

**ESSEX HEALTH PROTECTION UNIT**

**HOSPICE**

**INFECTION CONTROL GUIDELINES**



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# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION A – INTRODUCTION AND CONTACTS

### 1. Introduction

Infection control is an important part of an effective risk management programme to improve the quality of patient care and the occupational health of staff.

In addition to the need to prevent avoidable infection, which arises from ethical considerations, the organisation has a legal obligation to take appropriate steps to protect patients, staff and visitors from harm.

### 2. Scope

The manual includes guidance on care given in hospices.

### 3. Responsibility

The Chief Executive is responsible for ensuring that there are effective arrangements in place for the control of infections.

The manual requires all staff, agency staff and contractors to follow the guidance contained within this manual.

### 4. Contacts

Infection Control advice can be obtained from the Essex Health Protection Unit., 8 Collingwood Road, Witham, Essex CM8 2TT.

Main office: 0845 1550069. **Please note that this is a new telephone number.**

New website address: [www.essexhpa.org.uk](http://www.essexhpa.org.uk).

Out of working hours: For **URGENT** Communicable Disease enquiries call 01245 444417, and ask for the on-call Public Health Person to be paged.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION B – INFECTION, ITS CAUSES, SPREAD AND DEFINITIONS

### 1. Introduction

This guideline explains the causes and spread of infection.

### 2. The Causes of Infection

Micro-organisms are integral to infections, and a basic insight into the characteristics of commonly encountered micro-organisms is essential for good infection control practice. 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 across. They are susceptible to a greater or lesser extent to antibiotics.

**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 which can also infect nails. A common yeast infection is thrush caused by an organism called *Candida albicans*.

**Protozoa** are microscopic organisms, but larger than bacteria. Free-living and non-pathogenic protozoa include amoebae and paramecium. Examples of medical importance include *Giardia lamblia*, which causes an enteritis (symptoms of diarrhoea).

**Worms** are not always microscopic in size but pathogenic worms do cause infection and some can spread from person to person. Examples include threadworms and tapeworms.

**Prions** are infectious protein particles. Examples include New Variant Creutzfeldt-Jakob Disease (vCJD).

### 3. The Spread of Infection

There are various means by which micro-organisms can be transferred from their place of reservoir to susceptible individuals.

These are:

**Direct Contact.** Direct spread of infection occurs when one person infects the next by direct person-to-person contact (e.g. chickenpox, tuberculosis, sexually transmitted infections etc.).

**Inhalation.** Inhalation spread occurs when microbes exhaled or discharged into the atmosphere by an infected person are inhaled by and infect another person. The common cold and influenza are often cited as examples, but it is likely that hands and fomites (inanimate objects) are also important in the spread of respiratory viruses.

**Ingestion.** 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. Organisms may be carried on fomites, hands or in food and drink e.g. Hepatitis A, *Salmonella*, *Campylobacter*.

**Inoculation.** Inoculation infection can occur following a “sharps” injury when blood contaminated with, for example, Hepatitis B virus, is directly inoculated into the blood stream of the victim, thereby causing an infection. Bites from humans can also spread infection by the inoculation mode.

**Indirect.** Indirect spread of infection is said to occur when an intermediate carrier is involved in the spread of pathogenic microbes from the source of infection to another person e.g. hands, fomite or vector.

- (a) **Fomite.** 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.
- (b) **Hands.** The hands of health and social care workers are probably the most important vehicles of cross-infection. The hands of patients can also carry microbes to other body sites, equipment and staff.
- (c) **Air.** Aerosol spread of infection undoubtedly occurs causing inhalation spread e.g. Chickenpox, Mumps and Measles.
- (d) **Vectors.** Crawling and flying insects are an obvious example of intermediate carriers and need to be controlled. Insect bites may cause infections such as malaria.

#### **4. Portals of Entry for Infection**

In order to cause disease a pathogen must have a way to enter the body - a portal of entry. To transmit to another host it must be able to leave the body via a portal of exit. The route of entry and exit may be different, for example enteric infections enter the mouth and leave in the faeces, or they may be the same, for example respiratory tract infections.

Micro-organisms use a range of different routes to find new hosts and one microbe may be able to spread by using more than one method.

A broad distinction can be made between transmission through direct physical contact with an infected individual and transmission indirectly on other vehicles, objects and equipment.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION C – PROCEDURES IN RESPECT OF COMMUNICABLE DISEASE CONTROL

### 1. Introduction

This guideline sets out the procedures for staff to follow in respect of communicable disease control. It includes the reporting, documentation and notification procedures and the training and staff health issues.

### 2. The Responsibilities of Different Roles for Communicable Disease Control

#### Managers

To ensure the implementation of the guidelines.

#### Clinical and Support Staff

- (a) All staff have an important role in the prevention and control of infection which is an integral quality issue in the care and management of patients and the health and safety of staff.
- (b) All staff need to follow all guidelines and participate in their audit.
- (c) All staff need to bring infection control issues to the attention of Senior Managers.
- (d) All staff need to maintain a high standard of infection control as a matter of good practice.

### 3. Notification Procedures

The registered medical practitioner attending the patient is legally responsible for the notification of certain diseases to the Proper Officer of the Local Authority, who is the Consultant in Communicable Disease Control (CCDC).

The notifiable diseases under the Public Health Act 1984 are:

Anthrax	Plague
Cholera	Poliomyelitis (acute)
Diphtheria	Rabies
Dysentery (amoebic or bacillary)	Relapsing Fever
Encephalitis (acute)	Rubella
Food Poisoning *	Scarlet Fever
Leprosy	Smallpox
Leptospirosis	Tetanus
Malaria	Tuberculosis
Measles	Typhoid Fever
Meningitis (all types)	Typhus
Meningococcal Septicaemia (without meningitis)	Viral Haemorrhagic Fever
Mumps	Viral Hepatitis
Ophthalmia Neonatorum	Whooping Cough
Paratyphoid Fever	Yellow Fever

\* Includes disease due to waterborne organisms e.g. Giardiasis, cryptosporidium, and Listeriosis should be reported as forms of food poisoning.

Legionnaires Disease is not a notifiable disease but should be reported to the Consultant in Communicable Disease Control.

#### **Prompt Notification Enables:**

- Prompt treatment or screening of contacts e.g. meningitis and tuberculosis
- Prompt investigation of potential food or water contamination
- Control of outbreaks
- Monitoring of the effectiveness of immunisation programmes
- Epidemiological investigations.

Notification forms can be obtained from Essex Health Protection Unit, who issue them on behalf of the local Environmental Health Departments.

The completed forms should be sent PROMPTLY (the next working day), and returned to the Essex Health Protection Unit

Outbreaks of food poisoning and suspected food poisoning should be telephoned immediately to the local Environmental Health Department.

Outbreaks of any other notifiable infectious diseases or suspicion/knowledge of a single case of meningococcal infection should be telephoned immediately to the Essex Health Protection Unit on 0845 1550069.

Out of working hours contact the on-call Public Health Person via 01245 444417.

Cases of Tuberculosis can be reported on the next working day to the Essex Health Protection Unit.

Cases of confirmed or suspected Scabies should be reported the next working day to the Communicable Disease Control Nurse for investigation and possible co-ordination of treatment.

Any suspicion of an outbreak of any disease should be reported to the Communicable Disease Control Nurse immediately. The relevant Clinical Manager should also be informed.

#### **4. Reporting and Documentation of Illness for a Suspected or Confirmed Outbreak of Infection**

##### **Recognising Outbreaks of Infection**

Any suspicion of an outbreak of any disease in the community should be reported to the Communicable Disease Control Team immediately for further investigation and management as appropriate.

The Communicable Disease Control Nurse Team should be contacted if:

- There are more than two cases of vomiting and/or diarrhoea amongst patients or staff of a potentially infectious nature
- There is more than one case of the same infectious illness in patients who may have been in contact
- There is a high sickness rate amongst staff, whom appear to be suffering from the same infectious disease.

The following guidance should be followed:

- Contact the Essex Health Protection Unit *promptly* if they suspect there may be an outbreak of infection
- Inform the local Environmental Health Department and the Commission for Social Care Inspection (CSCI)
- Managers to be made aware of the problem, so that arrangements can be made to ensure adequate staffing to cope with extra demands of managing an outbreak. Staff working in the hospice should not work in other care establishments until the outbreak is declared over by the Essex Health Protection Unit
- To list all residents and staff affected, including date of birth, area/unit where resident/worker is, onset of symptoms, symptoms suffered, duration of illness, GP and whether a sample has been taken. (Copies are attached for information.)
- To isolate symptomatic patients in their own rooms with their own toilet facilities, or a designated commode if en-suite facilities are not available
- Environmental cleaning to be increased. Particular attention should be paid to the toilets, bathrooms, door handles, support handrails and unit kitchens. For the

duration of the outbreak, environmental cleaning should be performed using detergent and hot water followed by a chlorine releasing solution (1 part household bleach to 10 parts water)

- All staff handwashing areas and the rooms of symptomatic residents should have an antibacterial liquid dispensed soap (or an alcohol hand rub following handwashing with a regular liquid soap) for the duration of the outbreak, then normal liquid dispensed soap should be used
- Patients should be encouraged to wash their hands after using the toilet and before eating. Where they are not able to do so, staff should wash their hands for them
- Staff should pay attention to all infection control practices, particularly the washing of hands and wearing protective clothing. A new pair of latex or vinyl gloves and a plastic apron should be worn for each resident
- Faecal samples should be obtained from patients and staff if they have symptoms. The microbiology form accompanying the sample should clearly state it is **part of an outbreak**, as this will determine which specific tests are carried out in the laboratory. (Samples of vomit are not required.)
- The hospice should be closed to admissions until 48 hours after the last symptomatic patient has recovered
- Symptomatic staff must go off duty, a faecal sample must be taken and they must remain off work until 48 hours symptom free
- Visitors should be informed of the outbreak so they can decide whether they wish to visit the home. Unnecessary visits should be discouraged. Those who choose to visit should wash their hands as they enter and leave the hospice
- Patients should only be discharged 48 hours after their last symptom and with the full consent of any carer that may be required to care for them in the community.

**RECORD OF OUTBREAK (Residents)**

Type: Diarrhoea/Vomiting/Chest Infection/.....

Name of Hospice: \_\_\_\_\_

Record started by: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

Reported to: EHPU/EHO/CSCI

\_\_\_\_\_

Total number of residents in home: \_\_\_\_\_

Tel: \_\_\_\_\_

Total number of residents affected: \_\_\_\_\_

Name of Resident	DOB	Area/Unit where Resident	Date Symptoms Started	Symptoms	Duration of Symptoms	GP		Faecal Sample Sent	Result
						Name	Date Seen		

**RECORD OF OUTBREAK (Staff)**

Type: Diarrhoea/Vomiting/Chest Infection/.....

Name of Hospice: \_\_\_\_\_

Record started by: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

Reported to: EHPU/EHO/CSCI

Total number of staff in home: \_\_\_\_\_

Tel: \_\_\_\_\_

Total number of staff affected: \_\_\_\_\_

Name of Staff	DOB	Area/Unit where Resident	Date Symptoms Started	Symptoms	Duration of Symptoms	GP		Faecal Sample Sent	Result
						Name	Date Seen		

## **5. Training and Education**

Training and Education on the prevention and control of infection will be provided to all staff that have direct contact to patients (e.g. nurses, carers, and doctors) by the Essex Health Protection Unit.

This training will include all aspects of the Infection Control Policy, to ensure all staff have an understanding of their responsibilities in the prevention and control of infection.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION D – STAFF HEALTH

### 1. Introduction

This guideline sets out the procedures for staff to follow for staff health.

### 2. Staff Health

In association with the Occupational Health (OH) Department at your local Hospital all staff (including agency and locum staff on short term contracts) should ensure that their immunisations are up to date i.e. Hepatitis B, BCG, Polio, MMR and Tetanus.

It is recommended that all women working with young children should have their Rubella, Varicella and Parvovirus immunity checked and be vaccinated for Rubella if necessary.

Pregnant staff who do not know if they are immune and believe that they have been in contact with a case of Rubella or Parvovirus B19 (slapped cheek disease) should see their GP without delay.

Pregnant women who do not have a definite history of Chickenpox or Shingles should also see their doctor promptly if they come into contact with a case.

It is recommended that all staff who come into contact with blood/body fluids should receive a full course of immunisation against Hepatitis B and have their antibody level checked.

Staff need to take appropriate action in the event of a sharps/splash injury (as in Procedural Guideline No. 9 'Safe Handling of Sharps').

Clinical staff and food handlers, who develop diarrhoea and/or vomiting of an unexplained cause or of a potentially infectious nature, should report this to the line manager and occupational health department. The staff member should stay off work until they have been symptom free for 48 hours. Staff may be asked to submit stool specimens to their GP. Advice on returning to work should be sought from the OH Department in consultation with the microbiologist. If the staff member is a food handler then consultation with the Environmental Health Officer is also required.

**ESSEX HEALTH PROTECTION UNIT  
HOSPICE INFECTION CONTROL GUIDELINES**

**SECTION E – COMMON INFECTIOUS DISEASES**

**1. Introduction**

This guideline sets out the procedures for staff to follow for common infectious diseases.

**2. Common Infectious Diseases**

This procedure describes the most common infectious diseases including the:

- Incubation period
- Method of spread
- Period of infectivity
- Exclusion period
- Management of contacts.

Additional information can be found in the information sheets at the end of this section. If further information and/or advice is required, contact the Communicable Disease Control Nurse, Essex Health Protection Unit on 0845 1550069.

Advice on treatment should be sought from a medical practitioner.

### 3. Guidelines for the Management of MRSA

#### What is MRSA?

MRSA stands for *Meticillin Resistant Staphylococcus aureus*.

It occurs when some strains of the common bacterium of Staphylococcus aureus become resistant to treatment with meticillin. This is not used for treatment, but a very similar antibiotic, Flucloxacillin.

Generally the worst scenario for an individual with MRSA in the community environment is that they have an infection in a wound, which is then slow to heal.

#### Why is it known as a hospital-acquired disease?

MRSA will spread more readily in the acute hospital setting, owing to the increased vulnerability that patients with an acute illness will have to infection.

When an individual suffers an acute illness, their immunity may be greatly reduced (making them vulnerable to infection). As that individual recovers, so will their immunity.

If an individual makes a complete recovery, their immune system generally makes a full recovery.

If an individual goes on to develop a chronic illness, their immune system may not make a complete recovery. However this deficit in their immune system will be far less than if they were still suffering from an acute illness.

This is why patients who were hospitalised with an acute illness, and then acquire MRSA, are discharged as soon as they have recovered from their acute episode - meaning they do not stay in a vulnerable environment for longer than necessary.

#### What is the difference between colonisation and infection?

**Colonisation** - means the MRSA is living on the skin (usually nose, throat, axilla or groin), causing no problem to the individual.

**Infection** - means that the MRSA is causing an active infection i.e. the wound is red, hot, inflamed, there may be a discharge and pain.

#### What precautions do you need to take in the hospice?

**No** special precautions are necessary.

Standard principles of infection control (especially handwashing) are all that are necessary.

However MRSA does act as an opportunity to remind us of the good practices that should **already** be in place.

Patients are **not** barrier nursed in the community setting. Ideally they are in a single room, or share a room with someone who does not have an open wound or invasive device e.g. urinary catheter, intravenous device.

They can mix with other patients socially and at mealtimes.

Laundry or china and cutlery does **NOT** need to be handled separately. Again, as long as they have good practices already in place, there is no need for additional precautions.

Waste should be handled as with any other patient - if the patient is known to have an infection, **and** that infection is producing a discharge, then arrangements should be made for a clinical waste collection. Otherwise the waste should be **well** wrapped and placed in the household waste. (Refer to waste section.)

### **Protocol for Treatment and Screening**

Do not screen unless there is clinical evidence to do so.

The state of the wound should be assessed and documented:

- Size, depth
- Condition of wound
- Does it look infected (is it red, hot, inflamed or has a discharge?).

The wound should be monitored to assess if it is healing:

- If the wound is healing - do not swab
- If the wound does not appear to be healing, re-swab after 4 weeks and at 4 weekly intervals thereafter until there is evidence of healing, to check whether antibiotic treatment is indicated.

If the patient is colonised with MRSA of the nose, throat, axilla or groin, do not routinely swab. Should such a patient then develop any wounds:

- Observe for signs of infection
- Swab if there is any sign of infection in a new wound.

The screening of staff is **very** rarely required - and should only take place in consultation with the CDCN.

## **Admission and care to Residential/Nursing Home**

No home is allowed to refuse admission of a patient/ resident because they happen to have MRSA. However, if a resident does have MRSA (either colonisation or infection) that resident should:

- Be in a single room, or
- Be in a shared room, but the other resident must *not* have an open wound or a urinary catheter, or any other invasive device.

In addition to the precautions on previous page:

- i) Environmental cleaning should be reinforced to help prevent further spread
- ii) After patient is discharged the room should be thoroughly cleaned and curtains removed for laundering.

## **Suggested Treatment Protocol for patients with MRSA infected wounds**

- Clean infected site with chlorhexidine for 4 weeks
- If there is no improvement, re-screen for culture and sensitivities
- Use the appropriate topical application for 4 weeks
- If there is no improvement, re-screen for culture and sensitivities
- Consider systemic antibiotic therapy (in consultation with the microbiologist).

Further advice:

Please seek further advice from your CDCN if required.

**Newly identified MRSA in clinical specimens should be managed as above.  
No routine MRSA screening should be undertaken.  
Please contact the Infection Control Team for further advice.**

## 4. Information Sheets

The following information sheets have been written for members of the general public.

- Blood-borne viruses
- Chickenpox
- Clostridium Difficile
- Conjunctivitis
- Cryptosporidiosis
- Cytomegalovirus
- Diarrhoea And Vomiting
- ESBLs
- Farm & Zoo visits
- Glandular Fever
- Hand Foot And Mouth
- Headlice
- Hepatitis A
- Hepatitis B
- Hepatitis C
- Herpes Simplex
- Impetigo
- Legionnaire's Disease
- Leptospirosis
- Listeria
- Lyme Disease
- Measles
- Molluscum Contagiosum
- MRSA
- Mumps
- Pertussis
- Polio
- Ringworm
- Rubella
- Scabies
- Scarlet Fever
- Shingles
- Slapped Cheek Syndrome (Parvovirus B19)
- Threadworm
- Toxoplasmosis
- Tuberculosis
- Verruca

Further copies can be photocopied as required. These are available on our website [www.essexhpa.org.uk](http://www.essexhpa.org.uk). Information is also available on [www.hpa.org.uk](http://www.hpa.org.uk).

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION F – STANDARD PRINCIPLES OF INFECTION CONTROL

### 1. Standard Principles of Infection Control

It is not always possible to identify people who may spread infection to others, therefore precautions to prevent the spread of infection must be followed at all times. These routine procedures are called **Standard Principles of Infection Control (or Universal Precautions)**.

All blood and body fluids are potentially infectious and precautions are necessary to prevent exposure to them. **A disposable apron and appropriate gloves should always be worn when dealing with excreta, blood and body fluids.**

The standard principles include:

- Hand Hygiene and Skin Care
- Protective Clothing
- Safe Handling of Sharps (including Sharps Injury Management)
- Spillage Management
- Equipment Decontamination
- Waste Management.

Each of the above topics are dealt with in the following sections

Each member of staff is accountable for his/her actions and must follow safe practices.

There should be facilities available to promote the compliance to the Principle of Infection Control e.g. Personal Protective clothing and handwashing facilities.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION G – HAND HYGIENE AND SKIN CARE

### 1. Introduction

This guideline sets out the procedures for staff to follow for hand decontamination and skin care.

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

### 2. Handwashing

Handwashing is recognised as the single most effective method of controlling cross infection. Hands should be washed between each patient activity and before handling food. The wearing of gloves is NOT a substitute for handwashing.

#### **Hands should be washed:**

- Before and after each work shift or work break. Remove jewellery (rings)
- Before and after physical contact with each patient
- After handling contaminated items such as dressings, bedpans, urinals and urine drainage bags
- Before putting on and after removing protective clothing (e.g. apron and gloves)
- After using the toilet, or blowing nose, or covering a sneeze
- Whenever hands become visibly soiled
- Before eating, drinking or handling food and before and after smoking
- After touching any waste or rubbish bins.

Hands that are visibly soiled, or potentially grossly contaminated with dirt or organic material, must be washed with liquid soap and water. Bars of soap must not be used. The preferred method for hand hygiene depends on the type of procedure, the degree of contamination and the desired persistence of anti-microbial action on the skin. (See table below.)

## How to wash hands:

	Method	Solution	Task
1	Social	Liquid Soap	For all routine tasks
2	Hygienic hand disinfection (15-30 secs)	Antiseptics, e.g. chlorhexidine, povidone-iodine or alcohol hand-rub after social cleaning of hands	During outbreaks
3	Surgical scrub (2 + mins)	Antiseptics, e.g. chlorhexidine, povidone-iodine. Clean thoroughly and carefully, dry on sterile towels	Prior to surgical and other invasive procedures

The areas of the hands which are often missed are the wrist creases, thumbs, fingertips, under the fingernails and under jewellery, which should (for this reason) be kept to an absolute minimum (wedding band only).

### Hand washing technique

An effective handwashing technique involves three stages:

#### (a) Preparation

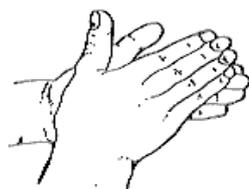
Before washing hands, all wrist, and, ideally, hand jewellery should be removed. Cuts and abrasions must be covered with waterproof dressings. Fingernails should be kept short, clean and free from nail polish or nail extensions. Wet hands under warm running water before applying liquid soap or an antimicrobial preparation, ideally from a wall-mounted dispenser.

#### (b) Washing and Rinsing

The liquid soap solution must come into contact with all of the surfaces of the hand. The hands must be rubbed together vigorously for a minimum of 10-15 seconds, paying particular attention to the tips of the fingers, the thumbs and the areas between the fingers. Hands should be rinsed thoroughly.

### Hygienic Hand Disinfection for Outbreak Control

This can either be achieved by using antiseptic liquid soap, or by routine handwashing, followed by 5mls of an alcohol handrub.



1. Palm to palm.



2. Right palm over left dorsum and left palm over right dorsum.



3. Palm to palm fingers interlaced.



4. Backs of fingers to opposing palms with fingers interlocked.



5. Rotational rubbing of right thumb clasped in left palm and vice versa.



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

*Handwashing technique. (Ayliffe et al. 1978; Lawrence 1985)*

### (c) Drying

This is an essential part of hand hygiene. Dry hands thoroughly using good quality paper towels. In clinical settings, disposable paper towels are the method of choice because communal towels are a source of cross-contamination. Store paper towels in a wall-mounted dispenser next to the washbasin, and throw them away in a pedal-operated domestic waste bin. Do not use your hands to lift the lid or they will become re-contaminated.

Hot air dryers are not recommended in clinical settings. However if they are used in other areas, they must be regularly serviced and users must dry hands completely before moving away.

## 3. Handrubs/Alcohol Gels

Hands should be free from dirt and organic material. 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.

### Emollient Hand Creams

An emollient hand cream should be applied regularly to protect skin from the drying effects of regular hand decontamination. If a particular soap, antimicrobial handwash or alcohol product causes skin irritation, an OH team or GP should be consulted.

## **Handwashing Facilities**

Facilities should be adequate and conveniently located. Hand washbasins must be placed in areas where needed e.g. residents' bedrooms, bathrooms, toilets, sluice, laundry and kitchen areas within the home. They should have elbow or foot-operated mixer taps. In sluice, laundry and kitchen areas the handwashing sink must be designated for this purpose.

A separate sink should be available for other cleaning purposes:

- Use wall-mounted liquid soap dispensers with disposable soap cartridges - keep them clean and replenished
- Dispensers should be dismantled and washed regularly with particular attention to the nozzle
- Place disposable paper towels in wall-mounted dispensers next to the basins - soft towels will help to avoid skin abrasions
- Position foot-operated pedal bins near the hand washbasin - make sure they are the right size.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION H – PROTECTIVE CLOTHING

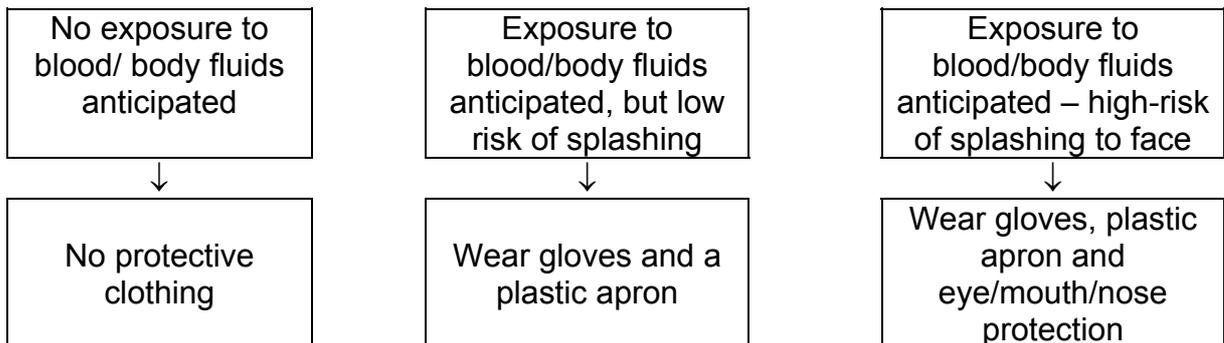
### 1. Introduction

This guideline sets out the procedures for staff to follow for protective clothing.

### 2. Types of Protective Clothing

The choice of protective clothing selected, depends on the anticipated risk of exposure to body fluid during the particular activity. Many clinical activities involve no direct contact with body fluid and do not require the use of protective clothing, for example taking a pulse, blood pressure or temperature.

#### WHAT TO WEAR WHEN



### Types of Protective Clothing

#### Disposable Gloves

All clinical areas should have a written policy on the use of different types of gloves and how to manage latex allergy. Employers have a duty to buy a product that minimises risk to patients and staff. (Synthetic or vinyl gloves will eliminate the risk of latex allergy.)

Gloves must be worn for invasive procedures, contact with sterile sites and non-intact skin or mucous membranes, and they should also be worn during all activities that have been assessed as carrying a risk of exposure to blood, body fluids, secretions or excretions, or to sharp or contaminated instruments.

Gloves that are acceptable to healthcare personnel and that conform to European Community (CE) standards must be available.

**DO NOT USE** powdered latex gloves as it exacerbates the risk of latex allergy through increased exposure to the allergens present in the powder. Polythene gloves do not provide any barrier protection, and do not have a place in the clinical setting.

Gloves must be worn as single-use items. They must be put on immediately before an episode of resident contact or treatment and removed as soon as the activity is completed. Gloves must be changed between caring for different residents, and between different care or treatment activities for the same resident and do not substitute for handwashing.

Gloves must be disposed of as clinical waste and hands decontaminated after the gloves have been removed.

Sensitivity to natural rubber latex in residents, carers and healthcare personnel must be documented. Alternatives to natural rubber latex gloves must be available e.g. nitrile.

To prevent transmission of infection, gloves must be discarded after each procedure. Gloves should **not** be washed between residents as the gloves may be damaged by the soap solution and, if punctured unknowingly, may cause body fluid to remain in direct contact with skin for prolonged periods.

Hands **must** be washed on removal of gloves.

1. **Non Sterile Gloves**  
Should be used when hands may come into contact with body fluids or equipment contaminated with body fluids.
2. **Sterile Gloves**  
Should be used when hands are likely to come into contact with normally sterile areas or during any aseptic procedure.
3. **General Purpose Utility Gloves**  
General purpose utility gloves e.g. rubber household gloves, can be used for cleaning instruments prior to sterilisation, or when coming into contact with possible contaminated surfaces or items. Ideally, colour coding of such gloves should be used e.g. blue for the kitchen, yellow for general environmental cleaning, and red for 'dirty' areas. This will help prevent cross-infection from one area of work to another. The gloves should be washed with general-purpose detergent and hot water, and dried between uses. They should be discarded weekly or more frequently if the gloves become damaged.
4. **Polyurethane Gloves (Non Sterile & Sterile)**  
Polyurethane gloves do not act as a barrier to infection. They do not meet the Health and Safety Commission regulations; they do not have a place in clinical application.  
**DO NOT USE.**

## **Aprons - Water-Repellent Protection**

Water-repellent protective apron should be worn for procedures anticipated to cause significant contamination of the skin or clothing with blood or body fluids and should be changed between each patient. This will protect the skin of the health care worker from contamination by potentially infected body fluids and reduce the risk of cross-infection of micro-organisms to other patients on the clothing.

Since the front of the body is the part most frequently contaminated by body fluid, plastic disposable aprons provide adequate protection in most circumstances. These should be readily available in all areas.

## **Eye Protection**

Eye protection (goggles) or visor should be used to protect health care workers from splashes of body fluid and should be worn for any activity where there is a risk of body fluid splashing onto the face.

## **Face Mask**

In the past, masks were worn with the intention of protecting vulnerable sites on patients such as wounds from contamination by micro-organisms expelled from the respiratory tract of staff. It is now recognised that healthy members of staff expel few micro-organisms from the respiratory tract and that masks are not necessary for most procedures.

However masks should only be worn if it considered that there is a high risk of body fluids splashing into the face e.g. during dental surgery.

## **Respiratory Protective Equipment**

A high efficiency particulate air (HEPA) filtration mask should be used when clinically indicated, for instance in Pulmonary Tuberculosis.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION I – SAFE HANDLING OF SHARPS

### 1. Introduction

This guideline sets out the procedures for staff to follow for the safe handling of sharps and the action to take in the event of a sharps injury.

### 2. Safe Handling of Sharps

Sharps include needles, scalpels, stitch cutters, glass ampoules, sharp instruments and broken crockery and glass. Sharps must be handled and disposed of safely to reduce the risk of needle-stick injuries and possible exposure to blood-borne viruses. Always take extreme care when using and disposing of sharps. Avoid using sharps whenever possible:

- Clinical sharps should be single-use only
- Do not re-sheath a used needle - if this is necessary in exceptional circumstances, use a safe method - for example, a re-sheathing device
- Discard sharps directly into a sharps container immediately after use and at the point of use
- Sharps containers must comply with UN 3921 and BS7320 standards
- Close the aperture to the sharps container when carrying or if left unsupervised to prevent spillage or tampering
- Place sharps containers wherever sharps are handled on a level stable surface
- Do not place sharps containers on the floor, windowsills or above shoulder height - use wall or trolley brackets
- Assemble sharps containers by following the manufacturer's instructions
- 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 to make more room

- Lock the container when it is three-quarters full using the closure mechanism
- Label sharps containers with the source details prior to disposal
- Place damaged sharps containers inside a larger container - lock and label prior to disposal. Do not place inside yellow clinical waste bag.

All staff should be vaccinated against common illnesses. In addition, all those involved in clinical procedures must be vaccinated against Hepatitis B. A record of Hepatitis B antibody response should be kept in the practice, or by the OH service, for all clinical staff involved in 'exposure prone procedures' or where regular exposure to blood/blood-stained body fluids occurs:

### **Giving Injections**

Always wash hands thoroughly prior to giving an injection.

If visibly dirty, skin should be cleaned with an individually packed swab soaked in 70% isopropyl alcohol and left to dry. If skin is clean, this step is not necessary.

Venepuncture and injections should be carried out only by staff who are adequately trained and experienced.

## **3. Occupationally Acquired Sharps Injuries**

This includes:

- Inoculation of blood by a needle or other 'sharp'
- Contamination of broken skin with blood
- Bites which draw blood
- Blood splashes to mucous membrane e.g. eyes or mouth
- Swallowing a person's blood e.g. after mouth-to-mouth resuscitation
- Contamination of the skin where clothes have been soaked by blood.

### **Treatment:**

- Encourage bleeding from the wound
- Wash the wound in soap and warm running water (do not scrub)
- Cover the wound with a dressing

- Skin, eyes or mouth: wash, in plenty of water
- Ensure any sharps are disposed of safely
- Report the incident to the line manager and OH Department
- Complete an accident/incident report form, recording all information of the accident/incident
- Managers must ensure that the incident is reported to the OH Department
- If the source of the contamination of blood is known, record name, date of birth and contact address, in the event that source testing is required.

**4. Sharps Injury Sustained from a Known Hepatitis B or C or HIV Source**

The person who sustains the sharp or splashing injury should:

- Follow the above treatment guidelines
- Advise OH department
- Attend **immediately** Accident and Emergency Department at local hospital for risk assessment.

Post exposure prophylaxis would only be considered when there has been exposure to blood or other high risk body fluids **known to be** or **strongly suspected** to be infected with Hepatitis B, C or HIV (these fluids include; amniotic fluid, vaginal secretions, semen, human breast milk, CSF, peritoneal fluid, pericardial fluid, pleural fluid, synovial fluid).

Post-exposure prophylaxis will not be considered following contact through any route with low risk materials e.g. urine, vomit, saliva, faeces, unless they are visibly blood stained, nor from an injury from an **unknown** source i.e. an inappropriately discarded needle in the health care setting or in a public place.

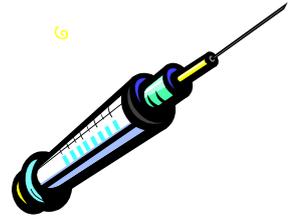
If post-exposure prophylaxis is indicated it should be commenced **as soon as possible** after the incident and ideally **within 1 hour**. (However the Department of Health recommends it may be worth considering PEP even if 1-2 weeks have elapsed since the incident.)

Accident and Emergency will then follow the agreed departmental protocol.

Local Hospital .....

What to do after a.....

# SHARPS INJURY



**Directions for the management of needle-sticks,  
and cuts and penetrating wounds,  
contaminated with blood or blood-stained body fluids**

Wash cuts thoroughly with soap and warm water,  
then gently encourage to bleed.  
Apply a dressing if necessary.

Splashes to the eyes or mouth  
should be thoroughly rinsed with running water.

Report incident to your manager immediately.

Your medical advisor should: -

- a) Take a history and make a risk assessment
- b) Review the recipients Hepatitis B vaccine status
- c) Take 10ml clotted blood from the recipient and,  
If possible the 'source' (with informed consent)
- d) Send the sample to the microbiology department marked  
'Needle-stick Injury'.

Complete an accident form.

Insert your local arrangements.

## Please Note

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

## Remember

Be prepared – if you are at risk of exposure to BBVs  
– get immunised against the Hepatitis B Virus

In hours:- Your GP or Occupational health Department  
Out of Hours:- Your local A&E Department



# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION J – SPILLAGE MANAGEMENT

### 1. Introduction

This guideline sets out the procedures for staff to follow for the management of spills of blood and body fluids.

### 2. Spillage Management

Deal with blood and body fluid spills quickly and effectively.

**For staff working in a care establishment**, a 'grab bucket' containing all the relevant equipment should be readily available to all staff who may be required to deal with a spillage of body fluids.

Commercial blood spillage kits can be purchased or the hospice can put together a kit as described below. The kit should be kept in a designated place (depending on the size of the establishment there may be more than one kit).

The kit should comprise:-

- 'Nappy' type bucket with a lid
- Non-sterile, unpowdered latex gloves or vinyl gloves
- Disposable plastic apron
- Disposable paper towels
- Disposable cloths
- Clinical waste bag
- Small container of general-purpose detergent
- Hypochlorite solution (e.g. Household bleach or Milton) or sodium dichloroisocyanurate compound (e.g. Presept, Sanichlor) – to comply with COSHH 1988 – this compound should be in a lockable cupboard.

The kit should be immediately replenished after use.

For spillage of high-risk body fluids such as blood, method 1 is recommended.

For spillage of low-risk body fluids (non-blood containing excreta) such as excreta, vomit etc., use method 2.

### **Hypochlorite / Sodium Dichloroisocyanurates (NaDCC) - Method 1**

- Prevent access to area containing the spillage until it has been safely dealt with
- Open the windows to ventilate the room if possible
- Wear protective clothing
- Soak up excess fluid using disposable paper towels
- Cover area with NaDCC granules (e.g. Presept, Sanichlor)

or

- Cover area with towels soaked in 10,000 parts per million of available chlorine (1% hypochlorite solution = 1 part household bleach to 10 parts water) e.g. household bleach, Milton, and leave for at least two minutes
- Remove organic matter using the towels and discard as clinical waste
- Clean area with detergent and hot water, and dry thoroughly
- Clean the bucket/ bowl in fresh soapy water and dry
- Discard protective clothing as clinical waste
- Wash hands.

### **Detergent and Water - Method 2**

- Prevent access to the area until spillage has been safely dealt with
- Wear protective clothing
- Mop up organic matter with paper towels or disposable cloths
- Clean surface thoroughly using a solution of detergent and hot water and paper towels or disposable cloths
- Rinse the surface and dry thoroughly
- Dispose of materials as clinical waste
- Clean the bucket/ bowl in fresh hot, soapy water and dry
- Discard protective clothing as clinical waste

- Wash hands
- Ideally, once dry, go over the area with mechanical cleaner.

N.B. For spills on carpets and upholstery with or without visible blood

- Wear protective clothing
- Mop up organic matter with paper towels or disposable cloths and/or absorbent powder e.g. vernagel
- Clean area with cold water
- Clean area thoroughly with detergent and hot water
- Allow to dry
- Ideally, once dry, go over area with a mechanical cleaner.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION K – DECONTAMINATION OF THE ENVIRONMENT AND EQUIPMENT

### 1. Introduction

This guideline sets out the procedures for staff to follow for decontamination of the environment and equipment.

### 2. Decontamination

The aim of decontaminating equipment is to prevent potentially pathogenic organisms reaching a susceptible host in sufficient numbers to cause infection.

Certain items are classified as single-use only. These items must never be re-used. If in doubt, refer to the manufacturer's recommendations, or contact the EHPU. The symbol below indicates 'single-use' and will be displayed on the package.



After use these items should be disposed of as clinical waste. Where there is a choice of single-use or re-usable items, the single-use item is recommended

Re-usable equipment should be appropriately decontaminated between each patient using a risk assessment model. Use only the method advised by the manufacturer - using any other process may invalidate warranties and transfer liability from the manufacturer to the person using or authorising the process. If you have any doubts about the manufacturer's recommendations, seek further advice.

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

Cleaning 'is a process which physically removes contamination but does not necessarily destroy micro-organisms. The reduction of microbial contamination cannot be defined and will depend upon many factors including the efficiency of the cleaning process and the initial bio-burden (potential amount of organisms on the item)'

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 micro-organisms, which may not necessarily inactivate some viruses and bacterial spores. Disinfection will not achieve the same reduction in microbial contamination levels as sterilisation.

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

### **3. Risk Assessment**

The decision to clean, disinfect or sterilise depends on the risk of the equipment transmitting infection or acting as a source of infection.

Medical equipment is categorised according to the risk that particular procedures pose to patients - by assessing the microbial status of the body area being manipulated during the procedure. For example, items that come into contact with intact mucous membranes are classified as intermediate risk and require disinfection between each use as a minimum standard. Items that enter normally sterile body areas, or come into contact with broken mucous membranes, are classified as high risk and must be sterile before use.

Some high-risk devices cannot tolerate high temperatures, and must either be single-use or disinfected between each use - for example fibre-optic endoscopes. Items used in the vagina or cervix must be single-use or sterilised between each use.

## Risk Assessment for Decontamination of Equipment

Risk	Application of Item	Minimum Standard
<b>Low</b>	In contact with healthy skin or Not in contact with patient e.g. furniture, mattresses, surfaces, commodes	Clean
<b>Intermediate</b>	In contact with intact mucous membranes or contaminated with virulent or readily transmissible organisms (body fluids) or prior to use on immuno-compromised patients e.g. thermometers, auroscope earpieces NB. Items used in the vagina or cervix must be sterilised	Disinfect, or single-use
<b>High</b>	In contact with a break in the skin or mucous membrane or for introduction into sterile body areas for example uterine sounds, instruments used for surgical/ operative procedures	Sterilise, or single-use

Adapted from Medical Devices Agency, Part 2 (1996), now MHRA

## 4. Cleaning Methods

Cleaning is the first step in the decontamination process. It must be carried out before disinfection and sterilisation to make these processes effective. Thorough cleaning is extremely important in reducing the possible transmission of all micro-organisms, including the abnormal prion protein that causes vCJD.

Thorough cleaning with detergent and warm water - maximum temperature 35<sup>0</sup>C - will remove many micro-organisms. Hot water should not be used as it will coagulate protein making it more difficult to remove from the equipment.

Manual cleaning must be undertaken in designated sinks. Two sinks are required, one sink for rinsing prior to manual washing. The second sink is for rinsing the items after washing. The sinks should be deep enough to completely immerse the items to be rinsed and cleaned. Scrubbing can generate aerosols that may convey infective agents. Therefore if scrubbing is necessary it must be carried out with the brush and item beneath the surface of the water.

Personal protective equipment, including aprons, gloves and goggles or visors, must be readily available for staff and used as appropriate.

Cleaning equipment, such as mops, brushes, and cloths must be stored clean and dry between uses. Use single-use, non-shedding cloths rather than re-usable cloths. Do not store brushes and mops in disinfectant solutions.

After cleaning and thorough rinsing, the items should be dried using a disposable non-shedding absorbent cloth.

### **Commode pots/Bedpans/Urinals**

Mechanical cleaning using a washer/disinfector is recommended as these can be validated.

Manual cleaning is not recommended. However if manual cleaning must be undertaken it must be undertaken in a designated sink, which is deep enough to completely immerse the items to be cleaned. Scrubbing can generate aerosols, which may convey infective agents. Therefore if scrubbing is necessary it must be carried out with the brush and item beneath the surface of the water.

Personal protective equipment, including aprons, gloves and goggles or visors, must be readily available for staff and used as appropriate.

Cleaning equipment, such as mops, brushes, and cloths must be stored clean and dry between uses. Use single-use, non-shedding cloths rather than re-usable cloths. Do not store brushes and mops in disinfectant solutions.

After cleaning and thorough rinsing, the items should be dried using a disposable non-shedding absorbent cloth.

## 5. Disinfection Methods

Disinfection methods apply to handwashing, skin preparation and equipment. Disinfection of equipment should be limited and, where possible, disposable or autoclavable equipment used instead. If disinfection is required, use the method recommended by the manufacturer.

Available disinfectants include:

Chemical	Advantages	Disadvantages	Uses
Chlorine-based: Hypochlorites (e.g. Domestos, Milton) NB Undiluted commercial hypochlorite contains approx. 100,000ppm available chlorine	<ul style="list-style-type: none"> <li>• wide range of bacterial, virucidal, sporicidal and fungicidal activity</li> <li>• rapid action</li> <li>• non-toxic in low concentrations</li> <li>• can be used in food preparation</li> <li>• cheap</li> </ul>	<ul style="list-style-type: none"> <li>• inactivated by organic matter</li> <li>• corrosive to metals</li> <li>• diluted solutions can be unstable</li> <li>• need to be freshly prepared</li> <li>• does not penetrate organic matter</li> <li>• bleaches fabrics</li> <li>• need ventilation</li> </ul>	<ul style="list-style-type: none"> <li>• can be used on surfaces and for body fluid spills</li> </ul>
Sodium Dichloroisocyanurates (NaDCC) e.g. Presept, Haz-Tab, Sanichlor	<ul style="list-style-type: none"> <li>• slightly more resistant to inactivation by organic matter</li> <li>• slightly less corrosive</li> <li>• more convenient</li> <li>• long shelf-life</li> </ul>	<ul style="list-style-type: none"> <li>• as above</li> </ul>	<ul style="list-style-type: none"> <li>• as above</li> </ul>
Alcohol 70% e.g. isopropanol	<ul style="list-style-type: none"> <li>• good bactericidal, fungicidal and virucidal activity</li> <li>• rapid action</li> <li>• leaves surfaces dry</li> <li>• non-corrosive</li> </ul>	<ul style="list-style-type: none"> <li>• non-sporicidal</li> <li>• flammable</li> <li>• does not penetrate organic matter</li> <li>• requires evaporation time</li> </ul>	<ul style="list-style-type: none"> <li>• can be used on surfaces, or for skin and hand decontamination</li> </ul>
Chlorhexidine e.g. hibiscrub, chlorhexidine wound cleaning sachets	<ul style="list-style-type: none"> <li>• most useful as disinfectants for skin</li> <li>• good fungicidal activity</li> <li>• low toxicity and irritancy</li> </ul>	<ul style="list-style-type: none"> <li>• limited activity against viruses</li> <li>• no activity against bacterial spores</li> </ul> <p>inactivated by organic matter</p>	<ul style="list-style-type: none"> <li>• For skin and hand decontamination</li> </ul>

## 6. Sterilisation Methods

Sterile instruments can be obtained by:

### 1. Purchasing pre-sterilised single-use items

These avoid the need for re-sterilisation and are a practical and safe method. Items must be stored using a stock rotation system and according to manufacturer's instructions.

Do not use items after the 'use by' date.

This is the preferred option for care homes requiring sterile items of equipment. It is usual practice for community nursing or medical staff to provide their own sterile items of equipment for use in this setting.

### 2. Using a sterile supplies department (SSD)

SSDs may provide a cost effective and efficient service. There should be a contract specifying the responsibilities of both parties. Since June 1998 SSDs have been bound by the Medical Devices Directive 93/42/EEC, which requires the department to have a quality system of audit and to have been assessed and validated as CE compliant.

Local sterilisation of equipment is not recommended in the care home setting. For further advice please contact the EHPU.

## 7. Single-use Equipment

**Single-use** means that the manufacturer:

- Intends the item to be used once, then thrown away
- Considers the item unsuitable for use on more than one occasion
- Has insufficient evidence to confirm that re-use would be safe.

**Single patient** use means that the item can be re-used on **same patient only**. The duration of use is dependant upon undertaking a risk assessment of individual risk factors.

The MDA (1995) guidance suggests that reprocessing and re-using such items may pose hazards for residents and staff if the reprocessing method has not been validated. Therefore re-use of single-use products is not advisable unless the outcomes have been taken into account. The Consumer Protection Act 1987 will hold a person liable if a single-use item is reused against the manufacturer's recommendations.

## 8. A-Z of Equipment and the Decontamination Method

EQUIPMENT	CLEANING METHOD
Baths	To be cleaned between users. With gloved hand, clean bath surface, grab rails and taps with hot water, General Purpose Detergent (GPD) and paper towels. Rinse. Dry using disposable paper towels. Specialist mechanical baths must be regularly serviced and cleaned according to the manufacturer's instructions. Clear protocols are required to define any categories of patient for whom these baths are contraindicated
Bath water additives	There are no antiseptic solutions that should be added to the bath. When antiseptic bathing is prescribed, the agent should be applied directly to the skin instead of soap
Bedpans (non-disposable)	Wearing disposable plastic apron and gloves, flush away contents and clean thoroughly using paper towels, warm water and GPD. Rinse and store dry and inverted. Disinfection using sodium hypochlorite solution 100ppm (1 part bleach to 10 parts water) will be required if the patient has enteric symptoms. Hospices should be upgrading sluice facilities to incorporate mechanical water/disinfectant machines
Bedpan Washers/ Macerators	These should be used, cleaned and serviced according to manufacturer's guidance
Beds, backrests, bed cradles and mattresses	To be cleaned between users with hot water and GPD. If soiling is evident then immediately clean as above and then wipe over with chlorine-releasing compound
Bidets	To be cleaned after each use. Clean surface of pan and taps with hot water and GPD, using disposable paper towels and gloved hand and then flush
Bowls - Patient washing	Clean between each use with hot water and GPD, using disposal paper towels. Rinse and store dry
Commode armrests and seats	If no soiling is evident clean with hot water and GPD, and dry using paper disposable towels after every use. If soiling is evident, or there is an outbreak of diarrhoea, or the previous user had a loose stool, clean with hot water and GPD Wipe over with a chlorine-releasing compound (e.g. Presept, Chlortabs). <b>Use separate wipes for armrests and seats, and clean armrests first</b>
Ear pieces from auroscopes	Clean thoroughly with GPD and hot water, using thin brushes to clean inside

ECG Equipment - Electrodes - Straps - Machine	<ul style="list-style-type: none"> <li>- Wash well with hot water and GPD, store dry.</li> <li>- Wash well with hot water.</li> <li>- Wipe over with damp cloth, keep covered when not in use</li> </ul>
Examination Couches	Surface must be in good repair, clean with hot water and GPD at start and finish of each session or if becomes soiled. Cover with disposable paper roll and change between each patient use
Hoists and slings	After each patient use, clean thoroughly using hot water and GPD and store dry. Slings should be single resident use and regularly laundered. Single patient use disposable slings are also available
Nail brushes	Single-use only
Nebulisers	<p><b>Nebuliser Units</b> Follow manufacturer's instructions, or wipe with damp cloth and GPD and hot water after each use</p> <p><b>Nebuliser (patient end) equipment</b> i.e. tubing, mask and nebuliser reservoir should be single patient use. Mask and nebuliser reservoir – wash with hot water and GPD, and dry between each use. Store dry</p> <p>If the nebuliser unit is being used for several residents the patient end equipment must be removed from the unit at the end of each treatment and stored as above, in a clean container in the residents room</p> <p>Nebuliser unit to be decontaminated as above between each patient use</p> <p>All single patient use equipment must be disposed of at the end of the residents treatment, or earlier if grossly soiled</p>
Suction equipment	<p><b>Disposable suction jar/liners</b> are recommended in cases of known or suspected infection. Suction machine should be cleaned with GPD and water, and dried.</p> <p><b>Non-disposable bottles</b> - ensuring appropriate staff protection, empty the contents into the toilet, rinse with cold water. Clean using hot water and GPD, store dry. Tubing should be disposable. Filters - These should be replaced when wet and at appropriate intervals in keeping with the manufacturer's instructions.</p>
Thermometers	Use disposable sheaths on wards for single patient use. <u>After each use, wash with GPD and water and store dry</u>

Trolleys (dressing trolleys)	Clean top and all surfaces with hot water and GPD daily. Dry thoroughly. If trolley becomes contaminated between patient use, wash with GPD and hot water again
Urinals (non-disposable)	The use of disposable urinals is advised, as manual cleaning is both difficult and unsatisfactory. Non-disposable urinals place in bedpan/urinal washer. Rinse, dry and store inverted. Ideally each patient should have a designated urinal
Urine jugs (non disposable)	The use of disposable jugs is advised, as cleaning is both difficult and unsatisfactory. Wearing gloves and apron, a separate clean jug should be used for each urine collection. Empty the contents into the toilet and rinse. Clean thoroughly with hot water and GPD using disposable paper towels. Rinse and dry. Store inverted. Note: Jugs must be decontaminated between each use
Work surfaces	<b>General Cleaning:</b> Use GPD and hot water or multi-surface wipes.  <b>Contaminated Surfaces:</b> Clean with GPD and hot water and then wipe with 1% sodium hypochlorite solution.

## **9. Environmental Cleaning**

The environment plays a relatively minor role in transmitting infection, but dust, dirt and liquid residues will increase the risk. They should be kept to a minimum by regular cleaning and by good design features in buildings, fittings and fixtures.

A written cleaning schedule should be devised specifying the persons responsible for cleaning, the frequency of cleaning and methods to be used and the expected outcomes:

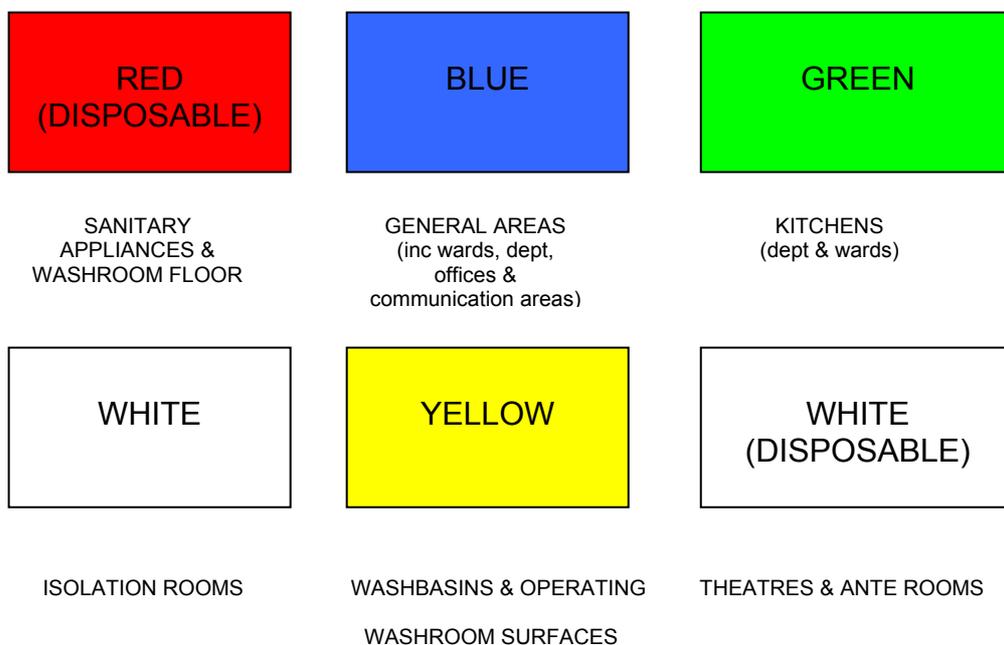
- Work surfaces and floors should be smooth-finished, intact, durable of good quality, washable and should not allow pooling of liquids and be impervious to fluids
- Carpets are not recommended in treatment rooms or areas where clinical procedures will take place because of the risk of body fluid spills
- Where carpets are in place, there should be procedures or contracts for regular steam cleaning and dealing with spills
- Keep mops and buckets clean, dry and store inverted
- Mop head should be removable for frequent laundering, or single-use if this is not possible
- Provide single-use, non-shedding cloths or paper roll for cleaning
- Keep equipment and materials used for general cleaning separate from those used for cleaning up body fluids
- Colour code-cleaning equipment, such as mop heads, gloves and cloths for toilets, kitchens and clinical areas. Use different colours for each area
- Use general-purpose detergent (GPD) all environmental cleaning - follow the manufacturer's instructions.

### **Colour Code for Hygiene**

The following table is from the NHS Healthcare Cleaning Manual and make recommendations for colour coding the cleaning equipment. These recommendations should be followed.

## Colour Code for Hygiene

Based on the National Colour-coding System for the British Institute of Cleaning Science



**THE GOLDEN RULE: WORK FROM THE CLEANEST AREA TOWARD THE DIRTIEST AREA. THIS GREATLY REDUCES THE RISK OF CROSS-CONTAMINATION.**

1. The aim of a colour-coding system is to prevent cross-contamination
2. It is vital that such a system forms part of any employee induction or continuous training programme
3. A minority of people are colour blind in one or more colours. Some individuals may not know this and colour identification testing should form part of any induction training
4. Always use two colours within the washroom/sanitary area
5. The colour-coding system must relate to all cleaning equipment, cloths and gloves.

Monitoring of the system and control of colour-coded disposable items against new stock release is extremely important.

<b>DOMESTIC</b>	<b>CLEANING</b>
Bucket (plastic)	Empty contents down toilet or slop hopper. Rinse with hypochlorite solution and dry
Mop (wet)	Rinse, dry and store head up after use; heat disinfect in washing machine and dry thoroughly weekly
Mop (dry)	Vacuum after each use. Replace covers daily or more frequently if necessary
Lavatory brushes	Rinse in flushing water and store dry
<i>Suggested colour coding of cleaning equipment</i>	See colour code for hygiene table
Floors (vinyl or equipment)	Dust control - dry mop Wet cleaning - wet mop, wash with hot water and G.P.D If known contamination - follow with hypochlorite. <b>Refer to Spillage Management (Section J)</b> . If carpet, vacuum/steam cleaner.
Furniture and fittings	Damp dust with hot water and GPD. If know contamination - follow with hypochlorite, 1000ppm
Lavatory seat and handle	If soiling is evident, or there is an outbreak of diarrhoea, or the previous user had a loose stool, clean with hot water and G.P.D followed by chlorine-releasing compound (i.e. Presept, Chlortabs)
Showers	Should be clean and maintained. Launder curtains 3 monthly. Showerheads should be de-scaled when necessary. If not in regular use showers should be run 5 minutes at least once a week as they are a potential risk for Legionella
Walls & Ceilings	Not an infection problem. When visibly soiled use hot water and detergent. Splashes of blood, urine or known contaminated material should be cleaned promptly with hot water and GPD, followed by hypochlorite solution 1000PPM ( <b>Refer Section J</b> )

## **10. Decontamination of Equipment Prior to Inspection, Service, Repair or Loan**

Do not send contaminated equipment elsewhere without decontaminating first. Before dispatch, complete and attach a certificate which states the method of decontamination used, or the reason why decontamination was not possible (NHS Management Executive 1993).

Equipment that is impossible to decontaminate is likely to be complex, high technology and heat-sensitive. Often it cannot be decontaminated without being dismantled by an engineer - in this case attach a biohazard label to the item. Complete the clearance certificate and advise staff on protective measures.

(See next page for clearance certificate.)

## DOCUMENTATION

A completed clearance certificate must be attached to the equipment prior to work being carried out. A suggested letter is:-

*From:*

-----  
-----  
-----  
-----

*To:*

-----  
-----  
-----  
-----

Make and description of equipment item:

-----

Model/ Serial/ Batch Number:

-----

Other distinguishing marks:

-----

This equipment/ item has not been in contact with blood or other body fluids. It has been cleaned in preparation for inspection, servicing or repair.

This equipment has been decontaminated. The method used was

\_\_\_\_\_

This equipment could not be decontaminated. The nature of risk, and safety precautions to be adopted are

\_\_\_\_\_

*Signed*

*Date*

\_\_\_\_\_  
*Position*

\_\_\_\_\_  
*Address*

\_\_\_\_\_

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION L – WASTE MANAGEMENT

Currently the waste management regulations are going through a transformation to comply with the EU waste management standards. A draft document (Hazardous Waste Regulation July 2005) is therefore being studied for final approval and possible implementation.

As a result of these changes the waste management section in this policy has not been reviewed. We advise that Hospices should keep to the current known waste management guidelines and best practice, and follow guidance of local waste collectors.

### 1. Introduction

This guideline sets out the procedures for staff to follow for the management of waste.

### 2. Responsibility

All health care organisations have a legal responsibility to dispose of all waste so that no harm is caused either to staff, members of the public or the environment. The responsibility begins with the generation of the waste and continues until its final disposal, even where properly authorised agents are used.

It is essential that in their own interests, and that of others, persons handling waste exercise care if injury or infection risk is to be avoided, thereby recognising their responsibilities under the following legislation:

- Health & Safety at Work etc Act 1974
- Control of Pollution Act 1974
- Collection and Disposal of Waste Regulations 1988
- Control of Pollution (Amendment) Act 1989
- Environmental Protection Act 1990
- Environmental Protection (Duty of Care) Regulations 1991
- Controlled Waste Regulations 1992
- The Special Waste Regulations 1996
- The Safe Disposal of Clinical Waste 1999

- Health Care Waste Management and Minimisation 2000

### **3. Definition of Clinical Waste**

Clinical waste is considered to be:-

- a) Any waste which consists wholly or partly of human or animal tissue, blood or other body fluids, excretions, drugs or other pharmaceutical products, soiled swabs or dressings, or syringes, needles or other sharp instruments, being waste which, unless rendered safe, may prove to be hazardous to any person coming into contact with it;
- and
- b) Any other waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practice, investigation, treatment care, teaching or research, or the collection of blood for transfusion, being waste which may cause infection to any other person coming into contact with it.

(Controlled Waste Regulations 1992)

### **4. Segregation of Waste**

This is currently being reviewed following the recent Hazardous Waste Regulation (2005). In addition there have been:

- 1) Changes in Waste Management Regulation, notably Landfill Waste Regulations (2002)
- 2) Changes in carriage regulations, notably amendments to Carriage of Dangerous Goods and Use of Transport Pressure Equipment Regulations (ADR 2005)
- 3) Changes in waste segregation – the need to segregate and identify waste destined for different disposal routes.

Therefore new guidance is awaited from the Environment Agency as to the categories of waste according to the European Waste Catalogue and routes of disposal. We currently recommend that you follow the waste contractor's instructions until we get clarity from the Environment Agency.

### **5. Handling of Waste**

- Waste should be segregated at the point of origin
- Personal protective clothing should be worn when handling waste
- Clinical waste should be:

- Correctly bagged in yellow bags of 225 gauge to prevent spillage
  - Double bagged where:
    - the exterior of the bag is contaminated
    - the original bag is split, damaged or leaking
  - Kept in a rigid-sided holder or container with a foot-operated lid, and, so far as is reasonably practicable, out of the reach of children
  - Only filled to  $\frac{3}{4}$  full
  - Securely sealed and labelled with coded tags at the point of use to identify their source.
- Clinical waste should not be:
    - Decanted into other bags, regardless of volume
    - Contaminated on the outside
    - Re-used
    - Sharps must be disposed of into approved sharps containers that meet BS7320/UN3291
    - Sharps containers should NEVER be placed into a yellow clinical waste bag.

## 6. Disposal of Waste

Clinical waste should be placed in a yellow bag (minimum gauge 225mm)

The bag should be removed and securely fastened at least once a day or when  $\frac{3}{4}$  full, labelled with its place of origin and placed in the designated clinical waste collection point.

Clinical waste should be collected weekly by an authorised clinical waste disposal company.

### **Disposal of Sharps**

- Syringes, needles, razors, ampoules and other sharps should always be placed in a sharps container. These items should never be placed in a waste bag of any kind.
- Care should be taken to ensure that sharps containers are correctly assembled according to the manufacturer's instructions.
- Use the appropriately sized sharps container to prevent used sharps being stored for long periods of time.

- It is the personal responsibility of the person who uses a sharp to dispose of it safely.
- Always place sharps in the sharps container as soon as possible.
- Sharps containers must be sealed, labelled with the point of origin and placed in the designated clinical waste collection point when  $\frac{3}{4}$  full.
- Sharps containers should be kept in a location which prevents injury to patients, visitors and staff. They should be below eye level and not kept on the floor. Sharps containers should conform to BS 7230/UN 3291.

### **Disposal of Pharmaceutical Waste - Special Waste**

- Pharmaceutical waste includes all part used and out of date medicines, cream and ointment tubes and aerosols. Other associated waste e.g. empty blister packs and alcohol wipe containers can be disposed of in the domestic waste stream (black bag).
- All pharmaceutical waste should be placed directly into the pharmaceutical waste container, or returned to the local chemist for them to place into their pharmaceutical waste container.
- When  $\frac{3}{4}$  full, the container must be sealed, labelled to identify its source with contact details and placed in the designated collection point.
- It must be ensured the container is clearly labelled, and that all associated documentation is signed off at the time of collection.

## **7. Storage of Clinical Waste**

Clinical waste should be removed from point of generation as frequently as circumstances demand, and at least weekly.

Whilst awaiting collection of bulk amounts, waste should be:

- Stored in correctly coded bags, with bags of each colour code kept separate
- Situated in a centrally designated area of adequate size related to the frequency of collection
- Sited on a well-drained, impervious hard standing floor, which is provided with wash down facilities
- Kept secure from unauthorised persons, entry by animals and free from infestations
- Accessible to collection vehicles.

**ESSEX HEALTH PROTECTION UNIT  
HOSPICE INFECTION CONTROL GUIDELINES**

**SECTION M – CARE OF PATIENTS WITH  
KNOWN INFECTIOUS DISEASES**

**1. Care of Residents with known Infectious Diseases  
Isolation Precautions (Barrier Nursing)**

Within the care home setting, traditional strict barrier nursing is not often recommended. The GP or EHPU may recommend a modified version for residents who develop acute symptoms of possible infectious disease. It is important for staff to appreciate that when they are caring for someone with a known, or suspected, infectious disease, there is the potential for cross-infection if basic infection control principles are not followed.

**2. Diseases**

More detailed information about diseases can be found in the relevant Section of these guidelines, and on the EHPU website [www.essexhpa.org.uk](http://www.essexhpa.org.uk), or on the HPA website [www.hpa.org.uk](http://www.hpa.org.uk).

The following communicable diseases may require isolation nursing precautions to be initiated.

<b>DISEASE</b>	<b>HOW LONG THE DISEASE REMAINS INFECTIOUS</b>
Beta-haemolytic streptococci Group A	Infectious until: (a) Clearance of organism is demonstrated or (b) 24 hours after the start of appropriate antibiotic therapy
Chickenpox	Infectious until vesicles are dry
<i>Clostridium difficile</i> (Pseudomembranous colitis)	Infectious until diarrhoea has ceased for 48 hours

Gastro-enteritis	Infectious until symptom free for 48 hours
Hepatitis A	Infectious until 7 days after the onset of jaundice
Hepatitis B + C	Blood and body fluids should be assumed to be infectious
HIV	As above
Impetigo	Infectious until: a) culture negative, or b) have received at least 24 hours of appropriate antibiotics, or c) clinical improvement
Meningococcal Meningitis	Infectious for 24 hours after start of appropriate antibiotic therapy
Mumps	Infectious for 9 days after onset of swelling in salivary glands
Rubella	Infectious for 4 days from onset of rash. Non-immune pregnant staff should not nurse these patients
Scabies	Infectious until one application of a scabicial treatment has been completed
Shigella	Infectious until diarrhoea has ceased for 48 hours
Shingles	Infectious to a person who has not had chickenpox by direct contact with vesicles. The contact will develop chickenpox
Pulmonary Tuberculosis (Open)	Infectious until the first two weeks of appropriate antibiotic therapy have been given. The infectious period may be prolonged for Multi-Drug Resistant TB (MDRTB)

Precautions should also be taken with residents suffering from the following symptoms until a diagnosis is confirmed:

- (a) Diarrhoea of unexplained origin
- (b) Temperature of unknown origin
- (c) Excessive bleeding
- (d) Rashes of unknown aetiology
- (e) Excessive vomiting.

## **PROCEDURES**

**Standard principles of infection control should be strictly adhered to at all times (refer to Section F – Standard Principles of Infection Control).**

Once a diagnosis has been made, the resident (and family) must have the condition explained to them including the mode of spread and its significance.

### **Hand Hygiene**

Alcohol handrub should be used after normal handwashing. In some instances i.e. outbreak of Diarrhoea and Vomiting the use of antibacterial soap will be requested by the CDCN.

### **Disposal of Potentially Infected Items**

Contaminated dressings and all disposable items should be disposed of as clinical waste **(refer to Section L – Waste Management).**

### **Urinals and Bedpans**

Automated washer/disinfectors are recommended.

If not available, the contents should be emptied down the toilet or sluice and flushed away. Care should be taken when cleaning the urinal or bedpan to avoid splashing. A plastic apron and non-sterile latex or vinyl gloves should be worn. The item should be cleaned with GPD and hot water prior to disinfection with a sodium hypochlorite solution strength 10,000 p.p.m. (1 part household bleach to 10 parts water) and left for 10 minutes. The bedpan/urinal should be dried and stored inverted.

### **Linen**

Should be washed on as hot a wash as the fabric will tolerate as promptly as possible. Soiled linen should be contained within a soluble alginate bag to minimise the risk of contamination to the environment or to personnel **(refer to Section S - Laundry Management).**

## **Crockery and Cutlery**

Disposable items are not required. GPD and water as hot as can be tolerated is sufficient, to be washed in the usual kitchen sink or dishwasher.

## **Transporting Residents**

Residents should only be sent to other department/premises (i.e. care homes, hospital Out-patient or In-patient departments) when it is essential. Staff involved in the direct care of the resident should be informed of risk factors, so that relevant control measures can be implemented.

## **Deceased Residents**

Standard principles of infection control should be maintained when a patient dies. If the resident had, or was suspected of having, an infectious disease when they died the mortuary/funeral director staff should be informed of the potential infectious risk, but not the exact condition – patient confidentiality continues after death.

**ESSEX HEALTH PROTECTION UNIT  
HOSPICE INFECTION CONTROL GUIDELINES**

**SECTION N – ASEPTIC TECHNIQUE**

**1. Introduction**

This guideline sets out the procedures for staff to follow for aseptic technique.

**2. Important Principles of Aseptic Technique**

The aims of aseptic technique are:

- To prevent the introduction of pathogens to the wound/break in the skin
- To prevent the transfer of bacteria from one patient to another
- To prevent staff from acquiring infection from the patient.

The important principles are:

- That the open wound should not come into contact with any item that is not sterile
- That any items that have been in contact with the wound may be contaminated, and should be discarded safely or appropriately decontaminated.

Indications for using an aseptic technique:

- Wound healing by primary intent (before surface skin has healed)

IV cannulation	Medical invasive procedures
Urinary catheterisation	Endotracheal suction
Suturing	

Since hands are not sterile, forceps have traditionally been used for the procedure. However, forceps are cumbersome to use and do not prevent the transfer of bacteria from the wound to the hands.

The procedure can be performed more easily holding sterile swabs in the sterile-gloved hands. Hands should be washed before and after the technique.

Many aseptic techniques include a ritualistic practice of cleaning trolleys with alcohol between patients. It is now felt that this serves no useful purpose, and that an area cleaned

by detergent and hot water and dried with paper roll is sufficient, as the sterile field will be created by the sterile towel contained within the dressing pack.

Bacteria acquired on the clothing during the procedure may be transferred into the wound of another patient, therefore a clean disposable apron should be used for each dressing procedure.

If dressings are removed by soaking in bath water or bowls, a plastic impermeable lining/ bag should be placed in the bucket/ bowl before filling with water. The bath or bowl should be thoroughly cleaned with detergent and then dried to ensure that pathogens are removed.

### **3. Clean Technique**

In many situations a modified aseptic 'clean' technique is more appropriate.

The aim is still to avoid the introduction of potential pathogens to a susceptible site and to prevent the transfer of pathogens to other patients or staff.

Indications for use of a clean technique may include:

- Dressing of wounds healing by secondary intention.

Removal of sutures	Dressing tracheostomy sites
Dressing of IV lines	Catheter care
Removal of drains	Stoma care

The procedure is the same as for the aseptic technique, except that appropriate clean unsterile gloves are worn.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION O – INTRAVENOUS THERAPY

### 1. Introduction

This guideline sets out the procedures for staff to follow for intravenous therapy.

### 2. Intravenous Therapy

Control of infection in intravenous therapy is of paramount importance. Catheter-related sepsis causes significant morbidity and mortality.

The incidence of Central Venous catheter related infections is 4-20%. Staphylococci is implicated in 50% of episodes. Other micro-organisms include:

- a) *Candida*
- b) *E. coli*
- c) *Klebsiella*
- d) *Pseudomonas*.

Intravenous therapy may be accessed via a peripheral vein or a central line. A central line catheter is inserted into the superior vena cava and is often tunnelled under the skin in the chest wall e.g. a 'Hickman' Line. Another access point into a central line is through an entry port in the arm or chest wall e.g. Porta Cath.

These various devices may be left in situ for different lengths of time. Individual instructions on care of specific lines can be obtained either from the health care premises, that the patient attended, or from the manufacturer.

### 3. Intravenous Cannulation and Therapy

Factors influencing development of sepsis include:-

- Initial skin preparation
- Care of the insertion site
- Type of connector
- Skin microflora and type of dressing
- Care of entry port.

## 4. Recognising Catheter Associated Infections

**Localised** effects may occur at the insertion site or along the track of a tunnelled device. These include:

- Thrombophlebitis
- Pain
- Exudate formation
- Irritation
- Heat at site
- Erythema
- Oedema.

**Systemic** effects include:

- Pyrexia
- White cell count elevated.

## 5. Action to take in the Event of an Infection Occurring

- Do not inject via the catheter or use the intravenous line
- Contact the Doctor in charge of the patient's care - an alternative route or site of administration should be considered (cannula should be removed at first indication of local infection)
- Take swab for Microbiology culture and sensitivity
- May need blood cultures whilst still in-situ from:
  - a) Peripheral Line
  - b) Central Line
- Mid-stream specimen of urine (MSU) chest x-ray, throat swabs.

## 6. Extravasation

Occurs when a cannula pulls out of a vein and the fluid accumulates around the cannula site in the surrounding tissues.

Possible signs are:

- Swelling
- Discomfort
- Burning
- Pain

Action:

- Do not use intravenous line
- Inform Doctor in charge of the patient's care
- Elevate the limb to promote venous drainage
- Monitor vital signs.

## **7. General Principles for the Control of Infection in Intravenous Lines**

### **Catheter Site care**

Preferably, a sterile transparent, semi-permeable polyurethane dressing should be used to cover the catheter site.

If a patient has profuse perspiration, or if the insertion site is bleeding or oozing, a sterile gauze dressing is preferable to a transparent, semi-permeable dressing.

Gauze dressings should be changed when they become damp, loosened or soiled, and the need for a gauze dressing should be assessed daily. A gauze dressing should be replaced by a transparent dressing as soon as possible.

Transparent dressings should be changed every 7 days, or sooner if they are no longer intact or moisture collects under the dressing.

Dressings used on tunnelled or implanted CVC sites should be replaced every 7 days until the insertion site has healed, unless there is an indication to change them sooner.

An alcoholic chlorhexidine gluconate solution should be used to clean the catheter site during dressing changes, and allowed to dry. An aqueous solution of chlorhexidine gluconate should be used if the manufacturer's recommendations prohibit the use of alcohol with the product.

Individual sachets of antiseptic solution or individual packages of antiseptic-impregnated swabs or wipes should be used to disinfect the dressing site.

Healthcare personnel should ensure that catheter-site care is compatible with catheter materials (tubing, hubs, injection ports, luer connectors and extensions) and carefully check compatibility with the manufacturer's recommendations.

### **General principles for catheter management**

The injection port or catheter hub should be decontaminated using either alcohol or an alcoholic solution of chlorhexidine gluconate before and after it has been used to access the system.

In-line filters should not be used routinely for infection prevention.

Antibiotic lock solutions should not be used routinely to prevent catheter-related bloodstream infections (CRBSI).

Systemic antimicrobial prophylaxis should not be used routinely to prevent catheter colonisation or CRBSI either before insertion or during the use of a CVC.

Preferably, a single lumen catheter should be used to administer parenteral nutrition. If a multilumen catheter is used, one port must be used exclusively dedicated for total parental nutrition and all lumens must be handled with the same meticulous attention to aseptic technique.

Preferably, a sterile 0.9 percent sodium chloride injection should be used to flush and lock catheter lumens.

When recommended by the manufacturer, implanted ports or open-ended catheter lumens should be flushed and locked with heparin sodium flush solutions.

Systemic anticoagulants should not be used routinely to prevent CRBSI.

If needle-less devices are used, the manufacturer's recommendations for changing the needle-less components should be followed.

When needle-less devices are used, the risk of contamination should be minimised by decontaminating the access port with either alcohol or an alcoholic solution of chlorhexidine gluconate before and after using it to access the system.

When needle-less devices are used, healthcare personnel should ensure that all components of the system are compatible and secured, to minimise leaks and breaks in the system.

In general, administration sets in continuous use need not be replaced more frequently than at 72 hour intervals unless they become disconnected or a catheter-related infection is suspected or documented.

Administration sets for blood and blood components should be changed every 12 hours, or according to the manufacturer's recommendations.

Administration sets used for total parenteral nutrition infusions should generally be changed every 24 hours. If the solution contains only glucose and amino acids, administration sets in continuous use do not need to be replaced more frequently than every 72 hours.

## **8. Total Parenteral Nutrition**

- Total Parenteral Nutrition (TPN) is the administration of nutrient solutions via a central or peripheral vein. It is most commonly administered through a peripherally inserted CVC into the superior vena cava and it is used when the resident's gastro-intestinal tract is non-functional.
- Preferably a single lumen catheter should be used to administer TPN.
- Strict asepsis is required when dealing with parenteral nutrition procedures.
- Administration sets should be changed every 24 hours.
- Residents are generally self-caring with advice and support from the Nutrition Support Team.
- The Nutrition Nurse Specialist team is available 24 hours a day via your local hospital.

## **9. Enteral Feeding**

### **PREPARATION AND STORAGE OF FEEDS**

Wherever possible pre-packed, ready-to-use feeds should be used in preference to feeds requiring decanting, reconstitution or dilution.

The system selected should require minimal handling to assemble and be compatible with the resident's enteral feeding tube.

Effective hand decontamination must be achieved prior to feed preparation.

When decanting, reconstituting or diluting feeds, a clean working area should be prepared and equipment dedicated for enteral feed use only should be used.

Feeds should be mixed using cooled boiled water or freshly opened sterile water and a no-touch technique.

Feeds should be stored according to the manufacturer's instructions and, where applicable, food hygiene legislation.

Where ready-to-use feeds are not available, feeds may be prepared in advance, stored in a refrigerator and used within 24 hours.

### **ADMINISTRATION OF FEEDS**

Minimal handling and an aseptic no-touch technique should be adopted to connect the administration system to the enteral feeding tube.

Ready-to-use feeds may be given for a whole administration session, up to a maximum of 24 hours.

Administration sets and feed containers are for single-use and must be discarded after each feeding session.

### **CARE OF INSERTION SITE AND ENTERAL FEEDING TUBE**

The stoma should be washed at least daily with water and dried thoroughly.

To prevent blockage, the enteral feeding tube should be flushed with fresh tap water before and after feeding or administering medications. Enteral feeding tubes for residents who are immunosuppressed should be flushed with either cooled freshly boiled water or sterile water from a freshly opened container.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION P – PREVENTION OF INFECTION ASSOCIATED WITH URINARY CATHETERS

### 1. Introduction

This guideline sets out the procedures for staff to follow for the prevention of infection associated with urinary catheters.

### 2. Routes of Entry For Infection

Urinary catheters are inserted to provide urinary drainage. They may be introduced via the urethra or into the bladder through a supra pubic procedure.

Comprehensive information, advice and support is available from the continence advisors in your area.

.....  
Bacteria may enter the bladder of the catheterised patient in one of four ways:

- Introduced with the catheter at the time of insertion
- Travel along the outside of the catheter
- Travel along the inside lumen of the catheter
- Through a break in the closed system.

### 3. Assessment for Catheter Equipment

Once the decision to insert a urinary catheter has been made an individual assessment needs to be completed by the nurse or continence advisor for:

- Size, length and type of catheter
- Appropriate drainage and securing system.

Manufacturers guidelines **must always** be followed.

The catheter size should be the smallest that is capable of providing adequate drainage. Catheters are available in paediatric, female and male (standard) lengths. In some instances it may be more appropriate to use a male length for a female patient.

- Short-term catheters can be used for 7 days only. Plastic catheters irritate the bladder, cause urethral pain, and leakage and trauma, and should therefore be avoided
- Medium-term catheters can be used for up to 3 weeks and are PTFE-coated or silicone-coated
- Long-term catheters can be used for up to 3 months and are made from silicone or hydrogel coated. They should not be changed unless they are necessary, for example due to a blockage
- The retaining balloon should be filled with sterile water to the volume indicated by the manufacturer (usually 10mls in adults, and 3-5ml in children).

#### 4. Insertion

This should be an **aseptic** technique. The ***ONLY*** exception to this may be when an individual performs intermittent ***self***-catheterisation, when a clean technique is required.

#### 5. Other Equipment

Typical equipment consists of: Catheter, Leg Bag, Night Bag, and Night Bag Stand

- The leg bag, attached to the end of the catheter can remain in place for up to 7 days. Should it be removed or become detached for any reason before that, then a new sterile bag is required
- To provide the patient with a greater capacity of drainage a night bag can be attached to the end of the leg bag. If the patient is self-caring, this bag can then be removed, rinsed with water, drained dry, the connector tube capped and then stored in a clean place and re-used for up to 7 consecutive nights
- When more than one carer is delivering care single-use, non-drainable night bags should be used
- Non-drainable bags should be emptied by snipping the bottom corner of the bag and emptying contents down the toilet, whilst wearing gloves and plastic apron
- When emptying the bags, or for any manipulation of joints, disposable aprons and gloves should be worn. Hands must be washed and dried before putting on and after removal of gloves
- Straps

- A catheter should always be securely positioned, usually to the patient's leg to prevent trauma and potential infection. Velcro (MG) straps **ONLY** are suitable for this purpose, they are available on GP prescription
- Manufacturer's straps should be used to secure the leg bags
- Night Bags should be securely fastened to a drainage bag stand.

## 6. Bladder Washouts and Installation

**These must not be used routinely to prevent catheter-associated infections. Where indicated they should only be performed by appropriately trained nurses. As the correct technique is of paramount importance, patients/ carers should NOT perform washouts without prior instruction. Washouts should be sterile commercially prepared packs. Advice about regimes and technique is available from the Continence Advisor.**

Hands should be washed and sterile disposable gloves worn. Although the logistics of manipulating catheter, catheter bag and wash-out may mean that the procedure becomes unsterile, every attempt should be made to keep it sterile, by a non-touch technique of sterile areas.

## 7. Care of Catheters

The catheter bag should **ALWAYS** hang at least 30cms below the bladder, this assists in a good flow of urine and prevents stagnation of urine.

When a catheter bag is emptied it should be performed whilst wearing latex or vinyl gloves and apron and into a specified individual container for each patient. This container should then be washed with detergent and water and stored dry.

Urine can be disposed of into the toilet or the sluice.

Good personal hygiene should be maintained at all times. This can be achieved with soap and water by washing the genital area from front to back and taking care not to contaminate the catheter itself. The use of talcum powder and lotions should be avoided.

If an infection is suspected (presence of pyrexia, groin pain, foul smelling and cloudy urine), a specimen of urine should be taken. The causative organism (bacteria) must be identified and antibiotic sensitivities established before antibiotics are commenced. Specimens of urine should only be taken from the sample port on a leg bag and not from the drainage tap. All specimens need to be in the laboratory as soon as possible.

Supra pubic urinary catheters require the same assessment and drainage procedures.

A sterile dressing will be necessary until the entry/ exit site heals, when normal washing/ bathing may resume.

If a catheter becomes blocked with debris or a blood clot it may be necessary to use a 'bladder' syringe filled with sterile water to clear the blockage. This should only be performed after adequate instruction/ training.

To remove an indwelling urinary catheter the retaining balloon must be deflated using a syringe. Once removed the balloon should be re-inflated to ensure it is intact and therefore no debris is left inside the bladder. If the balloon or catheter is not complete the patient needs a urologist referral.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION Q – SPECIMENS FOR LABORATORY EXAMINATION

### 1. Introduction

This guideline sets out the procedures for staff to follow for specimens for laboratory examination.

Clinical specimens include any substance solid or liquid removed from the resident for the purpose of analysis. Staff should be trained to handle specimens safely.

### 2. General Principles of Specimen Collection

A specimen of any body tissue/fluid may be required to diagnose an infectious disease, but the specimen may also be a source of infection. Therefore correct collection and handling is necessary.

Correct completion of specimen request forms (including “High Risk” identification) is the responsibility of the Doctor or requesting Environmental Health Officer.

All specimens should be collected using “Standard Principles for Infection Control” (i.e. wearing of appropriate gloves, disposable plastic apron and washing and drying of hands before and after the procedure).

Where residents have been asked to provide a specimen, they should be provided with appropriate container and given instructions as to how to collect specimens.

Laboratory approved containers must be labelled with patient identification details, date of specimen and specimen details. If a wound swab; state what type of wound, where on the body, whether deep or superficial, if antibiotics have been used either topical or systemically, and any other known clinical condition.

The lids should be screwed on tightly. The container with the specimen must be placed in an individual transparent plastic transport bag as soon as it has been labelled.

The transport bag must be sealed. The request form must always accompany the specimen but should not be put inside the bag with the specimen. If a wound swab state type of wound, where on the body, whether deep or superficial and if antibiotics have been used, either topical or systemic.

Specimens must be sent to the laboratory as soon as possible after collection. This will mean planning workload carefully. Whilst awaiting transport, specimens should be stored securely, for as short a time as possible, i.e. not overnight, away from resident and visitor areas and away from food and medicines.

If specimens have to be stored awaiting transport for more than 4 hours, specimens should be stored in an airtight container in a designated fridge (at a maximum temperature of 5°C- **not a food fridge.**

Specimens must be transported safely from the place of collection to the laboratory. They should be securely sealed as detailed above and if the specimen collection occurs at home (or away from the specimen collection area) the specimen should be placed in **a designated rigid specimen transport container** before being transported by car to the Clinic/GP surgery or laboratory.

Receiving laboratories should supply instructions on specimen collection and transport on request. Sputum specimen must be received by the laboratory within 24 hours of collection.

**NB.** In the event of a suspected outbreak of infection it is important for specimens to be collected promptly and for the request form to be marked as "Possible Outbreak". Stool specimens should be sent as soon as an outbreak is suspected e.g. the second loose stool.

**ESSEX HEALTH PROTECTION UNIT  
HOSPICE INFECTION CONTROL GUIDELINES**

**SECTION R – MANAGEMENT OF NON INFECTIOUS AND  
INFECTIOUS DECEASED PATIENTS**

**1. Introduction**

This guideline sets out the procedures for staff to follow for the management of non-infectious and infectious deceased patients.

**2. Management of Deceased Patients**

The deceased should be treated with the due respect and dignity appropriate to their religious and cultural background. Last Offices, which vary according to religious and cultural practices, may be compromised by the need for specific measures if an infectious disease was associated with the death, or co-existed at the time of death. Any problems should be discussed with a member of the Infection Control Team who may wish to consult the appropriate priest or religious authority.

Most bodies are not infectious, however through the natural process of decomposition the body may become a source of potential infection whether previously infected or not, therefore sensible precautions should be taken routinely:

- (a) Disposable gloves and aprons should be worn when washing and preparing the body
- (b) Washing the body with soap and water is adequate
- (c) Dressings, drainage tubes, etc. should be removed unless the death occurred within 24 hours of an operation or was unexpected in which cases a post-mortem is likely and therefore a coroner's advice should be sought
- (d) Clean dressings should be applied to any wounds
- (e) Profusely leaking orifices may be packed with gauze.

### **3. Additional Last Offices for a Known Infected Body**

The body of a person who has been suffering from an infectious disease may remain infectious to those who handle it.

The mortuary/funeral director staff should be informed of the potential infectious risk.

If the deceased has died from one of the following infectious diseases listed below, the body will need to be placed in a cadaver bag which is available from the undertaker.

Anthrax	Psittacosis
Chicken pox/shingles	Q fever
Cholera	Rabies
Diphtheria	Tuberculosis (infective)
Food Poisoning (if faeces is present)	Viral Haemorrhagic fever
Hepatitis B	Yellow fever
Hepatitis C	Pyrexia of unknown origin
HIV/AIDS	Brucellosis
Leprosy	
Meningococcal Septicaemia (with or without meningitis)	
Plague	
Acute Poliomyelitis	

**or** if there are large quantities of body fluids present.

A 'Notification of Death' label and a 'Danger of Infection' label should be attached discreetly to the outside of the bag. Neither label should state the diagnosis, which is confidential information; it is the responsibility of the certifying clinician to ensure the funeral directors have sufficient information about the level of risk of infection and stating the type of precautions required.

Once the body is sealed in the body bag, protective clothing will no longer be necessary.

Relatives and friends who wish to view the body should do so as soon after death as possible. The bag can be opened by a member of staff wearing gloves and plastic apron, but relatives should be told that there is a risk of infection and should be advised to refrain from kissing or hugging the body. In some rare cases the bag should not be opened e.g. if the patient suffered from Anthrax, Plague, Rabies and Viral Haemorrhagic Fever.

Further advice on specific infectious diseases can be found in the Infection Control Guidelines for Funeral Directors, or advice can be sought from the Essex Health Protection Unit ([www.essexhpa.org.uk](http://www.essexhpa.org.uk)).

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION S – LAUNDRY MANAGEMENT

### 1. Introduction

This guideline sets out the procedures for staff to follow for laundry management.

The laundry must be sited so that soiled articles are not carried through areas where food is stored, prepared, cooked or eaten.

The laundry floor must be of a smooth, impermeable and easily cleanable material.

Domestic staff should have a clear programme for cleaning the laundry environment. All horizontal surfaces should be damp-dusted on a daily basis.

Any body fluid contamination must be cleaned immediately according to the spillage policy.

Walls must be in sound condition and easily cleaned as necessary.

All machinery must be maintained in a clean dust-free condition and must be covered by a service agreement which supports prompt repair or replacement of the machine in case of breakdown. Records of maintenance/service should be kept.

Soiled laundry must be stored in a designated area within the laundry, separate from the area where clean laundry is handled.

Staff must have use of a designated handwash facility with liquid soap and paper towels within the laundry. Washing machines should have programming ability to meet disinfection standards:

- A 'sluice' cycle to pre-wash heavily contaminated laundry
- Machine should reach 65°C for a minimum of 10 minutes or 71°C for 3 minutes in order to achieve disinfection
- Laundry staff should have training and be competent in the use of the equipment.

Washing powders and other substances must be kept in a locked storage cupboard. Material Safety Data Sheets for any potentially hazardous substances must be obtained and be available for reference.

## 2. Risks to Staff from Infected Linen

The germs in most soiled and fouled linen are unlikely to cause infection in healthy workers provided that care is taken. But to further minimise the risk:

- Wear a waterproof apron and gloves when dealing with used laundry
- Ensure that adequate hand washing facilities are available
- Remove any protective clothing and wash hands before returning to other duties
- Do not smoke or eat while dealing with laundry
- Cover cuts and abrasions with waterproof dressing.

## 3. Categories and Procedures for Handling Laundry

Staff should always wear gloves and a disposable apron whilst handling laundry.

Hands must be washed after removal of protective clothing.

Soiled laundry must be removed to the designated laundry area for processing as soon as possible after it has been produced.

Soiled laundry must be transported around the home only whilst contained within designated linen bags.

**USED LINEN** - all used linen, apart from FOUL, INFECTED or HEAT-LABILE linen should be laundered by a process in which the temperature in the load is maintained at 65°C (150°F) for not less than ten minutes or preferably at 71°C (160°F) for no less than three minutes.

**FOUL LINEN** - is used linen contaminated by blood, faeces, urine, saliva or other body fluids, or otherwise soiled. Heat labile clothing should be washed at the highest temperature possible according to the items fabric instructions. Ideally a sluice cycle on the washing machine should be used for foul linen, followed by the same washing cycle as for used linen.

Laundry contaminated with blood or body fluids must be contained within a water-soluble or soluble-stitched bag prior to being placed in a normal linen bag. This enables contaminated laundry to be placed into the machine (on a 'sluice' cycle) whilst in the soluble bag thereby reducing the risks of body fluid contamination, and potential infection risk, to the staff member.

**Under no circumstances should foul linen be soaked or sluiced by hand.  
Foul linen should be laundered separately and not mixed with other laundry.**

**INFECTED LINEN** includes all linen from patients with or suspected of suffering from an infection. Linen in this category should be handled as little as possible, and placed directly into a washing machine and washed immediately.

There is no need to segregate laundry from residents who are colonised with MRSA or who have any other infection unless advised by the EHPU. Good hygiene practices will suffice.

#### **SENDING LAUNDRY TO A COMMERCIAL LAUNDRY**

A commercial laundry service may stipulate a colour coding system for the management of soiled linen. All staff must be aware of these instructions and comply fully with them.

### **4. Staff Uniforms or Work Clothes**

Staff who are at risk of contaminating their clothes by body fluids should always change into 'home' clothes as soon as possible - preferably before leaving the work place or as soon as home is reached.

Under no circumstances should staff go out socialising in clothes that may have been in contact with body fluids.

Uniforms or work clothes should be washed as soon as possible on as hot a wash as the fabric will tolerate. Cardigans/jumpers should be washed at least weekly.

Uniforms should not be washed with newborn baby, elderly persons or immuno-compromised persons clothing.

The majority of bacteria and viruses will not survive away from the host and would not present a high risk of infection on clothing. However within a mass of body fluid, organisms would survive longer.

Shoes should be cleaned immediately if contaminated with body fluids, using general purpose detergent and hot water - disposable gloves should be worn.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

## SECTION T – PETS AND PESTS

### 1. Introduction

This guideline sets out the procedures for staff to follow for pets and pests.

Whilst staff caring for patients in their own homes have no direct responsibility for the pets of their patient, there may be occasions when staff do become involved in their care. However, with regard to the management of pests, staff may be the only individuals in a position to instigate the control and management of them.

### 2. Pets

Pets can often enhance the quality of life for the ageing and the ill. However some of them can be a source of infection to humans, including some exotic species like reptiles, fish or birds. Sensible precautions can reduce any infection risk to an acceptable level. Hands should be washed following any contact with animals, their bedding or litter.

All animals should be regularly groomed and checked for signs of infection, flea infestation or other illness. If pets become ill, diagnosis and treatment by a vet should be sought. All animals should have received relevant inoculations. Dogs and cats should be wormed regularly as advised by the vet. They should also be checked regularly for flea infestation.

Pets should not be fed in the kitchen or other food preparation areas and their dishes and utensils should be washed separately to other household articles.

Once opened, pet food containers should be kept separate from food for human consumption.

Food not consumed within 1 hour should be taken away or covered to prevent attracting pests.

### 3. Pests

Pests may be found in any property but with sensible precautions will not present an infection risk to patients and staff.

These include:

- Insects** - ants, flies, cockroaches, flees, silverfish.
- Rodents** - rats and mice.
- Birds** - pigeons, magpies, sparrows, etc.,
- Feral cats and foxes**

Kitchen and food stores provide ideal conditions for pests. Not only do they eat the food but also they contaminate and spoil a lot more.

Control measures should include the following:

- Stop pests getting in by fly screens, well fitting doors, covered drains and bird netting
- Look out for droppings, nests, chew-marks on wood or cables
- Discard any foodstuffs or other articles affected by pests, including milk from bottles, the tops of which have been pecked by birds
- Clean up any spillage and decaying food immediately. Carry out regular inspection and rotate any stock. Use rodent-proof containers with well-fitting lids. Store food off the ground.

If any pests are found the local Environmental Health office should be contacted.

#### **4. Litter Box Care**

- Never deal with the litter box if you are pregnant
- Always wear a protective apron and gloves when cleaning the litter box
- If possible, fit a disposable liner to the box for easy cleaning
- Soiled litter should be changed daily
- Litter should be sealed in a plastic bag and disposed of in household waste
- The litter box should not be sited near food preparation, storage or eating areas
- The litter box should be disinfected weekly by being filled with boiling water, which is allowed to stand for at least 5 minutes in order to kill toxoplasmosis eggs and other organisms.

# ESSEX HEALTH PROTECTION UNIT HOSPICE INFECTION CONTROL GUIDELINES

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