



# NURSING MATTERS

*Nursing Matters* fact sheets provide quick reference information and international perspectives from the nursing profession on current health and social issues.

## Infection control

# Fact Sheet

Prevention of infections has become a primary concern of health policy makers, health professionals, employers and patients. The emergence of life-threatening infections or conditions, such as severe acute respiratory syndrome (SARS), HIV, antimicrobial resistance and re-emerging of other infectious diseases such as TB, has highlighted the need for efficient infection control programmes in all health care settings.

Infection control refers to all policies, procedures and activities, which aim to prevent or minimize the risk of transmission of infections, whether health care acquired (HAI) or those representing a public health concern.<sup>1</sup> Infection prevention and control are often perceived as being limited to health care facilities and to the surveillance and control of health care associated infections. However, the scope is much wider, including among others: patient safety, occupational health, food safety, biosafety, injection safety, blood safety, and containment of antimicrobial resistance.<sup>2</sup>

Fighting infectious conditions is not easier now even though the health care systems and technology are more advanced. However, appropriate hygiene and infection control measures, in addition to numerous vaccines and rapidly advancing medical technology, allow people to be better prepared to avoid infections.

### Infection Control Measures

Poor health practices and procedures or unclean environments contribute to the transmission of infections. Transmission of infections in health care facilities can be prevented and controlled through the application of infection control measures, which interrupt the transmission of infectious diseases from patients to health care providers, other patients and families. The main aim of infection control measures is to create health care facilities that are safe for patients as well as for health care providers.

Infections and antimicrobial resistance complicate the treatment and the care of millions of patients every year.<sup>3</sup> As a result, many patients' conditions become worse; they stay longer in the hospitals, and some experience long-term disability. Health care-associated infections increase health care costs to both patients and the health care system.

## **I**nfection control precautions

Infection control involves a series of activities and measures that include both standard and universal precautions, which aim to reduce the risk of disease transmission in the health care setting, even when the source of infection is not known; and additional precautions, which may be needed for diseases that are transmitted by air, droplets and contact. <sup>4</sup>

### **Standard/Universal precautions**

Standard precautions require that health care providers assume that the blood and body fluids of all patients are potential source of infections, regardless of the diagnosis, or presumed infectious status. Precautions include: <sup>5</sup>

- Hand washing and antisepsis (hand hygiene);
- Use of personal protective equipment when handling blood, body substances, excretions and secretions (gloves; protective eye wear; mask; gown; shoe covers; hair cover);
- Appropriate handling of patient care equipment and soiled linen (transport and process used linen with care to ensure there is no leaking of fluid);
- Prevention of needle stick/sharp injuries ;and
- Environmental cleaning and spills-management, and appropriate handling of waste.

**Additional precautions** (in addition to standard/ universal precautions) include:

- Airborne precautions (to reduce the transmission of diseases spread by the airborne route, e.g. TB, measles, chicken pox, pulmonary, etc.);
- Droplet precautions (to reduce the transmission of mumps, pneumonias, diphtheria, meningitis, etc.);
- Contact precautions (to reduce the transmission of skin infections, infection with multiple antibiotic resistant organisms).

Most of the activities include keeping patients in a single room, keeping doors closed, requiring either the visitor or the patient to wear a mask, limiting the movement in to and out of the patient's room and wearing gloves when appropriate.

## **H**and washing and antisepsis (hand hygiene)

Hand hygiene is the most effective way to prevent the transmission of infections. Proper hand washing minimizes the transmission of the micro-organisms acquired on the hands during daily activities or while performing patient care. Hand washing breaks the transmission of the infection from

person to person. Because nurses are in close contact with patients, they are exposed to a variety of microbes, some of which may cause disease. By adhering to appropriate hand washing guidelines nurses can prevent infection transmission.

Hand washing is recommended:

- After handling any blood, body fluids, secretions, excretions and contaminated items;
- Between contact with different patients;
- Between tasks and procedures on the same patient to prevent cross-contamination between different body sites; and
- Immediately after removing gloves.

Hand hygiene involves using a plain soap, or antimicrobial agents such as an alcoholic hand rub or waterless antiseptic agent.

In order to prevent transmission of infections, it is important for health care providers and patients to follow infection control guidelines appropriate to their settings.

## **G**lobal initiatives

ICN has signaled its interest in supporting the recently launched World Alliance for Patient Safety. This initiative, spearheaded by the World Health Organisation, works to develop solutions to improve safety and reduce risk by focusing on five action areas in particular:<sup>6</sup>

- Clean hands;
- Clean practices (safe clinical procedures);
- Clean products (blood safety);
- Clean environment (safe water and sanitation in health care);
- Clean equipment (injection safety).

ICN is encouraging national involvement in this important undertaking.

*For further information, please contact: [icn@icn.ch](mailto:icn@icn.ch)*

The **International Council of Nurses (ICN)** is a federation of more than 130 national nurses associations representing the millions of nurses worldwide. Operated by nurses and leading nursing internationally, ICN works to ensure quality nursing care for all and sound health policies globally.

## References

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- <sup>1</sup> World Health Organisation, Regional Office for Western Pacific (2004). Practical guidelines for infection control in health care facilities. Retrieved July 18, 2005, from: [http://www.wpro.who.int/NR/rdonlyres/006EF250-6B11-42B4-BA17-C98D413BE8B8/0/Final\\_guidelines\\_Dec2004.pdf](http://www.wpro.who.int/NR/rdonlyres/006EF250-6B11-42B4-BA17-C98D413BE8B8/0/Final_guidelines_Dec2004.pdf).
- <sup>2</sup> WHO (2004), *ibid*.
- <sup>3</sup> International Council of Nurses (ICN) (2004). Antimicrobial Resistance: ICN Position. Retrieved August 3, 2005 from: <http://www.icn.ch/psresistance.htm>.
- <sup>4</sup> WHO (2004), *op.cit*.
- <sup>5</sup> El-Ansari W & Privett S (2005). Health protection: communicable disease, public health and infection control educational programmes- a case study from the UK. *Public Health*, 119, 328-340.
- <sup>6</sup> World Health Organisation, World Alliance for Patient Safety (2004). Global Patient Safety Challenge. Retrieved July 18, 2005, from: <http://www.who.int/patientsafety/challenge/en/>

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