

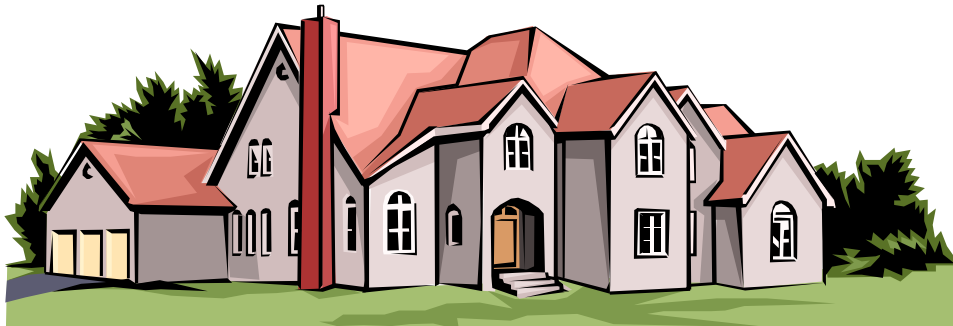
# ESSEX HEALTH PROTECTION UNIT

Part of the



## INFECTION CONTROL GUIDELINES

### CARE HOMES



Issued January 2004  
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# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION A – INTRODUCTION AND CONTACTS

### 1. Introduction

These guidelines have been written for proprietors, managers and carers working in care homes. They replace all previous infection control guidance from the Essex Health Protection Unit (EHPU).

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

These guidelines should be read in conjunction with the Public Health Infection Control Guidance for Care Homes.

### 2. Responsibility

The philosophy of this manual is to encourage individual responsibility by **every** member of staff.

The proprietors and registered manager are responsible for ensuring that there are effective arrangements in place for the control of infections.

### 3. Contacts

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

**The main office telephone number is: 0845 1550069.** The CCDCs and Communicable Disease Control Nurses are contactable via this number.

Advice is also available on the HPA website: [www.hpa.org.uk/essex](http://www.hpa.org.uk/essex).

Users are encouraged to ensure they have access to this site as it has advice and information on a wide range of local communicable disease issues, and during incidents will be updated at least daily with the current state of affairs.

Out of working hours – for **URGENT** communicable disease enquiries:

Contact: 01245 444417, and ask them to page the on-call Public Health Person.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION B – INFECTION, ITS CAUSES AND SPREAD

### 1. The Causes of Infection

An understanding 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 in diameter. 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 it may also infect nails. A common yeast infection is thrush caused by *Candida albicans*.

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

#### **Parasites**

Worms are not always microscopic in size but pathogenic worms do cause infection and some can spread from person to person. Examples include: threadworm and tapeworm.

Ectoparasites i.e. headlice and scabies.

**Prions** are infectious protein particles. Example: the prion causing (New) Variant Creutzfeldt-Jakob Disease (vCJD).

## 2. The Spread of Infection

One feature that distinguishes infection from all other disease is that it can be spread, i.e. one person can 'catch' it from another or via a vector (e.g. crawling or flying insects). There are various means by which micro-organisms can be transferred from a reservoir to susceptible individuals.

The modes of spread of infection can be classified as:

### **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.).

### **Indirect Contact**

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

A **fomite** is defined as an object, which becomes contaminated with infected organisms and which subsequently transmits those organisms to another person. Examples of potential fomites are bedpans, urinals, thermometers, oxygen masks or practically any inanimate article.

Crawling and flying insects are obvious examples of **vectors** and need to be controlled. Insect bites may cause infections such as malaria in areas where malaria carrying mosquitoes live.

### **Hands**

The hands of health and social care workers are probably the most important vehicles of cross-infection. The hands of residents can also carry microbes to other body sites, equipment and staff.

### **Inhalation**

Inhalation spread occurs when pathogens 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. Human, animal and insect bites can also spread infection by the inoculation mode.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION C - NOTIFICATION OF INFECTIOUS DISEASES

### 1. Introduction

This guideline sets out the procedures for staff to follow in respect of communicable disease control.

### 2. Responsibilities

#### Managers

Managers have a responsibility to report relevant notifiable diseases and outbreaks by telephone, and then by utilising the documentation provided in this document.

#### Clinical and healthcare 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 residents 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. Reporting & Documentation of Illness - Suspected/Confirmed Outbreak

Any **registered medical practitioner** (i.e. doctor) who becomes aware or suspects that a patient (s)he is attending is suffering from a notifiable disease is required by law (Public Health Control of Disease Act 1984) to send a notification form to the local authority Proper Officer forthwith.

While laboratories may report, this does not absolve clinicians from their responsibility to do so.

Although the GP is legally responsible for the formal notification of a number of infectious diseases, any suspicion of an outbreak of communicable disease in the care home or the community should be reported to the EHPU by the Home (Team) Manager immediately for further investigation, and management as appropriate.

**It is not necessary to wait for laboratory/microbiological confirmation of a diagnosis.**

**Which diseases are notifiable?**

### **List of Notifiable Diseases**

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

**\* This category includes any infection which could be food or water-borne e.g. *campylobacter*, *salmonella*, *cryptosporidiosis*, *giardia*.**

The EHPU should be contacted if:

- There are two or more individuals with vomiting and/or diarrhoea (amongst residents or staff) or sudden onset of coughing with raised temperature
- There are two or more individuals suffering from the same infectious illness
- There is a high sickness rate amongst staff who appear to be suffering from the same infectious disease.

If a residential establishment is affected the following guidance should be followed:

- Care home managers should contact the EHPU without delay if they suspect there may be an outbreak of infection in a home
- The local Environmental Health Department and the CSCI must also be informed
- Senior management must be informed and requested to ensure adequate staffing to cope with the extra demands of managing an outbreak. Staff working in the home should not work in other care establishments until the outbreak is declared over by the EHPU
- List all residents and staff affected, including age, area/unit where resident/working, onset of symptoms, symptoms suffered, duration of illness, GP and whether a sample has been taken. (Proforma attached for information).

In the event of an outbreak of diarrhoea (with or without vomiting), it is essential to obtain stool samples as soon as possible. The sooner the sample is obtained the higher the chance of identifying the organism causing the outbreak.

To speed the collection of stool samples we recommend that an 'outbreak' kit is kept and replenished after use. The kit should contain:

- Stool sample pot x 6
- Plastic transport bags x 6
- Laboratory forms (to be completed once sample is obtained) x 6.

The above can be obtained from your GP, District Nurse or Environmental Health Officer.

All staff should be aware of the location of the kit.








Samples should be taken as soon as possible after diarrhoea has started, and kept safely at room temperature. Contact the Communicable Disease Control Nurse for further advice regarding the completion of the laboratory form etc.,

Please see Bristol Stool Form Scale on the next page.

Please note that only stool samples of Types 6 and 7 will be processed by the microbiological laboratories.

Please ensure sample pots are securely closed, and sent to the laboratory in the correct packaging.

# THE BRISTOL STOOL FORM SCALE

<i>Type 1</i>		Separate hard lumps, like nuts (hard to pass)
<i>Type 2</i>		Sausage-shaped but lumpy
<i>Type 3</i>		Like a sausage but with cracks on its surface
<i>Type 4</i>		Like a sausage or snake, smooth and soft
<i>Type 5</i>		Soft blobs with clear-cut edges (passed easily)
<i>Type 6</i>		Fluffy pieces with ragged edges, a mushy stool
<i>Type 7</i>		Watery, no solid pieces ENTIRELY LIQUID

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## 4. Specific Guidance for Common Outbreaks

### 4a. Specific Guidance for Outbreaks of Diarrhoea and/or Vomiting

- Isolate symptomatic residents 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 hand rails and kitchen units. For the duration of the outbreak, environmental cleaning should be performed using detergent and hot water followed by a 1000 parts per million available chlorine **or** Sodium Dichloroisocyanurate (NaDCC) e.g. Precept, Haztabs diluted as per manufacturer's guidance, **or** a proprietary brand that combines detergent and chlorine agent i.e. Antichlor Plus and Chlorclean).

NB Alcohol Gel alone will not destroy Norovirus or *Cl. Difficile*.

- All staff handwashing areas and the rooms of symptomatic residents should have an antibacterial liquid dispensed soap (or an alcohol handrub following handwashing with a regular liquid soap) for the duration of the outbreak, then normal liquid dispensed soap should be used
- Residents should be encouraged to wash their hands after using the toilet and before eating
- Staff should pay attention to all infection control practices, particularly the washing of hands and wearing protective clothing. A new pair of disposable gloves and a plastic apron should be worn for each resident
- Faecal samples should be obtained from residents and staff if they have symptoms. The microbiology form accompanying the sample should clearly state it is part of an outbreak, and additionally please request virology screening. as these will determine which specific tests are carried out in the laboratory (samples of vomit are not required)
- The home 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 and unnecessary visits should be discouraged. Those who choose to visit should wash their hands as they enter and leave the home and comply with all other hygiene practices in place

- Soiled/infected linen must be transferred to the laundry in a sealed soluble red bag
- Residents should only be discharged 48 hours after their last symptom and with the full consent of anyone who may be required to care for them in the community.

The affected unit or the general home must be terminally cleaned at the end of the outbreak (**Refer Section H - 8 Decontamination**) before the home reopens to admissions.

#### **4b. Specific Guidance for Outbreaks of Respiratory Infections**

##### **Respiratory Infections in Care Homes**

Respiratory infections often affect the elderly in residential settings. For most people the illness is mild, but in the elderly it can cause serious illnesses such as pneumonia and even death, because they may have underlying chest problems and compromised immunity.

Between October and March every year respiratory illnesses including flu circulate. Whenever there is a cluster of cases of new respiratory illnesses severe enough to warrant hospital admission or cause death, the EHPU should be contacted to assess the situation.

##### **Signs and Symptoms**

An influenza-like illness (ILI) will present with the following signs and symptoms:

- Sudden onset of fever
- Headache
- Myalgia
- Prostration
- Coryza (cold or runny nose)
- Sore throat
- Cough.

Elderly patients may however not have a fever, and may present with unusual signs and symptoms such as loss of appetite or change in mental state.

An outbreak is defined as two or more cases in a care home within a 3-day period. Whether flu is generally circulating or not, treatment and prophylaxis may be required for outbreaks in residential homes.

##### **What to do when Flu is Suspected in a Care Home**

- Notify EHPU when two or more residents are affected as soon as possible

- Isolate ill residents in their rooms or nurse them together on the affected unit until they no longer have a fever if they are on antiviral medication, or until 5 days after the onset of illness if they are not on antiviral medication
- Separate symptomatic residents from asymptomatic residents during activities to prevent further spread or reinfection
- Encourage residents to wash their hands frequently, and where they are unable, they should be assisted to wash them. Detergent hand wipes may be used.
- Re-offer vaccination to unvaccinated residents
- Keep a record of onset date and the presenting signs and symptoms such as fever, cough etc
- Staff on duty should pay attention to all infection control practices. They should wear masks and apron when attending to symptomatic residents and wash hands after each contact.
- Ill staff must not work until 5 days after the onset of their illness
- Unvaccinated staff should be offered vaccination
- Environmental cleaning should be stepped up, paying particular attention to door handles, handrails and wheelchair arms using 1000 ppm of available chlorine
- Used or contaminated paper tissues should be disposed of as infectious waste
- The home should be closed to admissions and discharges until the outbreak is declared over (5 days after the onset of illness in the last case)
- Visitors should be informed of the outbreak and unnecessary visits should be discouraged
- Ill visitors should be discouraged from visiting the home.

### **Prevention/Control**

Flu vaccination is given freely to people at risk, such as those over 65 years, people with chronic respiratory and cardiovascular diseases, chronic renal diseases, diabetics and immunocompromised.

It is strongly recommended that all residents in care home who fall into these groups should be vaccinated to prevent any serious respiratory infection.

Staff should also be vaccinated as part of an employers Occupational Health programme.

**For specific guidance for residents with *Clostridium difficile* refer to section F- 4 Management of Infectious Diseases.**

**For specific guidance for residents with Scabies refer to Section G - 4 Infestations.**

<b>5. Proforma Documents for reporting of Outbreaks of Diarrhoea &amp; Vomiting, Chest Infections</b>
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**RECORD OF OUTBREAK (Residents)**

Name of Home: \_\_\_\_\_

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

\_\_\_\_\_

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

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

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

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

Reported to: EHPU/EHO/CSCI/PCT

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

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)**

Name of Home: \_\_\_\_\_

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

\_\_\_\_\_

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

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

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

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

Reported to: EHPU/EHO/CSCI/PCT

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

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		

**RECORD OF OUTBREAK OF SCABIES (Residents)**

Name of Home: \_\_\_\_\_

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	Diagnosed by		Treatment Date	
				GP	EHPU	1 <sup>st</sup>	2 <sup>nd</sup>

**RECORD OF OUTBREAK OF SCABIES (Staff)**

Name of Home: \_\_\_\_\_

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

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

Reported to: EHPU/EHO/CSCI

\_\_\_\_\_

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

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

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

Name of Staff Member	DOB	Area/Unit where Resident	Date Symptoms Started	Diagnosed by		Treatment Date	
				GP	EHPU	1 <sup>st</sup>	2 <sup>nd</sup>

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION D – STANDARD PRINCIPLES OF INFECTION CONTROL

### 1. Standard Principles of Infection Control (Universal Precautions)

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 (Universal Precautions)**.

The recommendations on Standard Principles provide guidance on Infection Control Precautions that should be applied by all healthcare personnel and other carers, to the care of patients in the community and primary care settings.

Standard Principles of Infection Control include:

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

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

Everyone involved in providing care in the community should know and apply the standard principles. Each member of staff is accountable for his/her actions and must follow safe practices.

Facilities must be available to promote the compliance to Standard Principles of Infection Control e.g. Personnel protective clothing, and handwashing facilities.

### 2. Hand Hygiene 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.

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

Hands must be decontaminated:

- Before and after each work shift or work break. (Remove jewellery (rings) prior to handwashing)

- Before and after physical contact with each resident
- After handling contaminated items such as dressings, bedpans, urinals and urine drainage bags
- Before putting on, and after removing, protective clothing, including gloves
- After using the toilet, blowing your nose or covering a sneeze
- Whenever hands become visibly soiled
- Before preparing or serving food
- Before eating, drinking or handling food, and before and after smoking.

### How to Wash Your Hands

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 not recommended.

	Method	Solution	Task
1	Social (15-30 seconds)	Liquid soap	For all routine tasks
2	Hygienic hand disinfection (15-30 seconds)	Antiseptics, e.g. Chlorhexidine, povidone-iodine or alcohol hand-rub after social clean	In high-risk areas and during outbreaks
3	Surgical scrub (2 mins)	Antiseptics, e.g. Chlorhexidine and povidone-iodine	Prior to surgical and other invasive procedures

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 15-30 seconds, paying particular attention to the tips of the fingers, the thumbs and the areas between the fingers. Hands should be rinsed thoroughly.

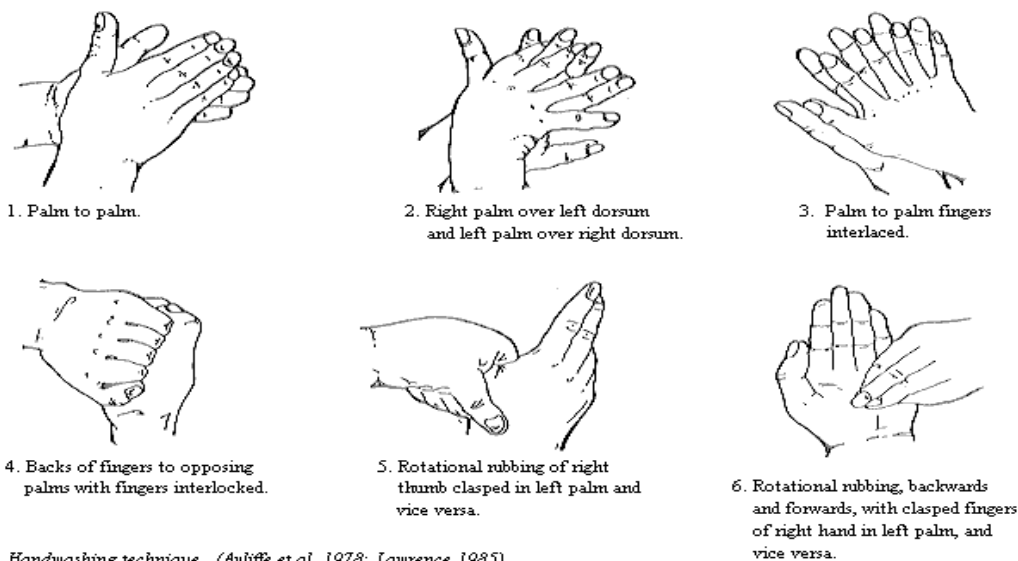
## Hygienic Hand Disinfection for Outbreak Control

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

### Surgical Handwashing

Surgical handwashing destroys transient organisms and reduces resident flora before surgical or invasive procedures. An aqueous antiseptic solution is applied for two minutes. Preparations currently available are 4% chlorhexidine-detergent and 0.75% povidone/iodine solution-detergent.

This is required before minor surgery and invasive procedures.



### (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.

### (d) 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 Occupational Health 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, treatment rooms, laundry and kitchen areas within the home. They should have elbow or foot-operated mixer taps. In treatment rooms, sluice, laundry and kitchen areas the handwashing sink must be designated for this purpose.

Nursing homes please note: There may be some service users who will require ongoing nursing care in their rooms. It may be necessary to have a designated handwashing facility in their room. In these circumstances seek Infection Control advice.

A separate sink should be available for other cleaning purposes:

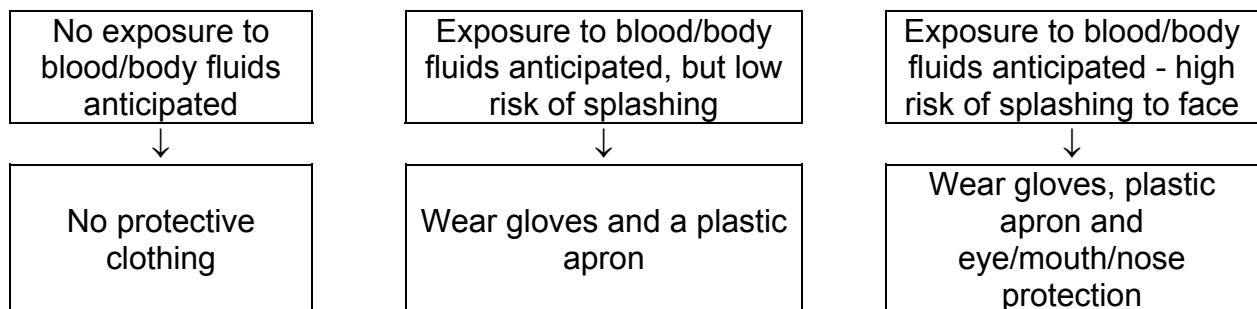
- Use wall-mounted liquid soap dispensers with disposable soap cartridges - keep them clean and replenished
- Dispensers should be dismantled and washed regularly with particular attention to the nozzle
- Place disposable paper towels in wall-mounted dispensers next to the basins - soft towels will help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

### 3. Protective Clothing

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

#### Assessment of Risk

#### WHAT TO WEAR WHEN



#### Types of Protective Clothing

##### Disposable Gloves

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 gloves or polythene gloves in healthcare activities.

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.

Following risk assessment for infectious hazard, gloves should be disposed of via the offensive, non hazard route, or infectious hazard route, (**Refer Waste Management Section H -12**) and hands must be 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.

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 blood and body fluids, or equipment contaminated with blood and body fluids.

#### 2. **Sterile Gloves**

Should be used when the hand is likely to come into contact with normally sterile areas or during any surgical procedure.

#### 3. **General-purpose Utility Gloves**

General-purpose utility gloves e.g. rubber household gloves should be used when coming into contact with possible contaminated surfaces or items. Colour-coding of such gloves should be used e.g. green for the kitchen, blue for general environmental cleaning, and red for 'dirty' clinical duties. This will help prevent cross-infection from one area of work to another. The gloves should be washed with GPD and hot water, and dried between uses. They should be discarded weekly, or more frequently if the gloves become damaged.

#### 4. **Polyurethane/polythene Gloves (Non Sterile and Sterile)**

Polyurethane/polythene gloves do not act as a barrier to infection. They do not meet the Health and Safety Commission regulations and they do not have a place in clinical application. **DO NOT USE.**

The Infection Control Nurses Association – now known as the IPS (Infection Prevention Society (2002) recommends that gloves should be kept in their original box, and taken from it as and when required. They must not be decanted into an open container, and they must not be put in uniform pockets. They must not be stored on windowsills or on top of waste bins.

#### **Disposable Plastic Aprons**

Should be worn when there is a risk that clothing may be exposed to blood, body fluids, secretions or excretions, with the exception of sweat.

Plastic aprons should be worn as single-use items, for one procedure or episode of patient care, and then discarded and disposed of by the appropriate waste route (**Refer Waste Management Section H -12**).

Full-body fluid-repellent gowns must be worn where there is a risk of extensive splashing of blood or body fluids onto the skin or clothing of healthcare practitioners.

## Face Masks and Eye Protection

There are few occasions when facemasks are necessary in the care home environment. However when there is a risk of blood, body fluids, secretions or excretions splashing into the face and eyes e.g. cleaning of commode pots, full face protection should be worn. Face/eye protection e.g. full face visor, or face masks and goggles should be worn if manual decontamination of equipment is undertaken.

## Respiratory Protective Equipment

When clinically indicated, a particulate filter mask must be used when clinically indicated i.e. SARS, Pulmonary Tuberculosis.

## 4. Safe Handling of Sharps

All staff should be fully immunised according to national policy. For staff who are at greater risk of contact with fresh blood, it is recommended that they have a course of Hepatitis B vaccine. A record of Hepatitis B antibody response should be kept, obtained after completion of the vaccination course.

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

Sharps include needles, lancets, 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 exposure to blood-borne viruses. Always take extreme care when using and disposing of sharps. Whenever possible avoid using sharps.

- Clinical sharps should be single-use only
- Sharps must not be passed directly from hand-to-hand and handling should be kept to a minimum
- Needles must not be re-capped, bent, broken or disassembled before use or disposal
- Needle safety devices must be used where there are clear indications that they will provide safer systems of working for healthcare personnel
- Sharps containers must conform to UN3291 or BS7320 standards
- Assemble sharps containers by following the manufacturer's instructions
- Label sharps containers with the source details
- Used sharps must be discarded into a sharps container at the point of use by the user
- Sharps containers must not be filled above the mark indicated on the container

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

### **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.

**(For occupationally acquired sharps injuries refer to Section E – Management of Sharps Injuries).**

## **5. Spillage Management**

Deal with blood and body fluid spills quickly and effectively.

Commercially available spillage kits are available. Ensure that kits remain in date, and that the contents of the kit are replenished immediately after use.

For spillage of high-risk body fluids such as blood, method 1 is recommended. For low-risk body fluids such as non-blood containing excreta, use method 2.

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

- Prevent access to the 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 and/or absorbent powder e.g. Vernagel
- Cover area with NaDCC granules (e.g. Presept, Sanichlor)

Or

- Cover area with paper towels soaked in 10,000 parts per million of available chlorine and leave for at least two minutes or follow the instructions provided in the kit)
- Remove organic matter using the towels and discard as infectious waste
- Clean area with detergent and hot water and dry thoroughly
- Clean the bucket/bowl in fresh soapy water and dry
- Discard protective clothing appropriately based on risk assessment
- Wash hands.

## **2. Detergent and Water Method**

- 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 and/or absorbent powder e.g. Vernagel
- 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
- Clean the bucket/bowl in fresh hot, soapy water and dry
- Discard protective clothing as appropriate
- Wash hands
- Ideally, once dry, go over area with a 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
- Discard protective clothing
- Wash hands
- Ideally, once dry, go over area with a mechanical cleaner.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION E – MANAGEMENT OF SHARPS INJURIES

### 1. Occupational Injuries

In the event of a sharp injury/contamination incident these guidelines should be followed:

A sharp injury/contamination incident includes:

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

When a sharp injury/contamination incident occurs:

1. Encourage bleeding from the wound
2. Wash the wound in soap and warm running water (do not scrub)
3. Cover the wound with a dressing
4. Skin, eyes or mouth, wash in plenty of water
5. Ensure the sharp is disposed of safely i.e. using a non-touch method into a sharps container
6. Report the incident to immediate supervisor. An incident form should be completed as soon as the recipient of the injury is able
7. The incident should be reported to the Occupational Health department and GP (**Refer to Sharps Injury poster**)
8. Attempt to identify source of the needle/sharp. Depending on the degree of exposure and the knowledge of the source patient/client it may be necessary to take further immediate action, see below.

## **2. Control Measures**

Any staff working in a healthcare facility who handle sharps or hazard infectious waste should receive a full course of Hepatitis B vaccine and have their antibody level checked to establish immunity.

New staff or any existing staff who know they are not already protected should contact their occupational health department to arrange vaccination without delay.

Generally staff in the community do not perform Exposure Prone Procedures (EPPs) with the exception of dental and some podiatrist practices. EPPs are invasive procedures where there is a risk that injury to the worker may result in the exposure of the patient's open tissues to the blood of the healthcare worker.

However, all staff who do perform EPPs need to be aware of their obligations (see statements by the General Medical Council in Serious Communicable Diseases, 1997; [General Dental Council in Maintaining Standards Guidance 1997;] United Kingdom Central Council for Nursing, Midwifery and Health Visiting Registrar's letter 4/1994 Annex 1) i.e. to declare it if they know themselves to have been at risk of exposure to a blood-borne virus infection (Hepatitis B, C or HIV).

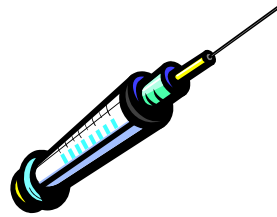
### **Screening**

Existing staff that undertake EPPs should be screened for Hepatitis B.

New employees who undertake EPPs must be screened for both Hepatitis B and Hepatitis C prior to commencing work.

## What to do after a.....

# SHARPS INJURY



Directions for the management of needlestick injuries,  
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 (if applicable)



Your medical advisor should: -

- a) Take a history and make a risk assessment
- b) Review your Hepatitis B vaccine status
- c) Take 10ml clotted blood from the recipient and,  
if possible, the 'source' (with informed consent)
- d) Send the samples to the microbiology department marked  
'needlestick Injury'
- e) Ensure appropriate follow-up

Complete an accident form

Insert your local arrangements

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### Please Note

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

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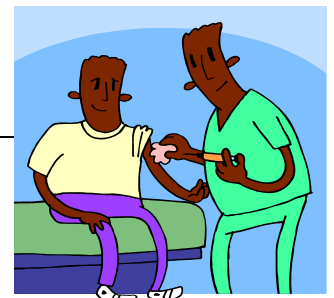
### Remember

Be prepared – If you are at risk of exposure –  
get immunised against Hepatitis B Virus



Tel: In hours:- Your GP or Occupational Health Dept

Tel: Out of Hours:- Your local A&E Department



# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION F – MANAGEMENT OF INFECTIOUS DISEASES

### 1. Introduction

The HPA produce a series of factsheets, which are available from the website, [www.hpa.org](http://www.hpa.org), under Topics A-Z, factsheets, and some constructed by the EHPU. under [www.hpa.org.uk/essex](http://www.hpa.org.uk/essex).

The factsheets include information on incubation periods, method of spread, period of infectivity, exclusion periods and where appropriate the management of contacts.

The factsheets can be photocopied and passed to members of the public.

In addition, there is extended text in this document on Meningococcal Disease, MRSA and PVL, Clostridium Difficile and CJD. (**Refer to Section G - Infestations, for further information on Scabies and Headlice.**)

### 2. Factsheets

These factsheets are available on [www.hpa.org.uk/essex](http://www.hpa.org.uk/essex). See also [www.hpa.org.uk](http://www.hpa.org.uk), under Topics A-Z for other diseases and factsheets.

Blood-Borne Viruses	Immunisation – General Information
Bugs, Fleas and Ticks	Impetigo
Conjunctivitis	Meningitis
Diarrhoea and Vomiting	MMR and Immunisations
Glandular Fever	Molluscum Contagiosum
Group A Streptococci	Rashes in Childhood
Hand, Foot and Mouth	Ringworm
Headlice Management Chart	Scabies
Herpes	Verrucas (Warts)

### 3. Guidelines for the Management of MRSA in the Community

#### 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.

The most common 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 residential care/intermediate care setting?

**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.

Resident/patients are **not** barrier nursed in the residential care/intermediate care 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 a risk assessment of infection status should be completed. Colonised patients waste should be disposed of in the offensive waste stream. Infected patient waste should be disposed of in infectious hazard waste stream (orange bag). (**Refer to Waste Management Section I -12**).

Maintaining a clean environment will help to reduce the transmission of the bacteria. The daily removal of dust and body substances is crucial. Cleaning protocols should also include regular cleaning of high surfaces, curtains, carpets, extractor fans and the removal of radiator covers to clean radiators.

### **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/ICN.

## **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:

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

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

General Information on this organism can be found on the factsheet available at [www.hpa.org.uk](http://www.hpa.org.uk).

Please refer to PCT Wound Management Policy, or consult with Tissue Viability Specialist. Where access to the above is not available the protocol below can be followed.

- Clean infected site with sterile water for 4 weeks
- If there is no improvement, seek further advice from the Tissue Viability nurse.

## **Pre-Hospital Screening/Treatment of Colonisation prior to Hospital Admission**

If this is required the admitting hospital's infection control team/hospital microbiologist should provide guidance for their requirements.

## **Unplanned Hospital Admission**

Advise hospital staff of history of MRSA colonisation/infection.

### **Additional advice:**

**Please seek further advice from the EHPU or Infection Control team, if required.**

<b>Newly identified MRSA in clinical specimens should be managed as above. No routine MRSA screening should be undertaken.</b>
--

## 4. Specific Guidance for Residents with *Clostridium difficile*

### What is *Clostridium difficile*?

*Clostridium difficile* is a bacterium of the intestine, which can be found in both healthy and ill people. There are millions of different types of bacteria in the body which are important for health. These protective bacteria help to break down and digest food and also help to ward off many harmful or foreign bacteria. In a healthy person all the bacteria live in a state of balance with one another.

### What is *Clostridium difficile* colitis?

When there is an imbalance of bacteria flora in the gut, *Clostridium difficile* takes over, and produces two toxins that affect the body to give the symptoms of the disease. The symptoms may include diarrhoea and cramping pain at first, and, in the later stages, flu-like symptoms, nausea, vomiting and blood in the stool/faeces.

### How is *Clostridium difficile* colitis diagnosed?

The disease is suspected if a person has been taking, or is currently taking, antibiotics and is suffering with abdominal cramps and diarrhoea. A diagnosis is made by a laboratory test using a stool sample to confirm whether or not the toxin is present in the intestine. The results are usually available within 24 hours. Some patients may have *Clostridium difficile* in their stool but without the symptoms of diarrhoea. It is unlikely that they have *Clostridium difficile* colitis.

### Hospital Transfer

- Symptomatic patients (with diarrhoea) should not be accepted from Acute hospitals. Ideally they should be 48 hours free from symptoms. Seek advice from an EHPU nurse
- Patient should be isolated in their own room for a further 48 hours until bowel habit is established – if diarrhoea returns inform the doctor. The patient must remain in isolation until 48 hours free from symptoms, and normal bowel action has been established
- Faecal samples are not required for clearance
- If symptoms persist, seek advice from GP – further antibiotic treatment may be required.

### Newly diagnosed cases

- Isolate patient
- On lab confirmation of a case of *Clostridium difficile* inform the GP – if the patient is still symptomatic commence antibiotics
- Ensure completion of antibiotics

- If symptoms cease – no further treatment is required. Once diarrhoea symptoms have ceased for 48 hours the room and toilet facilities should be thoroughly cleaned using the guidance in ‘ **Specific Guidance for Outbreaks of Diarrhoea and/or Vomiting**’
- If symptoms persist, seek advice from GP.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION G – INFESTATIONS

### 1. Prevention and Control of Headlice in the Community

#### Introduction

Headlice are found on adults and children. They are transferred from person-to-person wherever head-to-head contact occurs. This is generally at social gatherings or within a household environment.

Treat when headlice are found. The Pharmacist or GP should offer advice and assistance to carers when required. Information on headlice can be found on the HPA website.

[www.hpa.org.uk/infections/topics\\_az/wfhfactsheets/WFHheadlice.htm](http://www.hpa.org.uk/infections/topics_az/wfhfactsheets/WFHheadlice.htm)

### 2. Some Facts about Headlice and Nits (*Pediculus humanus capitis*)

Headlice can be more efficiently found by combing through (preferably wet) hair with a detection comb. Divide the hair into sections and hold the comb at angle of 45°. If lice are found, that person should be treated.

When a resident has been found to have headlice, all other residents who are likely to have head-to-head contact must be carefully checked using the detection comb.

Headlice lotions (or shampoos) should not be used as a preventative measure.

### 3. Treatment - for when Lice are Found

**Only** treat those with a **proven** headlice infection.

There are three options for the treatment of headlice:

#### 1. Wet Combing

This method does require perseverance. However, if this treatment appears to continually fail, treatment with insecticides may still be required.

- Wash the hair in the normal way with an ordinary shampoo

- Make sure the teeth of the comb slot into the hair at the roots with every stroke. This should be done over a pale surface, such as a paper towel or the bath
- Clear the comb of lice between each stroke
- Wet lice find it difficult to escape, so removal with the comb is easier
- This routine should be repeated every day for 2 weeks, so that any lice emerging from the eggs are removed before they can mature, mate and lay more eggs.

## 2. Insecticides (pesticides)

There are three chemical insecticides available. However, there is evidence that some headlice have become resistant to particular insecticides. This may lead to problems of eradicating headlice from an individual's head.

Insecticides should *ONLY* be used if live lice are found.

The insecticides are **Malathion, Pyrethroids (Phenothrin and Permethrin)** and **Carbaryl**. Carbaryl can only be prescribed by a healthcare professional (e.g. GP and some nurses), the other two chemicals can be purchased from a pharmacy.

All products must be used according to manufacturer's guidance. Insecticides are not effective on eggs therefore a second application is required a week later to kill the newly hatched lice. Fine comb the hair every 3-4 days between applications and for at least a further 2 weeks after the final application is recommended

Insecticides are available in alcohol and aqueous-based preparations. Individuals that suffer from asthma, eczema etc should avoid alcohol based products. Please check the suitability of the product with the pharmacist.

Insecticides must not be used more than once a week, and not for more than 3 consecutive weeks.

## 3. Non-pesticide Lotion

Non pesticide lotion – Dimeticone compound (proprietary name Hedrin)- coats headlice and smothers them. There is no resistance to this lotion. However careful application is required for effective killing of the lice. It is important to follow the instructions on the pack, ensuring that the lotion is applied evenly and is combed throughout the length of the hair.

Two applications, one week apart, is required to kill hatching lice. To check effectiveness use a detector comb 24 hours after the second treatment. Further applications can be used if headlice remain present after the 2<sup>nd</sup> course of treatment.

## Contact Tracing

Contact tracing is an important part of the control of headlice infestation.

Contacts will be other individuals who have had head-to-head contact lasting approximately one minute or more in the past month.

These social contacts outside of the home may include family members, friends from and other social groups.

A contact list should be formulated by each person with headlice. This list will be fairly short. Every person on the list should then be told that they have been in contact with a person who has had headlice and that they should have their own hair checked.

## 4. Prevention and Control of Scabies in the Community

### Introduction

Scabies is an allergic response to an infestation of the skin by the mite ***Sarcoptes scabiei***. The mites penetrate through the skin and excavate burrows at the epidermal/dermal junction. The female mite lays eggs which hatch after 3-4 days. Newly hatched larvae exit the burrows and appear on the surface of the skin before forming their own tunnels. The burden of mites can range from 10-20 to several thousand in people who are severely immuno-compromised (Norwegian Scabies). Scabies is distributed worldwide and is endemic in many developing countries.

### Recognition of Symptoms

The most frequent symptom is itching which may affect all parts of the body and is particularly severe at night. There may be no sign of infection for 2-6 weeks after exposure.

Occasionally small vesicles may be visible along the areas where the mites have burrowed. A papular rash may be visible in areas such as around the waist, inside the thighs, lower buttocks, lower legs, ankles and wrists. Firm nodules may develop on the front folds of the axillae and around the navel and in males around the groin. Pale burrows described as a "greyish line resembling a pencil mark" may be present in the skin between the fingers, but are less commonly seen than textbooks suggest.

Failure to find burrows does **not** exclude scabies as a diagnosis.

It should be emphasised that scabies may be difficult to recognise particularly if scratching, inflammation or infection have obscured the presentation. Also scabies can look atypical in anyone with immature or impaired immunity such as very young children, those with Down's syndrome, alcoholics or the very elderly. In immunosuppressed people, such as those with AIDS or those on immunosuppressive therapy, a more severe hyperkeratotic form may develop (Norwegian Scabies).

### Mode of Transmission

Scabies mites are generally not capable of surviving off the host long enough to establish a new infection as they quickly become too dehydrated and weak.

Mites are passed directly from the skin of one person to another with prolonged contact. The likelihood of transmission increases with the duration and frequency of skin to skin contact.

Fomites and animals are not implicated in transmission.

### **Incubation**

The incubation period is 2–6 weeks before onset of symptoms in those infected for the first time. Symptoms may occur 1–4 days after re-exposure.

### **Outbreaks**

Outbreaks occur particularly in residential/nursing homes, mental healthcare establishments, long-stay hospital wards and pre-school nurseries.

Advice will be given on the need to treat and the treatment programme by the EHPU.

### **Treatment in a Residential Establishment (Care Home) (Intermediate Care)**

When a single suspected case of Scabies occurs in a residential establishment the EHPU (or Infection Control Team if the residential setting is owned by the PCT) should be alerted promptly to investigate. It may be necessary to treat all residents and anyone with whom they have had close contact.

If this action is required, it is important that all staff who have come into direct contact with residents also treat themselves because they may be incubating the disease without showing any symptoms. Family members of symptomatic staff will require one application of treatment. If family members are symptomatic they will require 2 applications of treatment. Family members of asymptomatic staff need not be treated routinely but asked to report any later symptoms.

As far as possible all staff members should receive the treatment on the same day that their unit is treated. Staff should not work in any other area until treatments have been completed throughout the home.

Symptomatic people should be treated using 2 applications of insecticidal cream at 7-day intervals. The EHPU will make an individual assessment and advice.

### **Following Treatment**

It is not uncommon for a person to have itching for up to 4 weeks after successful treatment. Antihistamines may be helpful. In residents with dry skin conditions emollient cream will moisturise the skin.

## LYCLEAR DERMAL CREAM IS THE TREATMENT OF CHOICE

Lyclear dermal cream is suitable for use by adults, including the elderly and children over 2 months old. Children between 2 months and 2 years should be treated under medical supervision. Pregnant women should seek medical advice.

- Ensure that the entire surface of the body is covered from the hairline on the head to the soles of the feet. **This should include the area behind the ears and the face, avoiding the area around the eyes, otherwise the treatment may not be effective.** If the person to be treated has little or no hair the scalp should also be included
- Areas of skin normally covered by extensive dressings should be exposed, and Lyclear cream applied onto the intact skin up to and around the wound. The dressing may then be replaced
- Apply the cream to clean, dry and cool skin. Do not apply following a bath or shower
- Pay particular attention to the areas behind the ears, between the fingers and toes, wrists, under the arms, external genitalia, buttocks and under finger and toe nails
- The whole body should be washed thoroughly 8 - 12 hours after treatment, with warm water
- Be sure to reapply any lotion washed off during the treatment period e.g. after handwashing, or cleaning of the skin
- Directly after treatment, change bed linen and wear freshly laundered clothes
- Lyclear Dermal Cream disappears when rubbed gently into the skin. It is not necessary to apply the cream until it remains detectable on the surface
- Where possible, the cream is best applied by someone other than the person receiving treatment. This makes it easier to get to difficult to reach parts of the body.

It may be necessary to prescribe two tubes of cream to ensure all areas of the body are covered thoroughly bearing in mind very dry areas of skin will absorb more of the cream.

The following table shows the approximate amount of cream to be used as a **single** application:

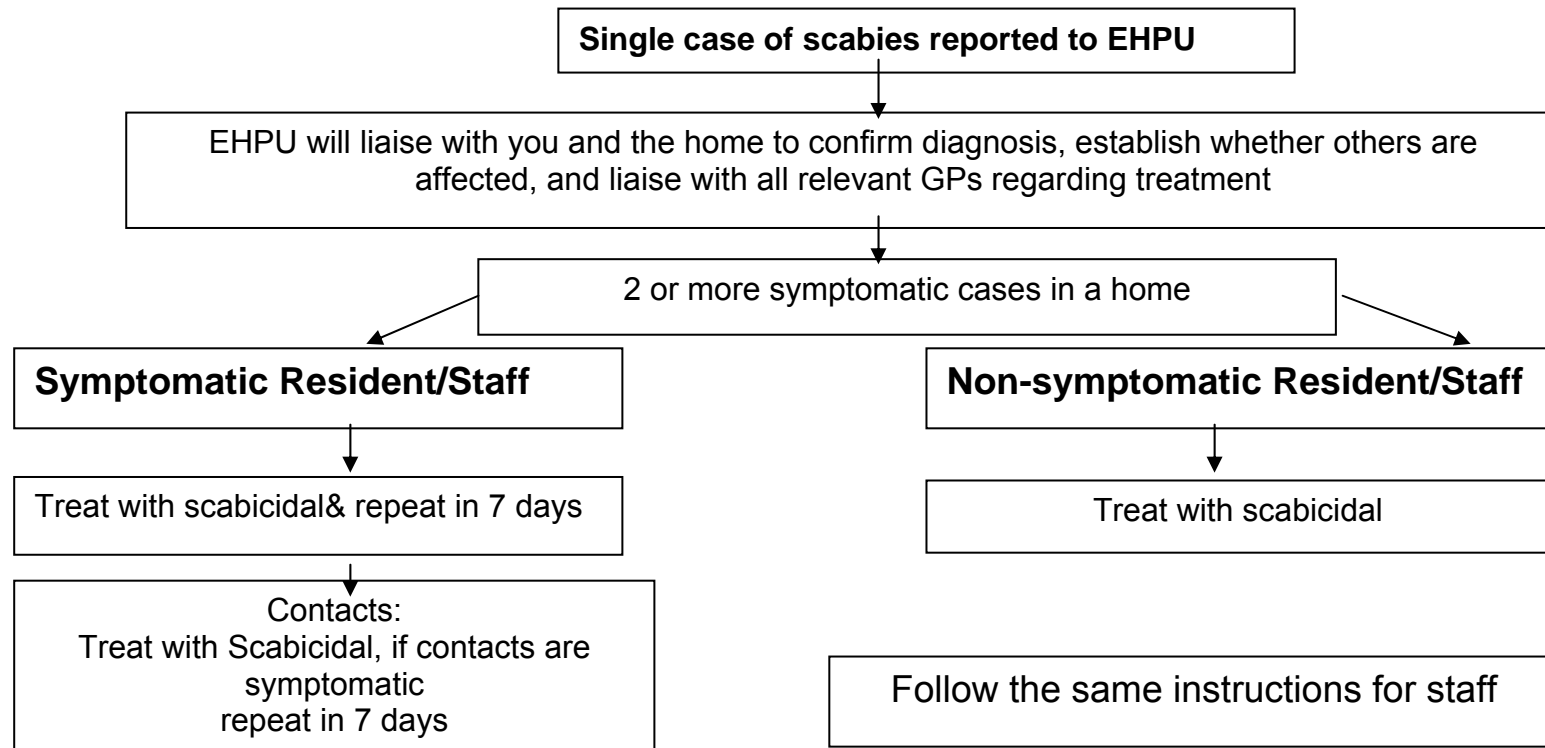
Adults and children over 12 years	1 tube, but large people may require up to 2 tubes but no more than 2 tubes
Children aged 5 to 12 years	Up to half a tube
Children aged 1 to 5 years	Up to one quarter of a tube
Children aged 2 months to 1 year	Up to one eighth of a tube

**NB** Following discussions with the Medical Entomology in Cambridge, it is now recommended to apply scabicial lotions/creams to the face avoiding the area around the eyes.

**This may conflict with some manufacturers' guidance. However, there is increasing evidence that scabies may also affect the face and failure to treat this area could result in an incomplete and therefore unsuccessful treatment.**

**Benzyl Benzoate has been shown to have reduced effectivity compared to other scabicides. BNF caution that it is an irritant to skin therefore not recommended for elderly and sensitive skins.**

## ACTION TO TAKE WHEN A SINGLE CASE OF SCABIES OCCURS IN A RESIDENTIAL CARE SETTING



### Action for Essex Health Protection Unit

- Plan treatment programme
- Inform residents' GPs and request treatments
- Inform staff members' GPs
- Arrange staff education sessions on treatment and management
- Provide printed information
- Establish surveillance procedure post mass treatment

**RECORD OF OUTBREAK OF SCABIES (Residents)**

Name of Home: \_\_\_\_\_

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

Address \_\_\_\_\_

Reported to: EHPU/EHO/CSCI/PCT

\_\_\_\_\_

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

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

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

Name of Resident	DOB	Area/Unit where resident	Date Symptoms started	Diagnosed by		Treatment Date	
				GP	EHPU	1 <sup>st</sup>	2 <sup>nd</sup>

**RECORD OF OUTBREAK OF SCABIES (Staff)**

Name of Home: \_\_\_\_\_

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

Address \_\_\_\_\_

Reported to: EHPU/EHO/CSCI/PCT

\_\_\_\_\_

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

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

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

Name of Staff Member	DOB	Area/Unit where resident	Date Symptoms started	Diagnosed by		Treatment Date	
				GP	EHPU	1 <sup>st</sup>	2 <sup>nd</sup>

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION H – CLINICAL PRACTICE

- Aseptic Technique
- Care of Patients with known Infectious Disease - Source Isolation (Barrier Nursing)
- Management of Non-Infectious and Infectious Deceased Clients
- Decontamination
- Laundry Management
- Enteral Feeding
- Prevention and Control of Infection Associated with Urinary Catheter Care
- Safe Handling of Specimens
- Waste Management

## 1. Aseptic Technique

Aseptic technique is the term used to describe the methods used to prevent contamination of wounds and other susceptible sites by organisms that could cause infection (Marsden Manual of Clinical Nursing Procedures).

The aims of aseptic technique are:

- To prevent the introduction of pathogens to the site
- To prevent the transfer of pathogens from the patient to staff or other patients.

**An aseptic technique should be implemented during any invasive procedure that bypasses the body's natural defences.**

An aseptic technique should also be adopted when undertaking the following procedures (this list is not exhaustive):

- Dressing wounds
- Removal of sutures or clips
- Dressing peripheral or centrally sited intravenous lines
- Removal of drains
- Endotracheal suction
- Dressing tracheostomy site.

However the procedure is undertaken either with forceps or sterile gloved hands. The important principles are that the susceptible site should not come into contact with any item that is not sterile.

Any items that have been in contact with the wound will be contaminated and should be disposed of safely, or decontaminated.

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 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.

## **Management of Chronic Wounds**

If dressings are removed by soaking, a plastic impermeable liner/bag should be placed in the bucket/bowl before filling with water.

After the wound has been washed then water should be disposed of in a sluice or a sink which is separate from the handwash sink.

The plastic liner should be disposed of and the bath or bowl should be thoroughly cleaned with detergent and hot water, and then dried to ensure that pathogens are removed.

This process should be undertaken after each separate patient episode.

## **Wound Swabbing**

Swabbing should only be undertaken if wound/site of invasive device exhibits signs of infection. They should not be taken routinely, or if wound/site is healing.

## 2. Care of Patients with known Infectious Diseases – Source Isolation (Barrier Nursing)

### In Residential Settings

Within the home setting, traditional barrier nursing is not often recommended. 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.

### Diseases

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

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

DISEASE	HOW LONG THE DISEASE REMAINS INFECTIOUS
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 (usually about 5 days)
<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 – Hepatitis B and C
Impetigo	Infectious until: a) lesions are crusted or healed b) however infectivity will be reduced following 24 hours of appropriate antibiotics
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 C)**

Once a diagnosis has been made, the patient (and family) must have their infectious disease carefully explained, the mode of spread and its significance, if any, for the patient's condition.

### Hand Hygiene

Alcohol handrub should be used after normal handwashing, or an antibacterial soap should be used to wash hands.

### Disposal of Potentially Infected Items

Contaminated dressings and all disposable items should be disposed of as hazardous waste (**Refer to Waste Management Section H – 12**).

### Urinals and Bedpans

Manual cleaning is not good practice, and **must not** be undertaken, when dealing with potentially or known infectious body fluids.

Either use disposable pans, or if reusable pans are used, they must be cleaned in a washer/disinfector.

If reusable pans are used, they must be decontaminated in a bedpan washer/disinfector. An automated process should achieve a temperature of at least 80°C for 1 minute. If disposable pans are used they must be disposed of via a macerator.

A service contract for these machines must be in place, and provision made for the prompt replacement or repair in the event of malfunction.

If the automated system is temporarily unavailable disposable pans must be utilised, and disposed of via the hazardous waste disposal route (orange bag).

### Linen

Should be washed on as hot a wash as the fabric will tolerate, as promptly as possible.

Should be segregated into dissolvable laundry bags thereby minimising any risk to staff.

## **Crockery and Cutlery**

Disposable items are not required. A dishwasher capable of achieving a temperature of at least 80°C for at least 1 minute is recommended. A service contract for these machines must be in place, and provision made for the prompt replacement or repair of the machine in the event of malfunction.

If a dishwasher is not available items can be washed in the kitchen sink using GPD, and water as hot as can be tolerated.

## **Transporting Clients**

Clients 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 client should be informed of the risk, so that relevant control measures can be implemented. Ambulance control should be unformed when booking transport.

## **Deceased Clients**

Standard Principles of Infection Control should be maintained when a patient dies. Body bags are not necessary in most cases (only used in highly infectious cases i.e. Viral Haemorrhagic Fever). However if there is excessive risk of body fluids from the body, body bags should be used.

Body bags are available from the stores centre from where all other care equipment is requested.

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

## **Personal Protective Equipment (PPE)**

A risk assessment must be made for each patient contact episode in order that the correct protective clothing is worn. If the staff member is not planning to have any direct contact with the patient or the immediate surroundings, protective clothing may not need to be worn.

Supplies of disposable gloves, aprons and masks (if necessary) should be accessible outside the isolation room and donned prior to entering the room. Hands must be sanitised prior to the wearing of protective clothing.

## **Hand Hygiene**

Alcohol handrub should be used after normal handwashing, or an antibacterial soap should be used to wash hands.

## **Disposal of Potentially Infected Items**

Contaminated dressings and all disposable items and protective clothing should be disposed of as infectious hazardous waste. The orange bag must

be situated inside the isolation room, and hands must always be washed inside the room after protective clothing is removed. Hands should also be sanitised immediately after leaving the room.

### **Medical Equipment**

Disposable equipment should be used whenever possible. Non-disposable equipment such as sphygmomanometers, stethoscopes etc. should remain in the room and be terminally cleaned once the patient is discharged.

### **Daily Cleaning of Isolation Rooms**

All rooms must be cleaned at least daily using freshly prepared GPD solution. Horizontal surfaces should be kept dust free and any spillages cleaned immediately. Isolation rooms should be cleaned after the other areas of the ward and all equipment such as cloths and mops should be disposable or laundered after each use.

### **Terminal Cleaning of Isolation Rooms**

Disinfection is not generally required although the Infection Control Team for specific situations may recommend it.

## **3. Management of Non-Infectious and Infectious Deceased Clients**

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

### **Management of Deceased Clients**

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 the Consultant in Communicable Disease Control 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.
- (d) Clean dressings should be applied to any wounds
- (e) Profusely leaking orifices may be packed with gauze or cotton wool.

### **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.

Body bags are available from either the undertaker or the stores centre from where all other care equipment is requested.

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:

Anthrax	Plague
Brucellosis	Acute poliomyelitis
Cholera	Psittacosis
Diphtheria	Pyrexia of unknown origin
Food Poisoning (if faecal matter is leaking)	Q fever
Hepatitis B	Rabies
Hepatitis C	Smallpox
HIV/AIDS	Tuberculosis (infective)
Leprosy	Viral Haemorrhagic fever
Meningococcal Septicaemia (with or without meningitis)	Yellow fever.

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 instances the bag could not be opened e.g. if the patient suffered from Anthrax, Plague, Rabies, Smallpox or 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 EHPU.

#### **4. Decontamination**

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

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

- **Cleaning** 'is a process which physically removes contamination but does not necessarily destroy microorganisms'. The reduction of microbial contamination cannot be defined and will depend upon many factors including the efficiency of the cleaning process and the initial bio-burden

Cleaning is an essential prerequisite of equipment decontamination to ensure effective disinfection or sterilisation can subsequently be carried out

- **Disinfection** 'is a process used to reduce the number of viable microorganisms, which may not necessarily inactivate some viruses and bacterial spores'. Disinfection will not achieve the same reduction in microbial contamination levels as sterilisation.
- **Sterilisation** 'is a process used to render the object free from viable micro-organisms, including spores and viruses'.

HTM 2030 and HTM 2010 are to be replaced by HTM 01-01 Decontamination of Reusable Medical Devices, Part A, and Part B 2007-08.

#### **Risk Assessment**

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 skin

or mucous membranes, are classified as high-risk and must be sterile before use.

### **Classification of Infection Risk Associated with the Decontamination of Medical Devices**

<b>Risk</b>	<b>Application of Item</b>	<b>Minimum Standard</b>
High	<ul style="list-style-type: none"> <li>• In close contact with broken skin or broken skin or broken mucous membrane</li> <li>• Introduced into sterile body areas</li> </ul>	Cleaning followed by sterilisation
Medium	<ul style="list-style-type: none"> <li>• In contact with mucous membranes</li> <li>• Contaminated with particularly virulent or readily transmissible organisms</li> <li>• Before use on immunocompromised patients</li> </ul>	Cleaning followed by sterilisation or disinfection NB: Where sterilisation will damage equipment, cleaning followed by high level disinfection may be used as an alternative
Low	<ul style="list-style-type: none"> <li>• In contact with healthy skin</li> <li>• Not in contact with patient</li> </ul>	Cleaning

MHRA DB2006 (05) November 2006

Within the care home environment the majority of equipment to be decontaminated will require cleaning, or cleaning and disinfection. Items that require sterilisation will be purchased sterile, and require disposal after single-use. Items that require decontamination should follow a process recommended by the manufacturer.

### **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 microorganisms.

Thorough cleaning with detergent and warm water and clean non-shedding cloths, followed by rinsing and thorough drying.

## 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.

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>• needs 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> <li>• inactivated by organic matter</li> </ul>	<ul style="list-style-type: none"> <li>• For skin and hand decontamination</li> </ul>

## Training

Training of personnel to use the equipment correctly is an essential part of ensuring a safe procedure. No staff should be expected to use such equipment, or be involved in the sterilisation procedure unless a clear understanding is first ensured.

## 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 reused if re-processed using an appropriate method and is used on the **same patient only**. The duration of use is dependent 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 patients 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.

## DECONTAMINATION OF EQUIPMENT

### A-Z OF EQUIPMENT AND THE DECONTAMINATION METHOD

<u>Use</u>	<u>Available Chlorine</u> (ppm)
Blood Spillages	10,000
Environmental disinfection	1,000

Ensure that manufacturers' instructions are followed to obtain correct concentration of solution.

<b>EQUIPMENT</b>	<b>CLEANING METHOD</b>
Baths	To be cleaned between users. With gloved hand, clean bath surface, grab rails and taps with hot water, GPD and paper towels, or GPD wipes. Rinse
Bath water additives	Bath emollients should be added to the bath water. However some preparations can be applied to wet skin and rinsed off. Always follow the manufacturers' instructions
Bedpans	Disposable pans are recommended and disposed off in a Macerator. Reusable Pans to be decontaminated in Washer Disinfector. Manual cleaning is not advised.
Beds, backrests, bed cradles and mattresses	To be included in the regular cleaning regime, but to be cleaned between users with hot water and GPD, or GPD wipes. 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, or GPD wipes, using disposable paper towels and gloved hand and then flush
Bowls – patient washing	Clean between each use with hot water and GPD, or GPD wipes, using disposal paper towels. Rinse and store dry on the shelf of a cupboard
Commode armrests and seats	If no soiling is evident, clean with hot water and GPD, and dry using paper disposable towels. 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, or GPD wipes. Wipe over with a chlorine-releasing compound (e.g. Presept, Chlortabs). <b>Use separate wipes for armrests and seats</b>

Hoists and slings	Residents/patients slings should be allocated to each individual, and kept at their side ready for use. On discharge, or if the sling becomes soiled, the sling should be washed in an industrial washing machine on as hot a wash as the fabric will tolerate as per manufacturers guidance. The slings should be dried and then stored in a designated area. Alternatively, single patient slings can be used and disposed of once the patient no longer requires it
Nail brushes	Single-use only
Nebulisers	<p>Single patient use nebuliser and tubing recommended. Clients should have their own nebuliser units, which should be washed with hot water and GPD, or GPD wipes between use. Store dry. On completion of treatment, dispose of nebuliser. Follow manufacturer's instructions.</p> <p>Nebulisers which are used in the surgery or loaned to clients must be thoroughly decontaminated between patient uses. All tubing, mask, and filters should be disposed of after use, and replaced with new, disposable components before the item is used by another client.</p> <p>Staff must maintain a register of use (giving patient details and date of use) for each nebuliser including a record of the decontamination process detailing the date, time, cleaning method used, items replaced, and the signature and name of the member of staff responsible</p>
Stethoscopes	Clean with GPD wipe after each use
Suction equipment	<p>Disposable suction units are recommended. After each use (or 24 hours if in frequent use) the disposable components should be disposed of in the appropriate waste.(See waste Section I,12)</p> <p>Non-disposable bottles – recommend change to disposable.</p> <p>Tubing should be disposable.</p> <p>Filters - these should be replaced when wet and at appropriate intervals in keeping with the manufacturer's instructions</p>
Thermometers	Single-use recommended

Trolleys (dressing trolleys)	Clean top and all surfaces with hot water and GPD, or GPD wipes daily. Dry thoroughly. If trolley becomes contaminated between patient use, wash with GPD and hot water again
Toys	Soft toys should be washable via an industrial washing machine. Plastic toys to be washed in hot water and GPD. Wooden toys are not suitable
Urinals	Single-use recommended. Non disposable urinals mechanically cleaned as described in bedpans. Non-disposable urinals an individual's own home -wear disposable plastic apron and gloves, empty urine into the toilet, clean thoroughly using paper towels, hot water and GPD. Rinse, dry and store inverted
Urine jugs	Single-use recommended. Reusable - 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. Allocate a jug per individual resident/patient
Walking frames, wheelchairs etc.	Clean with GPD and hot water, or GPD wipes and dry In residential environment clean weekly, daily during outbreaks and immediately after contamination with body fluids
Weighing scales	Line with disposable paper towel. Wash bowl of scales with GPD and hot water, or GPD wipes if they become soiled before next baby is weighed and at the end of each clinic session
Work surfaces	<b>General Cleaning</b> Use GPD and hot water, or GPD wipes. <b>Contaminated Surfaces</b> Clean with GPD and hot water, or GPD wipes, and then wipe with a 10000 ppm available chlorine solution

## DECONTAMINATION OF THE CLINICAL ENVIRONMENT

### 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.

National initiatives such as The Health Act 2006, Essential steps to Safe Clean Care (2006), Towards cleaner hospitals and lower rates of infection (2004), and NHS Estates Healthcare Facilities Cleaning Manual (2004) all promote the importance of cleanliness in the healthcare environment, to assist in tackling the problem of healthcare acquired infections.

- 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. All surfaces should be kept clear of unnecessary equipment or clutter to ensure regular and thorough cleaning can occur. The most important component of an effective cleaning programme is the regular removal of dust from all horizontal surfaces.
- GPD and water should be used for all environmental cleaning – follow the manufacturer's instructions. Disinfectant such as a chlorine releasing solution, should only be used to decontaminate spills of body fluids, or for "terminal" cleaning of an area after a known case or outbreak of infection
- 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, should be cleaned with vacuum cleaner with filters daily or contracts for regular steam cleaning and dealing with spills (suggested frequency of steam cleaning in waiting rooms yearly)
- Walls require spot cleaning to remove splashes/marks
- Difficult to reach/clean areas should have contracts arranged for regular planned preventive maintenance and cleaning e.g. behind radiator guards, fans, ventilation units/grills etc
- All cleaning equipment should be colour-coded for different areas of use, as per National colour-coding guide (see below). E.g. buckets, mop handles, aprons, gloves and disposable cloths etc.
- The water used for cleaning, in buckets, must be changed frequently and disposed in a sluice sink/hopper. Clean the mop handle and bucket after use. Dry and store bucket inverted.

- Mop heads should be removed after each use for laundering in a hot wash and then stored dry but if heavily soiled to be discarded. Single-use mop heads should be used if industrial washing machine laundering facilities are not available.
- Single-use, non-shedding cloths or paper roll should be used for cleaning and drying.
- Equipment and materials used for general cleaning should be kept separate from those used for dealing with body fluids.
- All equipment used for cleaning including vacuums and floor polishers should be clean and maintained properly

## Colour-Code for Hygiene

Based on the Safer Practice Notice – Colour-coding hospital cleaning materials and equipment, published by the National Patient Safety Agency.

### National Colour Coding Scheme



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

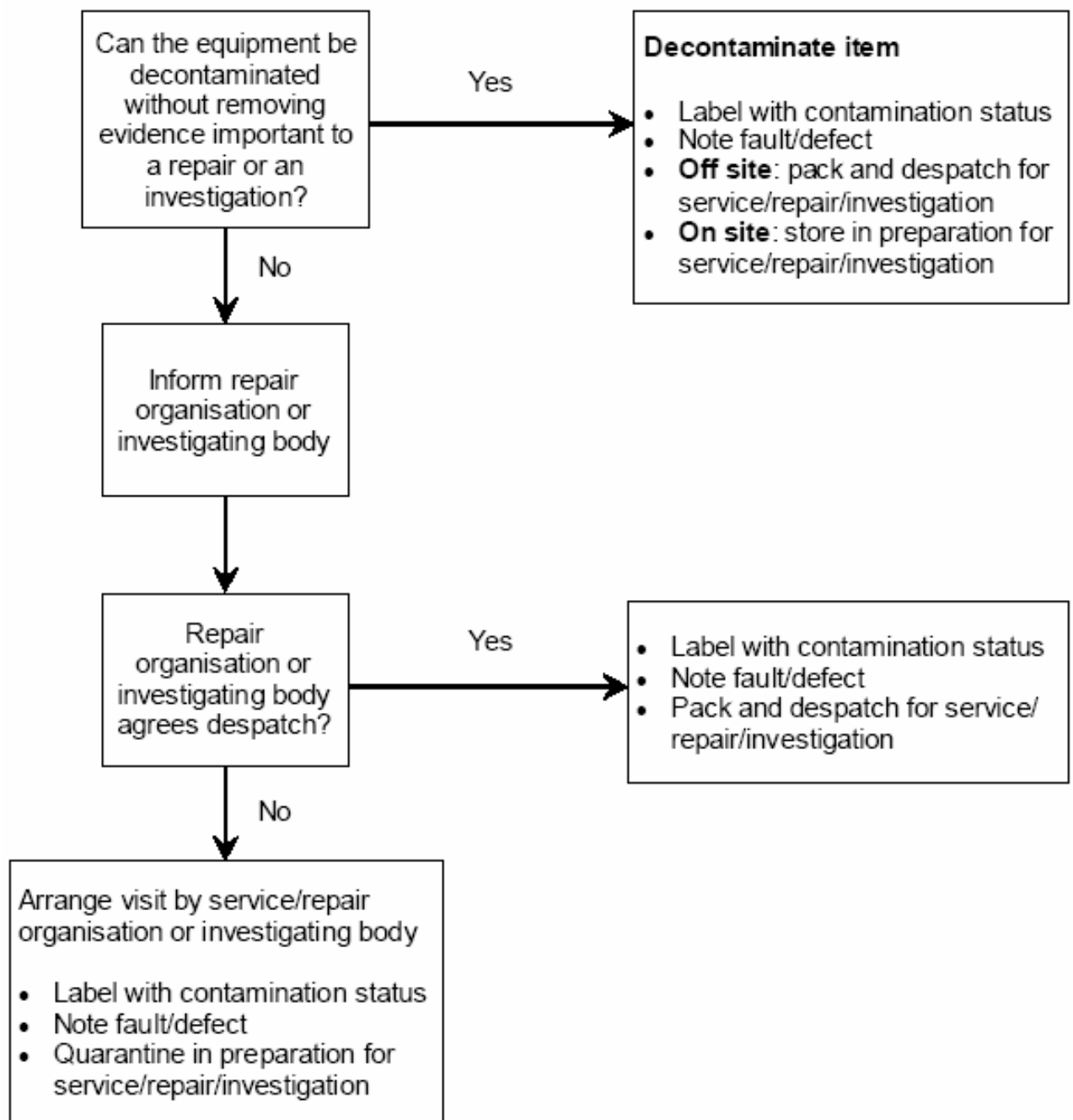
1. The aim of a colour-coding system is to prevent cross-contamination
2. It is vital that such a system forms part of any employee induction or continuous training programme
3. A minority of people are colour-blind in one or more colours. Some individuals may not know this and colour identification 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. Wash with GPD and dry
Curtains	Launder 6 monthly or at once if visibly soiled or after an outbreak of infection as part of the terminal clean Disposable curtains are available and are recommended where a laundry service is not available
Mop (wet)	Disposable recommended. Dispose after single task or for periods not exceeding three hours. Reusable, heat disinfect in washing machine and dry thoroughly daily, or more frequently if necessary. Store dry
Mop (dry)	Single-use covers – dispose of after use
Lavatory brushes	Rinse in flushing water and store dry
Suggested colour - coding of cleaning equipment	Red: toilet bathroom/sluite Blue: General areas Green: kitchen/pantry Yellow: isolation
Floors	Dust control - dry mop. Wet cleaning - wet mop, wash with hot water and GPD. If known contamination - follow with 1,000 ppm available chlorine
Furniture and fittings	Damp dust with hot water and detergent. If known contamination - follow with 1,000 ppm available chlorine
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 GPD followed by chlorine-releasing compound (i.e. Presept, Chlortabs) 1,000 ppm
Showers	Should be clean and maintained. Launder curtains 3 monthly. Shower heads should be de-scaled when necessary. If not in use – shower should be run for 5 mins weekly (potential Legionella risk)
Walls and 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 10,000 ppm available chlorine

## DECONTAMINATION OF EQUIPMENT PRIOR TO INSPECTION, SERVICE, REPAIR OR LOAN

Figure 3 Decontamination flow chart for devices being sent for investigation/repair or service



**Figure 4 Sample form – declaration of contamination status**

<b>From</b> (consignor): _____ Address _____ _____ _____ Reference _____ Emergency tel _____	<b>To</b> (consignee): _____ Address _____ _____ _____ Reference _____
---	--

Type of equipment \_\_\_\_\_ Manufacturer \_\_\_\_\_  
 Description of equipment \_\_\_\_\_  
 Other identifying marks \_\_\_\_\_  
 Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_  
 Fault \_\_\_\_\_

<b>Is the item contaminated?</b>	<b>Yes*</b> <input type="checkbox"/>	<b>No</b> <input type="checkbox"/>	<b>Don't know</b> <input type="checkbox"/>
<small>* State type of contamination: blood, body fluids, respired gases, pathological samples, chemicals (including cytotoxic drugs), radioactive material or any other hazard _____</small>			
<b>Has the item been decontaminated?</b>	<b>Yes†</b> <input type="checkbox"/>	<b>No‡</b> <input type="checkbox"/>	<b>Don't know</b> <input type="checkbox"/>
<small>† What method of decontamination has been used? Please provide details</small>			
Cleaning _____			
Disinfection _____			
Sterilization _____			
<small>‡ Please explain why the item has <b>not</b> been decontaminated?</small>			
_____			
_____			

**Contaminated items should not be returned without prior agreement of the recipient**

<b>This item has been prepared to ensure safe handling and transportation:</b>	
Name _____	Position _____
Signature _____	
Date _____	Tel _____

## **5. Laundry Management**

### **IN THE CARE HOME**

#### **Laundry facilities**

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

The laundry should have a flow of 'dirty to clean'. Clean items should not pass back through the 'dirty' area of the laundry.

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

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

The laundry room should be ventilated with appropriate extraction devices.

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.

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.

### **Laundry practices**

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.

Linen 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.

Heat labile clothing must be washed at the highest temperature possible according to the item's fabric care instructions. Where indicated disinfection can be achieved by adding sodium hypochlorite in 150ppm concentration to the wash during the rinse cycle.

There is no need to segregate laundry from residents who are colonised with MRSA unless the lumen is soiled with body-fluids, or as advised by the EHPU. Good hygiene practices will suffice.

Tumble-drying and ironing are also heat disinfection processes.

### **Curtains/blinds**

These should be washed at least twice a year, or when there is visible contamination, and after outbreaks, or following the discharge or death of a resident with an infection. If in doubt please contact EHPU for advice.

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

A commercial laundry service may stipulate a colour coding system for the management of soiled linen.

Usually laundry bags are colour coded in the following way:

Used linen - a white bag

Foul linen and/or infected linen – placed in a red water-soluble bag, into a red outer bag.

If resident's laundry is sent to a commercial laundry, by collection or delivery, it should be checked whether they have any special instructions regarding the colour-coding system.

## **STAFF UNIFORMS OR WORK CLOTHES**

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

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.

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 GPD and hot water - disposable gloves should be worn.

## **6. Enteral Feeding**

### **Preparation and Storage of Feeds**

Effective hand hygiene must be carried out before starting feed preparation.

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 to the enteral feeding tube.

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

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

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

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.

### **Administration of Feeds**

Minimal handling and an aseptic no-touch technique should be used 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. Reconstituted feeds should be administered over a maximum 4 hour period.

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

In some areas, single patient use syringes are used to administer drugs. Check the packaging to ensure it is **single patient** use, and, if it is, follow the manufacturer's instructions on decontamination between uses.

### **Care of Insertion Site and Enteral Feeding Tube**

**The stoma should be washed 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 patients who are immunosuppressed should be flushed with either cooled freshly boiled water or sterile water from a freshly opened container.

## **7. Prevention and Control of Infection in Urinary Catheter Care**

### **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.

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.

### **Assessment for Catheter Equipment**

Indwelling urinary catheters should be used only after alternative methods of management have been considered.

The patient's clinical need for catheterisation should be documented and reviewed regularly, and the urinary catheter to be removed as soon as possible.

Catheter insertion, changes and care should be documented.

#### **Catheter drainage options**

Following assessment, the best approach to catheterisation that takes account of the clinical need, anticipated duration of the catheterisation; patient preference and risk of infection should be selected.

Intermittent catheterisation should be used in preference to an indwelling catheter if it is clinically appropriate and a practical option for the patient.

For urethral and supra-pubic catheters, the choice of catheter material and gauge will depend on an assessment of the patient's individual characteristics, and predisposition to blockage.

In general, the catheter balloon should be inflated with 10ml of sterile water in adults and 3-5ml in children.

In patients for whom it is appropriate, a catheter valve may be used as an alternative to a drainage bag.

There are a variety of types of urinary catheters. When the assessment for the need for catheterisation is made the catheter material and expected usage should be recorded. In the community medium (up to 28 days) or long-term (up to 12 weeks) catheters are recommended.

The retaining balloon should be filled with sterile water to the volume indicated by the manufacturer (usually 10mls for adults).

### **Catheter Insertion**

Catheterisation is an aseptic technique.

Ensure that healthcare workers are trained and competent to carry out catheter insertion.

Intermittent self-catheterisation is a clean procedure. A lubricant for single patient use is required for non-lubricated catheters.

The urethral meatus should be cleaned before insertion of the catheter, with sterile normal saline prior to insertion.

An appropriate lubricant from a single-use container should be used during catheter insertion to minimise urethral trauma and infection.

### **Documentation**

The following details must be documented in the patient records e.g. amount of urine drained, problems encountered, patient discomfort, reason for catheterisation, date of insertion, catheter size, type, length, balloon size, batch number, expiry date.

### **Catheter Maintenance**

Indwelling catheters should be connected to a sterile closed urinary drainage system or catheter valve.

Healthcare personnel must decontaminate their hands and wear a new pair of clean, non-sterile gloves before manipulating a patient's catheter, and must decontaminate their hands after removing their gloves.

Urine samples must be obtained from a sampling port using aseptic technique.

A link system should be used to facilitate overnight drainage, to keep the original system intact. Drainage bag should be **single-use**.

The meatus should be washed daily with soap and water.

Reusable intermittent catheters should be cleaned with water, and stored dry in accordance with the manufacturer's instructions.

Catheters should be changed only when clinically necessary or according to the manufacturer's current recommendations.

Healthcare personnel should ensure that the connection between the catheter and the urinary system is not broken except for good clinical reasons, (for example changing the bag in line with the manufacturer's recommendations).

Carers and patients managing their own catheters must wash their hands before and after manipulation of the catheter, in accordance with the recommendations in the standard principles of infection control.

Urinary drainage bags should be positioned below the level of the bladder, and should not be in contact with the floor.

The urinary drainage bag should be emptied frequently enough to maintain urine flow and prevent reflux, and should be changed when clinically indicated.

Each patient should have an individual care regimen designed to minimise the problems of blockage and encrustation. The tendency for catheter blockage should be documented in each newly catheterised patient.

Bladder instillations or washouts must not be used to prevent catheter-associated infections.

Antibiotic prophylaxis when changing catheters should only be used for patients with a history of catheter-associated urinary tract infection following catheter change, or for patients who have a heart valve lesion, septal defect, patent ductus or prosthetic valve.

## **8. Safe Handling of Specimens**

Clinical specimens include any substance, solid or liquid, removed from the patient for the purpose of analysis.

Staff should be trained to handle specimens safely and receive regularly updated immunisation cover.

### **General Principles**

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

- Appropriate container should always be used, and follow instructions as to how to collect the specimen.
- Laboratory approved containers must be labelled with patient identification details, date of specimen and specimen details. 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 work load carefully. Whilst awaiting transport, specimens should be stored securely, for as short a time as possible i.e. not overnight and away from food and medicines.
- Sputum specimens must be received by the laboratory within 24 hours.

**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.**

## 9. Waste Management

The management of Healthcare Waste has changed in line with the new Hazardous Waste Regulations.

The new Department of Health document is entitled: **Environment and Sustainability – Health Technical Memorandum 07-01: Safe Management of Healthcare Waste**. This guidance has been produced to provide a framework for best practice in waste disposal. The guidance is designed to help healthcare organisations and other producers of waste to meet their legislative requirements.

HTM 07-01 is available from the Stationary Office or it may be electronically downloaded from DH website [www.dh.gov.uk/publications](http://www.dh.gov.uk/publications) or [http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_063274](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_063274).

It is strongly recommended that the organisation/healthcare businesses also consult the HTM 07-01 and discuss waste disposal with the management or advisors of the waste collection contractor.

All healthcare organisations should have a waste policy that provides clearly written instructions on the way waste should be managed. The roles and responsibility of the waste management chain from “cradle to grave” still applies. Producers of waste are advised to carry out regular audit of their waste management systems to ensure that they complying with best practice.

### Example of Waste produced in the Healthcare Sector

#### Hazardous Waste

Infectious Waste
Fluorescent Waste
Laboratory Chemicals
Cleaning Chemicals
Photo Chemicals
Oils
Batteries
Waste Electronics
Asbestos
Paints
Solvents
Contaminated Land

All waste products will have European waste codes.

## Non-Hazardous Waste

Domestic Waste (black-bag or municipal waste)
Food Waste
Offensive/Hygiene Waste
Packaging Waste
Recyclates (paper, glass, aluminium etc)
Furniture
Construction and Demolition Waste
Grounds Waste

Note: Adapted from Welsh Health Estates 'Healthcare waste strategy for Wales' guidance document.

All healthcare organisations have a legal responsibility to dispose of waste safely, ensuring no harm is caused either to staff, members of the public or the environment. The healthcare organisations' responsibility begins when waste is generated and ends with its final disposal, even where properly authorised agents are used.

It is essential that persons handling waste exercise care to prevent injury or transmission of infection to themselves or others. This is to fulfil their responsibilities under the current legislation (for list see end of this Section).

### 1. DEFINITIONS

#### Clinical Waste

- 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)

The regulations subdivide healthcare clinical waste into:

1. Waste that poses a risk of infection (infectious waste)
2. Medicinal waste.

## **Infectious Waste**

The Hazardous Waste Regulations define this as:

H9 Infectious: Substances containing viable micro-organisms or their toxins which are known or reliably believed to cause disease in man or other living organisms. (Traditionally known as “**clinical waste**”.)

## **Medicinal Waste**

Classified into two categories:

- (a) Cytotoxic and cytostatic medicines (classified as Hazardous Waste)
- (b) Medicines other than cytotoxic and cytostatic.

Failure to segregate cytotoxic and/or cytostatic medicines from other medicines will mean that the entire medicinal waste stream will need to be classified as hazardous.

Cytotoxic and cytostatic classifications can be found in the NIOSH Alert or the BNF.

## **Offensive/Hygiene Waste**

Non-infectious (human waste and sanpro (sanitary protection) waste such as nappies, incontinence pads etc), which does not require specialist treatment or disposal, but which may cause offence to those coming into contact with it.

## **2. SEGREGATION OF WASTE**

The new regulations focus on the correct segregation at the point of generation, correct identification of the waste and the safe disposal via the appropriate route.

The European Waste Code (EWC) coding for correct labelling is illustrated in the following table:

**Table 1 EWC Coding for the Types of Healthcare Waste**

<b>EWC Code</b>	<b>Colour of Text</b>	<b>Description of Waste</b>
18 01 XX	Black	Waste from natal care, diagnosis, treatment or prevention of disease in humans
18 01 01	Black	Sharps except 18 01 03*
18 01 02	Black	Body parts and organs including blood bags and blood preserves (except 18 01 03*)
18 01 03**	Red	Waste whose collection and disposal is subject to special requirements in order to prevent infection
18 01 04	Black	Waste whose collection and disposal is subject to special requirements in order to prevent infection e.g. dressings, plaster casts, linen, disposable clothing
18 01 06*	Blue	Chemicals consisting of dangerous substances
18 01 07	Black	Chemicals other than those listed in 18 01 06*
18 01 08**	Red	Cytotoxic and cytostatic medicines
18 01 09	Black	Medicines other than those mentioned in 18 01 08*
18 01 10**	Red	Amalgam waste from dental care

\*Hazardous Waste list entries

Hazardous wastes are absolute entries (in which case they are always hazardous – highlighted red\*\* in the table) or mirror entries (which can be either hazardous or non-hazardous depending on their properties – highlighted blue\* in the table).

A national colour-coding system has been developed. Most infectious clinical waste generated in community settings will be disposed of in the orange package stream.

Non-infectious waste and incontinence waste is considered to be offensive. It can be disposed of in yellow bags with black strips. (Refer to figures 4 and 5 on the following pages).

The assessment for whether waste is hazardous because of infection will be made at the point of generation i.e. the site of healthcare provision.

An assessment is required to ascertain the correct type of packaging i.e. if there is a risk of an item piercing a waste bag a rigid container should be used.

## Colour-coding key to segregation system







Colour	Description
 Yellow	<b>Waste which requires disposal by incineration</b> Indicative treatments/disposal required is incineration in a suitable permitted or licensed facility
 Orange	<b>Waste which may be “treated”</b> Indicative treatments/disposal required to be “rendered safe” in a suitable permitted or licensed facility. <i>Usually alternative treatment plants (APT’s) However this waste may also be disposed of by incineration</i>
 Purple	<b>Cytotoxic and Cytostatic Waste</b> Indicative treatments/disposal required is incineration in a suitable permitted or licensed facility
 Yellow & Black	<b>Offensive/Hygiene Waste</b> Indicative treatments/disposal required is landfill in a suitable permitted or licensed site. This waste should not be compacted in unlicensed facilities
 Black	<b>Domestic (Municipal) Waste</b> Minimum treatments/disposal required is landfill in a suitable permitted or licensed site. Recyclable components should be removed through segregation. Clear/opaque receptacles may also be used for domestic waste
	<b>Amalgam Waste</b> For recovery

Table from HTM07-01: Safe management of healthcare waste. Figure 4

The use of yellow/black for offensive/hygiene waste was chosen as these colours have historically been universally used for the sanitary/offensive/hygiene waste stream.

## Waste Packaging and Colour-coding






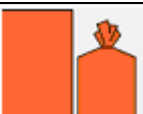


Waste receptacle	Waste Types	Example contents	Indicative treatment/ disposal
 Yellow body/ Purple lid	Sharps contained with cytotoxic and cytostatic medicinal products	Sharps used to administer cytotoxic products	Incineration
 Yellow lid and body	Infectious and other waste requiring incineration including anatomical waste, diagnostic specimens, reagent or test vials, and kits containing chemicals	Anatomical waste from theatres	Incineration
 <small>Receptacle must be UN-approved for liquids</small> Yellow	Partially discharged sharps not contaminated with cyto products	Syringe body with residue medicinal product	Incineration
 Yellow	Medicines in original packing	Waste in original packaging with original closures	Incineration
 Yellow	Medicines NOT in original packing	Waste tablets not in foil pack or bottle	Hazardous waste incineration
 Orange	Infectious waste, potentially infectious waste and autoclaved laboratory waste	Soiled dressings	Licensed/ permitted treatment facility
 Yellow body/orange lid	(i) Sharps not contaminated with medicinal products or (ii) Fully discharged sharps contaminated with medicinal products other than cytotoxic and cytostatic medicines	Sharps from phlebotomy	Suitably authorised incineration or alternative treatment facility
 Yellow/black	Offensive/hygiene waste	Human hygiene waste and non-infectious disposable equipment, bedding and plaster casts	Deep landfill

Figure 5

## Assessment of Hazard

Generally in primary healthcare the waste generated is less of an infectious hazard.

Infectious waste is waste that has been generated from a person with signs and symptoms of infection and will be considered infectious or potentially infectious and should be disposed of in orange waste streams. Non-infectious but offensive waste should be disposed of in a yellow bag with black stripe. There will be occasions when offensive/hygiene waste is potentially infectious e.g. patients/residents with gastroenteritis, in which case the correct waste-stream is orange.

Healthcare workers working in the community and in the household environment need to assess the waste they are producing for the hazardous properties it may contain, most notably 'infectious'.

### 3. HANDLING OF WASTE

- Waste should be segregated at the point of origin
- Personal protective clothing should be worn when handling waste
- Waste should be:
  - Correctly bagged in the appropriate coloured bag 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.
- Waste should not :
  - Be decanted into other bags, regardless of volume
  - Be contaminating the outside of the bag
  - Sharps must be disposed of into appropriate colour-coded sharps containers that meet BS7320/UN3291

- Sharps container should **NEVER** be placed into a waste bag.

All staff handling waste should receive appropriate training to carry out the procedure safely.

#### **4. DISPOSAL OF WASTE**

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 (e.g. home details) and placed in the designated waste collection point.

##### **Disposal of Sharps**

A risk assessment is required to identify the correct waste stream required.

Syringes, needles, lancets, razors, ampoules and other sharps should always be placed in the correct sharps container (see Waste-packaging and colour-coding). 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 responsibility of the person who uses a sharp to dispose of it safely.

Always place sharps in the sharps container as soon as possible, at point of use.

Sharps containers must be sealed, labelled with the point of origin and placed in the designated waste collection point when  $\frac{3}{4}$  full.

Sharps containers should conform to BS 7230/UN 3291.

Sharps containers should be kept in a safe location (on a flat surface, below eye level but not on the floor). This will reduce the risk of injury to patients, visitors and staff.

##### **Disposal of Pharmaceutical Waste - Medicinal 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.

Ensure that the container is clearly labelled, and that all associated documentation is signed off at the time of collection.

## **5. STORAGE OF HAZARDOUS/NON-HAZARDOUS HEALTHCARE WASTE**

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

Between collections, 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.

## **6. MANAGEMENT OF CLINICAL WASTE IN CARE HOMES**

The above guidance should be followed in full.

Each health and social care employer is responsible for ensuring that contracts are in place to collect clinical waste from their premises. They are also responsible for monitoring the performance of their staff and waste contractors.

Community healthcare workers generating waste in health and social care establishments are responsible for ensuring the waste that they generate is managed correctly, this is part of their duty of care.

The waste should be stored in a suitable place to which children, pets, pests etc. do not have access.

This 'cradle to grave' responsibility will include the correct storage of waste whilst awaiting collection by an authorised collector.

### **Risk Assessment**

A risk assessment should be undertaken to determine whether the waste generated by the healthcare worker is a hazard because it has a known or potential risk of infection. This should be a professional assessment based on clinical signs and symptoms and prior knowledge of the patient.

## **Infectious Waste**

The table below is based on the Delphi process for identifying wound infection (European Wound Management Association 2005) and can be used to assist in the risk assessment.

Potentially infectious healthcare waste like dressings, blood and body fluids based on a risk assessment must be disposed of in an orange bag.

However the healthcare worker may have further information that would indicate that the waste is potentially infectious. Infectious waste must be disposed of in an orange bag.

## **Non-infectious Waste**

Non-infectious healthcare waste generated by a healthcare worker should be disposed of via the offensive waste stream (yellow with black strip waste bag).

## **8. CURRENT 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
- HTM Environment and Sustainability 07-01 Safe Management of Healthcare Waste Department of Health 2006
- Health Care Waste Management and Minimisation 2000.

## **In Summary**

It is the responsibility of the home to ensure that they are using the correct waste containers and the correct EWC codes.

## **Residential Care Homes**

- Sharps bins – are prescribed for individual residents i.e. a diabetic resident if required. Liaise with District nurse team or GP – sharps boxes should be returned for disposal to GP surgery or pharmacy according to local arrangements

- Orange bags for soiled dressings and other “infectious waste” labelled with the EWC code 18 02 02 at disposal. Depending on the volume of waste generated (small amounts of waste i.e. dressings no larger than 130mm x 220mm can be disposed of as domestic waste)
- Yellow and black striped bags for incontinence waste labelled with EWC code 18 01 04 at disposal
- Black bags for domestic waste
- Pharmacy waste should be returned to dispensing pharmacy for disposal.

### **Nursing Homes**

- Sharps bins – Yellow lidded sharps bins for partially discharged sharps not containing chemo or cytostatic medicines with EWC code 18 01 01
- If required - Purple lidded sharps bins for Chemotherapy and Cytostatic waste with EWC code 18 01 03 or 18 01 08
- Orange bags for soiled dressings and other “infectious waste” labelled with the EWC code 18 02 02 at disposal. Depending on the volume of waste generated
- Yellow and black striped bags for incontinence waste labelled with EWC code 18 01 04 at disposal
- Black bags for domestic waste
- Pharmacy waste – Yellow lidded ridged container - discuss with dispensing pharmacy with EWC code 18 01 09.

The assessment of whether waste is hazardous because of infection will be made at the point of generation i.e. the site of healthcare provision.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION I – FOOD HYGIENE

### 1. Introduction

This guideline sets out the procedures for staff to follow for food hygiene in Care homes.

### 2. Legislation

All individuals who handle food should follow basic food hygiene practices to ensure contamination and subsequent disease does not occur.

All staff involved in the handling of food should be aware of the legislation relevant to food management. The main legislation is the Food Safety Act 1990 and its related regulations (General Food Hygiene Regulations (1995) and The Food Safety (Temperature Control) Regulations (1995)).

### 3. Basic Requirements for Food Safety

The Local Authority Environmental Health Officers will advise on Food Safety and Kitchen Hygiene in the care home setting.

The following basic principles should be observed:

- It should be ensured that the food purchased is of good and wholesome quality and is subsequently stored, prepared, cooked and served in hygienic conditions
- Check “use by” dates. Use food within recommended times
- Do not provide/eat food containing uncooked eggs. Keep eggs in the fridge
- **Food Preparation Areas.** All food preparation surfaces should be cleaned before use with hot water and GPD
- **Pets.** Keep pets away from food, and preparation areas

- **Cross Contamination.** Care must be taken not to contaminate cooked foods with raw foods. Ideally there should be a separate chopping board and utensils for each type of food (e.g. raw meat, cooked meat and raw and cooked perishables)
- **Hands and Hand-washing.** Hands **must** be washed thoroughly following any cleaning session, after toilet visits, before handling food and between handling different food types e.g. raw and cooked meats
- **Refrigerators.** All fridges should be defrosted and cleaned regularly. Should a spillage occur or food become stale the whole interior of the fridge should be cleaned with hot water and GPD and dried thoroughly
- **Food.** Food should be stored at the correct temperature. The fridge should be kept at 5° C or lower. The freezer should be kept at minus 18°C or below. In the care home, it is essential that a record of daily temperature recordings is kept
- **Storage.** Store raw meat and fish at the bottom of the fridge ensuring juices do not drip on to salads and vegetables. Raw meat and defrosting foods should be stored in covered dishes, or boxes which can catch drips. All sealed dry foods should be stored on shelves or in cupboards. Food should not be stored on the floor. Open packs of food should be stored in containers or packaging sealed to inhibit the entry of animals. Open bottles, such as squash, sauces and jams may require storage in the refrigerator. Follow manufacturer's guidelines
- **Defrosting.** All foods should be defrosted in the fridge or microwave, not at room temperature (unless specified on the packaging). Do not re-freeze uncooked food. Cook before you freeze again
- **Cooking.** Always follow cooking times on the labels and in cookbooks. Cook food thoroughly so that the temperature reaches 70° C for at least 2 minutes. Ideally food should be eaten as soon as it is cooked or prepared. Never re-heat food
- **Leftovers.** These should not be left out unnecessarily. Cold food should be covered and put directly into the fridge. Hot food should be cooled for one hour at room temperature and then placed in the fridge. All leftovers should be eaten within 2 days
- **Crockery and Cutlery.** A mechanical dishwasher incorporating a hot drying cycle should be used if possible. If a dishwashing machine is not available, hot water and GPD should be used for washing. Wherever possible, dry with disposable heavy-duty paper towel. If used, tea towels are to be changed daily and laundered at least 65° C
- **Dishcloths.** Should be changed daily and laundered at least 65°C.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION J – STAFF HEALTH

### 1. Occupational Health Service

If you have access to an occupational health service you should refer to any written guidance issued by them.

### 2. Principles of Staff Health in Care Homes

Care home staff are not in general at increased risk of acquiring communicable diseases. However, it is wise to take some basic precautions:

- Keep a record of staff immunisation histories, to facilitate action should an incident occur
- Consider the need to vaccinate staff who have not completed a primary course of the following routine childhood vaccine:
  - Diphtheria
  - Tetanus
  - Polio
  - MMR for those 35 and under (2 doses 3 months apart)
  - Meningitis C vaccine for those 25 and under (1 dose).

As a general public health measure, regular boosters are NOT required, nor should individuals have more than 5 doses of tetanus unless they sustain a high-risk injury.

- The Control of Substances Hazardous to Health (COSHH) Regulations 1994 require employers to undertake a risk assessment of their environment and to bring into effect measures necessary to protect their workers who may be exposed to Hepatitis B (Green Book)
- Employers are expected to organise and pay for vaccination of any workers who are considered to be at risk. They are also expected to keep records of who has been vaccinated.
- Staff who handle sharps e.g. needles, cannulae, lancets etc., which may be contaminated with the blood of others, should have a full course of Hepatitis B vaccine, including measurement of antibody levels. (Blood test 2 months after final dose of vaccine.)

Details of the schedules are available in the DOH document “Immunisation Against Infectious Disease 2006” (The Green Book) found at [www.dh.gov.uk](http://www.dh.gov.uk) . Staff should be aware of “sharps injury” procedure (**Refer Section E – Management of Sharps**)

- Staff from countries with high incidence of TB should be assessed on employment and on an annual basis for symptoms suggestive of tuberculosis e.g. persistent cough, weight loss, night fevers etc. The review should be on an individual basis with a face-to-face interview. A list of countries classified as high risk can be found at the end of this section and is also available from [www.immunisation.nhs.uk](http://www.immunisation.nhs.uk). (the list can be found on the Tuberculosis fact sheet)
- Consider BCG vaccination for staff under 35 years old whose parents or grandparents were born in a TB high prevalence country
- Influenza Immunisation – the DOH recommend that social care employers (especially nursing and care homes where older people are cared for) should offer yearly immunisation to their staff.

Everyone who was born, or has lived in a country other than Western Europe, North America, Australia or New Zealand should be considered as potential at risk for TB. A detailed list of countries with an incidence of more than 40/100,000 is available from the WHO website [www.who.int](http://www.who.int).

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION M – PETS AND PESTS

### 1. Introduction

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

Management and staff in a care home have the responsibility for the care and management of pets, if there are any, in the home.

### 2. Pets

Pets can often enhance the quality of life for the ageing and the ill. However, many types of animal often kept as pets can be the source of human infection, including exotic species such as reptiles, fish or birds. Sensible precautions can reduce any infection risk to an acceptable level.

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 directed by a vet, and be subject to a regular programme of flea prevention.

Hands should be washed following any contact with animals, their bedding or litter.

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

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

Food not consumed in one hour should be taken away or covered to prevent attracting pests.

### 3. Litter Box Care

Take particular care if you are pregnant.

Always wear a protective apron and gloves when cleaning the litter box.

Always wash hands immediately after removing protective clothing.

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 whenever the litter is changed 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.

### 4. Pests

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

These include:

**Insects** - ants, flies, cockroaches, fleas, 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.

**ESSEX HEALTH PROTECTION UNIT  
INFECTION CONTROL GUIDELINES  
FOR CARE HOMES**

**SECTION N – AUDIT TOOL**

See Appendix 1

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR CARE HOMES

## SECTION L – REFERENCES

### Decontamination

Babb J., (1994) Methods of Cleaning and Disinfection. British Journal of Theatre Nursing 3(10) Jan 12-29.

Bassett WH (1992) Clay's Handbook of Environmental Health. 16<sup>th</sup> Edition. London.

DoH (2004) The NHS Healthcare Cleaning Manual.

NHS Management Executive 1993

PHLS (1993) Chemical Disinfection in Hospitals. London.

### Enteral Feeding

ICNA (2003) Enteral Feeding – Infection Control Guidelines. London

NICE (2003) Prevention of Healthcare-associated Infections in Primary and Community Care

### Exclusion of Food Handlers

DoH (1994). Management of Outbreaks of Foodborne Illness. HMSO. London.

DoH (1995) Food Handlers: Fitness to work. Guidance for Food Businesses, Enforcement Officers and Health Professionals. London.

## **Handwashing**

Gould et al 2000. *Improving hand hygiene in community health settings*.  
Journal of Clinical Nursing 9-95-102

ICNA (1999) Guidelines for Hand Hygiene. London.

Journal of Hospital Infection epic2: national Evidence Based Guidelines for preventing healthcare-Associated Infections in NHS Hospital in England  
Volume 65 Supp 1, February 2007

NICE (2003) Prevention of Healthcare-associated Infections in Primary and Community Care

## **Health and Safety**

Health and Safety Commission (1974). Health and Safety at Work Act.  
HMSO. London.

Health and Safety Executive (1994). Control of Substances Hazardous to Health Regulations. HMSO. London.

## **Infection Control**

Ayliffe G, Fraise A, Geddes A, Mitchell K, (2000) Control of Hospital Infection – A Practical Handbook. Fourth edition. London

Hawker J, Begg N, Blair I, Reintjes R, Weinberg J (2001)  
Communicable Disease Control Handbook. London.

The Journal of Hospital Infection (Jan 2001). The Epic Project. Volume 47 supplements. W B Saunders.

Lawrence, J., May, D., (2003) infection Control in the Community. Churchill Livingstone. London.

McCulloch, J. (2000) Infection Control - Science, management and practice. London.

MEERS P, McPherson M, SEDGWICK J (1997) Infection Control in Health Care. 2<sup>nd</sup> edition. Thomas Cheltenham.

NATIONAL INSTITUTE FOR CLINICAL EXCELLENCE (2003) Infection Control – Prevention of healthcare-associated infection in primary and community care.

NICE (2003) Prevention of Healthcare-associated Infections in Primary and Community Care

Pritchard, A.P., Mallet, J. (Eds) (1992). The Royal Marsden Hospital Manual and Clinical Nursing Procedures, Blackwell, London

Wilson J. 2002 Infection Control in Clinical Practice. Bailliere Tindall London

### **Infectious Diseases**

British Society for Antimicrobial Chemotherapy (1995) Guidelines on the control of methicillin-resistant Staphylococcus aureus in the community. Journal of Hospital Infection, 31, 1-12.

BTS (2000) Control and prevention of tuberculosis in the United Kingdom. Code of Practice 2000. Thorax 2000; 55: 887-901.

Burgess, I. (1995) Management guidelines for lice and scabies. Prescribers. 5 May 87-107.

CMO Letter. The Influenza Immunisation Programme. 25/07/2005

Heymann, D.L. (2004) Control of Communicable Diseases Manual. 18<sup>th</sup> Edition. Washington

DoH (1998) Guidance for Clinical Health Care Workers: Protection against infection with blood-borne viruses. London.

DoH (2000) HIV Post-Exposure Prophylaxis: Guidance from the UK Chief Medical Officers' Expert Advisory Group on AIDs. London

DoH (2000) Recommendations for the prevention and control of Tuberculosis at local level.

Greenwood D, Slack R, Peutherer J. (1992) Medical Microbiology a guide to Microbial Infections: Pathogenesis, Immunity, Laboratory Diagnosis and Control. 14<sup>th</sup> edition. Churchill Livingstone, London

Healing TD, Hoffman PN, young SEJ, (1995). The Infection Hazards of Human Cadavers. Communicable Disease Report. Vol5:No5.

McDonald, P. (2000) Diagnosis and treatment of headlice in children. Prescribers. 5 Feb. 71-74

Ramsey, M.E. (1999) Guidance on the investigation and management of occupational exposure to hepatitis C. Communicable Disease and Public Health. Vol. 2. No. 4. 258-262.

RCN (2000) Methicillin Resistant Staphylococcus Aureus (MRSA) -Guidance for Nurses. London.

RCN (2005) Good Practice in infection Prevention and Control.

### **Laundry**

NHS Executive (1995). Hospital Laundry Arrangements for Used and Infected Linen HSG(95)18.

DoH 2003. *Care Homes for Older People; National Minimum Standards*. HMSO.

DoH 2004. NHS Estates. The NHS Health Cleaning Manual.

### **Protective Clothing**

ICNA (1999) Glove Usage Guidelines. London.

ICNA (2002) A Comprehensive Glove Choice. London

ICNA (2002) Protective Clothing – Principles and Guidance

### **Public Health**

DoE (1990) Environmental Protection Act 1990. HMSO. London.

DoH(1961) Public Health Act 1961. HMSO. London.

DoH (1988) The Public Health (Infectious Diseases) Regulations 1988. HMSO. London

### **Sharps**

ICNA (2003) Reducing Sharps Injury – Prevention and risk management. London

### **Single-use**

MDA (2000) Single-use Medical Devices: Implications and Consequences of Reuse. London.

## **Waste**

HSC (1999) Safe Disposal of Clinical Waste. London.

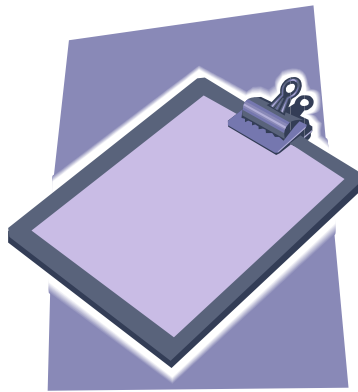
IWM (2000) Healthcare Waste Management and Minimisation. London

Phillips G (1999) Microbiological Aspects of Clinical Waste. Journal of Hospital Infection 41:1-6.

HTM 07-01. The Department of Health Environment and Sustainability - Safe Management of Healthcare Waste.

## APPENDIX 1

## Care Home Audit Tool



Issued by Essex Health Protection Unit  
January 2006

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## **INFECTION CONTROL ENVIRONMENTAL AUDIT**

This tool is broken down into two distinct parts:

### **Environmental Audit**

1. Environment
  - a) General
  - b) Surfaces
  - c) Kitchen
  - d) Bedrooms
  - e) Bathrooms and Toilets
  - f) Sluice

### **Infection Control Practices**

2. Infection Control
  - a) Hand hygiene
  - b) PPE
  - c) Spillages
  - d) Laundry
  - e) Waste disposal
  - f) Handling of sharps
  - g) Guidelines and policies

Throughout the audit form indicate:

√	for <b>achieved</b>
x	for <b>not achieved</b>
NA	for <b>not applicable</b>

Additional comments should include:

reasons for not achieved  
areas that raise concern  
specific training needs

Action Plan based on the findings/failings of the audit with clear lines of responsibility and timescales for action.

Items need to be numbered to assign action against any failing in the subsequent Action Plan.

**Scoring:** The number of positive answers divided by the total number of questions answered, multiplied by 100 = % score.

**AREA** \_\_\_\_\_  
\_\_\_\_\_

**DATE** \_\_\_\_\_ **TIME** \_\_\_\_\_

**CARE HOME ADDRESS** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**NAME OF C.D.C.N.** \_\_\_\_\_

**CARE HOME REPRESENTATIVE** \_\_\_\_\_

## 1. Environment

### 1a) General Environment

Standard Statement: The environment will be maintained appropriately to reduce the risk of cross-infection.

		Yes	No	N/A	Comments
1	Is there a cleaning schedule available for inspection (evidence of a used tick sheet)				
2	Overall appearance of the environment is tidy and uncluttered with only appropriate, clean and well-maintained furniture is being used				
3	Fabric of the environment and equipment smells clean, fresh and pleasant				
4	Rooms allocated for clinical practice are fit for the purpose and not carpeted				
5	Floor coverings are washable and impervious to moisture and are sealed regularly				
6	Floors, including edges and corners, are visibly clean with no visible body substances, dust, dirt or debris				
7	Furniture, fixtures and fittings should be visibly clean with no body substances, dust, dirt, debris or adhesive tape				
8	Furniture (chairs and couches) in communal client/patient areas are made of impermeable and washable materials				

		Yes	No	N/A	Comments
9	Furniture is free from rips and tears				
10	Medical equipment, e.g. lifting aids, is cleaned, maintained and stored appropriately				
11	Hoist slings are allocated to one resident only				
12	Pillows are covered with washable and impervious materials				
13	There is a procedure in place to regularly decontaminate curtains and blinds, minimum yearly, but also when contaminated with body fluids and following an outbreak of Diarrhoea and Vomiting				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

<b>1b) Surfaces</b>					
		Yes	No	N/A	Comments
1	Carpets vacuumed daily				
2	Carpets deep cleaned 6 monthly (see cleaning record)				
3	Hard floors vacuumed daily				
4	Hard floors damp mopped daily				
5	Hard floors washed/scrubbed weekly				
6	Mops stored dry/inverted				
7	Mop heads machine-washed weekly in GPD				
8	Flat surfaces damp dusted daily				
9	Correct dilution of disinfectants used				
10	Dilution chart accessible				
12	Disinfectants stored in a locked cupboard (COSHH)				
13	Carpets are cleaned after spillages of body fluids				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

**1c) Kitchens**

		Yes	No	N/A	Comments
1	Kitchen is regularly inspected by Environmental Health Department				
2	Separate handwash basin available				
3	Liquid soap available				
4	Paper towels available				
5	Foot-operated and labelled waste bin available				
6	No evidence of infestation or animals in the kitchen				
7	Floor visibly clean, free of dust, grit, litter, water or other liquids				
8	Cleaning materials accessible, and away from food				
9	Cleaning equipment colour coded (green), and stored separately from other cleaning materials				
10	Drying cloths are disposable (paper roll)				
11	Opened foods are labelled with name and date of opening and in pest-proof containers				
12	Bread is stored in a clean bread bin				
13	Milk stored in fridge				
14	Food within expiry date				

		Yes	No	N/A	Comments
15	Microwave and toaster are visibly clean				
16	All cooking appliances are visibly clean				
17	Kitchen trolley is clean and in good state of repair				
18	Kitchen free from left-over food				
19	There is a satisfactory system for cleaning crockery and cutlery e.g. dishwasher with a planned maintenance programme				
20	Water coolers are visibly clean and on a planned maintenance scheme				
21	Fridge/freezers are clean and free of ice build-up				
22	Fridge/freezers have thermometers, temperatures taken daily and appropriate action is taken if standards are not met i.e. fridge temperature less than 5° C and freezer less than -18°C				
23	Fridge free from specimens and drugs				
24	Hands washed prior to the handling of food				
25	Staff aware of policy regarding sickness				
26	There are no inappropriate items or equipment in the kitchen				

		Yes	No	N/A	Comments
27	Fly screens are in place where required				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

## 1d) Bedrooms

		Yes	No	N/A	Comments
The following areas are all clean and free from stains and dust:					
1	Beds				
2	Mattresses and covers in good condition (select a bed at random and undertake a mattress test <sup>1</sup> )				
3	Lockers and wardrobes				
4	Bedside tables and chairs				
5	Floor including edges and corners				
6	Curtains and blinds				
7	Handwash basins clean				
8	Clients have individual towels/toiletries				
	Totals				
Overall scoring					
Potential total					
Percentage					%
Status					
Date of next audit					

<sup>1</sup> Mattress Test: examine the mattress – there should be no staining visible and the mattress should be impermeable to fluids. (Place paper beneath the cover and press down for 10 seconds. Pour 30mls of water onto area and press for 30 seconds. Remove an examine paper towel for signs of leakage beneath cover.)

<b>1e) Bathrooms and Toilets</b>
----------------------------------

		Yes	No	N/A	Comments
1	Baths and bath mats are cleaned after each client use				
2	Appropriate cleaning materials are available for staff use				
3	Cleaning materials available and stored correctly				
4	There is evidence that baths, sinks, taps and showers not in use are run through at least weekly				
5	Handwash basin in each bathroom/toilet is visibly clean				
6	Paper towels and liquid soap are available				
7	Waste bins are foot-operated				
8	Shower curtains and bath mats are free from mould, clean and dry				
9	Walls tiles and wall fixtures are clean, intact and free from mould				
10	Floors, including edges are free of dust and grit				
11	Hoists are cleaned after use				
12	Nothing stored on edges of baths/basins				
13	Toilets are clean and free from organic matter even under the toilet seat				
14	Clients have their own toiletries				

		Yes	No	N/A	Comments
15	There is evidence that Jet type baths are serviced and cleaned according to the manufacturer's instructions				
16	There is evidence that the Jet type baths are operated weekly when not regularly used by the service user				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

**1f) Sluice Areas**

		Yes	No	N/A	Comments
1	There is a separate area for cleaning sanichairs etc				
2	Appropriate facilities are available and in working order to ensure correct disposal (or disinfection) of bedpans and urinals e.g. washer disinfector or macerator				
3	Washer disinfector/macerators are used according to the manufacturer's instructions				
4	There is a regular maintenance plan in place for washer disinfector/macerators				
5	Manual cleaning is not the recommended procedure but where there is no other facilities the correct procedure is used				
6	Sanichairs/bedpans/urinals stored clean and dry, on racks (urinals inverted)				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

## 2. Infection Control Practice

Standard Statement: The premises are kept clean, hygienic and free from offensive odours throughout, and systems are in place to control the spread of infection, in accordance with relevant legislation and published guidance.

		Yes	No	N/A	Comments
1	Check supplies of: Latex/vinyl gloves, plastic aprons, soap/paper towels, appropriate waste bags and Alginate laundry bags.				
2	Current Infection Control policy accessible to all staff				
3	Outbreak plan readily available				
4	Clients can be segregated in the event of an outbreak				
5	Staff education programme in place				
6	Staff report communicable disease i.e. Scabies or gastroenteritis, to manager				
7	Managers report and document outbreaks to EHPU, CSCI and EHOs as appropriate				
8	Staff remain off sick until treated/clinically well				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

## 2a) Hand Hygiene

Standard Statement: Hands will be decontaminated correctly and in a timely manner using a cleansing agent to reduce risk of cross-infection.

		Yes	No	N/A	Comments
1	The hand hygiene policy/procedural guidance is available to all staff				
2	Staff have received training in hand hygiene procedures (ask staff)				
3	Hand hygiene is an integral part of induction for all staff				
4	Handwashing sinks in clients' bedrooms are accessible with functional liquid soap and paper towel dispensers				
5	Liquid soap is available at all handwashing sinks				
6	Liquid soap must be single-use cartridge dispensers				
7	Wall-mounted or pump dispenser hand cream is available for use				
8	There are no plugs or overflows or water from taps passing directly into the plug hole of handwashing basins				
9	Soap and alcoholic handrub dispenser nozzles are visibly clean				
10	Soft absorbent paper towels are available at all handwashing sinks				
11	Handwashing sinks are free from used and inappropriate items				
12	Clinical staff nails are short, clean and free from nail extensions and varnish				

		Yes	No	N/A	Comments
13	No wrist watches, stoned rings or other wrist jewellery are worn during clinical procedures				
14	There are no nail-brushes on handwashing sinks				
15	Bar soaps are not present on sinks				
16	Elbow/mixer taps are available in all handwashing sinks				
17	Handwashing sinks are visibly clean				
18	Alcohol handrub is available for hand disinfection *				
19	Handwashing sinks are located in all areas where clinical practice takes place				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

\*Provided correct handwashing facilities are available (see 16), alcohol handrubs are not necessary, and this category may be marked N/A.

## 2b) Personal Protective Equipment (PPE)

Standard statement: Personal protective equipment is available and is used appropriately to reduce the risk of cross-infection.

		Yes	No	N/A	Comments
1	There is a comprehensive policies/procedures manual that includes the appropriate use of PPE				
2	The staff are trained in the use of PPE as part of their induction				
3	Sterile (for Nursing homes) and non-sterile non-powdered latex/vinyl/nitrile based gloves are available in all clinical areas				
4	Alternatives to natural rubber latex (NRL) are available for use by staff who are sensitive to NRL				
5	Gloves are available in a range of sizes				
6	Gloves are used as single-use items for each clinical procedure or patient episode				
7	Gloves are stored appropriately				
8	Hands are decontaminated following the removal of gloves (observe 2 or 3 healthcare workers)				
9	Disposable plastic colour-coded aprons are available				
10	Disposable plastic aprons are used by staff when there is the risk of clothing or uniform contamination				

		Yes	No	N/A	Comments
11	Disposable plastic aprons are used as single-use items for each clinical activity of patient care				
12	Plastic goggles and face masks or visors are used when there is a risk of body fluid splashing into the face and eyes				
13	Used protective clothing is disposed of appropriately				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

## 2c) Spillages

Standard Statement: The healthcare worker will demonstrate safe handling and disposal of all body fluids.

		Yes	No	N/A	Comments
1	Staff are familiar with the policy for dealing with spills of body fluids				
2	Appropriate disinfectants are available for cleaning all body fluid spillages such as Sodium hypochlorite solution in the strength 1:10,000ppm				
3	The procedure for clearing away spillages is followed as per Essex Health Protection Unit (EHPU) Infection Control Guidelines				
4	A spillage kit is available				
5	Furniture that has been contaminated with body substances and cannot be cleaned is condemned				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				
	Status				%
	Date of next audit				

## 2d) Laundry Management

Standard Statement: Linen is managed and handled appropriately to prevent cross-infection.

		Yes	No	N/A	Comments
1	Clean linen is stored away from dirty linen and in a dust-free environment				
2	Soiled linen is washed immediately				
3	Soluble/Alginate bags are used for foul and/or infected linen				
4	Linen washed at 65°C for not less than 10 minutes or as high as the manufacturers' recommended temperature				
5	Linen is ironed before use				
6	Personal linen is designated for each client's use				
7	The washing machine (industrial) is operated according to the manufacturers' guidance and is regularly maintained (see service record)				
8	The tumble dryer (industrial) is operated according to the manufacturers' guidance and is regularly maintained				
9	Handwashing facilities are available within the laundry room				
	Totals				
	Over all scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

## 2e) Waste Disposal

Standard Statement: All waste from healthcare premises is segregated and identified at source, transported and disposed of safely without risk of contamination, infection or injury to healthcare staff and the general public, and in accordance with legislation.

		Yes	No	N/A	Comments
1	There is a comprehensive policy/procedure in place including waste disposal				
2	There is evidence that the home is registered with a licensed waste contractor (check records)				
3	Staff have attended training sessions about correct and safe disposal of healthcare waste (check training records)				
4	Waste is correctly segregated (according to regulation in force) into clinical and household waste				
5	Correctly colour-coded waste bins/bags are used				
6	Waste bags are no more than 2/3rds full, secured and labelled prior to disposal				
7	Waste bins are visibly clean inside and out				
8	There is a dedicated area for the storage of healthcare waste, which is under cover from the elements, free from vermin and pests and the area locked and inaccessible to animals and the public				

		Yes	No	N/A	Comments
9	All waste is collected on a regular basis by a licensed contractor, at least once a week				
10	Consignment notes kept and up to date				
11	The producer of the waste realises their duty of care to ensure waste is incinerated				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

## 2f) Handling of Sharps

Standard statement: Sharps/needlestick injuries, bites and splashes involving blood or other body fluids are managed in a way that reduces the risk of injury or infection.

		Yes	No	N/A	Comments
1	Sharps container used conforms to BS 7320/UN 3291, and is assembled correctly				
2	Bins are stored safely and off the floor away from the public and out of reach of children				
3	Sharps containers are available for use and located within easy reach				
4	The box is not filled beyond the indicator mark i.e. less than 2/3rds full and there are no protruding sharps				
5	Sharps are disposed of directly at the point of use				
6	All sharp bins are labelled and signed according to policy				
7	Full sharps bins are locked, sealed and kept in a locked area prior to collection				
8	All staff are aware of what action should be taken following a sharps injury (question a member of staff)				

		Yes	No	N/A	Comments
9	Staff who are involved with clinical practice such as giving injections, obtaining blood samples and dealing with blood spillages are vaccinated against Hepatitis B and there is documented proof of this e.g. blood glucose monitoring				
10	Syringes with a residue of Prescribed Only Medication are disposed of according to current legislation				
11	The temporary closure mechanism is used when the bin is not in use				
12	Full sharps containers are sealed only with the integral lock and tape or stickers are not used				
13	Sharps containers are not placed in waste bags prior to disposal				
14	Sharps containers are visibly clean with no body substances, dust, dirt or debris				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				

<b>2g) Guidelines, Policies and Standards</b>
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Standard Statement: There are written policies and procedures that demonstrate infection prevention and control for all client care.

		Yes	No	N/A	Comments
1	Current infection control policy is available				
2	Infection control policy is easily accessible to all staff				
3	There are at least 2 members of staff aware of the content of the policy				
4	Staff are aware of the notification procedure for notifiable infectious diseases				
	Totals				
	Overall scoring				
	Potential total				
	Percentage				%
	Status				
	Date of next audit				