Every year, healthcare-associated infections adversely affect patient quality of care, cause longer hospital stays, create disabilities, and increase the risk of antimicrobial resistance among patients.<sup>4, 5</sup> These infections can also trigger sepsis and septic shock, which particularly affect vulnerable populations such as newborns and people who are already sick.<sup>6</sup> Sepsis accounts for approximately 6 million deaths every year and is a common cause of maternal and neonatal deaths.<sup>7,8</sup>

Research shows that simple, cost-effective infection prevention and control measures, such as appropriate hand hygiene practices, can reduce health care-associated infections by more than 50%. These changes would save some countries over \$28 billion annually. Health systems with poor hand hygiene compliance need more resources to care for patients who have infections, many of whom must stay in hospitals for longer periods of time. Poor hand hygiene also compromises health workers' ability to offer safe services, exposes them to a higher risk of infection, and limits patients' confidence in health systems.

## **Current practice and barriers to hand hygiene**

The World Health Organization recommends five critical moments in which all health workers and staff must wash or disinfect their hands: before patient contact, before an aseptic task, after body fluid exposure risk, after patient contact, and after contact with patient surroundings.<sup>3</sup> These critical moments appear in any healthcare setting and are not limited to hospitals or clinics. Healthcare leaders in all settings must prioritize strategies to improve hand hygiene during these critical moments.

Currently, 61% of health workers do not comply with best handwashing practices.<sup>2</sup> This low compliance rate is due to various factors, which can include lack of infrastructure, cultural norms, or lack of knowledge.<sup>10</sup> Motivations for or against hand hygiene can vary by context. Strategies to improve hand hygiene must address the most relevant factors in a given context, as well as influencing overall behavior and organizational norms to improve hand hygiene.

A 2018 study found that 66% of health facilities in low- and middle-income countries lack soap and piped water for handwashing.<sup>11</sup> There is an urgent need to ensure that soap, water, and handrub are available in every health facility worldwide. However, infrastructure alone is typically not enough to ensure good hand hygiene behavior. Poor hand hygiene practices persist in high-income countries and in settings with proper infrastructure and supplies.

### Strategies to improve hand hygiene

Existing tools and strategies have been effective in improving hand hygiene. For example, the World Health Organization Multimodal Hand Hygiene Improvement Strategy<sup>12</sup> outlines a series of steps a facility can take, including: setting appropriate polices, implementing training and education programs, establishing staff feedback mechanisms for increased accountability, and using visual nudges to encourage staff members to wash their hands during critical moments.<sup>13</sup> An infection prevention and control strategy is another practical solution that healthcare leaders can use to prevent infection in their facilities.<sup>14,15</sup>

Healthcare leaders should ensure specific infection prevention and control policies are in place; provide and maintain the supplies and infrastructure needed to practice good hand hygiene; and promote training and accountability for all staff to ensure compliance. Training and information are essential components of strategies to change hand hygiene behavior, but knowledge alone will not lead to improved practices. Strategies to change behavior should respond to health workers' motivations and must include methods to ensure accountability.

Improving hand hygiene is not only the responsibility of health workers and healthcare leaders. Hand hygiene also requires a supportive enabling environment. This includes improvements in policy, funding, and strategy to ensure hand hygiene is prioritized, and improvements in hand hygiene are recognized. Policy makers have an important role to play in ensuring good hand hygiene is possible, and promoted, in all healthcare settings.

#### **Calls to action**

Proper hand hygiene must be prioritized by leaders and staff in all healthcare facilities to ensure quality of care, reduce the spread of infections, and protect staff and patients. It must also be included in the investments, policies, and strategies that make this possible. Health workers and patients have an important role to play by practicing and advocating for proper hand hygiene during critical moments of care.

Here are some priority actions you can take to promote and improve hand hygiene:

**Governments**: Invest in critical infrastructure for water, sanitation, and hygiene in health facilities. Include hand hygiene in policies, requirements, and monitoring for quality health care.

**Businesses and donors:** Invest in behavior change, infrastructure, and supplies. Recognize the vital role of hand hygiene in the success of any health facility.

**Health facility leaders**: Ensure availability of hand hygiene supplies and infrastructure. Monitor hand hygiene and ensure all staff are accountable for their performance of hand hygiene. Demonstrate leadership commitment to hand hygiene.

**Advocates and associations**: Advocate for hand hygiene infrastructure, programming, and monitoring as an essential part of keeping health workers and patients safe.

**Health workers and patients:** Clean your hands at critical times. Remind all staff, patients, and visitors to clean their hands at key moments.

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- <sup>6</sup> Sepsis Alliance. (2017). Sepsis and healthcare-acquired infections. Retrieved from <a href="https://www.sepsis.org/sepsis-and/healthcare-acquired-infections/">https://www.sepsis.org/sepsis-and/healthcare-acquired-infections/</a>
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- <sup>9</sup> WHO. (2018). 10 facts on patient safety. Retrieved from <a href="http://www.who.int/features/factfiles/patient\_safety/en/">http://www.who.int/features/factfiles/patient\_safety/en/</a>
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- <sup>11</sup> Cronk, R. & Bartram, J. (2018). Environmental conditions in health care facilities in low- and middle-income countries: Coverage and inequalities. International Journal of Hygiene and Environmental Health, 221(3). https://doi.org/10.1016/j.ijheh.2018.01.004
- <sup>12</sup> Available: <a href="https://www.who.int/gpsc/5may/Guide">https://www.who.int/gpsc/5may/Guide</a> to Implementation.pdf
- <sup>13</sup> WHO. (2009). Guidelines on hand hygiene in health care. Retrieved from http://apps.who.int/iris/bitstream/handle/10665/44102/9789241597906\_eng.pdf;jsessionid=A95B4A01E3D8FE851318 C4EDDC2105A7?seguence=1
- <sup>14</sup> WHO. (2019). Prevention and Infection Control. Retrieved from <a href="https://www.who.int/infection-prevention/about/ipc/en/">https://www.who.int/infection-prevention/about/ipc/en/</a>
- <sup>15</sup> Storr et al. (2017). Core components for effective infection prevention and control programmes: New WHO evidence-based recommendations. Antimicrobial Resistance and Infection Control, 6(6). doi: <u>10.1186/s13756-016-</u>0149-9

<sup>&</sup>lt;sup>2</sup> WHO. (2016). Health care without avoidable infections: The criticale role of infection prevent and control. Retrieved from <a href="http://apps.who.int/iris/bitstream/handle/10665/246235/WHO-HIS-SDS-2016.10-eng.pdf?sequence=1">http://apps.who.int/iris/bitstream/handle/10665/246235/WHO-HIS-SDS-2016.10-eng.pdf?sequence=1</a>

<sup>&</sup>lt;sup>3</sup> Allegranzi B, et al. (2011). Burden of endemic health-care-associated infection in developing countries: systematic review and meta-analysis. Lancet, 377(9761).