



TRAINING & CONSULTANCY LTD

Infection Prevention & Control - Level 2

Objectives

By the end of the course candidates will:

- Know how individuals can contribute to infection prevention and control
- Have a knowledge and demonstrate the standard prevention and control precautions relevant to the role including:
 - Hand Hygiene
 - Personal Protective Equipment (PPE)
 - Management of Blood and Body Fluid Spillage
 - Management of the Environment
 - Management of Care Equipment
- Recognise and act when their personal fitness to work may pose a risk of infection to others
- Be able to describe the healthcare organisation's and their own responsibilities in terms of current infection prevention and control legislation
- Know how to obtain information about infection prevention and control within the organisation
- Understand what is meant by the term healthcare associated infections
- Understand the chain of infection and how this informs infection prevention and control practice
- Demonstrate an understanding of the routes of transmission of micro-organisms
- Understand individual roles and responsibilities for the three levels of decontamination
- Use single use items appropriately
- Be able to conduct a risk assessment in respect of ensuring infection prevention and control
- Explain different alert organisms and conditions that pose an infection risk
- Describe how to safely manage patients with specific alert organisms.

What is Infection and how is Infection Spread?

A pathogen is an organism capable of causing disease in another organism e.g. a bacteria or virus. An infection occurs when pathogens enter the body. An infection can be localised or systemic e.g. a localised infection caused by a boil or systemic infection such as HIV. Micro-organisms that cause disease are referred to as pathogenic organisms.

They may be classified as follows:

Bacteria are minute organisms about one-thousandth to five-thousandth of a millimetre in diameter. They are susceptible to a greater or lesser extent to antibiotics.

Type of bacteria	Characteristics	Transmission/Diseases
<i>Staphylococcus aureus</i>	Normally present in the nasal passages and on the skin. 30% of the population will carry it at any one time.	Spread by direct contact, coughing and sneezing. Causes skin infections such as boils or impetigo etc.
<i>Streptococcus pneumoniae</i>	Normally present in the throat.	Spread directly by infected droplets when coughing or sneezing, or indirectly through contaminated articles e.g. used tissues.
<i>Escherichia coli</i>	Normally present in the gut of animals. There are many strains.	Spread by oral-faecal contamination contact with infected animals and contaminated food. Can cause urinary tract infection, septicaemia, kidney disorders and diarrhoea.
<i>Salmonella</i>	Common on raw meats and poultry	Spread person to person by oral-faecal route and by poor food handling/cooking. Causes food poisoning.
<i>seudomonas</i>	Can be water borne.	Infects wounds, burns and can cause severe urinary tract infections.

Viruses are much smaller than bacteria and although they may survive outside the body for a time they can only grow inside cells of the body.

- Viruses are not susceptible to antibiotics, but there are a few anti-viral drugs available which are active against a limited number of viruses.

Pathogenic Fungi can be either moulds or yeasts. For example, a mould which causes infections in humans is *Trichophyton rubrum* which is one cause of ringworm and it may also infect nails.

- A common yeast infection is thrush caused by *Candida albicans*.

Protozoa are microscopic organisms, but larger than bacteria. Free-living and non-pathogenic protozoa include amoebae and paramecium.

- Examples of protozoa which are of medical importance include: *Giardia lamblia* which can cause an enteritis (symptoms of diarrhoea).

Parasites

Worms are not always microscopic in size but pathogenic worms do cause infection and some can spread from person-to-person.

Prions are infectious protein particles.

- Example: the prion causing (New) Variant Creutzfeldt-Jakob Disease (vCJD).

The aim of infection control is to:

- To prevent infection passing from the environment to people.
- To prevent infection passing from one person to another.

Page | 4

During the course of your work you will be passing from one service user to another. It is important that you do not transmit known or unknown infections to yourself or others.

Healthcare-Associated Infections

Healthcare-associated infections (HCAIs) can develop either as a direct result of healthcare interventions such as medical or surgical treatment, or from being in contact with a healthcare setting. The term HCAI covers a wide range of infections.

The most well-known include those caused by MRSA, *Clostridium difficile* and E. coli

HCAIs cover any infection contracted:

- As a direct result of treatment in, or contact with, a health or social care setting
- As a direct result of healthcare delivery in the community
- As a result of an infection originally acquired outside a healthcare setting (for example, in the community) and brought into a healthcare setting by patients, staff or visitors and transmitted to others within that setting (for example, norovirus).

Alert Organisms and Conditions

These are organisms or conditions which have the potential to give rise to hospital outbreaks.

Alert organisms are identified in the microbiology laboratory and include organisms such as:

- MRSA and other antibiotic resistant organisms
- Glycopeptide Resistant Enterococci (GRE)
- Extended Spectrum Beta lactamases (ESBLs)
- *Clostridium difficile*,
- *Streptococcus pyogenes*
- Norovirus
- Respiratory Syncytial Virus (RSV).

HCAIs and Alert Organisms and Conditions pose a serious risk to patients, clients, staff and visitors to health and social care premises.

They can incur significant costs for the NHS and others, and cause significant morbidity and mortality for those infected. You are responsible for following the hospitals policies and procedures on HCAIs and Alert Organisms and Conditions.

Safe management of patients with these conditions include using standard precautions and isolation. These will be discussed later in the course.

Infections can be spread in a variety of ways and it is important that we understand how so that we can do our best to try and control the spread of infection.

We call the movement of infection “**transmission**”.

The faecal-oral route – a common route for spreading gastrointestinal infections.

Infection can occur when organisms capable of infecting the gastro-intestinal tract are ingested.

When these organisms are excreted faecally by an infected person, faecal/oral spread is said to occur.

If personal hygiene is insufficient, the stool (faeces) may contaminate hands, food, water, surrounding objects and surfaces.

The easy spread of intestinal infections is also due to the fact that some of the germs can survive on surfaces and objects for long periods of time.

Food-borne infection:

e.g. food poisoning caused by bacteria which have multiplied in the food which we eat which may cause vomiting and diarrhoea and more seriously dehydration and in severe cases even death.

Water-borne infection:

Waterborne illness are caused by consuming water contaminated by disease-causing microbes or pathogens. Many waterborne pathogens can also be acquired by consuming contaminated food or beverages, from contact with animals or their environment, or through person-to-person spread. Contaminated water can carry diseases such as typhoid, cholera, dysentery, poliomyelitis and hepatitis A.

Airborne infection:

Some diseases e.g. Legionnaire’s disease can be found in water sources and be spread through poorly maintained air conditioning systems or shower heads.

Insect-borne infection

Of the many diseases spread by insects, very few are actually caused by the insects themselves but rather, by other organisms passed on when they feed or bite.

Mosquitoes, ticks, and flies are not only annoying nuisances, but can spread a variety of nasty diseases, including Malaria, Lyme Disease, and African Sleeping Sickness

Direct contact transmission occurs when there is physical contact between an infected person and a susceptible person. Sexually transmitted diseases such as gonorrhoea and HIV need intimate human contact to be transmitted.

Although scabies can be spread by direct contact just by sitting next to a person with scabies.

Infections, particularly skin infections such as impetigo and ringworm, are spread by direct physical contact

Indirect Contact

Indirect spread of infection is said to occur when an intermediate carrier is involved in the spread of pathogens e.g. fomite or vector.

A fomite is defined as an object, which becomes contaminated with infected organisms and which subsequently transmits those organisms to another person.

Examples of potential fomites are bedpans, urinals, thermometers, oxygen masks or practically any inanimate article.

Droplet spread

Inhalation spread occurs when pathogens exhaled or discharged into the atmosphere by an infected person are inhaled by and infect another person.

Germs that cause colds, strep throats etc. are found in the saliva and secretions of the nose. Also other minor infections including the eyes, nose and throat.

When people cough, sneeze, have runny noses, or do anything that spreads droplets of secretions from the respiratory tract, the germs can spread. The germs can then be inhaled, or they may land in a person's eye, nose or mouth. Indirect spread may also occur because some viruses can survive in the environment (e.g. counter tops) for days at a time.

Coughs and sneezes spread diseases!!

Direct inoculation

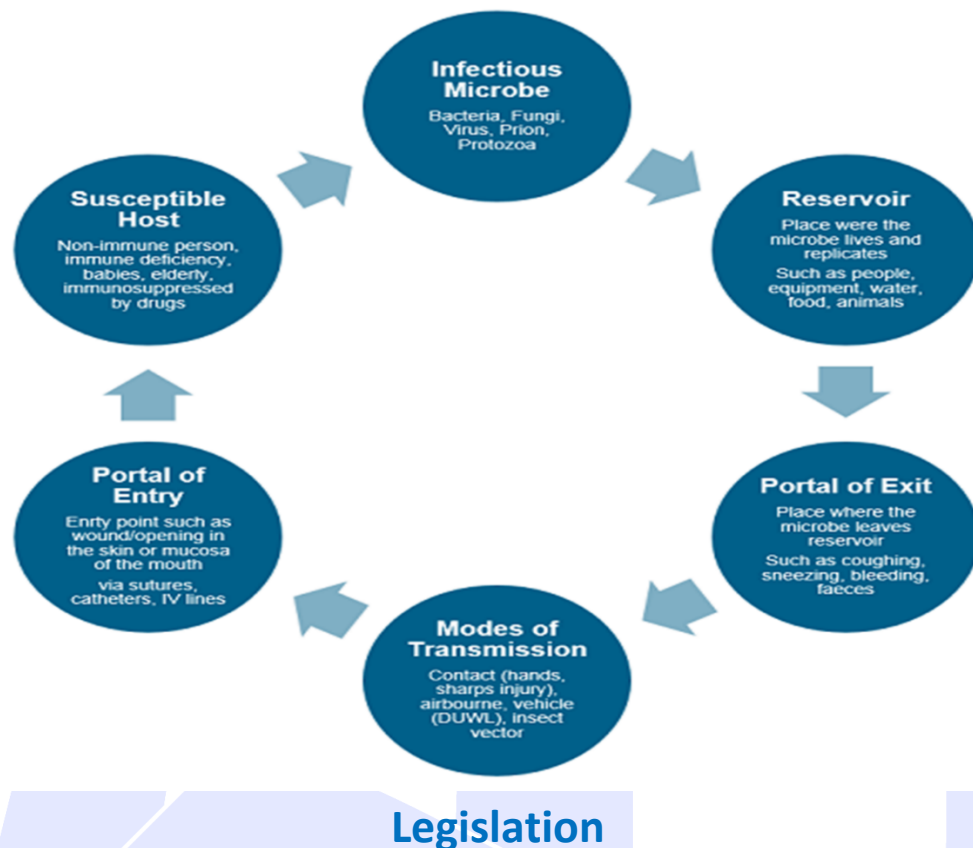
Drug users who share needles with others risk getting hepatitis and HIV infection as a result of inoculating themselves with the blood from an infected individual.

Vertical transmission

From the placenta to the unborn child.

How we control infection is dependent upon identifying the mode of spread and interrupting the cycle of infection.

TRAINING & CONSULTANCY LTD



As care workers we need to be aware of the legislation that covers our health, welfare and safety at work and know how to protect both ourselves, our colleagues and our service users from harm.

All employees are responsible for taking action to prevent the spread of infection, in accordance with legislation and local and organisational policies and procedures.

They also have a personal and moral responsibility, as members of a caring society and profession.

It is the employee's responsibility to make themselves familiar with the organisations policies and procedures and report to their line manager with any concerns.

The main purpose of health and safety legislation is to encourage good standards and to prevent harm to people at work. Health and safety is essential and not an option.

Therefore, we are responsible for ensuring that we maintain good standards of infection control.

Failure to follow precautions and policy could mean that we are putting our service users, our colleagues, our families and ourselves at risk.

Risk Assessment

The legislation that relates to risk assessments is **The Management of Health and Safety at Work (Amendment) Regulation 2006**.

Regulation 3 states that every employer shall make a suitable and sufficient assessment of:

- The risks to the health and safety of his employees to which they are exposed whilst they are at work; and
- The risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertaking

Infection Control Risk Assessment

An infection control risk assessment must be undertaken to carried out to assess infection hazards and risks and ensure that, where possible, infection risks are eliminated, reduced, contained and managed appropriately.

The aim of an infection control risk assessment is to identify specific tasks that may carry the risk of contamination or the spread of disease.

The infection control risk assessment will need to:

1. Identify the hazards within the workplace
2. Decide who might be harmed and how.
3. Evaluate the risks using a rating such as low, medium or high risk. The precautions and controls put in place must be proportionate to the risks.
4. Record the findings of the risk assessment and inform all relevant persons.
5. Review the assessment and update when changes are required.

C.O.S.H.H. - Control of Substances Hazardous to Health

Micro-organisms are covered in COSHH by the term biological agents.

These are defined as any micro-organism, cell culture, prion or human endoparasite whether or not genetically modified which may cause infection, allergy, toxicity or otherwise create a hazard to human health

Substances can take many forms and include:

- Chemicals
- Products containing chemicals
- Fumes
- Dusts
- Vapours
- Mists
- Nanotechnology
- Gases and asphyxiating gases
- Biological agents (germs).

Any substance which is hazardous will have a warning label on the container.

Substances **MUST NEVER** be removed from the original container and decanted into another container without the correct labelling.

Every hazardous substance will have a COSHH data sheet giving instructions on dealing with spills, splashes or any other problems.

Using hazardous substances can put people's health at risk. COSHH requires employers to control exposures to hazardous substances to protect both employees and others who may be exposed from work activities.

What are Hazardous Substances?

Hazardous substances are anything that can harm your health when you work with them if they are not properly controlled e.g. by using adequate ventilation. They are found in nearly all work places e.g. factories, shops, healthcare establishments, mines, farms and offices.

They can include:

- Substances used directly in work activities e.g. glues, paints, cleaning agents
- Substances generated during work activities e.g. fumes from soldering, welding and mixing cleaning substances together
- Naturally occurring substances e.g. grain dust, bodily fluids, bacteria

For the vast majority of commercial chemicals, the presence (or not) of a warning label will indicate whether COSHH is relevant. For example, household washing up liquid doesn't have a warning label but bleach does - so COSHH applies to bleach but not washing up liquid when used at work.

Chemicals can enter your body in 4 main ways:

1. **Skin absorption or eye contact** —this is especially true of liquid chemicals
2. **Inhaling hazardous fumes**, vapours, mists, or dust. These can be taken into the lungs and travel from there into the bloodstream and to other organs of the body
3. **Swallowing or ingestion**. Even though you may not intentionally swallow hazardous chemicals, chemicals can be transferred onto food if your hands are contaminated, and then swallowed accidental
4. **Direct penetration**, such as when a chemical enters the body through an open cut or skin puncture.

Types of Hazardous Waste in the healthcare sector:

- Human tissue
- Contaminated disposable sharp instruments or items
- Urine, blood, vomit, faeces, sputum
- Items used to dispose of urine, faeces and other bodily secretions or excretions, including used disposable bed pans, bed pan liners, incontinence pads, stoma bags and urine containers

Cleaning fluids, powders such as bleach and disinfectant

Other Types of Hazardous Waste

We need to remember that in the course of our work we come into contact with hazardous waste:

- Human tissue
- Bodily fluids
- Contaminated sharps

Disposal of Hazardous Waste Is governed by The Waste (England and Wales) (Amendment) Regulations 2012. All waste must be disposed of by using the correct bags:-



Swabs and Dressings - swabs, wound dressings, bandages, blood contaminated waste (excluding sharps)



Phlebotomy Sharps - sharps used to take blood samples or administer saline



Sharps with Medicinal Residue - sharps waste from dispensing medicine with traces of medicine



Cytotoxic and Cytostatic Waste - waste relating to the dispensing of cytotoxic and cytostatic drugs only



Pharmaceutical Waste - medicines, controlled drugs once denatured by specialist disposal kits



Offensive Waste - incontinence waste, nappies



Anatomical Waste - surgical waste, tissue, solidified embalming fluid

Yellow bags for the disposal of sanitary or clinical waste in service users own home can be ordered from the Council and will be collected weekly

When service users use needles and syringes in their home they will be supplied with a yellow plastic sharps box. Used needles must be discarded in these boxes. Under no circumstances should needles be put into ordinary household rubbish.

Following the 8 steps to COSHH

Employers must....

- **Step 1** Work out what hazardous substances are used in your work place and find out the risks from using these substances to people's health.
- **Step 2** Decide what precautions are needed before starting work with hazardous substances.
- **Step 3** Prevent people being exposed to hazardous substances, but where this is not reasonably practicable, control the exposure.
- **Step 4** Make sure control measures are used and maintained properly and that safety procedures are followed.
- **Step 5** If required, monitor exposure of employees to hazardous substances.
- **Step 6** Carry out health surveillance where your assessment has shown that this is necessary or COSHH makes specific requirements.
- **Step 7** If required, prepare plans and procedures to deal with accidents, incidents and emergencies.
- **Step 8** Make sure employees are properly informed, trained and supervised.

What next?

The subsequent reviews of COSHH regulations since 1998 have concluded that the present system of health and safety regulation generally works well, though it identified several areas where improvements can be made.

Although the Review has ended, work in support of "Better Regulation" continues. The Review Program has formed an important basis for long-lasting successes in improving workplace health and

safety. Policies and initiatives following from it continue to support priority aims and objectives, and will be refined in the coming years, adapting and evolving to take account of changes in technology, workplace trends and the needs of those involved.

Personal Protective Equipment at Work 1992

Employers are required to supply personal protective equipment to employees who may be exposed to a risk at work.

R.I.D.D.O.R

Reporting of Injuries, Diseases and Dangerous Occurrences Regulation 1995.

These regulations came into force April 1996

RIDDOR – What you need to know?

It is a requirement that some work-related accidents, diseases and dangerous occurrences must be reported to the Health & Safety Executive.

All accidents that arise from or are connected to work must be recorded in the accident/incident book at the work place where you had the accident, and must also be reported to the agency if you work for one.

When does an employee need to make a report?

Accidents that arise out of or in connection with a work activity must be recorded in the accident book of the establishment where the accident happened. Accidents to clients/patients must also be recorded in the accident book and in the Service User's Care Plan.

What should the employer report?

Reporting accidents and ill health at work is a legal requirement. The information enables the Health and Safety Executive (HSE) and local authorities (referred to as '*the enforcing authorities*') to identify where and how risks arise and to investigate serious accidents. They can then help you and give advice on how to reduce injury, ill health and accidental loss.

Death or major injury

If there is an accident connected with work where someone is killed or suffers a major injury (including as a result of physical violence); or a member of the public is killed or taken to hospital; the person in charge of Health and Safety within that environment must notify the enforcing authority without delay (e.g. by telephone). They will ask for brief details about the business, the injured person and the accident; and within ten days a completed accident report must be sent to the authority.

Definition of major injuries, dangerous occurrences and diseases reportable are:

- Fracture other than to fingers, thumbs or toes
- Amputation

- Dislocation of the shoulder, hip, knee or spine
- Loss of sight (temporary or permanent)
- Chemical or hot metal burn to the eye or any penetrating injury to the eye
- Injury resulting from an electric shock or electrical burn leading to unconsciousness or requiring resuscitation or admittance to hospital for more than 24 hours
- Any other injury: leading to hypothermia, heat-induced illness or unconsciousness; or requiring resuscitation; or requiring admittance to hospital for more than 24 hours
- Unconsciousness caused by asphyxia or exposure to a harmful substance or biological agent
- Acute illness requiring medical treatment, or loss of consciousness arising from absorption of any substance by inhalation, ingestion or through the skin; acute illness requiring medical treatment where there is reason to believe that this resulted from exposure to a biological agent or its toxins or infected material

Over-seven-day injury

If there is an accident connected with work (including an act of physical violence) and anyone working as an employee or a self-employed person working on the premises, suffers an over-seven day injury an accident report form must be sent to the authority within ten days. An over-seven-day injury is one which is not major but results in the injured person being away from work *or* unable to do the full range of their normal duties for more than seven days (including any days they wouldn't normally be expected to work such as weekends, rest days or holidays) not counting the day of the injury itself.

Disease

If a doctor notifies the employer that an employee suffers from a reportable work-related disease a report form must be completed.

Reportable diseases include:

- Certain poisonings
- Some skin diseases such as occupational dermatitis, skin cancer, chrome ulcer, oil folliculitis/acne
- Lung diseases including occupational asthma, farmer's lung, pneumoconiosis, asbestosis, mesothelioma
- Infections such as leptospirosis, hepatitis, tuberculosis, anthrax, legionellosis and tetanus; and more recently MRSA

What records must be kept?

A record of any reportable injury, disease or dangerous occurrence for three years after the date on which it happened, to include:

- The date and method of reporting
- The date, time and place of the event
- Personal details of those involved
- A brief description of the nature of the event or disease

Maintaining Good Infection Control Standards – STANDARD PRECAUTIONS

The Government together with the Department of Health and other professional bodies are tasked with reducing the number of infections.

Page | 15

Infections are very costly to treat in terms of the amount of money it costs but also in terms in the number of lives that are lost – particularly in hospital acquired infections.

The people who are most at risk of being most severely affected by infections are the elderly, the very young, people with diabetes and people who have very low immune systems such as those with cancer or HIV because their bodies cannot fight the infection.

Many of the service users that we look after are susceptible to infection. It is our duty of care to ensure that we do not expose our service users or ourselves to infection.

There are 10 elements to Standard Precautions

1. Hand Hygiene
2. PPE
3. Clinical waste
4. Linen
5. Spillages
6. Cough etiquette
7. Occupational Exposure
8. Environment
9. Isolation
10. Patient Care Equipment

1. Hand Hygiene

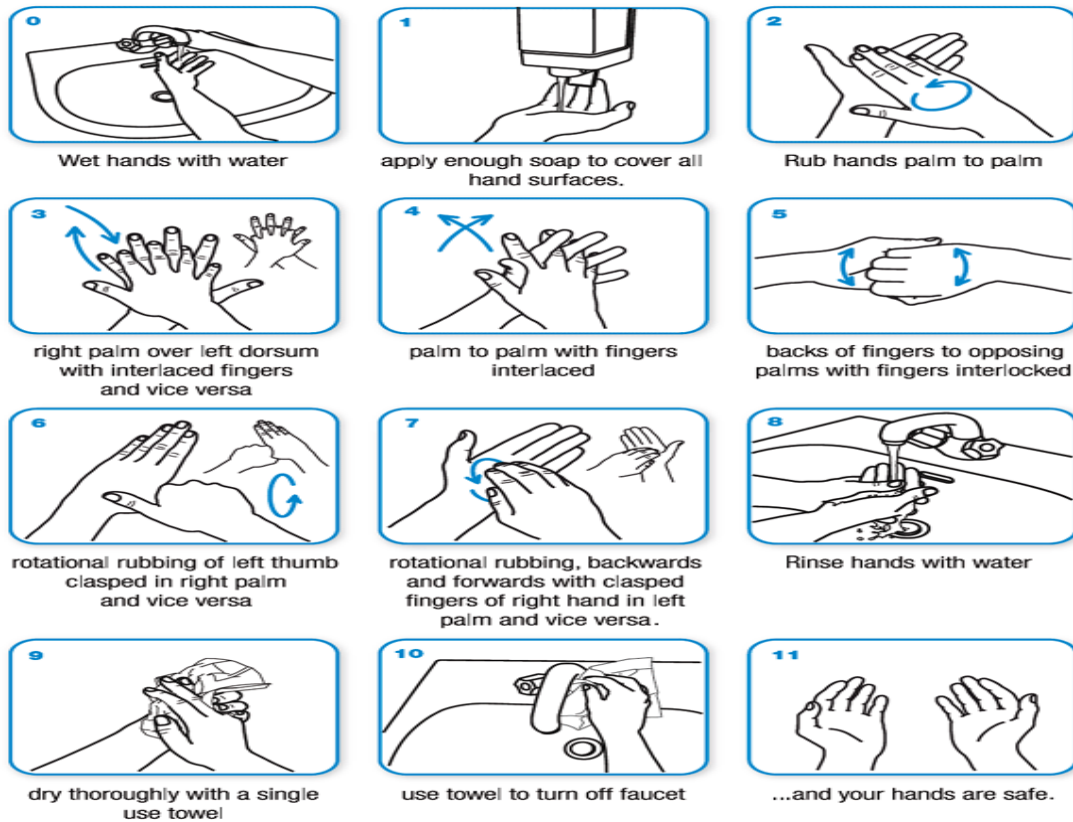
There are two methods of hand decontamination, which are hand washing, using soap and water, and handrubs, using alcohol or non-alcohol preparations.

Hand decontamination is recognised as the single most effective method of controlling infection.

Hands must be decontaminated:

- Before and after each work shift or work break
- Before and after physical contact
- After handling contaminated items
- Before putting on, and after removing, protective clothing, including gloves
- After using the toilet, blowing your nose or covering a sneeze

- Whenever hands become visibly soiled
- Before preparing or serving food
- Before eating, drinking or handling food, and before and after smoking



Handrubs/Alcohol Gels

Alcohol hand gels are not suitable for use on hands that are contaminated with organic matter e.g. faeces or during diarrhoeal illness. The handrub solution must come into contact with all surfaces of the hand. The hands must be rubbed together vigorously, paying particular attention to the tips of the fingers, the thumbs and the areas between the fingers, until the solution has evaporated and the hands are dry.

TRAINING & CONSULTANCY LTD

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

🕒 Duration of the entire procedure: 20-30 seconds

1a Apply a palmful of the product in a cupped hand, covering all surfaces;

1b Rub hands palm to palm;

2 Rub hands palm to palm;

3 Right palm over left dorsum with interlaced fingers and vice versa;

4 Palm to palm with fingers interlaced;

5 Backs of fingers to opposing palms with fingers interlocked;

6 Rotational rubbing of left thumb clasped in right palm and vice versa;

7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

8 Once dry, your hands are safe.

World Health Organization

Patient Safety
A World Alliance for Safer Health Care

SAVE LIVES
Clean Your Hands

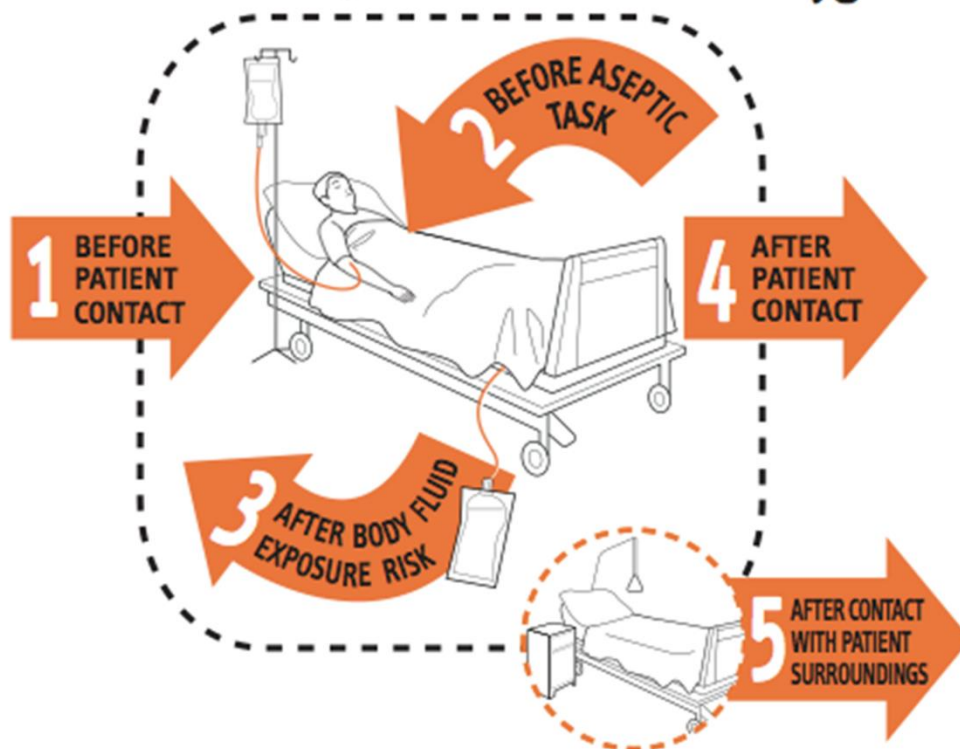
All reasonable precautions have been taken by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. WHO acknowledges the Hôpital Universitaire de Genève (HUG), in particular the members of the Infection Control Programme, for their active participation in developing this material.

May 2009

Five Moments for Hand Hygiene

The newly developed Five Moments for Hand Hygiene has emerged from the WHO Guidelines on Hand Hygiene in Health Care (Advanced Draft) to add value to any hand hygiene improvement strategy. Quite simply, it defines the key moments for hand hygiene, overcoming misleading language and complicated descriptions.

WHEN? Your 5 moments for hand hygiene



Your 5 Moments for Hand Hygiene



Personal Hygiene

Your own standards of personal hygiene should be good. Uniforms should always be kept clean and a fresh one used each shift. Hair should be kept clean and if long should be tied back when delivering care to service users and preparing food. Keep your fingernails clean and trimmed short. False fingernails should not be worn (they can come off and cause trauma to a service user's skin.

Jewellery should be kept to a plain wedding band and just stud earrings. Watches and bracelets can harbour infections and also can scratch and cause injury to service users.




Any cuts, abrasions or wounds should be covered.

You must be aware of your own personal fitness level and health statuses at all times and report any problems you may be experiencing to ensure that local policy is followed and you do not pose a risk to other in terms of infection control and conversely, that others do not pose a risk to you.

2. Personal Protective Equipment

Selection of personal protective equipment (PPE) must be based on an assessment of the risk of transmission of infection between the client and the risk of contamination of the healthcare workers' clothing and skin by client blood and body fluids.

What to Wear When

<p>No exposure to blood/body fluids anticipated</p>	<p>Exposure to blood/body fluids anticipated, but low risk of splashing</p>	<p>Exposure to blood/body fluids anticipated, but low risk of splashing</p>
		
<p>No protective clothing</p>	<p>Wear gloves and a plastic apron</p>	<p>Wear gloves, plastic apron and eye/mouth/nose protection</p>

3. Clinical Waste

All clinical waste must be disposed of in the correctly as governed by The Waste (England and Wales) (Amendment) Regulations 2012 immediately.

4. Linen

Handle, transport, and process used linen in a manner which:

- Prevents skin and mucous membrane exposures and contamination of clothing.
- Avoids transfer of pathogens to other patients and or the environment.

Always wear gloves and aprons when handling linen. Any heavily soiled or contaminated linen should be placed in a separate linen bag, usually a red bag.

5. Spillages

All staff need to be aware of the organisation policy on blood and bodily fluid spillage.

- Deal with blood and body fluid spills quickly and effectively.
- Always wear PPE's when managing spillage
- Remove organic matter using the paper towels and discard as clinical waste
- Use cleaning solutions as per hospital policy
- Dispose of PPE's
- Wash Hands

6. Cough Etiquette

- Cover your nose and mouth when coughing/sneezing with tissue or mask.
- Don't cough, sneeze or blow your nose near a service users.
- Dispose of used tissues and masks appropriately.
- Perform hand hygiene after contact with respiratory secretions.

7. Occupational Exposure

All staff should be fully immunised according to national policy. Staff who may have direct contact with blood or blood-stained body fluids should be immunised against Hepatitis B.

Care should be taken to avoid accidental needlestick injury, as exposure to contaminated blood and blood-stained body fluids may be associated with transmission of blood-borne viruses.

Sharps include needles, lancets, glass ampoules, sharp instruments, broken crockery and glass.

Sharps must be handled and disposed of safely to reduce the risk of exposure to blood-borne viruses. Always take extreme care when using and disposing of sharps. Whenever possible avoid using sharps.

Sharps Safety

- Clinical sharps should be single-use only
- Sharps must not be passed directly from hand-to-hand and handling should be kept to a minimum
- Needles must not be re-capped, bent, broken or disassembled before use of disposal
- Needle safety devices must be used where there are clear indications that they will provide safer systems of working for healthcare personnel
- Used sharps must be discarded into a sharps container at the point of use by the user
- Sharps containers must not be filled above the mark indicated on the container

- Close the aperture to the sharps container when carrying or, if left unsupervised, to prevent spillage or tampering
- Place sharps container on a level stable surface
- Carry sharps containers by the handle - do not hold them close to the body
- Never leave sharps lying around
- Do not try to retrieve items from a sharps container
- Do not try to press sharps down in the sharps box to make more room
- Lock the container when it is $\frac{3}{4}$ full using the closure mechanism
- Place damaged sharps containers inside a larger container - lock and label prior to disposal.
- Do **not** place sharps inside a waste bag
- Containers in public areas must be located in a safe position, and must not be placed on the floor.

A sharp injury/contamination incident includes:

- Inoculation of blood by a needle or other sharp
- Contamination of broken skin with blood
- Blood splashes to mucous membrane e.g. eyes or mouth
- Swallowing a person's blood e.g. after mouth-to-mouth resuscitation
- Contamination where the individual has an open wound, and clothes have been soaked by blood
- Bites (where the skin is broken).

Following a Sharps injury, you should:

- Encourage the wound to bleed – do not suck
- Wash well under running water
- Cover with a water proof dressing
- If bodily fluid in eyes: Irrigate with cold water
- If bodily fluid in mouth: do not swallow – rinse several times
- Report to manager
- Take a history and make a risk assessment
- Review your Hepatitis B vaccine status
- Take 10ml clotted blood from the recipient and, if possible, the 'source' (with informed consent)
- Send the samples to the microbiology department marked 'needlestick Injury'
- Ensure appropriate follow-up
- Complete an accident form

If the source is known or a risk of having HIV the injured person should contact Accident & Emergency, and attend if possible within the hour

8. Environment

Use adequate procedures for the routine cleaning and disinfection of environmental and other frequently touched surfaces.

The Medical and Healthcare Products Regulatory Agency (MHRA) defines the following terms:

Page | 22

Cleaning 'is a process which physically removes contamination but does not necessarily destroy microorganisms'.

The reduction of microbial contamination cannot be defined and will depend upon many factors including the efficiency the cleaning process and the initial bio-burden. Cleaning is an essential prerequisite of equipment decontamination to ensure effective disinfection or sterilisation can subsequently be carried out.

Disinfection 'is a process used to reduce the number of viable microorganisms, which may not necessarily inactivate some viruses and bacterial spores'. Disinfection will not achieve the same reduction in microbial contamination level as sterilisation.

Sterilisation 'is a process used to render the object free from viable microorganisms, including spores and viruses'.

Colour-Code for Hygiene

Based on the Safer Practice Notice – Colour-coding hospital cleaning materials and equipment, published by the National Patient Safety Agency. This may not all be possible in domiciliary settings.

THE GOLDEN RULE: WORK FROM THE CLEANEST AREA TOWARD THE DIRTIEST AREA. THIS GREATLY REDUCES THE RISK OF CROSSCONTAMINATION.

Risk categories / levels

To prevent the spread of infection it is essential that equipment is decontaminated to the appropriate level:

Low risk - items used on intact skin, should be cleaned with detergent e.g. mattresses, wash bowls.

Medium risk – items that have been in contact with mucous membranes, or contaminated with blood/body fluids or used on an infected patient should be disinfected e.g. commodes.

High risk – items that penetrate skin or mucous membranes, or enter sterile body areas e.g. surgical instruments or an aseptic technique must be sterilised.

National Colour Coding Scheme



9. Isolation

The decision to isolate a patient is taken by the medical team caring for the patient, in consultation with the nursing staff and Infection Control Team.

Isolation is usually carried out in single rooms with hand washing facilities and with the door closed. Occasionally, a group of patients with a particular infection may be cohort nursed together in a defined ward area.

A patient or groups of patients (a cohort) can be successfully barrier nursed in a ward, but this should only be done as a last resort.

It is the responsibility of ALL members of staff to comply with Isolation and Infection Control procedures. Remember that infections are generally transmitted by health care workers.

In order to prevent the spread of micro-organisms, it is often necessary to isolate patients.

There are two types of isolation:

Source Isolation: aims to confine the infectious agent and prevent its spread

Protective Isolation: aims to protect an immunocompromised patient who is at special risk from environmental organisms or those carried by attending staff and visitors.

Patients with certain illnesses should be isolated immediately when facilities are available, for example: Page | 24

- Diarrhoea and vomiting
- Undiagnosed rashes and fevers
- Newly diagnosed or suspected “open” tuberculosis
- Suspected Group A streptococcal infection (i.e. acute sore throat or cellulitis)
- Patients shedding methicillin-resistant *Staphylococcus aureus* (MRSA), glycopeptide-resistant enterococci (GRE), aminoglycoside-resistant Gram-negative organisms, etc.
- Inter-hospital transfers known to be colonised with resistant bacteria

Source Isolation Procedure

Prior to moving the patient into a single room:

- Explain the need for isolation to the patient
- Remove all unnecessary equipment from the room
- Ensure that mattresses and pillows have protective covers
- Place a Source Isolation notice on the door of the room
- Consider whether people entering the room should be immune to the patient's disease
- Record in the nursing care plan the reason for isolation, the date started and any special precautions necessary to prevent the spread of infection
- Inform the Infection Control Team
- If appropriate, inform household and catering departments

Equipment required for source isolation:

Outside room:

- Coat hook
- Source Isolation notice (yellow) or equivalent
- Disposable aprons (colour depending on your local hospital practice)
- Patient's charts (except ICU)
- Clear / red (depending on your local hospital practice) plastic bags (for double-bagging linen)
- Alcohol gel or alcoholic chlorhexidine hand rub

Inside room:

- Unsterile disposable gloves
- Skin disinfectant for handwashing (e.g. chlorhexidine gluconate in a proper dispenser)
- Paper towels
- Yellow/Orange plastic bag for all waste in a foot-operated sack holder
- Red alginate-stitched plastic bags (for linen)

- "Sharps" disposal box, preferably wall-mounted
- Dedicated cleaning equipment (if space available)

Staff Responsibilities

Before entering the room, staff members should:

Page | 25

- Remove white coats or outside clothing (preferably leave on hook outside room)
- Remove wristwatch and jewellery and roll up sleeves
- Put on a (colour depending on your local hospital practice) apron

Inside the room (or visiting bed space):

- If the patient is to be examined or before any procedure, wash and dry hands thoroughly or, if hands are clean, use alcohol gel and put on non-sterile examination gloves
- Perform patient task (change disposable gloves if they become soiled during the procedure)
- Do not touch the patient or anything else in the room unnecessarily
- Do not sit on the bed
- Sharps must be disposed of in the sharps box inside the isolation room

Before leaving the room or bed space:

- Remove gloves and apron and discard into yellow/orange bag
- Bag linen in red / clear alginate bag
- Wash hands in antiseptic hand wash and dry thoroughly

Outside the room:

- Close the door after leaving the room
- Place alginate linen bag into red / clear plastic bag
- Wash hands again in antiseptic hand wash, OR
- Rub hands using alcohol gel, alcoholic chlorhexidine hand rub or equivalent

Visitors of Patients in Source Isolation

The risks to visitors should be assessed (low risk for MRSA, high risk for chickenpox). If in doubt, ask the Infection Control Team before allowing visits.

Visits by children should be discouraged.

The following actions should be followed if a visitor is allowed to see a patient in source isolation:

- Visitors should be reassured by staff as to the risks of catching infection
- Visitors should remove outdoor clothing before entering the room
- There is usually no need for visitors to wear protective clothing
- Visitors should not sit on the patient's bed
- Visitors should not eat in the patient's room
- Visitors should be encouraged to wash their hands or use alcohol gel before leaving the room and not to do tasks for other patients

Protective Isolation Procedure

Protective isolation aims to protect an immunocompromised patient who is at special risk from environmental organisms or those carried by attending staff and visitors.

The procedure for Protective Isolation is the same as for Source Isolation although the emphasis is on preventing contaminants entering the isolation room.

10. Patient Care Equipment

Handle equipment soiled with blood, body fluids, secretions, and excretions in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of pathogens to other patients or the environment.

Clean, disinfect, and reprocess reusable equipment appropriately before use with another patient.

Single use

- Single use items are marked 'single use' or a '2' with a line through it. Single use items must not be re-used
- Single patient use items e.g. oxygen mask, nebulizer can be re-used on the same patient, but not on any other patient.
- When purchasing new equipment check the manufacturer's instructions on how it can be decontaminated and check this is achievable, check with ICT (Information Communication Technology) if in doubt.

When considering infection control – ALL health care workers MUST use standard precautions at all times.

Think before you undertake any care procedure and use the appropriate precautions.

It is the responsibility of your employer to maintain an infection control policy and procedure.

It is your responsibility to be familiar with these policy/procedures and follow them.

If you are unsure where to find your organisation's policies and procedures, you must ask your line manager to provide them for you.



TRAINING & CONSULTANCY LTD