

### **STANDARD 3: Giving healthcare safely in a secure, clean ‘child friendly’ environment**

**‘Health care providers, organisations and individual health workers, share a responsibility to advocate for children and to reduce the fear, anxiety and suffering of children and their families by ensuring that they give healthcare safely in a secure and clean ‘child friendly’ (See Standard 4) environment’.**

#### **Supporting criteria**

1. Effective security and general safety policies and systems of care to protect children, carers, visitors and health workers from accidents or other dangers while they are in a health facility.
2. Policies and systems that are used by everyone to keep equipment and health care environments clean enough to minimize the risk of acquiring a healthcare related infection
3. Other general infection control policies that are used by all health workers to minimize the risk of acquiring a healthcare related infection
4. Systems and policies that are used by all health workers to minimise work related physical, emotional and mental health problems in health workers
5. Evidence-based clinical guidelines and other job aides that are followed by all professional health workers in the healthcare environment. These include ones about hand hygiene, fire safety and evacuation, no smoking where there are children, the dangers of advertising, safe sharps disposal, and management of needle stick injuries, lifting patients, food safety, laundry safety, safe waste disposal and radiation protection. (See also standard 2)

#### **Discussion**

Every health worker has a responsibility to give healthcare safely and to make sure that the places where they give care are as secure, clean and ‘child friendly’ as possible.

#### ***Clean, safe ‘Child Friendly’ ward in a hospital in Wales***



It is very important to protect themselves and the children and families from dangers, also to protect possessions from damage, loss or theft. Possible personal dangers for children, parents/carers, visitors and/or health workers include:

- Physical harm, for example abduction or a deliberate injury
- An accidental injury from unsafe equipment, fittings, electrics, furniture, buildings
- An unwanted side-effect from any system of care or treatment program

- A healthcare related infection
- A work related injury or illness such as HIV/AIDS, hepatitis, back injury or a stress related mental health problem.

To prevent all these dangers best practice is for health workers and families to work together to identify possible problems and solutions to prevent these. Health workers need to be able to report openly about any security or safety concerns, without fear of losing their job or harming their career prospects. Families need to be able to voice their concerns without fearing that their child's healthcare may be adversely affected. Best practice is for all health facilities to have an effective system to assess, prioritise and investigate these concerns properly.

To give healthcare safely there need to be enough health workers to look after the children that need healthcare throughout the twenty-four hours. All too often in many of the countries visited during the pilot project many health workers were present during the working day but very few during the late afternoons, evenings and nights. Children are ill throughout the 24 hours, therefore staff need to be allocated in safe numbers for every time period. Best practice is always to have enough health workers on duty to ensure each individual child's safety. When there are few health workers it is even more important to distribute these sensibly

To help limit the number of clinical mistakes, best practice is for everyone to use the same policies and guidelines for giving healthcare programs and treatments, and also to use other job aides as reminders. To develop a sense of ownership these need to be developed and introduced following wide consultation. It is also important for clinical guidelines and other job aids to be compatible with WHO and/or other International guidelines, and with any country and/or regional guidelines.

Examples include:

- security, cleaning, waste disposal, hand washing and the control of infection.
- common investigations and clinical procedures, blood transfusion.
- lifting patients
- the use of drugs and disposables and quality control measures for these that will minimise harm caused by unnecessary or inappropriate treatment.
- safe and appropriate use of blood and blood products



*A hand washing reminder, but the sink is unsafe as it has a taped crack*

Responsibility for these and the management and prioritisation of risk can be delegated to named lead health worker/s who is/are given the authority to develop, monitor and change these as well as coordinate related activities.

Safety and security for people and possessions will also be helped by:

- The use of name badges by health workers and a method for identifying inpatient children, such as wrist bands
- A security system and/or security health workers at the entrances of health facilities
- Lockable storage facilities: but not for emergency equipment as this needs to be immediately available
- Having a system for children, families and health workers to report and investigate accidents, drug administration errors and infections acquired during an in-patient stay
- Accounting for health facility property
- Accountability for, and secure storage of drugs and other disposables
- Giving an individual named health worker the responsibility for protecting equipment, books and other items
- Using a structured system to reduce or eliminate losses due to accident or misadventure (Risk management). The aim of risk management is to improve the quality of care by identifying and reducing risks that might result in damage to a patient, visitor or health worker, or result in a complaint and/or litigation

To minimise the dangers associated with a fire or other disaster, best practice is for all individual health workers to:

- Know about evacuation, fire management and other general safety measures, and to contribute to any disaster practices.

#### **Other ways to reduce accidents and harm include:**

- Keeping the utilities (electrical circuits and plumbing), buildings, fittings, medical and other equipment and furniture in a good state of repair by good organisation and management, regular maintenance, risk-prioritised repairs and funding.
- Protecting children, their carers and health workers from radiation by using safe x-ray machines, lead aprons, gonad protectors and guidelines for 'which health problems need an x-ray and which do not'

#### ***Gonad protectors of different sizes***



- Safety gates to help prevent children leaving a ward and on stairs that children may use.

*Safety gates on the third floor of a building*



- Window safety catches or locks to prevent children falling from opened windows.
- Banning possibly harmful advertising from a health facility, for example of formula milks
- Not allowing smoking in areas where there are children, oxygen cylinders or flammable liquids/gases

*No smoking sign on a children's ward in Eastern Europe*



### **Reducing healthcare acquired infections**

Healthcare related infections cause unnecessary deaths and suffering in children and their families and also incur large costs to a health service. They affect at least 10% of all hospitalised patients in the advantaged countries and probably a higher percentage of patients in the disadvantaged countries. These infections may be acquired because a child shares the same facilities and equipment with others, from the environment, especially the work surfaces or directly from health workers. Only a very small number are caused by visitors or by other patients.

The effectiveness of hand washing and the cleanliness of the washing facilities and toilets in a health care environment correlate well with the healthcare acquired infection rate.

The infections are caused by the micro-organisms that are always around in a healthcare environment. They contaminate the hands and uniforms of health workers and colonise the sinks and other equipment.

*Why is cleaning so important?*

At least half of healthcare related infections can be prevented if health workers keep their hands, their uniforms, the environment and the equipment scrupulously clean to reduce the number of organisms around. It is essential that each individual health worker examines their own practice, keeps up-to-date with infection control policies, especially hand-washing and follows such policies themselves as well as ensuring that other health workers also comply.

**Effective hand washing is the most important way a health worker can prevent a healthcare acquired infection**



*A bucket used to flush an adjacent nurse's toilet: there are no spare parts to repair the flush mechanism, which broke a year previously, no soap and no method of hand drying*

What is needed to keep hands clean?

- Enough clean toilets with nearby sinks for hand washing and a facility for hand drying
- Enough clean sinks and showers that are easy to use
- Knowledge about the importance of hand washing
- Strict hand-washing policies.
- Hand washing reminders at all sinks (when and how)
- A secure and adequate supply of soap



*Soap on a string: An effective way to prevent it from being stolen*



*The only facility for washing kitchen utensils and hands in a hospital kitchen in Eastern Europe.*



*An effective, clean, accessible resource for hand washing in a children's ward in the UK. There is no excuse for not keeping your hands clean if you have this resource.*



*When there are no resources for buying paper towels, cut up material squares used once only, then laundered are just as effective*

- ❑ A method for drying hands properly
- ❑ Effective methods for handling and disposing of bodies, specimens, human waste, body fluids and other waste, including a method for separating the different types of rubbish.
- ❑ A good example set by senior health workers (the pilot project confirmed that they are the worst offenders) and a culture for hand washing
- ❑ A water supply that is:
  1. Secure (never runs out)
  2. Clean and safe to drink (and is regularly tested for dangerous micro-organisms)
  3. Adequate in amount for drinking and for cleaning
  4. Hot for washing and cleaning procedures (For safety ideally hot water should be stored at 65 degrees C, distributed at 60 degrees C and then reduced to 43 degrees C to be used from the taps)
  5. Accessible in all areas where children are given healthcare
- ❑ An alcohol based product to use for hand cleaning when it is not possible or practical to wash hands
- ❑ Clean clothes always worn by health workers
- ❑ A 'no touch' policy that is followed by everyone. This means not touching anything or anyone unless essential (the affectionate hugging of children is an essential act that must be allowed) and only after hand washing.

### **What else needs to be clean?**

#### **Food**

Hygienic food preparation, handling and storage (see The World Health Organisations' ten steps to Hygienic food preparation) will reduce the possibility of a food-borne illness. Poor hand washing, frequency and technique, is strongly linked to food poisoning.



*Unhygienic, unsafe  
parents/carers kitchen*

### **Laundry**

All bedding/curtains/towels/flannels must be regularly washed with a detergent/disinfectant. Access to Industrial quality washing machines is preferable. Water temperatures of at least 60 degrees C and preferably above should be used to destroy the micro-organisms on clothes and other materials. The uniforms of health workers need to be kept clean and used only in the same clinical area to prevent moving micro-organisms from one clinical area to another. If health workers visit more than one clinical area they should change uniforms or clothes between each area or wear disposable protective clothing over their own clothes when they move to a different clinical area



*Unhygienic personal laundry facilities  
at a hospital in Asia*

**The equipment and furniture and the whole of the hospital including the grounds** must also be kept scrupulously clean.

A scrupulously clean environment is the responsibility of each and every person in the health care environment

Health workers who clean are best supervised by professional health workers and given adequate status and pay that recognises the importance of the work they are doing. They need access to sufficient cleaning agents and materials, preferably colour coded for the different areas to be cleaned and induction training about the health facility's policies and cleaning systems.

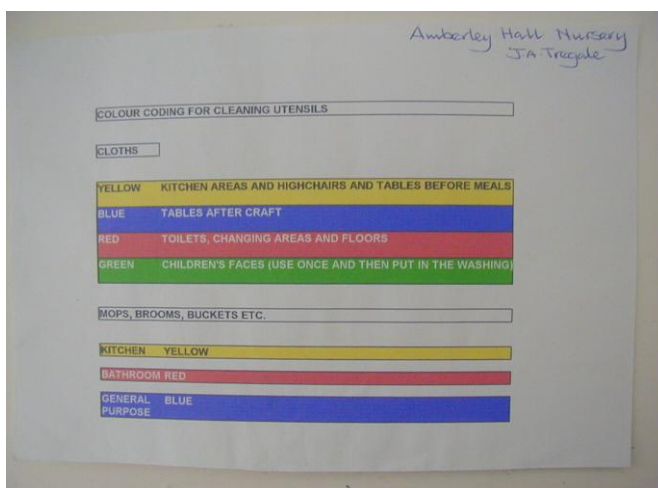
Effective and supervised cleaning policies and systems for cleaning the entrances, corridors, wards (floors, walls, window-sills, light fittings and curtains), toilets and washing facilities, kitchens and all other areas in a health facility will contribute to reducing risk of acquired infections and should cover:

- Cleaning methods used for all these different areas, also fittings, fixtures, furniture, bedding and other non-clinical equipment
- Cleaning frequency
- Cleaning materials and for what - colour coding of cleaning cloths/materials for use on different surfaces can be helpful.
- Use of cleaning agents, including disinfectants in appropriate dilutions for the task
- Effective management of spills of body fluid (blood, urine, vomit, faeces and saliva etc.)
- The cleaners or, if cleaners are not always available, others need to be trained and supervised by the senior health worker for the clinical area.
- Waste disposal systems and waste separation. Safe waste disposal systems and policies will prevent body fluids, faeces, drugs and disposables being a danger to others.

A **budget for cleaning** is essential.

Entrances of health facilities should screen visitors' shoes for dirt, corridors need to be cleaned at least twice a day with a disinfectant and ward areas need to be kept scrupulously clean. The priority is the adequacy and state of the toilets and washing areas/bathrooms. Best practice is for these to be kept scrupulously clean throughout the twenty-four hours by frequent cleaning and disinfection (See also Section 5 for more information about how to clean).

All these issues may be seen as costly for a health service but save costs when balanced against the cost of the increase in hospital stay due to infection, the additional medications needed and the sometimes unnecessary deaths.



*A method for using different coloured cleaning cloths for different surfaces*

## What else can be done to reduce the risk of a healthcare related infection?

Micro-organisms become more difficult to treat if they develop a resistance to antibiotics. This occurs if antibiotics are used indiscriminately. Best practice is for every health facility to develop and use an antibiotic policy to control and restrict the use of antibiotics. For this to be effective all prescribing health workers need to respect and follow the policy.

Other ways of reducing infection include:

- Limiting the number of people who look after a child. The risk of cross contamination is reduced if a child's parent/carer does as much of the child's care as possible and the number of health workers who have contact with the child is limited, particularly in high-risk areas such as intensive care
- Avoiding crowding. Adequate space between beds will also limit the risk of cross-infection



*Unnecessary over-crowding of babies in a ward in Eastern Europe*

- Having a system to ensure that equipment, surfaces and other objects are cleaned before use by another child
- Having a lead health worker and when resources permit an infection control team to develop and supervise all the infection control practices following wide consultation.
- Having a wound management policy (including an umbilical cord management policy)
- Having healthy staff

Best practice is for all health workers to have regular training about these security and safety issues and an opportunity to audit compliance with the policies to see if these are achieved at the 'best possible' level with the resources available.

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