

A Year of Cleaner and Safer Care

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World Health Organization
World Alliance for Patient Safety
Global Patient Safety Challenge 2005-2006

KEY FACTS

Health care-associated infection: scale and cost

- The burden of disease attributable to health care-associated infection is huge, with hundreds of millions of patients affected worldwide every year. These infections contribute to patient deaths, disability and promote resistance to antibiotics.
- At any time, over 1.4 million people worldwide are suffering from infections acquired in hospital.
- Between 5% and 10% of patients admitted to modern hospitals in the developed world acquire one or more infections.
- The risk of health care-associated infection in developing countries is 2 to 20 times higher than in developed countries. In some developing countries, the proportion of patients affected by a health care-acquired infection can exceed 25%.
- In England, more than 100,000 cases of health care-associated infection lead to over 5,000 deaths directly attributed to infection each year.
- In the United States, 1 out of every 136 hospital patients becomes seriously ill as a result of acquiring an infection in hospital; this is equivalent to 2 million cases and about 80,000 deaths a year. That is 200 people every single day.
- In Mexico, an estimated 450,000 cases of health care-associated infection cause 32 deaths per 100,000 inhabitants each year.
- In developing countries the situation is even more stark with 4,384 children dying every day of health care-associated infection, equating to a plane crashing every hour.
- With conservative estimates suggesting that at least 9% of these infections could be prevented just through better hand hygiene, there is a huge potential to reduce suffering and death of this magnitude.
- Health care-associated infections in England are estimated to cost £1 billion a year. In the United States, the estimate is between US\$4.5 billion and US\$5.7 billion per year. In Mexico, the annual cost approaches US\$1.5 billion.

- Health care-associated infection is one of the leading causes of premature mortality in some countries.
- In intensive care, health care-associated infection affects about 30% of patients and the attributable mortality may reach 44%.

Health care-associated infection: areas of care

- In Brazil and Indonesia, more than half of the babies housed in neonatal units are affected by health care-associated infection, with a fatality rate between 12% and 52%.
- The infection rate associated with vascular devices among neonates is 3 to 20 times higher in developing countries than in developed countries.
- During the SARS pandemic, the proportion of infected health-care workers ranged from approximately 20% to 60% of cases worldwide.
- Unsafe blood transfusion causes 16 million hepatitis B infections, 5 million hepatitis C infections, and 160,000 cases of HIV worldwide every year.
- Invasive procedures and unsafe blood transfusion were responsible for the largest documented outbreak of HIV nosocomial transmission in 400 children in the Libyan Arab Jamahiriya.
- The greatest risk of nosocomial transmission of hepatitis B virus takes place from patients to personnel. Nevertheless, hepatitis B vaccine is not available to immunize health-care workers in the majority of developing countries.
- Surgical site infection accounts for about 25% of health care-associated infections.
- Surgical site infection accounts for about 14% of possible adverse events threatening patient safety in hospitals in developed countries.
- In 2000, reuse of contaminated syringes in developing and transitional countries caused an estimated 21 million hepatitis B virus infections (33% of new infections), 2 million hepatitis C infections (40% of new infections), and 96,000 HIV infections (2% of new infections).
- In some parts of the world, up to 96% of people seeking primary health care receive injections, of which over 70% are unnecessary or could be replaced by an oral formulation.
- By the end of 2003, following implementation of WHO interventions, 55% of non-industrialized countries reported the use of auto-disable syringes.
- 1.8 million people die every year from diarrhoeal diseases. Hygiene education and promotion of hand washing can lead to a reduction of diarrhoeal cases by more than 50%.

Source: Global Patient Safety Challenge data, 2005

WHO Guidelines on Hand Hygiene in Health Care(Advanced Draft): A Summary, 2005