Global Patient Safety Challenge 2005/2006 “Clean Care is Safer Care”

WHO Guidelines for Hand Hygiene in Health Care

Work in Progress

Executive Summary

In October 2004, WHO and its partners launched the World Alliance for Patient Safety to address and advance the issue of safety in patient care. A core element of the World Alliance work is the Global Patient Safety Challenge programme. The challenge is a topic that covers a significant aspect of risks threatening patients in health care and will change every two years. The first challenge for the years 2005-2006 focuses on the prevention of health care-associated infection.

A key action within the Challenge for 2005-2006 is to promote hand hygiene in health care globally and at country level. The goal will be achieved through the development and implementation of new WHO Guidelines on Hand Hygiene in Health Care. With hand hygiene as a cornerstone, the Challenge also aims to integrate a number of interventions from existing WHO strategies to achieve "Clean Care is Safer Care".

The first Consultation on Hand Hygiene in Health Care was held in Geneva on 3 December 2004 and chaired by Professor Didier Pittet, University of Geneva Hospitals, Switzerland, who prepared a set of draft Guidelines for international consultation. Participants included representatives from eight WHO departments at Headquarters and two Regional Offices, the Centres for Disease Control and Prevention, USA, the Health Protection Agency, UK, International Confederation of Midwives, International Council of Nurses, the National Patient Safety Agency, UK, and international technical experts from major universities around the world (see current list of participating experts below). Further development of the draft WHO Guidelines on Hand Hygiene in Health Care was carried out by meetings and working groups, together with some external experts who volunteered to contribute to the draft Guidelines.

Following the 3 December meeting, a core group of international experts met in March 2005 to review the content of the draft Guidelines, and facilitate discussion among authors. An advanced draft was reviewed at the 2nd Consultation of Hand Hygiene in Health Care held on 27-29 April 2005. The Consultation allowed to reach consensus and to discuss implementation strategies and the development of a global awareness-raising campaign to be piloted in selected health care settings in each of the WHO regions.
In parallel, consultative Task Forces have been set up to research specific topics in hand hygiene:

- Patient involvement
- Cultural, religious, and behavioural aspects of hand hygiene
- Global implementation of the WHO alcohol-based formulation
- Glove use and re-use
- Water quality for hand washing
- Alcohol absorption
- Education tools and behavioural change
- Communication and campaigning
- National Guidelines on Hand Hygiene
- Frequently asked questions

It is foreseen that the draft *WHO Guidelines for Hand Hygiene in Health Care* will be finalised and published in the Autumn 2005.

The contents of the *Advanced Draft Guidelines* are:

**Part I. Review of scientific data related to hand hygiene**

1. Definition of terms
2. Historical perspective on hand hygiene in health care
3. Normal bacterial flora on hands
4. Physiology of normal skin
5. Transmission of pathogens on hands
  5.1. Organisms present on patient’s skin or inanimate environment
  5.2. Organisms transferred on HCWs’ hands
  5.3. Organisms are capable of surviving on hands
  5.4. Defective hand cleansing results in hands remaining contaminated
  5.5. Contaminated hands cross-transmit organisms
6. Models of hand transmission
  6.1. Experimental models
  6.2. Mathematical models
7. Relation between hand hygiene and acquisition of health care-associated pathogens
8. Methods to evaluate the antimicrobial efficacy of hand rub and hand wash agents, and formulations for surgical hand preparation
  8.1. Current methods
  8.2. Shortcomings of traditional test methods
  8.3. New methods for the future
9. Review of preparations used for hand hygiene
  9.1. Water
  9.2. Plain (non-antimicrobial) soap
  9.3. Alcohols
  9.4. Chlorhexidine
  9.5. Chloroxylenol
  9.6. Hexachlorophene
  9.7. Iodine and iodophors
  9.8. Quaternary ammonium compounds
  9.9. Triclosan
  9.10. Other agents
Chapter 9. Activity of antiseptic agents against spore-forming bacteria

9.11 Reduced susceptibility of bacteria to antiseptics

9.12 Relative efficacy of plain soap, antiseptic soap/detergents, and alcohols

Chapter 10. Surgical hand preparation

10.1 Evidence for surgical hand preparation

10.2 Objectives of surgical hand preparation

10.3 Selection of production for surgical hand preparation

10.4 Surgical hand antisepsis using medical soap

10.5 Surgical hand preparation with waterless, alcohol-based hand rub

10.6 Surgical hand scrub with medicated soap or surgical hand rub with alcohol-based formulations

Chapter 11. Safety

11.1 Frequency and pathophysiology of irritant contact dermatitis

11.2 Allergic contact dermatitis related to hand hygiene products

11.3 Methods for reducing adverse effects

Chapter 12. Factors to consider when selecting hand hygiene products

12.1 Pilot testing

12.2 Selection factors

Chapter 13. Hand hygiene practices among healthcare workers and adherence to recommended measures

13.1 Hand hygiene practices among healthcare workers

13.2 Observed adherence to hand cleansing

13.3 Factors affecting adherence

Chapter 14. Religious and cultural aspects of hand hygiene

14.1 Hand hygiene in different religions

Chapter 15. The concept of “visibly dirty” hands

Chapter 16. Behavioural considerations

Chapter 17. Organizing an education programme to promote hand hygiene

Chapter 18. Formulating strategies for hand hygiene promotion

18.1 Elements of promotion strategies

18.2 Developing a strategy for guideline implementation

Chapter 19. Impact of improved hand hygiene

Chapter 20. Other policies related to hand hygiene

20.1 Gloving policies

20.2 Glove use in developing countries

20.3 Jewellery

20.4 Fingernails and artificial nails

Chapter 21. Hand hygiene research agenda

Chapter 22. Web-based hand hygiene resources

Part II. Country-wide/society-wide differences in recommendations for hand hygiene in health care

Part III. Consensus recommendations

III.1 Ranking system for evidence

III.2 Recommendations

1. Indications for handwashing and hand antisepsis

2. Hand hygiene technique
3. Surgical hand preparation
4. Selection of hand hygiene agents
5. Skin care
6. Other aspects of hand hygiene
7. Healthcare worker educational and motivational programmes
8. Administrative measures

Part IV. Outcome measurements

1. Monitoring
2. Hand hygiene as a quality indicator for patient safety
3. Cost-effectiveness of promotion strategies in different health care settings

Part V. Promoting hand hygiene on a large scale

1. Country-wide related issues
2. Worldwide

Part VI. Information to the public

International and WHO participating experts involved in the preparation of the WHO Guidelines for Hand Hygiene in Health Care, part of the Global Patient Safety Challenge (Chair, Professor Didier Pittet)

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